



The Village of
PORT CLEMENTS
"Gateway to the Wilderness"

36 Cedar Avenue West
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Port Clements, BC
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AGENDA

**Special Meeting of Council Monday September 22, 2014
COUNCIL CHAMBERS
7pm**

- 1. ADOPT AGENDA.**
- 2. PETITIONS, DELEGATIONS & OPENING OF SEALED TENDERS**
- 3. MINUTES**
- 4. BUSINESS ARISING FROM THE MINUTES & UNFINISHED BUSINESS**
- 5. ORIGINAL CORRESPONDENCE**
- 6. GOVERNMENT**
- 7. FINANCE**
 - F1 – Biomass Boiler Decision
 - F2 – Biomass project Management discussion
- 8. NEW BUSINESS**
- 9. REPORTS & DISCUSSIONS**
- 10. ACTION ITEMS**
- 11. QUESTIONS FROM THE PUBLIC & PRESS**
- 12. ADJOURNMENT**



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REPORT TO COUNCIL

Authors: Kim Mushynsky & Sean O'Donoghue
Date: September 19, 2014
Re: **Biomass Boiler**

Background: The Village put out a tender for a biomass boiler. We received 7 responses and initially reduced that to 3. Further analysis by Council and David Dubois caused that to be reduced to 2 – a Herz by Western Bioheat for \$98,750 and a KOB by Fink for \$112,138. The difference in price between the two is \$13,388 or 12%. Sean has done extensive calls (in excess of 30 calls) to find out from operators how they feel about their product as a means of determining if there was a clear reason to choose one of these machines over the other rather than simply pricing. It is challenging to succinctly recap his conversations in a spreadsheet but a basic spreadsheet has been attached for your information. The activity, in addition to helping us make our decision, was definitely worthwhile as Sean made many useful contacts that will be valuable to him going forward with a biomass heating project. The question we tackled was – is there enough evidence of a difference between these two products to make us choose a more expensive KOB over the lower priced Herz. Sean and I have spent considerable time every day this week recapping his discussions with operators, manufacturers and reference checks to reach our recommendation. Our reasoning follows the recommendation.

Recommendation: We recommend purchasing the KOB from Fink.

1. There are two features in the Fink tender that have value that are not part of the WB tender. They are a built in air compressor that is an integral part of the boiler that Sean has heard from operators is a valuable component saving maintenance time and effort and a return trip to the island after the boiler has been in operation for some time to ensure that we are satisfied with the operation.

2. There are only 2 Herz in operation in Canada at this time – one of those is a very small household boiler. There will be a 3rd in PEI sometime this year. This means there is no information from operators about the long term performance of the machine as the one in Telkwa is still in its warranty period so we have no information on the long term effectiveness of the boiler nor do we have any data on the performance of the company outside of the warranty period. This is not saying that it is not good; this is saying that we have no Canadian data to make a decision one way or the other. There are over 13 KOB boilers in British Columbia as well as dozens throughout the rest of Canada that have been in place in excess of 8 years – well outside the warranty period – so there is a wealth of data on their long term performance and manufacturer support outside of the warranty period. Haida Gwaii is not an environment to be putting in products that are still new on the market (I know the Herz has a long history in Europe but we should be looking at Canadian data as that is where the machine will be located).
3. In discussions with the owners – Herb Fieschl from WB (Herz) was polite but less than forth coming with information. Sean asked if, due to the lack of Herz in operation whether Mr. Fieschl could provide him with contacts for their installation of Binders in Canada because although that is a different machine it would at least give us information as to the supportiveness of WB in regards to after warranty support of their products. Mr. Fieschl did not provide that information to Sean. Mr. Burkhard of Fink was very helpful with names and phone numbers of operators that Sean could call for information. It is potentially just a personality issue but getting information was much easier with Fink than with WB.

Respectfully submitted:

A handwritten signature in cursive script, appearing to read "Kim Musky". The signature is written in black ink and is positioned below the text "Respectfully submitted:".

Kim Mushynsky

From: Rod Graham <rod.ventek@shaw.ca>
Sent: September-19-14 11:39 AM
To: cao@portclements.ca
Cc: 'Markku Riionheimo'
Subject: Biomass Boiler Project

Hi Kim
Thanks for your time the other day in reviewing the RFP on the biomass project.

I can fully appreciate your comment that you have learned more about biomass than you ever wanted to and still feel unsure of which way to proceed. This is not new to us and unfortunately the RFP process for this type of product and service does not lend itself to a clear and precise selection process. I'm still not sure what the answer is whether it is the emphasis on the weighting rather than the overall system design presented or, is it matter of lack of knowledge from mechanical engineers or consultants, I don't know. Bottom line is that the project must be successful especially since it is public funds being spent and sometimes a little extra money and experience go a long way in guaranteeing a success story. Maybe a performance clause needs to be inserted to guarantee a success story.

We were not aware of the fact that pucks may be used as a fuel source. Possibly I missed this in the tender documents. We can guarantee performance of our system when pucks are used. It would require the addition of one extra component which could be included at no additional cost. In addition if pucks were to be used a few slight changes to our equipment selection could be made to decrease our overall system cost. The option of the walking floor that we presented lends itself to a much better system for chips as well as pucks. This I cannot emphasize enough.

