

Town of Aurora Community Energy Plan

Stakeholder Working Group Meeting #4

June 11, 2020, 3:30pm to 6:00pm

Introduction

The Town of Aurora is developing a Community Energy Plan (CEP) – a comprehensive long-term plan to improve energy efficiency and reduce energy consumption and greenhouse gas production. The CEP will result in a plan that fosters a culture of conservation, considers the impacts of future growth and options for local clean energy generation and supports economic development by better meeting local energy needs.

The Stakeholder Working Group (SWG) provides an ongoing mechanism for input and advice to the Project Team on key points in the development of the CEP.

Session Objectives

The fourth SWG meeting was held on June 11, 2020. The objectives of the meeting were to:

- Discuss potential targets and current gaps;
- Present high-level refined strategies;
- Seek feedback on proposed high-level strategies; and
- Discuss additional items and answer questions as necessary.

Presentation and Participant Comments

The meeting began with welcome remarks by Natalie Kehle, Town of Aurora, and Susan Hall, LURA Consulting. Susan provided a brief review of the project objectives, reviewed the highlights from the third SWG Meeting, and reviewed the proposed strategies for inclusion in the CEP. Caitlin Rodger, ICLEI Canada, reviewed the total emissions reductions both cumulatively and associated with each strategy. In total, the current strategies will achieve a 28% GHG reduction by 2030 and a 63% reduction by 2050.

Discussion – Vision Statement & Goals

SWG members reviewed the CEP draft Vision Statement and draft goals. Members reiterated their support for both the vision and goal statements.

Discussion - Strategies

In small groups, SWG members reviewed and provided feedback on the proposed strategies with a focus on fit for Aurora, immediate next steps, partners and the ability to generate further reductions. Overall, the strategies were supported by SWG members, with some modifications to the participation rates and applications. The following section provides a summary of the feedback received. This feedback will be used to refine the strategies.

Transportation

Mode Shift – Encourage mode shift from single-occupancy vehicles to active transportation, public transportation and carpooling.

- Connectivity to Metrolinx is critical, as well as the Oak Ridges Trails Association for supporting mode shifting for commuters. Inter-municipality connectivity is necessary and requires collaboration.
- COVID-19 may support mode shift and may reduce single-occupancy vehicle travel as people work from home.
- Yonge Street is an opportunity to support mode shift with off-street bike lanes, regional transportation (VIVA), modernized sidewalks. We have the opportunity to retrofit these corridors to support walkability and amenities that support foot traffic.
- Locations for connectivity for active transportation would be identified through an Active Transportation Plan.

EV Adoption – Develop and implement a plan to become an electric vehicle ready city and promote the adoption of electric vehicles and other low-emission vehicles within both commercial and residential sectors.

- Members felt the strategy was a good fit for Aurora, and there is potential for significant uptake in electric vehicles.
- The Town should adopt policies to support electric vehicles.

Residential Buildings

New Residential Buildings – Encourage new residential buildings to meet a high energy performance standard.

- The strategy is consistent with neighbouring municipalities. A coordinated approach is appreciated.
- Aurora should piggy-back efforts of municipalities in the region regarding the development of the green standard. However, Aurora must give special attention to how they will implement it given they are much smaller than others and don't have the same capacity.
 - Note: Aurora is currently in the process of developing a Green Development Standard for the town.
- Continued collaboration with the Joint Municipal Climate Change Working Group is advisable.
- The Plan should stress that focus should be on long-life assets first (i.e. building envelope) before short life assets (i.e. energy technology). However, this may be difficult to convince developers because long-life assets don't add a lot of value in the eyes of the buyer.
- Aurora should add "conduct jurisdictional scan" before the consultation in the action item list – so you can go to the consultation with some information at hand.

New Residential Buildings – Encourage new residential buildings to adopt **heat pumps** as an efficient low carbon heating system.

- For the most part, the Plan does not mention "air source heat pumps" but rather heat pumps in general. This is good and should remain this way.

- The Plan shouldn't be prescriptive about what technology or fuel the heat pumps are, so long as they help reach their energy and emissions goals. For instance, natural gas heat pumps aren't on the market yet, but they are being trialled and they are showing some promise for the future.
- Consider the fact that electricity is expensive, it may be challenging to get people to use electric heat pumps. But natural gas ones might add savings and payback.
- Most of the measures here are targeted at owners. There should be programming for landlords and renters if they make up a decent share of the market.
- Electric baseboard switching to electric heat pumps is the one renovation they are seeing the most interest, as it offers attractive savings.
- Efforts should be made by the Town to stay up to date on the rapid market changes in heat pumps.

Commercial and Institutional Buildings

New Commercial and Institutional Buildings – Encourage new commercial and institutional buildings to meet a high energy efficiency performance standard.

