

# Climate Change and Land Use Planning

## What You Need to Know

Land use planning is identified as one of the most effective processes to facilitate local adaptation to climate change (*Land Use Planning Tools for Local Adaptation to Climate Change*, Government of Canada, 2012). Existing processes and tools available through the municipal land use planning process in Canada including official plans, zoning, and/or development permits, assist in minimizing the development risks to a municipality from the predicted impacts of increased floods, wildfires, landslides, and/or other natural hazards due to a changing climate.

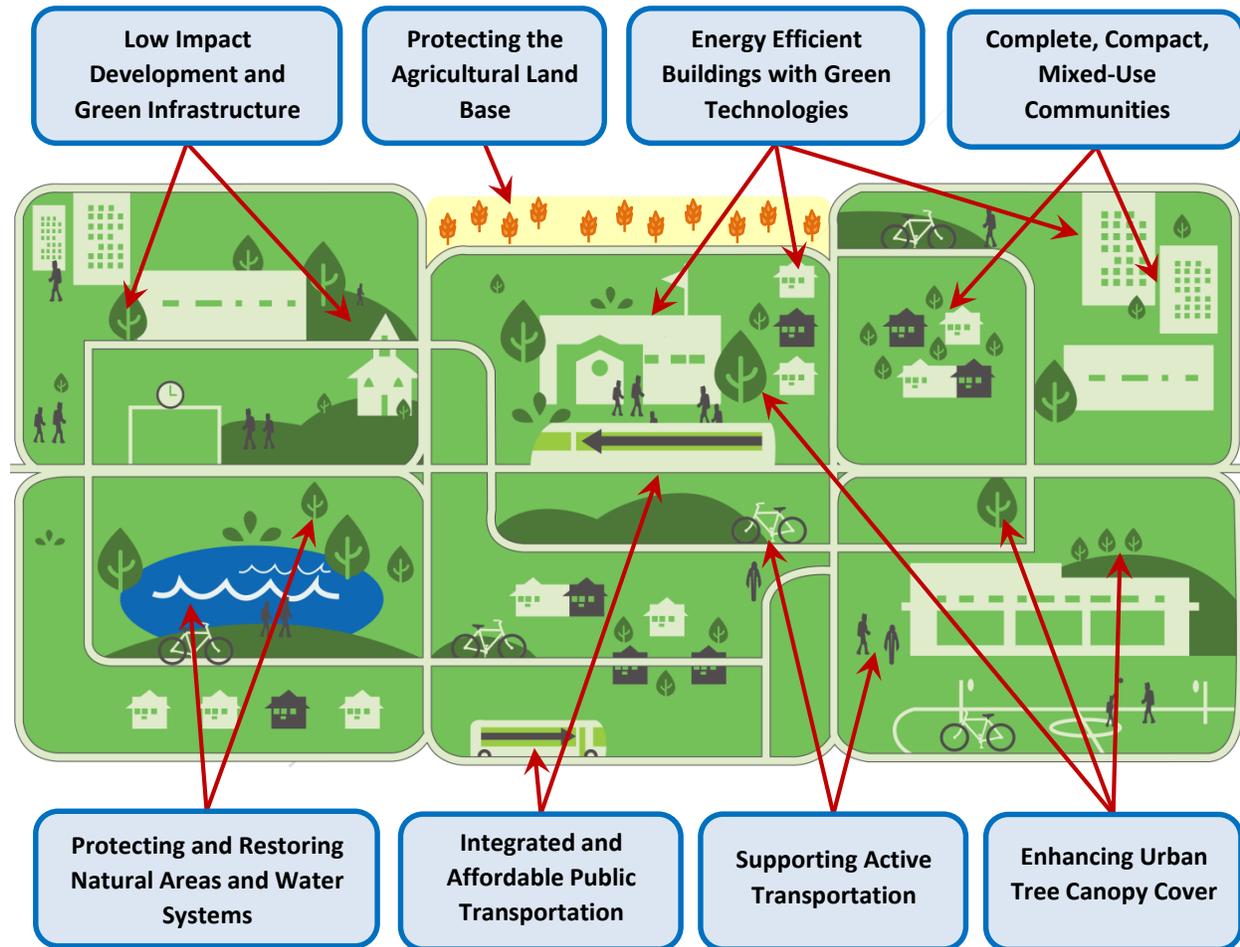
The land use planning framework in Canada provides opportunities that can assist in reducing greenhouse gas (GHG) emissions, increase resiliency, and achieve the long-term goal of low-carbon communities.

## What is Climate Change and Land Use Planning?

Planners can assist through their work in one or more broad theme areas including, but not limited to, those listed below with the goal of climate change mitigation and adaptation.

Growth Management	<ul style="list-style-type: none"> <li>• Allocate population and employment growth to increase intensification and density and develop compact, mixed-use, and transit-supportive communities.</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>• Improve public health and reduce GHG emissions through sustainable and active modes of transportation including carpooling, public transit, cycling, and walking.</li> </ul>
Energy/Waste	<ul style="list-style-type: none"> <li>• Promote energy efficiency and conservation through renewable energy (including district energy), green development standards, and electric vehicles. Explore all opportunities before final disposal of waste.</li> </ul>
Water Resources	<ul style="list-style-type: none"> <li>• Protect water resources and inform master plans through watershed and sub-watershed planning and consider the risk and vulnerabilities to public infrastructure.</li> </ul>
Natural Hazards	<ul style="list-style-type: none"> <li>• Address impacts related to surface water, groundwater, and flooding and increase resilience through low-impact development and green infrastructure stormwater approaches.</li> </ul>
Natural Heritage	<ul style="list-style-type: none"> <li>• Maintain, restore, and enhance the diversity and connectivity of natural features such as forests and rivers in urban/rural areas for the long-term protection of ecosystems and public health.</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Identify and protect prime agricultural lands and the economic viability of farming through land use planning.</li> </ul>

The integration of these key themes below will assist in reducing GHG emissions and achieve healthy and sustainable communities, which will help mitigate and adapt to the predicted impacts from climate change, as illustrated below.



The Regional Municipality of Peel, 2018

## How Do You Bring it Into Your Professional Practice

Through the many roles that planners play in the land use planning system, there are many opportunities to influence the decrease of GHG emissions and assist in implementing climate change mitigation and adaptation actions, including through policy development, regulatory practice, community planning, urban design, building design, and environmental stewardship. The collective and collaborative efforts of everyone are essential to build national and community resilience to the impacts of climate change.

Please see the Canadian Institute of Planners' Policy Statement on Climate Change for more information.