



Climate Resilience Planning and Development Action Plan

Edmonton

October 2024

INTRODUCTION

The Need for Climate Action

Edmonton is warming at a faster rate than the global average. Climate projections indicate that Edmonton will see four key shifts: temperatures are increasing, precipitation patterns are changing, weather extremes are increasing, and ecosystems are changing. This means Edmonton can anticipate increased instances of extreme weather events like wildfires and high wind along with an increase in heavy rainfall events but a decrease of overall rainfall and an increased likelihood of drought conditions during the summer.

The City Plan targets net zero per person greenhouse gas emissions by 2050. Edmonton's Community Energy Transition Strategy (2021) further defines the City's emission reduction targets with a reduction of community-based net greenhouse gas emissions by 50% by 2030. Urban development of land, transportation networks, and buildings, were identified as major reduction areas, together accounting for up to 47% of the needed emissions reductions.

The objective of this Action Plan is to take deliberate action towards these targets while building resilience to climate impacts by identifying and integrating strategic, regulatory, and procedural climate mitigation and adaptation action throughout the City's land use planning and development continuum, where feasible and effective.

Developing the Actions

This project originated as a framework, but evolved into an action plan, as it presented an opportunity to build on existing initiatives and take decisive action. Integrating climate change adaptation and mitigation into urban planning is complex as there are significant interrelated components and diverse perspectives. It requires technical understanding of climate science and the impacts of climate change at the local level along with land use planning expertise. Developing effective and achievable actions requires collaboration between the City, utility partners, the development industry and residents.

Council declared a climate emergency in 2019 and Administration has heard from Council and the public that immediate action is needed. The goal when developing the Action Plan was to identify effective actions that can be implemented within the 2023-2026 budget cycle. This meant prioritizing actions that could realize swift and deliberate change through existing land use tools and lay a foundation to enable continued climate action in the future. Fifteen priority actions were compiled based on a combination of key considerations:

- **City Policies** - Actions align with both of the City's Climate Strategies and policy targets in The City Plan and ConnectEdmonton;

- **Council** - Actions address Council motions and priorities;
- **City Powers** - Actions are within municipal jurisdiction;
- **Best Practices** - Actions align with best practices identified through jurisdictional scans and literature reviews;
- **Professional Expertise** - Actions are informed by input from an internal working group and a senior review team; and
- **Stakeholder feedback** - Actions are informed by external engagement specific to this project and an analysis of the public and stakeholder feedback on The City Plan, Zoning Bylaw Renewal and District Planning projects.

The actions and their outcomes were evaluated and prioritized based on equity, cost, impact, ease of implementation and critical timing in relation to the climate emergency. The evaluation criteria was informed by the evaluation frameworks developed for both of the City's Climate Strategies, ensuring a consistent evaluation of climate actions across the strategies and supporting projects.

The Action Plan

The Action Plan prioritizes 15 interdependent actions that are described on the following pages. The actions are intended to be completed concurrently by the end of 2026. These actions support the holistic integration of climate resilience throughout the planning and development continuum, including:

- **Neighbourhoods** - New and existing communities (residential, commercial and industrial) that provide homes, amenities, recreation and other services.
- **Site Design and Landscaping** - The location of development and landscaping on individual sites.
- **Buildings** - New construction and building retrofits for residential, commercial, institutional, and industrial development.
- **City Processes** - How administration reviews and processes applications, develops new policies and plans, and collaborates across departments and areas of expertise.

Several of the actions contribute to climate resilience in multiple of these categories across the continuum.

Integration of climate action across the planning and development continuum will result in cohesive processes and provide clear and implementable outcomes for residents and industry at every stage of development.

