

Climate Action Plan Update

2027-2030

DRAFT ACTION CONCEPTS

December 2025
Environment and Climate Resilience
edmonton.ca/climatestrategy

Edmonton

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OVERVIEW

EDMONTON'S CLIMATE IS CHANGING AND THE CITY OF EDMONTON IS TAKING ACTION.

The City is doing a **Climate Action Plan Update (2027-2030)** to ensure our existing Climate strategies remain effective and adapt to changing local priorities.

This initiative is being undertaken to meet requirements under Edmonton's City Charter regulation and supports the [Edmonton's Community Energy Transition Strategy and Action Plan](#) and [Climate Resilient Edmonton: Adaptation Strategy and Action Plan](#).

The Climate Action Plan Update (2027-2030) will build off the momentum the City has made so far in enhancing resilience to a changing climate. It aims at reducing emissions (mitigation) and preparing and responding to climate impacts (adaptation). The recommendations from this project will be presented to City Council for approval in mid-2026.

The City's history of climate leadership has led to the integration of climate action practices into City programs, services, and projects. The Climate Action Plan Update (2027-2030) builds off of this foundation.

This document provides details on the **draft action concepts** that will inform the final recommended actions included in the Climate Action Plan Update (2027-2030).

The development of the draft action concepts was informed by feedback received in phase 1 engagement with targeted partners, which included Indigenous Nations and organizations, non-profits and advocacy groups, utilities, educational institutions and the development industry. Work to further integrate some of the feedback, such as that from Indigenous Nations and organizations, is ongoing and will be informed by additional conversations in phase 2.

We are inviting Edmontonians to view the draft action concepts and provide feedback from December 5, 2025 to January 30, 2026. To learn more about the project and how you can provide feedback please visit engaged.edmonton.ca/climateactionplan.

PROJECT INFORMATION LINKS

Interested in learning more about this project? Please visit the following links:

- [Engaged Edmonton Project Page](#)
- [Additional Info - City's Approach To Responding To Climate Change](#) (including foundational action)
- [Additional Info - Climate Change In Edmonton](#)
- [Additional Info - Project Principles](#)
- [Phase 1 What We Heard Report Summary](#)
- [Phase 1 What We Heard Report](#)
- [Climate Action Dashboard](#)

UNDERSTANDING THE PROPOSED DRAFT ACTION CONCEPTS

DRAFT ACTION CONCEPTS are the high-level action statements that describe what climate action the City is proposing. Each concept is accompanied by a short description to provide context, the intended impact, and why it matters. Action concepts will inform the final recommended actions that will be included in the Climate Action Plan Update (2027-2030).

These action concepts will be refined through phase 2 engagement with the public and targeted groups to develop clear, actionable, accountable, and measurable climate actions for 2027-2030.



The figure to the right illustrates how the draft action concepts are organized into Action Categories and demonstrates the additional connection of the action concepts to benefits beyond climate.

ACTION CONCEPT CATEGORIES

(multi-coloured ring of figure) are how the action concepts are organized.

BENEFITS BEYOND CLIMATE (outer grey ring of figure) are the intended benefits of action concepts to other important priorities, such as affordability, equity and economic development. Each individual action concept identifies the relevant benefits beyond building climate resilience.

In the action details, each action concept also identifies if the primary focus of the action is adaptation, energy transition, or both.



Adaptation Actions are actions that respond to and address the risks of a changing climate, including preparing for changing temperatures, precipitation, weather extremes, and changing ecosystems.

Energy Transition Actions are actions that reduce or prevent the release of greenhouse gases (GHG) to the atmosphere in an effort to slow climate change. Examples include using renewable energy, improving energy efficiency, and transitioning away from fossil fuels.

DRAFT ACTION CONCEPTS AT A GLANCE

This section includes a categorized overview of the draft action concepts. You can navigate to the specific action by selecting a specific action number, or continue through this document in order.

BUILDINGS AND LAND USE

This category is about the design, construction and operation of private buildings, sites and neighbourhoods to improve energy transition and climate adaptation outcomes.

Action #	Action Concept
1	Launch a community outreach program on wildfire prevention
2	Advocate for building standards that address extreme temperature and air quality risk and reduce utility costs
3	Support energy affordability for equity deserving Edmontonians
4	Expand eligibility of the existing brownfield redevelopment grant
5	Create and drive policy for planning and design of climate-resilient communities
6	Provide community programming to prepare for major climate risks
7	Provide programs and incentives for new construction, building retrofits and renewable energy

Take a deeper dive into the [Buildings and Land Use](#) related actions.

MOBILITY

This category is about how people move throughout Edmonton, and the types of infrastructure and facilities provided to support that movement and reduce emissions from transportation.

Action #	Action Concept
8	Advance Bus Rapid Transit projects from planning to design and construction
9	Incorporate climate resilient measures at transit facilities to improve comfort and safety for transit users
10	Expand the active transportation network in priority areas
11	Expand secure public bike parking opportunities in priority areas
12	Encourage and facilitate vehicle transition and the buildout of electric vehicle charging facilities in priority areas
13	Advance the decarbonization of the City's bus, light-duty and heavy-duty vehicle fleet

Take a deeper dive into the [Mobility](#) related actions.

INFRASTRUCTURE

This is about how the City provides services and assesses, prioritizes and builds infrastructure (roads, City buildings, bridges) in response to changing climate conditions.

Action #	Action Concept
<u>14</u>	Support resilience hubs in communities
<u>15</u>	Integrate climate-related risks and extreme weather events into Emergency Response Management planning and preparedness
<u>16</u>	Incorporate new weather extremes and shifting seasons into business continuity plans and standard operating procedures for City services, civic events and programming
<u>17</u>	Advance climate resilience improvements for City infrastructure
<u>18</u>	Incorporate climate resilient design practices into the City's Design and Construction Standards

Take a deeper dive into the [Infrastructure](#) related actions.

NATURE AND WATER

This category is about how to support, restore and sustainably manage ecosystems including green spaces and parks, and water resources.

Action #	Action Concept
<u>19</u>	Optimize urban forest management for climate resilience
<u>20</u>	Grow and protect the urban forest and natural assets
<u>21</u>	Develop a Water Management Framework that incorporates water security and drought preparedness
<u>22</u>	Expand flood hazard mapping to incorporate creeks and ravines and prepare a flood defence strategy
<u>23</u>	Implement a vegetation management program to reduce wildfire risk

Take a deeper dive into the [Nature and Water](#) related actions.

LOW-CARBON ENERGY AND WASTE

This category is about energy and waste systems aimed at reducing community greenhouse gas emissions; the actions listed include efforts targeting both community-wide change and the City's own corporate operations.

Action #	Action Concept
<u>24</u>	Enable community led renewable energy projects
<u>25</u>	Collaborate with partners to advance utility regulation and programs that reduce energy use and increase grid resilience
<u>26</u>	Identify alternative funding options for City climate resilience projects
<u>27</u>	Further expand Edmonton's district energy network into identified opportunity areas
<u>28</u>	Install Solar Photovoltaic (PV) canopies with vehicle chargers and battery storage at City facilities
<u>29</u>	Explore options to generate useful energy from gas that is captured at the Clover Bar Landfill
<u>30</u>	Advance research and development in sustainable fuels from waste
<u>31</u>	Reduce food waste within Edmonton's food system
<u>32</u>	Reduce barriers and red tape for renewable energy in Edmonton

Take a deeper dive into the [Low-Carbon Energy and Waste](#) related actions.

DRAFT ACTION CONCEPT DETAILS

BUILDINGS AND LAND USE

This category is about the design, construction and operation of private buildings, sites and neighbourhoods to improve energy transition and climate adaptation outcomes.

ACTION CONCEPT 1

Launch a community outreach program on wildfire prevention

DESCRIPTION

- Edmonton's climate is changing resulting in drier temperatures and increasing extreme weather events, like lightning storms. This contributes to an increasing risk of wildfires which can damage properties.
- The City is in the process of developing its first Wildland-Urban Interface (WUI) Wildfire Risk Strategy in alignment with the FireSmart Alberta framework. One of the seven disciplines of this framework is education.
- This action supports implementation of the WUI Wildfire Risk Strategy through education of Edmontonians on wildfire risk awareness and prevention.

IMPACT

- Improve community-wide awareness, understanding and proactive behaviors related to wildfire prevention and preparedness.
- Reduce human-caused ignitions, implement enhanced wildfire resilient practices on private lands, and increase participation in the FireSmart [Neighbourhood Recognition Program](#).
- In the long-term, this action will help build a safer, more informed, and wildfire resilient community capable of mitigating wildfire risks and responding effectively when events occur.

WHY IT MATTERS

- Managing wildfire risk is required to ensure public safety and environmental protection while also reducing the financial costs of wildfire events.
- Through public education and awareness campaigns, the City can significantly lower the likelihood and severity of wildfire events.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾

Financial Sustainability ▾

Ecosystem Health ▾

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ACTION CONCEPT 2

Advocate for building standards that address extreme temperature and air quality risk and reduce utility costs

DESCRIPTION

- Climate change is increasing the frequency and severity of air quality advisories, with wildfire smoke and other air pollutants causing health issues for Edmontonians, especially those living in poor quality housing with poor building envelopes and insufficient ventilation.
- Edmontonians have expressed concerns about indoor temperatures and indoor air quality and are advocating for regulatory changes to ensure risk from extreme heat and poor air quality is mitigated.
- The Alberta Public Health Act requires that buildings are required to provide a minimum level of heat in winter, however, similar requirements for cooling in summer are absent.
- This action focuses on collaborating with partners to advocate for this issue with decision-makers.

IMPACT

- Building standards that address extreme temperatures, low air quality, and high utility costs will help ensure residents have improved access to living spaces with safe temperature and air quality conditions, improving health and social outcomes.

WHY IT MATTERS

- Rising temperatures are exacerbating the length, frequency, and intensity of extreme heat events in Canadian communities. High temperatures lead to heat-related illnesses that, along with air quality issues, worsen existing health conditions and decrease economic productivity, making it crucial to have protective measures in place, especially for vulnerable and equity-deserving residents
- In Alberta, essential building requirements and health regulations are primarily governed at the provincial level, limiting the City's ability to directly regulate for climate resilience to heat.
- Advocacy allows the City of Edmonton to support its residents in improved access to living spaces with safe temperature and air quality conditions.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾ Affordability ▾ Social Development & Equity ▾

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ACTION CONCEPT 3

Support energy affordability for equity deserving Edmontonians

DESCRIPTION

- Equity deserving Edmontonians face various access barriers to renewable energy and building retrofits.
- Programs are needed that directly address these barriers, enabling equity-deserving Edmontonians to live in more climate resilient homes and facilitating an equitable energy transition.
- This action will explore and develop opportunities for programming that improve access to the energy transition for equity deserving Edmontonians, including residential energy retrofits and solar installation.

IMPACT

- Facilitate access to renewable energy for Edmontonians who don't own homes suitable for solar photovoltaic (PV) installations, or who have income or other barriers, by establishing a community solar program and income-qualified solar programs.
- Reduce energy poverty through community programs that facilitate building retrofits for income-qualified participants.
- Equity-informed programming can support the reduction of community greenhouse gas (GHG) emissions, increase access to energy efficiency, and alleviate energy poverty.

WHY IT MATTERS

- Providing access to energy efficient upgrades and renewable energy is critical to allow for a greater diversity of Edmontonians to share the benefit of renewable energy generation and energy efficiency, regardless of their housing situation.
- Over 30 per cent of Edmonton households are renters who have, historically, not been able to access energy efficiency and renewable energy incentive programs (2021 Canadian Census Data).
- An equitable energy transition is dependent on offering programs that address access and affordability barriers.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Social Development & Equity ▾ Economic Development ▾ Affordability ▾

ACTION CONCEPT 4

Expand eligibility of the existing brownfield redevelopment grant

DESCRIPTION

- Brownfield sites are pieces of land that have previously been developed, often for commercial or industrial purposes, that are vacant or underused, such as gas stations or large industrial sites. Redevelopment of these sites often requires environmental cleanup.
- The existing Brownfield Redevelopment Grant Program provides financial assistance to owners of Brownfield sites for environmental testing, remediation and exposure control costs in preparation for redevelopment.
- This action is about refreshing the grant to further align with policy and climate resilience goals and increase effectiveness. This may include expanding eligible sites, prioritizing properties located in priority growth areas, added incentives for affordable housing projects and sustainable remediation techniques, and revising existing green building performance standards.

IMPACT

- Brownfield redevelopment has many climate benefits, such as environmental remediation of contaminated sites, increasing density in existing areas of the city, and reducing urban sprawl.
- The updated program will further support redevelopment that meets green building criteria, resulting in high-performing, energy efficient buildings that have various environmental benefits, all within the existing boundaries of the city.

WHY IT MATTERS

- This action will help the City achieve economic, environmental and social benefits for Edmontonians. With the changes being considered, an expanded grant program would contribute to both climate mitigation and adaptation outcomes, while also supporting housing affordability and densification goals.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾ Financial Sustainability ▾ Affordability ▾

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ACTION CONCEPT 5

Create and drive policy for planning and design of climate-resilient communities

DESCRIPTION

- Land use planning and design is guided by policies, standards and guidelines which are used by City administration and Council to inform decisions.
- This action will build upon the existing policy framework to incorporate guidance on climate resilient community design and development for both new and redeveloping neighbourhoods.
- This action will advance The City Plan, and policies to further create vibrant, sustainable, and affordable neighbourhoods. A holistic review of policies, standards, guidelines and processes has been initiated through the Climate Resilience Planning and Development Action Plan project and will inform new neighbourhood development and existing neighbourhood renewal, help provide an updated vision on how Edmonton's neighbourhoods balance climate resilience, affordability, land use and road network efficiency.
- This action concept is exploratory in nature. The scope will be defined and focused based on community engagement feedback and best practice research.

