

CITY OF BARRIE COMMUNITY ENERGY & GHG REDUCTION PLAN

Active Transportation & Sustainability Committee Presentation

Date: January 4th, 2022



Objectives of Today's Presentation

- ✓ Share highlights of the draft
- ✓ Solicit feedback, comments and suggestions
- ✓ Build support for endorsement and implementation of the plan

DEVELOPING OUR PLAN

Council Support for Climate & Energy Action

Council motion March 2018

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

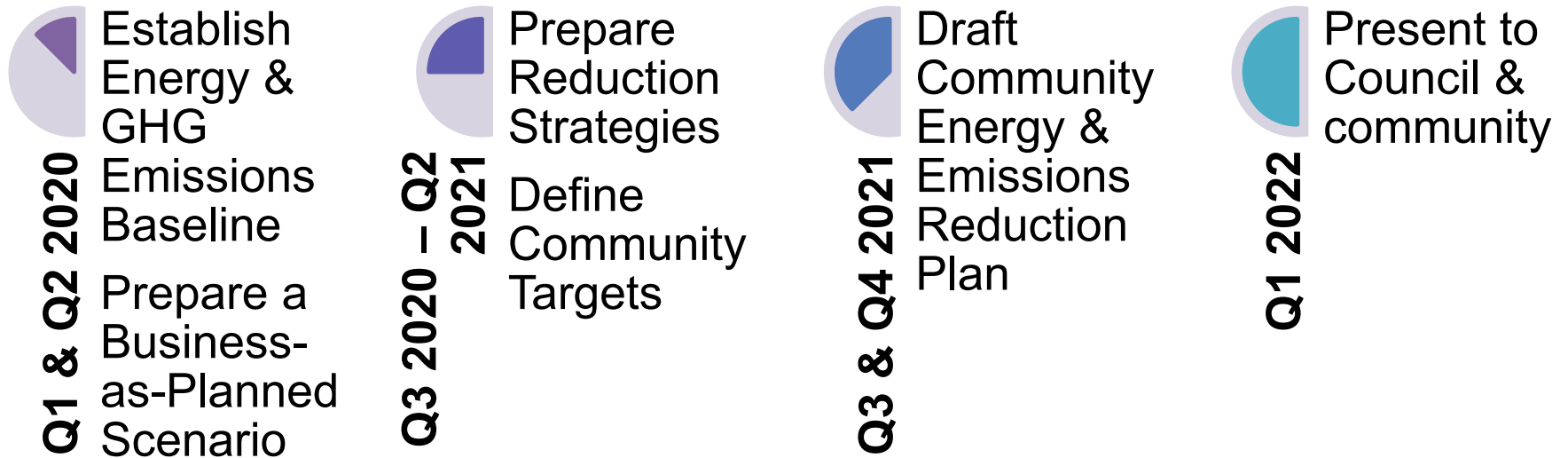
2018 – 2022 Council Strategic Priorities

- “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



Stakeholder & Community Engagement

Plan Framework

Vision

- Barrie's "big picture" for climate action.

Principles

- Values to guide our path forward.

Big Moves

- Four areas where we will focus our efforts.

Goals

- What we hope to achieve within each Big Move.

Strategies

- Concrete steps to reduce energy and emissions.

Implementation

- How we will move this plan forward.

Vision & Principles

Vision

The Barrie community is taking an integrated, ambitious and action-oriented approach to climate action providing positive environmental, social, economic and health outcomes for all.

