

Submitted online

February 24, 2025

Re: Public review of proposed change to the 2020 National Model Codes

The Canadian Environmental Law Association (CELA) appreciates the opportunity to comment on the proposed changes to overheating in new dwelling units (Part 1, 6 and 9) in the 2020 edition of the National Building Code of Canada (NBC).

CELA is writing to support the proposed change “2061: (NBC) Overheating in New Dwelling Units,” which recommends that the NBC mandate the addition of an acceptable upper indoor temperature that must be maintained in a dwelling unit by the addition of mechanical cooling where the outdoor temperature exceeds 26°C.¹ CELA is also writing to recommend that this addition pertain to all buildings, not just new buildings.

The Danger of Extreme Heat

Extreme heat is a serious issue and an escalating public health emergency. Extreme heat is especially dangerous for elderly people, people with disabilities, people with certain pre-existing medical conditions or taking some medication, children, low-income tenants, and more isolated individuals.² During the 2021 extreme heat event in British Columbia, the majority of deaths occurred inside people’s homes. According to Dr. Sarah Henderson of the BC Centre of Disease Control, “People don’t die because it is hot outside; they die because it is hot inside.”³

The Important Role of a Maximum Indoor Temperature Standard

As the climate crisis worsens and extreme heat events become more frequent and intense⁴, it is essential that the NBC be conceived in a manner that protects Canadians from the dangerous and sometimes deadly impacts of extreme heat.

¹ Canadian Board for Harmonized Construction Codes, “Proposed Change 2061” (last modified 11 January 2025) online (pdf): <cbhcc-cchcc.ca/eng/public-review/2025_1/2025-proposed-changes-to-nbc-combined-file-2025-01-15.pdf>.

² See Kenny, G. P. et al., (2018). Towards establishing evidence-based guidelines on maximum indoor temperatures during hot weather in temperate continental climates. *Temperature*, 6(1), 11–36, <https://doi.org/10.1080/23328940.2018.1456257>.

³ See Government of Canada, “Surviving the heat: The impacts of the 2021 western heat dome in Canada” (last modified 26 June 2022), online: <science.gc.ca/site/science/en/blogs/science-health/surviving-heat-impacts-2021-western-heat-dome-canada>.

⁴ See notably IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, 184 pp., doi: 10.59327/IPCC/AR6-9789291691647. See also Government of Ontario, “Ontario Provincial Climate Change Impact Assessment: Technical Report” (January 2023), online (pdf): <ontario.ca/files/2023-11/mecp-ontario-provincial-climate-change-impact-assessment-en-2023-11-21.pdf>.

The volume of research and evidence supporting a maximum indoor temperature standard as a public health measure is significant.⁵ Further, studies have demonstrated that individuals in apartment-type dwellings are most at risk if their apartments remain above 26°C during an extreme heat event.⁶

CELA supports an upper indoor temperature of 26°C in all buildings

We commend the Canadian Board for Harmonized Construction Codes (CBHCC) on their proposed addition of an acceptable upper indoor temperature that must be maintained in a dwelling unit by the addition of mechanical cooling where the outdoor temperature exceeds 26°C in new buildings.

However, we recommend that the CBHCC ensure that all buildings are safe from extreme heat events. CELA recommends that 2061: (NBC) Overheating in New Dwelling Units be modified to include an acceptable upper indoor temperature that must be maintained **in all buildings**, whether they are new or old.

CELA hopes these comments and recommendations are helpful. We would be happy to answer any questions arising from this submission.

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION



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⁵ See Government of Canada, “Mobilizing Public Health Action on Climate Change in Canada: The Chief of Public Health Officer of Canada’s Report on the State of Public Health in Canada 2022” (2022), at 18, online (pdf): <canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/state-public-health-canada-2022/report-rapport/report.pdf>. See also Campbell M, McKeown D, “Update on Extreme Heat and Maximum Indoor Temperature Standard for Multi-unit Residential Buildings” (2015), online (pdf): <toronto.ca/legdocs/mmis/2015/hl/bgrd/backgroundfile-85835.pdf>.

⁶ Government of British Columbia, “Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021” (2022), at 22, online (pdf): <www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme_heat_death_review_panel_report.pdf>.

Canadian Environmental Law Association