IMPACT

- New and existing neighbourhoods have further guidance on how to consider climate-resilient design to better respond to climate impacts and contribute to the City's emissions reduction targets, whether through new neighbourhood planning processes or neighbourhood renewal processes for existing neighbourhoods, while also balancing affordability, land use and transportation network efficiency, and other technical standards.
- Develop and apply detailed guidance on climate-resilient neighbourhood design to actively guide administration's decision-making and ensure new neighbourhood development is resilient to climate impacts and contributes to the City's emissions reduction targets while aligning with broader development priorities.

WHY IT MATTERS

- Buildings and transportation are the City of Edmonton's largest sources of greenhouse gas (GHG) emissions, accounting for 70 per cent of community GHG emissions (City of Edmonton 2024 Greenhouse Gas Inventory).
- Edmonton is growing and planning for an additional one million people, requiring 400,000 new housing units according to The City Plan. To achieve net-zero by 2050, the way we plan and design our neighbourhoods today needs to incorporate low-emission and climate-resilient design and construction.
- Resilient community design can reduce exposure to climate hazards and result in complete communities with strong mobility connections and local renewable energy sources.
- Upfront climate design can lower costs and barriers for adopting new technologies compared to post-development and construction.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾ Financial Sustainability ▾ Social Development & Equity ▾
Affordability ▾ Health & Safety ▾ Ecosystem Health ▾

ACTION CONCEPT 6

Provide community programming to prepare for major climate risks

DESCRIPTION

- Nine-in-ten Edmontonians (93 per cent) have experienced at least one extreme weather event in the last two-years ([2025 Climate Change and Energy Perceptions Report](#)). Increased wildfire smoke, extreme heat/heatwave, extreme cold, and increased high winds were the most common impacts experienced by Edmonton residents.
- A climate adaptation community program can mobilize individuals, organizations and neighbourhoods to adapt to a changing climate and prepare for major climate risks.
- This action aims to leverage education, capacity building, partnerships and incentives to advance localized, innovative climate adaptation projects that foster resilience, strengthen communities, stimulate green economic growth, and contribute to equitable protection against increasing climate risks.
- This action includes expanding green infrastructure and supporting climate resilience landscaping on private property through education, programming and regulatory changes.

IMPACT

- Edmontonians are empowered to demonstrate shared leadership as stewards of the environment through adaptation to a changing climate.
- Adaptive actions support resilience to climate hazards such as wildfire smoke, extreme heat, flooding, and other extreme weather events.

WHY IT MATTERS

- Individuals and communities lack the resources and capacity to implement necessary climate adaptation measures. This leads to increased vulnerability to climate-related hazards and hindering long-term economic stability.
- Edmonton faces increasing risks from climate change, including wildfires, floods, and heatwaves.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾

Financial Sustainability ▾

Affordability ▾

Health & Safety ▾

Ecosystem Health ▾

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ACTION CONCEPT 7

Provide programs and incentives for new construction, building retrofits and renewable energy

DESCRIPTION

- Retrofitting existing residential and non-residential buildings to improve energy efficiency is required to meet the City's community greenhouse gas (GHG) reduction targets.
- This action includes programs and incentives that focus on building retrofits that increase energy efficiency and renewable energy generation such as heat pumps and solar energy.
- This action also aims to develop incentives and support mechanisms for new building construction, beyond what is required by energy code to promote enhanced energy efficiency and emissions reduction.
- This action will employ education, capacity building, partnerships and municipal funding arrangements to advance renewable energy and energy efficiency in new and existing buildings.

IMPACT

- New programs and incentives will improve energy efficiency and access to renewable energy generation in both new and existing buildings, leading to reduced GHG emissions, improved energy performance, and utility cost savings.
- Strategic financial incentives serve as a catalyst to stimulate the local economy, increased adoption of energy retrofits and renewable energy technology and creation of specialized and local jobs
- Supporting climate-resilient construction results in new buildings that have lower carbon emissions, are more resilient to climate hazards and provide financial savings for residents and businesses.
- Access to incentives for home retrofits will contribute to alleviating energy poverty and improving affordability for Edmontonians.

WHY IT MATTERS

- Residential and non-residential buildings account for 35 per cent of the City of Edmonton's GHG emissions (2024 Community Greenhouse Gas Inventory), which will increase as Edmonton welcomes an additional one million people, and an estimated 400,000 new housing units (The City Plan).
- Building energy efficiency and renewable energy generation supports affordability, reduces air pollution and improves the comfort and safety of homes and buildings.
- Reducing energy usage and generating renewable energy also helps create a more resilient and affordable electricity grid, avoiding costly upgrades to the transmission and distribution infrastructure
- Education, capacity building, partnership and incentives increase community access to energy efficiency and renewable energy, allowing more people to benefit from climate action.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Affordability ▾ Economic Development ▾

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MOBILITY

This category is about how people move throughout Edmonton, and the types of infrastructure and facilities provided to support that movement and reduce emissions from transportation.

ACTION CONCEPT 8

Advance Bus Rapid Transit projects from planning to design and construction

DESCRIPTION

- Edmonton Transit Service is continually working to expand and improve the mass transit network and support increased ridership. This includes the planning and development of three citywide Bus Rapid Transit (BRT) routes.
- BRT provides a comparable level of transit service to Light Rail Transit (LRT) where there are dedicated transit lanes for 75 per cent of the route alignment and transit priority measures at every intersection.
- Conceptual planning is underway for the [B1 and B2 BRT routes](#), which provide new north-south and east-west rapid transit connections. Concept design is anticipated to be complete by the end of 2027. This action is about advancing to detailed design and the potential start of construction once concept planning is complete for these two BRT routes.
- The B6 BRT route is currently being constructed through the [Terwillegar Drive expansion](#), and will provide rapid transit connections between Ambleside and the University of Alberta. This action is about finishing the construction of the B6 BRT by prioritizing the construction of the B6 BRT route terminus station at the Windermere Transit Centre between 2027-2030.

IMPACT

- Implementation of three BRT routes will provide faster and more reliable travel over long distances and serve major nodes and primary corridors across the city.
- BRT provides convenient and reliable options for moving across the city, contributing to a comprehensive public transit network that can help reduce community greenhouse gas (GHG) emissions by enabling citizens to shift from individual vehicle usage to transit.