- A tiered building standard is a great approach. A checklist for developers is also beneficial (there are examples of good checklists from around the GTA).
- There are fewer examples of great incentivization structures and this could be a significant challenge with this strategy.
- Developer support may be an issue. It is important to not discourage non-residential development in Aurora. ICI development can occur in neighbouring municipalities so if a code were too stringent it could push development away. There must be a balance between effective standards and adequate incentives.
- Consider risk reduction – design and architecture fields are leery of taking risks with new technology and tend to favour traditional approaches that don't pose a risk. Consider a way to de-risk or share the risk, through a pilot project that encourages the adoption of new innovative tech.

New Commercial and Institutional Buildings – Encourage new commercial buildings to adopt **heat pumps** as an efficient low carbon heating system.

- Feedback related to this strategy has been captured under the new residential buildings strategy. The key takeaway is that the strategies should not be over-prescriptive.

Existing Commercial and Institutional Buildings – Develop and implement a voluntary retrofit program for existing commercial/institutional buildings to improve energy efficiency.

- Education and awareness should be part of the program, and there should be a discussion of the different options that are available concerning implementing a retrofit. A retrofit program would not necessarily be one-size-fits-all, it would need to be tailored to the building.
- A detailed design phase (beyond the scope of this plan) is needed to outline the business case for doing a retrofit. The detailed design should identify the specific funding options available to the potential participants in the program. There needs to be a very strong business case made for building owners/managers to choose to participate in the program.
- Sometimes it is not necessarily older buildings that are less efficient but has more to do with how buildings are operated. There may be an opportunity to leverage data from the

EWRB database alongside the age of the building to create a screening system for buildings in the program (with the idea being to target the least efficient buildings first, rather than simply the oldest).

Existing Commercial and Institutional Buildings – Encourage existing commercial/institutional buildings to adopt heat pumps as an efficient low carbon heating system.

- The other two strategies are very broad and then we jump into a very specific prescriptive strategy (i.e. heat pumps). If specific technologies are outlined then it might not be the most appropriate technology for each ICI building, and if new technologies are introduced in the future then the Town may not position itself to take advantage of that technology.
- It would be better to have heat pumps as a consideration in the building standard or retrofit program, rather than as stand-alone strategies. It may also be better to consider other low-carbon technology, and so disaggregate the description so that it is clear the strategy includes building thermal efficiency, energy efficiency, and low-carbon intensity as inclusive goals.

Existing Commercial and Institutional Buildings – Develop and implement a **commissioning and recommissioning program** for commercial, institutional and multi-residential buildings.

- The best time for equipment upgrades is when technologies are at the end of their lifecycles, and so if a program were targeting ICI with technology upgrades it would be beneficial to know when to do this.
- Consider the possibility of developing a voluntary database so that a program could work with building operators to introduce heat pumps or another tech at the end of equipment lifecycles.

Industry

Industrial Buildings – Facilitate energy efficiency improvements in the industrial sector.

- Consider referencing the [ClimateWise Program](#) specifically as one of the mechanisms to build a best practice network for industry, to support knowledge exchange and capacity building.
- Consider being more aggressive in with industrial sector energy consumption reductions. Rather than 1-2%, consider 3% cumulatively across Aurora by 2030.

Renewable Energy

Renewables – Promote the adoption of renewable energy (rooftop solar PV systems, solar thermal systems, ground-mounted arrays).

- The anticipated residential rooftop solar uptake estimations may be too high as there are several barriers for homeowners (expensive and sometimes unsightly).
- Members recommended increasing the uptake of rooftop solar amongst other sectors to increase their use of renewables (e.g., commercial, industrial, institutional and multi-unit residential buildings).
- Ground-mounted systems on vacant land may be challenging due to limited lands. Public lands may need to be prioritized. Members recommended Exploring the opportunity for solar panels can be installed in parking lots with no effects on lot capacity

to achieve ground-mount solar reductions. SWG members suggested that ground-mount solar should be considered after other solar applications.

- .

District Energy

Renewables – Identify opportunities through a feasibility study for implementing a renewable/alternative fuel-based district energy system.

- The industrial parkway or area surrounding the GOTrain station may be good candidates for locating a DES.
- DES is very important for the Town to explore and a feasibility study would be the right approach.
- Potential challenges: There are regulations regarding the distribution of power which may become problematic if the municipality does not own the utility company, how to incentivize customers to the DES utility, and finding a 3rd party to operate the utility.

Waste Reduction and Diversion

Waste – Implement programs to reduce waste generation by residents and businesses and to increase waste diversion from landfills.

- Develop efforts to ensure that the benefits realized by the anaerobic digestion derived renewable natural gas produced from in the Region are realized within the Region, and not sold elsewhere. This fuel can be used to offset the region's emissions and there are enough organics to make a business case about this.
- Municipalities in the Region (Aurora included) need to advocate in support of the region's waste efforts. Aurora can do the education and implementation (i.e. bag limit rules).

Next Steps

Natalie, Jennifer and Susan thanked participants for their time and contributions. The next meeting is anticipated for late summer/early fall and will focus on further refinements to select strategies, implementation considerations as key components of the draft CEP.