

# What We Heard Report

## Climate Resilience Planning and Development Action Plan

**PART 2 OF 2**

August 2024

| **SHARE** YOUR VOICE  
**SHAPE** OUR CITY

**Edmonton**

# Table of Contents

<b>Table of Contents</b>	<b>2</b>
<b>Land Acknowledgement</b>	<b>3</b>
<b>Executive Summary</b>	<b>4</b>
<b>Project Overview</b>	<b>5</b>
Introduction	5
Strategic Direction	5
Objective	6
Developing the Actions	6
Engagement and Next Steps	7
Implementation and Monitoring	7
<b>Engagement Approach</b>	<b>9</b>
Engagement Goals	9
How We Engaged	10
Who We Engaged	12
What We Asked	13
<b>What We Heard</b>	<b>15</b>
Summary	15
Review of Existing Engagement	15
Climate Resilience Perception (Survey and Workshop)	16
Climate Change Attitudes (Survey)	18
Workshop Feedback on Draft Actions	20
Survey Feedback on Draft Actions	27
Feedback from Meet with the Project Team	55
Feedback on Future Engagement Opportunities	55
<b>Next Steps</b>	<b>56</b>
How Input Will Be Used	56
<b>Appendices</b>	<b>57</b>
Appendix A: Additional Detail on Engagement Tactics	57
Appendix B: List of Stakeholder Groups at Workshop	58
Appendix C: Example of Workshop Posters	59
Appendix D: Survey Demographics	60
Appendix E: Review of Existing Engagement	61
Appendix F: Participant Drawing Submission	67

## Land Acknowledgement

The City of Edmonton acknowledges the traditional land on which we reside is in Treaty Six Territory and the homeland of the Métis. We would like to thank the diverse Indigenous Peoples whose ancestors' footsteps have marked this territory for centuries, such as nêhiyaw, Dene, Anishinaabe, Nakota Isga, and Niitsitapi peoples. We also acknowledge this as the Métis' homeland and the home of one of the largest communities of Inuit south of the 60th parallel. It is a welcoming place for all peoples who come from around the world to share Edmonton as a home. Together we call upon all of our collective, honoured traditions and spirits to work in building a great city for today and future generations.

Climate action efforts must recognize the interconnected relationships between all living beings and the environment. The interconnected relationships with Mother Earth and all beings are expressed in the vastness of wahigicobi and wâhkôhtowin, described further in the [City of Edmonton's Indigenous Framework](#):

*"With these relationships comes our shared responsibilities to one another and all beings. ... Kinship is about interconnection and all individuals' responsibilities in a mutual relationship, including honour and respect."*

The City of Edmonton commits to working together on climate action with courage and teamwork for all peoples and all generations.

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<sup>1</sup> City of Edmonton. Indigenous Framework (2021).

## Executive Summary

<b>Project Overview</b>	Edmonton's Climate Resilience Planning and Development Action Plan (the Action Plan) identifies 15 critical actions that can be implemented from 2024 to 2026 to integrate climate adaptation and mitigation into the City's planning and development processes. The Action Plan will be finalized by October 2024.
<b>Engagement Approach</b>	Engagement included an in-person workshop with stakeholders (subject matter experts representing organizations related to real estate and development, utilities and energy; community; and environment and sustainability) and an Engaged Edmonton webpage which hosted an online survey, question and answer, bookings for one-on-one meetings with the project team, and essential materials to understand the draft Action Plan. The engagement opportunities were shared broadly with Edmontonians via social media and newsletters and shared directly with numerous organizations that serve equity-deserving communities.
<b>What We Heard</b>	A review of existing engagement provided insight for this project. Survey data analyzed included perception of climate resilience, views of climate change, feedback on draft actions, and feedback on future engagement. Workshop data analyzed included perception of climate resilience and feedback on draft actions. GBA Plus analysis spotlights are integrated throughout to provide key insights from equity-deserving communities and intersectionalities, when patterns emerged.
<b>Next Steps</b>	The results will be used to further adjust and prioritize the draft actions and inform the development of the Action Plan. The Action Plan is scheduled to be presented to the Urban Planning Committee (UPC) on October 8, 2024 and implemented from 2024 to 2026.

# Project Overview

## Introduction

Edmonton's climate is changing and there is an urgent need for continued action to build resilience. Edmonton is one of the fastest warming regions in the world and the science shows that our climate is expected to change even more significantly into the future. Decisions made now on how we design and build our city, transportation systems, infrastructure and energy networks will set the course for our future climate resilience. In 2022, over half of greenhouse gas emissions in Edmonton were produced by transportation and building sectors.

Climate resilience action means both reducing greenhouse gas (GHG) emissions and preparing our city to adapt to and mitigate the effects of climate change and climate related events. The objective of the Climate Resilience Planning and Development Action Plan (the Action Plan) is to identify and implement strategic, regulatory, and procedural changes to support the integration of energy transition and adaptation action throughout the City's land use planning and development continuum, where feasible and effective.

The Action Plan serves to implement the direction provided by the City's two climate strategies, as it relates to planning and development, and leverages various levers of change to take deliberate action towards planning, designing and building a vibrant and resilient city.

## Strategic Direction

Climate Resilience is one of four strategic goals in [ConnectEdmonton](#) (Edmonton's Strategic Plan). It is also a key component in [The City Plan](#), which sets ambitious targets through five big city moves to direct the shift to a denser, well-connected and climate resilient city. Through the City Plan, the City has committed to achieving a community-wide carbon budget of 135 megatonnes and reaching net-zero per-person greenhouse gas emissions by 2050.

The [Climate Resilient Edmonton: Adaptation Strategy and Action Plan](#) (2018) was developed to help respond to the impacts of climate change and protect the community, infrastructure and services. [Edmonton's Community Energy Transition Strategy](#) (2021) outlines multiple targets and pathways to mitigate climate change, reduce GHG emissions, and achieve a low-carbon future. Both of these strategies identify the significance of planning and development in building a carbon neutral city that is resilient in the face of a changing climate.

## Objective

Edmonton's Climate Resilience Planning and Development Action Plan identifies 15 critical actions that can be implemented from 2024 to 2026 to integrate climate adaptation and mitigation into the City's planning and development processes. The Action Plan aims to integrate climate considerations throughout the planning and development continuum—from strategic planning, through to the construction stage. The intent is to provide a coordinated approach to growth and development that reduces greenhouse gas emissions (mitigation) and increases resiliency to the impacts of changing climate conditions (adaptation).

The planning and development continuum conceptualizes the approvals process for city planning and development, from policy (how land is used and redeveloped) to post-occupancy (how new developments are built and used). It is a dynamic process that includes various stages of development, anywhere from raw land to finished development. Various planning tools, such as statutory plans, policies, standards, guidelines, bylaws, codes, etc., work together to determine where and how development occurs throughout the city. Each stage of the planning and development continuum represents a juncture at which climate resilience strategies should be considered and incorporated into decision-making.



## Developing the Actions

Fifteen priority actions were selected based on a combination of key considerations:

- **City Policies** - Actions align with both of the City's Climate Strategies and policy targets in The City Plan and ConnectEdmonton;
- **Council** - Actions address Council motions and priorities;
- **City Powers** - Actions are within municipal jurisdiction;
- **Best Practices** - Actions align with best practices identified through jurisdictional scans and literature reviews;
- **Professional Expertise** - Actions are informed by input from an internal working group and a senior review team; and

- **Stakeholder feedback** - Actions are informed by external engagement specific to this project and an analysis of the public and stakeholder feedback on The City Plan, Zoning Bylaw Renewal and District Planning projects.

The actions are intended to support the holistic integration of climate resilience throughout the planning and development continuum, including:

- **Neighbourhoods** - New and existing communities (residential, commercial and industrial) that provide homes, amenities, recreation and other services.
- **Site Design and Landscaping** - The location of development and landscaping on individual sites.
- **Buildings** - New construction and building retrofits for residential, commercial, institutional, and industrial development.
- **City Processes** - How administration reviews and processes applications, develops new policies and plans, and collaborates across departments and areas of expertise.

Several of the actions contribute to climate resilience in multiple of these categories across the continuum.

## Engagement and Next Steps

Targeted stakeholder engagement is an important part of the development of the Action Plan. To date, background research has been conducted and process reviews within Administration across the planning and development continuum have served to identify opportunities for change within the city's policies and processes. Input from an internal working group and senior review team helped to identify achievable and effective actions.

Phase 1 of external engagement involved two targeted stakeholder focus groups and one external stakeholder interview focused on the opportunities and challenges for change within the city's planning and development processes. Phase 2 of external engagement is detailed in this report.

Future opportunities for engagement and feedback from residents, stakeholders and subject matter experts will be offered for individual actions during the implementation phase of the project. The Action Plan will be presented to the Urban Planning Committee on October 8, 2024.

## Implementation and Monitoring

Administration will work to implement each of the actions concurrently between 2024 and 2026. Planning and Environment Services within City Administration will be responsible for overseeing,

monitoring and reporting back on the Action Plan, however, various business areas in Administration will be responsible for implementing the action items.

Action scoping will be supported by a legal review and identification of budget implications, metrics, and completion measures. Further research and engagement will be conducted, as needed, to inform the specific components of each action. Administration will bring forward the actions that will require either City Council approval or further direction (e.g. Zoning Bylaw 20001 text amendments). Some actions will be able to proceed without further direction, such as those related to education or exploring options in order to inform the next stage of climate action.

As the actions are implemented, Administration will evaluate and monitor the impact of the actions and identify the need for further action. Future action plans will allow for actions to be adapted and built upon to support the City's emissions reduction targets and resilience goals.



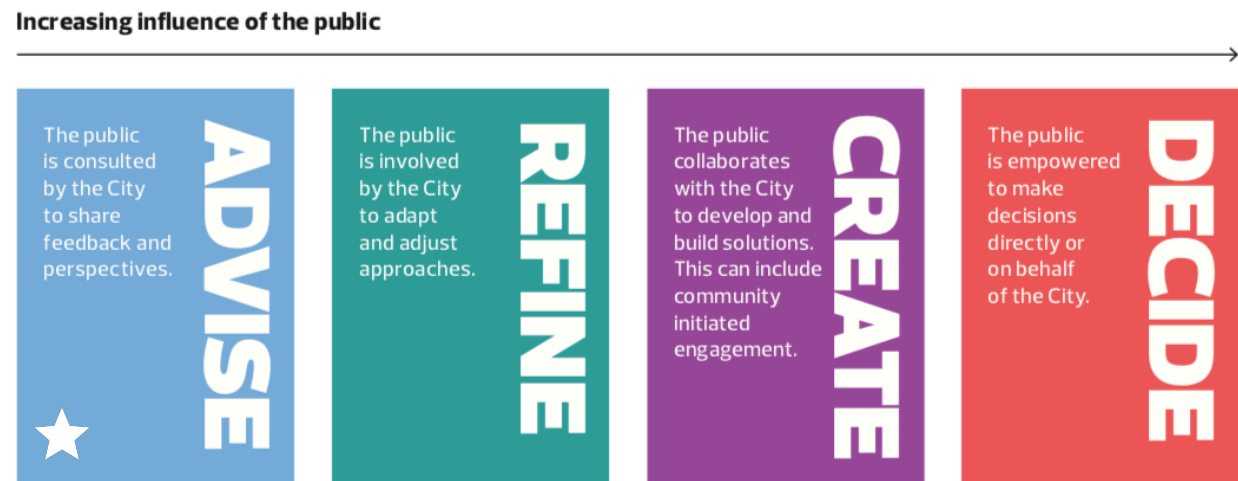
# Engagement Approach

## Engagement Goals

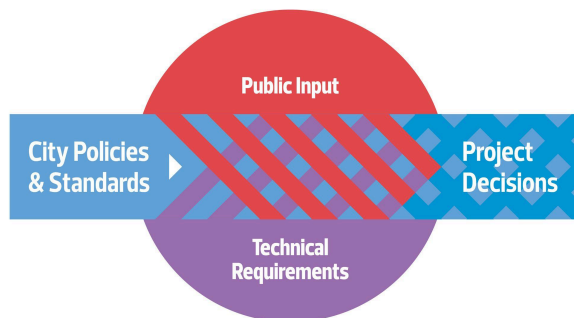
The [Public Engagement Spectrum](#) explains the four roles the public can have when they participate in City of Edmonton public engagement activities. As you move within the spectrum, there is an increasing level of public influence and commitment from the City and the public.

The current phase of the Action Plan project falls within the **Advise** level of the spectrum: *The public is consulted by the City to share feedback and perspectives that are considered for policies, programs, projects, or services.*

The visual below illustrates the City of Edmonton’s Public Engagement Spectrum:















A combination of City policies and programs, safety and technical requirements and public and stakeholder input will provide direction for further developing the Action Plan. This process helps to ensure that the decisions we make are fiscally responsible, align with best practices, and result in the best outcomes for our city.




## How We Engaged

Public Engagement for the draft Action Plan was open for feedback from July 2 to 23, 2024. To ensure that a wide range of Edmontonians could provide feedback, a variety of engagement methods and tools were used. Engagement opportunities were provided both virtually and in-person. Overall, the engagement opportunities demonstrated our commitment to engaging with a diverse range of stakeholders in order to understand their unique perspectives and experiences. Each activity was designed to meet GBA Plus goals by targeting specific stakeholder communities that may be underserved and/or underrepresented in traditional planning processes. Additional detail on the major engagement tactics is provided in Appendix A.

Resources & Tactics	Description	Audience	Format	Statistics
<b>Engagement</b>				
 <b>Review of Existing Engagement</b>	Environmental scan of climate and planning related engagement projects	Internal	Online	N/A
 <b>Engaged Edmonton Site</b>	A hub to access all engagement opportunities and educational materials	Public	Online	1,772 visitors
 <b>Online Survey</b>	Public was invited to fill out the online survey to collect feedback on individual draft actions	Public	Online	435 respondents
 <b>Questions and Comments</b>	Questions and comments from public were collected and responded to either privately or on the Engaged Edmonton platform	Public	Online	6 questions / comments
 <b>Meet with the Project Team</b>	10-20 minute meetings booked by any member of the public or organizations to meet with the project team for in-depth discussions	Public	Online	9 participants
 <b>Stakeholder Workshop</b>	Subject matter experts from development industry, utilities, environmental and community organizations were invited to learn about the draft actions and provide detailed feedback	Stakeholder	In Person	24 attendees

Resources & Tactics	Description	Audience	Format	Statistics
 <b>ETCRC Presentations</b>	The project team presented project updates and requested feedback from the Energy Transition Climate Resilience Committee three times between January and June 2024.	Stakeholder	In Person	15 Committee Members
<b>Communications</b>				
 <b>Emails to Equity-Deserving Communities</b>	Representatives of organizations serving equity-deserving communities and stakeholders were invited to engage directly to ensure their feedback on the actions was included	Stakeholder	Online	22
 <b>Emails to Indigenous Partners</b>	Indigenous community members, Elders, and organization representatives were invited to engage directly to ensure their feedback on the actions was included	Stakeholder	Online	33
 <b>Emails to Businesses and Organizations</b>	Emails sent to Community Leagues, Business Improvement Areas, Environmental Groups, Industry Stakeholders, and Energy Transition Climate Resilience Committee members advertising engagement opportunities	Stakeholder & Public	Online	79
 <b>Newsletters</b>	Engagement opportunities were publicized through the Indigenous Relations Office, Change for Climate News, and Building Edmonton newsletters	Internal & Public	Online	
 <b>Social Media Posts</b>	Social media channels including Instagram, Facebook and X were used to educate and encourage participation.	Public	Online	

Resources & Tactics	Description	Audience	Format	Statistics
 <b>Public Service Announcements</b>	Engagement opportunities were publicized weekly during the engagement period through the City's PSAs	Public	Online	

### Who We Engaged

The City has made a commitment to engage with the people affected by the decisions it makes and seeks diverse opinions, experiences, and information so that a wide spectrum of perspectives are represented in the process. The insights presented in this What We Heard Report represent the viewpoints of people and organizations who decided to participate in public engagement for this phase. Results are not necessarily representative of the perspectives of all Edmontonians.

