

City of Port Moody

Minutes

Climate Action Committee

Minutes of the meeting of the Climate Action Committee held on Monday, January 24, 2022 via Zoom.

Present

Councillor Amy Lubik, Chair
Councillor Steven Milani, Vice-Chair
Aline Bennett
Helen Howes
Adam Janis
Poopeh Morakkabati
Aidan Trerise
Derek Wilson

In Attendance

Jennifer Mills – Committee Coordinator
Laura Sampliner – Senior Sustainability and Energy Coordinator

Also in Attendance

Kevan Cornes, Manager of Facilities, City of Coquitlam

1. Call to Order

Call to Order

1.1 The Chair called the meeting to order at 7:00pm.

Committee members introduced themselves and provided their backgrounds.

2. Adoption of Minutes

Minutes

2.1 CAC22/001

Moved, seconded, and CARRIED

THAT the minutes of the Climate Action Committee meeting held Monday, November 22, 2021 be adopted.

3. Unfinished Business

4. New Business

City of Coquitlam Low Carbon Facilities

4.1 Presentation: Kevan Cornes, Manager of Facilities, City of Coquitlam

Kevan Cornes, Manager of Facilities, City of Coquitlam, gave a presentation on City of Coquitlam City Centre and Poirier Sport and Leisure Centre (PSLC) Thermenex Systems, and the following was noted:

- the City of Coquitlam selected the Thermenex system when redeveloping PSLC for its innovate energy conservation systems;
- the PSLC redevelopment sought to reclaim the heat produced from the ice plant, and other areas, and distribute the rejected heat to warm the pool;
- the Thermenex system connects the mechanical systems in the buildings, including heat pumps, condensing units, and boilers, into the common water loop to allow heating and cooling to be distributed throughout the buildings by all connected mechanical systems;
- the Thermenex system heats and cools the buildings through a common gradient header and only uses natural gas when the recovered heat is insufficient to meet the demand;
- the Thermenex system continuously performs checks and balances through one single pipe to determine the heating and cooling needs of the buildings;
- the heat generated from the three ice rinks at PSLC is enough to heat the PSLC pool and Coquitlam Public Library Poirier Branch (CBLPB); CBLPB has been running solely off the Thermenex system for over ten years;
- the parking lot between the CBLPB and PSLC stores the excess heat created in vertical pipes forming a ground source thermal battery;
- the excess heat storage reserve is at full capacity and the demand has not required access to the stored heat for approximately eight years;
- the Thermenex system provides opportunities to connect new developments to the system and create further energy savings opportunities;
- the City of Coquitlam undertook a comparison of the Thermenex system with traditional pool and arena recreation centres in Metro Vancouver in 2011 and determined that energy consumption savings were being achieved; and
- the implementation of the Thermenex system has helped the City of Coquitlam achieve a 54% reduction in

greenhouse gas emissions.

Mr. Cornes noted the following in response to Committee questions:

- the City of Coquitlam has approached School District 43 about energy sharing opportunities at Centennial Secondary School in the past;
- the life expectancy of Thermenex piping is approximately 50 years and heat pumps is approximately 20-25 years;
- the recent extreme cold temperatures resulted in high demands for heat and boilers are operating to provide supplemental heat to the pools in Coquitlam;
- there can be financial challenges with retrofitting the Thermenex system in existing complexes;
- the Town of Cochrane Alberta designed a Thermenex in a Box system where the plant room was built off-site and craned in once construction of the building was complete;
- the extreme temperatures experienced in 2021 created challenges as the fluctuations in temperatures were outside the typical outdoor heating and cooling loads;
- the City of Coquitlam will use climate projection data for the next 30 years when undertaking refrigeration plant upgrades scheduled for summer 2022;
- the switch to no natural gas in buildings with pools and recreation centres is challenging as there must be assurance that services and programs can be delivered to the community;
- the Thermenex system is more efficient when designed for buildings within close proximity, such as Port Moody City Hall, Inlet Centre Fire Hall, and the Recreation Complex, and separate systems, such as solar panels, heat pumps, or boilers, should be considered for inclusion in the design of spread out buildings; and
- the presented energy savings does not include the financial savings from the Provincial Carbon Tax.

Mr. Cornes left the meeting at this point and did not return.

**Committee
Orientation**

4.2 Jennifer Mills, Committee Coordinator
Attachments:

- a) Committee Orientation Manual – January 2022
- b) Climate Action Committee – Terms of Reference
- c) Respectful Workplace Policy
- d) Anti-Racial Discrimination and Anti-Racism Policy
- e) Privacy Breach Policy
- f) Zoom Webinar Instructions for Committee Members
- g) [Draft Five Year Financial Plan – 2020-2024](#)
- h) [2019-2022 Council Strategic Plan](#)

The Committee Coordinator provided an overview of the City's committee system and noted that the Transportation Committee's Terms of Reference membership includes a Climate Action Committee representative and encouraged any interested members to volunteer for the position.

**2022 Climate Action
Committee Work Plan**

4.3 Attachments:

- a) Draft 2022 Climate Action Committee Work Plan
- b) 2022 Annual Report – Climate Action Committee

The Senior Sustainability and Energy Coordinator provided an overview of the draft 2022 Climate Action Committee Work Plan and requested feedback from the Committee on ideas for the 2022 Work Plan.

The Committee noted the following ideas for the 2022 Climate Action Committee Work Plan:

- update on the Climate Ready Homes and Buildings Survey;
- information about integrated stormwater planning;
- information about the City's Community Wildfire Protection Plan;
- information about the City's Urban Forest Management Plan;
- information about achieving the Climate Action Plan greenhouse gas reduction targets, including updates about the uptake and outreach of the CleanBC Better Homes Program and the number of Port Moody homes with heat pumps;
- update on the integration of climate change into the Official Community Plan;
- information about best practices and challenges of green infrastructure and participation in the joint working group with the Environmental Protection Committee and Parks and Recreation Commission;
- exploring community connections with youth, seniors, and community groups to understand the community's connection with climate action;

- information about high performance residential buildings and solutions to reduce greenhouse gases and increase efficiencies;
- information about community health and its vulnerability, adaptivity, and sensitivity to climate impacts; and
- information about City planning for drought risks and extreme weather events.

Formation of Subcommittees

- 4.4 The Committee requested information about the status of the work undertaken by the 2021 Sustainable Building Practices Subcommittee.

Action: The Chair to follow-up with Councillor Lahti on the status of the Sustainable Building Practices Subcommittee report.

CAC22/002

Moved, seconded, and CARRIED

THAT Formation of Subcommittees be added to the February Climate Action Committee meeting agenda.

5. Information

Staff Updates

- 5.1 The Senior Sustainability and Energy Coordinator noted that Metro Vancouver recently adopted the Metro Vancouver Regional Consumption-Based Emissions Inventory that provides information about embodied emissions of the region and highlights community level differences, and that detailed Port Moody inventories can be shared with the Committee in the future.


2022 Climate Action Committee Meeting Schedule

- 5.2 Attachment: 2022 Meeting Schedule – Climate Action Committee

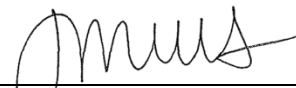
This item was provided for information only.

6. Adjournment

The Chair adjourned the meeting at 8:19pm.



Councillor Amy Lubik,
Chair



Jennifer Mills,
Committee Coordinator