



Report to Council

From the Office of Councillor Amy Lubik and Councillor Hunter Madsen

Date: July 9, 2022

Subject: Support For Cooling And Air Filtration For Health And Climate Resilience

Purpose

To recommend that our City advocate for provincial actions and initiate local steps that will encourage new multi-family construction to include climate-resilient cooling and air filtration capacities that help keep residents safe during the increasingly extreme heat and wildfire smoke events associated with our changing climate; and also to recommend that our City will work with the province to increase access to cooling for all seniors, those with disabilities, and low income community members within existing housing.

Recommendation

THAT staff be directed to encourage inclusion of both air filtration and air conditioning or other mechanical cooling in new building design at the re-zoning or Development Permit stage for new multi-family developments;

AND THAT the Office of the Mayor be asked to send a letter to Port Moody's MLA, the Minister of Environment, the Minister of Poverty Reduction, and the Parliamentary Secretary of Community Development to include air conditioning and air filtration in government rebate and/or retrofit programs, as well as on the list of medical and health-protection devices fully or partially funded for people living with disabilities;

AND THAT staff be directed to report back to Council on alternatives to improve access to air conditioning/ cooling among seniors and people living with disabilities in Port Moody, including potential partnership with non-profits and/or BC housing.

Background

The regional and worldwide climate crises are on track to gradually worsen weather challenges in Port Moody over the coming decades. In addition to heavily increased rainfall and flooding, we will see increased average seasonal temperatures and the growing likelihood of severe provincial wildfires over multiple months of the year that will bring, in turn, dangerously unhealthy air conditions throughout our region.

Lives are at stake: during the 2021 regional heat dome – a foretaste of summer conditions to come – at least 526 B.C. residents died, most of them trapped in their own over-heated and poorly ventilated residences.

Elevated air temperatures can trigger heat stroke and dehydration, and fine particulate matter in smoke is harmful to human health, especially for seniors, adults, infants, pregnant women and people with asthma, pulmonary disease and heart disease.

People are learning to protect themselves: purchase of AC units in the lower mainland during 2021 jumped by 20%, and air purifier sales grew too. (Several studies have shown air purifiers with HEPA filters can get rid of harmful particulate fine matter and other air pollutants; and carbon or charcoal filters can also reduce smoke odour.) Even so, many seniors and those on limited incomes lacked the resources or capacity to improve the livability of their homes.

Looking ahead to these weather challenges, on May 2022 its council directed the City of Vancouver to initiate significant changes to construction bylaws that aim to both reduce the use of fossil fuels and require cooling and air filtration in all new large buildings. All new multi-family buildings will require cooling systems by 2025 and “best practice” (MERV 13) air filtration, which reportedly captures 85 per cent of fine particulates from vehicle pollution and fire smoke. The city’s requirement to build with air filtration and cooling systems will pertain to low-income housing, in view of the fact that people on fixed incomes can be more vulnerable to heat waves and pollution. The city is providing \$2 million in grants to add heat pumps to existing below-market housing.

Discussion

The City of Vancouver has more independent agency to set its own bylaws in this arena, but the City of Port Moody nonetheless has an opportunity to follow Vancouver’s lead and be an early adopter of these sustainable, climate-smart systems as well. That said, the District of North Vancouver has recently implemented similar recommendations.

At this initial stage, we are suggesting only that staff should encourage cooling systems and HEPA filtration in new construction and investigate the issue and report to Council with recommended next steps that we might embed and fund within the City’s Climate Action Plan and its Housing Action Plan. We would anticipate that this investigation entails examining how Vancouver’s bylaws and District of North Vancouver’s policy have been shaped, and assessing the expected needs of seniors and disabled residents.

We further recommend that staff identify possible options for collaborative partnering with provincial and non-profit players involved in housing solutions for seniors, lower-income residents, and those with disabilities.

Based upon staff’s investigation of promising approaches to both climate-optimized new multi-family housing and protection of vulnerable groups, this report encourages the Mayor to advocate as needed for advances at the provincial level in terms of building standards and programs to subsidize and/or incent the adoption of needed cooling and air filtration systems.

THAT the report date July 9, 2022, from Councillor Amy Lubik and Councillor Hunter Madsen regarding Support for Cooling and Air Filtration for Health and Climate Resilience be received for information.

Financial Implications

To be determined: may entail outside consulting costs.

Communications and Civic Engagement Initiatives

Provide information on internal and external communication and civic engagement initiatives.

Council Strategic Plan Objectives

- Climate Change Preparedness
- Community Health/Reducing Social Inequities
- Courage to lead

Appendix

1. <https://vancouver.sun.com/news/local-news/vancouver-votes-to-make-significant-changes-to-building-by-laws-to-address-climate-crisis>
2. <https://vancouver.sun.com/news/local-news/bc-heat-wave-guide-how-to-prepare>
3. Support from VCH
https://twitter.com/MichaelSchwandt/status/1527133272379076608?s=20&t=Epv8APoOhVF_PJwo_QBkVQ
4. <https://www.cbc.ca/radio/whitecoat/to-prepare-for-future-heat-waves-classify-air-conditioners-as-medical-devices-ubc-expert-says-1.6111655>
5. [Heat and Human Rights \(bcdisability.com\)](https://bcdisability.com/heat-and-human-rights)
6. https://www.researchgate.net/profile/Sarah-Henderson-22/publication/357934317_Analysis_of_community_deaths_during_the_catastrophic_2021_heat_dome_Early_evidence_to_inform_the_public_health_response_during_subsequent_events_in_greater_Vancouver_Canada/links/61e83d72dafcdb25fd38547c/Analysis-of-community-deaths-during-the-catastrophic-2021-heat-dome-Early-evidence-to-inform-the-public-health-response-during-subsequent-events-in-greater-Vancouver-Canada.pdf
7. <https://beyond.ubc.ca/why-protecting-air-quality-in-bc-matters-to-your-health-not-just-during-wildfire-season/>