

Energy & Sustainability Framework Update

Date	September 23, 2020
To	Priorities and Planning Committee
From	Citizen Experience, Innovation & Performance
Service Area	Technology & Digital Innovation
Item No.	PPC20-14

RECOMMENDATION

The Priorities and Planning Committee recommends City Council:

1. Direct the Administration to develop a community-wide Energy & Sustainability Framework and Action Plan that includes:
 - a. Community and municipal wide action plans, with timelines and targets to achieve a renewable Regina by 2050.
 - b. Actions focused on land use and transportation planning, development and building permit guidelines, energy efficient building design, transportation demand management, waste management, energy conservation, regulatory tools, financial tools, advocacy for legislative change, as well as public education and awareness.
 - c. Community engagement through the development and implementation.
 - d. A regular and ongoing progress reporting framework that includes community reporting at regular intervals.
 - e. A preliminary estimate of the financial and economic impacts associated with implementing an action plan.
2. Remove items MN18-11, MN18-4 and MN18-1 from the List of Outstanding Items of City Council.
3. Approve these recommendations at its meeting on December 16, 2020.

ISSUE

At the June 17, 2020 Priorities and Planning Committee meeting, Administration was directed to return to the Priorities and Planning Committee meeting on September 23, 2020 with the following:

1. A plan for a forum to be held in Q1 of 2021 with space for youth and local community engagement.
2. Report back to Council by September 30, 2020 on the implementation of Motion 18-1 (Autonomous Vehicles) and Motion 18-4 (Solar Panels).
3. Report on engagement with SaskPower or a plan to move forward without them - what generation potential does the City have through wind solar and other renewable sources?
4. Report on engagement with other cities on best practices from their experience.
5. A project plan to build an Energy and Sustainability Framework that includes the following elements:
 - Details on how City and municipal wide action plans, with specific and aggressive timelines, could forward the commitment of a transition towards a 100% community-wide renewable Regina by 2050.
 - Details on how building codes, new subdivision design and green building design like LEED standards could be built into the Sustainability Framework.
 - Details on how infrastructure including transportation infrastructure, public transit and other public vehicles, waste management, the new water treatment plant and park and urban forest could be built into the Sustainability Framework.
 - Details on how platforms for community and resident engagement including engagement by marginalized communities, Indigenous communities, advocacy and neighbourhood planning committees can be built into the Sustainability Framework.
 - Details on how platforms for effective monitoring of the City's environmental and environmental programs could be included in the Sustainability Framework.
 - Other specifics that this debate has suggested for inclusion in the Sustainability Framework, including a definition of sustainability and a review of equity and collaborative partnerships.
 - A preliminary estimate of financial and other implications associated with this initiative.

IMPACTS

Energy & Sustainability Framework and *Design Regina: The Official Community Plan*

The OCP goals and policies were developed through extensive community consultation and are focused on building a sustainable community. A sustainable community is the product of a holistic approach that focuses on the community's economic, social, and environmental health collectively. To be successful and achieve an enhanced quality of life, communities are taking approaches that integrate policies and action plans in all three spheres.

Our OCP includes environmental policies related to sustainable development and climate change mitigation. The OCP guides the City to work with stakeholders to build “*a resilient city and minimize Regina’s contributions to climate change.*” The actions identified in the OCP to achieve this policy goal are:

1. Promote more energy-efficient new construction.
2. Improve Regina’s air quality, including reduction of corporate and community greenhouse gas (GHG) emissions.
3. Monitor changes in climate and its impact on the city and develop mitigation strategies.
4. Encourage green building design.
5. Encourage the reduction of greenhouse gas emissions through the use of alternative energy sources.

The policy goal and the actions outlined above are the starting point for building Regina’s Energy & Sustainability Framework and Action Plan. Work to advance environmental sustainability overlaps with policy goals and action plans focused on economic and social development. Policies and actions within each sphere are integrated.

