Climate-Forward Building Guide

Note: If the proposal requires a Development Permit, the following information can be provided at that stage.

As outlined in the City's <u>Climate Leadership Plan</u>, Victoria has both a responsibility and an opportunity to respond to the causes and impacts of climate change. To meet this challenge, the City's vision for 2050 is a vibrant, healthy and prosperous community, fueled by renewable low carbon energy systems, and designed and integrated in ways that promote a high quality of life for all Victorians.

Climate-forward buildings go above and beyond the minimum requirements to provide occupants with comfortable, healthier and lower carbon buildings and surrounding sites, which are more resilient to a changing climate.

How to use this guide

Using the following table, applicants can consider how to align their proposal with the City of Victoria's <u>Climate Leadership Plan</u> goals through minimizing carbon emissions and increasing resilience to current and projected climate impacts. It also serves as a tool for staff, Council and the public to assess the merits of an application while considering the sources and impacts of climate change. Including climate-forward building features for new developments is encouraged and providing details of these features is a requirement for all rezoning applications that include new construction.

Using this guide as a reference, the applicant will provide details of the climate-forward features of their proposal in the letter to Mayor and Council or as an appendix to the letter. By submitting the rezoning application, the applicant is providing a voluntary commitment to include the building features as indicated in the letter to Mayor and Council. In the cases where the climate-forward building features are required as a condition of rezoning, further documentation may be required.



	Climate-Forward Features	Information
Rating System	Pursue certification with a third-party green building rating system	Zero Carbon Building Standard Passive House LEED Living Building Challenge
Near Zero Emissions	 Design mechanical systems as fully electric Modeled GHG emission intensity meets stricter level than required 	Zero Carbon Step Code - City of Victoria
Energy Efficiency	Exceed the required level of the BC Energy Step Code	BC Energy Step Code – City of Victoria
Building Retention and Re-use	 Retain and re-use existing building elements and/or deconstructed building materials in excess of requirements Increase waste reduction and landfill diversion to exceed requirements 	Reducing Construction Waste - City of Victoria
Low Carbon Materials and Construction	 Prioritize and specify the use of low embodied carbon materials and/or carbon-sequestering materials Set a project-wide embodied carbon reduction target to be verified through life-cycle assessment 	Embodied Carbon Quick Guide - Living Future Institute Low Carbon Building Materials - City of Nelson
Transportation	 Embrace multi-modal design and connectivity, including access to sidewalks, bike lanes, car share services, transit stops, etc. Speak with City staff about transportation demand management alternatives to minimize parking Ensure bicycle parking includes gear storage, a repair station and heavy-duty locks, while considering all bike types, including cargo and e-bikes Exceed requirements for EV charging, such as providing charging for e-bikes Provide car share vehicle(s) with memberships and driving credits for occupants Provide transit passes for occupants 	GoVictoria Walking, Riding & Rolling - City of Victoria Zoning Regulation Bylaw Schedule C - Off-Street Parking Modo Car Share BC Transit - EcoPASS

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Rainwater Management and Green Infrastructure	 Incorporate green infrastructure to manage rainwater and stormwater, and support urban forest, urban agriculture, native plants and pollinators Include features such as green roofs, rain gardens, permeable paving, bioswales, cisterns and infiltration chambers Manage road runoff through boulevard rain gardens, stormwater tree soil cells or similar 	Rainwater Management Standards Stormwater Management - City of Victoria Rainwater Rewards Incentive
Landscaping and Native Plants	 Specify that plants are native to southern Vancouver Island, climate-adapted, food-bearing and/or provide pollinator habitats Demonstrate steps to restore or enhance the healthy natural ecology of the site 	Downtown Core Area Design Guidelines - Section 3.3. Open Space and Landscaping - City of Victoria
Urban Forest	 Make a significant contribution to protect, enhance and expand Victoria's long-term tree canopy, in excess of tree minimum requirements Design for healthy tree growth by maximizing soil volumes and providing unobstructed space above and below sufficient for long-term vitality; this may include increasing building setbacks, using soil cells and co-locating utilities under paved areas 	Tree Protection Bylaw Urban Forest Master Plan
Urban Gardening and Food Production	 Design community-building outdoor spaces for gardening and food production, such as home, community or rooftop gardens, greenhouses and urban farms Incorporate edible landscaping and pollinator gardening into landscaped areas Make vacant lots or underutilized spaces available for temporary community gardens or urban farms prior to development 	Growing Food and Gardening in Mixed-Use, Multi-Unit Residential Developments

	Climate-Forward Features	Information
Climate Change Adaptation	 Minimize overheating risk beyond minimum requirements using mechanical and passive cooling techniques, including tree shading Use future climate predictions to design mechanical systems and storm drainage Include flood protection and risk reduction measures, including green infrastructure, to exceed minimum requirements Include measures to ensure indoor air quality during forest fire smoke events 	Passive Design Toolkit – City of Vancouver Planning for Climate Change – Climate Atlas of Canada Projected Weather Files - PCIC Regional Climate and Sea Level Rise Projections - CRD
Innovation and Inspiration	 Include new or emerging technology and/or techniques to achieve higher carbon and energy performance Indicate specific methods to share sustainability successes and challenges to educate and inspire others 	Leadership and Green Building Excellence Award Winners - CaGBC