

From: Sarah Sheehan [REDACTED]
Sent: Friday, August 5, 2022 11:59 AM
To: clerk@hamilton.ca
Subject: Re: CEEP / Draft Climate Plan

“The greenest building is one that is already built.” — Carl Elefante

Hamilton’s Climate Strategy includes the goals of sequestering carbon, creating jobs, and making our city more resilient to the effects of climate change. Over the past two years, I have learned a lot about the climate value of our built environment as part of my advocacy work for adaptive reuse. As I write in my recent CBC Opinion:

“Reduce, reuse, recycle: adaptive reuse fits the sustainability mantra of the “three Rs,” but all too often we overlook the green side of architectural conservation. ... Reusing old buildings is an easy way to reduce our carbon footprint, but first, our thinking about development needs a reset.”

The draft plan includes energy-efficient retrofits of existing buildings. There also needs to be specific policy incentivizing reuse of existing buildings, ideally tied to inventoried heritage properties and development applications, especially those presupposing demolition for new build.

As we now recognize, the climate emergency requires a shift to a net-zero, climate resilient economy, and that shift must include the construction industry. Unfortunately, the current status quo is the legacy of postwar ideas valorizing unsustainable consumption, with built-in incentives to waste and consume resources.

Embodied carbon refers to the total energy invested in a building's construction, from extraction of natural resources, manufacturing, and transportation, up to final completion of a new structure. This carbon investment accounts for up to 50 per cent of a building’s greenhouse gas (GHG) emissions over its entire lifespan, even for buildings constructed with the most sustainable, up-to-date methods and materials.

City staff already understand the importance of built heritage conservation to Hamilton’s climate strategy. The [City of Hamilton webpage for St. Mark's Centre](#) lists “preserving a heritage building and preventing its embodied energy and carbon from going to a landfill” among the green initiatives.

North American standards are evolving towards Life Cycle Assessment (LCA). In her 5-minute TEDx talk (<https://youtu.be/PFdvlIt41Hk>), Jennifer O'Connor, president of the Athena Sustainable Materials Institute, describes a case study, linked below, about carbon footprint and building reuse.

Natural and architectural conservation are recognized by UNESCO, as Harold Kalman, Principal at Commonwealth Historic Resource Management Ltd. and a member of the Order of Canada, notes:

"The global equivalent [of heritage designation] is UNESCO's *World Heritage Convention*. It lists and protects natural and built places that hold 'outstanding universal value'."

Recycling buildings is just common sense. Taking a more holistic view of conservation, heritage, and sustainability means undoing the division between natural and built environments, and ensuring embodied carbon is incentivized in the Climate Strategy.

Sincerely,
Dr. Sarah Sheehan, The Friends of St. Giles

Resources and further reading:

Case Study – United Nations Headquarters and Campus (2015):
<http://www.athenasmi.org/resources/case-studies/united-nations-headquarters/>

Building Resilience Tool Kit: <http://buildingresilience.ca/>

Harold Kalman, "Hug a Tree, Hug a Building," National Trust for Canada, June 15, 2021
<https://nationaltrustcanada.ca/online-stories/hug-a-tree-hug-a-building>

Sarah Sheehan, "Save a building, fight climate change," CBC Opinion, Jan. 26, 2022
<https://www.cbc.ca/news/opinion/opinion-climate-building-demolition-1.6325677>

Cheers,
- Sarah

[@DrSarahSheehan](#) | sarahsheehan.ca | friendsofstgiles.ca