

## **Growth and Development Climate Framework (The Framework)**

---

### **RECOMMENDATION(S):**

That the Priorities and Finance Committee recommend that Council:

1. Adopt the Growth and Development Climate Framework in Attachment 2;
2. Approve a one-time budget increase of \$250,000 in 2021 and \$450,000 in 2022 from the Fiscal Stability Reserve investment income to accomplish project deliverables; and report back to Council through the SPC on Planning and Urban Development on the implementation of the associated projects by Q2 2022; and
3. Direct administration to develop a Carbon Budget and report back to Council as part of the updated Climate Resilience Strategy, by Q2 2022.

### **HIGHLIGHTS**

- This report provides Council with the Growth and Development Climate Framework, inclusive of the resources required to deliver on the actions within it. This report is in response to the Motion Arising approved by Council as part of the New Community Growth Strategy (PFC2020-0963) on 2020 November 02.
- What does this mean to Calgarians Incorporating climate change considerations into city-building decisions will build local resilience to our changing climate, reduce the impact of climate change, and maintain Calgary's reputation as a modern, innovative and future-focused municipality that attracts and retains investment and talent.
- Why does this matter? City-building decisions regarding investment in infrastructure, buildings and community design are long lasting and can have significant effects on our ability to reduce greenhouse gas emissions and to protect against climate change. Additionally, in the City of Calgary's Fall 2020 Citizen Satisfaction and Quality of Life Survey the majority of Calgarians (80 percent) stated they are "concerned about climate change" and 79 per cent agreed with the statement "I think we need to act now to address climate change".
- This report provides Council with a Growth and Development Climate Framework that will provide a guide for how climate considerations are embedded into the planning approvals continuum. (Attachment 2)
- This report provides Council with a summary of the work Administration is undertaking to establish tools, programs and processes to assess the impact of growth and development on climate targets and goals and determine at which point along the Planning Approvals Continuum the work is integrated. (Attachment 3)
- This report also provides Council with an introduction to Carbon Budgeting that could be used as a tool to evaluate growth and development decision-making. (Attachment 4)
- This report also provides information on integrating climate considerations into the new community growth business case evaluation process. (Attachment 5)
- Strategic Alignment to Council's Citizen Priorities: A healthy and green city
- Background and Previous Council Direction is included as Attachment 1.

## Growth and Development Climate Framework (The Framework)

---

### DISCUSSION

#### What role does city-building play in our climate future?

There is a direct causal relationship between the function of urban systems and climate change. Cities are responsible for the bulk of global greenhouse gas emissions (GHG), and therefore reducing urban emissions is necessary in order to meet global climate change commitments.

The Government of Canada identifies land use planning as one of the most effective tools for reducing GHG emissions, increasing resiliency, and achieving the long-term goal of low carbon communities. In November 2020, the federal government introduced the *Canadian Net-Zero Emissions Accountability Act* to set a course for the country to achieve net-zero emissions by 2050. This national target will require all municipalities, including the City of Calgary, to prepare their communities to be net-zero ready by 2030. In response to this, Administration is preparing to update the City's emissions reduction targets through the Climate Resilience Strategy update in 2022.

Current monitoring and tracking data shows, that Calgary's emission reduction target will not be met with current city-building practices. Reliance on non-renewable energy sources will continue to move The City further from its emissions reduction target. The built form - which refers to the function, shape and configuration of buildings - accounts for two thirds of Calgary's impact on emission levels while transportation systems account for a majority of the remaining one third of emissions. Thus, the built form and transportation are the areas in which the greatest climate impact can be made. The intersection of climate, growth and development, presents an opportunity to educate, influence and regulate to ensure reduced emissions and risk, moving us toward a low carbon economy.

#### The Growth and Development Climate Framework (Framework)

The Growth and Development Climate Framework, illustrated in Attachment 2, is a made-in-Calgary approach that aims to integrate climate considerations throughout the planning approvals continuum – from strategic planning, through to the construction stage. The intent is to provide an approach that links the aspects of the city-building process to provide for a coordinated and meaningful approach to growth and development that has reduced greenhouse gas emissions (mitigation) and increased resiliency to the impacts of severe weather and longer-term climate conditions (adaptation). The Framework is based on the planning approvals continuum. Through the development and application of climate-based programs, processes and tools (actions) it provides for a systems-approach that builds upon the City's culture of collaboration and teamwork. Attachment 3 outlines the numerous actions that collectively influence the full spectrum of growth and development. Additional funding and resources as outlined in this report, will be required to develop and fast track some of the actions.

Recognizing that the built form is the area of greatest impact, the Framework focuses on tools that can inform land use planning, building construction and operations. Aligned with this approach, climate-related considerations will be incorporated within the New Community Growth Strategy (NCGS) business case evaluation process. Attachment 5 provides details on this specific action. As an initial measure to address emissions and climate risks, proponents of

## **Growth and Development Climate Framework (The Framework)**

development applications are currently encouraged to complete a climate self-assessment using a Climate Resilience Inventory form that was introduced in 2020.

