



RESORT MUNICIPALITY OF WHISTLER

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STAFF REPORT TO COUNCIL

PRESENTED: August 2, 2022 **REPORT:** 22-108
FROM: Resort Experience **FILE:** 7733.03
SUBJECT: GREEN BUILDING POLICY G-23 UPDATE

RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

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

RECOMMENDATION(S)

That Council receive Information Report 22-108 Green Building Policy G-23 Update.

PURPOSE OF REPORT

The purpose of this report is to present the Resort Municipality of Whistler's (RMOW) draft updated Green Building Policy (attached as Appendix A to this report) for Council information, including the results of the community and industry engagement that have been completed and that have informed the draft Green Building Policy.

Information Report Administrative Report (Decision or Direction)

DISCUSSION

Background

On January 25, 2022, Council received [Administrative Report No. 22-007](#) presenting a recommended approach to updating the current Green Building Policy with proposed performance areas, timeline, and engagement strategy, and received direction to proceed with the work plan.

Actions 6.2.2.4 and 6.2.2.10 from Whistler's Community Energy and Climate Action Plan (CECAP) provide direction to maintain and update the Green Building Policy to modernize the framework and require higher energy performance standards for new buildings. Official Community Plan (OCP) Policy 10.3.1.1 also provides policy direction to maintain, update, and apply the Green Building Policy to reflect leading practices in energy efficiency and local government jurisdiction, including a broad, progressive integration of the BC Energy Step Code. Whistler has also identified updated climate action goals captured in the 2020 Climate Action Big Moves Strategy (Big Moves). These new climate action goals identify the need to update tools to advance climate action in Whistler.

The current Green Building Policy (Appendix B) was established in 2008 and outlines green building objectives and performance goals for new construction across six main areas: site and landscape,

energy, water, materials, waste, and the indoor environment. Green building and sustainable design practices, technologies, and standards have evolved since 2008, and provincially, British Columbia has adopted a new approach to energy efficiency in new buildings with the BC Energy Step Code. As a result, the existing policy is outdated and Whistler's green building requirements are no longer consistent with leading sustainability practices.

The updated Green Building Policy, attached as Appendix A, is organized around six sections. Each section contains a description of objectives and intent, along with performance-based guidelines that include a mix of criteria, targets and information submittal requirements as considered appropriate to achieve the overall goals and objectives of the Policy.

1. Energy and Emissions
 - This section will reduce Greenhouse Gas (GHG) emissions from new buildings by advancing the BC Energy Step Code implementation and by requiring strategies to decrease energy requirements and lower the share of energy supplied by non-renewable sources.
2. Building Materials
 - This section reduces environmental impacts of new developments and lowers carbon consumption by outlining minimum expected diversion/recycling rates for demolition. Applicants will include a construction waste management plan and incorporate environmentally-friendly building materials and technologies.
3. Sustainable Site Design
 - This section describes land development approaches to minimize impacts on the natural environment to protect Whistler's sensitive ecosystems, wildlife, habitat and biodiversity.
4. Green Mobility
 - This section helps to realize GHG emission reductions from vehicles and transportation. Applicants will incorporate pedestrian friendly design, electric vehicle (EV) charging infrastructure, active transportation infrastructure and amenities such as bicycle parking and end of trip facilities.
5. Water Conservation and Rainwater Management
 - This section reduces potable water consumption and addresses stormwater management to protect water quality and quantity in Whistler's water bodies, streams, and groundwater. Applicants will develop an integrated water management approach and to submit stormwater management plans.
6. Solid Waste
 - This section improves solid waste management and landfill diversion during building operational phase. Applicants will include waste management plans and infrastructure.

These six categories are based on the green building and sustainability priorities identified in Whistler's OCP, Big Moves, and CECAP, and ensure that the draft Green Building Policy is advancing implementation of community goals and priorities. Each section supports specific goals, objectives, and policies of the OCP. The sections also address Big Moves #1, 2, 4, and 6 and their corresponding key initiatives. The guidelines of each section are aligned with Whistler's Development Permit Area guidelines and were benchmarked against national and international green building frameworks and against green building policies established by other local governments, with assistance from Integral Group sustainability consultants. The six sections of Whistler's updated Green Building Policy capture the principles of green building and sustainable design and provide continuity with the content and intent of the original Green Building Policy.

The draft Green Building Policy includes a *Green Building Policy Checklist* for applicants to submit with rezoning applications, and with development permit and building permit applications where applicable. The single checklist will provide clear guidance to applicants and streamline the application review process. The checklist describes supporting documents and reports that need to be submitted to demonstrate compliance with the Green Building Policy guidelines.

The policy update responds to advances in building and sustainable design practices, technologies, and standards by outlining guidelines for new construction to meet sustainability and climate goals. Whistler’s updated Green Building Policy advances several RMOW key sustainability goals and proposes a flexible, performance-based framework for new construction. It encourages sustainable design approaches to reduce infrastructure demands and costs, environmental impacts, GHG emissions, and long term building operating costs, and contributes to Whistler’s community vision of being a place where our community thrives, nature is protected and guests are inspired. The draft Green Building Policy encourages a holistic approach to sustainability and green building priorities, including energy and emissions, building materials, sustainable site design, green mobility, water conservation and rainwater management, and solid waste.