WHY IT MATTERS

- The transportation sector accounts for 34% of Edmonton's community GHG emissions (City of Edmonton 2024 Greenhouse Gas Inventory).
- Shifting from personal vehicles to alternative mobility options like mass transit, cycling, or walking reduces road congestion and the number of vehicles on the road. This in turn lowers GHG emissions by both limiting direct emission sources and reducing travel time.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Social Development & Equity ▾ Affordability ▾

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ACTION CONCEPT 9

Incorporate climate resilient measures at transit facilities to improve comfort and safety for transit users

DESCRIPTION

- The City is committed to building resilience to climate impacts like heat waves, extreme weather events, and changing precipitation patterns.
- Upgrades to infrastructure and facilities like bus stops and transit centres can serve to reduce lifecycle costs while also supporting the health and wellbeing of Edmontonians.
- This action will build on the testing of new bus shelter designs underway currently, integrating climate resilience considerations into future infrastructure and facility upgrades.

IMPACT

- New bus stops and transit facilities will incorporate adaptive design elements, making them better able to withstand and protect from the impacts of the city's changing climate while also meeting other objectives such as durability against vandalism.

WHY IT MATTERS

- Edmonton's climate has become warmer over time. Extreme heat events have become longer and more intense. As climate change progresses, Edmonton can expect average temperatures to continue to rise across all seasons.
- Warmer temperatures can be exacerbated by the Urban Heat Island effect, in which urbanized areas are warmer than the surrounding rural areas. Communities like downtown and industrial zones, with limited tree canopy coverage, are warmer than vegetated zones.
- Edmonton's precipitation patterns are also expected to change. While historical trends in Edmonton indicate a reduction in precipitation, Edmonton can expect more heavy rainfall events in the future.
- The design and installation of City infrastructure and facilities must be both strategic and robust to protect users from the impacts of climate events.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾

Financial Sustainability ▾

Social Development & Equity ▾

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ACTION CONCEPT 10

Expand the active transportation network in priority areas

DESCRIPTION

- The active transportation network is made up of all the routes that support people as they bike, walk and roll around the city. This includes sidewalks, shared use paths, and bike lanes.
- Opportunities for expansion of the active transportation network have been identified through the [Bike Plan](#) and the [Missing Sidewalk Program](#).
- This action will enhance existing substandard connections acting as barriers and continue the expansion of the active transportation network in areas identified for prioritization in the next budget cycle.

IMPACT

- Expansion of the active transportation network will provide citizens with infrastructure to support safe movement around the city.
- Enhancing active transportation infrastructure supports low-carbon modes of transportation and helps to reduce traffic congestion.

WHY IT MATTERS

- The transportation sector accounts for 34 per cent of total community emissions (City of Edmonton 2024 Greenhouse Gas Inventory).
- Expanding opportunities for active transportation across the city enables citizens to shift from personal vehicles to walking, biking, and scootering; supporting public health and reducing greenhouse gas (GHG) emissions.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾ Health & Safety ▾ Affordability ▾

ACTION CONCEPT 11

Expand secure public bike parking opportunities in priority areas

DESCRIPTION

- The City continually supports the adoption of bikes, ebikes and scooters through the ongoing expansion of the active transportation network, installing bike racks in priority areas such as Business Improvement Areas, recreation centres, and at transit centres and LRT stations, and through bike parking requirements in the Zoning Bylaw.
- Bikes, ebikes and scooters require secure parking to support their integration with the broader mobility system and to encourage uptake.
- This action focuses on enhancing City facilities in priority areas through the provision of safe, convenient and secure bike parking facilities.

IMPACT

- Secure public bike parking encourages a critical mode-shift from personal Internal Combustion Engine (ICE) vehicle usage to bikes and e-scooters.

WHY IT MATTERS

- Thirty-four per cent of Edmonton's community greenhouse gas (GHG) emissions are attributed to the transportation sector (City of Edmonton 2024 Greenhouse Gas Inventory).
- Expanding secure public bike parking opportunities can encourage shifting to low emission transportation options by reducing the risk of theft and providing weather protection year-round.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾

Health & Safety ▾

Affordability ▾

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ACTION CONCEPT 12

Encourage and facilitate vehicle transition and the buildout of electric vehicle charging facilities in priority areas

DESCRIPTION

- Edmontonians move around the city in many ways; by car, bus, Light Rail Transit (LRT), bike and foot. All of these mobility options, and the infrastructure that supports them, make up the city's mobility network.
- City Plan policies support the integration of accessible electric vehicle (EV) charging within the mobility network.
- This action will leverage City-owned land and City resources to support the expansion of EV charging facilities at priority areas through encouraging and facilitating the EV charging network buildout with private partners.

IMPACT

- Expanded EV charging infrastructure facilitates the shift to EVs and supports the City's emission reduction targets.
- Encourage private investment through partnerships between industry, communities and the City.
- A strategic approach to public electric vehicle charging supports the equitable provision of EV charging infrastructure, focuses investment and maximizes placement.

WHY IT MATTERS

- Traditional vehicles can cause local air pollution that can impact health. Electric vehicles do not emit harmful tailpipe emissions and can contribute to healthier air quality.
- The transportation sector accounts for 34 per cent of Edmonton's community greenhouse gas (GHG) emissions (City of Edmonton 2024 Greenhouse Gas Inventory).
- Accelerating the adoption of EVs is crucial for reducing total emissions. Advancing publicly accessible EV charging infrastructure is a necessary step to advance the electrification of vehicles.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Social Development & Equity ▾

Economic Development ▾

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ACTION CONCEPT 13**Advance the decarbonization of the City's bus, light-duty and heavy-duty vehicle fleet****DESCRIPTION**

- Edmonton's corporate fleet comprises approximately 5,000 buses, light and heavy-duty vehicles and pieces of equipment.
- As part of the City's Energy Transition Strategy, the City is working to progressively transition its current fleet to lower emission alternatives.
- This action focuses on projects that will advance the transition of the City's fleet.

IMPACT

- A variety of projects related to the transition of the City's fleet to lower-emission alternatives will be performed in 2027-2030 as part of this action concept, which includes the following:
 - Advancing decarbonization of light-duty City fleet by assessing the efficacy, performance, and viability of various lower-emission vehicle options, with the long term goal of phasing out most internal combustion engine vehicles.
 - Progress the implementation of lower-emission vehicle fueling and charging infrastructure, with consideration for suitability for differing vehicle types.
 - Advance the Southeast Transit Garage to the construction phase, including necessary infrastructure, to support growth of transit service and transition to lower-emission buses.

WHY IT MATTERS

- Edmonton's vehicle and transit fleet produce 30 per cent of the City's corporate greenhouse gas (GHG) emissions; switching to lower-emission vehicles will contribute to reducing the City's corporate emissions.
- In order to support the City's ongoing adoption of lower-emission vehicles, it is important that the City proactively develop the necessary infrastructure to support operations.
- Improved public health outcomes and air quality by reducing local pollution emissions.
- Lower-emission vehicles, including electric vehicles, have the potential to offer reduced fuel and maintenance costs.

CLIMATE FOCUS**Energy Transition** ▾**BENEFITS BEYOND CLIMATE**

Financial Sustainability ▾

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INFRASTRUCTURE

This is about how the City provides services and assesses, prioritizes and builds infrastructure (roads, city buildings, bridges) in response to changing climate conditions.