In addition to building an Energy & Sustainability Framework, Economic Development Regina is in the process of finalizing a 10-year growth strategy for the community. Reconciliation Regina has also just launched a Community Action Plan and the City is in the process of developing a Community Health and Well-being Strategy. To achieve a sustainable community, this work requires community commitment and coordination.

International, National, Provincial and Local Action

There are many international, national, provincial and local energy and climate change initiatives underway that seek to transition the world to a low-carbon economy by 2050. These initiatives have cascaded from the *2015 Paris Agreement* and the *2016 Pan Canadian Framework on Clean Growth and Climate Change* and work completed by the International Panel on Climate Change (IPCC).

Across Canada, all levels of government have begun creating plans for reducing GHG emissions and reliance on non-renewable fossil fuels. In 2018, the Government of Saskatchewan proclaimed *The Management & Reduction of Greenhouse Gases Act* with the associated regulations. The first annual report on climate resilience was published in April 2019. To date, the focus in Saskatchewan has been primarily on industry and public utilities.

City Authority for Environmental Regulation in Saskatchewan

Under *The Cities Act*, cities have a number of stated purposes that include: (a) providing good government; (b) developing and maintaining a safe and viable community; (c) fostering, economic, social and environmental well-being, and (d) providing wise stewardship of public assets.

Within these stated purposes, cities have the jurisdiction to enact bylaws for a number of purposes including: (a) the peace, order and good government of the city; (b) the safety, health and welfare of people and the protection of people and property; (c) transport and transportation systems, including carriers of people and goods; (d) business, business

activities and those engaged in business; and (e) public utilities.

The Environmental Management and Protection Act, 2010 is the legislative foundation for regulation of the environment in Saskatchewan. The Provincial Act covers a range of topics and includes specific regulatory codes for different activities and industries. In many cases it sets minimum regulatory standards that may be expanded by city bylaw.

Public Utilities in Saskatchewan

Cities have the authority to establish and manage public utilities. Public utilities are defined in *The Cities Act* as “a system or works used to provide for public consumption, benefit, convenience or use”. The definition lists a number of possible utilities including both electricity and natural gas. A city may provide for public utility service either directly, through a controlled corporation or by contract with an external party. Any contract with an external service provider cannot exceed 30 years.

The ability to create a public utility for electricity or natural gas is subject to other provincial requirements. Section 38 of *The Power Corporation Act* (“the Act”) gives SaskPower the exclusive right to supply, transmit, distribute and sell electrical energy within the province of Saskatchewan. The Act does grant SaskPower the authority to waive these rights subject to any conditions SaskPower considers advisable.

OTHER OPTIONS

Administration can continue to focus initial efforts on building a Framework and Action Plan for municipal operations while taking a leadership role in community education around energy, sustainability and renewability.

Working together with stakeholders and other municipalities, Administration has developed an understanding of our climate and environmental characteristics, policies of other levels of government and our municipal energy profile. The information gathered for the Energy & Sustainability Conference is continuing to be used to inform action planning efforts. A focus on municipal operations is seen as an important first step in a longer-term plan to achieving the goal of renewability by 2050 for the broad community. Appendix A includes the City’s municipal energy and emissions inventory for 2019. With this in place, Administration is positioned to set targets for our operations and make data driven policy and investment recommendations for specific actions.

This option includes community engagement following the municipal election and the delivery of a Framework and Action Plan in the second quarter of 2021. This option would continue to be completed with internal resources and include actions that are policy based and short-term (1 to 5 years) in nature.

This option is not recommended as it does not align with the direction provided by Priorities & Planning Committee on June 17, 2020.

COMMUNICATIONS

Administration is continuing to meet with individuals, community organizations, stakeholders and other municipalities to discuss this work and partnership opportunities. The Clerk’s

Office provided copies of this report and notified interested parties of the date for Committee consideration of this report.

