

# HAMILTON'S COMMUNITY ENERGY AND EMISSIONS PLAN



## LOW-CARBON SCENARIO VIRTUAL CONSULTATION JANUARY/FEBRUARY 2021

### Q & A REPORT

## **ABOUT THIS REPORT**

Hamilton's Community Energy and Emissions Plan ("CEEP") is a long-term plan to meet Hamilton's future energy needs while improving energy efficiency, reducing greenhouse gas (GHG) emissions and fostering local sustainable and community-supported energy solutions. The plan includes every aspect of city-wide energy use and GHG emissions, from homes to transportation to industry to waste.

A Public Virtual Information Meeting was held on January 28<sup>th</sup>, 2021 with the following objectives:

1. Inform participants on Hamilton's Community Energy and Emissions Plan (CEEP).
2. Answer questions related to the CEEP.
3. Provide information on ways to get involved.

This report, prepared jointly by City Staff and Sustainability Solutions Group (SSG), serves to provide an overview of the questions received prior to and during the Public Virtual Information Meeting along with a record of the associated responses. Please note that some of the questions have been modified to avoid repetition where multiple similar questions were received. Please also note that the questions and answers have been grouped by theme in order to provide for easier navigation of the report.

## QUESTIONS/RESPONSES

**Table 1 – Public Consultation Questions and Responses Noted**

	Theme	Questions and Responses Noted
1.	<b>Transportation</b>	<p><b>How will we incentivize folks to buy EVs (electric vehicles)?</b></p> <p>Response: We are seeing municipalities experiment with different mechanisms to stimulate EV uptake, including differentiated parking rates, designated parking spaces, zero emissions zones, incentives such as EV lanes, and installation of EV infrastructure (chargers, etc.), among others. There are also creative financing strategies that reduce the upfront costs of purchasing an EV. Highlighting the operational cost savings of EVs is also important. How the City of Hamilton and broader Hamilton community can incentivize the uptake of EVs is one concept being explored through the CEEP.</p>
2.		<p><b>Does the current low-carbon model include a proposed LRT (light rail transit) system?</b></p> <p>Response: The current low-carbon scenario does not include an LRT system; however, a BRT system has been modelled along some of the City’s transit routes that have been identified for rapid transit through the City’s <a href="#">BLAST</a> network. It should be noted that the CEEP is a flexible document that will be updated at set intervals, should alternative forms of transit be developed, the model and plan can be updated accordingly.</p>
3.	<b>Buildings</b>	<p><b>What specific actions can be taken to reduce traffic through the lower and upper city? New surveys should require green building practices as well as mandating cycle infrastructure. Is the city prepared to mandate this?</b></p> <p>Response: The focus of the CEEP is not to reduce traffic congestion through the lower and upper City, but rather to increase energy efficiency and reduce greenhouse gas emissions across the entire community. However, some of the proposed actions, such as promoting transit ridership, active modes of transportation, and carpooling, will have the co-benefit of reducing traffic congestion within the City.</p>

		<p><i>The Ontario Building Code regulates the level of construction of new buildings and building standards within Ontario. Accordingly, as a municipality, the City of Hamilton has very little legislative power to <b>require</b> green building standards on new construction. However, there is certainly an opportunity for municipalities to incentivize and encourage green building standards through development approvals and guidelines.</i></p> <p><i>Cycling infrastructure is implemented within new development in accordance with the City's Cycling Master Plan. Where a future cycling route has been identified, the City will take necessary measures to secure its provision through the development approvals process.</i></p>
4.		<p><b>Will there be additional grants/funding to help businesses &amp; residents implement retrofits to help with this greener energy sourcing plan? What happens to those who can't afford (residential building) retrofits?</b></p> <p><i>Response: There are financing models being developed in other jurisdictions in which the municipality (or other parties) finance the retrofits and take a share of the energy savings over time to pay for the capital cost of the retrofits, so that there is no upfront cost burden on households. There are other complexities, such as buildings with rental units, but funding mechanisms are also being developed for these circumstances in other jurisdictions as well. The City of Hamilton is in the process of exploring various financing mechanisms being implemented elsewhere to support building retrofits in search of a potential solution that works for Hamiltonians. The City is also considering how it can leverage any available funding from other levels of government to support home energy retrofits.</i></p>
5.		<p><b>Does the low-carbon scenario model include fuel switching from natural gas to hydrogen for residential heating requirements?</b></p> <p><i>Response: The low-carbon scenario model currently includes a combination of electrification of residential heating systems, combined with some fuel switching of existing natural gas systems to renewable natural gas and hydrogen. However, the majority of residential heating systems are modelled to be electrified in the low-carbon scenario.</i></p>

