

Update: Energy Transition and Climate Resilience

Initiative Title: Energy Transition and Climate Resilience
City Council Lead(s): Councillor B. Henderson/Councillor M. Walters
Department Lead(s): Sustainable Development, Gary Klassen/Paul Ross

Recommendation - Renew for 2017-2021 Council Term

Objective:

The two objectives of this Council Initiative are: (1) Council leadership/engagement in the implementation of Edmonton's Community Energy Transition Strategy and (2) Council leadership/engagement in the development of Edmonton's community climate change adaptation plan. Areas where Council leadership, evaluation and oversight are needed include:

- Energy use in buildings
- Generating of heat and power
- Energy efficiency in local industry
- Energy efficient land use and transportation
- Various greenhouse gas reduction opportunities associated with solid waste
- Opportunities within City operations

Background:

The Way Ahead Implementation Plan identifies: (a) implementation of Edmonton's Community Energy Transition Strategy and (b) development of a Climate Change Adaptation Strategy as two key initiatives to be delivered by 2018. Funding for these initiatives was approved in the 2016-2018 Operating Budget, within the Corporate Environmental Targets service package and the Implementing Edmonton's Community Energy Transition Strategy service package.

Key outcomes, projects or activities and their status as of April 2017:

1. Energy Transition Projects / Activities

2016 was the first full year of implementation for Edmonton's Community Energy Transition Strategy. With a mandate to lead Edmonton to an energy-sustainable future as defined in the Strategy, Administration launched efforts on a number of fronts. Phase One of implementation began in mid-2015 and concluded in 2016. Its focus was to create a strong accountability framework that included:

- Establishing a supporting City Policy C585 - Edmonton's Community Energy Transition Strategy,
- Obtaining new operational funding through the 2016-2018 Operating Budget to advance key initiatives in Phase Two,

- Creating a new City Council advisory committee to provide broad, independent advice on the Strategy to City Council,
- Recognizing energy transition as one of the City's key strategic actions within *The Way Ahead Implementation Plan*; and
- Establishing corresponding corporate measures and targets.

Phase Two of implementation commenced in 2016, with the launch of more than a dozen significant projects aimed at:

- Engaging and mobilizing Edmontonians to make Edmonton an energy sustainable city,
- Leading by example in City operations by applying best practices regarding energy transition, with learnings that could be used to inform and inspire the entire community,
- Piloting energy efficiency and clean energy programs, with the aim that they will grow to be community-scale programs,
- Continuing to refine the Strategy in areas where information and knowledge gaps remain and where more detailed action plans are needed,
- Collaborating with other municipal, provincial and federal governments to share knowledge, leverage resources and align strategies, and
- Applying an integrated, corporate-wide effort.

A full review of 2016 efforts is contained in Edmonton's Community Energy Transition Strategy Annual Report 2016, which was presented to City Council on May 2, 2017 (CR_4515).

2. Climate Resilience Projects / Activities

Work to establish the City's Climate Change Adaptation Strategy has commenced. Terms of Reference for the project were presented to Executive Committee on May 31, 2016 (CR_3635). A project update was presented to Executive Committee on May 2, 2017 (CR_4527). In 2016 the following work was completed: creation of a baseline to compare future climate change risk and vulnerabilities; review of historical climate change trends in Edmonton; commissioning a series of papers to discuss ways in which cities can be resilient to the impacts of climate change; and analysis of climate change resilience best practices from other jurisdictions summarized through a series of case studies. As well in 2016, the City of Edmonton was awarded the first of five Milestones in the ICLEI Canada Climate Change Adaptation Planning process.

Future Steps:

Energy Transition

Phase 2 will continue until 2019, transitioning into phase 3. Key next steps include:

- Establishing the Energy Transition Marketing and Communication Campaign
- Expanding the Sustainability Showcase Program
- Expanding the Green Leagues: EFCL Energy Efficiency and Solar Program
- Advancing Property Assessed Clean Energy (PACE)
- Launching the EnerGuide Assessment and Labelling Program pilot project for residential buildings
- Launching the Large Building Energy Reporting and Disclosure Program
- Establishing a Community Energy Consumption Information Platform
- Launching an the Eco Industrial Pilot Project
- Commissioning the Anaerobic Digestion Facility
- Establishing Edmonton's Electric Vehicle Strategy
- Implementing City Policy C532 – Sustainable Buildings
- Updating the Corporate Operations GHG Management Plan
- Implementing the Electric Vehicle Charging Station Pilot Project
- Enhancing sustainable building practices

Going forward, Administration will also focus on the following issues and opportunities, including:

- Aligning City's energy transition efforts with those of federal and provincial governments
- Reducing GHG emissions in City (corporate) operations
- Advancing energy transition in Edmonton:

Climate Resilience

Future steps include:

- Development of Climate Change Scenarios
- Climate Change Risk and Vulnerability Assessments
- Development of a climate change adaptation strategy, corresponding action plan, City Policy and Corporate Measure for Resiliency

City Council will be updated on the status of energy transition and climate change projects at key points in their progress.

Evaluation

This Council Initiative is ongoing and would benefit from Council's continued involvement.

Implementation of the Edmonton's Community Energy Transition Strategy will continue for many years and it is recommended that Council continue its related initiative until, at least, the end of Phase 2 (in 2019).

Council's leadership is needed for the development and implementation of Edmonton's Climate Change and Resilience Strategy.