

Revised Community Energy Transition Strategy

Accelerated Actions and Draft Strategy

Recommendation

That Executive Committee recommend to City Council:

That the Mayor, on behalf of City Council, write a letter to the Minister of Municipal Affairs requesting an extension of the December 31, 2020 deadline for the City to establish the Climate Change Mitigation Plan, to December 31, 2021.

Previous Council/Committee Action

At the August 27, 2019, City Council meeting, the following motion was passed:

That Administration take steps to bring back a revised Community Energy Transition Strategy by end of second Quarter 2020 that aligns the emissions targets and actions with the local carbon budget for City Council's approval.

This is to include:

1. Additional technical analysis on the levers to be used for deep emissions reductions.
2. Stakeholder engagement to develop clear pathways for the achievement of the actions to be included in the plan, following a market transformation approach including possible regulatory tools that can be employed to facilitate the transition.
3. A comprehensive economic analysis of the costs and benefits of the updated plan.
4. A funding strategy that outlines the investment required by all levels of government to catalyze private investment necessary to achieve the local carbon budget.
5. An updated Community Energy Transition Strategy with a ten-year action plan that captures the results of the above while achieving the level of ambition aligned with a 1.5 degree global average temperature increase.
6. Continuing implementation, and where possible, further leveraging current program initiatives and projects identified in the current Community Energy Transition Strategy, the Climate Resilient Edmonton: Adaptation Strategy and Action Plan, and integrate the applicable Climate Shifts into other policy documents, such as the developing City Plan.

7. Implementation of a carbon accounting system for municipal operating and capital budgeting decisions and priorities.

Executive Summary

This report provides an overview of the recommended Guiding Principles, Goals and Strategies and Implementation Approach for the revised Energy Transition Strategy. The revised Energy Transition Strategy supports the goals in ConnectEdmonton and The City Plan implementation. In order to achieve the path outlined, it will require additional bold action on an accelerated time frame. This report also provides an overview of how the revision of the Community Energy Transition Strategy is responding to the COVID-19 pandemic and the actions to reimagine City Building currently underway. A final Energy Transition Strategy and Climate Action Plan will be advanced to City Council in 2021 for adoption by a resolution of Council as the City's Climate Change Mitigation Plan (the "Mitigation Plan"), as per the requirements under the City of Edmonton Charter Regulation. However, adopting the Mitigation Plan in 2021 will not meet the requirements of the City Charter regulation to have the Climate Change Mitigation Plan established and adopted by December 31, 2020. To address this, Administration recommends requesting an extension from the Province to the December 31, 2020 deadline.

Report

Alberta and Edmonton have a proud history of being some of the best energy innovators in the world. This expertise has led to growth and economic prosperity. The Government of Alberta and the City have supplied the global markets with energy products for the last 50 years, and are positioned to supply the energy products the global markets are demanding for the next 50 years.

Responding to changing global markets and conditions will present opportunities and challenges. Through an annual online survey of randomized Edmontonians that took place in August, 75 percent of Edmontonians are asking for more climate action, and through The City Plan engagement and the work to update Edmonton's Community Energy Transition Strategy, Edmontonians shared their excitement and desires for a low carbon future. At the same time, Administration heard from stakeholders that there will be difficult tradeoffs that come with this transition, which will create challenges for decision makers.

Revised Energy Transition Strategy, COVID-19 and Re-Imagine

While updating the current Energy Transition Strategy in response to the growing global climate crisis, a global pandemic unfolded. COVID-19 has impacted residents, businesses and the City and COVID-19 will impact the energy transition. Throughout the pandemic Administration has reconfirmed the importance of listening to science,

taking action to prevent future harm (even when there is uncertainty), and taking action to support societal well-being even when there is no agreement within the community on all the actions needed. COVID-19 will cause financial challenges, however there are also economic opportunities. Globally, national COVID-19 recovery plans are being linked to a transition to a more climate resilient future. There will be global market opportunities for cities and organizations that are ready for them, however Edmonton will be competing against global cities for opportunities to leverage talent and expertise to support clean technologies, services and products. The energy transition is a way to create local jobs today, while developing the innovation, expertise and products the local and global market need to reduce emissions and avoid the most catastrophic impacts science has warned us about.

Though not linked to COVID-19 at the time, the essence of the August 27, 2019, Council motion was for Administration to reimagine how to achieve the low carbon future part of Council's strategic goal of Climate Resilience. The updated Energy Transition Strategy is about reimagining energy systems and the energy markets the City can lead, while transforming community and economy through decisions that are just and equitable. As Administration reimagines City Building and advances work to support the Big City Moves of "Catalyze and Converge" and "Inclusive and Compassionate", an accelerated list of actions to support recovery from the pandemic, by leveraging potential stimulus funding from other orders of government, has been developed (see Attachment 1).

