



Going Green

Summer 2013

Cowichan: On the Road to Fuel Security

by Laura Nessman

Vancouver Island's first and only biodiesel blending station, located at the CVRD's Bings Creek Recycling Drop-off Depot, is now officially open! Cowichan's Biodiesel Blending Station is the result of a unique partnership between the CVRD, Cowichan Energy Alternatives, and the Cowichan Bio-Diesel Cooperative. The opening of this station completes Phase I of a sustainable fuel loop where recycled fryer oil is processed into biodiesel and used to fuel diesel vehicles, all at the same location.

Phase II will add a point of sale system that will allow the station to be accessed by Co-op and BC Biofuel Network members. Select CVRD diesel vehicles are now using this fuel source, moving us one step closer to energy and fuel security.



Biodiesel is an important renewable energy solution that can be used with existing diesel engine technology to immediately begin to reduce greenhouse gas emissions and other harmful pollutants. It is clean burning, biodegradable, and non-toxic. Biofuel also has mechanical and operational benefits, including increased lubricity, decreased noise, and cleaner fuel systems

and combustion chambers. Furthermore, by using biodiesel we are preventing waste oils from being poured down municipal drains where they clog waste-water infrastructure, or being sent for landfill disposal in southern Washington State.

The Cowichan Biofuel Facility is a homegrown biodiesel processing and distribution centre. It recycles locally collected commercial and residential waste cooking oils into environmentally-friendly biofuel for local users. Waste cooking oil (vegetable oils only) can be dropped off by residents at CVRD Recycling Drop-Off Depots and at sponsored waste oil collection bins around town such as the one at Ingram Street and Canada Avenue in Duncan.

The CVRD provided \$50,000 of UBCM Community Works funding to help build the station on a portion of Bings Creek land, which the facility leases from the CVRD. By taking a waste product and refining it into a value-added commodity, we are closing the loop on local sustainable energy solutions. This partnership has moved the CVRD yet another step closer to achieving its goal of zero waste.

West Cowichan Community Halls Heating Upgrades

by Kuan Foo

The CVRD is in the process of upgrading the heating systems at Youbou Community Hall, Honeymoon Bay Community Hall, Mesachie Lake Community Hall, and Lake Cowichan Centennial Hall. The project to upgrade to high efficiency air source heat-pumps offers an opportunity to reduce annual operating costs by an estimated \$34,078 (77%) each year, reducing costs from \$44,296 to \$10,218.

How is this possible? There are two problems with the old system. First, the current oil-fired furnaces operate with efficiencies of only 45 to 65 percent. The second problem is control. The users of these halls set the thermostat to their desired temperature when necessary. However, more often than not, people forget to turn the thermostat down when they leave. Because staff are not on site daily, the furnace could run for days to maintain a high temperature in a space that is unoccupied.

We needed a solution that could solve both those problems. As no natural gas is available in the area, we looked to modern air source heat pumps as replacements. These new units are extremely efficient with the ability to modulate heating output from 10 to 100 percent of their slated capacity. This feature, coupled with heat pump technology, allows these units to take 1 unit of electricity and output 2.5 units of heat by leveraging low temperature heat in the outside air year round. These units can also operate down to -20°C without any backup heat, perfect for our west coast climate.

To address the second problem, all new units are being installed with web-enabled controls so CVRD staff can monitor, control, and program the heat pumps from their offices or from their smart phones. Users will still have some control in the space, but temperatures will return to baseline values after a set amount of time.

From an environmental perspective, eliminating the oil furnaces reduces any leak and contamination risks, and reduces air pollution and greenhouse gas (GHG) emissions. GHG emission reductions from this project are approximately 88 tonnes each year. Over the 20 year life of this project, the emissions reductions will be 1760 tonnes of greenhouse gases, the equivalent of taking 370 cars off the road permanently.

Budgeting on Less Paper

by Andrea Kross & Tammy Knowles

Finance staff have reduced their paper use for printing budgets by 72% over last year. The final adopted version of the CVRD's 2013 budget was distributed to CVRD directors and staff via a link to the CVRD's website, which they were able to access on their new ipads.

Budget books are produced twice a year. First is the draft budget, which is produced in February. After weeks of debate, the final budget is adopted by the CVRD Board before the March 31 deadline. A final version of the budget is produced in April. This year, the budget was released in two separate sections: the General Budget and the Water and Sewer Budget.

In 2012, paper copies of the 887 page budget were made for 30 people: 15 for the CVRD's directors, 5 for Finance staff, 8 for members of the Corporate Leadership Team, and 2 for the public. In addition, 10 partial budget books in draft and final versions were printed for Division Managers, containing only the functions applicable to their division. These partial budgets ranged in length from 10 to 100 pages. That's 53,220 pages printed for the full budget book, plus about 1100 pages for the partial budget books. In 2012, approximately 54,320 double-sided pages, 54 reams of paper, or 5½ boxes of paper were used for budget books alone.

This year, 11 copies of the 730 page draft General Budget and 13 copies of the 200 page draft Water and Sewer Budget were printed (5 for Finance staff and the rest for directors). Only 5 copies of the final budgets were printed, all for Finance staff who access the books daily. The 2013 total is just 15,280 double-sided pages, 15 reams of paper, or 1½ boxes of paper. And it's a whopping 72% reduction in paper use over last year. Congratulations, Finance Division!!