

Buildings in North America and around the globe generate approximately 40% of annual CO2 and CH4 (methane) emissions¹ – the main drivers of climate disruption - with most of those emissions coming from space and water heating using fossil gas and oil, as well as from gas stoves and fireplaces. Right now, the use of fossil (methane) gas continues to expand in new construction in our province and our community. Fortis, BC's gas corporation, continues to euphemistically call methane "natural gas," a marketing ploy adopted in the 19th century, and to call gas a "transition fuel", when we now know that gas leaks make it as damaging as coal. There is increasing evidence that fossil gas leaks in homes that use it - and new evidence of how unhealthy living in buildings using gas is, especially for children.

Electrification is the clean, healthy, and economical alternative to fossil gas in buildings. Given the accelerating pace and intensity of climate impacts, and that we now know there's an <u>increased risks of childhood asthma and leukaemia from methane gas in the home</u>, it's time for local governments to support our communities in making the switch away from gas, starting with new construction.

The good news is the BC government has now given local governments the tools you need to require the decarbonization and electrification of new buildings – in the Zero Carbon Step Code, which came into force on May 1, 2023, and enables local governments to pass bylaws that require lower emissions, right up to requiring full electrification, in new buildings. Here on Vancouver Island the City of Victoria and the District Municipality of Saanich have already adopted Zero Carbon bylaws at level 4 of the new Zero Carbon Code for new buildings.

In <u>Victoria the highest step of the Zero Carbon Step Code is being implemented</u> during 2023 and 2024, with all building permits submitted for Residential (Group C - up to 6 stories) on or after July 1, 2023, needing to meet both Energy Step Code 3 and Zero Emission Step Code 4 (all electrification). Building permits submitted for residential buildings over 6 stories and commercial buildings (Group D and E) on or after November 1 need to meet these same Zero Carbon requirements. Saanich has put in place the same dates and requirements as Victoria for building permit applications for all Group C residential buildings to meet level 4 of the Zero Carbon Code. Specifying EL4 in the bylaw is necessary to achieve the needed full electrification and decarbonization. The Code does allow energy-efficient wood stoves and gas fireplaces for backup use during power outages.

See embedded links & additional footnotes here:

¹ https://www.unepfi.org/themes/climate-change/40-of-emissions-come-from-real-estate-heres-how-the-sector-can-decarbonize/

An added benefit of all electrification is that <u>heat exchangers/pumps provide both heating and cooling</u>², something that fossil gas can't provide – which is so important as, year after year, we experience longer and hotter heat waves with increasing health risks.

Having municipalities right here on the Island that have already applied zero carbon bylaws to new construction gives momentum to other local governments like ours to implement similar bylaws. It also means both Victoria and Saanich are now great sources of advice and support for our five local governments here in the Cowichan Valley as you engage in dialogue with contractors and builders here in the Valley, some of which are the same builders from the south Island, to move forward on decarbonizing the built environment.

Retrofitting existing buildings to eliminate fossil fuels is also needed from a health and safety perspective, as extreme heat waves become more common and more intense. Repeated high temperature events like the 2021 BC Heat Dome must not be allowed to take the tragic death toll we saw that June, with over 600 deaths in BC. We need local governments to prioritize programs that supplement existing federal and provincial support, to get heat pumps, with their ability to provide effective cooling as well as heating, into the rental homes and apartments of our most vulnerable and economically-challenged community members. More broadly, these building retrofits to reduce emissions will also be needed to meet the Province's 2030 climate commitments.

Retrofits will almost certainly be more expensive than new construction, so the sooner we move to requiring new buildings to be Zero Carbon the more money we will save, the healthier we will be, and more impact we will have on reducing emissions and slowing the damage caused by this accelerating climate emergency.

Here in BC and across Canada we continue to see large active wildfires, displacing communities and destroying ecosystems. Indigenous communities are being disproportionately affected. Smoke-filled skies have enveloped cities and towns across the continent. Hot weather and lack of rain have dried our forests and soils increasing fire risk, challenging farmers' ability to grow food, and causing watersheds like the Cowichan and Koksilah to have flows low enough and waters warm enough that salmon and other aquatic life are under stress right now. Meanwhile, in other communities, tornados, heavy rains, and flash floods are destroying roads, homes, and infrastructure.

Eighty percent of greenhouse gas emissions in the last decade come from the extraction, transportation and burning of gas and oil. Methane emissions are over 80 times more potent than CO2 across a 20-year period, and thus have the most severe and immediate climate impact, worse that coal, driving temperatures higher faster here and around the globe, and accelerating the damaging and dislocating climate impacts we're experiencing in our lives, our communities, and on our health and wellbeing.

Given the urgency of climate breakdown that we are experiencing here, across BC and Canada, and the evidence of serious health risks, especially to children, posed by living or working in indoor spaces heated by natural gas, we are asking MNC Council to move forward on a bylaw to decarbonize the built environment to eliminate the health and climate risks of fossil gas in the buildings in our community,

² https://vancouver.ca/files/cov/strata-heat-pump-guide.pdf

THE COWICHAN CLIMATE HUB - Delegation to Council on Decarbonizing the Built Environment

starting with new construction. It's time to act, and we're excited to know that local governments now have the tools and the ability to make a big difference in this major area – building emissions.

This can be done by adopting Zero Carbon bylaws at level 4 (EL4) of BC's new Zero Carbon Code, which means full electrification with no fossil (methane) gas included. We are asking North Cowichan Council to establish a bylaw where all building permits submitted for Residential (Group C - up to 6 story) on or after September 1, 2024, are required to meet both BC Energy Step Code 3 energy efficiency requirements, and BC Zero Carbon Step Code 4 (all electrification). With all building permits submitted for residential buildings over 6 stories and commercial building (Group D and E) on or after January 1, 2025, required to meet these same Zero Carbon requirements, following in the footsteps of the City of Victoria and the Municipality of Saanich who have already put these bylaws in place effective this year -2023.



Respectfully submitted by the Cowichan Climate Hub³ Cowichan@ClimateHub.ca

³ The Cowichan Climate Hub is a collaboration of 20+ diverse local groups - social benefit and environmental nonprofits, faith groups, farmers, fishers, small businesses, and others - seeking to support and work together with local government to achieve solutions-focused climate action locally. We seek to raise community awareness about the climate emergency and engage in collaborative conversations so that no one is left behind.