



The Corporation of the District of North Vancouver

CORPORATE POLICY

Title	Climate Ready Rezoning Policy for New Part 3 Buildings
Section	Planning, Properties, and Permits

POLICY

This policy reflects the District’s goals to reduce emissions and strengthen the community’s resilience to climate change impacts. The policy sets out climate change mitigation and resilience requirements when an applicant is seeking additional density or land use changes.

1. BACKGROUND AND CONTEXT

In 2019, District of North Vancouver Council declared a climate and ecological emergency and subsequently adopted a *Community Energy and Emissions Plan* which set a target of 45% emissions reduction by 2030 and net zero emissions by 2050. The District’s 2017 *Climate Change Adaptation Strategy* and 2021 *Official Community Plan (OCP) - Action Plan* provide direction to strengthen the resilience of our built environments to the impacts of climate change. Applicable projects are expected to account for lifecycle greenhouse gas emissions (embodied carbon), refrigerant emissions, air filtration performance levels, and provide mechanical cooling to residential dwelling units as outlined herein.

2. APPLICABILITY

This policy applies to rezoning applications for buildings constructed under Part 3 of the British Columbia Building Code. The below embodied emissions and refrigerant emissions reporting requirements and minimum ventilation requirements apply to Part 3 building applications, while cooling requirements only apply to residential dwelling units within Part 3 building applications.

This policy does not apply to the following:

- i. Rezoning applications that have been submitted prior to August 1, 2022 and for which an associated building permit application is submitted before August 1, 2024. Should a Building Permit Application not be submitted prior to August 1, 2024, detailed reporting as required under this policy shall apply.
- ii. Rezoning applications that are not proposing a new building (e.g. an addition or renovation to an existing building).
- iii. The General Manager of Planning, Properties & Permits or designated staff may provide an exemption for an exceptional circumstance where the requirements are demonstrated to be not feasible.

3. POLICIES

a. Embodied Emissions and Refrigerant Emissions

Reporting:

- i. Report the life-cycle equivalent carbon dioxide emissions (i.e. global warming potential impact, or 'embodied carbon') of each building, in kgCO₂e/m², as calculated by a whole-building life-cycle assessment (LCA).
- ii. Include a description of specific measures that will be explored during design to reduce embodied emissions.
- iii. Calculate and report the life-cycle equivalent annual carbon dioxide emissions of each building, in kgCO₂e/m², from the emission of refrigerants.

b. Minimum Efficiency Reporting Value (MERV) for Ventilation

- i. Ventilation systems are to be designed to include filtration devices with a Minimum Efficiency Reporting Value (MERV) of 13, as defined by ANSI/ASHRAE 52.2, prior to introduction of outdoor air into indoor occupied spaces.

c. Cooling

- i. Active cooling: Residential dwelling units within applicable Part 3 buildings will be served by active mechanical cooling capable of maintaining an indoor temperature of 26°C or less, with windows closed.
- ii. Passive cooling: All applicable projects will include a description of passive design strategies employed to minimize cooling energy consumption and keep spaces below critical temperatures during a power outage (e.g. building orientation, reducing window-to-wall ratio, exterior shading devices, low Solar Heat Gain Coefficient glazing). Energy performance modelling should support the choice of passive cooling measures selected.

4. PROCEDURE

The following procedure is used to implement this policy but does not form part of the Policy. This procedure may be amended from time to time at the discretion of the General Manager of Planning, Properties & Permits.

- a. Rezoning application submission: A **Climate Ready Design Strategy** is to be submitted at the time of detailed rezoning application. This report confirms that the design submitted is on target to meet the requirements of the Policy and describes the sustainable design elements and strategies included in the project, and will include:
 - i. Preliminary calculations for embodied emissions and a description of specific measures that will be explored during design to reduce embodied emissions.
 - ii. A commitment by the owner to meet the requirements of the Climate Ready Rezoning Policy will be secured prior to the adoption of zoning, with documentation to be submitted at time of building permit application, including:
 1. Complete refrigerant emissions calculations.
 2. The use of filtration devices with a minimum MERV of 13.
 3. Active mechanical cooling for all residential dwelling units within Part 3 buildings.
 4. A description of passive design strategies employed to minimize cooling energy requirements and energy performance modelling to support the choice of passive cooling measures selected.
- b. Building permit application submission: Complete refrigerant emissions calculations, updated calculations of embodied emissions and descriptions of specific measures taken, if any, to reduce embodied emissions, mechanical drawings showing a ventilation system accommodating minimum MERV 13 filtration and an active mechanical cooling system are required at time of building permit application.
- c. Guidelines for Calculating Refrigerant and Embodied Emissions

See the District of North Vancouver's *Climate Ready Rezoning Policy for New Part 3 Buildings – Information for Applicants*, for guidelines for calculating refrigerants and embodied emissions. These guidelines have been adapted from the City of Vancouver's guidelines.

Policy approved on: July 4, 2022
Policy amended on: