



# CLIMATE RESILIENCE AND OUR FUTURE CITY

What We Are Hearing: Climate  
**THE CITY PLAN**

September 2018 – June 2019

## **Acknowledgements**

We acknowledge the traditional land on which Edmonton sits, the Territory of the Treaty 6 First Nations and the Métis Nation of Alberta Region 4. We would like to acknowledge and thank the diverse Indigenous peoples whose ancestors' footsteps have marked this territory for centuries such as: Cree, Dene, Saulteaux, Nakota Sioux, Blackfoot, as well as the Métis and the Inuit.

Edmonton is a welcoming place for all people 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.

The authors thank everyone who participated in the engagement activities. Your contributions are greatly appreciated and we hope you see your values and ideas reflected in these pages.



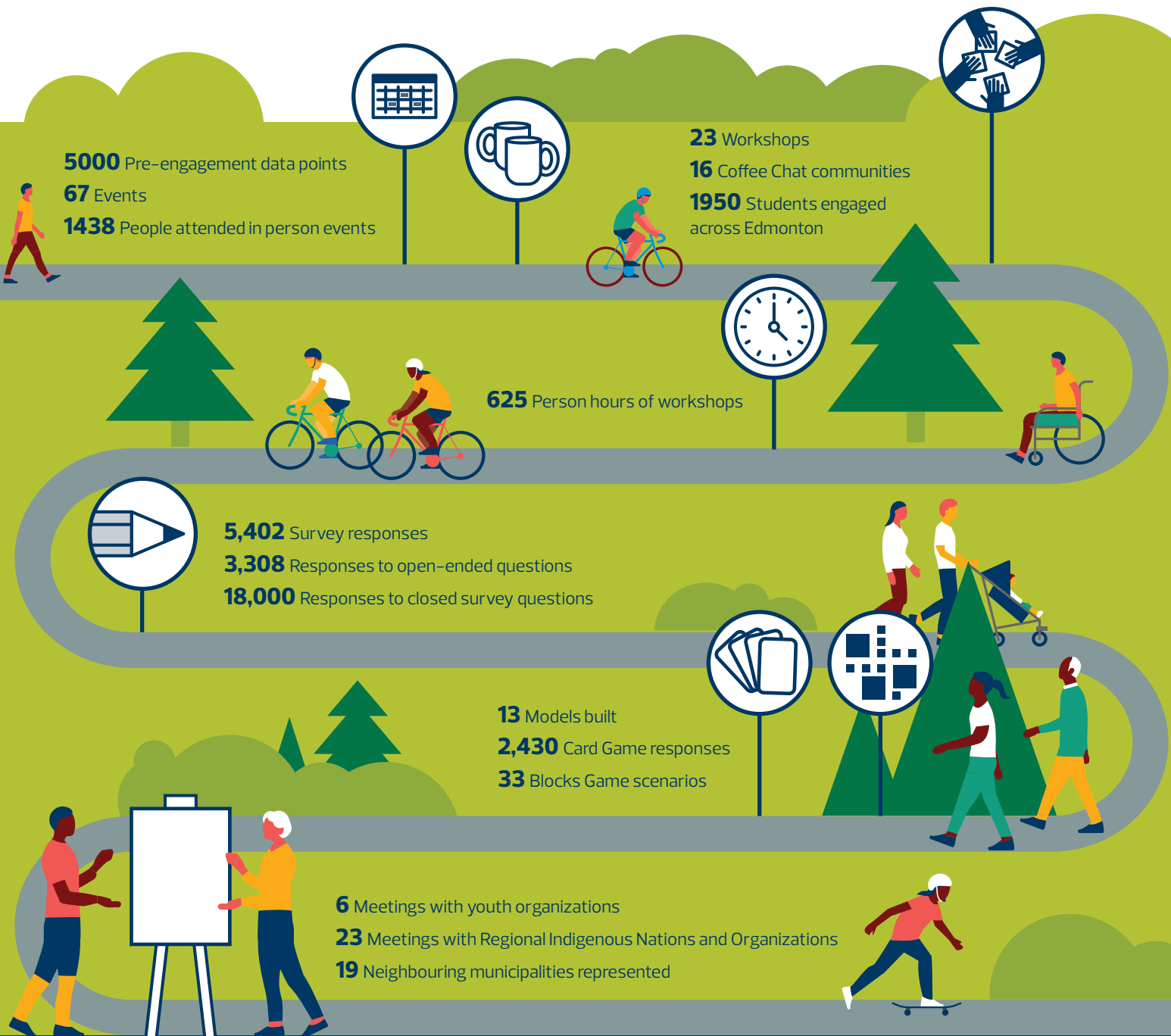
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# ENGAGEMENT SNAPSHOT

## WHO WE ARE HEARING FROM

Throughout The City Plan project phases, specific efforts were made to reach a diverse range of Edmontonians of different age, cultural and socio-economic background in different geographic areas of the city.