ACTION CONCEPT 14

Support resilience hubs in communities

DESCRIPTION

- Extreme weather events, particularly extreme heat and days with poor air quality (such as from wildfire smoke), pose immediate health risks to residents, especially vulnerable populations.
- Resilience hubs are facilities located within communities that are designed to reduce health risks due to extreme weather events.
- This action leverages the City's existing network of facilities (like recreation centers, libraries, and other public buildings) to establish a network of accessible hubs during extreme weather events.

IMPACT

- Support protection of public health and safety, as these hubs will open for all Edmontonians to access as a place of respite from extreme weather events.
- Reduce immediate risks associated with heat-related illnesses and respiratory issues during extreme weather events.
- Provide equitable access to safe, climate-sheltered spaces, particularly to those without adequate in-home cooling or air filtration.

WHY IT MATTERS

- Not having access to safe refuge during events such as extreme heat and poor air quality days can lead to preventable hospitalizations, severe health outcomes, and increased strain on emergency services.
- Resilience hubs can help safeguard community wellbeing by protecting residents from the current and worsening impacts of climate change.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Social Development & Equity ▾

Health & Safety ▾

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ACTION CONCEPT 15**Integrate climate-related risks and extreme weather events into Emergency Response Management planning and preparedness****DESCRIPTION**

- The Office of Emergency Management creates, implements and maintains the City's emergency management program to prepare the City to respond to and recover from major emergencies and disasters. This includes collaboration with partnering agencies and organizations, such as the Government of Alberta and essential utility providers.
- Due to climate change, the risk of extreme weather events in the Edmonton area is increasing. The City will need to be prepared to respond to these events; including being able to support Edmontonians and evacuees from other affected communities.
- This action supports the integration of up-to-date climate science and risk assessment information into the City's emergency management program.

IMPACT

- Ensure the City is prepared to respond to emerging climate impacts and emergencies with the most recent climate data.
- Enable the City to continue to support evacuees from local and regional communities experiencing climate emergencies.

WHY IT MATTERS

- Climate change impacts mean the City must prepare for more severe and frequent weather events within its borders, and for its role in responding to requests for assistance from other jurisdictions.
- In the summer of 2024, more than 300 City employees provided support to 2,856 evacuees affected by the Jasper wildfire through the activation of the Rapid Emergency Support Terminal (REST). As extreme weather events increase in frequency, the City will need to assess and prepare to support future needs.
- These new extremes change the risks associated with weather-influenced events like wildfire, extreme heat, poor air quality and heavy rain or snow.
- Using robust climate data to inform emergency preparedness means the City can more efficiently and effectively minimize impacts to residents, infrastructure and buildings in the face of new hazards.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾

Social Development & Equity ▾

Financial Sustainability ▾

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ACTION CONCEPT 16

Incorporate new weather extremes and shifting seasons into business continuity plans and standard operating procedures for City services, civic events and programming

DESCRIPTION

- Edmonton's changing climate will bring more frequent and severe extreme weather, and shift, or change, our current seasons. These weather extremes, and changing climate conditions, impact City service delivery, workforces, and the programs the City offers.
- This action focuses on integrating climate considerations into how we do our routine work and respond to disruptions in order to support continuous delivery of essential services, prepare City staff, and minimize operational downtime during extreme weather events.

IMPACT

- Climate-informed standard operating procedures, work instructions, and business continuity plans will enhance the City's resilience by preparing each branch to quickly adapt and respond to climate-related challenges, and result in safeguarding public safety and maintaining community stability.
- Minimize disruptions to the City's service delivery, workforce, and programs, thereby enhancing staff safety, improving service quality, and achieving cost savings.

WHY IT MATTERS

- Disruptions due to shifting seasons and extreme weather events can negatively impact the City's ability to deliver critical services to Edmontonians.
- Understanding how climate impacts City service delivery, the workforce, and programs allows the City to better plan and prepare for disruptions, reducing down time, saving costs, and maintaining service levels.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾

Health & Safety ▾

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ACTION CONCEPT 17

Advance climate resilience improvements for City infrastructure

DESCRIPTION

- Municipal infrastructure is the backbone of everyday life in a city and is essential to Edmonton residents and businesses. It includes City infrastructure like roads, buildings, parks, and transportation systems like the LRT.
- The City uses best practices in managing its infrastructure to ensure that services can be provided to support the needs of a growing population, now and in the future.
- To optimize the useful life of infrastructure, the City undertakes two key activities: maintenance and renewal.
- Maintenance activities ensure that infrastructure is accessible and functional. This includes activities such as street sweeping, snow clearing, crack sealing and pothole filling. Maintenance activities are funded from the City's operating budget.
- Renewal activities involve replacement of infrastructure with a modern equivalent or applying a rehabilitation treatment that reinstates the infrastructure (or a component of the infrastructure) to a better physical condition. Examples of rehabilitation include the repaving of the surface of a road or replacement of a boiler in a facility.
- This action focuses on further integration of climate resilience for City infrastructure by:
 - Identifying and incorporating a reasonable and funded level of climate resilience improvements to infrastructure renewal;
 - Identifying City infrastructure classes (for example, roads, bridges, facilities) with the highest risks and opportunities; and
 - Within selected City infrastructure classes, identifying specific opportunities for climate risk reduction or greenhouse gas (GHG) reduction.
- This action concept is exploratory in nature. The scope will be defined and focused based on community engagement feedback and best practice research.

IMPACT

- City infrastructure is more prepared for a changing climate and further contributes to greenhouse gas (GHG) reductions.
- Reduce long-term disruptions to City services and minimizing lifecycle costs.

WHY IT MATTERS

- Further implementation of climate resilience (mitigation and adaptation) measures helps ensure the impacts of a changing climate to City infrastructure are minimized and that costs of infrastructure maintenance and renewal are managed in the long term.
- This action supports due diligence and best practice in City governance, aligning with the principles of risk-based asset management and climate adaptation planning.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾ Social Development & Equity ▾ Financial Sustainability ▾
Health & Safety ▾

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ACTION CONCEPT 18

Incorporate climate resilient design practices into the City's Design and Construction Standards

DESCRIPTION

- The City has eight design and construction standard volumes, three of which are managed by EPCOR. These apply to all City contracts and private development projects and ensure that all City infrastructure is constructed to a consistent standard for operation and maintenance.
- Work is underway through the [Climate Resilience Planning and Development \(CRPD\) Action Plan](#) to review and identify opportunities to enhance integration of climate resilience and conduct a cost-benefit analysis to inform future changes.
- This action focuses on implementing the findings from the CRPD Action Plan through phased updates to the City's Design and Construction Standard volumes.

IMPACT

- Integrate climate-resilient standards into the City's Design and Construction Standards to ensure that infrastructure is resilient to climate impacts while improving energy efficiency and reducing greenhouse gas (GHG) emissions through design and construction.