Considering that the RMOW’s most significant opportunity to require specific commitments in respect of sustainability features is through its discretionary authority to enact and amend zoning bylaws, the policy focuses on establishing guidelines and requirements to achieve higher sustainability standards as a condition for rezoning applications. The draft Green Building Policy will also be used as a tool to assess the sustainable features of Development Permit applications and for Building Permit applications for single family homes over 465 square metres.

Community and Industry Engagement

The draft Green Building Policy reflects significant input from Whistler’s building sectors. Staff developed and carried out two rounds of engagement, involving builders, architects, and designers as well as the Advisory Design Panel (ADP). A complete summary of feedback received during all engagement activities is attached to this report as Appendix C. This section of the reports provides an overview of the engagement activities, key themes from input and feedback received and how it has informed the updated policy.

Table 1 Industry and Community Engagement Summary

Date	Activity	Details
Feb. 24, 2022	Building Sector Virtual Workshop	<ul style="list-style-type: none"> Staff presented the proposed policy update and presented a policy overview with the proposed performance areas, and timeline. Moderated break-out sessions were held using MURAL collaboration whiteboards to discuss and gain input on the proposed policy update.
Mar. 23, 2022	Presentation to ADP	<ul style="list-style-type: none"> Staff introduced the proposed policy update and presented a policy overview with the proposed performance areas, timeline and engagement strategy. ADP recommended staff to undergo a second stakeholder engagement activity using a first draft version of the policy to collect feedback on the specific details, guidelines, and metrics of the policy
May 9 to May 27, 2022	Green Building Policy Industry Consultation	<ul style="list-style-type: none"> Staff used Whistler’s community engagement portal (engage.whistler.ca) to collect feedback. Participants were asked to review the draft policy, and provide feedback on the scope, objectives, proposed requirements, and targets and metrics. To provide feedback, participants were offered two options, either using the Green Building Policy feedback form available online or scheduling a meeting with municipal staff.

Staff engaged Integral Group sustainability consultants to help to organize and facilitate a workshop for the local building sector in February 2022. Due to the ongoing pandemic, the workshop was held virtually. Participants were recruited from a list of industry stakeholders that have participated in other recent sustainability and green building engagement with the RMOW and through the Sea to Sky Canadian Home Builders' Association (CHBA) professional organization. Ads were also placed in the *Pique* and the event was promoted via the RMOW's social media channels. Nineteen participants attended the workshop.

Staff presented an overview of the proposed updates to the Green Building Policy and facilitated focused discussions on each section. The workshop included two breakout sessions to allow for smaller groups to discuss the proposed sections and their associated performance areas and provide detailed feedback. Participants considered challenges and opportunities for advancing sustainability through new construction in Whistler, taking into account local skills and resources, available technologies and strategies, market readiness, and cost and feasibility. The following themes emerged from the workshop:

- The relationship between Whistler's Green Building Policy and the BC Energy Step Code implementation pathway must be made clear.
- The use of plant-based and renewable building materials should be encouraged, and the use of petrochemical-based building materials discouraged through the Green Building Policy.
- Participants broadly advocated for promoting passive design strategies and maximizing solar gain.
- Concern was voiced about the electrical grid capacity with increasing requirements for EV charging. Participants suggested requiring load sharing, and to consider adopting an EV-ready approach rather than requiring fully installed chargers.
- End of trip facilities and provision for e-bike charging should be encouraged.
- The Green Building Policy should require adequate space for waste management in all new buildings.

The Green Building Policy update was presented to ADP for comment (see Appendix D – ADP Minutes from March 23, 2022). Feedback was provided on the proposed performance areas, and challenges and opportunities municipal staff should consider when designing the standards and updating the policy. The following themes emerged as comments regarding the presentation:

- Prioritize flexible and performance-based requirements, and avoid being overly prescriptive
- Policy must be evidence-based. Targets and requirements should have demonstrable positive outcomes.
- Consider trade-offs between achieving sustainability objectives and introducing additional construction costs.
- Look for opportunities to manage parking demand and implement transportation strategies to reduce parking demand and congestion.
- Simplifying and streamlining the checklist will lead to better results.
- Landscape requirements should emphasize conservation and retention of existing habitat and specify drought-tolerant planting and native species.
- Encourage using stormwater irrigation rather than potable water.

