

NO: **R048**

COUNCIL DATE: **March 9, 2020**

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **March 3, 2020**

FROM: **General Manager, Parks, Recreation & Culture
General Manager, Engineering
General Manager, Planning & Development**

FILE: **0512-02**

SUBJECT: **Update to the Climate Emergency Response and Amendments to Surrey
Official Community Plan Bylaw, 2013, No. 18020**

RECOMMENDATION

The Parks, Recreation & Culture Department, the Engineering Department, and the Planning & Development Department recommend that Council:

1. Receive this report for information;
2. Approve amendments to the Surrey Official Community Plan Bylaw, 2013, No. 18020, as amended, as documented in Appendix "I" of this report; and
3. Authorize City Clerk to bring forward the necessary Amending Bylaws for the required readings and to set a date for the related public hearing.

INTENT

The purpose of this report is to discuss next steps in support of the Climate Emergency Declaration and to obtain Council approval for the amendments to the Surrey Official Community Plan Bylaw, 2013, No. 18020, as amended.

BACKGROUND

At its Regular meeting on November 4, 2019, Council received Corporate Report No. R213; 2019 (attached as Appendix "II") that included the recommendation that staff report back to Council within six months on proposed revisions to the existing corporate and community GHG emissions reduction targets and report back within one year with an update to the CCAS. At the same council meeting, Council received a motion from the Environmental Sustainability Advisory Committee that was carried unanimously.

The motion, RES.R19-1922, read as follows:

“That Council declare climate change as an emergency and direct staff to review the City’s climate change targets in the context of the latest research of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming.”

In 2010, Council adopted the Corporate (“GHG”) Emissions Action Plan, which included a target to reduce corporate GHG emissions by 20% by 2020. In the same year, the City also adopted community wide GHG reduction targets in the City’s Official Community Plan (“OCP”). Paragraph D4.2 in the Policies section of the OCP reads that the City will:

“Move toward reducing Surrey’s per capita GHG emissions (see Figure 40) from non-agricultural and non-industrial activities to below 2007 levels, by 33% before 2020 and by 80% before 2050.”

These targets are in need of updating for several reasons. Firstly, the interim targets were set at 2020, a date that has now passed. Secondly, the community target is based on a per-capita measure of GHG emissions which does not align with current best practice. Finally, in order to align with the recommendations in the Intergovernmental Panel on Climate Change (“IPCC”) Special Report on Global Warming, it is necessary for all levels of government to adopt policies that will enable a net-zero GHG economy by 2050.

IPCC

The IPCC was established by the United Nations in 1988 and is recognised as the leading scientific body on climate change. In 2018, the IPCC released a report that compared the impacts of 2°C vs. 1.5°C of global warming above pre-industrial levels. As a point of reference, all impacts occurring thus far have been from the Earth warming by 1°C on average. The main conclusions of this report were that:

1. Half a degree will significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people;
2. Half a degree will significantly increase the risk of exceeding certain irreversible tipping points beyond which our ability to safely adapt could be overwhelmed; and
3. We can keep warming to 1.5°C but it will require urgent transformative action at all levels of government to eliminate GHGs by 2050.

DISCUSSION

Update to Surrey’s GHG Reduction Targets

Cities around the world are experiencing escalating and accelerated changes due to a significantly warming planet caused by human activity. Worldwide, climate scientists agree that the fast-rising global temperature has created a climate crisis. Local governments have the power to make decisions and take actions that will, collectively, protect the climate at a global scale while creating a more resilient community locally. The technological solutions, skills and knowledge already exist to transition away from fossil fuels to clean, renewable energy sources but the current scientific consensus suggests that greater urgency is required. New commitments are being made by governments at all levels around the world to accelerate community-wide action and investment to limit global warming to 1.5°C.

Following the Climate Emergency Declaration, a critical next step in addressing this challenge is to clearly define climate change targets for Surrey that would be necessary to reduce Surrey's relative impact on rising global average temperatures to a level consistent with 1.5°C. Based on the conclusions of the IPCC Special Report on Global Warming, this means net-zero GHG emissions across the community before 2050. Net-zero emissions refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere by such activities as planting trees. Absolute zero emissions would mean that no sources of new emissions exist. Surrey's community GHG emissions inventory includes emissions associated with buildings, on-road transportation, municipal solid waste, and land-use change from deforestation but excludes GHG emissions from agriculture and industry as these sources are managed at the regional district level.

Setting a target of net-zero GHG emissions before 2050 would ensure that Surrey's efforts are closely aligned with other leading municipalities across the Province and throughout Canada. At the regional level, the Metro Vancouver Regional District board recently approved amendments to the Climate 2050 Strategic Framework that include a commitment to a carbon neutral region by 2050. Working in close collaboration with Metro Vancouver and its member municipalities will enable Surrey to accelerate action across the community. Setting targets that meet the current best practice in climate action will position Surrey to attract financial support from senior levels of government to advance strategies that align with these targets.