The actions contribute to the following outcomes:

- **Energy Transition** - Actions support the energy transition through energy efficient buildings and low carbon energy sources;
- **Reduced Risk** - Actions restrict development or require risk management in hazard-prone areas (i.e. wildland-urban interface fire and river flood risk mitigation);
- **Resilient Community Design** - Actions guide community design to support low carbon transportation and infrastructure that is resilient to climate impacts
- **Preservation of Natural Assets** - Actions preserve and improve natural assets to support carbon sequestration and improved resilience to climate impacts; and
- **Education & Information Sharing** - Actions support education of stakeholders and decision makers about risks and opportunities and foster dialogue about adaptation.

Building resilience to climate change goes beyond reducing greenhouse gas emissions and protecting infrastructure and buildings. The actions identified can help to reduce physical and mental health impacts, mitigate the economic costs of climate change impacts, and protect Edmonton's natural environment and ecosystems.

Edmonton's climate is changing and there is an urgent need for continued action to build resilience. This is a critical decade for climate change, and local actions can have wide-ranging positive effects and contribute to increased climate resilience. Decisions made today about how our communities are designed, developed, and re-developed will set the course for our city's resilience in a changing climate. The 15 Actions identified will set the foundation for resilient planning and development in Edmonton.

CLIMATE RESILIENCE PLANNING & DEVELOPMENT ACTION PLAN SNAPSHOT

The CRPD Action Plan consists of 15 priority actions that integrate climate **adaptation** and **mitigation** into the City of Edmonton's land use planning and development continuum. These actions will be implemented in the 2023-2026 budget cycle and lay a strong foundation for ongoing climate resilience building.

ACTIONS



1. Streamline the permitting process for climate resilient development				✓
2. Incorporate EV-ready requirements into the Zoning Bylaw		✓	✓	
3. Incorporate solar-ready requirements into the Zoning Bylaw		✓		
4. Pursue options for resilient landscaping practices on private property			✓	
5. Update the Floodplain Protection Overlay in the Zoning Bylaw	✓	✓	✓	
6. Introduce new regulations for wildfire risk areas in the Zoning Bylaw	✓	✓	✓	
7. Incorporate climate resilient standards into the City's Design and Construction Standards	✓			✓
8. Pursue opportunities to bolster climate action through policy, regulatory and other planning tools	✓	✓	✓	✓
9. Incorporate climate resilience into the Terms of Reference that guide new neighbourhood design	✓			✓
10. Identify and pursue opportunities to enable development of low-carbon district energy systems	✓	✓		
11. Pursue options for preserving natural areas through neighbourhood design	✓		✓	
12. Develop a Climate Risk Index for Edmonton neighbourhoods	✓			
13. Foster awareness of climate resilient development through public education & outreach	✓	✓	✓	✓
14. Pursue opportunities to leverage grant funding for climate resilient development		✓		✓
15. Build organizational change within Administration through education and collaboration				✓

ACTION 1

Streamline the **permitting process** for climate resilient development

Why

The Alberta Building Code regulates energy efficiency in buildings and the Regulation prohibits municipalities from requiring a higher Applicable Energy Performance Tier than what is mandated by the Province. In order to reach its greenhouse gas emission reduction targets, the City can explore other levers of change to support the development of more energy efficient buildings.

Developing a streamlined permitting approvals process that reduces approval timelines, reinforces the City's commitment to championing climate resilient development. Reduced timelines help to reduce costs, and can help to improve certainty for applicants.

At the February 27, 2024 UPC Meeting (UPE01754), Administration committed part of the 2024 budget to the development of a green permitting pilot in 2024.

Approach

- Develop and implement a coordinated and dedicated development and building permit review program, which could include reducing timelines, for a subset of buildings that are built to a standard higher (a minimum of two tiers higher) than the current Applicable Energy Performance Tier of the Building Code. This action may impact service levels on applications that are not accepted into this review program.
- The program could be expanded in the future to include other climate resilient development components through a phased approach to implementation.

