

STAFF REPORT TO COUNCIL

PRESENTED: August 17, 2021
FROM: Resort Experience
SUBJECT: 2020 WHISTLER ENERGY AND GREENHOUSE GAS REPORT & BIG MOVES NEXT STEPS

REPORT: 21-087
FILE: A05001

RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION(S)

That Council receive the Information Report No. 21-087 regarding Whistler's Energy Consumption and Greenhouse Gas Inventory – 2020 Annual Report as attached in Appendix A as well as the planned next steps on the Big Moves Strategy implementation.

PURPOSE OF REPORT

The purpose of this report is three-fold. Firstly, to share the Whistler's Energy Consumption and Greenhouse Gas Inventory - 2020 Annual Report (2020 Annual Report) which provides a summary of Whistler's community and Resort Municipality of Whistler (RMOW) corporate energy consumption and greenhouse gas (GHG) emissions for the calendar year 2020. Secondly, to provide an update on the Q1 and Q2 2021 implementation progress of Whistler's Community Energy and Climate Action Plan (CECAP). Lastly, to update Council on the plan to consolidate the Climate Action Big Moves Strategy (Big Moves Strategy) and CECAP into the Big Moves+ Climate Action Plan.

DISCUSSION

Background

Whistler's vision is to be a place where our community thrives, nature is protected, and guests are inspired. Our community has a special dependence on weather patterns that deliver sufficient snowfall throughout the winter season and on summers that are free of wildfire smoke. This intrinsic relationship to the weather has heightened awareness about Whistler's shared responsibility to manage our GHG emissions—and the potential impacts if we do not.

Adopted by Council in 2016, the CECAP established a list of 94 actions for climate mitigation and 40 actions for climate adaptation. In 2020, the introduction of the Big Moves Strategy identified the top priority climate change mitigation actions that result in the highest GHG emission reductions and have the highest potential to help us achieve our climate targets. The Big Moves Strategy builds on the work of the 2016 CECAP and supports the Official Community Plan (OCP). The strategy focuses on transportation, buildings and waste and established a strong planning and communications platform with simple, compelling language and understandable high-level goals for more strongly pursuing prioritized corporate and community climate actions. The Big Moves strategy does not address climate

change adaptation. Staff is therefore planning to consolidate the CECAP and Big Moves Strategy into the proposed “Big Moves+ Climate Action Plan” with the goal to provide a comprehensive path for the RMOW to effectively work towards our climate goals with clearer, more informative climate reporting against specific targets and indicators. One consolidated climate action plan will reduce potential confusion between the quarterly CECAP and the planned semi-annual Big Moves progress reports as both contain similar objectives but varying reporting structures and metrics. Streamlined climate reporting will enable the community to more easily understand and commit to one consolidated set of actions to achieve Whistler’s climate targets.

Regular public reports on the community and corporate energy and GHG emissions performance have been published annually since 2013 and bi-annually since 2010 and continue to be part of Whistler’s commitment under Whistler’s OCP, the newly adopted Big Moves Strategy, the CECAP, the BC Climate Action Charter, as well as the Provincial Climate Action Rebate Incentive Program.

Analysis

2020 Annual Energy Consumption and Greenhouse Gas Inventory Report:

The intent of the 2020 Annual Report is to provide transparent access to relevant energy and climate related performance, as well as to inform both RMOW and community decisions as they relate to Whistler’s climate action and GHG reduction targets. The 2020 Annual Report is divided into five chapters, with chapter 2 providing a brief background on energy and emissions planning in Whistler as well as an overview of the methodologies used to quantify Whistler’s community wide and corporate GHG emissions.

Note that the COVID 19 pandemic had significant impacts on the community of Whistler, its residents, visitors, and the commuter workforce. Most changes in the community energy use and GHG emissions compared to 2019 are a result of pandemic related changes such as travel restrictions, social distancing, and working from home when possible. It is therefore important to note that this 2020 annual energy and GHG inventory is likely to be a significant outlier in data and not correlated with Whistler’s climate action efforts. As a result, the outcomes presented in the 2020 Annual Report won’t be used to inform immediate changes in the current and future climate action strategy.

Community Energy and GHG Inventory:

Chapter 3 reports on Whistler’s community wide GHG emissions in 2020 which are estimated to total 108,643 tonnes of carbon dioxide equivalent (tCO₂e). This is a 21 per cent decrease compared to 2019 and 18 per cent lower than 2007 (133,019 tCO₂e), and 24 per cent below 2000, but well above (+22 per cent) the 2020 community GHG reduction target levels. The main reason for this overall decrease in GHG emissions is the COVID-19 pandemic and all related restrictions and changes throughout the year.

The 2020 GHG emissions per population equivalent (PE) decreased by 2% to 3.45 tCO₂e/PE which is a result of a 20% decrease in Whistler’s population equivalent number. Passenger vehicle emissions account for 40 per cent of Whistler’s community wide GHG emissions, equal to natural gas (40 per cent) primarily used for space and water heating.