DISCUSSION

The information requested by Priorities and Planning Committee on June 17, 2020 is provided in the sections that follow.

A plan for a forum to be held in Q1 of 2021 with space for youth and local community engagement

As requested through Council's motion, community engagement will include a forum in Q1 2021 that includes space for youth and the local community. The engagement will be informed by a reference group that will include representation from groups already engaged through a number of community initiatives including but not limited to the Enviro Collective Regina, Regina Public Interest Research Group, Mother Earth Justice Advocates, Regina Blue Dot and Charged Up/David Suzuki Foundation. This group will be broadened to include the Regina Chamber of Commerce, SaskPower, SaskEnergy, Government of Saskatchewan, Economic Development Regina, the conventional energy industry, and the Regina & Region Home Builders' Association.

Community engagement is a vital component of the majority of framework and action plans in communities across Canada. The Administration is committed to ensuring the Framework builds on the work being done in the community and continues to be informed by the community at large and impacted stakeholders. This commitment extends beyond hosting a forum in Q1 of 2021.

Appendix B includes Administration's recommended objectives for community engagement and outlines a four-phased approach which includes the creation of a community advisory committee. Administration will consult with the community advisory committee throughout the Framework and Action Plan's development. Membership will include residents from the community, non-profit organizations, business and industry. The committee will be established following the municipal election and provide a voice for obtaining feedback on analysis, alternatives and decisions - particularly during action planning and when evaluating alternatives. This engagement would involve a commitment that members are kept informed and provided feedback on how their input influenced decisions made in the Framework and Action Plan.

Report back to Council by September 30, 2020 on the implementation of Motion 18-1 (Autonomous Vehicles) and Motion 18-4 (Solar Panels)

These motions were part of best practice research and content planned for the Energy and Sustainability Conference. A report back on each item is found in Appendix C and D, respectively.

Report on engagement with SaskPower or a plan to move forward without them - what generation potential does the City have through wind, solar and other renewable sources?

Administration is working with SaskPower and continues discussions about opportunities for partnerships and a community-wide Energy & Sustainability Framework and Action Plan. A

more detailed explanation of how the City of Regina is working with SaskPower can be found in Appendix E.

Report on engagement with other cities on best practice from their experience

Most local or municipal frameworks and action plans across Canada are based on the approach of *Reduce, Improve, Switch*. According to Ontario, “the logic of the approach is that by avoiding energy consumption, retrofit requirements (improve) and the need to generate renewable energy (switch) are both reduced. If switch occurred first, the capacity of the renewable energy installed would be greater, implying a higher cost; and once improve and reduce had been implemented, renewable energy capacity would be greater than demand”.

Each framework and plan includes inventories, targets, actions, scenarios, implementation plans and a process for evaluating and monitoring. Actions plans are built based on detailed scenario planning. The scenario planning seeks to identify the actions with the greatest savings per tonne of emissions reduced for both municipal operations and the community at-large, as well as how to best achieve renewability.

Building frameworks and action plans require modelling that uses a consistent methodology that considers energy profiles, emissions reductions, introduction of renewable energy sources and financial analysis of specific actions. This analysis is used to guide municipalities when making recommendations on strategic investments, as well as to inform decisions within the community at large. Appendix F provides a summary of Frameworks from other Canadian cities.

In planning the agenda for the Energy & Sustainability Conference, the Administration was in contact with many organizations and municipalities. Based on this work, Administration has developed relationships with these groups and is exploring innovative solutions and taking action to address challenges we are either currently experiencing or will likely experience in the future. These innovative solutions are informing action planning today and will continue into the future. For example, the City prioritized an Energy Monitoring and Optimization Infrastructure Project in its MEEP funding request as a result of discussions with the energy monitoring vendor community and successes achieved in other municipalities. A summary of those initial conversations can be found in Appendix G.