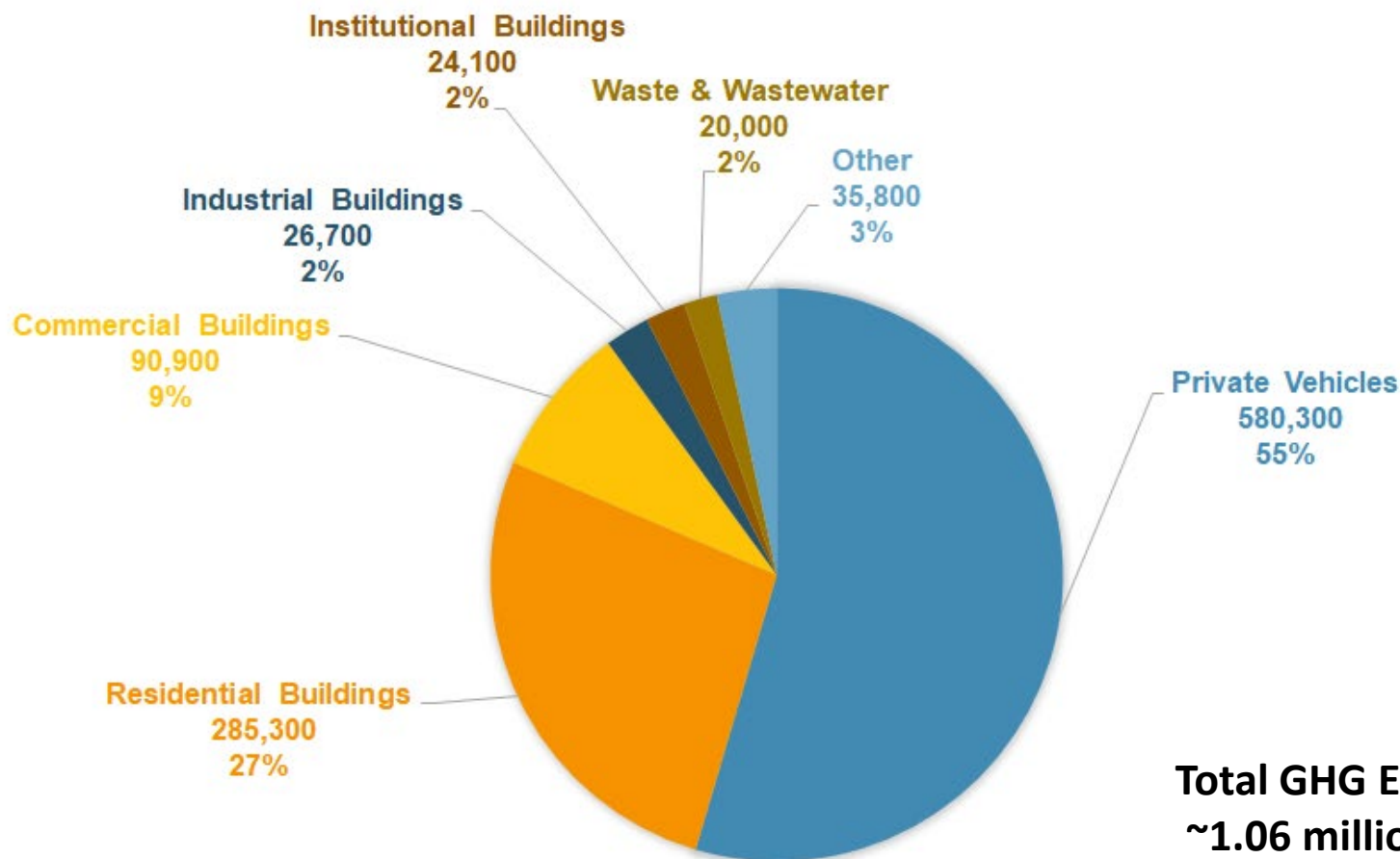
Principles

- 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 communities' 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 businesses to make positive environmental change, building on the City's leadership.
- Develop strategies that are equitable and enhance the quality of life for all residents.
- Benchmark against best practices and look 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.

OUR EMISSIONS & TARGET

Barrie's Emissions (2018)

GHG EMISSIONS BY SUBSECTOR IN 2018



Energy & Emissions Snapshot (2018)

As a whole, we used over **20 million GJ** of energy. This equates to about **132 GJ per person**.

Our energy use produced **over a million tonnes** of carbon dioxide equivalent – almost **seven tonnes per person**.

We spent over **\$596 million** on energy (most of which left our local economy).

The average person spent **\$3,860** on annual energy costs.

Our **homes, buildings and travel** use the most energy, generate the most emissions and energy costs.

In terms of transportation, **private vehicle use** is responsible for the largest use of energy and emissions.

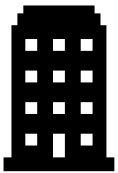
Without action, **our energy use will increase by 36% and our emissions will increase by 40% by 2050.**

Associated **energy costs could increase by as much as 60%.**

OUR BIG MOVES



Big Move - Buildings



Goal: Near zero emissions in new and existing building stock

- Deep Energy Retrofit Program
- Green Development Standard
- Energy Management and Benchmarking
- Solar Generation
- District Energy (Pre-feasibility)
- Larger Renewables (Pre-feasibility)

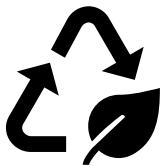
Big Move – Transportation



Goal: Near zero emissions from transportation

- Electric Vehicle Adoption
- Active Travel
- Local Transit Options
- GO Transit Use
- Car-Sharing

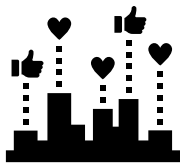
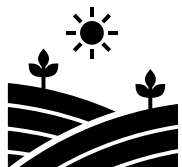
Big Move – Circular Economy



Goal: Waste reduction through a circular economy

- Community sharing economy
- Phase-out of single-use plastics
- Recovering energy
- Circular construction

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
- Local food
- Nature-based solutions

Our Reduction Target

Target: reduce overall GHG emissions 45% below 2018 levels by 2030 and to become net-zero by 2050

- Aligns with Paris Agreement

‘Big Moves’ Strategy Impact: reduction in emissions by 32% by 2030 and 72% by 2050.