Start Date	Q3 2024
Outcome	The City of Edmonton champions climate resilient development.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • energy efficient buildings <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • changing temperatures • extreme heat • extreme cold
Big Wins	<input checked="" type="checkbox"/> Low Cost

ACTION 2

Incorporate **Electric Vehicle ready** requirements into the Zoning Bylaw

Why

Electric vehicles (EVs) have an important role to play in reducing the Greenhouse Gas emissions from personal transportation.

As part of an effort to prepare for and support the transition to electric vehicles, new zoning regulations will require the development of sites and buildings to be EV ready, meaning they are designed to support the future installation of EV charging infrastructure.

Incorporating EV readiness at the initial construction stage provides flexibility for changing technology and choice in installation of full EV charging infrastructure. This results in more equitable access to EV charging infrastructure, while minimizing or completely mitigating future retrofit costs.

Approach

- Prepare EV readiness regulations with consideration for all building forms (e.g. residential, commercial, industrial, institutional and standalone parking facilities) for incorporation into Zoning Bylaw 20001.
- Zoning Bylaw Regulations will be drafted to ensure they do not conflict with the Safety Codes Act.
- The specific details of EV ready infrastructure requirements will be determined during the scoping phase. Considerations could include what types of buildings are required to comply and the type of charging infrastructure required. Other considerations may be investigated through research and engagement.

Start Date	Q3 2024
Outcome	New development sites and buildings are designed in a way that facilitates the future installation of electric vehicle charging infrastructure.
Mitigation and Adaptation	Reduce greenhouse gas emissions (mitigate) through: <ul style="list-style-type: none"> • low carbon transportation
Big Wins	<input checked="" type="checkbox"/> Advances Equity <input checked="" type="checkbox"/> Low Cost

ACTION 3

Incorporate **solar-ready** requirements into the Zoning Bylaw

Why

As part of an effort to support the use of renewable solar energy, new zoning regulations will require buildings to be designed in a way that facilitates the installation of future solar photovoltaic systems.

Many existing buildings are not designed to support solar electricity generation and require additional retrofits to enable effective installation. Ensuring solar readiness at the construction stage facilitates investment in building-integrated renewable energy, resulting in more affordable utilities and more productive solar energy systems while allowing for flexibility in choosing full installation of solar photovoltaic systems.

Approach

- Prepare solar readiness regulations with consideration for all building forms (e.g. residential, commercial, industrial and institutional) for incorporation into Zoning Bylaw 20001.
- Zoning Bylaw Regulations will be drafted to ensure they do not conflict with the Safety Codes Act.
- The specific details of solar-ready requirements will be determined during the scoping phase. Considerations could include what types of buildings are required to comply and what features are required. Other considerations may be investigated through research and engagement.

Start Date	Q3 2024
Outcome	New buildings are designed in a way that facilitates the future installation of a solar photovoltaic system.
Mitigation and Adaptation	Reduce greenhouse gas emissions (mitigate) through: <ul style="list-style-type: none"> • low carbon buildings
Big Wins	<input checked="" type="checkbox"/> Low Cost

ACTION 4

Pursue options for resilient **landscaping** practices on private property

Why

Urban landscaping and green infrastructure can play a key role in mitigating and adapting to the impacts of climate change in many ways, including providing habitat for species, managing stormwater runoff, sequestering carbon, and reducing the heat island effect.

In an effort to expand green infrastructure and support climate resilience on private property, opportunities to incentivize, educate and regulate landscaping will be pursued.

A Council motion was passed during the October 16-23, 2023 Zoning Bylaw 20001 Public Hearing to include an analysis on the landscaping provisions as part of the Zoning Bylaw's one-year review report and to provide amendment options to further implement the work of climate resilience in planning and development, if necessary.