While Surrey's corporate GHG emissions from civic facilities, corporate fleet and vendor operations represents a relatively small share of the total community GHG profile, it is important that the City demonstrate leadership by continuing to find ways to reduce corporate GHG emissions. Compared to the broader community GHG profile, Surrey has much greater control over GHG reductions in its corporate operations and by adopting leading edge technologies in its buildings, transportation fleets and vendor operations, Surrey can provide proof-of-concept for measures that will need to be broadly adopted across the community before 2050.

To achieve these objectives, staff are recommending that Council adopt community and corporate GHG emissions targets of net-zero and absolute zero, respectively, before 2050. If approved, these recommendations will be carried through amendments to Surrey's OCP as documented in Appendix "II" of this report.

Update to Surrey's Climate Action Strategy

Achieving the proposed GHG reduction targets before 2050 will require partnerships and collaboration with utilities, municipal governments, local businesses and Surrey residents. Supportive legislation and resources from senior levels of government will be also be critical for success. Equally critical is an update to the City's Community Climate Action Strategy ("CCAS") that includes clear articulation of the policies and actions available to the City of Surrey in support of the proposed GHG reductions targets as well as measures that are outside of the City's control but within the City's sphere of influence.

Through 2020, staff will be working on an update to the CCAS that will frame the City's approach to meeting the proposed corporate and community GHG reduction targets and illustrate a credible path to zero emissions in each of the following sectors:

1. Land-use;
2. Transportation;
3. Energy Systems;
4. Buildings; and
5. Waste.

To ensure the success of this strategy, staff in the Sustainability Office will work with staff across the organization to ensure that measures available to the City are identified and prioritized within existing and future plans, policies and projects in support of the proposed 2050 targets. Through this process, interim targets will be developed for the year's 2030 and 2040 providing key benchmarks for prioritization and budgeting of capital works and programs as well as periodic opportunity for the City to assess its progress towards the 2050 goals. Integrating the response to the climate crisis into each of the core areas of business for the City can yield significant results in GHG reduction with limited impact on human resources and capital.

Staff will conduct a modelling exercise to establish various pathways through which the City can meet the proposed 2050 targets in each of the 5 sectors above and develop guidelines to be applied to existing and future plans, policies and projects. A review of the existing CCAS will also be conducted in order to identify opportunities to advance adaptation measures through GHG reduction efforts making Surrey more resilient to the impacts of climate change that can't be avoided.

Collectively, the CCAS update will consist of:

1. An illustration of the sector pathways to meet net-zero GHG's by 2050;
2. Development of guidelines to be applied to existing and future plans, policies and projects;
3. Development of a separate corporate GHG reduction pathway;
4. Establishment of interim targets for 2030 and 2040;
5. Review and update of the Climate Adaptation Strategy; and
6. Development of a monitoring and reporting framework.

It is anticipated that the updated CCAS will be completed within a year's time and presented to Council for consideration in early 2021.

Integration with the Transportation Strategic Plan

A successful response to the climate crisis requires deep integration across all City departments to ensure that opportunities to make progress towards the 2050 GHG reduction targets are identified and embedded into City's plans, policies and projects. The ideal time to focus on this integration is during the planning process for major City initiatives such as the Transportation Strategic Plan which is currently underway. Staff in the Sustainability Office have and will be deeply engaged in the development of the Transportation Strategic Plan to help provide a framework for transitioning the transportation system in Surrey to work towards net-zero GHG before 2050. By demonstrating a credible path to achieving this goal in the transportation sector, Surrey will be well on its way to updating the overall CCAS as transportation represents approximately 54% of the total community GHG emissions.

Community Consultation

Broad community support and buy-in will be essential to the successful implementation of the updated CCAS. The process of updating the CCAS will include consultation with a diverse range of community stakeholders. It is important to recognize that climate change will not affect all Surrey residents to the same degree. Lower income and socially marginalized populations will have more difficulty coping with the impacts of climate change. These vulnerable populations will have fewer options to protect themselves when a disruptive event occurs and may have more difficulty recovering from the impacts. Policies and programs to reduce GHGs and adapt to the changing climate must not exacerbate existing economic, social, or geographic disparities. The design of policies and programs that reduce GHGs should be accessible to all Surrey residents. Inclusion, equity and affordability will be central considerations in the development of the updated CCAS.