WHY IT MATTERS

- Infrastructure designed today contributes to the City's climate resilience for decades, and making standards that are climate resilient is crucial to avoid complex and costly upgrades or fixes in the future.
- Updating the design and construction standards of infrastructure can support improved durability and lifespan of infrastructure, generating lifecycle cost savings.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾ Economic Development ▾ Health & Safety ▾ Ecosystem Health ▾

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NATURE AND WATER

This category is about how to support, restore and sustainably manage ecosystems including green spaces and parks, and water resources.

ACTION CONCEPT 19

Optimize urban forest management for climate resilience

DESCRIPTION

- Edmonton's urban forest—comprising all publicly owned vegetation, including maintained trees (along roadways and in parks) and native species in natural areas and naturalization sites—provides extensive environmental, ecological and economic benefits through climate cost avoidance and social return on investment.
- A changing climate, characterized by lower precipitation, drier conditions, and increased risk from pests and invasive species, poses a direct threat to the health and longevity of the entire urban forest.
- This action looks at integrating current and projected climate data and soil conditions into operations and maintenance activities to support long-term health and survival of forest assets and natural areas. These strategies include: using data to identify climate resilient species and increase diversity; implementing efficient irrigation and watering; developing new design standards for water retention and nutrient availability, particularly for hardscape trees and medians; and tailoring pest and disease management to climate vulnerabilities.

IMPACT

- By incorporating climate and soil data, the City will increase the health, suitability, and resilience of its trees and vegetation, leading to longer asset lifespans.
- Ensuring the health and survival of the existing urban forest assets and natural areas is the first step toward canopy enhancement. Healthier trees grow larger, faster, and live longer, maximizing high-value ecosystem services such as carbon sequestration, water filtration, improved air quality, and mitigating effects from extreme heat.

WHY IT MATTERS

- Current data indicates a severe vulnerability in asset maintenance. Approximately 30 per cent of urban trees marked for annual removal due to irreversible decline or death were planted within the last 10 years. In hardscape areas, the rate of tree replacement is significantly higher; 45 per cent of trees planted within 10 years are either replaced or need replacement, failing to reach their expected life span.
- Premature mortality of trees represents a fiscal and environmental loss.

CLIMATE FOCUS

Adaptation ▾

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Ecosystem Health ▾

Financial Sustainability ▾

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ACTION CONCEPT 20

Grow and protect the urban forest and natural assets

DESCRIPTION

- The City of Edmonton recognizes that sustained, long-term climate resilience requires expanding and protecting the City's natural assets such as urban forests, wetlands and naturalized areas.
- This action will explore and implement a variety of tools to support the preservation of mature trees and natural assets, and the growth of the urban forest across the city through:
 - Monetary valuation of ecosystem goods and services (EGS) to expand understanding of the ecological and financial value of natural assets;
 - Integration of monetary value of EGS into financial decision-making processes and policy development; and
 - Implementation of new approaches to preserving and acquiring natural assets in the future growth areas.

IMPACT

- Completing the EGS valuation will enable the City to quantify the financial and ecological value that these nature-based solutions offer. This will result in a robust system that can help justify and prioritize natural areas and assets for preservation, protection, and investment, especially in light of increasing climate change risks and competing land-use decisions. This will also document how naturalization and urban forest strategies contribute to climate resilience.
- Successful implementation of a diversity of tools and targeted resource allocation will directly lead to increased planting and restoration efforts, resulting in an increase in the number of urban forest and natural assets across the city. Proactive acquisition of ecologically valuable natural areas can ease future growth pressures on natural area ecosystems and reduce the risk that these high value natural assets are lost.

WHY IT MATTERS

- Edmontonians need access to the river valley and urban green spaces for mental and physical wellbeing. The river valley is a key part of Edmonton's identity and brand, and it is important to maintain the health of this rich diverse ecosystem.
 - Natural areas systems act as nature-based climate solutions, sequestering carbon and reducing greenhouse gas (GHG) emissions. They also serve as crucial habitats for biodiversity and provide many irreplaceable ecosystem services.
 - Urban forests and neighbourhood canopies provide natural cooling to actively moderate urban heat island effect (where urbanized areas are warmer than their surrounding rural counterparts), enhancing a community's resilience to growing heat events. Healthy and climate appropriate trees also reduce the risk of wildfires and protect public safety and infrastructure.
 - Protecting, preserving and acquiring natural assets and investing in them will ensure that their environmental benefits are available over the long term.
 - [BREATHE, Edmonton's Green Network Strategy](#), has already created a geospatial inventory of open spaces, natural areas, and green infrastructure, however, a monetary valuation of the goods and services these assets provide is needed to effectively guide strategic investment and policy development.
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- This action supports the Ribbon of Green preservation goals and the City of Edmonton's goal of planting two million trees by 2031 and achieving urban forest canopy coverage of 20 per cent by 2071.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Ecosystem Health ▾ Financial Sustainability ▾

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ACTION CONCEPT 21

Develop a Water Management Framework that incorporates water security and drought preparedness

DESCRIPTION

- The North Saskatchewan River watershed is a vital resource, and its management responsibility is shared by federal, provincial, and municipal governments, as well as land owners, utilities, and industry.
- Climate change will increase water security risks in Edmonton. This can affect both water quantity and water quality. Seven of Edmonton's 12 driest years on record have occurred since 2000.
- The City needs to be prepared for drought conditions as it will impact water availability for humans and ecosystems, affecting both the corporation and our community.
- This action is a continuation of water management efforts undertaken by the City in collaboration with EPCOR Water Services.
- Potential measures would consider water requirements for critical services such as fire protection and health and safety measures (e.g., cooling during extreme heat, sanitization, etc) and could integrate source water protection, conservation measures such as reuse or efficiency fixtures at City facilities, and innovative irrigation systems.
- This action concept is exploratory in nature. The scope will be defined and focused based on community engagement feedback and best practice research.

IMPACT

- The development of a Water Management Framework will provide the necessary structure to drive adaptation, and enhance resilience, so that the city, community, and ecosystems are able to withstand, recover from, and adapt to impacts of drought conditions and other adverse events.

WHY IT MATTERS

- Drought events can affect human health, safety and can cause economic losses.
- City actions will complement actions from other levels of government and EPCOR's [Drought Resiliency Plan](#) for Edmonton.
- As a large municipality in the North Saskatchewan River watershed, the health of our built environments and local activities directly affect the health of the watershed and communities downstream.
- Impacts of drought extend beyond reduced water for potable consumption. Drought conditions can further increase other climate hazards (like heatwaves or wildfires), have economic consequences (like impacting recreation, tourism or interrupting City services), and affect the physical, social and mental wellbeing of residents.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Ecosystem Health ▾ Health & Safety ▾ Financial Sustainability ▾

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ACTION CONCEPT 22

Expand flood hazard mapping to incorporate creeks and ravines and prepare a flood defence strategy

DESCRIPTION

- The City of Edmonton manages flood risk through data collection, mapping, and implementing mitigation tactics. North Saskatchewan River flood hazard mapping was updated by the Government of Alberta in 2025. Additional mapping is required to expand the City's understanding of flood risk outside of the North Saskatchewan River floodplain.
- Expanded flood hazard mapping would improve understanding of flooding in lower tributaries and creeks located in developing and future growth areas, support neighbourhood development planning, and advance protection and restoration of natural shorelines, and riparian areas and re-establishment of natural channels.

