Summary of Comments on Climate Resilient Edmonton: Adaptation Strategy and Action Plan

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Author: liscal Subject: D1 Date: 1/11/2021 10:42:54 AM Message from the City of

Edmonton's Environmental Advisory Committee

The City of Edmonton is pleased to be supported by a volunteer committee of citizens that provides Administration with strategic advice on environmental programs and topics. For over 22 years, the City's Environmental Advisory Committee (EAC) has provided a critical public perspective on environmental issues, and the current membership is no exception, demonstrating its commitment to improving the City's environmental performance.

Author: liscal Subject: D1 Date: 1/11/2021 10:43:35 AM

Membership on the Committee is comprised of nine citizens-at-large and one representative from each of Alberta Health Services, Alberta Environment and Parks, MacEwan University and Concordia University of Edmonton. The EAC was actively involved in the evolution of Climate Resilient Edmonton: Adaptation Strategy and Action Plan by asking probing questions, providing guidance over the course of its development, responding to discussion papers and advising on public communications. Following is the Committee's response to Climate Resilient Edmonton. The Environmental Advisory Committee (EAC) endorses this strategy and action plan based on: the process employed to develop the plan, the range of stakeholders consulted, efforts to raise awareness among the public, membership and oversight of the Climate Resilient Edmonton Strategy Stakeholder Committee, the diligence shown by the project working team and, perhaps most importantly, the EAC recognizes the significant and serious nature of this work. Leaders at the City of Edmonton are being proactive with this strategic approach to climate change, creating momentum across the region. This plan will help to provide citizens with a sense of security that leadership is committed to addressing future changes in climate, even in times of uncertainty. Climate Resilient Edmonton: Adaptation Strategy and Action Plan is the first climate change resilience plan for Edmonton. Due to the complex nature of this strategy, it was developed primarily with input from the scientific and expert community. However, since June 2016 when the plan was in very early stages of being formulated, the City has engaged the EAC with progress updates and sought feedback on ongoing and upcoming work

The EAC points out the following considerations from the Action Plan, each of which requires adequate funding to enable successful implementation:

Ongoing climate resilience research: Given that actions for resilience are relatively new for municipalities around the world, there will be a need for all pieces of the implementation plan to be reflective of scientifically-sound understanding. This includes the monitoring and incorporation of new practices and learning from other municipalities, and the most current developments in research. The integration of new information will enable evidence-based decision-making, and allow for this initial strategy to be revised over time.

Climate resilience of infrastructure and green spaces: Infrastructure, in all its forms, must be newly developed or retrofitted to meet a new climate future. From placement of utility infrastructure, to (permeable)

materials for hard surfaces, integration of public cooling stations and potable water, design of bridges and buildings, policies that advance climate-proofing in new neighbourhoods, vegetation choices for green spaces and parkland, and so on—all forms of infrastructure need to be thoughtfully and skillfully designed now for a new climate reality.

Climate resilience of people: citizens will need to be prepared in advance for climate shocks and develop skills for adapting their spaces and lifestyles for a changing climate. This in-depth engagement will obviously

include emergency preparedness, but must also build capacity that will activate citizens, neighbourhoods and communities to becoming climate resilient

The EAC is pleased that the City has taken on this work and supports the City's commitment to adapting its operations for resilience in the greater community. Preparedness for the potential impacts of climate change is the best way forward. The City must move forward with research, policy changes and support for citizens and stakeholders to ensure that Edmonton will thrive and be a leader in a new climate future. This strategy and action plan is a commendable first step to a resilient Edmonton

Author: liscal Subject: A1.1a Date: 1/11/2021 10:44:23 AM
The City of Edmonton is already in the process of implementing our Community Energy Transition Strategy, which aims to reduce greenhouse gas emissions in Edmonton. Our Climate Resilient Edmonton: Adaptation Strategy and Action Plan is complementary to those efforts.

