

**Re: Draft Green Building Standards need to address gas heating and cooking emissions**



June 2<sup>nd</sup> 2024

To

Mallory Smith, Planning Department,  
Linda Lukasik, Director, Office of Climate Change  
cc. Members of the Planning Committee,

**Re: Green Building Standards**

We wrote to you in April to address the single largest action that the City could take to address the greenhouse gas emissions from residential buildings, that of adopting a by-law requiring electrification of new buildings and recommending its inclusion in the Green Building Standards.

A review of this, along with a draft Municipal by-law were attached. They are provided again with this letter. (*A LEGAL REVIEW FOR MUNICIPALITIES: Mandating Full Electrification for New Buildings in Ontario and MODEL MUNICIPAL BY-LAWS*).

We have now had the opportunity to review the City of Hamilton City-Wide Green Building Standards and **we express serious concern that the single largest beneficial action – that of eliminating gas heating and cooking from new residential build - is not directly addressed.**

This should be the most important aspect of the Energy and Carbon Impact Category, EC1, which addresses building emissions.

Our focus is on Hamilton's Tier 1 standards, in that they are more prescriptive, while Tier 2 are less so, based on the description given during the Open House.

We also observe that the WSP background report is dated June 2021 which did not consider some more recent approaches to emissions reduction.

We find that the proposals do not adequately address the source of emissions. Instead, they focus on the measurement of potential energy losses from building due to their design and construction, for example using net zero standards, regardless of the emissions intensity of the energy source used.

Regardless, all residential buildings will still need some form of heating & cooking equipment. The standards talk of energy provision methods such as district energy and renewables. They indirectly address emission, through EC1, Energy Performance. But nowhere do they address the main source of heating currently used in Ontario, that of natural (fossil methane) gas.

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There are no requirements to avoid emissions from natural gas. We consider it probable that for some years to come the building industry will not achieve net zero on new builds. The standards make Net Zero a Tier 2 standard, which we read as optional and aspirational rather than a Tier 1 mandatory requirement.

Thus, it is likely that, given the availability of gas infrastructure, builders will opt for gas furnaces to heat homes to the limited Energy Star 17.1 or R2000 standard, which mainly address ignition and venting, with only indirect reduction in emissions through efficiency improvements.

**What is required is a specific Tier 1 standard mandating electrification of new buildings. This also encourages use of district heating or geothermal methods and promotes use of air-source heat pumps.**

**This standard will then reduce demand of building out of the natural gas infrastructure, with attendant potential for loading stranded asset costs onto homeowners.**

Since the 2021 report by WSP, several jurisdictions have recognized that the proper path to reduce emissions is to eliminate the use of natural gas in heating and cooking. **They recognize the additional health benefits of eliminating proven damaging effects of domestic emissions from gas burning devices.**

We argue that the single biggest building emissions reductions that can be achieved - without requiring builders to undertake extensive emissions modelling and BEAM assessment – is simply to require building electrification with the consequent use of heat pumps and electric stoves. Assessment and inspection become a very simple process. **Adherence costs are minimized, given the strong evidence today that this is the cheapest source of home heating.**

We would additionally propose that, with reasonable notice (say two or three years for industry and consumers to prepare) this requirement be extended to replacement heating and cooking equipment. This is an important supplement to new building standards given two facts 1. Existing Buildings are the second largest source of emissions in Ontario (after transport) and 2. The majority of buildings in 2050 will still be those that were in existence in 2025.

As noted in our earlier letter Hamilton 350 and Stand.earth representatives would be happy to review these documents with you and discuss further. They will be forming the basis for our advocacy on this matter.



David Carson

On behalf of the Hamilton 350 Committee

***Attachments. A LEGAL REVIEW FOR MUNICIPALITIES: Mandating Full Electrification for New Buildings in Ontario and A LEGAL REVIEW FOR MUNICIPALITIES MODEL MUNICIPAL BY-LAWS.***