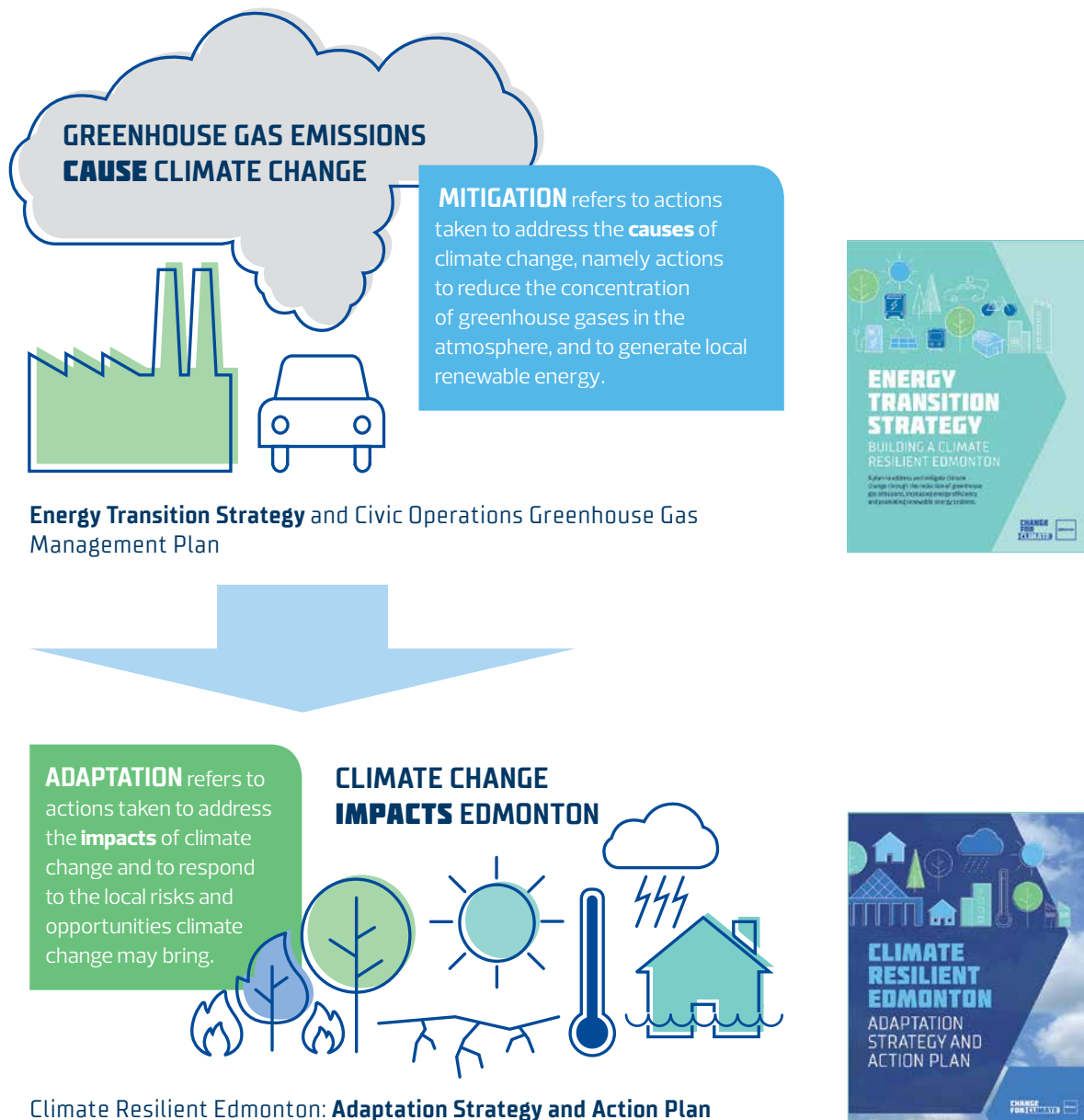
# CLIMATE RESILIENCE & ENERGY TRANSITION STRATEGY

Climate resilience is one of the four goals of Edmonton's strategic plan ConnectEdmonton (Vision 2050). Climate resilience is about transitioning Edmonton to a low carbon future with clean air and water while adapting to a changing climate. To achieve this, the City of Edmonton developed the *Community Energy Transition Strategy* (2015) and the *Climate Resilient Edmonton: Adaptation Strategy & Action Plan* (2018), with the best scientific research and advice available, to help mitigate the risks of climate change and adapt to a changing climate.

On Aug. 27, 2019 City Council declared a climate emergency and directed administration to update the Community Energy Transition Strategy to align with the international target of limiting global warming to 1.5°C. While the Strategy is currently being implemented, to help Edmontonians, businesses and organizations mitigate their impact on climate change, it is also in the process of being updated. The updated Strategy will work within a local carbon budget of 155 Megatonnes and will be guided by the six Climate Shifts described on page 7. The Adaptation Strategy and Action Plan is not being updated at this time.

Edmonton's Community Energy Transition Strategy is a risk management response to a carbon constrained world. The strategy was designed to accelerate Edmonton work to take direct and indirect action to reduce greenhouse gas emissions, and increase renewable energy and energy efficiency across all sectors. The actions were designed to position Edmonton to prosper in a low carbon economy, and to take advantage of emerging opportunities in clean technology and carbon abatement.

Figure 1. Mitigation and adaptation diagram



# CLIMATE SHIFTS

## CLIMATE SHIFT 1

### TOOLS & TARGETS

One of the foundations of the updated Strategy will be to use a local carbon budget to set its goals and to monitor its progress. Edmonton's carbon budget has been calculated using an internationally accepted methodology to be 155 Megatonnes. This is the amount of greenhouse gas emissions Edmonton can emit between 2017 and 2050 to meet the global target of limiting global warming to 1.5°C. Setting targets based on a carbon budget allows municipalities to visualize the urgency of the need for change. Every year that emissions are added to the atmosphere essentially reduces the remaining local carbon budget.

## CLIMATE SHIFT 2

### LOW CARBON CITY AND ZERO EMISSIONS TRANSPORTATION

Intensification of land use reduces emissions but it also drives transportation choices. A built form that includes low carbon dwellings and a high proportion of trips taken by active transportation and public transit will reduce emissions in Edmonton.

## CLIMATE SHIFT 3

### EMISSIONS NEUTRAL BUILDINGS

Buildings represent approximately 30% of Edmonton's greenhouse gas emissions. Approximately 80% of the buildings that will exist in 2050 have already been built. Both new and existing buildings need to reach a carbon neutral state in the future.

## CLIMATE SHIFT 4

### RENEWABLE REVOLUTION

Zero emissions energy is required both to reduce existing emissions and to ensure no new emissions are added. Proven technologies like solar will need to be deployed at scale. A circular economy and sustainable waste management practices including reducing waste at the source will be essential for a low carbon future.

## CLIMATE SHIFT 5

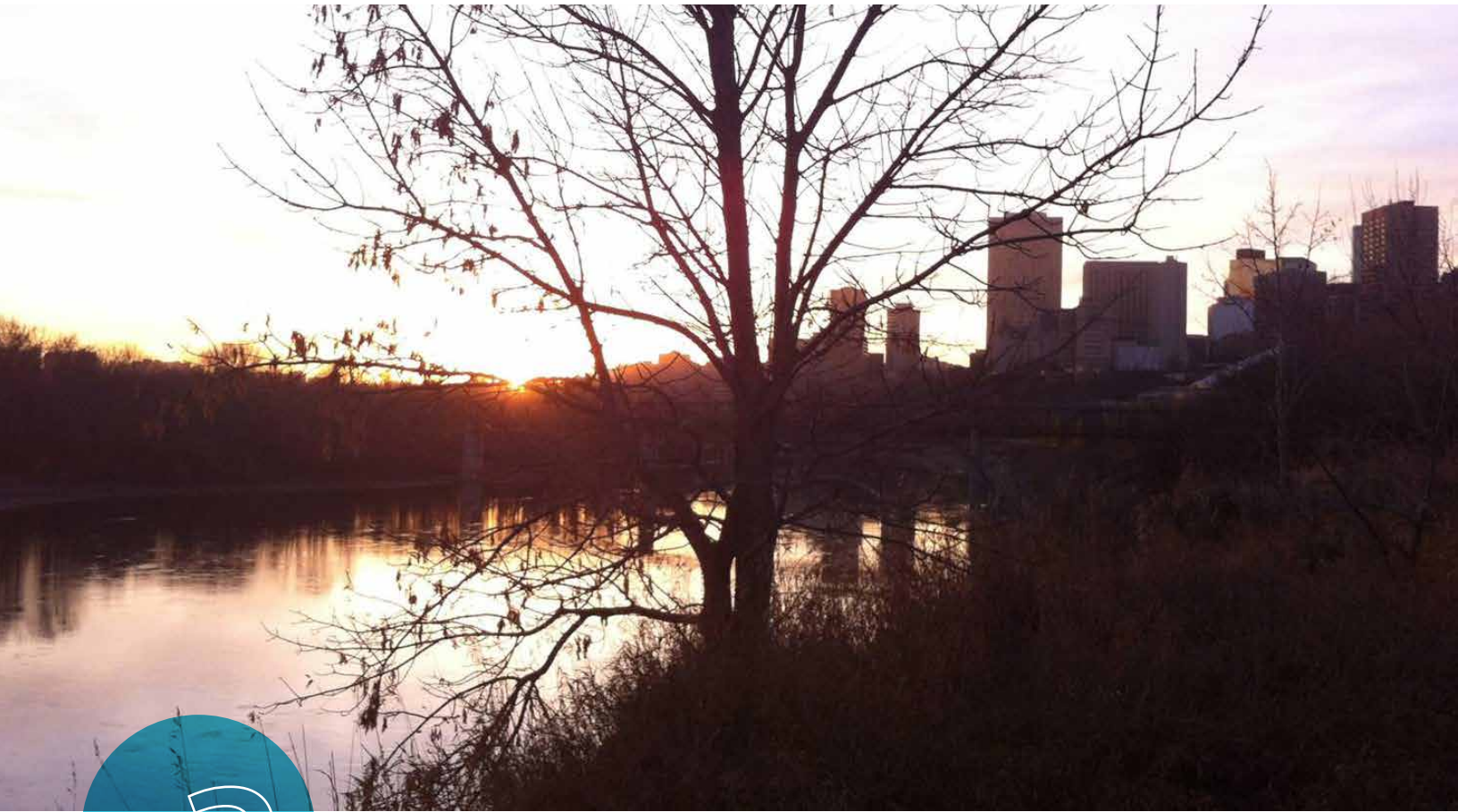
### JUST AND EQUITABLE TRANSITION

A critical component is to ensure that all Edmontonians have access to the opportunities a low carbon future provides. Attention to the reduction of energy poverty, gender equity and ensuring access to green jobs for the vulnerable populations will be critical.

## CLIMATE SHIFT 6

### NEGATIVE EMISSIONS

Even if Edmonton is able to aggressively reduce its overall greenhouse gas emissions, modelling suggests that there will still be residual emissions to manage. A combination of natural and technological solutions for direct removal of carbon and sequestration and/or utilization of that carbon is required.



## WHAT WE ARE HEARING ABOUT CLIMATE

Prior to City Council's decision to declare a state of climate emergency in August 2019, Edmontonians had already started to express urgent concerns about making major changes to address our environmental impact as a city.

The following pages summarize the climate-related feedback received to date through engagement for The City Plan, and the Vision 2050 engagement that has informed The City Plan. The City Plan engagement was designed to intentionally gather input from a wide cross section of Edmontonians. While this engagement did not explicitly ask about climate, climate did surface as a theme of interest. This document captures feedback about climate and will be used to inform the update of Edmonton's Community Energy Transition Strategy.



For a full report of what we heard through The City Plan engagement, who we listened to and how we listened, please visit [www.edmonton.ca/thecityplan](http://www.edmonton.ca/thecityplan)

- **What We Are Hearing: October – November 2018**
- **What We Are Hearing: November – December 2018**
- **What We Are Hearing: January – June 2019 (City-Wide Engagement )**
- **What We Are Hearing: January – June 2019 (Indigenous Engagement)**

## INDIGENOUS VOICES

Indigenous communities shared that they need to be involved in City projects earlier to share perspectives about the environment and the impacts that they are experiencing in their home communities surrounding Edmonton, and Edmonton regionally impacts rivers, air, and wildlife in their communities. There is still a perception that what Indigenous communities are sharing is not being heard and acted upon.

When asked about their future aspirations during engagement for the City Plan, participants were not focused on specific actions, goals or targets related to climate change. As participants were not directly engaged on the specific Climate Shifts, responses often highlighted ideas related to the quality of life, quality of the river and valley, and the importance of protecting the environment. Generally, five themes emerged from the City Plan Indigenous Engagement data that have direct ties to climate and the resilience of the city.