6.		<p><b><i>The City is currently undertaking its Land Needs Assessment and is requesting public input on where and how to grow. Are your CEEP folks working alongside the GRIDS2 MCR folks?</i></b></p> <p><i>Response: Yes. The City project teams for both the GRIDS2 project and the CEEP are working together to determine how the CEEP modeling and outcomes can inform the GRIDS2 process.</i></p>
7.	<b><i>Land Use Planning</i></b>	<p><b><i>Which of the GRIDS 2 intensification/densification options does BAP (business-as-planned) scenario use?</i></b></p> <p><i>Response: The business-as-planned scenario for the CEEP uses a 50% intensification target, which is the minimum target established in the Growth Plan for the Greater Golden Horseshoe (2019, as amended). The population projections were provided for modelling by traffic zone by City Staff up to 2041, these projections were then extrapolated linearly to 2050.</i></p>
8.	<b><i>Industry</i></b>	<p><b><i>How much scope for emissions reduction is there in Hamilton's heavy industrial sector, especially steel? What technologies exist that can reduce the carbon intensity of steel smelting? What technologies could be developed with more research?</i></b></p> <p><i>Response: As the Community Energy and Emissions Plan is a community wide plan, the plan takes into consideration the reduction of industrial emissions, including primary steel production. In fact, the CEEP’s goals align with those of the Canadian Steel Producers Association, which has set a goal of a net-zero carbon emissions for the steel industry by 2050.</i></p> <p><i>There are several technological pathways that are at various stages of development to help primary steel reduce its carbon intensity. These include the replacement of coal with various types of biofuels, including bio-char; and using blue and green hydrogen as an energy source. There are also various technologies in development that can be used for carbon capture during industrial processes.</i></p>

		<p><a href="#">Here</a> is an example of a recent development in low-carbon steel technology.</p>
9.		<p><b>I'd like to know how the City can support the industrial sector in responding to NRCan's Hydrogen Strategy for Canada (Dec 2020). This 'call to action', highlights the potential for hydrogen as a fuel source in cement and steel production. How can we encourage Steel Town to pilot new and likely expensive technologies required to realize net-zero goals?</b></p> <p>Response: <a href="#">The Hydrogen Strategy</a> certainly presents some interesting discussion surrounding the use of hydrogen as an alternative to coal and natural gas as a potential fuel source, in particular as it relates to the production of steel. The City is exploring ways that it can best support and encourage local industry to explore new low-carbon technologies as they become available. This could include an advocacy and awareness role in partnership with industry to upper levels of government, and the City working to attract clean tech companies to the City.</p>
10.		<p><b>Is the city planning to collaborate with the provincial and federal governments as well as large emitters to develop an overall strategy to reduce industrial emissions?</b></p> <p>Response: Part of the City's approach to supporting the local industrial sector could be working with the Provincial and Federal governments to advocate for programs and funding that encourage and support the low-carbon transition for industry. There are also existing and potentially new committees/working groups that bring industry and higher levels of government to the table to talk about innovative technology. A great example is Clean Air Hamilton and Stelco's successful innovative project to utilize bio-char for a small but important step forward in reducing coal use. Read more about it here: <a href="http://cleanairhamilton.ca/wp-content/uploads/2018/12/2017-CAH-Annual-Report-December-2018-FINAL.pdf">http://cleanairhamilton.ca/wp-content/uploads/2018/12/2017-CAH-Annual-Report-December-2018-FINAL.pdf</a></p>
11.		<p><b>Does your use of biochar in the model assume equivalent sequestration by trees etc. within the same time period?</b></p>