Author: liscal Subject: D1 Date: 1/11/2021 10:45:44 AM

We also consulted with other stakeholders and subject matter experts to develop this plan. The knowledge these experts shared with us formed an important part of our learning and evidence gathering process.

Author: liscal Subject: A1.1a Date: 1/11/2021 10:47:04 AM Climate Resilient Edmonton: Adaptation Strategy and Action Plan is Edmonton's Climate Change Adaptation Plan under section 615.5 of the City Charter.

Author: liscal Subject: A1.1a Date: 1/11/2021 10:46:23 AM
This strategy delivers on adaptation commitments from the Edmonton Declaration.

Author: liscal Subject: D4.2 Date: 1/11/2021 10:48:25 AM
To be successful climate change
adaptation efforts must be taken at a local scale,
including government action. Local governments
typically have many of the planning and policy tools
available to address climate change impacts such as
land use planning and zoning, design guidelines for
infrastructure and development, and emergency
management. management.

Author: liscal Subject: General - identify as strat/guiding document
The City of Edmonton Charter Regulation which
requires the City to establish, review and update
a plan for adapting to the effects of climate
change.

Date: 1/11/2021 10:54:36 AM

Author: liscal Subject: A3.2 Date: 1/11/2021 10:55:37 AM
Ongoing measurement and reporting of Edmonton's
vulnerabilities is required to assess the success of
adaptation actions and to determine any changes
to vulnerabilities. A monitoring plan and evaluation
process that reviews the implementation and
progress of Climate Resilient Edmonton: Adaptation
Strategy and Action Plan will be developed.

Author: liscal Subject: General - identify as strat document

Edmonton's 2050 Vision and Council's Strategic
Plan (2019-2028), which contains the climate
resilient goal:

Edmonton is a city transitioning to a low-carbon
future, has clean air and water and is adapting to a
changing climate.

Date: 1/11/2021 10:55:06 AM

Author: liscal Subject: D1 Date: 1/11/2021 10:56:46 AM

Engagement and Outreach Approach

A stakeholder and subject matter expert approach to engagement was the main source of advice and expertise used in the creation of this plan. Other various engagement and outreach efforts occurred as well in order to inform citizens about the strategy's

- A Strategy Stakeholder Committee that contributed knowledge, guidance and partnership since adaptation planning work began.

 The City's Environmental Advisory
- Committee members were provided with multiple opportunities to offer feedback and advice on the
- strategy development since the work began.

 A series of stakeholder workshops to identify and understand the impacts of current climate hazards.
- A series of stakeholder workshops to conduct a vulnerability and risk assessment of future climate
- change impacts.

 A stakeholder workshop to identify potential economic opportunities for Edmonton related to climate change.
- A mixed-topic Edmonton Insight Community Survey that attracted over 1600 respondents, indicating that Edmontonians have a wide range of knowledge and understanding about climate change adaptation.
- Pop-up conversations at various events and
- Informational "Climate Change is Here" and "To What Degree?" displays were placed at highly visited recreation venues.
- Public open houses at six locations engaged over 750 citizens in conversations about a climate resilient Edmonton.
- A 2018 general population survey of 1000 Edmontonians that showed 73% of residents are concerned about climate change and that 72% of residents believe action is required now to address climate change.

While subject matter experts and climate scientists were the main source of advice and guidance in developing the strategy, residents, staff, and the City's partners at EPCOR will be at the forefront of readying Edmonton, its homes, businesses and communities for a changing climate. Deeper engagement opportunities for residents will be provided during implementation.

