

#### INTRODUCTION

The Climate Resilience Inventory (CRI) User's Guide is a companion to the Climate Resilience Inventory (CRI) form that you submit to the City of Calgary with your planning applications. The User's Guide is a reference to help explain the requested information and provide policy background.

Information gathered through the CRI is intended to assist in the evaluation of applications for alignment with the climate policies of the Municipal Development Plan and Calgary Climate Strategy. Data collected will be used to inventory current practices.

If additional clarity is required, please do not hesitate to contact: CPclimate@calgary.ca

#### Certification

**Description:** Certifications are independent, third-party verification that a development's location and design meet high standards of sustainable and environmentally responsible development. Certifications validate sustainability strategies and can help market developments to prospective purchasers, tenants, community members, financiers, and approving authorities. Certifications are not required, but may support recommendations of approval.

**Policy:** MDP section 1.3.3, Calgary Climate Strategy Mitigation Plan Program Pathway H.

**Instructions:** Indicate if the proposed project is seeking third-party certification. If yes, indicate the type and level (example: "BREEAM Communities"). If your project is not seeking certification explain why not by identifying any issues or barriers (such as costs, project schedule, or unfamiliarity with certification systems).

#### **Further Information:**

LEED for Neighborhood Development

**BREEAM Communities** 

# Green Infrastructure and Urban Heat Mitigation

**Description:** Green infrastructure is an interconnected network of natural green and engineered green elements that provide ecological services (e.g., water filtration, air filtration, and food production) in urban environments. These features can mitigate climate change by sequestering carbon and enhance adaptive capacity to extreme weather, including reducing the urban heat island effect and limiting stormwater flooding.



The urban heat island effect is the build up of heat in paved and built areas, which increases the likelihood and scale of health impacts to people and damage to built and natural environments.

**Policy:** MDP section 2.6.1, Calgary Climate Strategy Mitigation Plan Program Pathway K and Adaptation Plan Programs 3, 13, 14, 16.

**Instructions:** Identify and explain any proposed green infrastructure features that exceed minimum policy or bylaw requirements, and measures taken to ensure green infrastructure is resilient to current and future climate impacts. Examples of natural green infrastructure may include the preservation of trees, wetlands, and natural open spaces. Examples of engineered green elements may include infrastructure (such as green roofs and walls and green roadways) designed to mimic ecological functions or to reduce impacts on ecological systems. Measures taken to reduce the heat island effect may include shading features, access to drinking water, and indoor cooling facilities.

## **Low-Carbon Mobility**

**Description:** Low-Carbon mobility refers to infrastructure and modes of transportation that are environmentally sustainable or reduce climate impacts through minimizing greenhouse gas emissions.

**Policy:** MDP section 2.2 and 2.5, Calgary Climate Strategy Mitigation Plan Program Pathways F, G.

**Instructions:** Describe the design features that will reduce or minimize travel by private vehicles, support the uptake of electric vehicles (ex. charging infrastructure), or facilitate travel by low-carbon modes (examples: transit, walking, cycling).

## Renewable Energy

**Description:** Renewable energy produces no GHG emissions and includes solar, wind, and geothermal heat. Low carbon and renewable energy helps to decrease GHG emissions and energy usage in buildings and neighbourhoods, and reduces energy costs.

**Policy:** MDP section 2.6.5, Calgary Climate Strategy Mitigation Plan Program Pathways D. H.

**Instructions:** Describe how renewable energy sources are incorporated into or facilitated by the proposal. Examples could include: commitments to install solar photovoltaics (PV), connection to low-carbon district energy systems, or wind power. Indicate if technology or equipment is proposed to improve efficiency of energy generation (i.e. combined heat and power) or if technology is being used to recover waste heat from waste water or industrial processes.



### **Food Security**

**Description:** Local food production reduces greenhouse gas emissions from transportation, creates economic opportunities, fosters a sense of community, and builds resilience.

**Policy:** MDP Section 2.2.4, 2.6.1, 3.6.2, and 4.2.3, Calgary Climate Strategy Adaptation Plan Program 3.

**Instructions:** Describe any opportunities that are created for local food production, such as community gardens or orchards, preservation of farmland, or commercial production (greenhouses, vertical farming, aquaponics, etc.).