APPENDIX A – Council Briefing Notes on 2022 Greenhouse Gas Inventory Results

September 25, 2023 - Briefing Note

Re: 2022 Greenhouse Gas Inventory Results

PURPOSE

This note is to inform you of the publication of the CRD's 2022 Community Greenhouse Gas (GHG) Emissions Inventory Report in advance of the CRD Environmental Services Committee scheduled meeting on September 27, 2023. Staff are currently reviewing the data and will be discussing the report outcomes with other municipal partners from across the region through the Inter-municipal Climate Action Working Group meetings. **While this is now public information, the CRD is asking that municipalities hold off on any media release or social media until after the committee meeting on September 27.**

BACKGROUND

Every year, the City of Victoria obtains a community GHG inventory to track progress toward its Climate Leadership Plan GHG emission reduction targets. Every other year the inventory is obtained through a regional inventory commissioned by the CRD. This year, Victoria's inventory has been obtained through the CRD. The regional inventory was published by the CRD on Friday, September 22 and will be presented to the CRD's environment committee on Wednesday, September 27.

The City tracks its emissions using two inventory methods: the CEEI method and the GPC BASIC + method. The City's CLP targets are set against a provincial inventory system, Community Energy and Emissions Inventory (CEEI). The City also obtains a GPC (Global Protocol for Community-Scale Greenhouse Gas Emission Inventories) BASIC + inventory. The GPC BASIC+ inventory is a globally recognized inventory that captures a broader range of GHG emissions than the CEEI, including land use change, industrial processes, and additional transportation emissions (air, marine and off-road transport). This supports comparison and reporting with other communities globally. Having both inventories helps us see and understand the impacts from sectors where we have more influence (buildings, on-road transportation, waste) and sectors where we have less influence (industry, air, marine, etc.).

2022 GHG INVENTORY RESULTS

The CEEI inventory shows a continued decline in community GHG emissions with a drop of 15,000 tonnes to 305,000 tonnes in 2022, resulting in a drop of 26% in community GHG emissions since 2007. The GPC BASIC+ inventory (which captures a broader scope of GHG emissions than the CEEI) shows an increase in GHG emissions between 2021 and 2022 with a rise of 8,000 tonnes in 2022 to 407,000 tonnes.

Overall, these inventories show the City is trending in the right direction to achieve our GHG emissions reduction targets:

- 7% decrease in on-road transportation GHG emission since 2021.
- Emissions from waste were down by approximately 5000 tonnes.
- Heating oil consumption continued to decrease.
- Overall building emissions were similar to 2021, mainly due to an uptick in electricity consumption from residential buildings.

The recently released Origin and Destination Study indicated a shift in travel patterns with more residents working from home, taking fewer trips outside of the city, as well as an increase in the use of car shares and EVs. These factors, combined with a decrease in the rate of vehicle ownership, contributed the decrease in on-road transportation GHG emissions. While this reduction in on-road transportation emissions is good news, more time and information are needed to understand if this is the beginning of a trend or driven by potentially shorter-term factors such cost-of-living increases, fuel price spikes, and vehicle supply constraints.

In the waste sector, emissions are down by approximately 5,000 tonnes. The CRD wastewater treatment plant came into full operation, providing tertiary treatment of wastewater and resulted in the bulk of emissions reductions in this area. Additional reductions in waste related GHG emissions, approximately 1,000 tonnes, result from a better understanding of landfill gas capture rates at Hartland Landfill.

From the GPC inventory, which includes marine traffic, there was an increase in transportation emissions from the resumption in Coho ferry and cruise ship traffic after the hiatus in 2020/21 (estimated to contribute 20,000 tonnes of GHG emissions). This was the main driver of the difference between the two inventories CEEI (which showed a continued decline in emissions) and the GPC BASIC + inventory (which showed a slight increase in emissions).

NEXT STEPS

Though GHG emissions continue to track downward in key areas in Victoria, theses emissions reductions are not yet at a rate consistent with meeting CLP targets. The City's Climate Leadership Plan targets a 50% reduction in community GHG emissions by 2030. While a 26% reduction has been achieved over the past 16 years, the City has seven years to achieve a further 24% reduction. To achieve this target, the community will require approximately 3.5% of emissions reductions year over year.

The community Greenhouse Gas (GHG) inventory provides a comprehensive snapshot of our progress to support municipal climate action. Over the coming weeks, staff will continue to analyze data and report back with insights to inform future policy recommendations, infrastructure, and program investments. The 2022, 2020 and 2018 Regional GHG Inventory Studies and Member Municipality Summaries can be found mid-way down the following CRD webpage on climate change data: Climate Change | CRD.

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November 24, 2023 - Briefing Note

Re: 2022 Greenhouse Gas Inventory Results

PURPOSE

This note is in response to questions that were received from Council following the release of the City's 2022 Greenhouse Gas (GHG) Inventory Results.

