

Guiding Principles for Climate Resilience

EXECUTIVE SUMMARY

Council approved a series of climate actions (adaptation and mitigation) in Action Plan 2015–2018. Starting in 2016, Administration developed a renewed, corporate-wide commitment and approach to carbon and energy management and addressing climate risk through the Climate Program (CP) in Environmental and Safety Management (ESM). One area of the CP is the development of a Climate Resilience Strategy. A report will be brought to Council in June 2018 to present the recommendations for the Climate Resilience Strategy with a focus on corporate services and operations.

A key element of the Strategy is to establish guiding principles. These principles will enable climate change and carbon/energy management considerations in decisions. This report provides a background to the development of the draft principles (attachment 1).

ADMINISTRATION RECOMMENDATION:

That Council endorses the “Guiding Principles for Climate Resilience” in Attachment 1.

PREVIOUS COUNCIL DIRECTION / POLICY

The City’s current and future actions on climate change mitigation and adaptation support Council’s priorities. Key actions led by ESM on behalf of the Corporation in Action Plan 2015 – 2018 include community engagement on greenhouse gas reduction, partnerships, adaptation, the development of climate plans and education to name a few.

On February 22, 2017 (UCS2017-0064 – A Climate Program for the City of Calgary) Administration provided an update on activities taken to date including the development of the Climate Program and the approach to be utilized. The report also included risks and opportunities associated with climate change.

The development of Climate Resilience Strategy was aligned with the development of the business plan and budget process 2019 – 2022 (OneCalgary). Preparing climate actions ready for submission into OneCalgary and specifically service owners in advance of deadlines, has increased efficiencies for prioritization to ensure these opportunities are included.

BACKGROUND

The Climate Program evolved several key areas over the past year including outreach and education, alignment with federal and provincial policy, risk integration into operations and services, and the development of strategies and actions. During 2017 in-depth research and targeted stakeholder engagement was conducted to establish baselines and analyse the risk and vulnerability of infrastructure, people and natural environment as well as a carbon and energy opportunities to develop a Climate Resilience Strategy. During 2017/8 analysis of the best management practices showed that clear guiding principles are key to successful implementation of climate resilience.

**Utilities & Environmental Protection Report
to
Strategic Meeting of Council
2018 March 21**

**ISC: UNRESTRICTED
C2018-0340
Page 2 of 5**

Guiding Principles for Climate Resilience

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Climate Change is a risk multiplier that increases the risk of severe weather events. Risks are managed through climate resilience and include both mitigation and adaptation. Mitigation is action to reduce GHG emissions and includes energy efficiency and use of renewables. Adaptation is a risk management strategy and reduces the damages from climate change impacts.

The City's role in climate change involves enabling a culture of climate resiliency actions which are supported through regulation, service provision, enabling activities, and leadership. Integrating climate specific decision-making into policies, programs and projects ensures that City services and operations are safe guarded against risks related to climate change and make use of opportunities.

Guiding Principles enables the integration of climate resilience into decision-making. It creates a line of sight for council and administration between climate risk reduction and effective service provision.

International research shows that guiding principles should be considered by municipalities to become more climate resilient including being innovative, inclusive, fair, comprehensive and integrated, relevant, actionable, evidence-based and verifiable. The inclusion of guiding principles for climate change is also a best practice in municipalities in Canada, the USA and Europe.

Each community is unique in their application or consideration of guiding principles. A variety of stakeholders in Calgary were asked to review and provide feedback of the abovementioned principles.

- Stakeholders supported the guiding principles in general
- Stakeholders suggested that some of the principles could be combined with others such as 'evidence-based and verifiable'. These two principles are similar in nature in that both refer to certainty and reliability of information.
- Stakeholders proposed that The City should commit to strong governance that assess and sustain progress, adequately fund and ensure ongoing meaningful engagement.
- Stakeholders reported that outcome based monitoring be applied with broad stakeholder collaboration.
- Varying degrees of engagement across stakeholders should be considered. In particular, Under-represented populations, business and industry stakeholders require more engagement and involvement at the policy creation stage.
- The City should remove barriers to private sector climate resilience innovation.
- Other elements to consider included implementation, economics and financing, leadership by the City and collaboration.

The feedback was incorporated into the analysis and a final set of principles were generated. It includes climate decisions that are focused on reducing risks and maximizing opportunities:

- **Innovation** – The City will play an active role in the process of climate innovation.

**Utilities & Environmental Protection Report
to
Strategic Meeting of Council
2018 March 21**

**ISC: UNRESTRICTED
C2018-0340
Page 3 of 5**

Guiding Principles for Climate Resilience

- **Inclusiveness** – The City will involve multiple stakeholders in planning and implementation at a city, regional and inter-governmental scale.
- **Integration** – The City will integrate both mitigation and adaptation considerations in all investments to improve energy use, reduce carbon emissions, reduce disaster risks and strengthen resilience for future climate conditions.
- **Relevance** – The City will develop locally-relevant solutions to address local climate-risks and vulnerabilities, and low carbon energy opportunities.
- **Commitment** – The City will provide strong governance to assess and sustain progress, adequately fund and ensure ongoing meaningful partnerships.