- **General public:** Engagement opportunities were open to all Edmontonians who live, work, and play anywhere in the city.
- **Indigenous groups:** Groups representing a variety of Indigenous Nations, peoples, and interests were invited directly to provide feedback on the draft Action Plan.
- **Equity-deserving communities:** Groups representing a variety of equity-deserving, hard to reach and typically under engaged groups were invited directly to provide feedback on the draft Action Plan.
- **Industry organizations:** Organizations with subject matter expertise in the planning and development industry were invited to a stakeholder workshop to provide their perspectives.
- **Climate and Environmental organizations:** Organizations with subject matter expertise in climate change and environmental sustainability were invited to a stakeholder workshop to provide their perspectives.

### Stakeholder Workshop Participants

Industry stakeholders in the workshop represented subject matter experts in the planning and development industry. This workshop included a more comprehensive invitation list than earlier stages of the project, including stakeholders who represented the following communities or subject areas:

- Planning and development
- Edmonton residents and businesses
- Climate change expertise
- Utilities

- Natural areas and the environment

Not all stakeholders were able to send a representative, and while over a dozen groups representing equity-deserving communities were contacted, none were able to send a representative.

Equity-deserving communities contacted for the workshop included those serving or representing health, affordability, newcomers, BIPOC (Black, Indigenous, and people of color), and youth. These organizations were also informed of the digital engagement opportunities to share with their communities so they could be better represented in the online survey.

Refer to Appendix B for a full list of stakeholder organizations represented by the workshop attendees.

### Survey Respondents

The survey was available from July 2 to 23, 2024 and received 435 completed responses. Refer to Appendix D for the complete analysis of demographics data from survey respondents.

### Equity-Deserving Groups (GBA Plus Analysis)

While climate change affects us all, it does not impact everyone in the same way and there are some people and neighbourhoods in Edmonton who are more vulnerable to its effects. Systemic discrimination and past policy decisions, including our urban and land use planning policies have contributed to the continuing marginalization of Indigenous people, racialized, and other disproportionately impacted communities (also known as equity-deserving communities). As a result, certain communities are more impacted by issues of poverty, lack of services, and unequal opportunities. These inequities within Edmonton's population result in varying degrees of vulnerability to the impacts of climate change. Equity-deserving communities are disproportionately exposed to climate risks, often with the least resources to prepare adequately for and withstand climate impacts.

To ensure that the actions outlined in this Action Plan represent an equitable approach to climate action, Administration sought feedback from diverse stakeholders who can provide insights from varied lived experiences. Stakeholder selection was informed by GBA Plus to identify equity-deserving communities, disproportionately impacted by climate change.

GBA Plus (Gender-Based Analysis Plus) is an analytical process developed by the Government of Canada to consider intersectionality in the development of initiatives, typically analyzing data in the context of gender, age, disability, education, ethnicity, economic status, geography, language, race, religion, and sexual orientation.

### What We Asked

Although there was a slight difference in questions posed depending on the type of stakeholder and method of engagement, all participants were invited to provide feedback on the draft Action Plan.

What we asked about	Why we asked it	Where we asked it
<b>Perceptions and understanding of climate change and climate resilience</b>	We asked participants to provide their perspectives and understanding about climate change and climate resilience in order to help determine what kind of key messaging and information can be used in future communications and to frame their subsequent feedback on the draft actions.	Workshop and Survey
<b>Understanding of the draft actions and how they may be impacted by them</b>	We asked how participants viewed the draft actions and how they think they might impact them if implemented so that changes could be made both to their wording and content if they were either unclear or having unintended consequences.	Workshop and Survey
<b>Agreement with the draft actions</b>	We asked to what degree respondents agreed with the draft actions to give the project team an overall perspective on how much they aligned with the opinions and experiences of Edmontonians.	Survey
<b>Gaps in the draft actions</b>	We asked if the participants felt there were gaps or missing opportunities in the draft actions to determine whether additions had to be explored.	Workshop and Survey
<b>Future engagement opportunities</b>	We asked what kinds of engagement opportunities respondents would be interested in participating in for future phases of the Action Plan project.	Survey

# What We Heard

## Summary

The What We Heard section covers engagement used to inform the further development of the draft Action Plan. In the How We Engaged section, engagement tactics and reach are described in more detail. In summary, the following analyses were completed:

- Review of existing engagement and research relevant to the Action Plan
- Perception and understanding of climate resilience
- Views of climate change
- Feedback on draft actions
- Considerations for additional actions
- Feedback on future engagement opportunities

The survey analysis includes “GBA Plus Spotlights” highlighting key findings from data analysis of those who self-identified with equity-deserving communities in their responses to demographic questions in the online survey.

## Review of Existing Engagement

As the Action Plan is in its early development, existing engagement and research relevant to the Action Plan was reviewed: in particular, survey research on public perceptions of climate action and engagement with Indigenous peoples on climate topics.

A review of the City of Edmonton’s annual Climate Change and Energy Perception survey provided an understanding of the general public’s attitudes and beliefs of climate action to inform the Action Plan’s engagement.

A review of recent engagement that asked Indigenous peoples about climate and the environment was conducted. This ensured responsible use of knowledge which had already been gathered. It also acknowledges that meaningful Indigenous engagement should be developed as a series of conversations and relationship-building, which was not possible in the early stages of this project’s timeline.

The information is contextualized with the specific methodologies used and comes with a commitment to do action-specific engagement in future phases of the Action Plan’s development. Future phases of engagement should involve Indigenous communities with strategies shaped by this report’s findings on best practices of climate-related Indigenous engagement (such as

relationship-building, reciprocity, and other considerations) and in consultation with the City of Edmonton's Indigenous Relations Office.

The following projects or initiatives were analyzed, with the full analyses presented in Appendix E:

- City of Edmonton's Annual Climate Change and Energy Perception Survey
- City Plan, District Planning, and Zoning Bylaw Renewal Climate Change Engagement
- River Valley Planning Modernization Indigenous Engagement
- Zoning Bylaw Renewal Indigenous Engagement
- District Planning Indigenous Engagement
- Indigenous Youth and Climate Reconciliation
- Policy on Planning Practice and Reconciliation

### Climate Resilience Perception (Survey and Workshop)

In the survey, respondents were asked about their understanding of climate resilience: **Prior to today, have you ever heard of the expression "climate resilience"?** Of the 435 survey respondents, 77% indicated familiarity with the term "climate resilience," 19% had not heard of "climate resilience," and 4% were not sure.

Survey respondents were then provided with the following definition of climate resilience to ensure they had an understanding before moving into question on the draft Action Plan.

*Climate resilience is the ability to adapt to and mitigate the impacts of climate change and climate-related events. Adaptation means making adjustments to social, economic and environmental practices to reduce vulnerabilities to climate change. Mitigation involves using new strategies to reduce greenhouse gas emissions. Together, adaptation and mitigation enable sustainable development and improved well-being in the face of a changing climate. (Survey Text after Question 3)*

In the stakeholder workshop on July 4 (24 industry stakeholder representatives), the project team presented background information on climate change and a definition of climate resilience (the same as the definition provided in the survey). This presentation was followed by a brainstorming activity that asked the following question: **What does climate resilience mean to you?**

The comments from workshop participants covered a range of topics. Below is a summary of comments on climate resilience, with similar comments combined:



Topic	Specific Comments
<b>Strategies and designs that respond to a changing climate</b>	<ul style="list-style-type: none"> <li>● Absorbing climate impacts without catastrophic impacts</li> <li>● Designs with tornado proof measures, flood resistant measures, indoor air filtration for smoke and wildfire events, and resilience to extreme weather</li> <li>● Community can bounce back from extreme weather events</li> <li>● Community is prepared for a changing climate</li> <li>● Shade and cold water available for extreme heat events</li> <li>● Utilities are available in all conditions</li> </ul>
<b>Environment and ecosystem resilience</b>	<ul style="list-style-type: none"> <li>● Incorporating more trees, a larger tree canopy, and deep soil to offset increasing development</li> <li>● Prioritizing and preserving natural areas and green spaces</li> <li>● Acknowledging changing ecosystems</li> </ul>
<b>Renewable energy</b>	<ul style="list-style-type: none"> <li>● Builds that are ready for integrating photovoltaic and electric vehicles</li> <li>● Renewable energy and renewable resources used to fullest potential</li> <li>● Energy security</li> </ul>
<b>Greenhouse gasses (GHG)</b>	<ul style="list-style-type: none"> <li>● Finding ways to reduce GHG emissions</li> <li>● Permanent reduction in GHG emissions</li> </ul>
<b>Costs and benefits</b>	<ul style="list-style-type: none"> <li>● Economically resilient</li> <li>● Recognizing the social, economic, and environmental costs of not achieving climate resilience</li> </ul>
<b>Affordability, accessibility, and community</b>	<ul style="list-style-type: none"> <li>● Affordable, process-efficient climate action with no unintended consequences and with realistic outcomes</li> <li>● Local decision making on climate action</li> <li>● Easily accessible actions</li> <li>● Low utility costs</li> <li>● Transportation shift in favour of more walkability</li> </ul>
<b>Long-term planning</b>	<ul style="list-style-type: none"> <li>● Future-proofing climate action plans</li> <li>● Creating livable and sustainable cities for future generations</li> <li>● Long-term sustainability</li> <li>● Long-horizon thinking</li> </ul>

Topic	Specific Comments
<b>Buildings, infrastructure, and landscaping</b>	<ul style="list-style-type: none"> <li>● Highly-efficient buildings (e.g. airtight to protect occupants from extreme weather)</li> <li>● Protecting critical infrastructure</li> <li>● Sustainable landscaping</li> <li>● Reducing heat island effect</li> <li>● Making better choices in all design aspects</li> <li>● Building healthy, livable, equitable neighbourhoods</li> <li>● Storing 90% of stormwater to maintain healthy vegetation in an urban watershed</li> <li>● Integrating “natural” and “green”, weaving built and natural environments, and incorporating nature-based solutions</li> </ul>

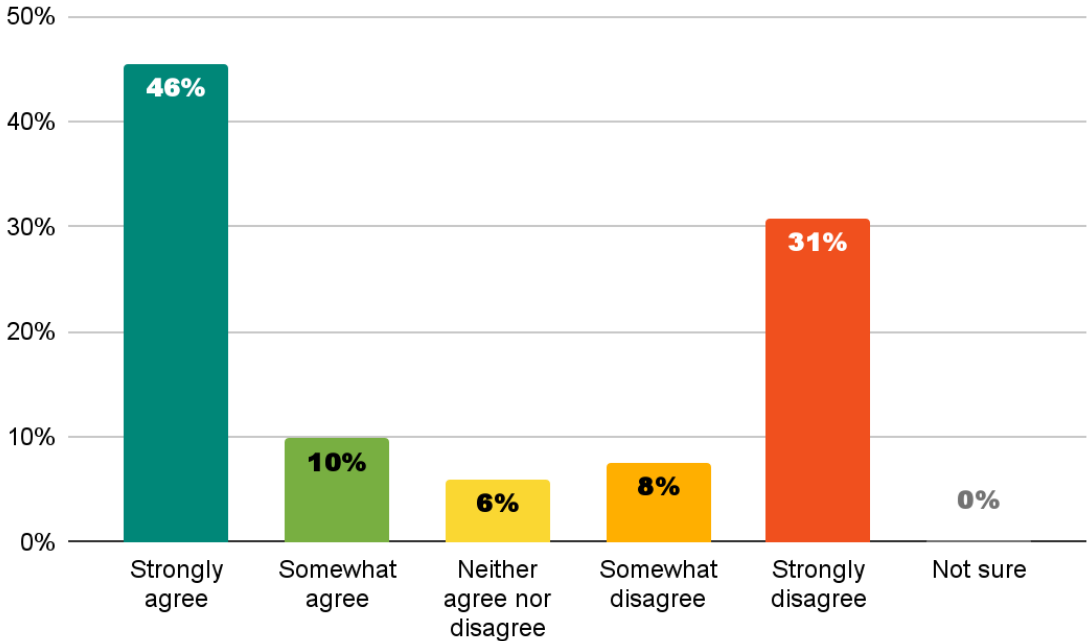
### Climate Change Attitudes (Survey)

The first two survey questions asked for respondents’ attitudes about climate change using multiple-choice options.

Overall, the majority of survey respondents agreed with being concerned about climate change and showed a divided opinion between whether the City should increase or decrease its efforts to address climate change, with few respondents suggesting the City should maintain its efforts.

### Concern about Climate Change

*Thinking about how you personally feel about climate change, how much do you agree or disagree with the following statement: I am concerned about climate change. (Survey Question 1, N=435 responses)*



Just over half (56%) of survey respondents are concerned about climate change, including 46% who strongly agree that they are concerned.

### Annual Climate Change and Energy Perception Survey

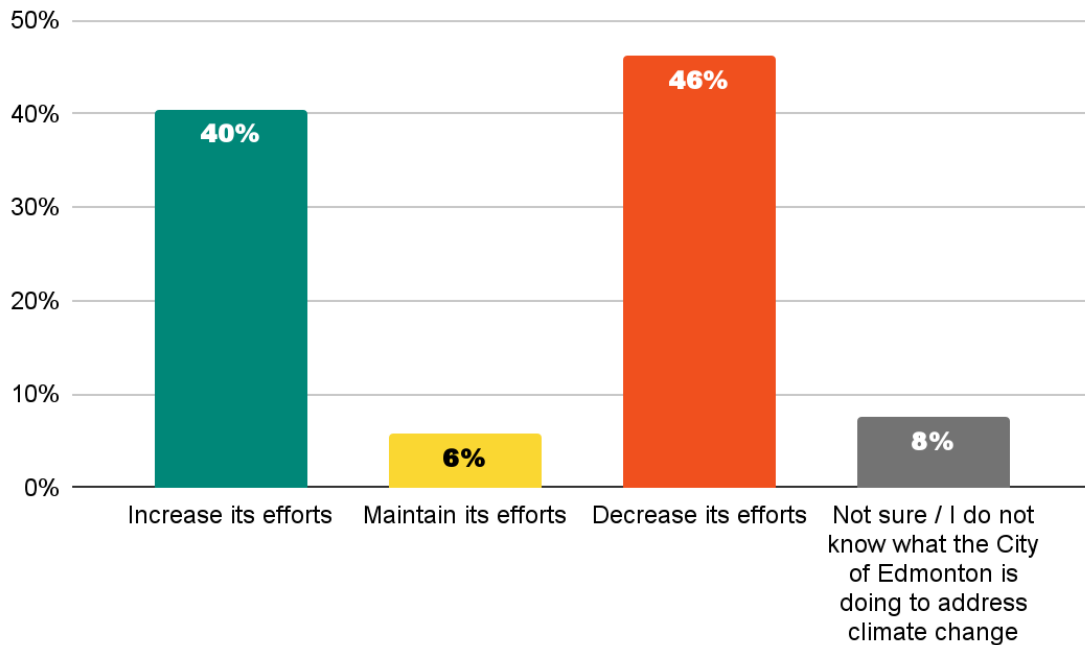
A similar question has been asked of Edmontonians in the City’s annual Climate Change and Energy Perception survey. The 2023 survey found that almost 3 in 4 (74%) Edmontonians were concerned about climate change. More information on the Climate Change and Energy Perception survey can be found in Appendix E.

