CITY OF BARRIE COMMUNITY ENERGY AND GHG REDUCTION PLAN

General Committee Presentation







Date: March 21, 2022



Objectives of Today's Presentation

- ✓ Solicit support from General Committee for endorsement of the Plan
- ✓ Provide an overview and highlights of the Plan

- ✓ Enhance awareness of climate action opportunities in the community
- ✓ Discuss the implementation framework and next steps



Council Support for Climate & Energy Action

Council motion March 2018

 Council adopted motion to develop a Community Energy and Greenhouse Gas (GHG) Reduction Plan

2018 – 2022 Council Strategic Priorities

- "while mitigating and adapting to climate change"
- added to the priority of Building a greener Barrie

Climate emergency October 2019

Goal of net-zero carbon emissions by the year 2050



Developing the Plan

Q1 & Q2 2020

- Establish
 Energy &
 GHG
 Emissions
 Baseline
- Prepare a
 Business-as Planned
 Scenario

Q3 2020 – Q2 2021

- Prepare Reduction Strategies
- Define Community Targets

Q3 & Q4 2021

Community
 Energy &
 Emissions
 Reduction
 Plan

Stakeholder & Community Engagement



Stakeholder Advisory Group

Alectra Utilities

City Council

Electric Vehicle Society

Enbridge Gas

Georgian College

Independent Electricity System Operator Lake Simcoe Region Conservation Authority

Living Green Barrie Nottawasaga Valley Conservation Authority

Ontario
Association of
Architects

County of Simcoe

Royal Victoria Hospital Simcoe County District School Board

Simcoe Home Builders Simcoe Muskoka District Health Unit

Transit & Parking

Business
Performance &
Environmental
Sustainability

Development Services Corporate Facilities



Stakeholder & Community Engagement Summary

Stakeholder Advisory Group Meetings

Seven meetings hosted between August 25, 2020 and December 8,
 2021

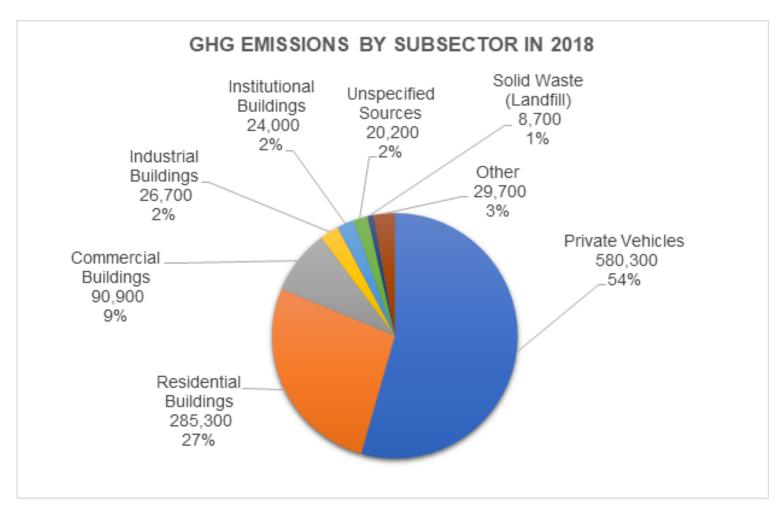
Public Engagement

- Three rounds of engagement:
- 1) Fall 2020 Public Survey: Seventy-six (76) individuals completed the survey.
- 2) Spring 2021 Public information Centre: Ten (10) participants engaged in discussions on draft plan strategies and actions.
- 3) Winter 2022 Public Draft Plan Review & Survey: Seventy-nine (79) individuals accessed draft plan and completed accompanying survey.

Stakeholder Outreach (Winter 2022)

- Engaged and reached out to additional stakeholders (businesses, building sector, local youth) to solicit feedback on draft plan.

