

Memorandum

To: Lisa Spitale,

Chief Administrative Officer

Date: December 4, 2023

From: Jackie Teed,

Director of CAPD

File: 2405306

Rod Carle.

General Manager – Electrical

Utility

Subject: Budget 2024: Integrating Climate Action and the Electrical Utility to Accelerate Implementation – Analysis of Reduced Funding Implications

PURPOSE

The purpose of this memo is to answer Council's question regarding the impacts to City's ability to achieve the greenhouse gas (GHG) reduction targets, established through the 2019 Climate Emergency Declaration, as well as the impacts on the Energy division if the 2024 requested funding levels were reduced.

BACKGROUND

Attached with this memo is the November 20th memo, and September 11th council report, which outline the 2024 funding request needed for the City to strive to achieve the defined GHG reduction targets that were defined by the 2019 Climate Emergency Declaration. At the November 20th Budget Workshop, Council asked that staff provide an analysis of the impacts to Energy and Climate Action workplan, and resulting impacts if requested funding could not be approved.

DISCUSSION

To analyze the impacts to the GHG reduction targets, four funding scenarios have been developed. The first scenario is the model recommended by City staff and is considered 100% funding – and acts as the baseline. The remaining three scenarios are derived from Scenario 1 by reducing staff and resource allocations to create three alternative models. In all models there is a basic need for a senior climate policy planner. This role is required to support the existing CAT staff, as the transition to the new Energy and Climate Action Department will result in additional scope of work for the current Manager of Climate Action.

Each scenario was evaluated on their impacts to these factors:



- 1. Volume of GHG emission reductions at risk of not being achieved by 2050
- 2. City-wide adaptation and resilience planning
- 3. Access to support for community energy and emission reduction programs
- 4. Level of services to enable community clean transportation transition

Climate Action Scenario 1 – 100% Funding (Targeting \$434K)

This CAT resource plan is outlined in the September 11, 2023 Council report and forms the request in the attached November 20th memo.

- \$120K Senior Climate Policy Planner
- \$97K Climate Change Adaption Specialist
- \$97K Community Climate Program Coordinator
- \$120K Corporate EV Fleet Project Manager

1. GHG Emission Impacts	This model will enable the CAT to initiate work on actions that will support reducing an estimated 110,000 tonnes of CO _{2e} (~37% of total emissions as compared to 2016 levels), with some portion of emission reductions realized within the 4 year workplan. It strives to set up the City and the community with the policies, tools, infrastructure and incentives required to achieve the City's GHG emission reduction targets for 2030, 2040 and 2050	
2. Adaptation and Resilience	Includes a dedicated workplan to develop a city-wide adaptation a resilience plan, and ongoing implementation support, including climate change related emergency response planning and delivery	
3. Community Support and Buildings Emissions	Ensures that a focus on community support through targeted program development for climate vulnerable buildings, reducing energy consumption in all homes and businesses and transitioning to low carbon fuel systems. A priority program will be responding to Extreme Heat in vulnerable buildings.	
4. Clean Transportation Transition	Includes a dedicated workplan to enable and support decarbonizing the transportation emissions in our community.	

Climate Action Scenario 2 – 75% Funding (Targeting \$325K)

A reduction of funding to 75% will eliminate a dedicated a resource for community transportation emissions. The key action items would include developing EV retrofit programs and incentive structures for multiunit residential buildings, providing technical support guidance for building electrical load management, and establishing a public EV charging network deployment plan.

• \$120K – Senior Climate Policy Planner



- \$97K Climate Change Adaption Specialist
- \$97K Community Climate Program Coordinator

1. GHG Emission Impacts	75% funding will delay initiating work on reducing an estimated 60,000 tonnes of CO _{2e} (~20% of total emissions as compared to 2016 levels), which will introduce risk of not reaching the 2050 targets.		
2. Adaptation and Resilience	Includes a dedicated workplan to develop a city-wide adaptation and resilience plan, and ongoing implementation support, including climate change related emergency response planning and delivery.		
3. Community Support and Buildings Emissions	Ensures that a focus on community support through targeted program development for climate vulnerable buildings, reducing energy consumption in all homes and businesses and transitioning to low carbon fuel systems. A priority program will be responding to Extreme Heat in vulnerable buildings.		
4. Clean Transportation Transition	sportation The CAT will at a maximum initiate a single project from the		

Climate Action Scenario 3 – 50% Funding (Targeting \$217K)

In addition to delaying clean transportation work, a reduction of funding to 50% will eliminate a dedicated resource for Stream 2 Heat Response (August 28th, 2023 Council report). This work would be aimed at developing a targeted energy and emissions reduction program that will improve the indoor living conditions in the buildings that have been identified as being vulnerable to the impacts of extreme weather events.