The feedback was analyzed by staff and incorporated into a draft Green Building Policy, which was brought back to the building sector and ADP for review and further comment. Using the RMOW's engagement portal (engage.whistler.ca), participants were asked to review a complete first draft and

provide comments. The engagement opportunity was promoted via the RMOW social media channels, on the municipal website, and with an ad in the *Pique*. Participants from the first green building workshop were invited to participate again, and the opportunity was shared to the members of the Sea to Sky chapter of the CHBA. Twelve responses were received. The key themes that emerged during this activity are described in the table below:

Table 2 Key Themes Following Industry Consultation

Section	Key themes
Energy and Emissions	<ul style="list-style-type: none"> Passive design strategies are a good, low-cost way to improve building energy efficiency and should be encouraged. Most Low Carbon Energy Systems require a traditional heating backup system and the policy should address that by providing better guidance to applicants.
Building Materials	<ul style="list-style-type: none"> The costs and availabilities of certified wood, low-carbon, and plant-based materials make prescriptive targets challenging. It is also difficult to measure and enforce for municipal staff. The different existing building codes (i.e. National Building Code, BC Building Code) are currently an obstacle to using innovative materials (e.g. hempcrete, straw, etc.).
Sustainable Site Design	<ul style="list-style-type: none"> On-site water storage could be a solution to irrigation. The policy should encourage water reuse on-site rather than eliminating completely irrigation systems. Respondents questioned the value of heat island mitigation requirements in Whistler.
Green Mobility	<ul style="list-style-type: none"> Having EV-ready parking space is preferable to fully-installed EV chargers, as it lowers the cost of construction and provides flexibility. Consider requirements for electrical outlets for bicycle parking to support e-bikes. End of trip facilities and active transportation amenities should be encouraged.
Water Conservation and Rainwater Management	<ul style="list-style-type: none"> Low impact development measures are an appropriate approach to maximize on-site infiltration
Solid Waste	<ul style="list-style-type: none"> Well-designed waste management facilities are essential for waste diversion and proper sorting of recycling.

The draft Green Building Policy and approval timeline was provided to ADP for review with the package for the June 15, 2022 meeting and no feedback was received (see minutes attached as Appendix E).

Summary of Changes to the Draft Green Building Policy

Staff have undertaken thorough review and reading of the input received through the engagement process, and acknowledge the thoughtful contributions and suggestions that were received. In response to the feedback received and on further review and analysis, staff refined the Green Building Policy to address feedback.

Following the engagement activities, the performance areas associated with each section have been re-organized based on the feedback received. Key changes that staff made following the engagement activities are described below:

Table 3 Summary of Changes to the Draft Green Building Policy

Section	Key changes made by staff
Energy and Emissions	<ul style="list-style-type: none"> Policy does not include requirements for renewable energy (i.e. solar panels) were removed as the feedback pointed out it has limited carbon benefits. The guidelines for backup heating systems and Low Carbon Energy Systems were clarified. Technical guidance was added to provide a rationale why backup systems need to be modeled as a primary energy system if they are fuel-fired.
Building Materials	<ul style="list-style-type: none"> Guidelines were reviewed to be more performance-based without any mandatory targets to meet.

	<ul style="list-style-type: none"> A requirement to submit a mandatory Life Cycle Assessment was replaced by a recommendation to submit a Life Cycle Assessment.
Sustainable Site Design	<ul style="list-style-type: none"> Guidelines were closely reviewed against the Development Permit Area Guidelines to avoid overlap. Some performance areas were removed from the policy as they were considered out of scope and/or because they were already taken care of through other municipal policies already in place.
Green Mobility	<ul style="list-style-type: none"> A requirement for charging electric bicycle and other e-mobility device was added to this section.
Water Conservation and Rainwater Management	<ul style="list-style-type: none"> Guidelines were updated to provide more flexibility and to be more performance-based. Guidelines relating to irrigation systems were reviewed to be less stringent and to encourage stormwater to be used for irrigation.
Solid Waste	<ul style="list-style-type: none"> Guidelines were reviewed to provide more flexibility and move away from a prescriptive approach. A guideline requesting applicants to submit a Solid Waste Management Plan was added to this section.

Analysis

The Green Building Policy update is an important step toward Whistler’s sustainability and climate action goals established in the OCP, Big Moves, and CECAP. The policy will be vital in addressing the climate change emergency and substantially reducing GHG emissions in Whistler.

With Whistler’s adoption of the BC Energy Step Code, the building emissions and energy component currently captured in the existing Green Building Policy will become part of the *Building and Plumbing Bylaw*. The scope of the Green Building Policy has been revised to reflect this change, and the updated policy aligns with and supports Whistler’s Step Code implementation pathway.

The draft Green Building Policy was crafted to propose a flexible, performance-based framework for new construction in buildings under Part 9 (houses and small buildings) and Part 3 (large and complex buildings) of the BC Building Code. The guidelines are grouped thematically and organized around the same six sections that were presented to Council in January 2022.

The following table provides a summary review of the six sections of the updated policy. The complete draft Green Building Policy is presented in Appendix A.