Date: 1/11/2021 10:58:19 AM

Author: liscal Subject: General - strat document identification
To establish these five paths, we consulted many
stakeholders and subject matter experts. We also
engaged with and listened to Edmontonians' vision
for a climate resilient Edmonton. These conversations
were meant to expand upon the aspirational vision
for the year 2050 included in City Council's Strategic
Plan 2019-2028. Vision 2050

Author: liscal Subject: D4.2 Date: 1/11/2021 10:59:32 AM ACTION 1:

The City of Edmonton develops and implements a climate science and evidence based decision-making framework

GOAL 1: The City of Edmonton uses formal climate science and evidence based policy and decision making processes

Description: We will create a formal mechanism for both City

Administration and Council to integrate climate science and evidence into their decision-making processes. This includes the consideration of science and evidence as it relates to our health,

economy, environment, infrastructure and climate. Implementation of this action will provide our decision makers with the most upto-date and best available science, research and evidence. This will affect all five of the climate change adaptation paths and will require cross-organizational integration and leadership to be successful.

Author: liscal Subject: A3.2 Date: 1/11/2021 11:00:04 AM

The City of Edmonton develops and implements a vulnerability risk assessment, resilience and adaptation planning, measurement and reporting program

Description: This ensures the ongoing review and update of Climate Resilient Edmonton: Adaptation Strategy and Action Plan to reflect any updated understanding of risks and vulnerabilities. It will also ensure we meet the City of Edmonton Charter Regulation's adaptation planning requirements. It will identify data requirements, monitoring data, tracking and assessing trends in data, reporting on measures that monitor the success of adaptation actions and goals, and overall community resilience.

Author: liscal Subject: D4.2Date: 1/11/2021 11:07:16 AM ACTION 3:

The City of Edmonton leads by example by continuing to pilot, evaluate, share results and implement science based adaptations Description: We recognize the City of Edmonton must be a

community leader on climate change adaptation. Through piloting and sharing the results of adaptation interventions, we will lead other community members to take similar actions.

T Author: liscal Subject: D4.2 Date: 1/11/2021 11:00:41 AM

ACTION 4:

The City of Edmonton in partnership with community stakeholders develops and integrates climate adaptation and resilience standards into urban and strategic planning, design, and development approval processes

GOAL 2: Edmonton is planned, designed, developed and built to be climate resilient today and

for future Edmontonians

Description: To increase the resilience of our built urban environment, we will integrate climate adaptation and resilience into key city planning and development processes, policies and standards. This includes participation in federal and provincial initiatives such as building code updates.

Author: liscal Subject: D3 Date: 1/11/2021 11:01:05 AM ACTION 5:

The City of Edmonton conducts

climate change impact assessments on existing assets, ongoing maintenance programs, planned retrofits, and new infrastructure developments Description: We will develop a process for Edmonton to apply a climate lens risk management approach so that we can then access federal infrastructure funding. Beyond that, this action includes asset level climate resilient assessments and improvements to support climate resilient infrastructure.

Author: liscal Subject: A1.1a

become more climate resilient.

Date: 1/11/2021 11:02:13 AM

ACTION 6:

The City of Edmonton in partnership with community stakeholders develops and implements a community scale and household climate change readiness program GOAL 3: Edmonton's communities, businesses and institutions are aware, connected, and prepared for climate change Description: We will work with communities to develop community scale climate resilience plans; they will focus on community-specific assets, risks and vulnerabilities, and support of households as they

Author: liscal Subject: A1.1a ACTION 7:

Date: 1/11/2021 11:02:36 AM

The City of Edmonton develops and implements a local business and institution climate change readiness

program
Description: We will help support local businesses and institutions prepare for climate change. Initiatives under this action will also explore economic opportunities in which Edmonton could potentially capitalize upon changes to the climate.

Author: liscal Subject: A1.1a ACTION 8:

Date: 1/11/2021 11:02:55 AM

The City of Edmonton in partnership with community stakeholders develops and implements a community "Resilience Hubs" program that provides support and resources for residents to improve their capacity to cope with climate changes and extreme weather Description: We will identify the need for (and subsequently identify partnerships to provide) community amenities that can be used in the event of an emergency or as a climate change innovation and demonstration facility.

