

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, JULY 15, 2020**

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**SUBJECT**     **Regional Greenhouse Gas Inventory Study**

**ISSUE SUMMARY**

To provide the results of the Capital Regional District (CRD) and regional local government community greenhouse gas (GHG) emissions inventories.

**BACKGROUND**

The CRD's 2018 Regional Growth Strategy (RGS) targets a reduction in community greenhouse gas emissions of 33% (from 2007 levels) by 2020, and 61% by 2038. In February 2019, the CRD Board declared a climate emergency and committed to regional carbon neutrality. At its March 13, 2019 meeting, the CRD Board directed staff to complete a regional GHG inventory and emission reduction pathway analysis.

Utilizing the internationally recognized Global Protocol for Cities (GPC) framework, the CRD retained Stantec Consulting Ltd. to develop four regional GPC BASIC + greenhouse gas (GHG) emission inventories including the years 2007, 2010, 2012 and 2018. The delivered inventories provide the basis for trending GHG emissions in the capital region.

This inventory represents the best available information and improves upon previous Community Energy and Emissions Inventories (CEEI) conducted by the Province of BC. However, there is some uncertainty and limitations with the data and some assumptions were made (specifically around transportation and land use). The CRD's GPC BASIC + inventory aligns with the inventory previously completed by the District of Saanich (2017) and the City of Victoria (2018). Staff will continue to work with partners to identify, understand and source the best available data for future inventorying efforts.

The inventory has been updated from the draft numbers presented in the 2019 CRD Climate Action Annual Report presented to the Board on May 13, 2020. The updated figures represent material changes to the 2007 baseline carbon emission due to an error found post publication.

The 2018 CRD inventory, found in Appendix A, indicates the capital region emits approximately 1.7 million tonnes of CO<sub>2</sub>e annually. This indicates that emissions are approximately the same as compared to 2007 levels with a slight decrease of 1.1%. The inventory reaffirms that transportation related emissions (with on-road transportation accounting for approximately 46% of total emissions alone) and the built environment (residential buildings account for approximately 18% and commercial/institutional buildings for 14%) as the main areas where progress needs to continue in order to meet the targets set by the CRD. It also affirms that the CRD and local governments should continue leadership on waste related emissions, which decreased 26% between 2007 and 2018. Appendix B summarizes changes in emissions between 2007 and 2018 for local governments.

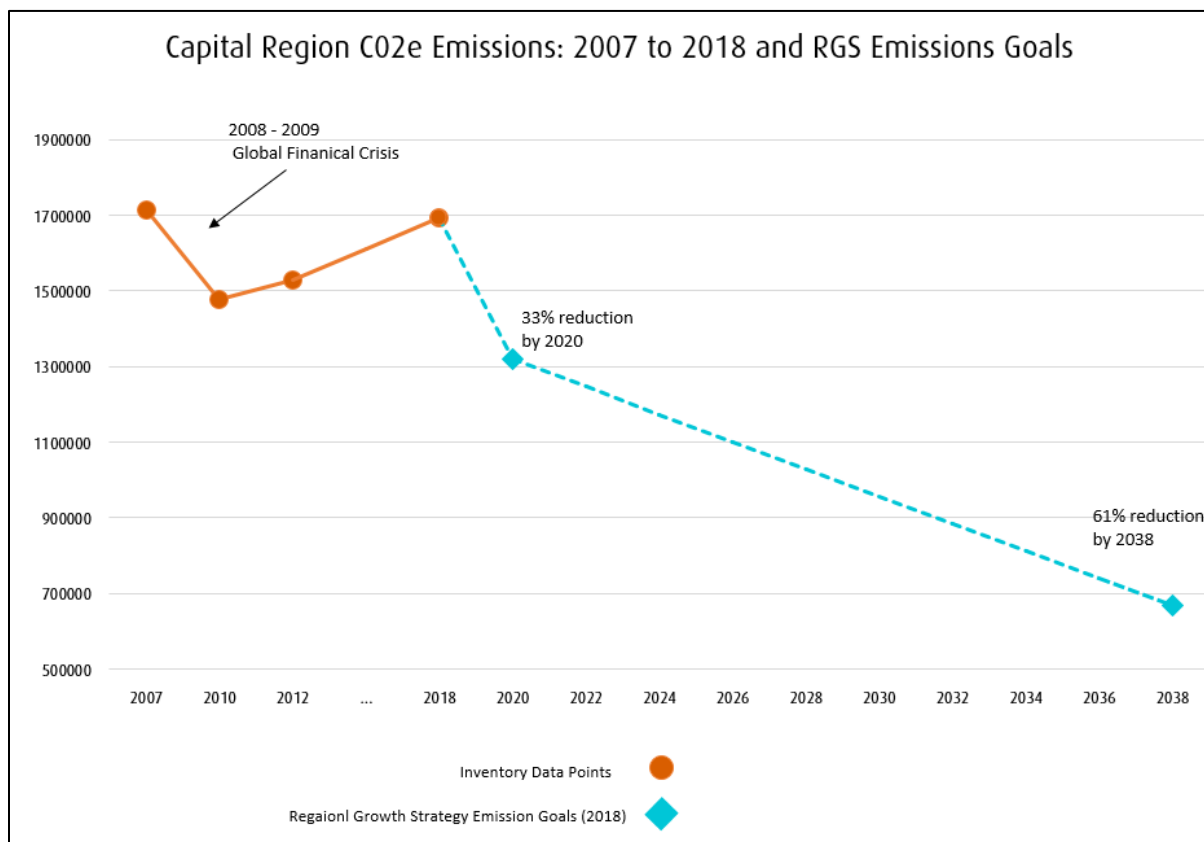


Figure 1: Capital Region GPC Basic + emission and RGS Goals

Figure 1 above indicates that the CRD is not currently on target to meet the 2020 target, with a 1% decrease in emissions observed below the 2007 baseline. The capital region would have to achieve a nearly 32% decrease in 2019 for the 2020 target to be achieved. The CRD Board, at its May 13 meeting, directed staff to report on additional potential expenditures in the 2021 budget to accelerate the priority Climate Action initiatives; this will be presented during the 2021 service planning process.

Staff expect that the COVID-19 crisis will impact emissions in 2020. As shown on the graph, emission reductions in 2008 – 2009 can be attributed to the global financial recession at that time. Results show that once economic recovery was underway, emissions returned to baseline levels, implying that the capital region will not achieve the RGS 2038 emissions goal if the economic recovery post-COVID-19 proceeds in a similar manner.

Staff will distribute local government specific reports and continue with the GHG pathway reduction modeling as part of the development of a new climate action strategy starting in late 2020.

## **CONCLUSION**

The CRD Board provided direction and funding to complete a regional GHG inventory and emission reduction pathway analysis at its March 13, 2019 meeting. Four regional GPC BASIC + greenhouse gas emission inventories and reports for the 2007, 2010, 2012 and 2018 calendar years were completed, and results indicate an approximate 1% decrease in regional emissions

from 2007 to 2018. The analyses also indicated that on-road transportation (accounting for approximately 46% of total emissions alone) and the built environment (residential buildings account for approximately 18% and commercial/institutional buildings for 14%) are the main sources of regional emissions. The CRD will utilize this information for climate action planning activities.

**RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:

That this report be received for information.

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**ATTACHMENTS**

Appendix A: CRD 2018 GPC BASIC + Community GHG Inventory Report

Appendix B: The Capital Region District – Municipalities and Electoral Areas 2007 Base Year and 2018 Reporting Year Energy & GHG Emissions Inventory Report