Plan Highlights: Emissions Summary



Total GHG Emissions: ~1.07 million tCO₂e



Plan Highlights: Emissions Summary

Key Findings:

- Energy use produced over a million tonnes of carbon dioxide equivalent for the community.
- Annually, nearly \$600 million is spent on energy (the majority leaves the local economy).
- The average person spent \$3,870 on annual energy costs and emits 7 tonnes of emissions.
- Private vehicle transportation use is responsible for 55% of total community emissions.
- The building sector is responsible for 40% of community emissions.
- The BAP forecast indicates emissions will increase by 40% by 2050.
- Without strong action, the community emissions will significantly exceed federal emission targets in both 2030 and 2050.

Plan Framework

Vision

Principles

Big Moves

Goals

Strategies

Implementation



Vision & Principles

The City of Barrie is taking an integrated, ambitious and actionoriented approach to climate action, which provides positive environmental, social, economic and health outcomes for all.

- -There are **economic** benefits in pursuing climate action at the local level.
- -Recognize and promote the inextricable link between the natural and built environments, climate change and our community's health and wellbeing, and foster the health co-benefits of climate action.
- -Pursue **innovative** solutions and an **evidence-based** approach to climate action.
- -Educate and inspire residents and business to make positive environmental change, building on the City's leadership.
- -Develop strategies that are **equitable** and enhance **quality of life** for all residents.
- -Benchmark against **best practices** and looks for continuous improvement. -Enable positive environmental actions amongst Barrie's residents.
- -Advance Barrie's climate and energy goals in **partnership** with residents, organizations and businesses.

Big Move - Buildings











- Green development standard
- Energy management and benchmarking
- District energy
- Rooftop/ground mounted solar
- Larger renewable energy infrastructure projects





Big Move – Transportation









Goal: Near zero emissions from transportation

- Local transit options
- Increased GO Train use
- HOV lane on Hwy 400
- Adoption of electric vehicles
- Active transportation
- Car sharing programs and networks



Big Move – Waste











- Specialized collection weeks
- Circular economy culture
- Commercial, institutional, and multiuse residential buildings recycling practices and procedures



Big Move – Natural Environment & Land Use











Goal:

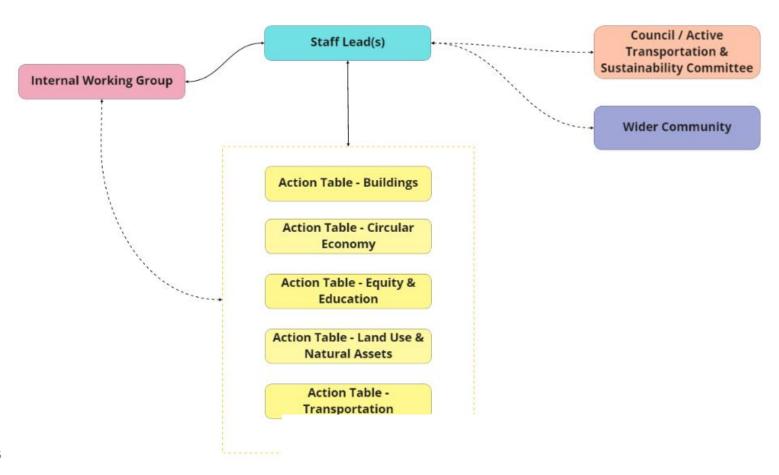
Livable neighbourhoods that support energy efficiency, mixed-use, complete communities & protection of the natural environment.

- Higher density, mixed-use developments
- Zero emissions neighbourhood
- Growing and buying locally grown food
- Carbon sequestration through trees, wetlands and other nature-based solutions



Implementation Framework

"City-led and community-supported"





Immediate Actions & Next Steps

Administrative and enabling actions:

- Establishment of Action Tables
- Establishment of Internal Corporate Implementation Working Group
- Development and implementation of a Communications and Engagement program
- Development of a Monitoring and Reporting Protocol
- Investigate the establishment of a carbon budget

Big Move actions (City Led):

- Initiate the development of a Deep Energy Retrofit Program
- Initiate the development of a Green Development Standard



THANK YOU

Questions?





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