

Council Policy

Climate Resilience



Programs Impacted	<p>Environmental Stewardship <i>The City of Edmonton's operations and service delivery sustains and conserves the environment.</i></p> <p>Environmental Protection <i>Edmonton protects its natural environment, minimizes its environmental impact and mitigates climate change.</i></p>
Number	C627
Date of Approval	TBD
Approval History	n/a
Next Scheduled Review	[Must not exceed 3 years from date of approval]

Statement

The City of Edmonton, through its planning, services, decision-making processes and leadership ensures, promotes and supports a climate resilient community with clean air and water; and natural and built environments that sustain long-term health and prosperity.

The City of Edmonton commits to immediately and urgently:

1. Act to be a carbon neutral community by 2050 through Energy Transition to help limit global warming to 1.5 degrees Celsius;
2. Act to adapt, prepare for and respond to a changing climate; and
3. Lead climate solutions in service delivery and corporate management.

The purpose of this policy is to provide clear and consistent governance and accountabilities for achieving a climate resilient community, and to demonstrate to Edmonton's citizens, businesses, and community and industry partners the City of Edmonton's commitment to climate solution leadership in all aspects of city planning, development and business decisions.

Guiding Principles

To achieve its commitments, the City of Edmonton decisions and actions will be:

- **Collaborative** Achieving a climate resilient community will require connecting and collaborating, cooperation and partnership with other governments, regional partners, institutions, communities, businesses, academia, and global partners. The City of Edmonton is committed to continuously listening to, learning from, and working with citizens, businesses, and our community and industry partners to achieve a climate resilient community.
- **Just and Equitable** Climate resilience must incorporate a just and equitable approach, that serves those today and those who come after us.
- **Mindful of Prosperity** The creation of economic opportunities for City of Edmonton citizens and businesses will be considered in planning climate resilient actions.
- **Transformational** Climate resilience requires transformative action, including integrating and accepting uncertainty in decision making processes.
- **Accountable** Climate resilient measures, including consideration of mitigation and adaptation co-benefits and tradeoffs, will inform decision-making.
- **Science and Evidence Based** Decision-making will inform continuous learning and improving and will be based on best available science, research and evidence.
- **Catalyze Change** Through community activation, partnership and advocacy, infrastructure investment, climate resilient programs including incentives, and policy and regulation to achieve climate resilience outcomes.

Climate Resilience Commitments

1. *Act to be carbon neutral community by 2050 through Energy Transition to help limit global warming to 1.5 degrees Celsius*

The City of Edmonton will catalyze and support community action to immediately and urgently align actions with the international goal of limiting global warming to 1.5 degrees Celsius and be carbon neutral by 2050 by pursuing:

- a. Renewable and Resilient Energy Transition - Promoting the urgent transition towards low carbon energy sources.
- b. Low Carbon City and Transportation - Planning, developing and building Edmonton to have carbon neutral and climate resilient communities and zero emissions transportation systems.
- c. Emission Neutral Buildings - Transforming Edmonton's building stock to be emissions neutral.
- d. Carbon Capture and Nature Based Solutions - Promoting a nature-based solutions approach to climate resilience by implementing and promoting actions that protect, sustainably manage, and restore natural and modified ecosystems.

2. Act to adapt, prepare for and respond to a changing climate

The City of Edmonton will increase climate adaptation and minimize the exposure to and reduce the vulnerability of people and assets to the impacts of climate change by adapting, preparing for and responding to a changing climate by:

- A. Climate prepared and adapted infrastructure and urban form - Planning, developing, building and adapting Edmonton to be ready for the future climate reality
- B. Prepared and adapted communities - Supporting communities, households, institutions, businesses and residents be more prepared for and able to respond to and recover from the impacts and opportunities of a changing climate
- C. Climate resilient, adapted and healthy ecosystems - Investing in and protecting ecosystems to build resilience, protect communities, enhance environmental connection, and support and improve quality of life
- D. Proactive risk management - Identifying and managing climate risks and vulnerabilities that could impact our cities long term livability

3. Lead climate solutions in service delivery and corporate management.

The City of Edmonton will ensure proactive leadership in climate solutions by taking a lead role in promoting and supporting Edmonton's climate resilience efforts and leading by example in its own civic operations.