Table 4 Whistler Green Building Policy Update – Summary of Content

Section	Goals	Topic Areas
Energy & Emissions	<ul style="list-style-type: none"> Align with the updated Building Bylaw to reduce the total building energy demand and target net zero energy consumption. Encourage innovative strategies to decrease energy requirements and associated greenhouse gas emissions and lower the share of energy supplied by non-renewable sources. 	<ul style="list-style-type: none"> Building Performance and Emissions Passive Design Strategies Ventilation Systems and Air Filtration Interior and Outdoor Lighting
Building Materials	<ul style="list-style-type: none"> Reduce solid waste generation during demolition and construction. Encourage the use of environmentally friendly materials and techniques. 	<ul style="list-style-type: none"> Demolition Waste Management Construction Waste Management Low-Emitting Materials Embodied and Refrigerant Emissions Certified Wood Locally Sourced Materials

Sustainable Site Design	<ul style="list-style-type: none"> • Preserve, restore and enhance the site and surrounding areas. • Encourage landscaping strategies promoting biodiversity and enhancing the natural spaces surrounding the built environment, and mitigating the impact of development activities on the natural environment. 	<ul style="list-style-type: none"> • Site Planning • Soils and Fill • Setbacks for Underground Parking Structure
Green Mobility	<ul style="list-style-type: none"> • Scale up EV charging infrastructures, reducing car dependency, encouraging alternative transportation modes and pedestrian friendly design. 	<ul style="list-style-type: none"> • EV Charging Infrastructures • Pedestrian Friendliness • Short-Term Bicycle Parking • Long-Term Bicycle Parking • End of Trip Facilities • Active Transportation Amenities
Water Conservation & Rainwater Management	<ul style="list-style-type: none"> • Reduce the use of potable water for indoor and outdoor water uses. • Reduce stormwater runoff and manage the quantity and quality of stormwater. 	<ul style="list-style-type: none"> • Integrated Potable Water Management Approach • Indoor Potable Water Use • Outdoor Potable Water Use • Stormwater Management • Pervious Surfaces
Solid Waste	<ul style="list-style-type: none"> • Reduce the solid waste generation during operational phases of the development. 	<ul style="list-style-type: none"> • Residential Waste Storage Area • Operational Waste Reduction and Management

1. Energy and Emissions

The primary tool for regulating new building emissions in British Columbia and Whistler is the BC Energy Step Code. Whistler has shown early leadership by adopting the Step Code in 2019, meaning building emissions and energy requirements are now established through the RMOW *Building and Plumbing Bylaw*. The Energy and Emissions section of the Green Building Policy aims to substantially reduce GHG emissions from new buildings and infrastructure, and by doing so, reduce the environmental and energy impacts of residential neighbourhoods. This will help the RMOW meet its target that by 2030, annual emissions do not exceed 66,500 t-CO₂e. By advancing the BC Energy Step Code implementation, this section addresses Big Move #4: Build zero-emissions buildings of Whistler’s Big Moves. Furthermore, this section is aligned with the RMOW *Building and Plumbing Bylaw* and will help Whistler meet the provincial goal for all buildings to be net-zero energy ready by 2032.

This section requires all new buildings subject to a rezoning to be built with environmentally sustainable methods, standards, and technologies including by implementing the BC Energy Step Code. The guidelines and performance targets in this section require strategies to decrease energy requirements and associated GHG emissions and lower the share of energy supplied by non-renewable sources:

- New developments will be required to use a Low Carbon Energy System as the primary space and water heating source.
- To accelerate implementation of the BC Energy Step Code in Whistler, the Green Building Policy establishes a requirement that new buildings are built one step higher than what is required by the *Building and Plumbing Bylaw*.
- This section encourages innovative and low-cost strategies to lower energy requirements by encouraging passive design strategies.

2. Building Materials

The purpose of this section is to decrease carbon consumption and reduce the environmental impacts during construction. Specifically, this section aims to encourage:

- low-carbon design (i.e. efficient use of materials and optimized spaces);
- low-carbon material use (e.g. mass timber, lower GHG-intensive cement, recycled materials);
and
- low-carbon construction practices.

Emissions associated with the rest of the life-cycle stages of the building, such as those associated with the production of materials like concrete are commonly referred to as “embodied emissions”. For new buildings the embodied emissions can far exceed the lifetime operational emissions but are currently not measured. Refrigerants used in building systems also contribute to emissions over a building’s lifetime and are also not currently measured. Guidelines of this section include:

- rezoning applications for new buildings should report refrigerant and embodied emissions, and describe specific measures explored to reduce embodied emissions.

Disclosure of embodied carbon emissions will increase understanding of the impact of these emissions and provide a foundation for target setting and future performance-based regulations.

The draft Green Building Policy also:

- encourages sourcing renewable, recycled, and locally-sourced building materials
- requires a minimum diversion/recycling rate for demolition and construction waste, and treats recycled and salvaged materials as a resource.

By requiring meaningful measures to minimize solid waste and carbon-intensive materials during design, demolition and construction, this section supports Big Moves #6 to close the loop and shift toward lower-carbon consumption. It also helps implement several actions and initiatives identified within the Whistler Zero Waste Action Plan.

3. Sustainable Site Design

This section encourages land development approaches that minimize negative impacts on the natural environment to protect Whistler’s sensitive ecosystems, wildlife, habitat, and biodiversity. The intent is to reduce threats such as habitat fragmentation, destruction, pollution, and the introduction of invasive species to help protect and enhance the natural resilience of natural areas to climate change.