### GBA Plus Spotlight

Survey respondents with graduate post-secondary education and those who identify as 2SLGBTQIA+ are more likely to indicate they are concerned about climate change. Specifically, 3 in 4 respondents whose highest level of education completed is graduate post secondary (74%) and those who identified as 2SLGBTQIA+ (72%) indicated they are concerned about climate change.

### City of Edmonton’s Climate Change Efforts

**Based on what you may know or have heard about climate change and what the City is doing about it, do you think the City should increase, maintain or decrease its efforts to address climate change?** (Survey Question 2, N=435 responses)



Survey respondents provided mixed responses when asked whether the City should increase, maintain, or decrease its efforts to address climate change. 40% of respondents believe that the City should increase its efforts to address climate change, 6% believe the City should maintain its efforts, and 46% believe that the City should decrease its efforts. 8% of respondents are not sure or do not know what the City is doing to address climate change.

#### Annual Climate Change and Energy Perception Survey

A similar question has been asked of Edmontonians in the City’s annual Climate Change and Energy Perception survey. The 2023 survey found that 43% of Edmontonians believe that the City should increase its efforts to address climate change, 22% believe the City should maintain its efforts, and 13% believe that the City should decrease its efforts. More information on the Climate Change and Energy Perception survey can be found in Appendix E.

## Workshop Feedback on Draft Actions

Participants in the July 4, 2024 stakeholder workshop received the detailed draft Action Plan one week in advance of the workshop date, and the project team presented the draft actions during the workshop, with the goal of developing a strong understanding of the draft actions before asking for detailed feedback. They also received printouts of background documents including the project outline and a glossary of terms. Participants were encouraged to complete the online survey and to book a one-on-one meeting with the project team, both available through the Engaged Edmonton website, if they had additional feedback to provide beyond the workshop.

The feedback below is a summary of comments provided on the poster boards relating to each of the 15 draft actions and group discussions during the workshop.

### Action 1: Streamline the permitting process for climate resilient development

Some participants indicated that this action would be beneficial but that it would need to be kept simple or it will be bypassed, and that this action will need to be tested in the context of the new building code. Others provided specific suggestions of how this could work, such as reviewing what other jurisdictions like Calgary have done in similar initiatives, and considering implementing this through a points-based system that prioritizes permits receiving more climate resilience “points.” There was also support shown for rewards instead of punishments.

Several concerns were raised about potential regulatory hurdles, including costs, processing time, efficiency and productivity, and management of additional City staff.

Some participants suggested incentivizing green roofs and tornado-proof rooms.

#### Questions Raised:

- Can utility partners be involved in permit reviews?
- Will the City be educated on compliance?
- Would applicants have to pay extra for this climate resilient development permit process?
- Will vegetation and trees be considered in this climate resilient development permit process?

### Action 2: Incorporate EV-ready requirements into the Zoning Bylaw

Some participants indicated support for this action as a simple tactic that should be applied quickly to save money. Others suggested specific details (such as examples for amplitude and wattage requirements) to maximize the effectiveness of the EV

#### Questions Raised:

- How is EV-readiness defined?
- Would this apply to more challenging areas of the city,

charging infrastructure for use in residential areas and gas stations.

Other participants noted the financial and energy capacity challenges that this action may pose. For instance, some participants commented that EV-ready requirements will raise costs for commercial, industrial, and residential areas: to offset this, incentives should be provided.

Comments were made that increased power infrastructure may be needed to achieve this Action, and that utility partners should be consulted in the future to meet this.

such as dense infill with minimal parking provisions?

- Will the power grid be able to meet the increased energy needs?
- Will EV technology be sustained during winter months?

### **Action 3: Incorporate solar-ready requirements into the Zoning Bylaw**

Some participants noted that implementing solar-ready requirements in the Zoning Bylaw is a necessary change but were concerned about costs. Other participants discussed the balance between mandating solar-readiness and incentivizing it.

There was an overall sentiment that the costs and design implications need to be thoughtfully considered, relating to subsidies for homeowners, regulations to address the height of adjacent buildings to not cast shade over solar installations, and design and style impacts.

There was a desire to learn how this action would be integrated with other actions like the electrical load required of Action 2 (EV-readiness) and potential shading created by Action 4 (resilient landscaping), as well as if these actions would all be funded and implemented at the same time.

For both Actions 2 and 3, it was noted that utility partners should be engaged.

#### **Questions Raised:**

- How will “right to light” be incorporated into this action with a growing city?
- How will all homes be supported equally for this action?
- Can green roofs be added at the same time to reduce heat and make solar panels more efficient?

### **Action 4: Pursue options for resilient landscaping practices on private property**

Some participants highlighted this action’s potential to promote innovation. Specifically, comments were made about

#### **Questions Raised:**

banning weed herbicides, banning artificial turf, and maintaining trees through the storage of stormwater.

Participants suggested additional related actions:

- Incorporating nature-based solutions in the private and public realm, including requiring greater soil depth and more mature tree canopy across the city
  - Capturing, storing, and reusing stormwater on private and public property
  - Developing performance based landscaping design regulations that provide credits to reduce cost of development permits and speed up the permit process
  - Increasing green infrastructure through low impact development and nature-based solutions in both private and public realm.
- How will this action link across roads, parks and other public lands?
  - How would this be maintained on private lots?
  - Can stormwater runoff coefficients be reduced at the new design stage to reduce infrastructure?
  - How can EPCOR and the City align better regarding low investment development/landscaping to streamline implementation for infill/redevelopment?

Participants suggested financial incentives and rebate programs to promote compliance. Some participants, however, noted that this could result in more “red tape,” which could in turn increase costs of implementation. Technical considerations were mentioned, including multiple references to topsoil, which they stated if increased could help reduce removal costs in new development, and the need for stormwater storage (diverting use of potable water and also as a drought resilience tool).

### **Action 5: Update the Floodplain Protection Overlay in the Zoning Bylaw**

Most participants noted the value in updating the current flood map and identifying new risks with updated data. A question was raised about flood risk mapping completed by other agencies, like Alberta Environment and Protected Areas, and the need for more clarity about how this update will differ. Some participants suggested that this update should be done in partnership with EPCOR and other utility companies.

Some questioned the need for an update to the Floodplain Protection Overlay. For instance, there was a belief that river flooding in Edmonton will not be impacted by climate change.

#### **Questions Raised:**

- What are the risks of continuing to develop in the floodplain?
- Would this update impact insurance rates or coverage?

It was also noted that it may be more affordable to relocate people living on floodplains rather than building berms.

### **Action 6: Introduce new regulations for Wildfire Risk Areas in the Zoning Bylaw**

Some participants suggested that there are operational measures the City can take now (outside the scope of the Action Plan), such as more frequent watering of vegetation, more frequent grass cutting, and better management of vegetation in general to reduce the risk of wildfire spread.

It was indicated that wildfire mitigation is needed to reduce human-caused wildfires, as long as it is done carefully and with a cost-benefit analysis.

Concerns were raised about the potential negative associations that could be created by classifying a specific area with a higher risk for wildfires, the potential higher cost of using fire-resistant building materials, and whether wildfires have enough predictability to assign a wildfire risk to specific areas in Edmonton. One suggestion included only applying regulations to areas at the highest risk for wildfires.

#### **Questions Raised:**

- How does this action relate to urban drought risk?
- Would these regulations require certain materials to be used in construction?
- Would these regulations affect insurance coverage or costs?
- Would these regulations result in more fire halls in specific areas?
- Would planting more trees increase the risk of wildfire spread?

### **Action 7: Incorporate climate resilient standards into the City's Design and Construction Standards**

Participants explained the importance of having consistent standards and approach to the City's Design and Construction Standards. However, some participants raised concerns about how this could be a large-scope and high-cost initiative and that existing planning and development projects might not benefit from this standard and therefore lead to inconsistencies.

Participants had a discussion about integrating building carbon footprint considerations into the Action Plan through the City's Design and Construction Standards or through a separate, additional action.

A range of technical considerations were also shared. This included adding more soil depth to help with runoff, aiming to maintain climate resilient carbon usage in repairs to turn over infrastructure to the City, having EPCOR offer rebates to promote low investment development, and keeping standards as simple as possible so as not to discourage green infrastructure. A number of comments referred to drought management specifically, such as increasing drought resilient plants, promoting better stormwater storage, and updating the Drought Resiliency Plan. Moving forward,



participants noted this action would need continued engagement with industry stakeholders and utility groups: support was shown for a working group on this subject.

### **Action 8: Expand the scope of the Climate Resilience Policy and Procedures to guide city-wide development**

Concerns and considerations were shared regarding this Action. Participants questioned whether the cost of this expansion would impact affordability for Edmontonians. Particularly, there was concern that this expansion would adversely impact specific already disproportionately impacted groups.

Others asked whether the City could not first expand current Climate Resilience Policy and Procedures, or if future developments would expand the scope of impact (i.e., focusing less at the neighborhood level and more on how/where Edmonton can grow).

### **Action 9: Incorporate climate resilience into the Terms of Reference that guide new neighbourhood design**

Some support was shown for this action, for instance by noting that climate resilience should be included in statutory plans. Respondents questioned whether this would be applied differently between newer and more mature neighbourhoods. This action received only a few responses during the workshop.

### **Action 10: Identify and pursue opportunities to enable development of low-carbon district energy systems**

Participants commented on the value of making energy sources more accessible and cost effective. Participants also suggested this action could promote the presence of EV fast chargers within individual neighborhoods, as well as reducing the load on the current electrical grid to support air conditioning and heat pumps during increasingly warm summer seasons.

Concerns were also shared in relation to the effectiveness of hydrogen as an energy source, as well as comments relating to the level of success of previous projects like Blatchford as a potential “red flag” for this action. Some participants questioned the degree to which “new” energy systems will be able to reduce costs, while others advocated strongly that any new energy system must be renewable.

### **Action 11: Pursue options for preserving natural areas through neighbourhood design**

Participants commented that this action could help protect natural land and farmland from being developed over as the city continues to grow. Others noted that this action could be used to influence infill developments, instead using the land for parks or stormwater storage.

Some respondents questioned where funding was going to come from for this and whether this would result in densification of the city as it avoids developing over natural areas.

### **Action 12: Develop a Climate Risk Index for Edmonton neighbourhoods**

Most participants expressed confusion or general questions about this action. They wondered how the index is defined and measured, what data would be involved, how often the index is updated, and if it would have unintentional impacts on Edmonton's ability to grow. Some suggested that the benefits and progress should also be profiled, not just the risks; for example, expanding it to become a Climate Risk and Benefit Index. Others questioned what benefits this would create and flagged that climate risks indices are highly variable due to methodology differences. It was noted that a Climate Risk Index would be particularly helpful for natural areas, and that vegetation metrics and stormwater capture could be potential factors in this index, based on Geographic Information System (GIS) mapping.

### **Action 13: Foster awareness of climate resilient development through public education and outreach**

Most participants who commented on this action provided ideas for education and outreach needed in climate resilient development:

- Educating on monthly costs rather than total costs so that it is more easily understood by the general public
- Initiating a study on how solar can protect roofs from extreme weather
- Requiring energy labeling for new homes so that homeowners can better understand how climate action is integrated in energy use and utilities
- Summarizing climate science to create improved understanding of its nuances
- Understanding gaps in knowledge so that education is aligned to what we know and do not know
- Creating awareness for home buyers about climate resilient development
- Linking incentives to education for industry to encourage industry to play a role in education

### **Action 14: Pursue opportunities to leverage grant funding for climate resilient development**

Participants noted that incentives are helpful but provided specific ideas on how the incentives should work:

- Incentivizing the client/homeowner, not the builder or developer
- Incentivizing during the transition to climate resilient development, rather than punishing or enforcing
- Focusing on reaching “the masses” with grants and regularly-scheduled education
- Recognizing that incentives are key in order to get buy-in on climate action

It was flagged that Action 14 should be linked to Action 12 (relating to the development of a Climate Risk Index) by providing higher-risk neighbourhoods with greater access to grant funding. Also, it was mentioned that grant funding for climate resilient development should be federally-funded.

### **Action 15: Build organizational change within Administration through education and collaboration**

Several participants expressed that the City should be tracking and publicizing how climate resilience goals are achieved and the associated costs of these initiatives. They indicated that once the City has developed these strategies, there needs to be regular communication with the public on their implementation and results.

Some participants suggested ways in which organizational change on climate resilience could move forward:

- Providing recommendations to Council on the most cost-effective ways to achieve climate resilience goals
- Creating a landing page for all climate resilience information and engagement opportunities
- Mandating education on climate resilience when hiring or moving jobs at the City
- Creating a tool that shows how climate resilience design elements affect a house: compost, rain garden, solar panels, etc.
- Educating on the benefits of certain practices, like improved landscaping reducing the need for larger pipes
- Considering existing educational resources like AB Low Impact Development Project, lot level hydrology, and Clean Action Runoff Guide

Others provided overall considerations that should be factored into the organizational change:

- Considering that education must involve research
- Considering if the City’s “appetite for risk” would be adjusted for climate resilience

- Considering linking Action 15 to Action 1 (streamlining the permitting process for climate resilient development)
- Increasing the consideration of operational costs
- Collaborating with other regional municipalities on organizational change
- Implementing education with organizations across the city, not just City staff

There were also some research opportunities posed by participants, including whether low impact developments (LIDs) adjacent to roads affect the freezing/thawing on roads, how infill compared to suburbs affect the environment and our carbon footprint, and how stormwater runoff could be limited in landscape design.

## Survey Feedback on Draft Actions

The online survey, which was open for three weeks and distributed across a variety of communication channels (as described in the How We Engaged section), included questions on each of the 15 draft actions. Respondents were required to provide their level of agreement with each action (with the options being strongly agree, somewhat agree, neutral / neither agree nor disagree, somewhat disagree, strongly disagree, and not sure) and were given the option to provide written feedback.

The level of agreement with each action for all survey respondents is graphically displayed in a chart, and a further level of analysis is provided in writing describing how different groups of respondents felt about the action based on their level of concern about climate change.

### Overall Survey GBA Plus Spotlight

The 18 to 34 age group of survey respondents are more likely to agree with the actions compared to other age groups, ranging from 56% (Action 15) to 83% (Action 11). The 18 to 34 age group are more likely to show concern about climate change (79%), and they are more likely to show interest in the City increasing or maintaining its efforts to address climate change (65%).

Respondents with a total household income of \$60,000 to \$99,999 are more likely to agree with the majority of the actions. Respondents with a total household income of less than \$60,000 are more likely to show lower support compared to other income levels.

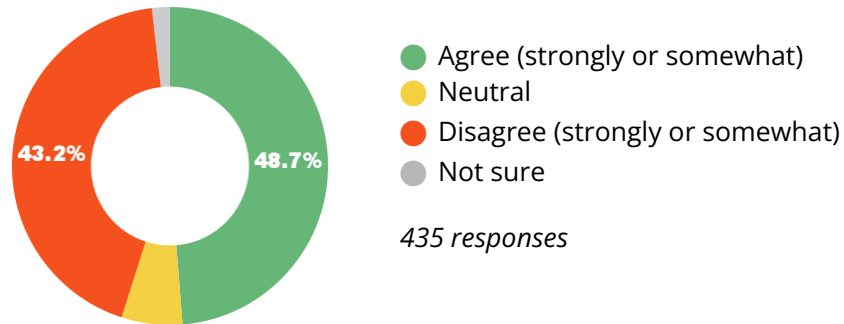
Respondents who identify as 2SLGBTQIA+ are more likely to agree with the majority of the actions.

