

Hamilton Community Energy & Emissions Plan Community Stakeholder Advisory Committee

Low-Carbon Scenario Results and Implementation

Meeting Summary

Date & time: January 14th, 2021, 9:30-11:30 am

Location: Zoom Conference Call

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Attendees

1. Kyra Bell-Pasht (SSG)
2. Yuill Herbert (SSG)
3. Marcus Williams (WiT)
4. Tom Chessman (City of Hamilton, Energy Office)
5. Trevor Imhoff (City of Hamilton, Public Health)
6. Christine Newbold (City of Hamilton, Planning)
7. Heidi Levitzky (Hamilton Industrial Environmental Association)
8. Kate Flynn (Centre for Climate Change Management at Mohawk College);

9. Ryan Hoeksma (Hamilton Wentworth Catholic District School Board)
10. Chris Hamilton (Enbridge)
11. Chris Cuthbert (Hamilton Health Sciences)
12. Eric Roehl (Hamilton Health Sciences)
13. Jim Cotton (McMaster University)
14. Lynda Lukasik (Environment Hamilton)
15. John Lundrigan (AMD Dofasco)
16. Kevin Van Hartingsveldt (McCallumSather/HBSA)
17. Bianca Caramento (Bay Area Climate Change Council)
18. Tony Cupido (Mohawk College)
19. Peter Hole (Stelco)
20. Andrew Sebestyen (Stelco)
21. Rafiq Dhanji (Sustainable Hamilton Burlington)
22. Michelle Singh (Faith & The Common Good)
23. Denise Arkell (Neighbour 2 Neighbour Centre)
24. Gail Krantzberg (McMaster University)
25. Hugo Vargas (Alectra)
26. Vickram Lakhian (Smarter Alloys)
27. Ankur Mehrotra (Hamilton Community Energy Inc.)

Webinar Objectives

- To understand the Net-Zero (Low-Carbon) Pathway as it is currently modelled.
- To seek stakeholder feedback on the Net-Zero (Low-Carbon) Pathway.
- To understand and gather feedback on the implementation process.
- To begin designing the implementation pathway.

Description

A webinar that will provide:

- An overview of the low-carbon scenario modeling results.
- An introduction to the implementation pathways of the various modelled actions.

The webinar will conclude with a group activity with various breakout groups where individual low-carbon actions and their respective implementation pathways will be discussed; including the opportunities and challenges for Hamilton surrounding each key low-carbon action.

Low-Carbon Scenario Results

- A presentation on the low-carbon scenario modelling results was provided by Kyra from Sustainable Solutions Group. Please refer to the PowerPoint presentation for details of the presentation.

[Please refer to webinar PPT slides]

Participant Questions & Comments

- Why does the electrical grid get increasingly dirty to 2050?
 - The grid in Ontario is projected to substitute natural gas for nuclear capacity, increasing its GHG intensity.
- What is included in the sectors of 'Industrial', 'Transportation', 'Commercial', & 'Residential'?
 - Commercial and residential refer to buildings; Industrial includes industrial buildings and process emissions; Transportation is everything moving around (movement of people and goods).
- Does residential include apartment buildings?
 - Yes.
- How would the electrification of the systems be affected by increasing GHG intensities within the electrical grid? Does the model take this into account?
 - Certainly- we represent the provincial grid and its emissions intensity with an annual time step. This requires that we add more local generation and the purchase of Renewable Energy Certificates.
- In the Low-carbon analysis, will there be a sub-analysis for "community-based" emissions - excluding industry? With industry emissions being so large, it seems to obscure the amount of effort needed to bring down community emissions even though Hamilton has comparable emissions in transportation, buildings, etc. to lots of other cities of comparable size.
 - Yes, we can split those pieces out in the CEEP.
- Does HSR have plans to electrify its fleet?
 - The low-carbon scenario includes decarbonizing the HSR's fleet.
- Is the City engaged in the newly developing Federal and Provincial hydrogen strategies?
 - The City is investigating working with this and that includes potential for Hydrogen in Transit in the future.
- Are charging stations for EVs part of the strategy?
 - Yes they will likely form a component of the implementation strategy for the electrification of personal vehicles.
- Please send questions that will be asked at the next session be sent in advance. That will give us some time to prepare quick and concise input.
 - Great suggestion and noted for future meetings.

- Can we get a follow up email about the January 28th public event? We'd be happy to share it with our networks.
 - A follow-up email will be sent with details of the January 28th event.