- \$120K Senior Climate Policy Planner
- \$97K Climate Change Adaption Specialist

1. GHG Emission Impacts	50% of funding will delay initiating work on reducing an estimated 80,000 tonnes of CO _{2e} (~27% of total emissions as compared to 2016 levels), which will introduce risk of not reaching the 2050 targets.		
2. Adaptation and Resilience	Includes a dedicated workplan to develop a city-wide adaptation and resilience plan, and ongoing implementation support, including climate change related emergency response planning and delivery.		
3. Community	No dedicated workplan to accelerate program development in		
Support and	response to Extreme Heat in vulnerable buildings.		



Buildings Emissions	The CAT will at a maximum initiate a single task as part of the program development with anticipated program delivery to launch after 2026.
4. Clean Transportation Transition	No dedicated workplan for transportation emissions. The CAT will at a maximum initiate a single project from the transportation action in 2024.

Climate Action Scenario 4 – 25% Funding (Targeting \$108K)

In addition to delaying clean transportation and extreme heat response work, a reduction of funding to 25% will eliminate the initiation of developing a Climate Action Adaptation and Resilience Plan for the City and community. This staff resource would also work closely with the emergency management office (EMO) to support deployment of education and awareness messaging during extreme weather events and support the development of community Resilience Hubs.

• \$120K – Senior Climate Policy Planner

1. GHG Emission Impacts	25% of funding will delay initiating work on reducing an estimated 85,000 tonnes of CO_{2e} (~28% of total emissions as compared to 2016 levels), which will introduce risk of not reaching the 2050 targets.			
2. Adaptation and Resilience	No dedicated workplan to develop a city-wide adaptation and resilience plan. The CAT will not have capacity to support EMO or other departments on climate adaptation and resilience related initiatives.			
3. Community Support and Buildings Emissions	No dedicated workplan to accelerate program development in response to Extreme Heat in vulnerable buildings. The CAT will at a maximum initiate a single task as part of the program development with anticipated program delivery to launch after 2026.			
4. Clean Transportation Transition	No dedicated workplan for transportation emissions. The CAT will at a maximum initiate a single project from the transportation action in 2024.			



Electric Utility Enhancements – 100% Funding (Targeting \$210K)

The Electrical resource plan was outlined in the November 20th memo. These include:

- Meter Supervisor (reclassification/promotion): \$25K plus benefits
- Metering Technician (1 FTE): \$85K plus benefits
- Business Systems Analyst (1 FTE): \$100K plus benefits

All 3 enhancements are a result of the ongoing Advanced Meter Infrastructure project. The positions would be funded through the capital project for the duration of the project and would be reassessed once the project is complete. These positions are needed in order to ensure the timely delivery of the project as well as meet the increasing demands resulting from the project's complexity and scale. Of note, in advance of the AMI project, the Utility brought the metering services scope in-house after having subcontracted this scope of work for over 10 years. The 2nd meter technician is needed to meet the daily operational needs helping ensure we are able to deliver service in a timely manner.

Impacts if Funding is Reduced:

Not funding these positions will likely result in a significant delay in the AMI project schedule as well as an increase to the overall project budget resulting from the prolonged schedule and would also result in delayed core service delivery.



Appendix -

November 20, 2023 Memo: 2024 Budget – Integrating Climate Action and the Electrical Utility to Accelerate Implementation

Memorandum

To: Lisa Spitale, Date: November 20, 2023

Chief Administrative Officer

From: Richard Fong, File: 2400318

Director of HR and IT

Rod Carle

General Manager, Electrical Utility

Jackie Teed Director, CAPD

Subject: 2024 Budget – Integrating Climate Action and the Electrical Utility to Accelerate Implementation

PURPOSE

The purpose of this memo is to provide Council with the proposal to restructure the Electrical Department by integrating the Climate Action Team with it and renaming the department the Energy and Climate Action Department. This department will have the mandate to drive innovation and implementation of the Climate and Environment Lens in the Strategic Plan.

OVERVIEW AND CONTEXT

The new Council Strategic Priorities Plan is an opportunity to evaluate the City's organizational structure to ensure appropriate alignment between departments, divisions, and functions in order to effectively and efficiently advance the strategic priorities and enhance service delivery. In particular, the City has experienced significant growth over the past decade as many work functions and priorities have been established or expanded. As such, the organizational and reporting structures need to be updated and modernized in order to reflect, and effectively respond to, the evolving and emerging needs, interests, and expectations of our growing City.