### Natural Areas and Wildlife

Communities are concerned that natural areas are disappearing in the city that contains wildlife corridors and traditional plants. Indigenous communities believe everything has a spirit and is alive and is equal, not greater than another. Although Indigenous communities have been engaged on environmental monitoring, additional work is required to understand the broader regional cumulative impacts that extend beyond the city limits.

### North Saskatchewan River and Other Water Bodies Are Important

The forts in Edmonton located beside the North Saskatchewan River were important trading posts; the North Saskatchewan River was an important component of the Indigenous economy helping to bring trade goods to the fort and helping them to purchase supplies for themselves and their community. Rivers were also used to help access hunting grounds and areas for gathering plants and medicines. Rivers were also used to help Nations to gather, celebrate and share and participate in ceremonies, which is one of the ways Indigenous communities could pass on wisdom, knowledge, traditions, and stories important to sustaining their way of life.

Indigenous communities that still use the river system are concerned about the rivers drying up. Some communities that are downstream of the city are concerned about the pollutants coming into their communities and that contaminated water will impact their drinking water. Concern was also raised about pollution contaminating the fish, which are caught and eaten by Indigenous people.

## Protect Natural Areas and Create New Green Spaces

Natural areas and green spaces are more than parks for Indigenous people, they provide important cultural and spiritual qualities supporting, their mental, physical, and spiritual well-being. Indigenous people have a strong and very unique connection to the environment, including the land, water, air, and everything living in the environment. The expression "all my relations" is often used to reflect that everything is connected.

Through previous engagements several Indigenous communities referenced the importance of having natural areas free of pollution and contamination. Many Indigenous people use natural areas to practice cultural ceremonies and to collect and harvest traditional plants and medicines. These natural areas are important places to teach future generations about culture, language, and connection to the land that help them protect and preserve their way of life.

## Ideas on Renewable Energy

Many Indigenous communities were familiar with renewable energy, as many communities in attendance of the engagement session had their own forms of renewable energy projects including wind and solar. During engagement sessions, Indigenous communities specifically identified that the City could look at utilizing "green energy", "green power", and explore "reusing waste for energy". Indigenous communities have also recommended that the City seek out best practices from other countries (e.g., Germany) around the world.

## Implement Recycling Programs

Throughout the engagement, Indigenous communities referenced the importance of recycling programs suggesting ideas such as: composting, gray water, water barrel program, and reusing products and reducing how much waste goes to the landfill.

# CITY-WIDE ENGAGEMENT AND CLIMATE SHIFTS

When asked about their future aspirations as a city, participants were not focused on specific actions, goals or targets related to climate change. Responses often highlighted ideas related to quality of life, including access to amenities, services, affordable housing, reasonable commutes and job opportunities. Analysis of the data identified where those quality of life aspirations aligned with the climate shifts at the centre of the update of the Community Energy Transition Strategy. The text below highlights common themes related to climate change and sustainability received in the city-wide engagement for The City Plan.

## CLIMATE SHIFT I



### TOOLS & TARGETS

Participants broadly identified that they would like to see Edmonton reduce its ecological footprint and greenhouse gas emissions. On the whole, these statements did not have an amount or time frame attached to them.

#### **More Than Just Greenhouse Gas Emissions** –

Perception of environmental sustainability is focused on more than just limiting CO<sub>2</sub>e emissions. Overall, responses were more likely to identify concerns about our collective ecological impacts like habitat degradation, or polluted waters, than global climate impacts.

**General Aspirations** – High-level aspirations like “be greener”, “be a climate leader” and “reduce our carbon footprint” were frequent. Specific actions were not identified.

**“Greener” Is Not Enough** – Saying “Greener” as part of The City Plan is not enough to meet the high bar of reaching the Paris Climate Agreement. Without clear and specific goals, ideas can be “green-washed” and approved. Guidelines should have clear thresholds and requirements for a range of topics including building and community design practices.

**Track Metrics** – It is crucial to have specific metrics and regularly monitor goals so we can understand how our decisions bring the city closer to its aspirations. Climate indicators and alignment with the Edmonton Declaration were specifically identified.

**Specific targets** – Adhering to international, national and local climate goals is important. (Limit increase in global average temperature to 1.5 degrees, a 40% reduction in emissions by 2050, and having all new buildings be built to Net Zero standards or better by 2030.)

**Apply a Universal Climate Lens** – All decisions should be made with consideration of climate impacts. Formally adding this lens to the decision-making process will help to ensure that Edmonton's climate goals are given a high priority and that its goals are actively considered at all stages of service delivery and policy making.

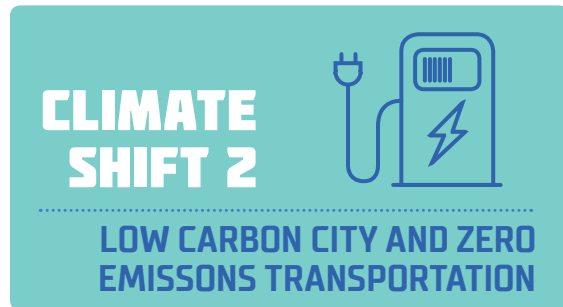
**Consistency** – Consistency over time is crucial to realizing major changes. Realizing goals requires implementation; decisions should be made only in alignment with goals.

#### Other Ideas

In addition to the above, participants also identified these ideas:

- Monitoring of air and water quality to address local environmental impacts; and
- Some participants indicated the need to use other metrics including 8/80 principles, Gender Based Analysis (GBA+), among others to help measure how the climate shift impacts people's quality of life and other factors associated with a just and equitable transition.

**“Psychologically we need to shift, it’s not passion, it is terror. That’s taking over the whole world and we don’t want to be stuck with a plan that does not go far enough on that.”**



The majority of responses received were focused on actions related to building a low carbon city. Edmontonians have clear ideas about the ways that the built form of our city can change to influence CO<sub>2</sub>e emissions.