Community energy consumption for 2020 totaled 2.9 M GJ, which was a 13 per cent decrease compared to 2019. Electricity is the most prevalent type of energy consumed in Whistler at 44 per cent of the total consumption, followed by natural gas (29 per cent) and vehicle fuels (27 per cent).

RMOW Corporate Energy and GHG Inventory:

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Chapter 4 reports on the RMOW corporate GHG emissions in 2020, which were 2,641 tCO₂e. Direct corporate GHG emissions were 2,160 tCO₂e, which represents a 34 per cent increase from 2019 and contracted emissions were 481 tCO₂e, which is a 36 per cent decrease from 2019.

GHG emissions across directly delivered and contracted out corporate operations are produced primarily from use of mobile fuels (gasoline and diesels) at 47 per cent, followed by combustion of natural gas at 34 per cent, and electricity at 19 per cent. The increase in 2020 corporate emissions was primarily driven by an increase of natural gas use at the sewer utilities compared to 2019 due to lower efficiencies in the wastewater treatment plant as a result of the COVID-19 pandemic and related changes in liquid flow rates. The decrease in contracted corporate emissions is most likely also a result of COVID-19 pandemic related changes in operations.

Direct corporate energy consumption increased in 2020 by 3 per cent to 80,612 GJ/year due to a 45 per cent increase of mobile fuel use and a 19 per cent increase of natural gas consumption. Electricity consumption decreased by 12 per cent compared to 2019 but still makes up the greatest portion of total energy consumed across municipal operations at 55 per cent of the total consumption, followed by natural gas (23 per cent), and mobile fuels (17 per cent).

CECAP Q1/Q2 2021 update:

Chapter 5 of the 2020 Annual Report updates on key RMOW mitigation and adaptation initiatives within the CECAP for the first and second quarter of 2021. The updates demonstrate that a wide range of activities was undertaken, but it is also clear that the strategic emphasis for mitigation initiatives continues to be transportation-sector initiatives, and for adaptation initiatives, wildfire protection. As of the end of the Q1/Q2 2021 reporting period (June 30, 2021), 6 initiatives are completed and 84 of these initiatives are in progress/ongoing. In comparison 72 were in progress/ongoing and 6 were complete by the second quarter of 2020. The need to accelerate Whistler's climate action is clear, and the Big Moves Strategy adopted in 2020 provides the guiding framework to prioritize CECAP mitigation actions, incorporate new opportunities, and align the community-wide efforts needed to achieve significant emissions reductions.

Big Moves Next Steps:

In December, 2020 Council adopted Whistler's new Big Moves Strategy with the new target to reduce Whistler's community-wide GHG emissions by 50 per cent below 2007 levels by 2030. To achieve this target and to ensure that the Big Moves Strategy becomes effectively operationalized, a robust implementation and monitoring plan is critical. However, the Big Moves Strategy focuses on mitigation efforts only and does not address adaptation. A new implementation and monitoring plan that focusses on climate change mitigation only would not include synergies and co-benefits between mitigation and adaptation.

Therefore, the next step in the Big Moves Strategy implementation planning will be to consolidate the CECAP mitigation and adaptation parts and the Big Moves Strategy into one "Big Moves+ Climate Action Plan". This plan will provide a consolidated climate action implementation for more efficient project planning, progress monitoring, and reporting. The consolidated climate plan will lead to more effective coordination between climate mitigation and adaptation actions and additionally aims to:

- Advance the implementation of the Big Moves Strategy and carry forward relevant actions from the CECAP;
- Establish quantitative key performance indicators (KPIs) to provide more accurate measures of success;
- Clearer, more informative climate reporting against specific targets and using few but

meaningful indicators;

- Clearer messaging on climate action to the Whistler community due to avoided overlap between CECAP and Big Moves Strategy action planning and reporting.
- Realize synergies and co-benefits between climate change mitigation and adaptation actions;
- Build upon the momentum and language of the Big Moves Strategy;

Monitoring and Reporting

Combining CECAP and the Big Moves Strategy into one plan (i.e. the Big Moves+ Climate Action Plan) will optimize efficiencies in data collection efforts and streamline our reporting process to help ensure that Whistler stays on track and moving towards our critical climate goals. RMOW's annual Energy and GHG Inventory Report will continue to be a key monitoring tool and will relate directly to the Big Moves+ Climate Action Plan.

Proposed reporting to Council and the public:

- Summer
 - Big Moves+ Climate Action Plan formal annual report
 - Energy Consumption and GHG Performance Trends annual report
- Winter
 - Less formal progress update on Big Moves+ Climate Action

This streamlined process and a shift from quarterly progress reporting to semi-annual reporting on key performance indicators will more clearly illustrate our progress toward targets and help keep Whistler on track to meeting our climate commitments.