This purpose is accomplished by encouraging low-impact landscaping strategies and promoting biodiversity by restricting the type of plants allowed. New development must:

- use only native and drought-tolerant species for all landscaping purposes.
- minimize excavation, grading, and soil disturbance where possible.
- protect and enhance the natural environment through design and development choices that are mindful of the existing natural context; new developments are required to minimize habitat fragmentation and provide continuous connection(s) between existing natural areas, parks, greenways, aquatic habitat(s), or other natural areas.

The performance guidelines and requirements for this section support and are reinforced by the municipality’s OCP development permit requirements.

4. Green Mobility

This section encourages building and site design to support active transportation and electric vehicles, aligned with Whistler's Active Transportation Plan and Electric Vehicle Strategy. Personal vehicles are Whistler's largest source of GHG emissions, accounting for 54% of Whistler's total emissions in 2019. Moving beyond car-based transport to active transport and accelerating the transition to electric vehicles are key opportunities to reduce transport-related emissions. The intent is to encourage sustainable transportation and reduce reliance on private automobiles by requiring new development to:

- provide active and sustainable transportation infrastructure such as bicycle parking, end-of-trip facilities, and EV charging infrastructure.

This will contribute to improve the travel conditions and to make walking/cycling more convenient.

Designing developments that are well connected to local transit, active transportation infrastructure, green space, amenities, and services is critical to support Whistler's transition from a predominantly car-based town to one in which most trips are done by active transport and transit use. The guidelines of the Green Mobility section will contribute to accelerate the transition to electric vehicles, reduce reliance on private automobiles, and improve air quality and resident health through an increase in active transportation modal share. This section directly supports Big Move #1: Move beyond the car and Big Move #2: Decarbonize passenger and commercial transport.

5. Water Conservation and Rainwater Management

The purpose of this section is to reduce potable water consumption and to protect water quality and quantity in Whistler's water bodies, streams, and groundwater. Whistler's OCP directs the RMOW to improve water conservation efforts to help reduce the burden on municipal water supply and wastewater systems. In addition, reducing water consumption decreases the amount of water that requires treatment and storage, which reduces energy use and infrastructure costs.

This section establishes requirements for:

- low-flow indoor fixtures and high-efficiency water-consuming appliances
- restricting installation of outdoor irrigation systems.

Applicants are also asked to develop and implement an integrated potable water management approach to reduce the total volume of potable water used by a building.

This section also addresses stormwater management by:

- requiring applicants to submit a preliminary stormwater management plan that balances pre- and post-development surface flows.

Applicants are asked to manage stormwater runoff volumes and rates so as to not exceed a naturalized (i.e. undeveloped) condition. Green infrastructure approaches and pervious surfaces are to be maximized on-site, with on-site infiltration and rainwater re-use being the most preferred approach. New developments are also asked to maximize the use of Low Impact Development measures and innovative stormwater management strategies such as bioswales, infiltration trenches, and rain gardens.

6. Solid Waste

This section aims to improve solid waste reduction and landfill diversion during building operational phase by requiring new development to incorporate better waste infrastructure and management plans. The goal is to move the RMOW closer to its zero waste goal and continue to reduce all streams of waste. Multi-family, industrial, commercial and institutional buildings are already required to separate organics, recycles, and landfill waste through the RMOW *Solid Waste Bylaw*. Therefore, this section's objective is to encourage new development applications to go beyond the *Solid Waste Bylaw* requirements by implementing meaningful measures to improve waste diversion and reduction.

The guidelines are intended to encourage ongoing waste reduction and increased diversion of products and materials from the waste stream through avoidance, re-use, composting, and recycling. They encourage innovative measures to support waste diversion and minimize the environmental impacts of waste collection activities.

Rezoning projects should:

- provide increased opportunities to properly dispose of different types of waste and sufficient space for collection of materials.
- where appropriate, develop and implement a Solid Waste Management Plan to demonstrate the proposed operational waste reduction and management strategies.

Applicants are also asked to consider and demonstrate adequate access routes and turning radius for collection vehicles. Through its guidelines, this section supports Big Move #6: Close the loop and shift toward lower-carbon consumption.

Procedure and Implementation

All rezoning applications must include a completed *Green Building Policy Checklist* and sustainability narrative summarizing how the project addresses each section of the policy. Per the RMOW's practice, green building commitments are secured by covenant as a condition of adoption of the zoning amendment.

Development Permit applications are to be accompanied by a *Green Building Policy Checklist* and sustainability narrative for projects in the Whistler Village, Whistler Creek, Multi-Family Residential, Intensive Residential, and Industrial Development Permit Areas to demonstrate alignment with the policy. Green building provisions will not be secured through covenant at the Development Permit stage as development permits are non-discretionary and covenanted requirements can not be mandated.

Building Permit applications for buildings larger than 465m² of floor area are to be accompanied by a *Green Building Policy Checklist* and sustainability narrative to demonstrate alignment with the policy. Green building provisions will not be secured through covenant at this stage as building permits are non-discretionary and covenanted requirements can not be mandated. Larger single family homes are significant contributors to GHG emissions; establishing a comprehensive sustainability approach for these projects is important to advance the RMOW's sustainability and green building objectives. The Green Building Policy proposes to establish this threshold as Whistler's principal Single Family Residential (RS) zones permit homes up to 465m² of gross floor area, with select zones permitting larger dwellings.