Summary of Engagement To Date

[See webinar PPT slides]

Implementation Breakout Group Exercise

- Participants were broken into facilitated breakout groups that were assigned a specific action to discuss the potential implementation implications for that action.
- Group discussion was guided by a series of questions within a Google Form. The following questions were asked to each group to stimulate discussion:
 1. *In order to implement these targets is there a key policy, action, or strategy that needs to be applied? Is there an existing City or other corporate policy or strategy that should be updated?*
 2. *Beyond GHG reductions, low-carbon actions are often accompanied by other community benefits, called co-benefits. Which co-benefits do these actions present for Hamilton?*
 3. *Who are the "Key Partners" in implementing these actions?*
 4. *What will these partners roles or opportunities be in relation to advancing these actions?*
 5. *What funding or other resources are available to help implement these actions? Do you know of any similar programs that have succeeded in other cities or jurisdictions?*
 6. *What conditions or competing interests might interfere with implementing this action? What might mitigate this challenge or overcome it?*
- The broader group was also given an opportunity to provide feedback in general at the end of the meeting.
- A feedback summary on the implementation of each action is included below.
- Stakeholders were also encouraged to provide feedback on as many low-carbon actions as possible via Google Forms online. Links to the Google Forms were provided in a follow-up email.

District Energy (DE) Decarbonization and Expansion

- There is a big opportunity to use industrial waste-heat as a potential energy source for the Downtown district energy system.
- Using waste heat could be a significant ambient temperature system, as opposed to historical DE; which is typically steam or hot water.
- The Chamber of Commerce has done extensive work through their Waste-Heat project and are identifying 11 policies for the advancement of waste heat fueled DE in Hamilton.
- There are different ways DE systems can either be mandated or incentivized through both land use planning policy and by-laws, this needs to be investigated.
- Exploring which level of “stick” or “carrot” should be required is important. Should we restrict and require or incentivize, or both?
- There is a need for further partnerships with government beyond the City to higher levels of government from both a financing and jurisdictional perspective.
- There is also a very clear need for a business case for a DE system when compared to other types of energy delivery systems and energy sources (renewable vs. conventional energy systems)
- Thermal trunk line from the bayfront to Downtown, would significantly increase the amount of waste energy available.
- There is a solid policy foundation from the Chamber of Commerce’s work that can be directly incorporated into the CEEP.
- Big opportunity to move quickly, building on existing work.

Industrial Process Efficiency Improvements

- Uncertainty on the transition between the Feds and Province on climate change policy and on political support for industry to make the low-carbon transition is a barrier.
- Past partnerships between Enbridge and several large industrial emitters and using this as a best practice program is an opportunity.
- The City should take an active role in advocating to higher levels of government for further funding and support on the low-carbon transition for industry.
- New alternative fuel types and low-carbon technologies are very costly; support from other levels of government is essential to ensure a successful low-carbon transition while also providing a sound business case for transitioning and remaining competitive.
- There are many co-benefits, not just air quality, but water quality and reduction of waste are also important co-benefits and these need to be conveyed and highlighted.
- Benefits also include economic development from the attraction of clean-tech companies, and construction, etc. These benefits also need to be considered and conveyed as part of the implementation plan and messaging of the CEEP.

Residential and Commercial Building Retrofits

- There is a large need for a residential building home energy retrofit program and funding/financing to incentivize retrofits on a large scale.
- There will be a need to develop programs that focus on both residential and commercial buildings likely through two separate programs. How do we advance this?
- There will be different responses to programs for different types of residential buildings – owner occupied building vs. a rental building where there is a landlord/tenant. How do we incentivize a landlord to complete retrofits? There needs to be a sound business case.
- An equity lens should be applied to ANY program that is created so that vulnerable populations can benefit. Important co-benefit focus needs to be increasing equity.
- There needs to be a simple way for homeowners to determine what retrofit is right for them. The process should be simplified for homeowners and links to other resources/funding should be made available.
- Working on the envelop and air sealing should be a priority vs. heating and cooling mechanical equipment replacement.

Renewable Energy Generation

- The Net-Zero pathway is focused on solar and wind primarily.
- Funding and regulatory framework surrounding renewable energy generation is very important.
- There needs to be a short term and long-term framework established by upper levels of government and regulatory authorities so that businesses and home owners have a long “runway” to plan large scale projects. The need for consistency.
- It would be great to have more capital funding and incentives for these types of projects, this could fit in with the long-term framework mentioned above.
- Medium to small size businesses and even homeowners; having something with a 10-year capital payback period is great, but if they have to invest their limited resources into a capital-intensive project it may make larger scale projects difficult. If a business owner needs to choose between their business success and some sort of renewable energy project, the choice will likely be reinvesting into their business.
- How do we make that decision easier for the homeowner/business owner, in light of competing interests for their limited capital?
- The business case needs to be attractive (incentives/certainty) to get businesses and home owners to invest in renewable energy projects/systems.
- Co-benefits include economic development, positive health outcomes, etc.

- We need to consider how equity can be included into the implementation of renewable energy projects.
- Research - there is a lot of research going on right now related to small scale community level renewable energy generation. A lot of this research is in Hamilton and we have an opportunity to be leaders in the field.