Again I would like to thank you for candid discussion and would like to extend my offer for any help you may need with the project. Please feel free to contact me if you wish to discuss in further detail our proposal or changes that can be made to it.

*Rod Graham
VP Technical Services*



Phone: 250 – 747-0608
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www.ventekenergy.com

Ariterm Biocomp Boiler

Biomass Contact List

Biomass Project	Contact Name	Position/Title	E-Mail	Location	Boiler Type Install Date	Biomass fuel	Phone Number	Notes
Telkwa District Biomass Energy System	Scott Beck	ENGINEERING TECHNOLOGIST	scottbeck@telkwa.com	Telkwa, BC	Herz Firematic	Chips	250-846-5212	Boiler currently in warranty period (less than 1 year operation). Working under a variance with BC Safety authority. Some admin time consumed in effort to remove variance. Scott is confident that variance will be removed eventually. Some downtime with various problems during 1st year startup and operations. During downtime energy vending reversed in a ratio of 367 units sold to 30 units purchased. (School backup heat ended up being consumed by others in district heat system) Supplies school and community center. Boiler chosen due to price. Scott says both Western Bioheat and Thomas Wunderlin have been very helpful and available through startup and warranty period.
Tappenvale Dairy	Bill Kennedy	Dairy farmer/owner operator		Tappen, BC	KOB Pyrot 100	Pellet	250-517-7058	Non experienced operator (farmer!). Never charged for phone support/trouble shooting. Minor problems all rectified with maintenance adjustment. Paid \$45000 for used unit.
Ecole Evangeline	Dick Arsenault	operator	dickarsenault@gmail.com	(PEI?)	KOB Pyrot 300	Pellet	902 854 3334	Repairs limited to "wear and tear". "Not much maintenance" Good relationship with Fink. "Very helpful." Estimates an 80%-85% transfer of heat to school.
Kalamalka Forestry	Randy Armitage	Operator/ Forestry research tech	Randal.Armitage@gov.bc.ca	Vernon, BC	Kob Pyrot 150 Jan 2008	Pellets	250 308 8237	Maintenance adjustments due to weather fluctuations. Periods of boiler not working in relation to solar hot water connected to system. Only problem during warranty phase was a defective monitor (pixel problem). It was replaced in a timely manner N/C.
Nazko Valley elementary	Jay Goffic	Retired operator		Quesnel, BC	KOB Pyrot 300 2007	Chips		Supplied by Ventec. 1/2 hour a week maintenance. Rough estimate of fuel savings from approx. \$33000 down to \$8000. Most shutdowns remediated by cleaning.
Nazko Valley elementary	Mike Lorenz	Heat tec, Quesnel School District electrician/HVAC license	mikelorenz@sd28.bc.ca	Quesnel, BC	same as above	"		Estimates fuel savings from \$30000 in propane/yr to \$7500 in pellets. A projected 7 year payback was beat, approximately 4-5 year payback. Mike has done all repairs since new. Warranty issues limited to tuning after initial setup. (possibly oversized, but problems remediated through proper tuning. Online monitoring has failed, is fixable however Mike relies on online monitoring of DDC in school so boiler monitoring is redundant. Maintenance: Weekly sightglass cleaning by custodian. (Mike is stationed 1.5 hours away, wishes he was on-site more) 2 or 3 times a year a one day shutdown and major cleaning. Igniter failed 1 year ago, approx. \$500-\$800 repair. Initial decision to purchase was because at that time, KOB was only model which was approved to be installed in a closed system. Mike says other brands are now approved. Mike sources parts from Viessman dealer in Ontario, because that is who Ventec provided him with. Fink has been consulted during trouble shooting and was helpful. One fire brick needs replacement, was cracked when new, doesn't seem to have any negative effect.
Hubers Furniture	Ed and Bonny Huber	Business owners		Vernon, BC	KOB Pyrot 540	Chips Sawdust	250 558 5112	Installed 11 years ago. Initially burned sawdust, recently began making their own pellets. Works "Super great". Payed itself 4 times over at least. Not a penny paid for natural gas since install. They have recently had natural gas lines entirely removed. 1/2 - 1 hour a week maintenance. 2 years ago, spent \$3500 for a mid life retrofit (new fire bricks, etc.) Extremely happy with Burkhardt Fink involvement.
Madsen Custom Cabinets	Allan Tratchuk	Building manager	allant@madsensmillwork.com	Edmonton Ab	KOB Pyrot 540 Dec 2004	Low quality waste wood	780 454 6790	Burns waste stream MDF, plastic laminate attached to wood, still passes provincial air quality. Increased maintenance/cleaning as a result- 3-6 hours bi weekly. Paid \$400,000 for system, paid back in 5 years. Upon install, Epcor (gas utility) attended 3 times to change energy meter, were in dis-belief that gas consumption could be reduced so much. Air compressor automated cleaning is a huge benefit due to low grade nature of fuel. Noted that any problem that they have encountered, Burkhardt Fink had a great ability to explain the solution "in layman's terms".