The application procedures and associated green building information requirements are summarized in the table below:

Application Information	Zoning Amendment	Development Permit	Building Permit – greater than 465m ² floor area
Application Checklist Submit a completed <i>Green Building Policy Checklist</i> and a narrative for the project.	Required	Recommended	Recommended
Green Building Commitment S.219 covenant requirement development consistent with the Green Building Policy		N/A	N/A

POLICY CONSIDERATIONS

Relevant Council Authority/Previous Decisions

[Green Building Policy G-23 Update, Report No. 22-007, January 25, 2022](#)

This report provided Council with an overview of the proposed update to the Green Building Policy and presented a community and stakeholder engagement process that was endorsed by Council.

[Whistler Zero Waste Action Plan 2021-2026](#)

Whistler Zero Waste Action Plan outlines strategies and actions organized by type: education, programs, infrastructure, advocacy, and bylaw/regulatory. These strategies are the ones over which the RMOW has jurisdiction. Strategies are higher level directions, whereas actions are specific initiatives or deliverables within each strategy. The updated Green Building Policy aligns with the plan and advances several strategies, particularly the ones relating to infrastructures and bylaw/regulatory. Further, the updated Green Building Policy will help implement several actions and initiatives identified within the Whistler Zero Waste Action Plan.

[File No. 5290 – Climate Action Big Moves Strategy, Report No. 20-126, December 15, 2020](#)

Whistler’s Climate Action Big Moves Strategy outlines climate change mitigation priorities to accelerate climate action and achieve significant greenhouse gas (GHG) reductions. The Big Moves Strategy serves as a basis for establishing priorities within the Green Building Policy. The updated Green Building Policy advances the following Big Moves to accelerate climate action in Whistler and meet RMOW’s climate targets:

- Big Move #1: Move beyond the car, by ensuring that building and site designs address active transportation facilities;
- Big Move #2: Decarbonize passenger and commercial transport, by introducing requirements for electric vehicle charging infrastructure;
- Big Move #4: Build zero emission buildings, by aligning the Green Building Policy requirements with Whistler’s Step Code implementation roadmap; and
- Big Move #6: Close the loop and shift toward lower carbon consumption, by updating demolition and construction waste diversion requirements, recycled and renewable building material requirements, and waste room requirements in mixed-use and multi-unit buildings.

[Whistler Transportation Action Plan 2018-2028](#)

Whistler Transportation Action Plan is the long-term transportation plan for the RMOW. It was developed to identify initiatives and projects to be implemented over the next ten years to continue to improve our transportation system. The Green Mobility section of the updated Green Building Policy advances the following goals of the Transportation Action Plan:

- Goal 2: Integrate the transportation system with land-use planning to minimize the need for travel by motor vehicle;
- Goal 3: Minimize GHG emissions created by the transportation system;
- Goal 4: Support the increased use of preferred modes of transportation for all travel purposes to reduce dependence on private motor vehicles.

[File No. A073 – Building and Plumbing Regulation Amendment Bylaw \(Energy Step Code\) No. 2197, 2018 Report No. 18-093, July 10, 2018](#)

On July 10, 2018, RMOW Council received Administrative Report No. 18-093 to seek first, second and third readings for, “Building and Plumbing Regulation Amendment Bylaw (Energy Step Code) No. 2197, 2018” to enable the BC Energy Step Code within Whistler. The adoption of the BC Energy Step Code by the RMOW triggered the need to update the Green Building Policy as the primary tool for regulating new building emissions in BC and in Whistler is now the Step Code. The Energy and Emissions section of the updated Green Building Policy advances the BC Energy Step Code implementation in Whistler.

On October 20, 2008, RMOW Council received Administrative Report No. 08-155 and approved the current Green Building Policy.

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***

Pandemic Recovery

*Leadership and support for **community and tourism recovery and sustainability** – priority focuses are where recovery needs intersect with other Council focus areas*

Not Applicable

Community Vision and Official Community Plan

The OCP is the RMOW's most important guiding document that sets the community vision and long-term community direction. This section identifies how this report applies to the OCP.

Chapter 5: Land Use and Development addresses residential and tourist accommodation, commercial and industrial space, and agricultural and extractive uses. The proposed Green Building Policy directly supports Goal 5.4 of this chapter that seeks to reduce the environmental and energy impacts of residential neighbourhoods to improve the quality of life and sustainability of the resort community. The Green Building Policy also directly supports the objectives and policies below:

- 5.4.1 Objective Encourage environmentally-friendly and energy efficient design, construction and renovation standards for both new developments and redevelopment of residential areas.
- 5.4.1.1 Policy Encourage all new buildings and renovations to be built with environmentally sustainable methods, standards and technologies including by implementing the BC Energy Step Code
- 5.4.1.3 Policy Ensure all neighbourhoods are well-connected to local transit, trails, green space, amenities and services.