- 3 in 4 respondents who identify as 2SLGBTQIA+ agreed with actions 3 (76%), 4 (76%), and 14 (76%).
- 7 in 10 respondents who identify as 2SLGBTQIA+ agreed with actions 5 (72%), 7 (72%), 8 (72%), 9 (72%), 10 (69%), 12 (72%), 13 (72%), and 15 (72%)
- Over 4 in 5 respondents who identify as 2SLGBTQIA+ agreed with action 6 (83%).

## Overall Survey GBA Plus Spotlight

- Over 9 in 10 respondents who identify as 2SLGBTQIA+ agreed with action 11 (93%)

### Action 1: Streamline the permitting process for climate resilient development



49% of respondents (n=435) strongly or somewhat agreed with Action 1. Among respondents who are concerned about climate change (n=241), 76% agreed with this action and 15% disagreed with it. Among respondents who are not concerned about climate change (n=167), 10% agreed with this action and 84% disagreed with it.

Action 1 received 255 written responses.

Respondents who are concerned about climate change generally expressed their agreement, with those who agreed noting that it could make climate-resilient development easier and more attractive for developers to pursue. Some respondents suggested that this action should go further in scope and significantly higher than the Province's standards.

We heard concerns about this action potentially slowing down the permitting process or resulting in additional costs to taxpayers, and we heard that the City should exercise caution to make sure developers actually move forward with the energy efficiency measures they claim in their permit applications.

We heard that there is an interest in considering existing structures in this process, not just new builds. Some suggested that climate resilient design should be a requirement in Edmonton.

Those who disagreed with this action were against additional costs on taxpayers, explained the inefficiencies in additional City processes, and the inequities it may create with those who are able to afford climate resilient architecture having permits approved more quickly. Most frequently, the concerns centered on costs to taxpayers and costs of climate resilient developments in general, which could lead to inequities.

There were numerous questions, with respondents mostly wondering why this is not applied to all permit applications already and how it will be funded. Respondents who noted that they were not

concerned about climate change overall shared this question. They also noted concern that a faster permitting process for climate resilient development may slow down other permit applications in the process, which they opposed. Others expressed that they would prefer to see the City focus on other efforts - such as maintaining green spaces and vegetation - rather than further modify processes or adding red tape.

Respondents who are neutral about concern for climate change had mixed responses to this action, with some showing support for the principle of efficient permit processing but expressing concern about the additional costs associated with additional staff or regulation and others suggesting other areas the City should focus its energies for climate resilience.

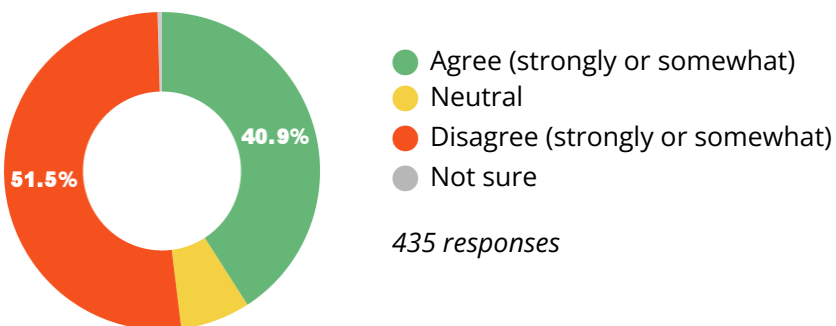
*“Policy can play a huge role in behaviour and seems like the best step after the changes to the zoning bylaw renewal. Allowing climate resilient a faster approval is one way to encourage better design. The entire city will benefit.” - Survey Respondent*

*“Expediting the permitting process for green buildings will make them more attractive for developers to undertake.” - Survey Respondent*

*“Must be implemented in a way so as to avoid additional bureaucracy and red tape. Does it need to be a whole new process, or simply an “express lane”?” - Survey Respondent*

*“With a housing crisis and affordability concerns, this will be detrimental to development through increasing costs and timelines.” - Survey Respondent*

### Action 2: Incorporate EV-ready requirements into the Zoning Bylaw



41% of respondents (n=435) strongly or somewhat agreed with Action 2. Among respondents who are concerned about climate change (n=241), 69% agreed with this action and 23% disagreed with it. Among respondents who are not concerned about climate change (n=167), 4% agreed with this action and 90% disagreed with it.

Action 2 received 246 written responses.

Respondents who are concerned about climate change generally agreed with the idea of electric vehicles (EV) while flagging concerns with the proposal. We heard that there are concerns about the cost of EV, whether it is subsidized by governments similar to solar panel installations and if EV users would pay for the infrastructure or all taxpayers whether or not they use EV. We heard widespread concerns about the capacity of electrical grids to support EV charging, particularly in older neighbourhoods.

Those who indicated full agreement pointed out the urgency of transitioning to EV and wondered why it is not being pursued more quickly. These respondents noted the importance of transitioning away from gas-powered vehicles.

Some respondents opposing this action noted that climate resilient planning should instead encourage a transition to other forms of transportation like bicycles and public transit and that requiring EV infrastructure still encourages a car-dependent culture and has its own climate impact, such as with lithium batteries. Others opposed the increased cost that EV infrastructure and maintenance would impose on residents and businesses. We heard caution that this could encourage more parking when Edmonton is aiming to reduce on-site parking. Some respondents suggested an incentive, rather than a requirement, might be more effective.

Respondents who indicated that they were not concerned about climate change overall also shared concerns for this action. Specifically, they questioned the viability of EV technology overall and the strain that this incorporation would have on Edmonton's power grid. Some noted that while EV readiness may be appropriate in some cases, it should be up to homeowners and builders to lead this effort, not the City.

Respondents who are neutral about concern for climate change indicate opposition to EV technology and suggested this action would affect affordability.

*"Yes love this! Although our central priority should not be on bringing in more car infrastructure, but instead on building out public transportation. So a more important consideration than making sure all sites are designed for EVs is to make sure all sites are designed for public transport and biking/walking. EVs also have an environmental impact via the extraction of primary resources, which is played out through violent colonial means in countries across the world." - Survey Respondent*

*"I fully support this idea and hope you implement it quickly. This will save Edmontonians a lot of money as we will not have to pay to upgrade infrastructure after the fact. It will make life more affordable for us and reduce our emissions!" - Survey Respondent*

*"I would be hesitant that this could increase costs of developments that aren't planning for any motor vehicle infrastructure, ie there are no parking spots, etc. This should only apply for developments already putting in parking spaces, etc." - Survey Respondent*

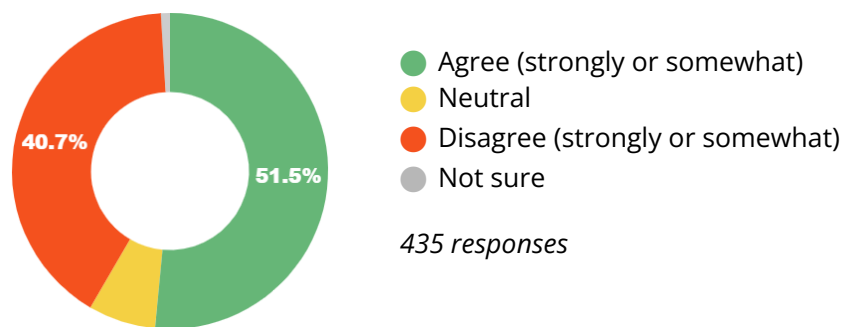
*"In my experience, the city is not considering the older neighbourhoods and their infrastructure to support the electrical demands. And does this mean that a developer is required to provide on-site parking? Or are they thinking EVs will have street parking and there'll be extension cords lying across the sidewalks?" - Survey Respondent*

### GBA Plus Spotlight

Respondents with higher income levels are more likely to agree with Action 2 compared to those with lower income levels.

- 1 in 3 respondents (33%) who reported low-income total household earnings (less than \$60,000) agreed with this action, while 1 in 2 respondents (51%) who reported low-income total household earnings disagreed with this Action.
- Just over 1 in 2 respondents (55%) who reported total household income of \$60,000 to \$99,999 agreed with Action 2, while 2 in 5 respondents (39%) who reported this income level disagreed with this Action.

### Action 3: Incorporate solar-ready requirements into the Zoning Bylaw



52% of respondents (n=435) strongly or somewhat agreed with Action 3. Among respondents who are concerned about climate change (n=241), 81% agreed with this action and 13% disagreed with it. Among respondents who are not concerned about climate change (n=167), 14% agreed with this action and 78% disagreed with it.

Action 3 received 227 written responses.



Respondents who are concerned about climate change generally showed enthusiastic support, with some respondents suggesting that this action would make solar panel installations more economical and some suggesting that it should be pursued quickly to reduce emissions as soon as possible. We heard that this action would reduce retrofit costs if new homes wish to install solar panels in the future.

Some respondents agreed with the action but flagged specific considerations. We heard that some are concerned about the increased costs associated with solar-ready infrastructure and potential impacts on housing affordability, the potential conflicts if existing buildings' solar arrays are blocked by newer, taller buildings, and the need to consider this action alongside other policies and integrated infrastructure. For example, some noted that the new Zoning Bylaw and District Plans may allow for taller buildings on more lot types, which could create issues with solar installations on neighbouring properties.

We heard concerns about the impacts of mandating this type of installation on affordability due to the increased infrastructure costs. We also heard that one way to address affordability could be providing incentives and grant funding, which could make access to solar installations more equitable for homeowners.

Respondents who disagreed with this action generally reasoned that it would create increased costs to developments and taxpayers and impact affordability.

Respondents who were not concerned about climate change overall shared this concern, particularly in regard to use of tax money to support the development and any mandating of solar panels on new builds. They also shared concerns that Edmonton's other development priorities - like densification - would disrupt its effectiveness as taller new builds would block sun exposure. Also, these respondents shared concern that Edmonton's climate and lack of sunlight in winter would make this action less effective overall.

Respondents who are neutral about concern for climate change disagreed with this action, suggesting it would create unnecessary costs or that it is outside the scope of the municipality.

*"I fully support this idea and hope you implement it quickly. This will save Edmontonians a lot of money as we will not have to pay to upgrade infrastructure after the fact. It will make life more affordable for us and reduce our emissions!" - Survey Respondent*

*"I'm fully supportive of ensuring buildings are solar-ready. As stated earlier, my main concern is ensuring climate resilient development is accessible for residents among all levels of income." - Survey Respondent*

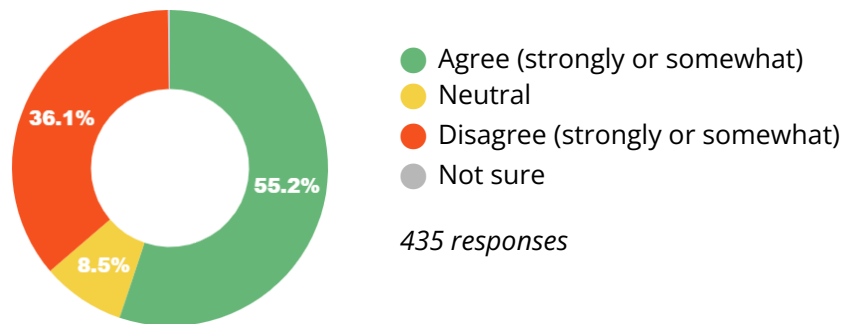
*"This might make housing more expensive to develop and be futile with [the] height of nearby zones." - Survey Respondent*

*"That's a great idea, except you're not putting limits on what your neighbors can build, and your densification efforts allow people to throw up giant buildings next to your home and block out the sun and existing solar panels on your roof." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 3 (see *Overall Survey GBA Plus Spotlight*).

### Action 4: Pursue options for resilient landscaping practices on private property



55% of respondents (n=435) strongly or somewhat agreed with Action 4. Among respondents who are concerned about climate change (n=241), 80% agreed with this action and 13% disagreed with it. Among respondents who are not concerned about climate change (n=167), 22% agreed with this action and 68% disagreed with it.

Action 4 received 235 written responses.

Some respondents who are concerned about climate change agreed with this action, provided that it is paired with proper education on resilient landscaping practices. For example, we heard that some respondents would like to implement resilient landscaping but do not know where to start. Others showed general enthusiastic support, especially regarding improving local ecosystems with native plants and sustainable stormwater management. We heard strong support for more trees and improved vegetation throughout Edmonton, especially to provide shade during heatwaves.

We heard from some respondents that proposing landscaping regulations on private property is concerning to them. These comments ranged from overall support of this action to opposition of

this action. Some respondents preferred incentives rather than regulations of landscaping on private property. Others were concerned about additional costs this may create for landowners.

We received many specific suggestions for implementation, ranging from water barrels to vegetable gardens. Some respondents indicated confusion over the lack of details in this action and wondered what the regulations and incentives might be.

Respondents who are neutral about concern for climate change showed support for the education components of this action but emphatically disagreed with the use of regulation or mandates. Respondents who were not concerned about climate change shared this concern, noting that landscaping on private property should be exclusively controlled by the property owner. Other respondents did support the use of incentives and education to promote climate resilient landscaping. Specifically, support was shared for climate resilient landscaping practices that would preserve Edmonton's tree canopy.

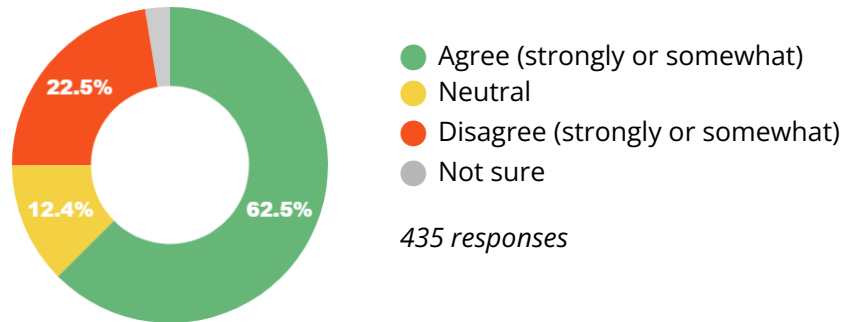
*"Love this, individuals want to help but don't know where to start. There are so many programs out there but it seems you have to know what you are looking. Change for Homes guide helped me with my planning when I was doing some of this." - Survey Respondent*

*"Great idea and really think it should be encourages and incentive. Certainly not mandated though. Its their private property and everyone has different needs and wants. Incentives such as discount to tax rate or rebate from EPCOR would probably get lots of people buying in." - Survey Respondent*

*"I strongly agree to further actions such as this. More native species. Greater canopy. I will commend Edmonton for how green the city it and accessible by pathways compared to other large cities in Canada. Great planning on that sector." - Survey Respondent*

### GBA Plus Spotlight

Respondents with graduate post secondary education and those who identify as 2SGLBTQIA+ are more likely to agree with Action 4, at 3 in 4 respondents (74%) for those with graduate post secondary education and 3 in 4 respondents for those who identify as 2SLGBTQIA+ (76%).

**Action 5: Update the Floodplain Protection Overlay in the Zoning Bylaw**

63% of respondents (n=435) strongly or somewhat agreed with Action 5. Among respondents who are concerned about climate change (n=241), 81% agreed with this action and 7% disagreed with it. Among respondents who are not concerned about climate change (n=167), 39% agreed with this action and 46% disagreed with it.

Action 5 received 179 written responses.

Respondents who are concerned about climate change generally agreed with this action, highlighting that it is sensible to keep flood mapping up to date and some calling it a proactive safety measure. Some remarked that it should be done as quickly as possible. We heard about the interconnection of flood risk mapping with home affordability, lot values, and people choosing where to live. We heard widespread concern about new developments still being allowed in high flood risk areas.