IMPACT

- Flood hazard mapping will improve information on where water will flow during a flood event and serves as the critical foundation for preparing a flood defence strategy.
- Incorporating creek and ravine flooding into the City's flood mapping will allow the City to integrate flood risk considerations into planning and infrastructure decisions and implement flood mitigation tactics as required.

WHY IT MATTERS

- Flood events can affect human health and safety and result in significant property damages. Changing precipitation and shifting weather extremes can exacerbate the likelihood of these events.
- Developing comprehensive flood hazard mapping that incorporates different types of potential flood events in Edmonton allows the City to reduce community and infrastructure vulnerability through informed planning and design.
- A flood defence strategy enables the City to understand the measures we can take as a municipality to be prepared for different types of flood events.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾

Health & Safety ▾

Ecosystem Health ▾

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ACTION CONCEPT 23**Implement a vegetation management program to reduce wildfire risk****DESCRIPTION**

- Edmonton's climate is changing resulting in drier temperatures and increasing extreme weather events, like lightning storms. This contributes to an increasing risk of wildfires which can damage properties.
- The City is in the process of developing its first Wildland-Urban Interface (WUI) Wildfire Strategy in alignment with the Alberta FireSmart framework.
- The Alberta FireSmart Framework is built around seven disciplines. The Vegetation Management Discipline outlines the need to have vegetation management strategies to consistently reduce the fuel load that increases the risk of fire ignition and spread.
- This action supports implementation of the WUI Wildfire Risk Strategy through the development and implementation of vegetation and fuel management programs.

IMPACT

- Monitoring of vegetation inventories and implementation of control measures such as controlled burns and reduction of fuel will contribute to reducing wildfire risk in WUI wildfire high risk zones.

WHY IT MATTERS

- A future with increased wildfires is inevitable given the effects of climate change. As the City adapts to this future, managing wildfire risk should be part of the way we plan and manage our natural assets such as vegetation in WUI areas.
- Effective vegetation management in high-risk zones will reduce wildfire impacts on communities and critical infrastructure, and prevent wildfires from spreading into other natural or naturalized environments.
- Many initiatives that support wildfire risk reduction have been short-term or pilot-based. A long-term program will ensure there are lessons learned, continuous improvement and capacity building with City staff.

CLIMATE FOCUS

Adaptation ▾

BENEFITS BEYOND CLIMATE

Health & Safety ▾

Financial Sustainability ▾

Ecosystem Health ▾

LOW-CARBON ENERGY AND WASTE

ACTION CONCEPT 24

Enable community led renewable energy projects

DESCRIPTION

- Edmonton's Community Energy Transition Strategy and Action Plan has a goal to generate 10 per cent of Edmonton's electricity locally.
- This action focuses on creating a renewable energy land use strategy which identifies potential locations in the city for larger co-operative or community-scale solar energy projects. Consideration of other City goals such as real estate development will inform the identification of potential locations for these projects.
- Through this action, the City will explore supporting third-party investment in community-scale projects and will work with utility providers to develop a network plan informed by the capacity of the energy distribution grid.

IMPACT

- Reduce greenhouse gas (GHG) emissions through additional renewable energy deployment.
- Identify potential locations for community solar projects.
- Provide opportunities for all Edmontonians to benefit from community renewable energy.

WHY IT MATTERS

- Generating local renewable energy is one of the most impactful ways of taking action on climate change. Accelerated installations are required to reach the 10 per cent goal.
- Many Edmontonians cannot participate in the energy transition because they do not own properties suitable for renewable energy generation. Community renewable energy projects can include all Edmontonians by allowing benefits to flow to multiple subscribers, and also foster community connection through shared ownership.
- A strategic renewable energy strategy is crucial to ensure development happens in a coordinated way which takes into consideration land use and the capacity of our local electricity grid.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾

Social Development & Equity ▾

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ACTION CONCEPT 25

Collaborate with partners to advance utility regulation and programs that reduce energy use and increase grid resilience

DESCRIPTION

- Utility regulations are an important mechanism to influence market behavior and advance the energy transition.
- Demand side management (DSM) is an approach that involves policies and programs that influence how consumers use electricity and natural gas that supports reducing energy use, balancing supply and demand, lowering costs, and increasing reliability of the grid.
- DSM has proven successful in other Canadian jurisdictions to reduce energy use, and the Government of Alberta has recently signaled its intent to advance DSM in the province.

IMPACT

- This action will identify and collaborate with external partners to advance utility regulation and programs, such as DSM or geoexchange financing, that contribute to a low carbon, sustainable energy future in Edmonton.
- This action will reduce energy costs for Edmontonians, empower consumers through greater awareness and control over their energy use and lower community greenhouse gas (GHG) emissions.

WHY IT MATTERS

- Nearly half of energy in Edmonton is consumed in buildings (City of Edmonton 2024 Greenhouse Gas Inventory). Adjusting regulatory frameworks to enable DSM is a proven, cost-effective approach to scale-up energy savings and expedite Edmonton's transition to a low-carbon city.
- Additionally, optimization through DSM is a proven approach to reduce emissions, improve grid resilience, and lower costs for utilities and consumers. It is a foundational and critical component of modern and affordable energy systems.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾ Affordability ▾

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ACTION CONCEPT 26

Identify alternative funding options for City climate resilience projects

DESCRIPTION

- Nearly half of the City of Edmonton's corporate greenhouse gas (GHG) emissions come from buildings.
- This action focuses on identifying alternative funding options for climate resilient City projects that save energy, reduce emissions, and/or reduce risk from climate hazards.
- The reserve could be funded by collecting the utility savings achieved by corporate energy saving projects, such as building retrofits, energy efficiency improvements, and solar power generation etc. The collected funds would be reinvested in projects to create additional energy savings and emission reductions.

IMPACT

- Establish a dedicated, self-sustaining financial reserve for corporate resilience projects, ensuring a consistent funding source for ongoing energy efficiency improvements, emission reductions, and adaptation interventions.

