#### Recommendation

That Council ask staff to do a cost analysis on a complete and accurate baseline measure of Cornwall's greenhouse gas emissions at the corporate- and community-scale, with the inventory to be completed by the end of FY 2021-22. This inventory of greenhouse gas emissions should include all fixed and mobile sources of direct, indirect, process, and fugitive greenhouse gas emissions, as detailed below. The analysis should include the costs associated with managing and updating the inventory annually, as well as publicly disclosing the inventory on an open data portal that allows benchmark comparisons and learning between Cornwall and other cities.

The cost analysis should identify grants and funding available to the municipality to conduct this work.

## Background

A strategic priority of Council is for the city of Cornwall to be **leaders in sustainability and climate change impact**.

In October 2019, Council approved the <u>terms of reference</u> and established the new Environment and Climate Change Committee (the Committee). An area of the Committee's mandate is to identify and address local sources of greenhouse gas emissions by developing local greenhouse gas inventories, setting greenhouse gas reduction targets, and developing and carrying out local climate change action plans.

Cornwall is a member of the Partners in Climate Protection (PCP), a program managed and delivered by the Federation of Canadian Municipalities and ICLEI–Local Governments for Sustainability Canada. The PCP program consists of a five step Milestone Framework that guides municipalities to act by reducing greenhouse gas emissions. The Milestone Framework consists of the following steps:

Milestone 1: Create a Baseline Emissions Inventory and Forecast

Milestone 2: Set Emissions Reduction Targets

Milestone 3: Develop a Local Action Plan

Milestone 4: Implement the Local Action Plan

Milestone 5: Monitor Progress and Report Results

A baseline greenhouse gas inventory provides a snapshot of energy use and emissions production in a community. Such inventories are fundamental to making informed choices about emission reduction targets, policies and investments that reduce emissions, and for evaluating progress towards climate goals. They are a necessary tool for municipalities to understand climate risk and practice sound financial management.

Climate change is a global problem with local impacts. According to <u>Canada's Changing Climate Report</u>, Canada's climate has warmed and will warm further in the future, driven by human activity. Global emissions of carbon dioxide from human activity will largely determine how much warming Canada and the world will experience in the future, and this warming is effectively irreversible. The effects of climate change in Canada include more extreme heat, less extreme cold, longer growing seasons, shorter snow

and ice cover seasons, earlier spring peak streamflow, thinning glaciers, thawing permafrost, and rising sea level. Limiting global average temperature rise to below 2 degrees Celsius will only occur if Canada and the rest of the world reduce carbon emissions to near zero early in the second half of the century and reduce emissions of other greenhouse gases substantially.

### Corporate Policy Context

The City of Cornwall reports an annual summary of the Corporation's energy use and greenhouse gas emissions in its <a href="Energy Conservation and Demand Management Plan">Energy Conservation and Demand Management Plan</a> (ECDM), as required by Ontario Regulation 507/18. The scope of the greenhouse gas emissions reported in the ECDM does not constitute a complete inventory of the Corporation's greenhouse gas emissions and is not a comprehensive baseline.

No inventory of Cornwall's community level greenhouse gas emissions exists.

City Council has approved an energy consumption reduction target in all municipal operations by an average of 10% per year between 2019 and 2023, based on ECDM data.

Cornwall has not adopted a greenhouse gas emission reduction target for the Corporation or the community.

# Greenhouse Gas Inventory and Reporting Standards

The Committee recommends the following standards for the corporate and the community greenhouse gas inventory:

**Corporate inventory** calculated using the methodology of the <u>Local Government Operations</u> <u>Protocol for Greenhouse Gas Assessments</u> (LGOP). The LGOP provides technical guidance to municipalities to inventory GHG emissions resulting from government buildings and facilities, government fleet vehicles, wastewater treatment and potable water treatment facilities, landfill facilities, and other operations.

**Community inventory** calculated using the methodology of the <u>Global Protocol for Community-Scale Greenhouse Gas Emission Inventories</u> (GCP), conducted at the BASIC+ level. The GCP requires cities to report on all greenhouse gas emissions occurring within the city boundaries, consistent with how they are reported at the national level. The BASIC+ level means that all emissions associated with stationary energy; transportation; waste; industrial processes and product use; agriculture, forestry, and other land use; and any other materially-relevant source of emissions occurring outside the city resulting from city activities (ex.: Cornwall Regional Airport), are included.

The reason these standards are being recommended is because they are internationally recognized and widely adopted standards for municipal greenhouse gas emissions reporting. They provide sufficiently advanced and comprehensive inventories to enable scenario modeling and climate action planning at the corporate and community scale and will facilitate cost-effective investments to reduce greenhouse gas emissions.

# Climate Data Disclosure

The Committee recommends that corporate and community greenhouse gas emission data are reported annually in a machine-readable, open data format. This should be disclosed on a public portal that allows comparison between Cornwall's greenhouse gas emissions and reduction approach and those of other cities in Canada and the world.

Disclosing the city's greenhouse gas emissions and climate approach has many advantages, including increasing citizen engagement, benchmarking performance, expanding access to finance, connecting with other cities, and learning from best practices.