Chapter 7: Natural Environment aims at protecting, monitoring and restoring Whistler’s natural environment. Specifically, the policy supports Goal 7.1 that seeks to protect, manage and restore Whistler’s sensitive ecosystems, wildlife, habitat and biodiversity.

- 7.1.1 Objective Implement land development approaches that minimize negative impacts on the natural environment.
- 7.1.1.2 Policy Minimize habitat fragmentation, while focusing on maintaining the interconnected components, functions and processes of local ecosystems.
- 7.1.1.3 Policy Wherever possible, link sensitive ecosystems, such as aquatic habitats, to parks, greenways or other natural areas to minimize habitat fragmentation.
- 7.1.1.7 Policy During development or significant redevelopment, the preferred outcome is avoidance of negative environmental impacts, followed by minimization or mitigation, thirdly, by restoration and, lastly, by compensation for impacts.
- 7.1.1.12 Policy Reduce the use of night-time lighting and contain glare to retain the quality of the night sky, while meeting safety needs.

Goal 7.2 is also relevant for the Green Building Policy, since it seeks to proactively manage natural areas and make them resilient to climate change.

- 7.2.2 Objective Manage, protect and restore native species, habitat and biodiversity in response to climate change forecasts and impacts.
- 7.2.2.2 Policy Enhance natural resilience to climate change by reducing threats such as habitat fragmentation, degradation and destruction, eutrophication, pollution and the introduction of invasive species.

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| 7.2.2.3 | Policy | Encourage the use of native plant species that minimize the necessity for significant watering as a means of protecting local biodiversity and adapting to climate change. |
| 7.2.2.4 | Policy | Prohibit the use of invasive plant species and support eradication of existing invasive plants. |
| 7.2.2.7 | Policy | Maintain connectivity of natural landscapes to allow species the opportunity to shift to more suitable habitats, as climate change impacts are experienced. |

Goal 7.3 outlines a commitment to protect water quality and quantity in local water bodies, streams and groundwater. The Green Building Policy, through the Water Conservation and Rainwater Management section support this goal of the OCP, and the objective and policy described below.

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| 7.3.2 | Objective | Maintain overland and in-stream water flows after development and significant redevelopment. |
| 7.3.2.4 | Policy | Require a stormwater management plan for development and significant redevelopment that balances pre- and post-development surface flows. |

Chapter 10: Climate Action and Energy confirms the community’s recognition that climate change is real, that reducing GHG emissions is beneficial to our broader well-being and that governments should act promptly to mitigate the negative impacts of climate change. In relation to the Green Building Policy, Goal 10.2 aims at substantially reducing GHG emissions from vehicles and transportation.

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| 10.2.3.1 | Policy | Integrate support for electric vehicle charging infrastructure into relevant municipal development policies, including electric vehicle-readiness requirements for parking areas and garages in new, or significant redevelopment, projects. |
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Goal 10.3 seeks to substantially reduce GHG emissions from buildings and infrastructure, and supports the updated Green Building Policy.

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| 10.3.1 | Objective | Make energy conservation and energy efficiency initiatives the core strategy and highest priority for achieving our GHG emission reduction goals. |
| 10.3.1.1 | Policy | Maintain, update and apply the Green Building Policy to reflect leading practices in energy efficiency and local government jurisdiction, including a broad, progressive integration of the BC Energy Step Code. |

Chapter 13 establishes Development Permit Areas designated for the protection of the natural environment, its ecosystems and biological diversity, and for the establishment of objectives for the form and character of developments. The updated Green Building Policy aligns with and reinforces relevant Development Permit Areas guidelines. The Green Building Policy will provide a framework to guide future DPA updates.

DPA guidelines for the protection of the environment seek to protect, restore and enhance natural areas from the effects of residential, commercial and industrial development. The updated Green Building Policy relates directly to the environmental protection DPAs as the guidelines were crafted in alignment with the relevant DPA guidelines. The Green Building Policy will reinforce the intent and purpose of the Development Permit Area.

Development Permit Areas designated for the establishment of objectives for the form and character encourage visually attractive developments that respond to natural features and strengthen the character of existing neighbourhoods. When crafting the guidelines for the updated Green Building policy staff reviewed the DPA guidelines for consistency.

The RMOW's CECAP sets out several recommended actions to reduce Whistler's contribution to climate change that can be supported by the Green Building Policy. Relevant actions for the policy are found within section 6.2 *Stationary Energy Use – Buildings & Infrastructure GHG Emissions*:

- 6.2.2.4 Maintain and update the RMOW Green Building Policy to require higher energy performance standards during rezoning for new residential buildings.
- 6.2.2.10 Maintain and update the RMOW Green Building Policy to modernize the framework and ensure that opportunities to increase energy performance outcomes are identified and leveraged during permit approval and rezoning processes (commercial, institutional and residential).

Relevant actions can also be found within section 6.4 *Solid Waste System-based GHG Emissions*:

- 6.4.1.3 Evaluate opportunities to require new development or significant redevelopment to incorporate meaningful measures to minimize solid waste during design and construction, deconstruct rather than demolish, and encourage alternative and evolving methods of waste diversion during building operation.