- Achievable according to evidence and research on best practices

1.5C consistent model: reduction in emissions by 50% percent by 2030 and 87% by 2050

- Considerably expanded uptake of strategies
- Still remains a gap to achieve net zero
- Recognizes where we need to be to align with Paris Agreement

Plan Implementation & Next Steps

Local governments – like the City of Barrie – have control over as much as half of the emissions that occur within the municipality.



- The City will play a key role in the plan implementation.

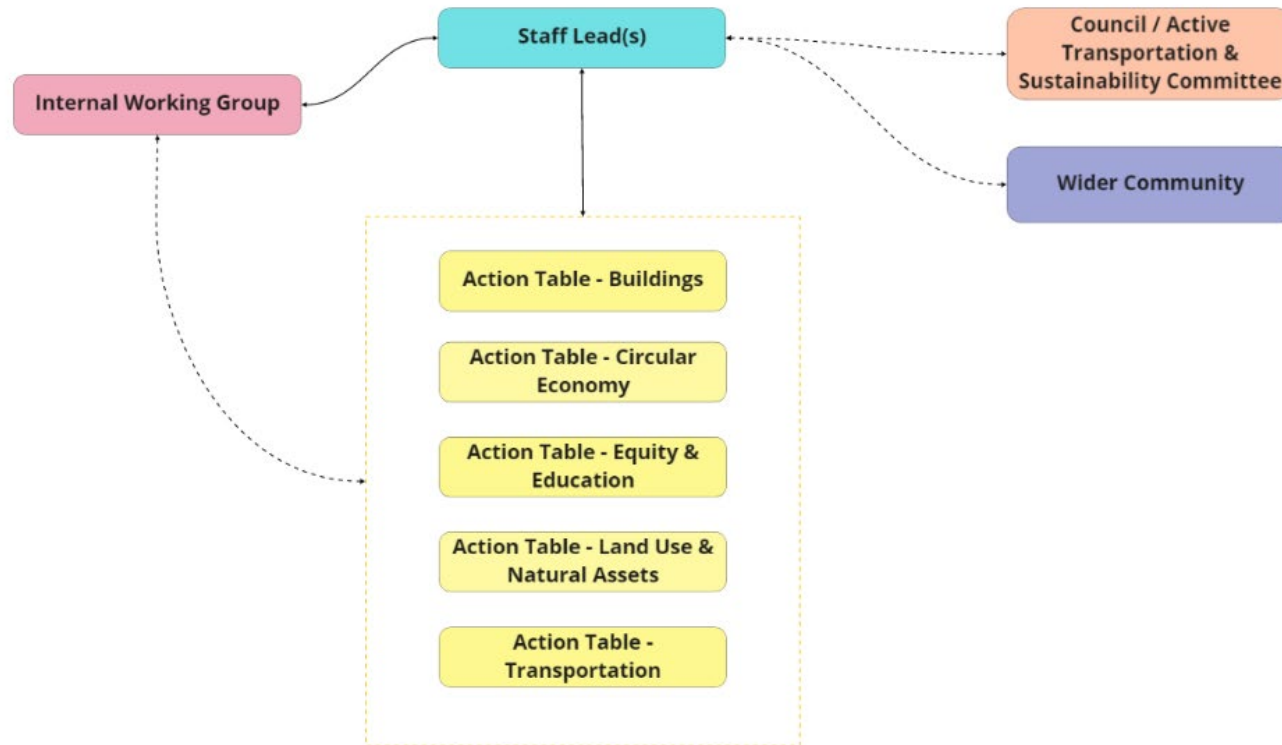
Best practices for plan implementation seen in other municipalities include:

- Ensure there is a dedicated staff resource within the municipality
- Engage multiple partners across the community
- Open communications both internally and with wider community
- Ongoing monitoring, evaluation and reporting

Proposed Governance Model

The proposed model is "municipally-led and community-supported"

- City (corporation) provides leadership and administrative oversight
- Wider community supports implementation



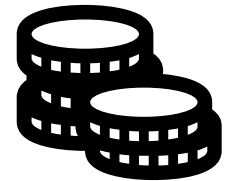
Financing

The City has a key role to play in supporting this Plan financially:

- Ongoing operational funding to support plan administratively
- Funding for implementation of specific strategies

This can include:

- Dedicated funding for a new full-time staff position
- Financial support to local homeowners and businesses
- Policies and programs that enable third-party financing
- Develop a sustainable financing model



City Actions

Immediate Priority Actions & Next Steps:

- Obtain Council Endorsement of Plan
- Establish Action Tables
 - (Initially targeting Transportation & Building Sectors)
- Initiate City led Strategies:
 - Deep Building Retrofit Program
 - Green Development Standard
 - Establish scope for feasibility studies
 - Development of a corporate net zero emission strategy

THANK YOU

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