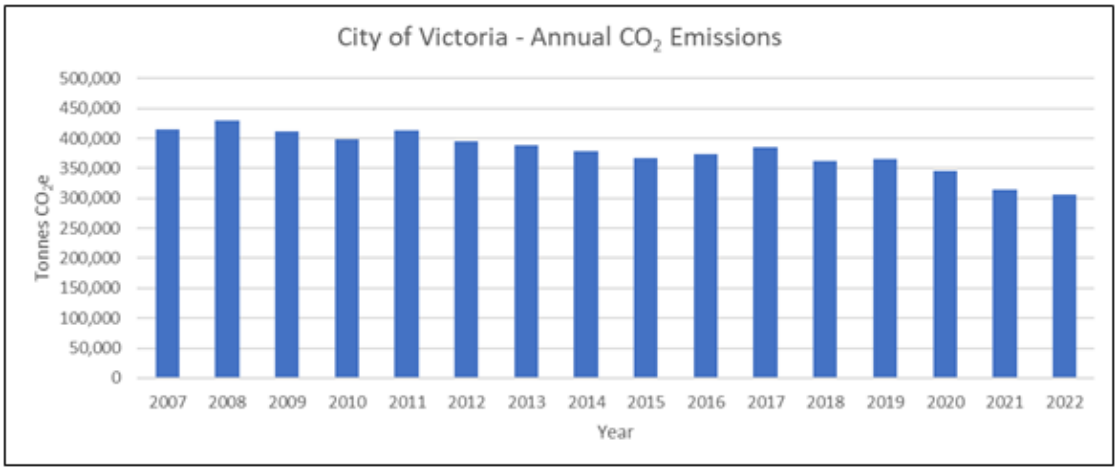
BACKGROUND

Council received a briefing note on September 26 related to the City's 2022 Greenhouse Gas Inventory Results identified in a Capital Regional District (CRD) report presented to the CRD Environmental Service Committee on September 27. The 2022, 2020 and 2018 Regional GHG Inventory Studies and Member Municipality Summaries can be found mid-way down the following CRD webpage on climate change data: Climate Change | CRD.

STATUS

The following information is intended to provide additional context around the City's greenhouse gas emissions trends and how this relates to the City's Climate Leadership Plan (CLP) policies in response to questions from Council following the release of the CRD Inventory Report.

How much of the decline in Victoria GHG emissions came from the pandemic?
The bar graph below shows Victoria's annual emissions reductions progress. Prior to the pandemic, Victoria's community GHG emissions were down 12% since 2007; the pandemic and time since has seen a further 14% reduction below 2007 levels.

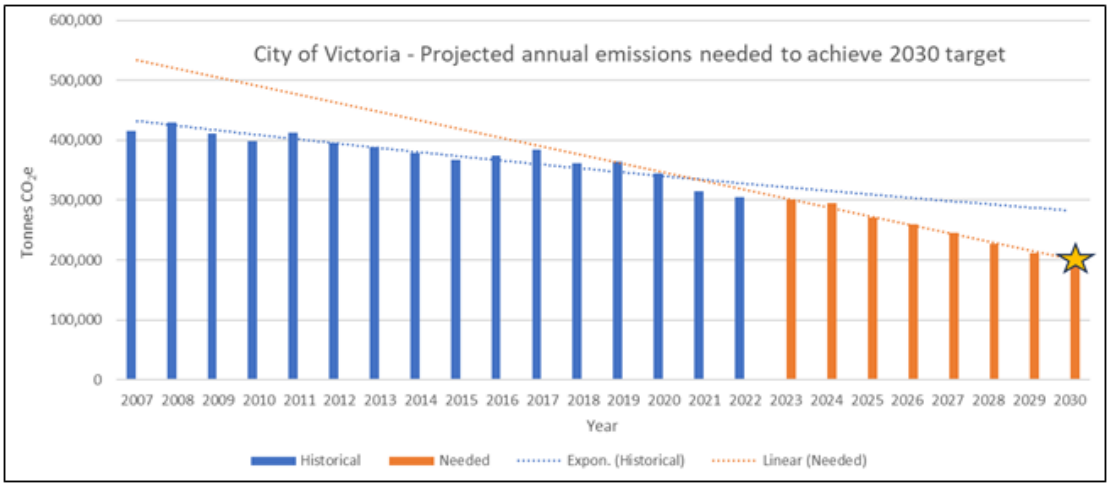


- Since 2019, Victoria has seen reductions from: heating oil use, the production of electricity, wastewater treatment, and transportation. Due to gaps in data, some of these reductions were happening gradually, but only became captured in recent inventories; an excellent example is the reduction in emissions from oil heating.
- Transportation emissions did drop noticeably in 2020 and 2021, influenced by the pandemic. The fact that the City is seeing transportation emissions continued to decline in 2022—after the majority of travel restrictions had been lifted—is encouraging, indicating we are experiencing more than a pandemic dip in transportation emissions.