WHY IT MATTERS

- Internal funding is often a barrier to implementing energy saving projects. The reserve would provide a steady source of funding to support completion of these projects.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾ Economic Development ▾

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ACTION CONCEPT 27

Further expand Edmonton's district energy network into identified opportunity areas

DESCRIPTION

- Buildings account for 35 per cent of Edmonton's community greenhouse gas (GHG) emissions (City of Edmonton 2024 Greenhouse Gas Inventory).
- [District energy systems](#) generate energy for heating and cooling at a central facility and distribute that energy through a network of underground pipes to multiple buildings in a defined area. These systems are a proven solution that efficiently provide energy to heat and cool connected buildings.
- The City of Edmonton has made progress on its District Energy Strategy. The Blatchford Renewable Energy System has been operational since 2019, and construction began on the Downtown District Energy Initiative in 2024.
- This action focuses on further expanding the district energy system into priority areas, as identified in the District Energy Strategy.

IMPACT

- Reduce GHG emissions from buildings through low-carbon district energy systems.
- De-risk private investment through policy and partnerships between industry, communities and the City.

WHY IT MATTERS

- Addressing how Edmontonians heat and cool our buildings is a critical factor in building a climate-resilient city.
- Edmonton's District Energy Strategy is designed to reduce City investment and public sector risk over time by increasing private sector participation.
- Missed opportunities for connecting buildings to district energy systems now will result in delays in achieving emission reductions.
- De-risking private investment is an important element to enable the expansion of district energy systems in Edmonton.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾ Financial Sustainability ▾

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ACTION CONCEPT 28**Install Solar Photovoltaic (PV) canopies with vehicle chargers and battery storage at City facilities****DESCRIPTION**

- Nearly one-third of the City of Edmonton's corporate greenhouse gas (GHG) emissions come from vehicle and transit related emissions.
- The City of Edmonton is working to reduce its environmental impact by transitioning to a lower emission fleet.
- This action supports the fleet transition by advancing the installation of solar canopies over parking lots at two City facilities, with integrated vehicle chargers and battery storage.

IMPACT

- Reduce corporate emissions by providing renewable energy generation and supporting a lower emissions fleet.
- Reduce utility costs and reliability by integrating battery storage.
- Provide vehicle protection by covering parking lots with solar canopies, keeping them cooler in summer and protected from weather extremes.

WHY IT MATTERS

- Charging infrastructure is necessary to support the transition to a lower emission fleet.
- Integrating charging infrastructure with solar PV canopies and battery storage brings co-benefits of utility savings, improved reliability during power disruptions, and vehicle protection.
- Further enabling new technology deployment supports job creations in a growing, future-focused economic sector

CLIMATE FOCUS

Adaptation ▾

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾

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ACTION CONCEPT 29

Explore options to generate useful energy from gas that is captured at the Clover Bar Landfill

DESCRIPTION

- Methane, a potent greenhouse gas (GHG), is generated as organic waste decomposes in landfills. This gas can be captured and used for value-added purposes.
- The City of Edmonton currently captures landfill gas emissions from the Clover Bar Landfill and is exploring how to best use it. This action focuses on implementing a beneficial use, like converting it to renewable natural gas, based on financial feasibility.
- The City of Edmonton has also received funding from Emissions Reduction Alberta to explore opportunities for producing renewable natural gas from the Clover Bar Landfill.

IMPACT

- Reduce GHG emissions and support the transition to lower-carbon fuels.

WHY IT MATTERS

- Renewable natural gas projects can create new revenue streams, bring economic opportunities, and support environmental goals.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾

Financial Sustainability ▾

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ACTION CONCEPT 30

Advance research and development in sustainable fuels from waste

DESCRIPTION

- The Alberta Clean Energy Technology Accelerator (ACETA) is a partnership between the City of Edmonton, the University of Alberta, InnoTech Alberta, and Canmet Energy.
- ACETA supports the energy transition by advancing research and development of renewable fuels derived from municipal solid waste.
- This action focuses on transitioning ACETA from its current state to a longer term, financially self-sufficient partnership.

IMPACT

- Working with partners to combine resources, expertise, and infrastructure will accelerate research and development of renewable fuels from waste.

WHY IT MATTERS

- Partnerships in research and development are required to assist the City of Edmonton in addressing challenges related to innovative waste management technologies and the transition to low-carbon fuels.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾

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ACTION CONCEPT 31

Reduce food waste within Edmonton's food system

DESCRIPTION

- Approximately [half of Canada's food supply is wasted](#), causing significant environmental, economic, and social consequences, including increased greenhouse gas (GHG) emissions.
- The City's Waste Services has two roadmaps that include food waste reduction as a focus area. The Waste Reduction Roadmap identifies strategies to reduce food waste generated at home and at public events. The Industrial-Commercial-Institutional (ICI) Waste Roadmap identifies opportunities for the City to create robust food waste diversion processes, partnerships and programs with the non-residential sectors.
- This action supports both roadmaps by actioning initiatives to reduce food waste and creating economic incentives to innovate in the sector.

IMPACT

- Reduce food loss from production and waste from food consumption, while avoiding landfilling organic/food waste will reduce GHG emissions.
- Our local food system consists of growing, processing, transporting and selling of food products at the upstream end, and managing the waste generated from these activities and from consumption at the downstream end. Through these activities, GHG emissions are generated throughout the food system with most emissions resulting from discarding organic food waste at the landfill.

WHY IT MATTERS

- The City can support food recovery and redistribution through incentives and initiatives. This will reduce upstream food loss (growers/manufacturers and grocers) and downstream food waste (consumers).
- [Ten per cent](#) of waste that the City collects from residential homes is avoidable food waste. Educating Edmontonians on how to minimize food waste, and use or share excess food will support environmental goals and also promote food security.

CLIMATE FOCUS

Adaptation ▾ Energy Transition ▾

BENEFITS BEYOND CLIMATE

Financial Sustainability ▾ Affordability ▾

ACTION CONCEPT 32**Reduce barriers and red tape for renewable energy in Edmonton****DESCRIPTION**

- Renewable energy, such as solar photovoltaic (PV), can effectively reduce greenhouse gas (GHG) emissions while supplying heat and power to buildings and provide utility cost savings.
- Identifying and removing existing non-financial barriers that hinder the implementation for residential and non-residential buildings will support the ongoing adoption of renewable energy.
- This action focuses on collaborating with partners to identify and reduce the barriers to renewable energy installations through education and training, permitting support, and advocacy to support micro-generation.

IMPACT

- Address informational gaps and provide greater support for both residential and non-residential parties to facilitate and encourage greater renewable energy adoption.
- Work with utility partners to enable and advocate for broad adoption of renewable energy micro-generation.

WHY IT MATTERS

- Residential and non-residential buildings account for 35 per cent of the City of Edmonton's GHG emissions, making it essential to prioritize transitioning to renewable low-emission energy sources (City of Edmonton 2024 Greenhouse Gas Inventory).
- It is important to address all barriers in order to encourage widespread renewable energy adoption.
- Demand for renewable energy is growing worldwide and supporting that technology locally creates jobs and local economic development.

CLIMATE FOCUS

Energy Transition ▾

BENEFITS BEYOND CLIMATE

Economic Development ▾

Affordability ▾

For more information about this project visit
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