Author: liscal Subject: A1.1a

Date: 1/11/2021 11:03:27 AM

ACTION 9: The City of Edmonton develops and implements a "Cool Edmonton" program to reduce the impacts of urban heat island effect Description: We will work with partners to incorporate actions that reduce the impacts of the urban heat island effect in the built environment and provide accessible information to those who may need to locate cooling amenities.

Author: liscal Subject: A1.1a

Date: 1/11/2021 11:03:42 AM

ACTION 10:

The City of Edmonton in partnership with EPCOR and other stakeholders develops and implements a drought management program

Description: We will work with partners to support Edmonton as it prepares for, responds to and recovers from drought conditions.

Author: liscal Subject: A1.1a ACTION 11:

Date: 1/11/2021 11:04:07 AM

The City of Edmonton in partnership with EPCOR and other stakeholders enhances long term source water security and protection planning for water quantity and quality

Description: We will work with partners to integrate climate change into source water protection approaches, including water conservation/re-use and identification of potential future water sources.

Author: liscal Subject: A1.1a

Date: 1/11/2021 11:04:27 AM

ACTION 12:

The City of Edmonton in partnership with the Province of Alberta and other stakeholders researches, develops and implements a river and ravine flooding resilience program

Description: We will identify partnership opportunities with the provincial government to understand the vulnerabilities and risks to communities and infrastructure should the North Saskatchewan River and connected ravines flood. We will also implement resilience actions, while keeping in mind the role that natural wetlands have in flood resilience.

Author: liscal Subject: A1.1a

Date: 1/11/2021 11:04:44 AM

ACTION 13: The City of Edmonton in partnership with EPCOR develops and implements an urban flooding resilience program

Description: We will work with partners to make Edmonton more resilient to urban flooding events, and integrate changes to our climate into stormwater management approaches.

Author: liscal Subject: D4.2 Date: 1/11/2021 11:05:12 AM ACTION 14:

ACTION 14:
Integrate changing climate
extremes into coordinated emergency
management programs including
preparedness, prevention, response
and recovery
Description: Climate change considerations will be integrated into

emergency management planning and priority backup power locations will be identified and evaluated.

Author: liscal Subject: D4.2 Date: 1/11/2021 11:05:36 AM ACTION 15:

The City of Edmonton identifies and assesses opportunities to increase the resilience of Edmonton's energy

systems
Description: We will investigate the resilience of energy systems within Edmonton and identify priority areas susceptible to disruption or increased demand due to climate impacts inside and outside the city's boundaries.

Author: liscal Subject: D4.2 Date: 1/11/2021 11:05:58 AM ACTION 16:

The City of Edmonton in partnership with stakeholders enhances integrated pest management policies and practices on public and private

Description: Changes to our climate may introduce new pests and invasive species to Edmonton. We will adapt our integrated pest management practices to respond.

Author: liscal Subject: D4.2 Date: 1/11/2021 11:06:24 AM ACTION 17:

The City of Edmonton develops and implements an ecosystem services based program, that includes ecological restoration, that supports climate resilience Description: To ensure Edmonton's natural ecosystems are resilient to climate change impacts, we will establish an integrated

ecosystem services team to conduct comprehensive ecological and environmental planning. This will maintain healthy ecosystems as part of a healthy and resilient city and will preserve, conserve, and foster wellbeing of the environment.

Author: liscal Subject: D4.2 Date: 1/11/2021 11:06:41 AM

ACTION 18: The City of Edmonton will research, develop and integrate climate change food resilience and agribusiness program into Edmonton's food and urban agriculture strategy Description: We will integrate climate change resilience into plans, programs, policies and actions related to Edmonton's food system, as well as explore agribusiness opportunities.

Author: liscal Subject: D4.1 Date: 1/11/2021 11:11:22 AM appendix a

Contains large table with all actions and responsible department identified for each. Extracted to new file for D4.1 $\,$