Approach

- Assess current landscaping programming, processes, and resources to identify:
 - Opportunities to increase Zoning Bylaw compliance levels of new developments
 - Public education, partnerships, capacity building, and other initiatives to increase resilient landscaping on private properties
- Assess landscaping regulations and identify opportunities to increase resilient landscaping, including:
 - Increased use of drought-resistant and native species
 - Increased use of low impact development (LID)
 - Increased tree count and canopy coverage
 - Increased naturalization and permeable area
 - Increased topsoil depth
 - Expanded requirements for minimum soft landscaping area to other zones
 - Improved landscaping in parking lots

Start Date	Q4 2024
Outcome	Landscaping is designed to reduce vulnerability to climate risks.
Mitigation and Adaptation	Improve resilience (adapt) to: <ul style="list-style-type: none"> ● extreme heat (i.e. urban heat island) ● drought ● urban flooding ● heavy rainfall events ● changing ecosystems
Big Wins	<input checked="" type="checkbox"/> Easy Win <input checked="" type="checkbox"/> Low Cost

ACTION 5

Update the **Floodplain Protection Overlay** in the Zoning Bylaw

Why

The Government of Alberta recently updated Provincial flood maps. Flood maps identify where water will flow during a flood, and what land could be flooded during different sizes of floods. Flood maps can inform land use planning decisions, emergency management operations and sustainable floodplain initiatives to mitigate loss of life and property.

Additionally, a local study is currently underway to assess the North Saskatchewan River flood risk in Edmonton to capture climate projections in more detail. This study will be completed by the end of 2024.

Using the Provincial flood maps and information from the study once completed, the Floodplain Protection Overlay in Zoning Bylaw 20001 will need to be updated. The purpose of the overlay is to mitigate the potential negative effects of a flood event and ensure the safety of those living within the defined floodplains of the North Saskatchewan River and its tributaries.

Approach

- Update the North Saskatchewan River flood risk mapping in the Floodplain Protection Overlay in Zoning Bylaw 20001 to reflect provincial flood mapping updates and incorporate future climate projections.
- Update the regulations in the Floodplain Protection Overlay in Zoning Bylaw 20001 to align with best practices for development within flood risk areas.

Start Date	Q3 2024
Outcome	New development is resilient to river flood events.
Mitigation and Adaptation	Improve resilience (adapt) to: <ul style="list-style-type: none"> • river flooding
Big Wins	<input checked="" type="checkbox"/> High Impact

ACTION 6

Introduce new regulations for **wildfire risk** areas in the Zoning Bylaw

Why

Edmonton is predicted to have an overall warmer and drier climate, this shift is anticipated to result in increased incidences of fire along wildland-urban interface areas in Edmonton. There is a need to reduce vulnerability to wildfire through site and building design.

Adding regulations for areas at risk of wildfire will help mitigate the potential negative effects of a wildfire event and ensure the safety of those living in areas that may experience wildfire risks.

Approach

- Prepare regulations informed by wildfire-ready best practices, such as FireSmart for incorporation into Zoning Bylaw 20001 to build resilience to the potential negative effects of a wildfire event.
- Zoning Bylaw Regulations will be drafted to ensure they do not conflict with the Safety Codes Act.

Start Date	Q3 2024
Outcome	New development is designed and constructed to reduce vulnerability to urban wildfire events.
Mitigation and Adaptation	Improve resilience (adapt) to: <ul style="list-style-type: none"> • wildland-urban interface fire
Big Wins	<input checked="" type="checkbox"/> High Impact <input checked="" type="checkbox"/> Low Cost

ACTION 7

Incorporate climate resilient standards into the City’s **Design and Construction Standards**

Why

The city currently has eight design and construction standard volumes, three of which are managed by EPCOR. Design and Construction Standards ensure that all City infrastructure is constructed to a consistent standard for operation and maintenance. They guide road and landscaping design as well as installation of power, water, and drainage infrastructure.

Integrating climate resilient standards within the City’s Design and Construction Standards can enable resilient neighbourhood development and renewal in the face of future climate shocks and stresses. Resilient Design and Construction Standards could lead to improved electrical service requirements, landscaping requirements for drought-resistant and native plant species, and improved drainage infrastructure.