**City Design Relies on Driving** – Edmontonians recognize how the current design of our city directly contributes to CO<sub>2</sub>e emissions. Reasons cited: how far Edmontonians have to travel to get to work and services, and how our cold winters have both contributed to large parts of the city being car-oriented or dependent. Driving is by far the best way to get around compared to transit or other modes, and even more so in the winter.

**Car Dependency is Not Equitable** – For most Edmontonians, living without a car is not a viable option. Reasons cited: cold climate, the design of suburban neighbourhoods and poor transit service. This is especially true for families, people who don't work downtown and people living in new suburbs. Without significant investment, achieving a greater uptake of public transportation and active transportation will be very challenging and will not occur equally across the city.

**Electric Vehicle Adoption** – Given Edmonton's existing car dependence and the magnitude of change required to reduce that dependency, it is important to find ways to speed the overall electrification of private vehicles in order to reach Edmonton's climate goals.

**Exceptional Future Transit** – The poor quality of Edmonton's existing transit system directly contributes to participants' decision to drive for their daily needs. To attract significantly more riders, the quality of the transit experience needs to improve. Common complaints raised against the existing system included long wait times, waiting in the cold, feeling unsafe both waiting and riding, as well as how long it takes to get to destinations compared to driving and the overall cost of transit, especially when considering paying for multiple family members and park and ride services. Ideas brought forward as part of these changes included:

- Make certain parts of the city free for transit;
- Build more transit priority infrastructure;
- Develop additional bus shelters;
- Expand the LRT network to serve a greater portion of the city including low income areas; and
- Improve neighbourhood access to bus transit.

**Build a Low Carbon City** – There is a desire to build a low carbon city by promoting more sustainable transportation systems including mass transit, walking, biking and electric vehicles. Reducing urban expansion into surrounding farmland and addressing car dependency across the city, especially in outlying areas can take place by reshaping the city. There are concerns about infill development and taking road space away from cars.

**Safe Active Transportation** – Active transportation networks that feel safe for a broad range of users are needed.

**Local Access to Services** – It is important to have communities in which it is possible to access services and amenities without a vehicle. The current design of neighbourhoods requires Edmontonians to drive; changes that encourage and enable residents to make more trips without a vehicle are desirable.



**Design Well Integrated Future Communities** –

Edmonton's climate aspirations need to be considered in the design of greenfield areas, where a large portion of Edmonton's growth occurs. Special attention needs to be paid to fully integrating major transportation transit rights-of-way, either for bus rapid transit or LRT into the design of new neighbourhoods.

**Green Infrastructure** – Green infrastructure can directly contribute to Edmonton's low carbon future. This includes the development of priority lanes for "green vehicles", expanding the LRT network, higher efficiency buildings, and active transportation corridors. Green transportation systems should efficiently connect the suburbs to other parts of the city and the core.

**Role of the Private Sector** – Identifying the roles of private businesses, service providers and utilities in helping Edmonton achieve its sustainability goals is important.

**Evolve Carbon Emitting Industries** – Reducing the impact of "carbon-emitting industries" to reduce Edmonton's climate impacts is an opportunity. While this is desirable from an environmental perspective, there is a need to evolve these industries to avoid eliminating jobs and livelihoods. Support to workers and their families impacted by the evolution of carbon industry is needed.



## CLIMATE SHIFT 3



### EMISSIONS NEUTRAL BUILDINGS

**Develop Along Green Transportation Corridors** – The co-location of additional medium and high-density residential development alongside major green transportation corridors, like frequent bus transit or LRT, is important.

#### Other Ideas

In addition to the above, participants also identified these ideas:

- Establish a “cap and trade” system to manage suburban growth;
- Establish car free areas to promote active transportation and transit to major destinations;
- Develop solutions to the “last mile” problem of transit systems;
- Create expanded green spaces that are more accessible and dispersed throughout the city;
- Promote opportunities for local food and urban agriculture;
- Redevelop and intensify existing neighbourhoods instead of developing in the suburbs;
- Connect greenspaces as part of the multi-modal transportation network; and
- Improve use of underutilized land instead of expanding the city.

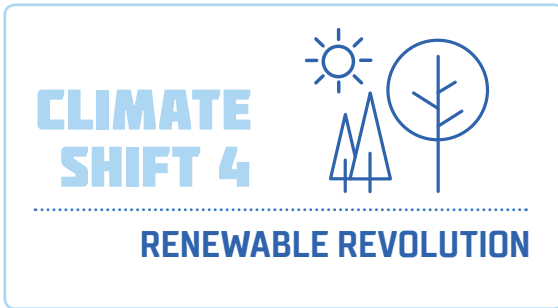
Compared to the other Climate Shifts, there were fewer responses related to carbon neutral buildings. Despite this, when carbon neutral buildings were raised by participants, there was consensus that more should be built. The significant role that carbon neutral buildings can play in achieving global climate goals was not identified.

**Green Incentives** – Incentives and rebates to undertake green renovations in Edmonton are desirable. These renovations, such as installation of high efficiency windows and re-insulation of older residential buildings, are often seen as more expensive or challenging than traditional building practices.

**Renovate and Retrofit Heritage Buildings** – Vacant and heritage buildings can be renovated and retrofitted to preserve Edmonton's character. It is possible to renovate the interior of buildings and maintain the façade: green retrofits.

**Community Scale Carbon Retrofits** – Supporting individual building owners interested in achieving carbon neutrality was mentioned. There was little mention of the massive scale at which these renovations are needed to bring buildings towards carbon neutrality.

**“ENVIRONMENT! Our vision must have something such as: Green Initiative etc. etc. Global Warming is real and if we don’t do anything, the temperature of our planet WILL go up.”**



Mention of the renewable revolution was more often mentioned at workshops than at drop-in events. Overall, participants were supportive of renewable revolution ideas.