Some respondents commented on flood risks being evaluated for residential areas beyond the River Valley, such as residential areas that may experience flash floods and the possible use of park spaces as sponges for stormwater surges.

Criticism of the action covered many elements and questions, such as if fewer trees is resulting in more flooding and how effectively the City can implement and regulate this action. Some respondents wondered if this should be a City responsibility or if developers or academic institutions could play a role.

Respondents who noted that they were not concerned about climate change showed some agreement with this action, stating that efforts to protect property within the floodplains could save Edmontonians money in the long run. Others felt they needed more information on what this would entail, and shared concern that an updated flood map would result in programs requiring more tax spending and permitting. Some support was offered on the condition that this action would only result in recommendations and incentives, not mandates. Others felt that Edmonton should not be building within floodplains at all.

Respondents who are neutral about concern for climate change generally agreed with this action and called it proactive.

*“Informing people of the risks, and possible mitigations would be far preferable to regulations..” - Survey Respondent*

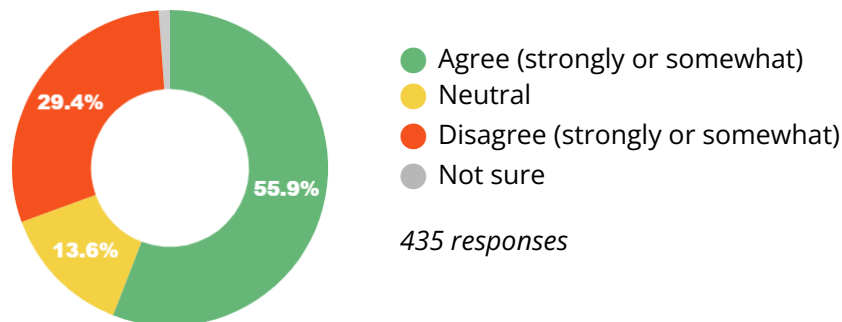
*“This is important. More Edmontonians need to be aware of water tables and flood plains, including how our actions impact these and how we can both use and avoid them.” - Survey Respondent*

*“Yes, great idea. We are in a slough and it will flood. This costs all of us money via insurance rate hikes. If someone wants to build in an area that is likely to flood, I think we should be able to either take a hard line and say no. Especially if the hidden costs of maintaining infrastructure in flood prone areas is higher than other areas. If we restrict building in these areas, it will make for more greenspace which is better for the surrounding environment and communities.” - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 5 (see *Overall Survey GBA Plus Spotlight*).

### Action 6: Introduce new regulations for Wildfire Risk Areas in the Zoning Bylaw



56% of respondents (n=435) strongly or somewhat agreed with Action 6. Among respondents who are concerned about climate change (n=241), 78% agreed with this action and 9% disagreed with it. Among respondents who are not concerned about climate change (n=167), 27% agreed with this action and 58% disagreed with it.

Action 6 received 183 written responses.

Respondents who are concerned about climate change generally showed strong agreement with this action, with some highlighting the benefits of wildfire risk management. Some respondents

pointed out items that should be considered alongside wildfire risk management, such as deadfall in natural areas, density of housing possibly posing greater risks of fire spread, and the need for more details on what these regulations would mean.

We heard widespread concern about new developments being allowed in wildfire risk areas, and some confusion about increased building costs that may come with these regulations. Firesmart was frequently mentioned as a standard to consider.

We heard concern about the increase in wildfire smoke and how this affects air quality, including comments on air filtration systems in new builds and regulating open flame burning.

Some respondents wondered if Edmonton faces wildfire risks and to what extent the risks of wildfires can be mitigated in Edmonton. Others noted that more public education may be needed on wildfire risk in Edmonton. Respondents who were not concerned about climate change shared this criticism, stating that they did not see Edmonton as being at risk from serious damage from wildfires, and therefore the action was not important. Instead, comments noted that it was the job of the individual to protect their property, in some cases supported by insurers. Certain respondents noted that City led educational materials or incentives to support wildfire preparation could be helpful.

Respondents who are neutral about concern for climate change provided a range of comments surrounding costs and other factors.

*"I'm not particularly clear about how big of a risk it is or what these measures would look like, but I strongly agree with looking into it." - Survey Respondent*

*"I think Edmonton is lower risk than many other municipalities. This should be a lower priority." - Survey Respondent*

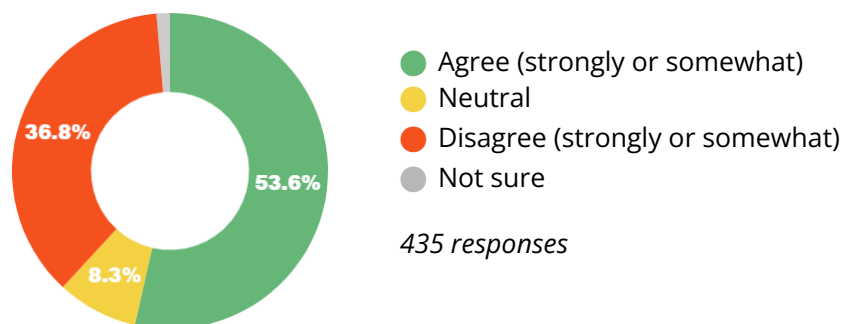
*"I strongly agree with this principle in theory, however requiring more fire resistant building materials will likely increase the cost of new homes, in a housing affordability crisis this is concerning, Perhaps the city could consult insurance companies to see if blanket fire resistant building and fire smart landscape design regulations for those designated areas could lead to lower home insurance costs?" - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as disabled, immigrant, or 2SLGBTQIA+ are more likely to agree with Action 6. 2SLGBTQIA+ survey respondents showed the highest level of agreement at over 4 in 5

respondents (83%), followed by people with disabilities at 3 in 4 respondents (73%) and immigrants at 2 in 3 (67%).

### Action 7: Incorporate climate resilient standards into the City's Design and Construction Standards



54% of respondents (n=435) strongly or somewhat agreed with Action 7. Among respondents who are concerned about climate change (n=241), 83% agreed with this action and 10% disagreed with it. Among respondents who are not concerned about climate change (n=167), 15% agreed with this action and 75% disagreed with it.

Action 7 received 210 written responses.

Respondents who are concerned about climate change generally showed enthusiastic support for climate resilient standards, with reasons such as reducing taxpayer burden in the long term with more resilient infrastructure and suggesting that if this has not already been done, it is overdue. Some respondents, however, were concerned about upfront costs and the effect on home affordability as they anticipate that homebuyers would bear the costs of more resilient builds instead of developers. Others highlighted that more resilient infrastructure would result in reduced costs in the long term. We heard confusion about the details of this action, with some respondents indicating they do not have enough information to provide detailed feedback on this action.

Specific suggestions included examples like incorporating nature-based solutions, bioswales, reducing widths of roads, considering both public and private property, and integrating these standards regionally and with other construction standards across Canada.

Respondents who noted they were not concerned about climate change expressed opposition for this action given it could result in higher taxes and poorly managed development. Some general support was shared as well, in certain cases on the condition that this tax increase was avoided.

Some respondents who are neutral about concern for climate change suggested that City infrastructure should be designed at a higher quality to last longer and be climate resilient.

*“Seeing as construction is one of the biggest causes of carbon emissions in the world, any actions that include construction should be looked at as a whole. We don’t just need more climate-resilient roads, we need the carbon footprint of making those roads to be smaller as well.” - Survey Respondent*

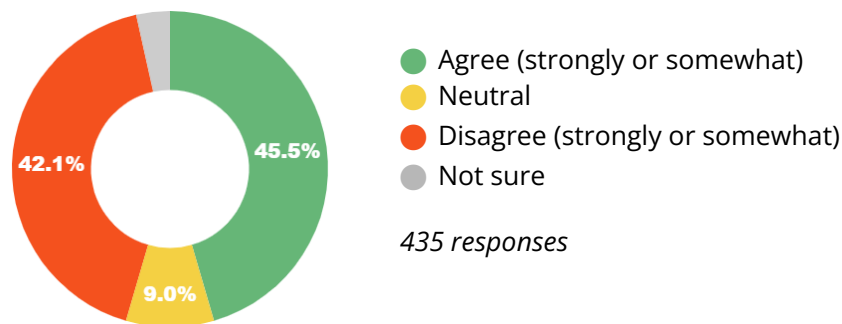
*“Again a great idea, one that should reduce taxpayer burden in the long term. However in the short term the costs of this new infrastructure will be passed on to buyers of homes in areas affected by these new standards again reducing affordability.” - Survey Respondent*

*“I would like to see the city instead focus on issues with existing infrastructure. Fix our sidewalks. Fix our infrastructure. Update the rec centers and fund libraries. Make our city safe. We don’t want to increase taxes and we don’t want these climate resilient changes.” - Survey Respondent*

**GBA Plus Spotlight**

Respondents who have completed graduate post secondary and respondents who identify as 2SLGBTQIA+ are more likely to agree with Action 7, at 3 in 4 respondents (77%) with graduate post secondary education and over 7 in 10 respondents (72%) who identify as 2SLGBTQIA+.

**Action 8: Expand the scope of the Climate Resilience Policy and Procedures to guide city-wide development**



46% of respondents (n=435) strongly or somewhat agreed with Action 8. Among respondents who are concerned about climate change (n=241), 74% agreed with this action and 13% disagreed with it. Among respondents who are not concerned about climate change (n=167), 7% agreed with this action and 83% disagreed with it.

Action 8 received 187 written responses.

Respondents who are concerned about climate change generally showed a mix of support and confusion over this action. In terms of support, respondents highlighted that this action recognizes



the interconnectedness of climate change. We heard widespread confusion over this action's implications, with some respondents simply stating that they do not have enough information on what this action means. Some respondents cautioned that this action needs more clarity and that the specifics need to be affordable and not hinder development. Some were concerned that more engagement would be needed on this action to better understand residents' needs.

Respondents who shared that they were not concerned about climate change showed opposition to this action on the basis that it could lead to overregulation and higher taxes. Others did feel that the action could be helpful to guide new developments, but that it should not impact already existing communities. Some respondents noted that whatever standard is chosen should apply to all property in Edmonton. Others expressed support for the idea of integrating climate resiliency, but noted that they needed more details to say for sure if they could support this action.

Respondents who are neutral about concern for climate change were mostly concerned about cost and affordability.

*"Absolutely. The climate emergency is an all encompassing issue that affects the society, the economy, and the culture. Equitable access must be front and centre." - Survey Respondent*

*"Yes - this is an all-around win for the city in moving toward resilience, for residents in improving our living environment and reducing costs related to climate change impacts, and for business in knowing that the rules are in place before they begin planning." - Survey Respondent*

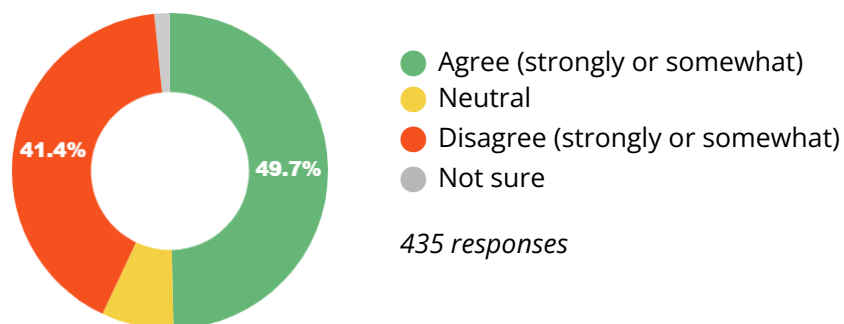
*"This action is quite vague and the implications are difficult to weigh in on." - Survey Respondent*

*"Yes - this is an all-around win for the city in moving toward resilience, for residents in improving our living environment and reducing costs related to climate change impacts, and for business in knowing that the rules are in place before they begin planning." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 8 (see *Overall Survey GBA Plus Spotlight*).

### Action 9: Incorporate climate resilience into the Terms of Reference that guide new neighbourhood design



50% of respondents (n=435) strongly or somewhat agreed with Action 9. Among respondents who are concerned about climate change (n=241), 79% agreed with this action and 10% disagreed with it. Among respondents who are not concerned about climate change (n=167), 10% agreed with this action and 86% disagreed with it.

Action 9 received 186 written responses.

Respondents who are concerned about climate change showed a mix of support for this action and concern about continued expansion of the city with new neighbourhoods. Some who supported this action pointed out that it is most effective to design with climate resilience in mind rather than retrofitting later. We heard some specific suggestions such as requiring more trees and mandating certain types of developments. One of the most frequent comments was concern about development of new neighbourhoods in general, with some respondents suggesting that infill and existing buildings should be pursued before new neighbourhoods are considered.

Respondents asked several questions about the scope of this action, such as looking for more specifics on energy transition and if this action considers utilities. We also heard concerns about the costs of this action on residents.

Some respondents who are neutral about concern for climate change expressed confusion about what this action would entail and others supported the idea of a guide but not regulations.

Respondents who were not concerned about climate change expressed opposition to this action on the basis of cost and government overreach. Some general support was also shared.

*"100% agree. It's usually easier to implement ways to reduce vulnerability when building new than when trying to retrofit." - Survey Respondent*

*"What about older neighbourhoods? Property taxes linked low cost loans to retrofit older properties... install solar panels etc." - Survey Respondent*

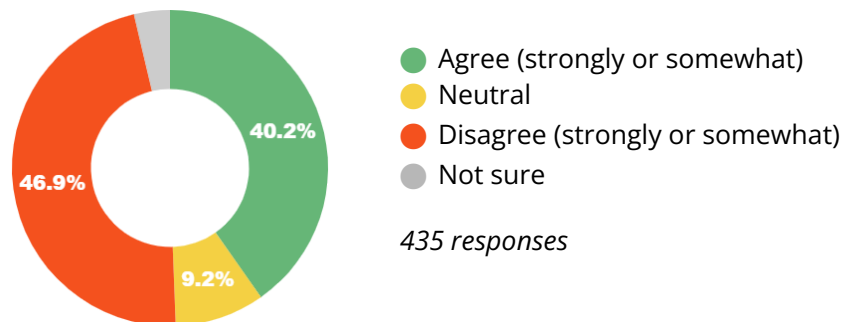
*"I think all residents would be very concerned about the cost and implications of this policy. I am also concerned that this survey question does not contemplate the cost impact to the City or to residents (property tax or otherwise) as a result of this option." - Survey Respondent*

*"Instead of sprawling outwards, the city should look to redevelop current inventory for new uses." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 9 (see *Overall Survey GBA Plus Spotlight*).

### Action 10: Identify and pursue opportunities to enable development of low-carbon district energy systems



40% of respondents (n=435) strongly or somewhat agreed with Action 10. Among respondents who are concerned about climate change (n=241), 68% agreed with this action and 15% disagreed with it. Among respondents who are not concerned about climate change (n=167), 5% agreed with this action and 89% disagreed with it.

Action 10 received 185 written responses.

Respondents who are concerned about climate change largely showed support for this action, both for developments in new neighbourhoods and retrofitting mature neighbourhoods. Some shared conditional support, based on whether the effort was ultimately cost effective, saving more money than it spent. Others felt this action needed to be first led by smaller pilot projects and accompanied by an education campaign over its intended goals. In terms of the benefits of this action, some went increaseon to highlight the importance a decentralized energy system can have on climate resiliency and energy security.

The idea of public vs private ownership was also present in comments both supporting and opposing this action. Some respondents shared optimism that public ownership of district energy systems could help communities economically and socially, while others were concerned that without public ownership or involvement, this action may disproportionately benefit developers and utility providers. There were also comments that based on our current energy system, it would be challenging to understand how and by who this action will be financed: with cost being a highlighted concern throughout.

