

Environment and Climate Review

The links between the potential revisions to the Edmonton Exhibition Lands Planning Framework (Planning Framework), the City’s environment and climate resilience and goals, and the related risks and opportunities are outlined below.

Sustainable Design	
<p>The integration of climate-resilient design and usage policies for any land use changes associated with the Planning Framework could ensure ongoing alignment with its sustainability and resilience guiding principle.</p>	<p>The Expo Centre is a leading example of sustainability and actively implements initiatives such as waste reduction programs and rooftop solar to enhance environmental performance.</p> <p>Incorporation of a large outdoor event space into the development plan has environmental and climate implications. For example, increased stormwater runoff and urban heat island effects from impervious surfaces typical of such spaces are potential impacts that space design and surfacing choices could help manage. Easy access to the LRT station and promotion of transit for events supports increased ridership. During events, standards and management plans can help mitigate some impacts such as waste generation; however, other impacts like noise may be more challenging to manage.</p>
Compact and Climate Resilient Community	
<p>Continued consideration of residential density targets and active transportation planning and design supports the City’s environment and climate goals.</p>	<p>The Planning Framework aims for compact and complete communities that help promote energy-efficient mobility and active transportation, efficient infrastructure and reduced outward growth.</p> <p>The development scenarios involve allocation of residential land to other uses or changes in the mix of housing types (such as ground-oriented versus mixed use transit village), which alters the total number of residential units. This variation in residential unit totals across scenarios may directly impact the potential for achieving climate goals and climate resilient outcomes.</p> <p>The Planning Framework also outlines mobility policies that include consideration for pedestrians and cyclists. The impact on active transportation and overall mobility will vary across development scenarios. Assessing mobility implications and associated greenhouse gas and other air emissions against</p>

	<p>these policies will help in understanding how revisions support mobility goals.</p> <p>The overall carbon impact of incorporating the various development scenarios, including the potential impacts of an outdoor event space, has not been quantified, particularly regarding the balance between potential event attendee emission benefits from the central location and public transit access versus possible reductions from alternative land uses such as central housing.</p>
<p>Open Space and Green Infrastructure</p>	
<p>Maintaining the vision to expand Borden Park contributes to ecosystem health and reduces urban heat island effects.</p>	<p>Maintaining and allowing for expansion of open space within the development scenarios can positively contribute to air quality, mitigation of urban heat island effects, ecological connectivity and stormwater management.</p> <p>While the planned park space varies slightly across the proposed scenarios, its continued presence suggests that the overall climate resilience benefits (i.e. ecological connectivity and localized climate adaptation) are not significantly impacted by any of the options. In addition, the presence of trees and landscaping as envisioned in the Complete Streets Design and Constructions standards, as well as vegetation buffers around laydown areas and/or event spaces, proper design can further contribute to positive environmental outcomes. The inclusion of the Urban Farm within this space can also support these outcomes and contribute to a more resilient food system.</p>
<p>Other Low Carbon Opportunity Areas</p>	
<p>Exploration of low carbon community options, including district energy, in line with the City's environment and climate goals.</p>	<p>The Planning Framework requires development to conform to directives and targets of the Community Energy Transition Strategy. Administration will evaluate options to reduce carbon emissions from the Exhibition Lands Development, including district energy.</p> <p>Growing Edmonton's district energy network is a 'Big Win' Action in the City's climate plan that will be considered for the Exhibition Lands development. For the projects quantified in the 2023-2026 budget cycle, district energy systems had the largest potential impacts on Pathway #1 community emissions (Renewable and Resilient Energy Transition).</p>

	<p>Following completion of a feasibility study, a district energy system is the recommended pathway to reduce emissions from building heating in Exhibition Lands. By transitioning from building scale mechanical solutions to a centralized utility for anchor loads and medium-to-high density nodes, this strategy reduces capital costs and technical complexity for developers while enhancing long-term energy efficiency. This approach directly enables low-carbon energy generation and distribution systems, and contributes to the City’s emission reduction targets.</p> <p>Administration is planning to bring forward a report on the impact of the suggested changes in development to Council later in 2026.</p>
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Linkages to The City Plan:

- 1.4.1.1 Facilitate energy efficient redevelopment and retrofits.
- 1.4.1.3 Facilitate the use of local renewable energy.
- 1.4.1.5 Provide support for residents, organizations and businesses to reduce energy use and greenhouse gas emissions and adapt to climate change.
- 2.4.1.2 Conserve, restore and reconnect natural areas and ecological networks within the built environment for human and ecosystem health.
- 2.4.2.1 Manage the impacts of climate change on City assets in the design, maintenance and retrofit of buildings and infrastructure.
- 2.4.2.2 Enable green energy generation and distribution systems.
- 4.2.1.2 Plan and design active transportation and transit networks in support of nodes and corridors.
- 5.3.3.3 Implement Edmonton’s carbon budget through ongoing development decisions.