BUDGET CONSIDERATIONS

Staff time and related resources required for this work is covered by the Planning Department budget.

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 are no specific considerations to include in this report. The draft Green Building Policy will be shared with the Lil'wat Nation and Squamish Nation for information.

COMMUNITY ENGAGEMENT

Level of community engagement commitment for this project:

Inform Consult Involve Collaborate Empower

Comment(s):

An analysis of community engagement and how it informed the updated Green Building Policy is presented above in the background section of this report. A complete summary of feedback received during all engagement activities is attached to this report as Appendix C.

Engagement

Staff have undertaken targeted engagement with the building and design sector at two points during the development of the draft Green Building Policy. Participants were invited through the Sea to Sky Chapter of the CHBA, contacts of builders and designers who have been previously involved in sustainable design, green building, and energy initiatives with the RMOW, and promoted on social media. The Green Building Policy update was also presented to ADP in March 2022 for comment and feedback, and the draft policy was shared with ADP on June 15th.

Building Sector Virtual Workshop – February 24, 2022

Integral Group sustainability consultants were engaged to assist with the development and facilitation of the building sector virtual workshop. The purpose of the workshop was to identify opportunities and constraints, and the feasibility of proposed sections and performance areas. Staff presented the Green Building Policy update framework including topic areas and facilitated discussions in break-out rooms using Mural board digital worksheets. Participants were asked to discuss challenges and opportunities staff should consider when designing the future requirements considering local skills and resources, available technologies and strategies, market readiness, and cost or feasibility. Nineteen participants attended the building sector virtual workshop. Participants were generally supportive of the Green Building Policy update and had a range of suggestions to refine and focus the performance areas, requirements, and targets.

Presentation to ADP – March 23, 2022

On March 23, staff introduced the project to the ADP. A complete summary of feedback received from ADP is included in the Appendix C, and the minutes of the March 23, 2022 ADP meeting are attached to this report as Appendix D. The design panel members were asked to provide comments on the proposed performance areas, and challenges and opportunities municipal staff should consider when designing the standards and updating the policy.

Design Panel members advocated for a flexible and performance-based policy, with clear intent on the desired outcomes of each section, target, and requirement. They also recommended that the Green Building Policy requirements are evidence-based and outcome-driven, and do not place unreasonable costs and expectations on builders and architects. Staff reminded ADP that the updated Green Building Policy is an update and refinement of the existing Policy, that includes a simplified application and review process that seeks to provide clarity and ease the burden on both applicants and RMOW staff.

The ADP was supportive of the proposed approach to update the Green Building Policy and suggested bringing the draft Policy back to the building sector for focused engagement and review of targets and requirements prior to bringing it forward to Council.

Green Building Policy Virtual Industry Consultation – May 12-27, 2022

A second round of industry consultation was undertaken between May 12 and 27, 2022. To collect feedback from participants, staff used Whistler's community engagement portal (engage.whistler.ca). Participants who had previously participated in the Green Building Policy update were invited to participate again, and the Sea to Sky chapter of the CHBA shared the invitation with their members. Participants were asked to review the draft policy, and provide feedback on the scope, objectives, proposed requirements, and targets and metrics. To provide feedback, participants were offered two options, either using the Green Building Policy Feedback Form available online or scheduling a meeting with municipal staff for a detailed discussion of the updated Green Building Policy.

Twelve responses were received through the feedback form. Feedback received through this engagement activity indicated support of the proposed Policy, and recommended a flexible, performance-based approach.

REFERENCES

Appendix A – Draft Green Building Policy G-23 and Checklist
Appendix B – Green Building Policy G-23 (current)
Appendix C – Green Building Policy Public Engagement Summary
Appendix D – ADP Minutes from March 23, 2022
Appendix E – ADP Minutes from June 15, 2022

SUMMARY

This report presents a draft updated Green Building Policy for information and includes a summary of engagement results.

The draft Green Building Policy addresses new construction at the scale of individual buildings and sites and proposes a flexible, performance-based framework for new construction. It is organized into six sections, each establishing performance-based goals and guidelines that also include requirements and targets where appropriate for new construction in buildings under Part 9 (houses and small buildings) and Part 3 (large and complex buildings) of the BC Building Code.

The six sections are based on the green building and sustainability priorities identified in Whistler's OCP, Big Moves, and CECAP, and ensure that the Green Building Policy is advancing implementation of community goals and priorities. Each section supports specific goals, objectives, and policies of the OCP. The sections also address Big Move #1, 2, 4, and 6 and their corresponding key initiatives. The guidelines of each section are aligned with Whistler's Development Permit Area guidelines and were benchmarked against national and international green building frameworks and against green building policies established by other local governments. The six sections of Whistler's updated Green Building Policy capture the principles of green building and sustainable design and provide continuity with the content and intent of the original Green Building Policy.

Following Council review, staff will consider further revisions based on Council feedback before returning to present a final Green Building Policy to Council for consideration of adoption. Moving forward, the Green Building Policy may be regularly updated and refined based on experience and to address ever-evolving changes in technology and regulatory conditions.

SIGN-OFFS

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