Approach

- Complete a comprehensive review of all standards to identify opportunities and provide recommendations to incorporate climate resilient standards.
- Develop a roadmap for phased updates to each volume of the Design and Construction standards. It is anticipated that these updates will occur over this budget cycle (2024 to 2026) and the next budget cycle (2027 to 2030).
- Conduct a cost-benefit analysis for proposed infrastructure design changes.
- Update Design and Construction Standards to incorporate climate resilient requirements.

Start Date	Underway
Outcome	New infrastructure is designed and built to support the energy transition and adapt to the effects of climate change.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • low carbon buildings • low carbon transportation <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • extreme heat • drought • urban flooding • extreme weather events • heavy rainfall events • changing ecosystems
Big Wins	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Co-benefits (Energy Transition & Adaptation) <input checked="" type="checkbox"/> High Impact <input checked="" type="checkbox"/> Advances Equity <input checked="" type="checkbox"/> Critical Timing

ACTION 8

Pursue opportunities to bolster climate action through **policy, regulatory and other planning tools**

Why

City Plan and the two climate strategies set targets for greenhouse gas emissions reductions and provide high-level guidance for climate resilient community design and development.

In order to bridge the gap between these high level strategic policies and implementation, there is a need for more detailed climate-focused guidance for design and construction of parks, infrastructure and communities as a whole. Providing clear direction through policy and regulatory tools can advance climate resilient development.

Approach

- Identify and pursue effective policy, regulatory and other planning tools to improve implementation of climate action within planning and development processes.
- Review and update Council Policy C627 - Climate Resilience Policy and/or the associated administrative procedures.

Start Date	Q4 2024
Outcome	Local climate action is supported with clear and consistent direction.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • nature based solutions • low carbon buildings • low carbon transportation • energy efficient buildings <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • extreme heat • drought • urban flooding • river flooding • extreme weather events • wildland urban interface fire • changing ecosystems
Big Wins	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Low Cost <input checked="" type="checkbox"/> Critical Timing

ACTION 9

Incorporate climate resilience into the Terms of Reference that guide **new neighbourhood design**

Why

Area Structure Plans (ASPs) and Neighbourhood Structure Plans (NSPs) guide future development of lands, including designating land uses, setting minimum residential densities, establishing a transportation network, and identifying parks and natural areas. A Terms of Reference (TOR) guides these plans through principles designed to ensure planning and development of communities that are healthy, vibrant and sustainable.

How we design and build our neighbourhoods will set the course for our future greenhouse gas emissions and resilience to climate impacts. Updates to the TOR can help to set the path forward for a low carbon city, ensure sustainable urban planning practices, and support the prevention of premature conversion of agricultural land for development.

A Council motion was passed in September 2023 to require the TOR be updated to adequately address greenhouse gas impacts and climate resilience.

Approach

- Update the Terms of Reference for ASPs and NSPs to align with Council Policy C627 - Climate Resilience Policy.
- Include climate resilience criteria in the Terms of Reference for new neighbourhood plans (i.e. ASPs and NSPs), and substantial amendments to existing plans in effect.
- Identify and update technical study requirements and policy direction as needed to support the changes in the Terms of Reference.

Start Date	Q1 2025
Outcome	New neighbourhoods are designed and built to support the energy transition and adapt to the effects of climate change.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • nature based solutions • low carbon buildings • low carbon transportation <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • extreme heat • drought • urban flooding • river flooding • extreme weather events • wildland urban interface fire • changing ecosystems
Big Wins	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Co-benefits (Energy Transition & Adaptation) <input checked="" type="checkbox"/> High Impact <input checked="" type="checkbox"/> Critical Timing

ACTION 10

Identify and pursue opportunities to enable development of low-carbon district energy systems

Why

To accelerate the decarbonization of new construction in Edmonton, it is essential that both building energy performance and transformation to low-carbon district energy systems be considered and optimized. District Energy Systems play an important role in reducing GHG emissions from space heating and cooling, and preparing Edmontonians for impacts of a changing climate.