A project plan to build an Energy & Sustainability Framework

Administration is recommending developing a community-wide Energy & Sustainability Framework and Action Plan for Regina. The project plan to complete this work is based on a widely accepted energy and sustainability planning process outlined in the Government of Ontario’s *Community Energy Planning Guidebook*. The diagram below provides an overview of the planning process which provides a step by step “project plan” for local and municipal governments.

Diagram 1: Energy and Sustainability Planning Process



Based on experience of other municipalities, the Administration expects to deliver a fulsome Framework and Action Plan in December 2021. This requires an investment in 2021 of up to \$250,000 for third party, specialized consulting services, as well as aligning the appropriate internal resources to carry out the scope of this work.

Phase 1: Preparation (current to December 2020)

This phase ensures the City and community are prepared to advance the work and typically takes 10 per cent of the total work effort. The key deliverables include developing a project charter and establishing a governance structure. In addition, a “situational analysis” is completed to describe the current planning. Administration has completed 80 per cent of the “situational analysis”, including:

- Climate and ecosystem
- Demographics
- Policies by other levels of government
- Policies and strategies of the local government
- Built environment characteristics
- Transportation systems
- Other relevant factors

Phase 2: Inventory (current to March 2021)

This phase involves creating a community-wide energy and emissions inventory and takes 15 per cent of the total work effort. The inventory is a snapshot of energy use and emissions production, and their driving factors. The inventory provides a baseline that informs the rest of the framework: it is used to inform GHG reduction targets and to measure progress once implementation begins.

In other communities that has been completed by specialized consultants who identify and establish partnerships needed to produce the inventory. A University of Regina professor is collaborating with the University of Victoria and a modelling team there. There are three researchers focused on modelling energy futures in Regina, each focusing on one of the following: electricity, transportation, buildings. Administration looks forward to reviewing what their modelling efforts reveal about the cost and feasibility of lowering Regina’s GHG emissions.

Administration has completed an energy and emissions inventory (Appendix A) for municipal operations which is enabling Administration to strategically plan its operations, make decisions and recommend policy and investment options to Council with the renewable goal in mind.

Phase 3: Target Setting (March 2021 to May 2021)

The third phase is establishing energy and emissions reduction targets. Administration plans to engage key stakeholders in the target setting process with the goal of building community and stakeholder commitment to working towards achieving the targets. Setting targets requires 5 per cent of the total work effort and once set, they are explained to the community.

The overarching goal for Regina's Energy & Sustainability Framework is to transition to 100 per cent renewable energy by 2050. Consistent with other local or municipal frameworks, it is recommended that targets to reduce GHG emissions also be included for the short, medium and long-term. This aligns with *Reduce, Improve, Switch* approach and other frameworks across Canada.

Phase 4: Actions and Scenarios (March 2021 to December 2021)

In phase four, scenarios that model policy choices and actions from now until 2050 are built and decisions are made about which scenario to implement. This is the first step in producing a preliminary estimate of the financial and economic impacts associated with becoming a renewable community.

This phase accounts for 30 per cent of the total work. Administration is recommending building advanced scenarios. Advanced scenarios include 1) actions that are identified more broadly in the community through crowdsourcing and focus groups with key stakeholders; 2) a range of land use policies; 3) a number of future scenarios; and 4) financial analysis. It is at this stage where the City and community begin to see how actions work in tandem with the OCP, as well as economic and social development strategies, master plans and the City's long-term financial plan.

Best practice for energy and sustainability planning suggests actions in focused areas achieve benefits that build sustainable communities. These areas include:

- Land use and transportation planning (eg. new subdivision design)
- Energy efficient building strategies for new and existing buildings (eg. green building design)
- Transportation demand management (eg. transit, alternate vehicles)
- Waste management
- Energy conservation
- Renewable energy generation
- Regulatory tools (eg. building codes)
- Development permit guidelines
- Financial tools
- Advocacy for senior government legislation
- Public education and awareness

Phase 5: Implementation (January 2022 to 2050)

This phase accounts for 35 per cent of the total level of effort and initially focuses on implementing short-term actions which could include implementing identified policies, partnerships, bylaws and other opportunities. In addition to evaluating the financial requirements for the short-term actions, other cities have also developed an overall investment strategy in the early years of the plan.