This report outlines the establishment of an Energy and Climate Action Department to achieve enhanced teamwork, integration, collaboration, and succession planning within the department, resulting in improved effectiveness, greater efficiency, improved decision analysis, and more resilient outcomes. This new Energy and Climate Action Department represents a modernization of the organizational structure, and provides an opportunity to be more innovative in the City's Electric Utility, and more effective in our implementation of the City's climate action plans in response to the City's 2019 Climate Emergency Declaration.

Electrical Utility - Current State

The City's Electrical Utility is currently facing the challenge of meeting the electrical needs of customers in a landscape that includes low carbon energy mandates (i.e. electric mobility, electric heating systems, etc.), a housing crisis with new mandated housing targets at the municipal level, extreme heat impacting habitability in existing buildings resulting in increased use of air conditioners, and building for climate resiliency and adaption, all while advocating for sustainable clean energy and conservation. Therefore, it is imperative that electrical infrastructure investments keep pace with increasing needs related to housing, population growth, and the concurrent drives to reduce consumption and shift to electrification of housing and transportation.

The current focus of the Electrical Utility is the efficient and reliable operation of the City's electrical distribution network. In order to effectively respond to the emergent needs of the City, the mandate of the Electrical Utility needs to be expanded by incorporating innovation, long range planning, and energy business expertise to its core functions. This will be achieved with the creation of the Energy and Climate Action Department

The next cycle of strategic planning and implementation will form the foundation of the Electric Utility for the foreseeable future. The establishment of a restructured department is an important first step in that process and will guide all future actions.

<u>Climate Action Team – Current State</u>

The Climate Action Team (CAT) formed in early 2020 and is currently composed of a manager and two staff. The function of the CAT is to:

- Develop and maintain climate strategies
- Complete <u>regulatory reports</u> related to carbon pollution
- Identify and develop climate action related policies and tools
- Report on progress on existing strategies, and
- Design and deliver <u>community programs</u> centered on energy and carbon pollution reduction through platforms such as Energy Save New West



Having completed the development of the Corporate Energy & Emissions Reduction Strategy (September 2020), eMobility Strategy (June 2022), and Community Energy and Emissions Plan 2050 (October 2022), the CAT is focused on the implementation actions identified in these strategies to ensure the City can reach the GHG emission reduction targets set out by the City's Climate Emergency Declaration (2019). Of the 124 implementation actions identified through the City's climate action strategies, 66 will be led by, or require significant contributions from, the CAT. The implementation actions extend far beyond low-carbon energy, as the CAT plays a significant role in implementing actions within each of the City's <u>Seven Bold Steps</u>. It should be noted that the existing workplan and the role of the CAT will not be compromised by this departmental restructure, rather the restructure will enhance the work that the CAT has been, and will continue, to do.

As identified in the August 28, 2023, and September 11, 2023 Council reports on climate action workplan acceleration and resulting financial implications, respectively, both the size and structure of the CAT requires evaluation in order to achieve the City's emission reduction targets. Aligning the CAT with the Electric Utility, by bringing the teams together into a new department, will enhance the structural capabilities to execute on some key aspects of the climate action accelerated workplan.

Based on the climate action strategies, energy conservation and a transition to clean energy, such as grid connected electricity, is an integral component in achieving the City's GHG emission reduction targets. Working in close collaboration with the Electric Utility has always been a priority for the CAT in the delivery of the comprehensive climate action workplan. Coming together with the Electric Utility under the Energy and Climate Action Department, will strengthen the ability for the CAT to deliver innovative community programming centered around electrification, energy conservation and demand management through Energy Save New West, while continuing to advance all other implementation actions the team is responsible for leading in areas such as buildings (new and existing), eMobility, corporate reporting, policy development, education and awareness and climate adaptation and resilience.

Additionally the CAT will continue to collaborate with other departments to activate climate action implementation in their respective areas of responsibility. Enhancement requests to advance the Bold Steps are included within individual department memos to support achieving goals and targets through departmental workplans, establishing their leadership role within the Bold Steps by 2030. For example, Bold Step #6 and #7 by Parks & Recreation, Bold Step #1, #2 and #7 by Engineering Services and Bold Step #3 by CAPD.

ALIGNMENT WITH THE STRATEGIC PLAN

The Energy and Climate Action Department would be established by bringing together the Climate Action Team from CAPD and the existing Electrical Utility. This will enable the department to streamline the strategic alignment and integration of climate action



plan implementation with the delivery of clean and reliable energy into one cohesive and collaborative department. This reimagined and restructured department would expand the current Electrical Utility to include strategic policy direction, fiscal decision making, energy business expertise to augment the department's mandate, climate action implementation, climate adaptation and resilience planning, as well as address the growing energy needs of the City.