Strategy Structure, Guiding Principles, Pathways, Goals and Strategies

The updated Energy Transition Strategy is about accelerated and transformational change. The updated strategy will align to the Reimagine Guiding Principles of Be Bold, Be Brave, Be Agile and Be Smart. The strategy will include pathways, goals and strategies that set bold and brave direction. The implementation approach, using multiple levers of change, will need to be agile and smart. Though the strategy and action plan are not complete, key elements of the draft content have been developed (see Attachment 2).

GUIDING PRINCIPLES ground how the Energy Transition Strategy will be advanced and implemented. The Guiding Principles are:

- Just and Equitable
- Prosperous
- Urgent and Dynamic
- Collaborative
- Transformative

PATHWAYS, previously called Climate Shifts, are areas of transformative action. They are interconnected, and all of them are required to meet Edmonton's energy transition goals. The Pathways are:

- Renewable and Resilient Energy Transition
- Emissions Neutral Buildings
- Low Carbon City and Transportation
- Carbon Capture and Nature Based Solutions

Underlying all of these pathways is the FOUNDATION of Climate Solution Leadership which recognizes that the City will need to lead if it wants the business community and residents to participate in the transition.

Within each pathway, goals and strategies are identified. GOALS set out what needs to be achieved in Edmonton. They are bold and brave long-term outcomes, aligned to Council's vision. STRATEGIES are the approaches and overall action that need to be taken to achieve the goals.

Implementation Approach

While efforts are underway to update the Energy Transition Strategy, current energy transition program initiatives and projects are continuing to be implemented. A suite of programs and initiatives are underway related to buildings, solar energy and electric vehicles (see Attachment 3). These initiatives are designed to help residents and businesses lower their energy costs, reduce greenhouse gas emissions and many support local job creation.

The updated Energy Transition Strategy requires a smart and agile implementation approach. A transition by its very nature, requires different actions at different points in time. The implementation approach identifies that initiatives or decisions will have a design life (ie. the period of time the initiative or service is needed and is relevant). To be agile and dynamic a monitoring process is needed to determine when a change in approach is required.

The implementation approach being considered includes four elements:

- Levers of Change - aligned with and expanded upon those identified in The City Plan
- Implementation Gates - aligned with the Capital Project Development and Delivery approach, using different "gates" to establish formal checkpoint reviews with Council
- Prioritization - aligned to the Carbon Accounting Framework and budget processes

- Thresholds - signals in the market transformation to be monitored to determine when to implement an action, when to change or modify Administration's approach, or when to stop an action.

Next Phases of Work

The energy transition is a key part of Edmonton's and Alberta's future. This work will position the City to respond to changing global markets, while creating prosperity, economic diversity, and supporting Edmontonians in a just and equitable way. This work is transformative in nature and while the current strategy provides a good foundation, this update takes this work to the next level where Edmonton's long-term goals can be achieved.

Work will continue to develop and refine the strategy and action plan. Administration is continuing to work towards meeting an aggressive, though adjusted, timeline with a full strategy and action plan being advanced to Council in 2021. Administration will present the energy transition strategy for adoption by a resolution of Council, as per City Charter requirements.

Administration will continue to monitor and identify potential stimulus funding to support the acceleration of actions. These actions, as well as those that will be identified in the action plan, will be prioritized as part of the capital and operating budget processes in 2021, and to inform budgets in 2022 and beyond. In addition, work will continue to prepare a funding strategy to support the work and will be advanced in 2021. The funding strategy will need to reimagine how this work can be financed, and will look for an innovative approach that prioritizes the implementation of energy transition actions through realistic yet ambitious partnerships, tools and levers. Early work to support the development of a funding strategy included developing funding scenarios. These scenarios identified that public and private investment of over \$1 billion annually will be required. There are multiple barriers to overcome to make this investment a reality. The analysis revealed that approximately 15 percent of the total investment would need to be supported by all orders of government to "de-risk" and catalyze the necessary private investment. Although further work is necessary, early estimates identified approximately \$45 million will be required to support economic recovery through implementation of accelerated actions, and up to \$65 million annually for energy transition implementation.

Work will also continue to advance a dynamic monitoring, reporting and adjustment approach for Edmonton's Carbon Budget through an evolving Carbon Accounting Framework. These actions will help Edmonton achieve the long-term goals, while balancing changing economic circumstances and the need for a just and equitable transition.