Through the Framework, informed decisions will encourage the responsible growth of our city that is future-focussed, protects both private and public investments in infrastructure and buildings, is responsive to the increasing availability of federal funding dollars, encourages innovation, and positions the city to remain competitive in the global market. Implementation of the Framework will be based on a stepped process towards a target and outcome, focusing first on education and awareness, then using incentives prior to moving towards regulation that will provide for stability and equity.

### **Carbon Budget:**

Consideration will be given to include a carbon budget as part of the Framework. A carbon budget is a permitted maximum limit of carbon dioxide emissions associated with remaining below a specific global average temperature by a target date. Carbon budgets are linked closely to net-zero and carbon-neutral targets and are an analytical tool for determining a pathway to reaching a carbon neutral future. Often carbon budgets are used as a communication tool for demonstrating the magnitude of change that needs to occur. Further information on carbon budgets and the Calgary context can be found in Attachment 4.

## **STAKEHOLDER ENGAGEMENT AND COMMUNICATION (EXTERNAL)**

- Public Engagement was undertaken
- Public Communication or Engagement was not required
- Public/Stakeholders were informed
- Stakeholder or customer dialogue/relations were undertaken

Successful delivery and application of the climate programs, processes and tools will require collaboration between Administration and numerous stakeholders. The Climate Team has engaged with BILD -Calgary Region since 2019 November on the development of the Integrated City Energy Map, and since late 2020 on the Community Climate Risk Index project.

Community Planning continues to engage with BILD - Calgary Region on other support tools such as the Climate Resilience Inventory forms. Calgary Growth Strategies undertook earlier discussion with industry stakeholders on the process to incorporate increased climate considerations into the New Community Growth Strategy business case evaluation process. Feedback received from stakeholders was incorporated into Attachment 5.

Further engagement will occur through 2021 on the testing of some of the tools and later their integration into growth and development decision-making processes, including the update to the New Community Growth Strategy business case evaluation process.

## **IMPLICATIONS**

### **Social**

A framework for assessing the impacts of growth and development decisions on approved climate targets and goals should reflect the principle of equity. The detrimental impacts of climate change are socially inequitable at both the global and local scale, as the most

## **Growth and Development Climate Framework (The Framework)**

vulnerable communities often lack the resources to mitigate and/or adapt to climate change. Climate change also brings serious concerns around intergenerational equity.

### **Environmental**

Climate change also impacts the natural environment. The latest report of the Intergovernmental Panel on Climate Change (IPCC) warns that global warming is becoming irreversible and that the societal impacts of climate change are catastrophic. While it is still possible to limit global warming to the critical threshold of a 1.5C increase, meaningful climate action is urgently needed. Informed and holistic long-range decision making must include an understanding of how city-building activities impact Calgary's GHG reduction target, as well as reduce climate-related risks.

### **Economic**

Applying a climate lens to growth and development related decisions will help transition the development industry and The City to a low carbon economy, while reducing the detrimental and costly impacts to Calgary's socio-economic system from acute and chronic climate-related events. Investment in carbon reductions and energy management creates jobs in the trades, energy and technology sectors. Preparing the Calgary market for this investment opportunity is critical to attract jobs and associated economic development. An example is the Federal Government's announcement of several billion dollars in post-Covid recovery funds – a large portion going to programs such as building retrofits which is a key feature in GHG reductions.

### **Service and Financial Implications**

New operating funding request

\$700,000 (\$250,000 in 2021 and \$450,000 in 2022)

See Attachment 6 for details on budget request.

### **RISK**

The risks of not integrating climate considerations into growth and development decisions, including the New Community Growth Strategy business case evaluation process are listed below:

- Reputational risk to The City for not being recognized as a modern, innovative and responsible city. This could impact future interest in investment and attracting new residents and businesses.
- Increased social and economic impacts from acute and chronic climate-related events.
- Increased risk to health and livelihoods of future generations both locally and globally with rising emissions levels.

These risks are mitigated through the development and implementation of the Framework.

Risks of integrating climate considerations into growth and development decisions:

- Stakeholders may not support additional costs and requirements in the land development process.
- Actions may be challenging to implement within the current economic context.

These risks are mitigated through budgeting, education, outreach and engagement.

### **ATTACHMENT(S)**

1. Background and Previous Council Direction

**Planning & Development Report to  
Priorities and Finance Committee**

**ISC: UNRESTRICTED  
PFC2021-0121  
Page 5 of 5**

**Growth and Development Climate Framework (The Framework)**

2. Growth and Development Climate Framework
3. Growth and Development Climate Framework – Actions
4. Carbon Budget Introduction
5. Exploring Climate Considerations in the New Community Growth Strategy Business Case Evaluation Process
6. Budget Request

Department Circulation

General Manager	Department	Approve/Consult/Inform
Michael Thompson	Greenline / Utilities and Environmental Protection	Approve
Stuart Dalglish	Planning & Development	Approve