

## Cooling Avenues

December 2, 2023

**Background:** The rise in summer temperatures and the climate crisis in the Pacific Northwest has severely impacted the CNV community members, leaving many with few options to find refuge in the extreme heat. In collaboration with the City of North Vancouver's Planning and Development team, our team has proposed innovative zoning recommendations focusing on cooling solutions for future building and infrastructure developments in CNV.

**City Goal / Strategy:** This project aims to provide the City of North Vancouver (CNV) with new zoning recommendations that offer CNV community members affordable options to cool down in the summer season with the rise in extreme weather events (EWE).

**Overview of the project:** In the summer of 2021, Metro Vancouver was severely impacted by an unprecedented heat dome, causing many to find refuge from the heat and developing heat-related illnesses. Due to the response and management of this EWE, this project inspired us to research affordable cooling options around the world while specifically looking at the low-income demographic and applying our recommendations to the zoning bylaws.

### Key recommendations:

1. Transforming Spaces/Public Access to Cooling and Heating Centers (Ro, 2023): New apartment buildings should allocate a room to deal with extreme heat/ cold during EWE. Additionally, complexes with amenities like swimming pools could extend these services to nearby residents.
2. Allocation of space construction cooling and Heating Centers/Islands (*C40 Knowledge Community*, n.d.): Designating spaces for cooling/heating services every few kilometres, which could involve constructing/reforming dedicated facilities for heating and cooling services or constructing cooling islands within the city, such as fountains and parks.
3. Tree Shade Implementation (Millan, 2022): Developers in North Vancouver should be made responsible for planting trees, for example, along sidewalks, at a rate of at least 250 per year. This is to provide shade for residents during extreme heat waves as they do day-to-day activities.

### References:

C40 Knowledge Community. (n.d.).

[https://www.c40knowledgehub.org/s/article/Cities100-Paris-is-using-blue-and-green-infrastucture-to-tackle-city-heat?language=en\\_US](https://www.c40knowledgehub.org/s/article/Cities100-Paris-is-using-blue-and-green-infrastucture-to-tackle-city-heat?language=en_US)

Millan, L. (2022, August 18). City of Seville in Spain Using 1,000-Year-Old Technology to Fight Climate Change. Bloomberg.com.

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<https://www.forbes.com/sites/christinero/2023/09/01/5-ways-to-increase-use-of-cooling-centers/?sh=5d12098c76f0>

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