Public Engagement

Through The City Plan engagement and the work to update the Energy Transition Strategy, Edmontonians were asked to help *refine* and *advise* on an updated strategy. Engagement took place from September 2019 to May 2020 focusing on “what” needs to be done to transition to a low carbon city. Twenty-eight events took place to listen to Edmontonians, including targeted stakeholders with diverse expertise, and the City’s Indigenous Memorandum of Understanding Partners. Over 850 conversations took place and over 2,600 written comments were shared (see Attachment 4 and 5).

While significant engagement has taken place, some engagement was paused due to the pressures that COVID-19 placed on safety and the capacity of the community. However, Administration also conducted an annual online survey of randomized Edmontonians in August. The annual survey checks on Edmontonians perceptions related to climate change. The survey revealed that 75 percent of Edmontonians still agree on the need to take climate action and the number who feel the City needs to increase or maintain efforts to address climate change is 66 percent. Additionally, 71 percent agree that investing in energy efficiency and 67 percent agree that transitioning to renewable sources of energy provide economic and employment opportunities for the city. To meet the accelerated timelines, further engagement will be limited to an existing steering committee working on the emission neutral building pathway and targeted engagement, which will continue during strategy implementation.

Climate Change Mitigation Plan and City Charter Requirements

As mentioned previously, the updated Energy Transition Strategy will also serve as the City’s Climate Change Mitigation Plan, which the City is required to establish under section 615.4 of the City Charter regulation. The Charter also requires that a climate change adaptation plan be established and adopted by a resolution of Council under section 615.5. The City of Edmonton has undertaken two separate processes to establish the climate change “mitigation plan” and a climate change “adaptation plan.” Administration will present the “adaptation plan” in UFCSD00129 on November 30 at Executive Committee.

Under the City Charter regulation, this Mitigation Plan is supposed to be established and adopted by a resolution of Council on or before December 31, 2020. However, due to the circumstances surrounding the COVID-19 pandemic, Administration is unable to meet this December 31, 2020 deadline. Therefore, Administration recommends requesting an extension from the Province to extend this deadline. The first step in requesting this extension is to have the Mayor, on behalf of City Council, send a letter to the Minister of Municipal Affairs to formally request this extension.

Legal Implications

Section 615.4(1) of the City of Edmonton Charter requires the City to establish a Mitigation Plan for the purpose of addressing and mitigating the effects of climate change. Section 615.4(9) of the City of Edmonton Charter requires that the City establish its first Mitigation Plan on or before December 31, 2020. In addition section 615.4(4) of the City Charter regulation indicates that the Mitigation Plan is to be adopted by a resolution of the Municipal Council.

The City intends to have the updated Energy Transition Strategy also serve as the City's Climate Change Mitigation Plan. Administration plans to bring the revised strategy forward to be adopted by a resolution of Council in 2021. If the Climate Change Mitigation Plan is not adopted by Council in 2020, the City would be in breach of its obligation to establish the Climate Change Mitigation Plan on or before December 31, 2020. To address this potential breach of the City Charter, Administration recommends asking for and obtaining from the Province an extension to the December 31, 2020 deadline.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmonton is an environmentally sustainable and resilient city			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Advance a thriving, resilient, sustainable economy and environment	Community greenhouse gas emissions	17,216,193 tonnes of carbon dioxide equivalents (2019). A decrease of 5.6% percent below 2005	35 percent below 2005 levels (11,871,000 tonnes of CO ₂ e by 2035)

Risk Assessment

Risk Element	Risk Description	Likelihood	Impact	Risk Score (with current mitigations)	Current Mitigations	Potential Future Mitigations
Legal/Regulatory	If the Climate Change Mitigation Plan is not adopted by Council in 2020, the City may be in breach of its obligation to	1 - rare	2 - moderate	2 - low	Strategy and action plan have been developed to fulfill charter requirements.	

	establish the Climate Change Mitigation Plan on or before December 31, 2020.					
Reputational/ Political	If the Climate Change Mitigation Plan is not adopted by Council in 2020, the City could face negative reputational issues for not being able to comply with the Charter Regulation requirements.	1 - rare	2 - moderate	2 - low	Strategy and action plan have been developed to fulfill charter requirements.	

Attachments

1. Proposed Accelerated Projects
2. Draft Content - Key Elements of the Energy Transition Strategy
3. Current Energy Transition Initiatives
4. City Plan Engagement “Climate” - What We Are Hearing Report
5. Energy Transition Strategy Update - What We Are Hearing Report

Others Reviewing this Report

- M. Persson, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- G. Cebryk, Deputy City Manager, City Operations
- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- K. Armstrong, Deputy City Manager, Employee Services
- R. Smyth, Deputy City Manager, Citizen Services
- B. Andriachuk, City Solicitor