Phase 6: Monitoring and Evaluation (Annually beginning in 2022)

The final step is to ensure there is a formal monitoring and evaluation process in place. The goal of this phase is to ensure we are providing transparent reporting progress and continuously improving the plan. Establishing this process requires 5 per cent of the total level of effort. At a minimum, Administration is recommending a series of annual indicators that are reviewed with annual updates to action plans and reporting to Council and the community.

Course of Action

Administration recommends developing a community-wide Energy & Sustainability Framework and Action Plan that includes:

- a. Community and municipal wide action plans, with timelines and targets to achieve a renewable Regina by 2050.
- b. Actions focused on land use and transportation planning, development and building permit guidelines, energy efficient building design, transportation demand management, waste management, energy conservation, regulatory tools, financial tools, advocacy for legislative change, as well as public education and awareness.
- c. Community engagement through the development and implementation.
- d. A regular and ongoing progress reporting framework that includes community reporting at regular intervals.
- e. A preliminary estimate of the financial and economic impacts associated with implementing an action plan.

This requires securing third party, specialized consulting services to complete the technical analysis and write the plan. Upon Council's approval of the recommended option, Administration will tender a Request for Proposals to secure this third-party support and begin implementing the community engagement plan with an initial milestone being the formation of the community advisory committee by the end of Q4 2020.

DECISION HISTORY

Item MN18-11 Make Regina a Renewable City, considered at the October 29, 2018 meeting of City Council stated:

1. That Administration return to Council by Q4 of 2019 with a proposed framework and implications for the City of Regina to join the growing number of municipalities from around the world and commit to be a 100 per cent renewable city by 2050.
2. That Administration seek external funding sources, such as grants made available through the Federation of Canadian Municipalities, to finance the report and any future costs incurred from this commitment.
3. Said report include at least four possibilities of new and concrete actions for

improving the environmental sustainability of the City of Regina that could be considered by Council for implementation by Q4 of 2023.

In response, at the June 20, 2019 Planning and Priorities Committee meeting, the Administration recommended:

1. That the City of Regina host an Energy and Sustainability Conference in May 2020 to provide input into the development of an Environmental Sustainability Framework, which among other initiatives, would include a roadmap for the organization to move to more renewable energy sources, autonomous vehicles and solar panels.
2. That the return date for item MN18-11, MN18-1 and MN18-4 be updated to Q3 of 2020 on the List of Outstanding Items of City Council.

These recommendations were approved by the Committee and forwarded to the July 29, 2019 City Council meeting where they were approved. The *Reimagine Conference* was scheduled for May 20-21, 2020. The Conference agenda was focused on best practices in energy management and environmental sustainability. The content would have provided input into the development of Regina's Framework/Roadmap.

On March 13, 2020, the Energy and Sustainability Conference Planning Group made the decision to postpone the Conference until Fall 2020. The scope and duration of the unfolding public health emergency was unknown but significant enough that all levels of government-imposed restrictions on most aspects of society including travel and public gatherings.

Respectfully Submitted,



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Technology & Digital Innovation

Respectfully Submitted,



Louise Folk, Executive Director
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Prepared by: Energy & Sustainability Working Group

ATTACHMENTS

Appendix A - Municipal Operations 2019 Energy and Emissions Inventory

Appendix B - Objectives for Community Engagement

Appendix C - Autonomous Vehicles

Appendix D - Solar Panels

Appendix E - Engagement with SaskPower

Appendix F - Summary of Frameworks from other Canadian Cities

Appendix G - Best Practice Research Completed for the Energy and Sustainability Conference