		<p>Response: <i>Yes, for the purposes of the low-carbon scenario, it is assumed that the biochar fuel is carbon neutral.</i></p>
<p>12.</p>	<p><b>Other/Administrative</b></p>	<p><b>You seem to have collected a great stakeholder group for the CEEP. It seems to me there is a lot of overlap between this and the Bay Area Climate Change Council (BACCC) organization, both in membership and in goals. And further overlap with the City's Climate Change Plan. These three things need to join together to avoid duplication. It would then bring a powerful joint effort to focus on the needs of the City and Community. Is there a plan to do this?</b></p> <p>Response: <i>Yes, some of the stakeholders who are part of the Bay Area Climate Change Council (BACCC) do overlap with the stakeholders for the CEEP. City Staff are also ex-officio members to BACCC to provide expert advice and information. This is important so we can avoid any duplications, ensure alignment and identify synergies. BACCC is the result of one of the top 10 recommendations within the City's 2015 Climate Action Plan. City Staff through the Corporate Climate Change Task (CCCTF) is currently collecting and coordinating all of these pieces together to ensure a holistic joint effort that addresses City and Community needs. The CCCTF have been directed by City Council to report semi-annually on the progress of all this work.</i></p>
<p>13.</p>		<p><b>Does Hamilton currently belong to the C40 cities initiative?</b></p> <p>Response: <i>Hamilton is not currently part of the C40 Cities Initiative. The C40 initiative is meant for 'megacities' and Hamilton does not qualify as a member based on its population. The City is currently members for the Global Covenant of Mayors, FCM's Partners for Climate Protection and ICLEI Canada's Building Adaptable Resilient Communities. The City also reports annually on climate actions through the Carbon Disclosure Project following the Global Protocol for Community-Wide Greenhouse Gas Inventories. All of these organizations are similar to the C40's initiative to commit to climate action and transparent reporting. Some Canadian cities on the list of C40 Cities include Montreal, Toronto and Vancouver.</i></p>

14.		<p><b>What are some of the short-term goals Hamilton set to get to net zero by 2050? how does the city measure success in this plan on a short-term basis (monthly, yearly etc)?</b></p> <p>Response: The CEEP will include a long-term framework for the City to achieve net-zero carbon emissions by 2050. The CEEP will also include a short-term (<math>\pm 5</math> year) implementation framework that contains goals and actions that should be implemented in the short-term. The CEEP will also recommend a monitoring and reporting framework whereby the City can track progress and measure success on implemented actions.</p>
15.		<p><b>A Hamilton Community Climate Change Plan was prepared &amp; issued in 2015 but little came of it – largely because the plan did not require stakeholders to commit resources to the proposed actions. Have the engaged stakeholders made any commitments to deliver resources to implement the plan?</b></p> <p>Response: The CEEP cannot require that engaged stakeholders commit resources to the implementation of the proposed actions. However, prior to the completion of the plan, we will strive to achieve a commitment from key stakeholders for the implementation of the plan. This may include a general endorsement of the plan by key stakeholders involved in the development and implementation of the plan.</p>
16.		<p><b>I have to wonder if the goal of net zero by 2050 is ambitious enough.</b></p> <p>Response: City Council's Climate Change Emergency Declaration directed Staff to form a cross-department Corporate Climate Change Task Force and to identify and investigate actions to achieve net-zero carbon emissions by 2050. Net-zero by 2050 is a target that has been widely adopted by other municipalities when developing Community Energy and Emissions Plans and also aligns with <a href="#">federal GHG reduction targets</a>. This is also supported by sector research, which asserts that in order to avoid the catastrophic effects of a warming climate, we must transition to a net-zero economy by 2050.</p>

17.		<p><b>Will the plan be costed and explain who is responsible for the costs and show the different cost per tonne of GHG reduction in different areas? Simple example: how much does the City have to spend to electrify buses.</b></p> <p><i>Response: Yes, we are in the process of costing all of the proposed actions in the low-carbon scenario, which is done through an accompanying financial model. We are doing a macro (societal) cost analysis and we also do an action by action analysis, which identifies the net present value of each action in alignment with which entity pays for which action.</i></p>
18.		<p><b>I appreciate the stakeholder engagement at all levels that you have talked about. I think there is still a lot of education to be done for the general population. Maybe budgeting should include a plan for some serious education/marketing of the plan to people.</b></p> <p><i>Response: We are currently in the process of developing the Draft CEEP. Consultation on the Draft CEEP will be accompanied by a significant public engagement component. Feedback received through the public engagement campaign will be considered and reflected in the final CEEP. Following the completion of the plan, the implementation framework and/or recommendations of the plan may include a subsequent educational/marketing campaign targeted towards the general public.</i></p>
19.	Renewable Energy	<p><b>What was the percent of GHG reduction will come from RECs?</b></p> <p><i>Response: 7% of GHG reductions come from Renewable Energy Certificates (RECs).</i></p>