- a. Governance - Establishing a governance framework to implement the City's climate change plans, that supports climate leadership by Council, Administration, and the community, including an advisory committee to City Council on climate resilience.
- b. Integrated Climate Resilience Decision-Making Model - Establishing a climate decision-making framework that includes considerations of short, medium and long-term climate conditions, vulnerabilities, risks and opportunities, and an integrated carbon and financial budget.
- c. Targets and Reporting - Establishing transformative and ambitious targets, including a carbon budget, to guide climate action, with progress reported to City Council and residents at least annually. Administration will provide the City Council and the community with information on key climate-related risks, opportunities, impacts and initiatives.

- d. Corporate climate resilience management plan - maintaining and implementing a plan(s) to manage greenhouse gases, climate change-related risks, opportunities and impacts to civic assets and services.
- i. Buildings - immediately adopting sustainable and resilient building practices for the buildings it owns, leases and funds , over the course of their entire lifecycle through: 1) the design and construction of Emission Neutral, climate ready buildings; 2) monitoring, benchmarking, operating, and maintaining City buildings, and 3) proactively retrofitting existing City buildings to reduce their carbon emissions and to prepare for a changing climate.
 - ii. City funded affordable housing - addressing energy poverty by applying a balanced approach to funding of affordable housing construction.
 - iii. Vehicles - transitioning to a zero emission fleet and public transit system incorporating lifecycle costing approaches.
 - iv. Energy and Offsets - purchasing 100% renewable electricity, installing onsite alternative energy systems on appropriate land uses, using low carbon or carbon neutral energy, and offsetting residual emissions to become a carbon neutral corporation.
 - v. Assets and Infrastructure - account for emissions and future climate conditions in design, and undertake carbon impact and climate risk and vulnerability assessments to guide investment and renewal decisions.

Definitions

Adapting: Lowering the risks and negative impacts and embracing potential opportunities associated with climate change so that communities and ecosystems are prepared to cope with new climate conditions.

Alternative Energy Systems: Energy generated from alternatives to fossil fuels such as renewable energy, biofuel, biogas, biomass and hydrogen fuel cell. For the purpose of this policy, alternative energy also refers to alternative, localized, on-site energy generation such as heat and power cogeneration.

Carbon Neutral:

- A carbon neutral community is a community where the net per-person greenhouse gas emissions is zero.
- Carbon neutral energy is energy with net zero greenhouse gas emissions.

City-Funded Buildings: Projects that are funded by the City in the form of grants, or loans that are provided by the City for up to 33% of the total capital cost of the building project (i.e. land costs if applicable are not included). The total capital project cost must also be over \$3M including the portions funded by the City.

Climate Resilience: Climate resilience is achieved by mitigating and adapting to climate change.

Emissions Neutral/Emissions Neutral Building: An emissions neutral building is a building that is highly energy efficient and:

a) uses only renewable energy for its operations on an annualized average basis (this may include either on or offsite generated renewable energy) ,

OR

b) produces and supplies onsite renewable energy in an amount sufficient to offset the annual greenhouse gas emissions associated with the energy consumed for its operations.

Energy Poverty: Energy poverty refers to the inability of a household to maintain access to energy services necessary to meet basic health and well-being needs at reasonable cost.

Low Carbon Energy: Low carbon energy is produced using significantly lower amounts of carbon dioxide emissions than is emitted from fossil fuel energy.

Mitigating: Efforts that slow climate change by reducing or preventing the release of greenhouse gases to the atmosphere.

Renewable Energy: Energy that is obtained from natural resources that can be naturally replenished or renewed within a human lifespan. These resources include moving water, wind, biomass, solar, geothermal, and ocean energy.