**Renewable Energy Production** – Future energy production should come from renewable sources. This involves limiting the use of coal and other fossil fuels for energy production and heating in order for Edmonton to meet our local commitments to the Paris Climate Agreement.

**Type of Energy** – Greater use of solar, hydro and wind energy, as well as exploration of nuclear energy, are possibly sources of future energy. There is a need for large-scale retrofitting of existing homes and buildings for solar energy production and greater adoption of electrified transportation options.

**Manage Waste Wisely** – The management of, and how we handle our waste products is important. It is important for Edmontonians to divert material from landfills, be better recyclers, and compost organics. Consumer culture plays into our carbon footprint.

**Green Incentives** – Incentives would be appreciated, especially for the installation of residential solar arrays.

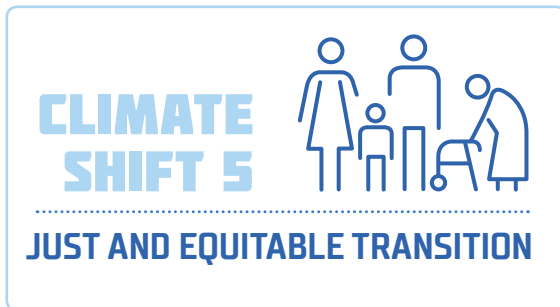


#### Other Ideas

In addition to the above, participants also identified these ideas:

- Compost as a way reduce waste production;
- Reduce overall consumerism; and
- Work with grocers, local restaurants and commercial food supplies to reduce waste in the food industry.

**“Something related to the environment and climate change mitigation – controlling urban sprawl is part of this but is not enough. I see later that this idea is one of the goals, but I would prefer to see it as a concept that flows throughout.”**



Ideas of inclusion and equity were described throughout The City Plan and Vision 2050 engagement data but generally without an explicit reference to climate. Across all engagement events, participants were interested in seeing greater levels of equity in many aspects of city building from policing to affordable housing and transit. While these concepts were not paired directly with environmental concerns, they did identify the following areas where concerns over equity and justice are aligned with the other Climate Shifts.

**Overall Inclusion** – It is important to ensure that Edmonton be an inclusive city in all ways, including welcoming newcomers and furthering reconciliation with Indigenous people.

**Inclusive Redevelopment** – In areas undergoing redevelopment and retrofitting, it is important to consider how redevelopment, even done with positive environmental outcomes, affects communities through displacement and cultural erasure. Residents of affordable or low-income neighbourhoods are more vulnerable to these challenges compared to residents of wealthier neighbourhoods. Green housing throughout the city is important, and it needs to be affordable and appropriate for a greater diversity of residents.

**Housing Affordability** – One of Edmonton's key appeals is its affordability compared to other cities in Canada and around the world. The future affordability of home ownership should be considered, especially as cheaper suburban housing shifts to be denser and additional costs associated with more sustainable and carbon neutral are incorporated into housing costs.

**Indigenous Knowledge and Partners** – Recognizing the long-standing role that Indigenous people have played as environmental stewards and advocates is important.

**Green Jobs and Diversification** – When it comes to revolutionizing the economy, Edmonton and Alberta as a whole, needs to be prepared for a "post-oil economy". This includes positioning educational institutions, designing new curricula and attracting new industries to contribute to a diversification of the economy away from oil and gas. Aim for plentiful green jobs that support workers in transition toward low carbon industries.

**Equitable Access to Transit** – Access to transit service around the city, including more affordable transit fares, expanded subsidized transit fare programs and an extended network of high-quality transit is important. Equity in distribution of major LRT investments is important; marginalized areas often do not have access to high-quality and frequent transit.



**“There are no healthy cities or urban places if climate change is not solved. There is no other possibility than responding to these things.”**

**Equitable Transit Enforcement** – Marginalized or minority groups are discouraged from taking transit because transit bylaw enforcement unfairly targets those groups.

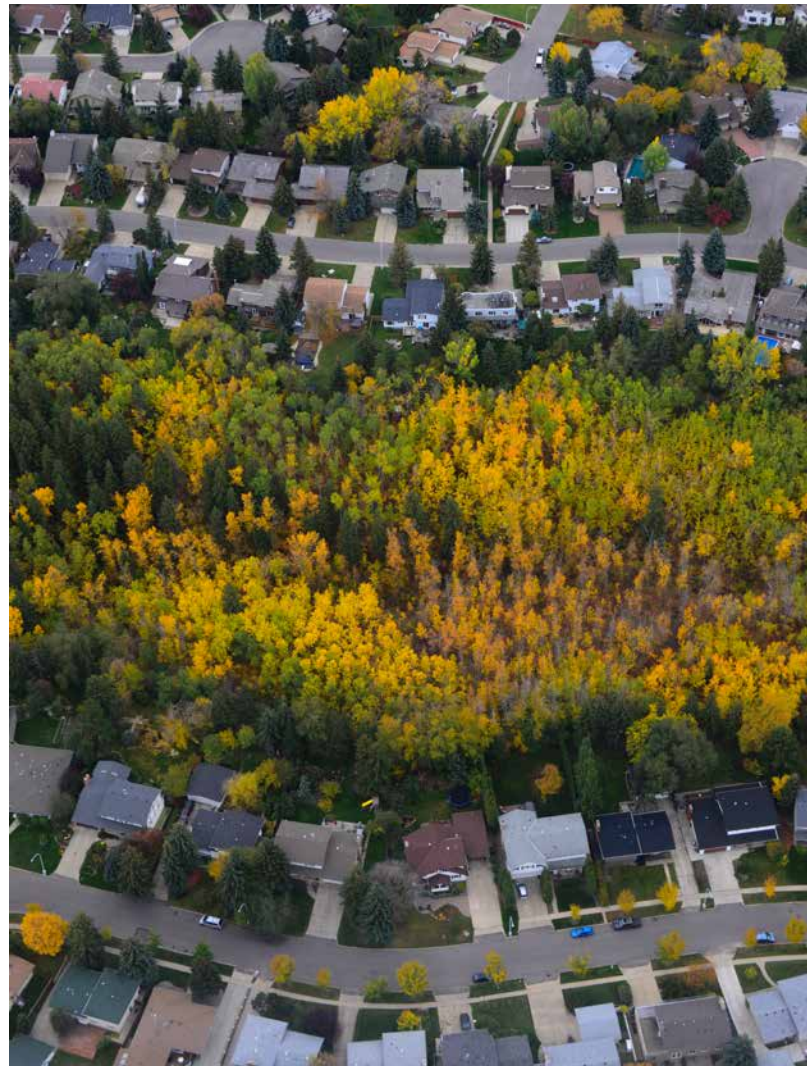
**Dispersed Active Transportation Networks** – Active transportation networks, distributed throughout the city to be accessible are important. These networks need to feel safe for all, including Indigenous people, people with mobility challenges, women, children and seniors.

