

You are here: [Home](#) » [Features](#) » Olson working towards 'solarification of the Coast'



## Olson working towards 'solarification of the Coast'

Posted by: Editor November 13, 2013 in [Features](#), [Home & Garden](#), [Local Community](#) [Leave a comment](#)

*Solar panels at Gibsons Recycling Depot can generate enough power to charge one of their electric collection vans. Photo submitted*

### *With Hydro rates on the rise, tapping into the sun's energy makes sense*

Two new banks of solar panels installed at Gibsons Recycling Depot (GRD) are now capable of producing 4,500 watts of electricity on a sunny day, enough to fully charge one of GRD's electric recycling vans. (On a rainy day, production drops to 10% of that). As the team from Olson Electric's Alternative Power Systems division hoisted the panels into position atop the repurposed shipping container that housed the electric grid tie system, Depot owner Buddy Boyd enthused "Dennis Olson is doing some interesting things – getting heavier into electric vehicles and solar panels. We're going to see the solarification of the Sunshine Coast if he has his way!"

Olson modestly noted that this installation is very typical of the "quite a few" solar packages and retrofits his company has installed recently. "Solar is an up and coming thing," Olson said, noting "in Canada, we're way behind Europe on this. Last week, on a sunny, windy day, Germany generated 59 per cent of the nation's energy from solar and wind power!"

Between 30 and 40 per cent of existing Sunshine Coast homes could benefit from solar power, Olson estimates: "any building with a clear exposure." Although most panels are installed on rooftops, they can also be mounted on swivel bases (for homes without a south-facing exposure) or on the ground. Each panel contains a network of individual photovoltaic cells (PVCs) that capture sunlight and convert it to electric current. The power generated may be stored directly on BC Hydro's power grid, connected through a 'grid tie' and the stored power is then credited to the homeowner's account through the SmartMeter ("one advantage of a SmartMeter," he noted). For remote or 'off-grid' locations, power is used as a stand-alone system with battery backup. Installation of most systems can range from a day to a week's work.

An average Canadian family of four typically uses between 13,000 and 14,000 kilowatt hours of power each year. A full solar system (18 solar modules) can generate almost half the typical home's energy needs, while significantly reducing CO<sup>2</sup> consumption. Because the systems are modular, each panel generates its own power. If one panel is affected by shadows, the others are not affected and continue to

produce. There is no limit to the number of units that may be installed – more can be added in future, as budget or demand permits.

The cost of solar systems can run from several hundred dollars for a 'cabin system' to almost \$16,000 for a system that will produce over half the home's energy needs (shipping and installation not included). The payback time – i.e. when the unit has paid for itself – depends not just on energy generated and used, but also on energy generated and sold to BC Hydro and the rates for each.

With BC Hydro rates estimated to rise 17 per cent over the next three years, tapping into the sun's energy makes fiscal, and ecological, sense.