However, some respondents expressed concern over whether this action would work based on the outcome of past energy projects, such as Blatchford. Additionally, they felt the cost risk for this action was high. Some questions were shared, such as whether renewable energy sources will be integrated into these energy systems, as well as who will be responsible for maintaining the systems once established.

Respondents who are neutral about concern for climate change disagreed with additional costs this action could create and suggested that it should not be controlled by an outside company.

Respondents who were not concerned about climate change showed some opposition to this action on the basis that it could increase taxes and disincentivize development. Blatchford was mentioned by respondents who opposed this action, noting it as evidence for the City not being prepared for this kind of project. There was some support for the notion of community based energy systems, yet disagreement about them being low-carbon or electric. Other respondents showed support for the action on the condition that it does not increase taxes.

*"Absolutely! The climate crisis is disintegrating communities. We need collective actions to bring people together in an equitable way." - Survey Respondent*

*"Community energy systems haven't worked too well of late in Edmonton - Blatchford is still having issues - before we mandate this type of thing, we have to know it will work better." - Survey Respondent*

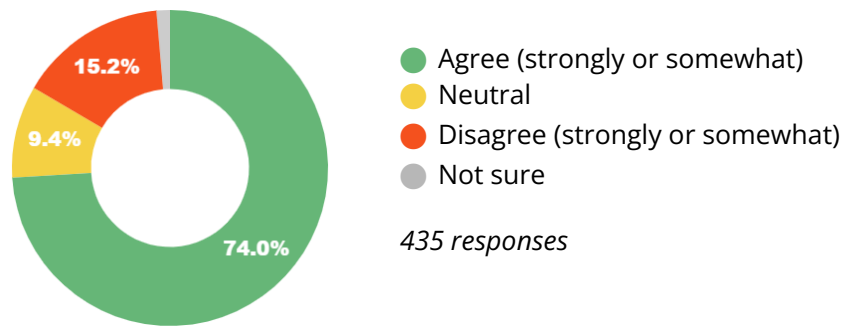
*"This is a brilliant recommendation - which is well understood by people who come from parts of the world where energy generation and management is done at a neighborhood or community level." - Survey Respondent*

*"I disagree, as I feel that this would be impossible to enforce--who pays for what, when things need upgrading? We already have suffering energy infrastructure because we have privatized electricity and gas--who owns the infrastructure, who is responsible for its maintenance, are huge challenges for the city as it is. We have PRIVATIZED energy--so we can't regulate it's development in this way.." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 10 (see *Overall Survey GBA Plus Spotlight*).

### Action 11: Pursue options for preserving natural areas through neighbourhood design



74% of respondents (n=435) strongly or somewhat agreed with Action 11. Among respondents who are concerned about climate change (n=241), 88% agreed with this action and 4% disagreed with it. Among respondents who are not concerned about climate change (n=167), 55% agreed with this action and 31% disagreed with it.

Action 11 received 177 written responses.

Support was shown for this action among those who expressed concern about climate change. Benefits for preserving natural areas included the physical, mental, and social health of Edmontonians, as well as the presence of wildlife and biodiversity. It was noted that natural areas can help mitigate high temperatures in Edmonton's urban and largely concrete areas. To ensure this happens, respondents shared support for preventing developments that might occur over green areas, either by mandates or incentives.

Some respondents said that this preservation may become more tricky if it includes the naturalization of already urban areas. Similarly, preserving natural areas would have to require proper maintenance of both new and existing green areas. For instance, questions would need to be answered about what vegetation is maintained or reintroduced. There was concern that without careful planning, regeneration efforts could introduce invasive species of plants and wildlife. Other respondents also expressed concern that this action may run contrary to any efforts that seek to densify Edmonton's population, as the city is expected to grow in coming years. In this case, the dual goals of building more housing and also preserving natural areas could lead to further expansion of the city, which could have negative impacts on Edmontonians.

There were few comments on this action from respondents who are neutral about concern for climate change, generally showing support from some noting that there is already widespread green space in Edmonton.

Respondents who were not concerned about climate change noted support for this action, specifically as a way of preserving green spaces like parks and protection of native species of plants and animals. Some respondents noted that this could be a positive way of slowing down the expansion of Edmonton's urban sprawl. Others showed support for the action on the condition that it did not lead to overregulation or higher taxes. Some respondents did also show general opposition, with certain respondents not believing the City would be able to effectively carry it out.

*"Yes, absolutely. Tree cover performs numerous important functions, and while density is important, we need to retain the trees we have while also adding to them. New trees do not replace cutting down a mature tree for many years in most cases. Trees also improve mental and physical health for those living in proximity, and of course provide shade and carbon capture." - Survey Respondent*

*"We should already be doing this type of thing. We destroy treelines in greenfield for infrastructure, and then require the planting of saplings or caliper trees which are 25+ years away from having any benefit. Not to mention the poor maintenance of these trees where plenty die within 3 to 5 years once they are the city responsibility. Require preservation of mature trees." - Survey Respondent*

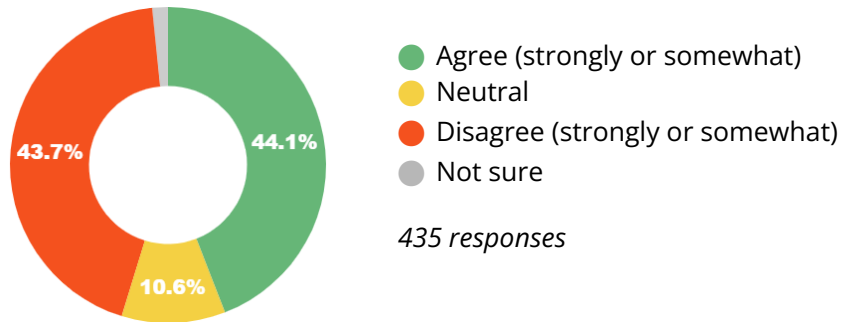
*"I somewhat agree but I don't understand how this is intended to complement the need for densification. It says this is for growth areas, so I guess new developments? sure. But it seems counterintuitive to add more buildings because that increases carbon footprint." - Survey Respondent*

*"This is essential. We must prioritize protection of any existing natural areas in order to protect our biodiversity - ecosystem needs are important to all [of] us." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as racialized, disabled, immigrant, or 2SGLBTQIA+ are more likely to agree with Action 11. Respondents who identify as 2SLGBTQIA+ showed the highest level of agreement at over 9 in 10 respondents (93%), followed by respondents who identify as disabled at 4 in 5 respondents (81%), people who identify as immigrants at 7 in 10 (70%), and people who identify as racialized at over 2 in 3 (68%).

**Action 12: Develop a Climate Risk Index for Edmonton neighbourhoods**



44% of respondents (n=435) strongly or somewhat agreed with Action 12. Among respondents who are concerned about climate change (n=241), 74% agreed with this action and 13% disagreed with it. Among respondents who are not concerned about climate change (n=167), 6% agreed with this action and 86% disagreed with it.

Action 12 received 185 written responses.

Among those who showed concern for climate change, there was support for this action as a way of helping Edmonton’s public, developers and leadership make informed decisions. Data from a Climate Risk Index could promote more sustainable, climate conscious, and accessible development. There was some concern shared about the unintended impact this Index could have on housing costs, affordability, and insurance prices, which could disproportionately impact low income or home owning Edmontonians.

Others believed this information would not be useful, and that collecting it would cost more money than it has the ability to save. In addition, there was confusion about what data exactly is being collected and how it will be used to support decision making and development. Some respondents noted that further engagement with community experts and academics could be helpful.

There were few comments on this action from respondents who are neutral about concern for climate change.

Respondents who were not concerned about climate change opposed this action, generally on the basis of its potential high cost and lack of use. Some did not support this data collection given it could more heavily impact low income residents whose cost of living could rise if they were deemed as living in a higher climate risk area.

*“Without good and broadly available raw data, no good decisions can be made.” - Survey Respondent*

*“Where can residents access this data? This data should be available to everyone.” - Survey Respondent*

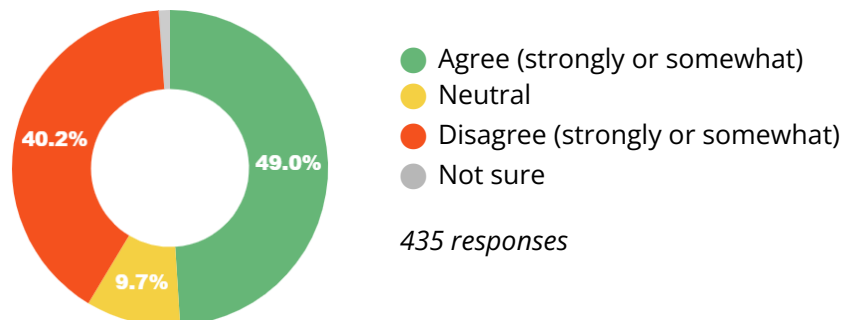
*"We should absolutely be doing this if we are not already. How are we supposed to address climate impacts if we don't measure them? However, measurement and reporting should not become a barrier to action. We already know that climate change is affecting us and will have compounding impacts, so we must act immediately!" - Survey Respondent*

*"I'm not sure how this would be used. More specific data (flood & fire risks as discussed earlier) which may come from the exercise could lead to better planning, but generic overarching climate risk index may cause confusion more than provide actionable information." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 12 (see *Overall Survey GBA Plus Spotlight*).

### Action 13: Foster awareness of climate resilient development through public education and outreach



49% of respondents (n=435) strongly or somewhat agreed with Action 13. Among respondents who are concerned about climate change (n=241), 79% agreed with this action and 13% disagreed with it. Among respondents who are not concerned about climate change (n=167), 9% agreed with this action and 78% disagreed with it.

Action 13 received 177 written responses.

Comments that showed support for this action emphasized the role that education plays in building enthusiasm and reducing apathy towards climate action, in addition to developing the capacity for Edmontonians to develop climate resilience. Some respondents noted that the success of this action could be tied to the success of the plan overall. Without an understanding of climate change and the full scope of climate action, climate resilience may not be developed as effectively. Considerations should be made, however, about who is raising this awareness and sharing climate action materials.



Some respondents noted that it is important it comes from the City to lead this effort and not rely on community groups directly. Others noted that community collaboration was very important as well.

Some respondents felt this action was not as helpful as a vast majority of Edmontonians are already aware of climate change and climate action. They felt those who do not agree with climate change science are unlikely to change their perspective. As such, resources and funding for this awareness campaign should instead be spent on something more actionable.

There was some opposition to this action as well, with respondents expressing concern that it is not the City's role to be promoting this awareness. Additionally, there was concern about what type of 'expertise' is being collected and shared, and from who.

Respondents who are neutral about concern for climate change generally indicated that this action is not within municipal scope.

Respondents who were not concerned about climate change noted opposition to this action. These respondents commented that it is not within the purview of the government to do this kind of work. Some felt this was an appropriate middle ground between inaction and regulation, feeling that actionable climate resilience information - if freely available - could have a positive impact.

*"Agree, and it would be most helpful to have practical information that we can implement." - Survey Respondent*

*"To the degree that this would make political decisions easier, sure, I guess, but again I really don't feel like knowledge and awareness of climate change are the issue here. Empower administration to do stuff about it." - Survey Respondent*

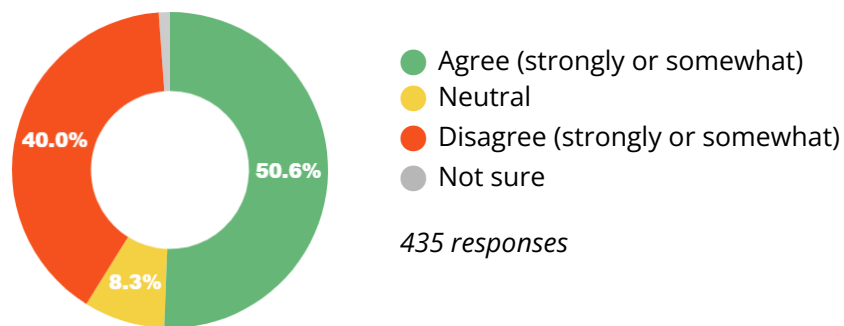
*"I think it's unlikely to be effective, as the people most in need of education would be unlikely to trust city employees." - Survey Respondent*

*"YES. PLEASE. We need this. So so very badly. Education can leverage public strength of numbers. Please do this in a way that is not alarmist though. There are a lot of people suffering from climate anxiety and as an educator I notice people shutting down in response to this information, when we should be rising up together. Please continue to make inspiring and positive messaging about what we can do together, as opposed to how screwed we are. We need people in the fight." - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 13 (see *Overall Survey GBA Plus Spotlight*).

#### Action 14: Pursue opportunities to leverage grant funding for climate resilient development



51% of respondents (n=435) strongly or somewhat agreed with Action 14. Among respondents who are concerned about climate change (n=241), 81% agreed with this action and 11% disagreed with it. Among respondents who are not concerned about climate change (n=167), 12% agreed with this action and 80% disagreed with it.

Action 14 received 181 written responses.

Among those who showed concern for climate change, supportive comments for this action noted that financial support was essential. Financial support would help increase the likelihood that climate resilient development is adopted, particularly among the public. This comment was made often across other actions, with respondents noting that this particular action therefore helps address concerns they noted elsewhere.

However, access to this funding should remain accessible. The City should be conscious not to add too many barriers to application that might discourage would-be applicants. Longer and more complicated applications were noted as being more inaccessible, meaning only those with the time and resources already to apply will be able to submit applications. Considerations should also be made as to the source of this funding, with some respondents being concerned that municipal grants would need to be drawn from tax revenue. Reliance on provincial or federal funding avenues, on the other hand, could change based on political shifts in upcoming election cycles, making reliance on funding challenging.

Respondents who are neutral about concern for climate change indicating concerns about cost. Respondents who were not concerned about climate change also showed opposition to this action

on the basis that it could raise costs. Others showed some support if the source of the money did not come from tax revenue.

*“Definitely helpful- many people would make changes to make their property more green if they could afford it.” - Survey Respondent*

*“For residents this would make sense. I have a very large heritage tree in my yard that costs me \$2000 every few years for pruning. I could use a residential tax break for maintaining this tree.” - Survey Respondent*

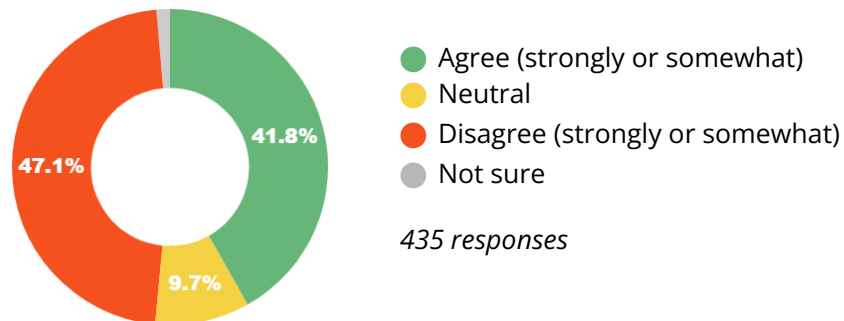
*“Grant funding for energy efficient and/or solar upgrades is great if it is either universally accessible or is equity-oriented. Grant programs that have a finite amount of money and are not income tested will primarily benefit the wealthy as they have the time and energy to apply for programs.” - Survey Respondent*

*“If this is grant funding coming from another means than property taxes, sure - But Edmonton has already seen crazy high tax hikes.” - Survey Respondent*

### GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 14 (see *Overall Survey GBA Plus Spotlight*).

### Action 15: Build organizational change within Administration through education and collaboration



42% of respondents (n=435) strongly or somewhat agreed with Action 15. Among respondents who are concerned about climate change (n=241), 72% agreed with this action and 18% disagreed with it.