**Link to Other Climate Shifts** – There is an explicit link between Climate Shifts 4 and 5 through calls for renewable energy production that was affordable for all users and having climate and energy production systems that are inclusive, rather than segregated.


#### **Other Ideas**

In addition to the above, participants also identified these ideas:

- Address quality of life inequities with promotion of time-consuming modes of transportation, like transit, for individuals who are already time impoverished as a result of other socio-economic factors; and
- Prepare to accept the arrival of new Edmontonians as a result of displacement and climate migration. Edmonton is a place with resources to be a climate refuge.



**CLIMATE  
SHIFT 6**



**NEGATIVE EMISSIONS**

Few methods and actions were identified to contribute to negative CO<sub>2</sub>e emissions. Vision 2050 and The City Plan engagement did not ask for methods and actions, therefore this should not be interpreted as lack of public awareness or support.

**Preserve and Protect** – Preserving and enhancing greenspaces and natural areas is important to serve as carbon sinks and sequester additional CO<sub>2</sub>e over their lifetime. It is important to also naturalize open spaces and protect farmland. This includes conversion of city-owned open park spaces into naturalized open spaces throughout the city. These concepts, although not always associated with negative emissions can contribute to this climate shift.

**Other Ideas**

In addition to the above, participants also identified these ideas:

- Establish permaculture systems which promote more circular use of resources in the agricultural industry including re-use of waste products;
- Use underutilized or vacant lands for urban agriculture as a way to strengthen the local food system;
- Require that additional lands be protected from development and maintained as natural areas during urban development to protect natural carbon sinks like wetlands and forests; and
- Consider how city infrastructure systems can be designed to make use of or emulate natural processes to manage products like sewage, stormwater or other waste materials.



## CITY-WIDE ENGAGEMENT AND CITY DESIGN

Several engagement activities done by The City Plan Team focused explicitly on the preferred future form of Edmonton. These activities included building a model of Future Edmonton, a card game that focused on city patterns, and a game with blocks to explore how to distribute 1 million new Edmontonians. The following sections highlight some of the climate related findings of those activities.

### City Patterns Card Game

The City Patterns card game identified Edmontonians' preferences about how the city's transportation, jobs, greenspaces and neighbourhoods might change in order to welcome another 1 million people to Edmonton.

Participants were asked four questions:

1. Transportation – How will Edmontonians move around the city?
2. Employment – How will jobs be distributed in the city?
3. Greenspace – How will we use greenspace in the city?
4. Proximity to Services – How will we intensify residential and commercial developments in the city?

For each question, at both drop-in workshops and through the Insight Community survey, participants chose their preferred pattern for the city:



#### **DYNAMIC DOWNTOWN**

**This city pattern concentrates employment and population within a specific boundary centred around the current downtown and mature areas.**



#### **CONNECTED CORRIDORS**

**This city pattern distributes population and employment throughout the city along corridors as opposed to concentrating it at nodes.**



#### **VIBRANT VILLAGES**

**This city pattern attracts people and employment to major hubs distributed throughout the city.**

## Vibrant Villages

For all four questions, Edmontonians preferred the ideas which revolved around the concept of Vibrant Villages, which hinged on the idea of intensifying and promoting redevelopment around major destination and activity points throughout the city. Vibrant Villages would mean additional growth near major destinations like universities, hospitals, and commercial areas including areas like MacEwan University, NAIT, the Royal Alexandra Hospital and West Edmonton Mall.

In all question areas except Transportation, respondents second preference was for Connected Corridors, which would see intensification and change along major thoroughfares within Edmonton. Connected Corridors would mean additional growth along major thoroughfares such as Gateway Boulevard, 137 Avenue, 82 Street, Whyte Avenue or Kingsway Boulevard. This preference affirms other calls to see communities evolve to be more complete and offer a greater range of services locally.

## What Kind of City Are We? Blocks Game

The Blocks Game provided The City Plan Team with feedback about how the city can welcome an additional 1 million residents within existing boundaries. Overwhelmingly, they identified changes to Edmonton's design and form that will contribute to an overall reduction of Edmonton's climate footprint and CO<sub>2</sub>e emissions.

The actions identified by the participants included have a low carbon city in mind:

- **Reduce Edmontonians' dependence on private vehicles** by promoting the conversion of mature communities and the development of new areas to be hyper-local and walkable. This includes having local commercial spaces, recreation centres, park spaces and jobs many of which should be accessible within a short walk.
- **Improve the functionality and convenience of the transit system.** Without improving public perception of convenience, cost, safety and benefits of mass transit, Edmontonians have clearly indicated that driving will remain their primary mode of transportation into the future.
- **Integrate and co-locate where people work and live** so that daily commutes can be reduced: live close to work.
- **Develop high density, mixed-use developments along major transportation corridors.** Medium and low-density developments should be integrated into existing communities to support the overall densification of the city.
- **Reconfigure the system of multi-use trails and greenways as a functional transportation network**, as opposed to a mostly recreational system.