SUSTAINABILITY CONSIDERATIONS

The work of the Community Climate Action Strategy supports the objectives of the Sustainability Charter 2.0. In particular, this work relates to the Sustainability Charter 2.0 themes of Built Environments & Neighbourhoods, and Infrastructure. Specifically, the initiatives support the following Desired Outcomes ("DO"):

- Neighbourhoods & Urban Design - DO 9: All aspects of planning, design and construction include climate change impacts, GHG mitigation, adaptation, and resiliency strategies.
- Emergency Preparedness & Prevention - DO 8: The community's critical infrastructure and systems are designed to withstand climate change impacts, natural events and disasters, and include emergency response and reconstruction plans.
- Energy & Climate - DO 6: The City anticipates changing weather patterns and sea level rise as a result of climate change, and implements appropriate infrastructure, land use planning and emergency response solutions that will be resilient over the long term.
- Energy & Climate - DO 7: Per capita emissions are low and align with global GHG reduction targets.

CONCLUSION

The recommendations and next steps proposed in this report are intended to address climate change risks facing Surrey residents and to guide the City's path to a resilient, zero-GHG community. By taking these steps now to improve and advance the Community Climate Action Strategy, Surrey is well positioned to continue to leverage additional financial support from senior levels of government; lead the way forward with innovative approaches to reducing GHG's; and collaborate with other local governments and economic partners to combine efforts and accelerate action.

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Appendix "I": Summary of Surrey Official Community Plan Bylaw, 2013, No. 18020, as amended

Appendix "I" – Proposed Amendments to Surrey's OCP, as amended

Appendix "II": Corporate Report No. R213; 2019

Summary of Proposed Amendments to Surrey Official Community Plan Bylaw, 2013, No. 18020, as amended

The following proposed amendments to PlanSurrey 2013: Official Community Plan are presented and highlighted in the order the sections appear in the document:

Policies Section

1. Page 163, Theme D: Ecosystems, D4 Energy, Emissions and Climate Resiliency, General, by deleting policy "D4.2" and replacing it with two new policies as follows:

"D4.2a Reduce Surrey's GHG emissions (see Figure 40) from non-agricultural and non-industrial activities to net-zero before 2050.

D4.2b Show corporate leadership by demonstrating best practices in climate change mitigation by reducing City of Surrey corporate GHG emissions to absolute zero before 2050."

Implementation Section

2. Page 306, Implementation, V. Definitions, by adding a new definition for "Net-Zero" as follows:

"Net-Zero

Refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere."

Proposed Amendments to Surrey's OCP, as amended

D4 POLICIES:
General

- D4.1 Implement the recommendations of Surrey's *Community Energy and Emissions Plan* and *Corporate Emissions Action Plan* (as amended).
- ~~D4.2 Move toward reducing Surrey's per capita GHG emissions (see Figure 40) from non-agricultural and non-industrial activities to below 2007 levels, by 33% before 2020 and by 80% before 2050.~~
- D4.2a Reduce Surrey's GHG emissions (see Figure 40) from non-agricultural and non-industrial activities to net-zero before 2050.
- D4.2b Show corporate leadership by demonstrating best practices in climate change mitigation by reducing City of Surrey corporate GHG emissions to absolute zero before 2050.
- D4.3 Support land uses, development options, transportation alternatives, built forms and infrastructure that reduce energy use and costs, integrate renewable energy sources and increase energy conservation through efficiency improvements.
- D4.4 Support the development of community-wide energy reduction targets by promoting the implementation of programs and policies that reduce energy use associated with transportation, utilities and buildings.
- D4.5 Promote the development and implementation of alternative financing strategies and mechanisms to address financial barriers associated with additional costs for efficiency and/or use of renewable energy.

D4 POLICIES:
Buildings

BL 20026

- D4.6 Minimize GHG emissions from buildings by using incentives and by encouraging building design and construction to exceed the *BC Building Code* (as amended) energy efficiency standards.
- D4.7 Support building designs that allow for mixed use, combining work and living spaces to reduce the need to travel for employment purposes.
- D4.8 Consider programs that advance the construction of energy-efficient development and encourage the use of, or provide incentives for, energy efficient retrofits in existing commercial, institutional and residential buildings.
- D4.9 Support building and landscaping designs that increase energy efficiency by encouraging developers to take building orientation and the local climate into consideration (e.g. passive solar building design) as part of the overall development and site design. (See DP1 of the Implementation Section of this OCP.)
- D4.10 Explore implementing requirements for new developments to accommodate infrastructure for solar hot water and/or electric vehicle charging stations.



Surrey's portable Sustainability House provides interactive information about sustainability issues.

V. DEFINITIONS (cont.)

BL 18423

BL 20026

Environmentally Valuable Resource

Where all the features, places and species present enhance the biodiversity of an area; range in size from small patches to extensive landscape features; can include rare or common habitats, plants and animals; require special management attention to protect fish and wildlife resources, other natural systems or processes and/or historical, cultural or scenic values.