- The recently released 2022 Origin & Destination study indicates a significant shift in the travel patterns of Victoria residents. There are numerous factors of potential influence including changes in behavior following the pandemic (including the persistence of work at home practices) as well as vehicle supply and cost of living constraints.
- The observed reduction in vehicle ownership and increased use of active transportation alternatives are consistent with the changes that the City's policies and investments aim to achieve through its Go Victoria and Climate Leadership Plans. However, more time and data are needed to define trends and causes.
- Overall, the news is encouraging and an indication that diversifying the city's transportation network has been a supportive and resilient move for both reducing transportation GHG emissions and citizen's travel needs during the pandemic.

Are the CLP policies too mild? What do we need to do to significantly accelerate reductions and meet our Climate Leadership Plan (CLP) 2030 Targets? Will new policies be needed?

- As of 2022, the City has achieved a 26% reduction in GHG emissions from 2007 levels, which leaves seven years to achieve a further 24% reduction. The bar graph below illustrates the increased rate of reductions needed (3.5% per year) to achieve our 2030 target (50% emissions reduction).



- The policies and initiatives in the CLP are a blend of shorter- and longer-term actions, recognizing that the implementation of climate action initiatives often follows an 'S-curve' pattern where progress is slow at first as programs are developed, then accelerates as barriers are overcome.
- Amidst many City initiatives to support behaviour change, the CLP focused on a mix of:
    - quick wins (eliminating oil heating).
    - establishing policies for sustainable growth (zero carbon step code).
    - building out infrastructure networks to support needed behaviour changes (multi-modal transportation networks and neighbourhood Electric Vehicle charging).
- Reviewing and adjusting actions, policies and targets is a normal part of delivering on a long-term plan. The GHG inventory is a significant guiding factor selecting and adjusting policies and measures but is only one of several lenses that should be applied.
- Reaching the City's ambitious yet achievable climate action targets will require strong and enduring collaboration across community, business, government, and residential groups.

How will new policies be different? How do we know that the policy set we are considering will actually reach the target?

- It is difficult to predict with certainty whether a policy set of a single local government such as Victoria will achieve the desired GHG reductions.
- The City recognizes that its targets cannot be achieved through local government authority or initiatives alone. Action is required at all levels of government and change needs to be supported by the broader community and its stakeholders.
- The focus will likely shift to implementation of initiatives at scale and will include a strong emphasis on regional collaboration.
- A key area where progress needs to be achieved is in retrofitting existing buildings. The City's new Buildings Emissions Reduction Strategy (being presented at COTW in Q1 2024) aims to identify how the City's efforts can complement initiatives from other levels of government in this area.

How is the City working with other levels of government?

- The CLP targets cannot be achieved without support from other levels of government. City staff meet regularly with their counterparts in several capacities at all levels of government.
- There are many collaboration and cost-sharing projects at a regional level. At a provincial level, the City's CLP actions have received financial support. Regular consultation takes place to support policy and action deployment and tracking. Federally, the City has received significant funding for both adaptation and mitigation actions of its plan.
- The City will need to continue to build on these collaboration efforts to accelerate and bring actions to scale sufficient to meet our 2030 targets.

To what extent is the climate team working with planning and development to ensure they are adding sufficient density in the right places in the OCP (Official Community Plan) and zoning review?

- The City has grown by more than 19% since 2007 and recent growth projections identify that our rate of growth is expected to continue to increase.
- Balancing a city's climate objectives with its growth objectives and housing needs is a crucial challenge in modern sustainable urban planning.
- Climate team staff are participating in several internal working groups as part of the City's 10-year OCP update.
- The City's distributed climate team approach enables the climate team to have staff that are embedded within the planning department for improved coordination and integration of initiatives and programs.

NEXT STEPS

A summary of Victoria's Community GHG emissions reduction trends will also be included in the Climate Leadership Plan Update Report that will be coming to Council early 2024.

KEY MESSAGES

1. Progress in Greenhouse Gas Reductions: Victoria has reduced its greenhouse gas emissions by 26% since 2007, advancing towards its 2030 goal of a 50% reduction. This achievement reflects both pandemic-influenced changes and consistent environmental efforts.
2. Significance of the Climate Leadership Plan: The CLP combines immediate and long-term actions, like phasing out oil heating and promoting sustainable growth, to drive Victoria's climate change mitigation efforts.

3. Collaboration Across All Levels: Achieving climate goals in Victoria requires collaboration beyond local government, involving federal, provincial, and regional bodies, as well as community and business participation.
4. Responsive and Evolving Policies: The city regularly reviews and adapts its climate policies, introducing initiatives like the Buildings Emissions Reduction Strategy to stay on track for its 2030 climate targets.
5. Integrating Climate Goals with Urban Planning: Victoria integrates climate objectives with urban development, balancing environmental sustainability with the city's growth and housing needs in its planning processes.

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