Among respondents who are not concerned about climate change (n=167), 4% agreed with this action and 88% disagreed with it.

Action 15 received 200 written responses.

Some respondents who showed concern about climate change indicated they felt it was important for the City to recruit, train and maintain climate expertise within City staff. It was expected then that this expertise could both support climate related City projects and also be shared to the general public via climate-related communications. There was some concern that the development of this expertise may cost too much to develop.

To draw on already existing knowledge, there was support for connecting with climate experts from the Edmonton community, particularly academics. However, others were concerned that this type of public engagement would give outsized influence to those with a particular agenda, such as Developers and Oil Industry interests. They also were concerned that this outreach and research would lead to more bloating, red tape, and unnecessary costs.

There was some confusion regarding who exactly this action refers to. Respondents asked who exactly is being collaborated with, as well as how this action is its own distinct goal, as opposed to a necessary component of all other actions.

Respondents who are neutral about concern for climate change generally expressed concern with this action. Respondents who were not concerned about climate change also generally expressed concern about this action. This option came from a lack of trust in the source of the climate change science or experts.

*"There's are already loads of experts, studies, and climate scientists out there. Adopt existing research and plans and use the money to directly fund change." - Survey Respondent*

*"Wonderful idea - use the expertise available to help in better informed planning." - Survey Respondent*

*"Fantastic idea. We need to have these experts at the table when making decisions, their knowledge affects us all. They can provide insights that can help us future proof policy, mitigate risk and add value. If you combine this by having social sustainability experts at the table you will have a much better chance of successful long term policy development and implementation. Integrating these professionals for policy and cross training can level up team baseline knowledge and bust silos." - Survey Respondent*

*"Just makes sense, where else would you get the experts from? It is nice to have a non biased review/perspective on any administration's decisions" - Survey Respondent*

## GBA Plus Spotlight

Respondents who identify as 2SGLBTQIA+ are more likely to agree with Action 15 (see *Overall Survey GBA Plus Spotlight*).

## Considerations for Additional Actions

Respondents were asked to provide additional ideas or actions to consider that might be missing from the draft Action Plan. This question received 280 responses. The topics and ideas included the following:

Topic	Ideas
<b>Climate, environment, and food</b>	<ul style="list-style-type: none"> <li>• Reducing greenhouse gas emissions and promoting renewable energy sources</li> <li>• Reviewing waste, recycling, and materials handling</li> <li>• Considering food waste and food insecurity</li> <li>• Incorporating embodied whole life carbon requirements (materials, operations, and disposal) into the Zoning Bylaw</li> <li>• Management of green spaces and vegetation</li> <li>• Preservation of wildlife</li> <li>• Water management (e.g. grey water, rainwater, water supply)</li> <li>• Lighting</li> </ul>
<b>Behaviour</b>	<ul style="list-style-type: none"> <li>• Transportation (e.g. public transit, walkability discouraging car use)</li> <li>• Public behaviour (e.g. reducing car idling, incentivizing local leisure, regulating smoke or pollution emitting activities)</li> </ul>
<b>Development</b>	<ul style="list-style-type: none"> <li>• Regulating concrete and asphalt paving</li> <li>• Managing rate/location of development</li> <li>• Retrofitting existing developments</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• Educating youth</li> <li>• Providing literature and education for the public on how to practice climate resilience</li> <li>• Communicate the environmental and economic benefits of climate resilience</li> </ul>
<b>Organizational</b>	<ul style="list-style-type: none"> <li>• Broad engagement with internal and external partners</li> <li>• Address affordability of climate resilience measures</li> <li>• Collaborate with public and private organizations</li> <li>• Find conflicting City projects</li> <li>• Indigenous collaboration, such as hiring Indigenous contractors and service providers</li> </ul>

Topic	Ideas
Other	<ul style="list-style-type: none"> <li>● Embed accessibility into projects</li> <li>● Research other jurisdictions for climate resilience</li> <li>● Online portal for climate resilience applications</li> <li>● Providing cooling centres for people experiencing homelessness</li> </ul>

The most frequent theme (20 respondents) was management of green spaces and vegetation. Specific suggestions included planting more trees, protecting existing vegetation including mature trees, implementing policies for natural areas, integrating more nature-based solutions, funding program for xeriscaping, more trees and space around properties to deal with heat emergency, banning destruction of tree canopies in mature neighbourhoods, increasing biodiversity outside of infrastructure and developments, address greenwashing, passive solar design, passive heating, rebates for exceeding building codes for insulation, ensuring more green space, planting more native vegetation, promoting plant-based low-carbon food for City meetings and conferences, provide subsidies for purchasing plants and trees, and others.

The second most frequent theme (16 respondents) was transportation. Specific suggestions included no longer expanding roadways and focus budget on active transportation, improving the reliability of transit, growing active transportation networks, adding trees to roadway medians, replace Council's car allowance with public transit passes or e-bike subsidies, reducing personal vehicle trips with improved bike lanes, incentivizing development near existing public transit, connecting bus routes to LRT hubs, introducing EV ride share programs, providing shade and shelters for improved walkability, improving access to public transit,

*"Walkability, bike-ability and transit. Making sure Edmontonians can move around in ways other than a car would go a long way in ensuring climate mitigation and adaptation." - Survey Respondent*

*"I would love to see more areas planted with native plants. That doesn't mean just stop mowing, it takes some effort to get them established. More community gardens too." - Survey Respondent*

*"Protecting existing private mature trees is important and they need to be protected by a bylaw and /or incentives to keep them. Developers routinely sacrifice all vegetation when demolishing existing homes for infill. Also, incentivizing retrofitting of existing homes is needed. These homes are often more affordable than new builds. Requiring all new buildings to be energy efficient is also necessary as developers will generally build the cheapest structure for highest financial gain." - Survey Respondent*

*"I suggest that the City encourage climate resilience by supporting low-cost options for citizens, and/or subsidizing them directly. For example, solar panels, rain barrels, electric bicycles, insulation, new windows. Also, tax breaks for incorporating such measures voluntarily could be considered." - Survey Respondent*

*"How about a list of indigenous business service providers such as electrical contractors, Plumbing contractors, solar contractors etc. for the public and companies that actually want to provide access and opportunity to indigenous businesses. Otherwise "indigenous inclusion" is just worthless words." - Survey Respondent*

## **Feedback from Meet with the Project Team**

Participants in the Meet with the Project Team engagement opportunity shared their thoughts in 10-20 minute one-on-one virtual meetings or phone calls with project team members. Time slots were offered during the day and evenings throughout the engagement period, and this opportunity was accessible via a section on the Engaged Edmonton page. Nine individuals, including members of the public and organization representatives, took advantage of this opportunity to share feedback.

Participants shared a range of feedback, with many providing suggestions of additional detail for specific actions and others raising concerns about elements of the proposed actions. An overall sentiment expressed by many participants was the need to better integrate the Action Plan with other policies and documents, whether in Edmonton's jurisdiction or not (such as building codes and energy codes).

Some participants spoke specifically about environmental considerations. For example, there were discussions about the expansion of green spaces, green roofs, emissions tracking, tree planting, and information on areas more vulnerable to the effects of climate change.

We heard a range of feedback on the enforcement, incentivization, and regulation of the actions. While some expressed concern about regulation, others indicated the need to enforce compliance.

We heard interest in involving climate experts in the processes and providing information on who these experts are and their role, involving industry experts and conservation groups in education and training initiatives on these new processes, and continuing to provide opportunities for industry, organizations, and members of the public to share feedback.

## **Feedback on Future Engagement Opportunities**

Survey respondents were asked if they have ideas, preferences, or accessibility needs for future engagement opportunities on the Action Plan. Examples provided in the survey question included

digital surveys, large workshops, open houses, small group meetings, specific days and/or times, accessibility, preferred locations in the city, and people you want us to hear from.

The most frequent suggestion (13 respondents) we heard about engagement opportunities was to hold open houses and workshops in local neighbourhoods or at community leagues. We also heard interest in webinar style sessions (6 respondents), online surveys (13 respondents), and the use of social media (4 respondents), with some respondents pointing out that online options save them time, allow them to engage on their own schedules, are COVID-safe, and save money, and others pointing out that paper surveys should be available as well. We heard that sometimes relevant stakeholders are not brought into the conversation early enough to influence decisions or are not engaged at all, and that more views need to be considered in the engagement process. Another frequent remark we heard was that the City should meet with experts with strong education and experience (12 respondents). Specific to the Action Plan, we heard that industry is well-equipped to support educational and action-based meetings with the public and stakeholders. We heard that the climate data and research that already exists should be considered in the process. Some specific engagement strategies were suggested, such as using social media to make the information “digestible and fun” and considering engaging beyond the Advise and Refine levels.

Respondents were also asked to provide their email and provide consent if they would like to be informed about future engagement opportunities. Those who provided their emails will be contacted in advance of the Urban Planning Committee meeting in October of 2024 and when future engagement opportunities arise relating to the implementation and monitoring of the actions.

## Next Steps

### How Input Will Be Used

This phase of the Action Plan project falls within the Advise level of the spectrum: *The public is consulted by the City to share feedback and perspectives that are considered for policies, programs, projects, or services.*

The results of this engagement will be used to further adjust and prioritize the draft actions and inform the development of the Action Plan.

The Action Plan will be presented to the Urban Planning Committee (UPC) for information on October 8, 2024. Following Administration’s UPC presentation, the actions will be assigned to various teams in Administration to implement, supported by ongoing engagement with residents and stakeholders and regular monitoring and reporting.



The Engaged Edmonton website will remain live through the October UPC meeting date to ensure the background documents are easily accessible and to publicly share this What We Heard report.

Thank you to everyone who contributed to this phase of engagement for the Climate Resilient Planning and Development Action Plan.

# Appendices

## Appendix A: Additional Detail on Engagement Tactics

### Engaged Edmonton Site

The Engaged Edmonton site was the central hub for information on the draft Action Plan and supporting background materials. Documents posted on the website included the following:

- **Draft Action Plan:** Details on the 15 draft actions including the outcomes, reasons (“why”), and proposed approaches. This document also included an introductory paragraph providing context for the Action Plan.
- **Glossary:** A five-page list of key terms that are referenced in the draft Action Plan, listed alphabetically with definitions.
- **Overview:** A four-page document providing detailed information on the strategic direction, objective, development of the Action Plan, engagement, implementation, monitoring, deliverables, and timeline.
- **Background Presentation:** A presentation providing background on climate change, guiding City policies shaping the Action Plan, the road to arriving at 15 draft actions, and high level information on each action. This background information was also shared at the stakeholder workshop. The presentation was linked as a downloadable PDF on the Engaged Edmonton website and embedded as a Google Slides widget directly in the main content section of the page for easy access.

The Engaged Edmonton website hosted three opportunities for engagement from July 2 to 23, 2024:

- Survey
- Meet with the Project Team
- Submit a Question or Comment

### Online Survey

The online survey was used to collect qualitative and quantitative data on respondents’ understanding and perspectives of climate resilience and climate action, and on respondents’ feedback on the draft Action Plan. To explore climate resilience and climate action, respondents were asked a series of questions at the beginning of the survey. Next, they were presented each of

the 15 draft actions and asked to provide their level of support (agreement scale) and written feedback on the draft actions. The survey also asked for additional ideas for inclusive engagement and whether they would like to be informed of future engagement opportunities. Demographic questions closed out the survey, each with an option to select “Prefer not to say” for those who did not wish to disclose personal information.

### Stakeholder Workshop

The stakeholder workshop was held on July 4, 2024 in Edmonton Tower, facilitated by a Public Engagement Advisor and the Project Team and attended by 24 industry stakeholder representatives. Please refer to the Who We Engaged section for more details on the attendees.

The workshop collected both oral and written feedback. Following a presentation on the term “climate resilience” and the 15 draft actions, participants were offered time to ask questions in a question and answer period.

Poster boards for each action were displayed around the workshop room with traffic-light colour-coded sticky notes for participants to provide detailed feedback while also suggesting a general sentiment:

- **Red:** What kinds of challenges might this action create? How might this not help climate resilience?
- **Yellow:** What are you confused or unsure about? What general comments do you have?
- **Green:** What is good about this action? How might this help climate resilience?

Overall comments were discussed in a final group discussion.

### Meet with the Project Team

This engagement tactic offered any member of the public to chat one-on-one with a Climate Resilience Planning and Development project team member in a 10-20 minute conversation over the phone or through a video call. Time slots were offered during the day and evenings throughout the engagement period, and this opportunity was accessible via a section on the Engaged Edmonton page.

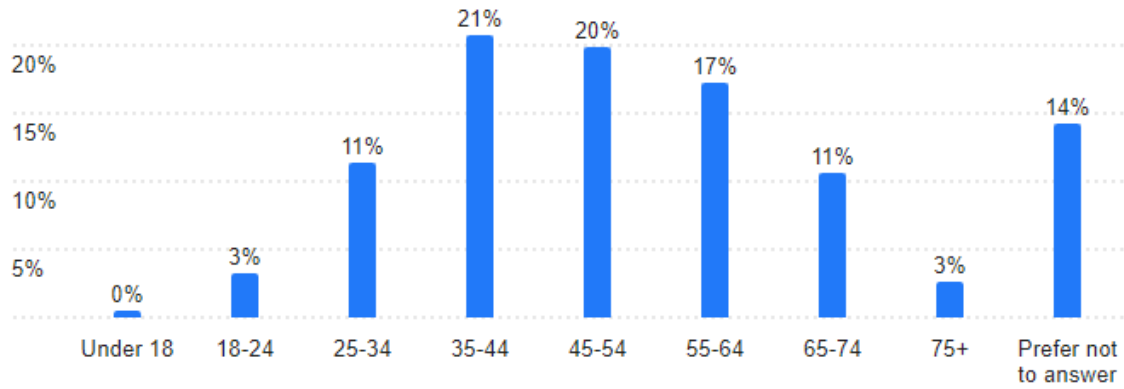
## Appendix B: List of Stakeholder Groups at Workshop

The following organizations were represented by attendees at the July 4, 2024 in-person workshop at Edmonton Tower:

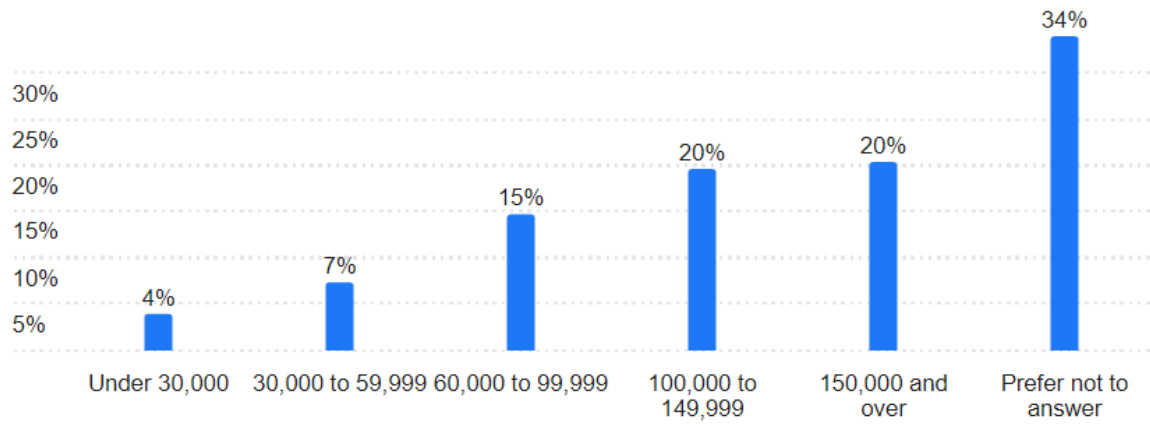


## Appendix D: Survey Demographics

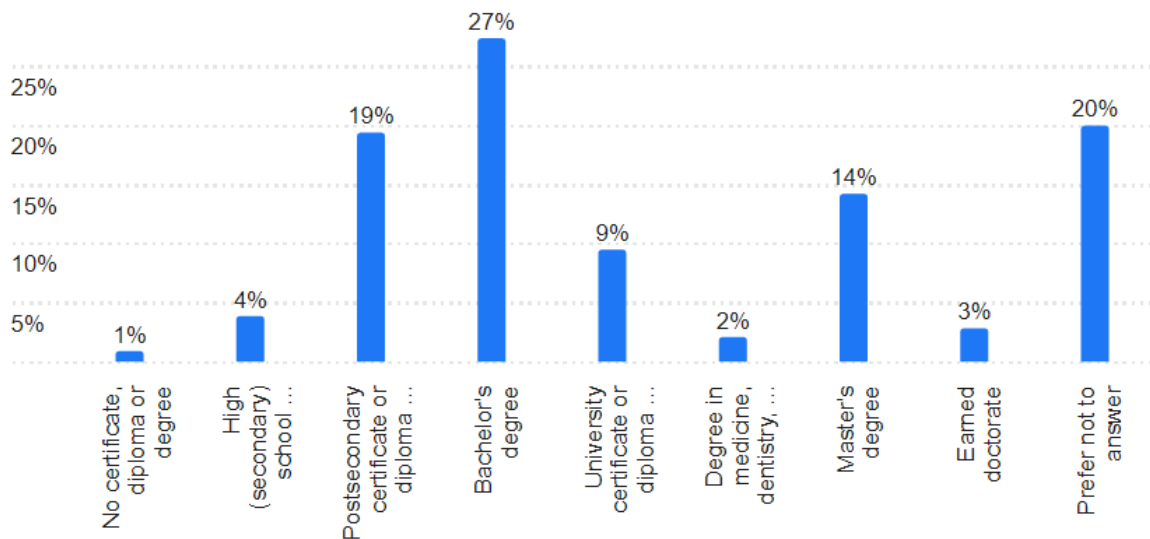
**Age Group** (435 responses)



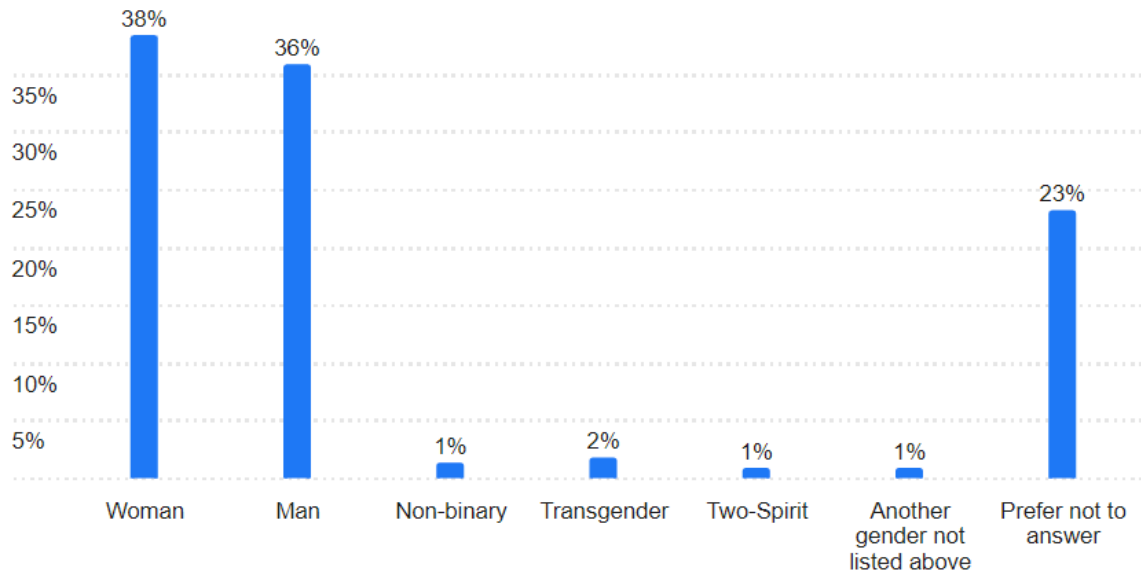
**Income Level** (435 responses)



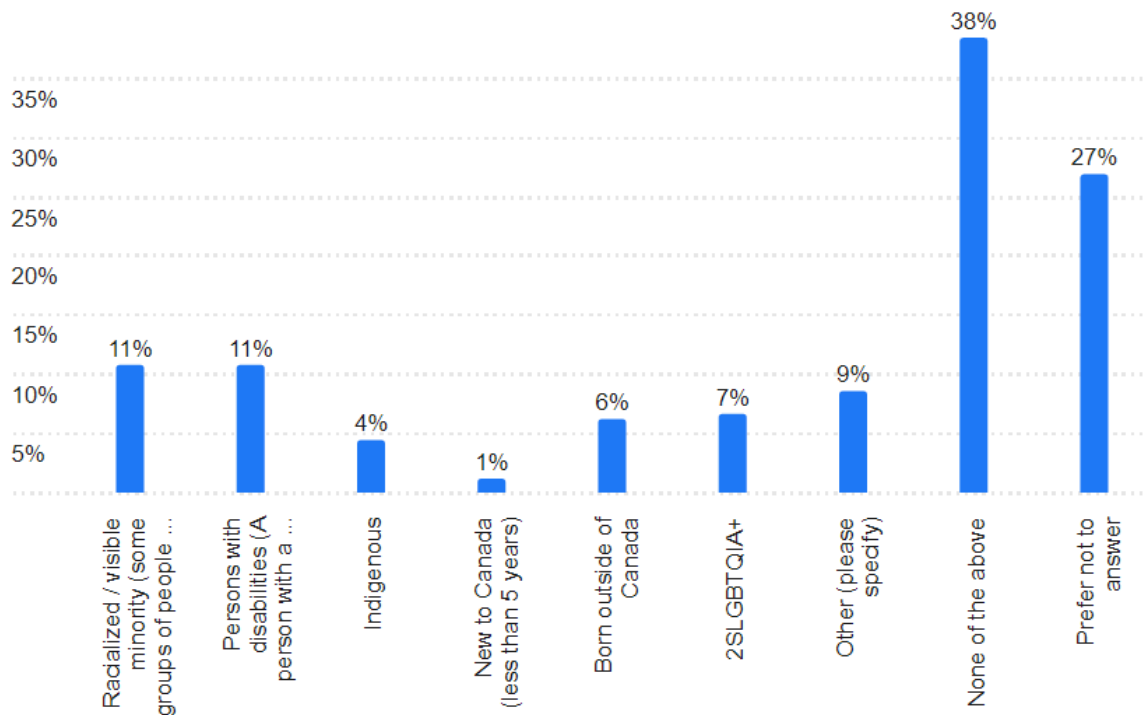
**Education Level** (435 responses)



**Gender** (435 responses)



**Identity** (435 responses)



**Appendix E: Review of Existing Engagement**

**Climate Attitudes and Beliefs**

The City of Edmonton publishes the annual Climate Change and Energy Perception survey to better understand attitudes and beliefs on climate and energy transition in order to inform and measure the effectiveness of policies and programs. [The 2023 survey found](#) that almost 3 in 4 Edmontonians felt climate change was a real trend that has been largely caused by humans and requires

immediate action. Similarly, around 65% of Edmontonians flagged they were taking steps to mitigate climate change. However, only 1 in 4 were familiar with the term “climate resilience.”

These findings provide important context for the Action Plan. Despite there being a majority support for climate action among surveyed Edmontonians, this data suggested that more communication and engagement would be required on the term “climate resilience” for this project. This would ensure all those participating in engagement activities were doing so with a shared understanding of the central concept.

### **City Plan, District Planning, and Zoning Bylaw Renewal Climate Change Engagement**

In April 2024, an external consultant reviewed climate-related engagement findings from three major City of Edmonton projects and prepared a “synthesis report.” This report focused on engagement relating to climate change mitigation efforts from the following projects:

- [The City Plan](#) (engagement from 2018 to 2020)
- [District Planning](#) (engagement from 2021 to 2024)
- [Zoning Bylaw Renewal](#) (engagement from 2022 to 2023)

The main priorities and concerns identified were then categorized within four main topics, which provided a framework for the fifteen draft actions.

- Climate Resilient Neighbourhoods
- Climate Resilient Site and Landscaping Design
- Climate Resilient Buildings
- Climate Resilient Processes

This synthesis report, including the categories of topics, the priorities, and the concerns, helped inform the draft Action Plan’s development from April to June of 2024.

### **River Valley Planning Modernization Indigenous Engagement**

River Valley Planning Modernization (RVPM) engaged Indigenous peoples during the project’s first three phases. In the first two phases, 31 nations and 12 community groups were invited to take part in one-on-one engagement sessions. In phase three, in-person engagement sessions were hosted. In phase four, the urban Indigenous community was invited to contribute to a survey with all Edmontonians.

RVPM participants emphasized the need for Indigenous perspectives in City projects and decision making, particularly concerning environmental and climate projects, highlighting their unique connection to and stewardship of the land. However, some identified concerns about Indigenous engagement, including being involved only after key decisions were made and lacking agency to

influence outcomes. They also noted that language, practices, and logistics of engagement activities must be accessible and culturally appropriate.

### Zoning Bylaw Renewal Indigenous Engagement

Zoning Bylaw Renewal (ZBR) used a virtual round table to listen to, connect with, advocate for, and partner with Indigenous peoples in Edmonton. This project received extensive feedback from Indigenous partners on a range of topics:

They received comments regarding use of space:

- Indigenous spaces should be surrounded by nature to maintain the significance of direct contact with land and water, with Indigenous organizations recommending consideration of neighboring uses, such as River Valley natural areas, to prevent encroachment by development.
- Traditional Indigenous practices face financial and spatial challenges, such as prohibitions on activities like smudging indoors or erecting teepees in backyard, restrictions that hinder traditional activities like harvesting and fishing, and the financial burden of leasing commercial properties for traditional activities. (Respondents expressed a preference on investment in residential zones where their services are in demand and have traditionally been offered, such as friendship centers and preschool programs.)

They received comments regarding planning and development:

- Indigenous organizations face barriers in obtaining development permits due to stigmatization and NIMBYism.
- The land development process, including zoning and building facilities, is discouraging for Indigenous organizations, prompting them to seek multiple sites and incur additional costs and delays.

They received comments regarding use of language, knowledge, and social values:

- Indigenous organizations suggest using the term 'gardens' instead of 'urban agriculture' to align more closely with traditional practices of growing and harvesting medicinal and traditional plants.
- Recognition and acknowledgment of Edmonton's history, including factors contributing to the marginalization of Indigenous communities like the River Lots System and displacement, are crucial for reconciliation efforts.
- Indigenous Peoples advocate for the normalization of their traditions and ceremonies in public spaces without requiring permission, urging the development of blanket policies to facilitate this normalization.



## District Planning Indigenous Engagement

As part of three distinct Indigenous engagement phases, District Planning collected feedback through 15 district pages on Engaged Edmonton, two online surveys, email, online workshops, and in person open houses, pop ups, and usability testing. The District Planning team met with Indigenous Nations (alongside RVPM and ZBR) to learn about their history and land use and to provide drafts of the District Plan for feedback.

The District Planning team heard that the City should consider alternative engagement methods, such as “oral and/or verbal storytelling, augmented reality, QR codes, site signage”. There was also a desire for developing engagement in partnership with Indigenous peoples and using projects to develop long term relationships. In relation to land use, participants commented on the historical context of Indigenous peoples missing. They explained that this context should be presented in a variety of ways to inform people about the role of Indigenous culture and history in land use planning.

## Indigenous Youth and Climate Reconciliation

In June 2024, Deloitte’s Future of Canada Centre and Indigenous Youth Roots published *Reconciling our relationships to preserve Mother Earth for future generations*, which is the fourth volume of their *Voices of Indigenous youth leaders on reconciliation* initiative. This research project used an approach that integrates Indigenous and Western research methods, known as Two-Eyed Seeing. Informed by Indigenous youth engagement, this project aimed to understand how governments and industries can apply environmental reconciliation and work together with Indigenous partners to meaningfully address the climate and improve our collective relationships with the land. Detailed information on the engagement and research methodology, which included surveys, interviews, workshops, academic and industry research, and review processes, [can be found in the report](#).

Indigenous youth leaders provided the following recommendations:

- |  |   |
|--|---|
| <p><b>“Embed respect for Indigenous traditional knowledge and connections to the land”<sup>2</sup></b></p> | <ol style="list-style-type: none"> <li>1. “Implement Indigenous language and cultural revitalization efforts”</li> <li>2. “Create cross-cultural learning opportunities to bridge Indigenous worldviews, and form a relationship with the land”</li> <li>3. “Decolonize climate research and action”</li> <li>4. “Invest in the next generation of Indigenous climate leaders”</li> </ol> |
|--|---|

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<sup>2</sup> Deloitte Future of Canada Centre. “Reconciling our relationship to preserve Mother Earth for future generations.” *Voices of Indigenous youth leaders on reconciliation* 4 (June 2024).

**“Facilitate partnerships among First Nations, Metis, and Inuit communities and non-Indigenous parties for environmental management”**

5. “Acknowledge past and continuing harms and give back to affected communities”
6. “Create space for Indigenous leaders to meaningfully participate in environmental decision making”
7. “Equitably invest capacity for Indigenous-led initiatives”
8. “Transition to more conscientious, Indigenous-led land management”

**Principles for collaboration and partnership**

- A. “Approach collaboration locally”
- B. “Sustain a community presence and involve community members”
- C. “Meaningfully bridge Indigenous and non-Indigenous knowledge”
- D. “Share responsibility by being transparent and accountable”

Overall, the findings from *Reconciling our relationships to preserve Mother Earth for future generations* relating to climate action suggest the following:

- Indigenous cultural perspectives should be considered in the climate conversation,
- Indigenous decision making should be integrated in climate action,
- Knowledge and consultation with Indigenous peoples should be handled respectfully and meaningfully, and
- Governments and institutions should recognize their roles in climate change, their responsibility to take action, and the need for Indigenous ways of knowing to be part of the climate conversation.

**Policy on Planning Practice and Reconciliation**

The [Policy on Planning Practice and Reconciliation](#) from the Canadian Institute of Planners (CIP) summarizes a broader discussion about how to integrate reconciliation - understood as the “building [of] relationships with Indigenous peoples that respect their values, ways, and cultures”<sup>3</sup> - into planning best practices. Drawing from Indigenous perspectives on planning, the resulting

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<sup>3</sup> Canadian Institute of Planners. “Policy on Planning Practice and Reconciliation.” *CIP Reconciliation* (2019).

guidelines highlight the importance of integrating Indigenous perspectives and practices into planning processes.

This shift would involve acknowledging historical injustices and the exclusion of Indigenous knowledge from policy-making and actively working towards reconciliation and respectful engagement. Planners are encouraged to prioritize cultural safety, humility, and active listening, aiming to adopt methods of fostering meaningful relationships with Indigenous communities. CIP notes that it is crucial to collaborate with Indigenous leaders, respect diverse governance systems, and ensure planning processes are community-driven. This, in turn, may begin to allow space for healing and mutual capacity-building.

## Appendix F: Participant Drawing Submission

A youth participant in a Meet with the Project Team session shared the below drawing with their ideas for the Action Plan.