The draft set of guiding principles for Climate Change is included in attachment 1. These principles, if endorsed by Council will be incorporated as part of the Climate Resilience Strategy to be presented to Council in June 2018 and help guide final actions for input into OneCalgary.

Stakeholder Engagement, Research and Communication

Results from a 2015 Environics survey and focus groups of Calgarians and Edmontonians about climate change indicated that Calgarians want more information and leadership from The City. During December 2016 Environics Research conducted six focus groups with Calgary residents. Participants appreciated a message of 'leadership', which spoke to Calgary's can-do attitude, especially where Calgary could lead on a low-carbon economy. The City is also trusted to address the effects of climate change with local, practical solutions.

A set of principles developed by the United Nations was used as a starting point for discussion with, and input from stakeholders including the City's Corporate Risk Management Advisory Team, BILD Calgary, the Energy Futures Lab, Transportation Logistics, Utility Companies and Renewable Energy Companies to name a few.

Strategic Alignment

The Guiding Principles for Climate Change are aligned in achieving the outcomes of 100 Resilient Cities (100RC), OneCalgary and Council Directives. The 100RC approach identifies 7 qualities of a resilient city: a city that is reflective, resourceful, redundant, robust, flexible, inclusive, and integrated.'

The recently approved Council Directives for OneCalgary depicts Calgary as "A Healthy and Green City - Calgary is a leader in caring about the health of the environment and promotes resilient neighborhoods where residents connect with one another and can live active, healthy lifestyles".

"Furthermore, it emphasizes the need for climate change in OneCalgary: "Calgary needs to address climate change in a way that engages Calgarians, resonates with the majority, and doesn't alienate people. We need to lever incentives that focus on the economic benefits of addressing climate change (such as business diversification, job creation, opportunities for small businesses and all Calgarians) and align The City's climate change strategies with other orders of government and industry initiatives. Calgary and The City should become nationally and internationally competitive by embracing a low carbon economy, fostering alternative

**Utilities & Environmental Protection Report
to
Strategic Meeting of Council
2018 March 21**

**ISC: UNRESTRICTED
C2018-0340
Page 4 of 5**

Guiding Principles for Climate Resilience

energies and developing strategies to reduce adverse impacts and vulnerabilities resulting from climate change.”

Social, Environmental, Economic (External)

The cost of inaction is greater than the cost of taking action on climate change. Climate-related risks to sites and infrastructure, costs more than preparing for these impacts (floods or hail damage). Developing greater resilience to climate impacts can help to avoid costs to municipalities and lead to savings in the costs of service provision which in return could see households and businesses have significant decrease in energy spending. The natural environment can also play a key role in developing resilience for example through tree canopy expansion or flood and/or drought alleviation. Capitalizing on growing the clean technology market, creating high quality local jobs and the attraction and retention of businesses are all areas that benefit from a low carbon economy.

Financial Capacity

Current and Future Operating Budget:

As per administrative protocol, programs/projects intended to build climate resilience are developed and evaluated, budgetary implications will be considered and brought forward as necessary. Climate related programs and projects will be included as part of OneCalgary. Any specific operating budget changes will be reported to ALT and Council as required.

Current and Future Capital Budget:

As per administrative protocol, programs/projects intended to build climate resilience are developed and evaluated, budgetary implications will be considered and brought forward as necessary. Climate related programs/projects will be included as part of OneCalgary. Any capital budget adjustments as a result of provincial, federal or other grants/funds will be reported to ALT and Council as required.

Risk Assessment

Climate change poses reputational, corporate and financial risks to The City. The City is at risk of not meeting its targets and adhering to federal and provincial regulatory requirements as per (UCS2017-0064). Climate change and severe weather are identified as a high risk requiring management effort. Risk management considerations that need to be addressed include: financial impact of changes required to adapt to and mitigate climate change; uncoordinated or insufficient plans for mitigation and adaptation; and/or insufficient or unbalanced resources being assigned to priority areas related to climate change.

The development of an integrated Climate Resilience Strategy encompasses a broader portfolio including mitigation and adaptation and guiding principles for decision-making.

**Utilities & Environmental Protection Report
to
Strategic Meeting of Council
2018 March 21**

**ISC: UNRESTRICTED
C2018-0340
Page 5 of 5**

Guiding Principles for Climate Resilience

REASON(S) FOR RECOMMENDATION(S):

To ensure the integration of climate resilience into decision-making for City policies, programs and projects.

ATTACHMENT(S)

1. Attachment 1: Guiding Principles for Climate Resilience