The District Energy Strategy estimates approximately 25% of all new residential construction in Edmonton through to when the population reaches 2 million will occur within District Energy Opportunity Areas. To support building decarbonization, appropriate policy and regulatory tools will need to be identified to facilitate connection (or readiness to connect) of new construction to District Energy Systems in Opportunity Areas.

Approach

- Identify the appropriate policy and regulatory tools to facilitate connection (or readiness to connect) of new construction to District Energy in Opportunity Areas.
- Develop guidance for enabling connection to District Energy for the various typologies of Opportunity Areas.

Start Date	Q2 2025
Outcome	District Energy Opportunity Areas are planned and developed to connect to District Energy.
Mitigation and Adaptation	Reduce greenhouse gas emissions (mitigate) through: <ul style="list-style-type: none"> • low carbon buildings
Big Wins	<input checked="" type="checkbox"/> High Impact <input checked="" type="checkbox"/> Low Cost

ACTION 11

Pursue options for preserving **natural areas** through neighbourhood design

Why

Various planning tools are used to protect and acquire natural areas, however there are gaps within the existing tools limiting the ability to acquire natural areas. Ravines, wetlands and flood areas are typically preserved and acquired through Environmental Reserve (ER) during the land development process, however, areas such as tree strands that do not meet the definition of ER must be acquired through a different approach. Municipal Reserve (MR) can be used, but must be balanced against other parkland priorities such as land needed for schools and parks.

There is a dedicated fund that may be used for natural area acquisition, but the fund is already fully allocated. As a result, newly identified features in already planned neighbourhoods cannot be protected, and no proactive acquisition can occur in the future growth areas.

Approach

- Pursue new approaches to the preservation of natural areas and natural infrastructure in neighbourhood design and development at the earliest stages of neighbourhood planning.
- Advocate for changes to the Municipal Government Act to support broader municipal powers to preserve natural areas through Environmental Reserve and Municipal Reserve.
- Explore additional funding for the Natural Area Reserve fund to purchase additional, high-value natural assets that cannot be retained through existing planning tools.

Start Date	Q1 2025
Outcome	Natural areas are preserved and protected through neighbourhood design.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • nature based solutions <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • urban flooding • river flooding • extreme weather events • wildland urban interface fire • changing ecosystems • extreme heat
Big Wins	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> High Impact <input checked="" type="checkbox"/> Co-benefits (Energy Transition & Adaptation) <input checked="" type="checkbox"/> Advances Equity <input checked="" type="checkbox"/> Easy Win <input checked="" type="checkbox"/> Critical Timing

ACTION 12

Develop a **Climate Risk Index** for Edmonton neighbourhoods

Why

The project to develop the Climate Risk Index (CRI) is designed to assess and track exposure, vulnerability, risk and resilience to climate change at the neighbourhood scale in Edmonton. The indicators represent a mix of human and natural systems as well as the built environment.

Upon completion of this work, the outcomes of the Index can help to shape planning, policy and capital decisions at the local level to enable more equitable and targeted resilience-building measures.

Approach

- Develop a Climate Risk Index to assess and track exposure, vulnerability, risk and resilience to climate change at the neighbourhood scale in Edmonton.

Start Date	Underway
Outcome	Decision making leads to more equitable and resilient outcomes.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • nature based solutions • low carbon buildings • low carbon transportation • energy efficient buildings <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • urban flooding • river flooding • wildfire • extreme heat
Big Wins	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Advances Equity <input checked="" type="checkbox"/> Easy Win <input checked="" type="checkbox"/> Low Cost

ACTION 13

Foster awareness of climate resilient development through public education and outreach

Why

The City's climate strategies include goals and actions where some are best initiated by the City and some by external partners, local businesses and residents.