Proposed Timeline and Next Steps:

- August 17: information report to Council (along with annual GHG inventory report and CECAP Q1/Q2 progress update)
- Sept – Jan: develop consolidated draft plan
- Feb 2022: external review of draft plan
- March 2022: administrative report to Council for approval of draft
- March – May 2022: rescind CECAP once all actions are rolled into Big Moves+ Climate Action Plan or retired.
- May/June 2022: finalize consolidated plan
- Summer 2022: administrative report to Council for final plan adoption and CECAP rescindment

In summary, the proposed Big Moves+ Climate Action Plan will lead to more effective and streamlined climate action and reporting by integrating the key elements of CECAP and the 6 Big Moves while realizing synergies and co-benefits between mitigation and adaptation. The Big Moves+ Climate Action Plan will serve as the core implementation plan to smoothly and successfully move Whistler toward our corporate and community climate goals.

POLICY CONSIDERATIONS

Relevant Council Authority/Previous Decisions

Regular public reporting of both community and corporate energy and GHG emissions performance is a commitment of the Whistler OCP, the Whistler CECAP, the RMOW Carbon Neutral Operations Plan, and our Council-adopted commitments within the BC Climate Action Charter.

The Big Moves Strategy was adopted by Council on December 15, 2020 with the new 2030 target to reduce Whistler's GHG emissions by 50 per cent below 2007 levels. The strategy builds on the work of the CECAP, supports the OCP, and aims to inform the Whistler Transportation Action Plan 2018 - 2028, the Green Building Policy update, and the Solid Waste Management Strategy.

Corporate Plan

The RMOW Corporate Plan is updated annually and articulates strategic direction for the organization. This section identifies how this report links to the plan.

Council Focus Areas

☐ Community Balance

*Effectively **balance resort and community needs** through deliberate planning, partnerships and investment*

☒ Climate Action

*Provide leadership to **accelerate climate action and environmental performance** across the community*

☐ Housing

*Advance strategic and innovative initiatives to enable and **deliver additional employee housing***

☐ Not Applicable

Official Community Plan

Regular public reporting of both community and corporate energy and GHG emissions performance is a commitment of the Whistler OCP, the Whistler CECAP, the RMOW Carbon Neutral Operations Plan, and our Council-adopted commitments within the BC Climate Action Charter.

The recommended consolidation of CECAP and the Big Moves Strategy aims to streamline climate action planning, reporting and to advance climate action in the transportation, buildings, and waste sectors and is therefore particularly strongly aligned with the OCP Goals listed below and all associated Objectives and Policies included within the Climate Action and Energy Chapter 10 and Transportation Chapter 11 of the current OCP.

5.4. Goal - Reduce the environmental and energy impacts of residential neighbourhoods to improve the quality of life and sustainability of the resort community.

6.5. Goal - Support sustainable diversification compatible with the tourism economy.

7.4. Goal - Air quality is protected.

10.1 Goal - Municipal decision-making is well-structured to achieve energy efficiency goals and GHG reduction targets.

10.2 Goal - Substantially reduce GHG emissions from vehicles and transportation.

10.3 Goal - Substantially reduce GHG emissions from buildings and infrastructure.

10.4 Goal - Substantially reduce GHG emissions associated with solid waste management

11.2 Goal - Integrate the transportation system with land use planning to minimize the need for travel by motor vehicle.

11.3. Goal - Minimize GHG emissions created by the transportation system.

11.4 Goal - Support the increased use of preferred modes of transportation for all travel purposes to reduce dependence on private motor vehicles.

11.7 Goal - Ensure the transportation system respects Whistler's natural environment, minimizes climate impacts and improves the livability of the resort community.

12.3 Goal - Move progressively toward zero waste.

BUDGET CONSIDERATIONS

The tracking and reporting of energy consumption and GHG emissions does not have direct budget implications beyond the dedication of staff time, and the one time honorarium for a summer student to assist with the annual report compilation. The inventories themselves however do provide the basis of forecasting future energy budgets for individual Divisions, Departments and Workgroups across the organization.

The budget implications of consolidating the CECAP and Big Moves Strategy are mainly associated with staff time for writing the consolidated plan and implementation details, e.g. timelines, added KPI's/targets, and consultant time for an external review of the draft plan.

LIL'WAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Lil'wat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw* to: create an enduring relationship; establish collaborative processes for Crown land planning; achieve mutual objectives; and enable participation in Whistler's resort economy.

There is no intersection between the 2020 Annual Energy and GHG inventory report and the Lil'wat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw*.

The consolidation of the CECAP and Big Moves Strategy aims to streamline climate action while recognizing the importance of equity and inclusion. Opportunities to identify mutual climate objectives, to collaborate and build relationships with Lil'wat and Squamish People through climate action will be a fundamental part of the implementation planning process.

COMMUNITY ENGAGEMENT

Level of community engagement commitment for this project:

☒ Inform ☐ Consult ☐ Involve ☐ Collaborate ☐ Empower

REFERENCES

Appendix A – Whistler Energy Consumption and Greenhouse Gas Inventory – 2020 Annual Report

SIGN-OFFS

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