



**CLIMATE ACTION COMMITTEE MEETING
OF THE VILLAGE OF LIONS BAY
HELD ON MONDAY, OCTOBER 28, 2024, AT 7:00 PM
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY
AND VIA ZOOM VIDEO CONFERENCE**

TO JOIN THE MEETING, CLICK HERE: <https://us02web.zoom.us/j/87107977094>
TO JOIN VIA PHONE, DIAL 778-907-2071 AND ENTER MEETING ID: 278 014 5720

AGENDA

- 1. Call to Order**
- 2. Approval of the Agenda**
- 3. Public Questions & Comments**
- 4. Approval of Minutes**
 - A. Climate Action Committee Meeting Minutes – Oct 03, 2024 **(On-Table)**
- 5. Business Arising from the Minutes**
 - A. Update on Mini Recycling Depot
 - B. Update on Hall Electrical Scope of work and next steps. Final version of RFD **(Page 3)**
 - C. Update on Hall Renovation Grant (budget sheet for review)
- 6. Unfinished Business**
 - A. Hall renovation next steps – scope of work for electrical upgrade (in progress) in order to meet green municipal fund spend requirements
 - B. Water metering recommendations
 - C. Mini Recycling Depot update
 - D. EV Charging – metering update, new potential provider update
- 7. New Business**
- 8. Howe Sound Community Forum Climate Strategy**
 - A. The Howe Sound Community Forum are discussing Climate Strategy - see attached for Committee members review & comment.
 - B. Link to <https://www.squamish.net/community-initiatives/climate-strategy/>
- 9. Recommendation to Council**

Agenda – Climate Action Committee Meeting – Oct 28, 2024

Village of Lions Bay

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- 10. Correspondence**
- 11. Public Questions & Comments**
- 12. Adjournment**



Type	Recommendation to Council		
Title	Electrical upgrade to accommodate heat pumps		
Author	Norman Barmeier	Reviewed By:	Neville Abbott
Date	Oct 8, 2024	Version	1
Issued for	Oct 15, 2024 RCM		

Project Background:

In the Spring of 2022 the Village initiated a Clean BC Communities Fund grant application to improve the hall and to reduce GHG emissions. In order to qualify for the grant, the Village engaged Bright Spot Consulting to conduct a GHG assessment of the village hall. This assessment was required in order to quantify the GHG reduction potential of the proposed upgrades. The replacement of the oil furnace among all the proposed upgrades was identified as the most impactful GHG reduction effort. The report is attached in Appendix A.

The grant application also required a project budget. To inform that budget the CAC collected quotes for the following elements in Appendix B:

1. Window replacements
2. 15.4 kW Grid-Tied Solar system
3. Heat pump – supply and install (specifications also attached)
4. EPA Fireplace replacement
5. Electrical upgrade estimate (email from electrical contractor)

The grant ultimately was not submitted due to budget constraints. However, the initiative to replace the oil burning furnace is still the most effective GHG reduction effort identified by council.

In order to progress the project and refine the scope, and to get clarity on the electrical upgrades; the next step has been identified in the recommendation below.

Recommendation:



- (1) THAT Council approve staff time to engage an electrical contractor to develop an electrical scope of work and provide a firm cost estimate to achieve the required electrical service upgrades.

Key Information:

The Climate Action Committee pulled together a rough capital cost estimate to replace the oil furnaces with heat pumps and replace the current wood burning fireplace with an EPA compliant fireplace to provide back-up heat in the winter.

Initial electrical contractor investigation found the hall to have:

1. Two 200 amp BC hydro service connections.
2. 2 large electrical panels in the back of the office
3. 400 amp back-up diesel generators

The Village currently has 2 oil burning furnaces with separate air handling units and separate duct work. Each furnace heats a different part of the Municipal hall. One furnace heats the common area, while the other furnace heats the gym area.

The heat pump electrical specifications will require an additional 220 amps (110 amps per unit; to be confirmed by electrical contractor). The hall will require 2 separate heat pumps and 2 separate air handling units to replace the existing 2 furnaces.

The additional power demand may push the hall to a 3rd service, which BC Hydro may not allow. The electrical contractor, in cooperation with BC Hydro needs to determine the total power required; 600 amp or 800 amp service. The electrical contractor needs to make recommendations on a cost effective approach to consolidating the existing panels and integrating the power upgrades, and provide the Village with a budget quote for the power upgrade.

The electrical contractor needs to work with staff and the CAC to develop an electrical scope of work to address the normal and emergency use cases, as well as develop optional strategies for solar integration and possible future level 3 public fast charging infrastructure.

Options:



(1) Approve the recommendations above. Staff with assistance of CAC members to update/escalate the stale quotes from 2022 and apply for a Green and Inclusive Community Buildings grant by 16 October.

(2) Approve with amendments.

(3) Do nothing.

Preferred Option: Option 1

Progress as of 10 October.

- Director of Operations has engaged a qualified electrical contractor to provide a reliable cost estimate.
- Staff have opened a grant application file.
- CAC members have approached bidders to updated/escalated the stale quotes from 2022 to create a budget.
- CAC members have offered to provide a grant application narrative. Staff to respond.

Legal Considerations: staff to advise

Financial Considerations:

LGCAP funding received to date (2022-2026) is considered adequate to complete the oil furnace with heat pump replacement only. A successful grant application will allow the other original scope items including solar panels, windows and include potential for future EV charger be included with potentially funds remaining for other qualified projects. Staff to confirm.

Other Considerations:

Follow Up Action: Per Council direction.

Communication Plan: TBA