To address the climate change emergency and protect our quality of life, health, and economy, we need to take this opportunity to interact with the public, share and promote information on climate action and motivate the public to take small and/or large steps. There is an opportunity to support and enable climate resilient and energy efficient development through a number of tools for the public and development industry.

Approach

- Integrate building and neighbourhood resilience measures within the Community Education and Activation Strategy (to be developed).
- Redevelop the Change for Climate website to serve as a source of information, events, incentive programs, links to complementary information/programs.
- Work with community-focused organizations and support them to lead climate action.
- Develop resources to educate the public on climate risks and opportunities for action related to development such as: climate resilient landscaping and site design, tree planting and preservation, energy-efficient building design, wildfire risk mitigation measures, flood risk mitigation measures, and sustainable demolition practices.

Start Date	Q2 2025
Outcome	Edmontonians are empowered to address climate change.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • nature based solutions • low carbon buildings • low carbon transportation • energy efficient buildings <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • drought • urban flooding • river flooding • changing ecosystems • extreme heat
Big Wins	<input checked="" type="checkbox"/> Easy Win <input checked="" type="checkbox"/> Low Cost

ACTION 14

Pursue opportunities to leverage **grant funding** for climate resilient development

Why

Achieving the greenhouse gas emission targets will require community buy-in and collective action. Previous grant programs, such as the Solar Rebate Program and the Home Energy Retrofit Accelerator (HERA) Program have successfully resulted in over 16 MegaWatts of rooftop solar installations and over 2,000 participants in energy upgrades.

Exploring opportunities to improve existing grants and leverage future grant funding can increase accessibility of climate resilient retrofits to ensure Edmonton’s most vulnerable communities are benefiting from climate resilient buildings.

Approach

- Launch a low income energy improvement program.
- Update current development grant programs to include a climate improvement requirement where equitable and effective.
- Explore new opportunities for grant programs that incentivize alignment with higher Tier building and energy codes and/or improve resilience to climate impacts.

Start Date	Q4 2024
Outcome	Climate resilient development and retrofits are accessible to Edmontonians.
Mitigation and Adaptation	<p>Reduce greenhouse gas emissions (mitigate) through:</p> <ul style="list-style-type: none"> • energy efficient buildings <p>Improve resilience (adapt) to:</p> <ul style="list-style-type: none"> • extreme weather events • wildland urban interface fire • extreme • urban flooding • drought • changing ecosystems
Big Wins	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Advances Equity <input checked="" type="checkbox"/> Easy Win

ACTION 15

Build **organizational change** within Administration through education and collaboration

Why

Climate expertise varies across different teams within the planning and development continuum. Varying levels of understanding can stand as a barrier to consistent application of the City's Climate Strategies and Climate Resilience Policy. Improved education and collaboration can help to build staff's working knowledge on climate change, improve consistency, and foster interdepartmental information-sharing and education.

Integration of climate knowledge across the planning and development continuum will take time and a phased approach is needed to first build capacity and foster knowledge-sharing and then to ensure long-term integration of climate resilience into planning and development processes.

Approach

- Add the Climate Planning and Strategy group to circulation processes where feasible and effective:
 - Development permits, subdivision applications, rezoning applications, plan amendments
 - City development projects (i.e. neighbourhood renewal, open spaces development)
 - Policy and guideline development
- Develop a "Climate Champions" program with representatives from each work unit to streamline information sharing and foster internal collaboration.
- Establish climate resilient standard operating procedures for planning and development processes to ensure long-term integration of climate resilience.

Start Date	Q3 2024
Outcome	Decision making is guided by a climate lens.
Mitigation and Adaptation	Reduce greenhouse gas emissions (mitigate) through: <ul style="list-style-type: none"> ● nature based solutions ● low carbon buildings ● low carbon transportation Improve resilience (adapt) to: <ul style="list-style-type: none"> ● drought ● urban flooding ● river flooding ● changing ecosystems wildland urban interface fire ● extreme heat
Big Wins	<input checked="" type="checkbox"/> Easy Win