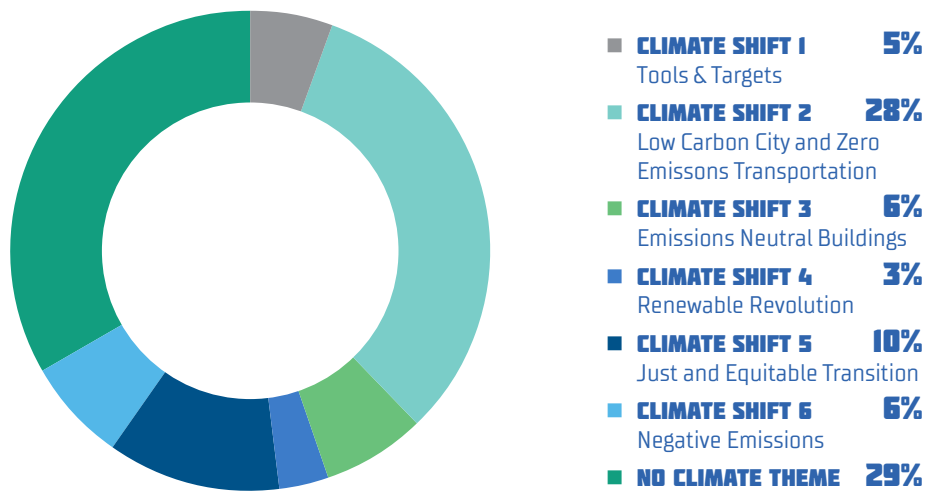
## Quantitative Analysis

The March 2019 Insight Community Survey conducted as part of The City Plan engagement involved roughly 2,300 open text responses. From the responses, it is clear that Climate Shift 2: Low Carbon City and Zero Emissions Transportation is the climate shift that Edmontonians are most familiar with. The data mining software, when given a list of keywords related to the Climate Shifts, classified 28% of responses into that category. In addition, the survey responses also noted that Edmontonians are clearly interested in a Just and Equitable Transition, with 10% of responses including references to themes like energy poverty, green jobs, new Canadians, affordable housing and environmental justice.

Finally, the analysis also indicates a relative lack of input on the remaining four climate shifts: Tools and Targets, Emissions Neutral Buildings, Renewable Revolution, and Negative Emissions. Further engagement during this project should consider how best to gather a greater depth of perceptions and ideas related to these climate shifts as well as seek to educate Edmontonians about the potential value that they represent for meeting Edmonton's climate goals.

The combined results of the workshops and the Insight Community Survey are noted below.

**Figure 2. Distribution of responses related to the climate shifts**



For a full report of what we heard through The City Plan engagement, who we listened to and how we listened, please visit [www.edmonton.ca/thecityplan](http://www.edmonton.ca/thecityplan)



# 3

## CONCLUSIONS AND NEXT STEPS

### CONCLUSIONS

This What We Are Hearing Report gathers data about climate from the engagement undertaken for The City Plan (October 2018 to June 2019). The ideas captured here are the beginning of public engagement for the update of Edmonton's Community Energy Transition Strategy; they help highlight the many ways Edmontonians have already been telling the City what to do about the evolving crisis. It's now up to Edmonton's residents, municipal administration, business community, community organizations as well as other levels of government and decision makers to listen and take action. Other overall conclusions are discussed below:

**A Low Carbon City of the Future** – Edmontonians' are most interested and have the most ideas about this climate shift: being a low carbon city and electrifying the transportation system.

**Climate Leadership** – Edmontonians who provided input on the Vision 2050 overwhelmingly described a desire to have Edmonton be a global leader in environmental sustainability. While Edmontonians are clearly concerned about climate change and our impact on the environment, most did not articulate what actions should be taken to address these concerns.

**Local and Tangible Environmental Sustainability** – While many responses directly addressed ideas related to climate change, more often Edmontonians were focused on local and tangible impacts on the natural environment: air pollution, habitat degradation and waste management.

**Timing** – Of the responses directly related to environmental resilience, only a few indicated a time frame and those that did were focused on 2050 as opposed to the shorter 2030 timeframe which is identified for the Community Energy Transition Strategy.

**Indigenous Voices** – Indigenous communities shared that they need to be involved in City projects earlier to share perspectives about the environment and the impacts that they are experiencing in their home communities surrounding Edmonton, and Edmonton regionally impacts rivers, air, and wildlife in their communities.

**Taxes and Efficiency** – The City needs to be cautious when it comes to spending tax dollars, say a significant portion of respondents: keep taxes low, use common sense and ensure basic services are provided in a high-quality and cost-effective manner. Spending money on services which are considered extras compared to waste, roads and snow clearing, is not desirable for many Edmontonians. This includes spending on bike lanes and transit, which many feel contributes to traffic congestion.

**City Design** – The design of the city has an impact on our lifestyle and our CO<sub>2</sub>e emissions. It also has an impact on how accessible and equitable the city is for its inhabitants.

**Climate Adaptation** – Adapting to the future impacts of climate change needs attention alongside the reduction of Edmonton's contribution to climate impacts.

**Education and Awareness** – Survey responses tended to indicate a lack of knowledge or awareness on multiple climate shifts. Future work as part of the Community Energy Transition Strategy update should focus on educating residents and broadcasting the importance of these climate shifts in meeting Edmonton's climate goals.

## NEXT STEPS

The What We Are Hearing Report contains feedback from Edmontonians about climate resilience prior to City Council declaring a state of climate emergency and directing administration to update the Community Energy Transition Strategy to align with the international target of limiting global warming to 1.5°C. While many of the ideas summarized here indicate that residents have ideas about climate change, they did not get into specifics actions or how to make them happen in Edmonton. The targeted engagement activities which started in September 2019 and go into August 2020 will do this work. Expect to be in conversation about carbon budgeting, monitoring, negative emissions strategies, equity, and being a low carbon city.

For a full report of what we heard through The City Plan engagement, who we listened to and how we listened, please visit [www.edmonton.ca/thecityplan](http://www.edmonton.ca/thecityplan)

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