Expanding on the current Electric Utility mandate, the new Energy and Climate Action Department would achieve the following desired outcomes:

- Enhance strategic decision making to leverage the opportunities of the City's Electrical Utility mandate and the trend towards electrification of buildings and transportation driven by Climate Action.
- Develop a policy framework to advance climate initiatives and optimize low carbon fuel credit generation and other carbon offset opportunities.
- Achieve direct alignment with the public policy goals of Council.
- Advance the Asset Management and Infrastructure Strategic Priority.
- Further the Utility's resilience through diversification within the renewable energy sector and strive towards completion of the City's District Energy project.

The new objectives of the Energy and Climate Action Department would include the following:

- 1. Expand the professional management structure to become the corporate strategic partner on energy and climate within SMT.
- 2. Expand the department by adding strategic policy development and long range planning to the mandate.
- 3. Expand the department by adding climate change adaptation and resilience to the mandate.
- 4. Expand the department by adding energy business strategy development to the mandate.
- 5. Provide energy and climate policy and business strategy to Council.
- 6. Provide leadership expertise to the Electrical Utility Commission.

FINANCIAL IMPLICATIONS

The new Energy and Climate Action Department is made up of existing positions. No existing positions will be eliminated as a result of bringing together these two existing teams under one new departmental structure.

Where applicable, existing management positions will be reclassified and retitled to reflect the scope and mandate of the Energy and Climate Action Department. No new funding is required.



The Electrical Utility General Manager position will be reclassified and retitled to Director of Energy and Climate Action. There will be two Divisions in the Department, both led by Deputies: Energy Utility; and Energy Innovation and Climate Action. The divisions will be structured as follows:

- Energy Utility Division: (1) Energy Utility Operations (including Renewable/District Energy), Electrical Services and Engineering Design & Planning; (2) BridgeNet Dark Fiber Utility; and (3) Energy Utility Policy and Business Systems.
- Energy Innovation and Climate Action Division: (1) Energy and Business Innovation; and (2) Corporate and Community Climate Action.

Within the Energy Utility division, there are no new additional staffing requirements identified at this time as a result of the merger. There are operational enhancements that have previously been identified which will be included in the 2024 Budget Utilities process. These include:

- Metering Technician (1 FTE): \$85K plus benefits
- Business Systems Analyst (1 FTE): \$100K plus benefits

Also, work continues to fill existing vacancies which are needed to deliver on the workplans moving forward.

For the Energy Innovation and Climate Action Division, the staffing needs will be addressed by advancing the accelerated Climate Action workplan. At the request of Council, staffing and resource needs were identified in a report to Council on September 11, 2023 to support delivery of the accelerated 4 year workplan though a 2-year resourcing approach.

Staffing needs identified for 2024 and 2025 are being brought forward as part of the 2024 and 2025 Budget process. The Climate Action Reserve is the identified funding source for the CAT operating cost.

The proposed staffing needs are presented in the following table:

Table 1: Target Driven Climate Action Workplan - Staffing Needs Table (from September 11, 2023 report to Council, with minor wording updates to align with the new proposed departmental structure and mandate)



Sector	Existing Staff 2023	Proposed New Staff 2024	Proposed New Staff 2025
Cross-Sectoral	Deputy of Energy Innovation and Climate Action 1 existing FTE	Senior Climate Policy Planner 1 new FTE; (\$120K plus benefits)	Education and Awareness Coordinator 1 new FTE; (\$97K plus benefits)
Regulatory Reporting	Energy and Emissions Specialist 1 existing FTE		
Building Emissions (existing & new construction)	Energy and Emissions Specialist 1 existing FTE	Community Climate Program Coordinator 1 new FTE; (\$97K plus benefits)	
Adaptation and Resilience		Climate Change Adaptation Specialist 1 FTE; (\$97K plus benefits)	Energy Utility Innovation Planner 1 FTE; (\$120K plus benefits)
EV Charging		EV Program Manager 1 new FTE; (\$120K plus benefits)	
Community Transportation Emissions			1 RFT eMobility Specialist 1 new FTE; (\$97K plus benefits)
New FTE and salary costs	0 New FTE	4 New FTE - \$434,000 plus benefits	3 New FTE - \$314,000 plus benefits

The proposed staffing plan involves the establishment of permanent positions over a multi-year period. The estimated salary costs are \$434,000 in 2024, and \$314,000 in 2025 (based on the 2021 collective agreement). The total salary cost associated with all the positions referenced above, for the 2 year period, is approximately \$748,000. It is important to recognize that these permanent positions represent ongoing costs and would continue beyond the specified budget years.