

February 28, 2019



**Re: Community Excellence Awards Nomination for District of Clearwater  
– Environmental Sustainability – Bio-mass Energy**

It is our pleasure to have an opportunity to provide a submission to SILGA for the 2019 Community Excellence Awards. The District has successfully been working towards environmental sustainability through many initiatives. Please accept our submission under the category of Environmental Sustainability.

The District signed the Climate Action Charter with the Province in 2008, adopted GHG reduction policy in the Official Community Plan, completed a Community Energy Emission Plan in 2012, and in partnership with Wood Waste2 Heat Rural Heat commissioned a Business Case Analysis for a biomass heating system for the Dutch Lake Community Centre.

The District has focused on several initiatives, with the intent to reduce energy costs, our carbon footprint and lessen the tax burden. One initiative we are proud of is the installation of two bio-mass energy systems – one at the Dutch Lake Community Centre (municipal hall) and one at the North Thompson Sportsplex. Both of these facilities had substantial energy costs. Through unique partnerships and utilizing wood waste the first system was installed and operational in 2015, with the second project operational in 2018.

**Dutch Lake Community Centre – Biomass Project**

- Install of 150 kW boiler system with above ground silo @ \$285,000 (all inclusive) procured FINK Machines Inc.
- Partnerships – Wells Gray Community Forest \$100,000 (\$40,000 loan/\$60,000 grant), Southern Interior Beetle Action Coalition \$20,000 and District of Clearwater remaining costs.
- Capital outlay \$285,341 **initial estimated payback 11 years**
- Average 51.62 BDT to heat 22,000 sq ft building
- Annual propane savings \$40,950 (96%)
- GHG savings 2017 – 25.9
- **Payback at 8.7 years**

**Learnings to apply to next project:**

- Risk Management
- Planning for what if's
- Engineering - sizing retrofits
- Chip dumping facility
- Need for Rock free chips!!

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**Successes:**

- Relationship with Fink Machines Inc. (supplier)
- Partnerships – Canfor / Community Forests
- Developed comfort level to manage future projects
- Cost Savings!!

**North Thompson Sportsplex – Biomass Project**

- Install of 220 kW boiler system – inground bunker system (all inclusive) procured FINK Machines Inc.
- Partnerships – Wells Gray Community Forest \$300,000 grant, Community Leadership Program \$160,000 grant, Thompspon Nicola Regional District \$24,000 gas tax funds, and District of Clearwater remaining costs.
- Capital outlay \$602,000 **initial estimated payback 23 years**
- Annual propane savings – need more data to complete – however prior to installation the average costs were \$40,000 to \$42,000
- Cost of woodchips - \$1,100 per month for the first six months of operation – during that time the costs of propane dropped from \$6,000/mo. to \$2,000 mo. (still ironing out some kinks)
- GHG savings TBD
- **Simple payback 6-7 years** (due to grants to reduce capital outlay)

**Learnings to apply to next project:**

- Risk Management
  - Timeline for receipt of grant to due date for completion
  - Plan B for chip supply if supplier closes

**Successes:**

- Relationship with Fink Machines Inc. as supplier
- Partnerships – Canfor / Community Forests / Regional District / Ministry of Energy – CELP
- In ground bunker system for chips
- Cost Savings!!

Future goals – to create a District Energy Utility; connect Phase 2 of the Affordable Housing development, connect Thompson Nicola Regional District Library and eventually supply surrounding developments with biomass energy. In closing, the District has focused on doing a good number of initiatives towards environmental sustainability with the primary focus on energy savings.

Sincerely,



Leslie Groulx, CMC,  
Chief Administrative Officer