Food Security

When a community's residents have access to safe, affordable, culturally-acceptable, nutritionally-adequate diets through a system that maximizes community self-reliance, environmental sustainability and social justice.

Fragmentation

A process whereby large contiguous ecosystems are transformed into one or more smaller patches surrounded by disturbed areas.

Greenhouse Gas (GHG)

Refers to an atmospheric gas that contributes to the greenhouse effect by absorbing infrared radiation produced by solar warming of the Earth's surface.

Green Infrastructure/Development

A type of infrastructure that uses elements of the natural environment to replace or supplement traditional infrastructure, such as drainage, sewers and water that contributes towards sustainable resource management; a network of facilities that can include parks, local woodlands, gardens, greenway corridors, streams, street trees and built structures such as green roofs.

Habitat

The natural abode of a plant or animal, including all biotic, climate and edaphic (plant communities distinguished by soil conditions rather than by climate) factors affecting life.

Mixed-Use Development

Development that incorporates multiple uses within a building or site; can be a combination of residential, commercial, office, institutional and low-impact industrial uses; allows for a range of needs to be met in one location reducing travel between different locations for housing, employment and services.

Natural Areas

Areas with significant flora and fauna (fish, terrestrial wildlife and bird habitats) and connecting corridors (ravines, treed areas, open fields and bodies of water).

Net-Zero

Refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere.

Pedestrian-Oriented Space

Areas which promote visual and pedestrian access onto a site and which provides pedestrian-oriented amenities and landscaping to enhance the public's use of a space for passive activities.

Performance-Based Standards

The use of goal-oriented criteria to establish review parameters for proposed land use plans or development projects that help provide flexibility to the development process.

Streetscape

The visual character of a street, as determined by various elements such as structures, greenery, open space, views, etc.

Sustainable Development

Development that balances human need with environmental protection so that human and environmental needs can be met in the present and into the indefinite future.

CORPORATE REPORT

NO: R213

COUNCIL DATE: November 4, 2019

REGULAR COUNCIL

TO: Mayor & Council DATE: October 31, 2019

FROM: General Manager, Parks, Recreation & Culture FILE: 0512-02
Acting General Manager, Engineering
General Manager, Planning & Development

SUBJECT: Update to Surrey's Community Climate Action Strategy

RECOMMENDATION

The Parks, Recreation & Culture Department, the Engineering Department, and the Planning & Development Department recommend that Council:

1. Receive this report for information; and
2. Endorse the following next steps to update Surrey's Community Climate Action Strategy:
 - a. Staff to report back to Council within six months on proposed revisions to the existing corporate and community greenhouse gas emissions reduction targets; and
 - b. Staff to report back within one year with an updated Community Climate Action Strategy.

INTENT

The purpose of this report is to provide further information of the growing body of knowledge on the impacts of climate change and recommend a series of next steps for Surrey that will ensure staff are able to build on the strengths of the existing Community Climate Action Strategy, maintain Surrey's eligibility for the Climate Action Revenue Incentive Program ("CARIP") grant and further align actions across other departments to maximize the benefits to Surrey residents and businesses.

BACKGROUND

At its Regular meeting on March 11, 2019, Council received Corporate Report No. Ro48; 2019 (attached as Appendix "I") that provided an update on the implementation of the Surrey Community Climate Action Strategy. Over the past ten years, Surrey has demonstrated climate action leadership through initiatives such as the Coastal Flood Adaptation Strategy ("CFAS"), the Surrey Biofuel Facility and Surrey City Energy among many other initiatives detailed in Appendix "I". Surrey's leadership was again recognized in September 2019 with the Community Energy Association's Climate & Energy Action Award for the City's leadership on climate resilience in developing CFAS, and an Honourable Mention from the Union of BC Municipalities for Excellence in Service Delivery for the City's Integrated Sustainability Education Program. Staff are now looking to the next ten years of City action on climate change.

The latest scientific research on climate change coupled with real-time observed impacts are putting into focus the need to do more to reduce and ultimately eliminate greenhouse gas emissions (“GHGs”). While progress has been made in this area, taking steps now to improve and advance Surrey’s Community Climate Action Strategy, the City is well positioned to:

1. Continue to leverage additional financial support from senior levels of government;
2. Lead the way forward with innovative approaches to reducing GHGs; and
3. Collaborate with other local governments and economic partners to combine efforts and accelerate action.

While the extent of the future impacts of climate change are uncertain, it is now clear that the earth is warming which will require costly adaptive measures in order to protect Surrey residents and businesses. The less action taken now to reduce GHGs the more costly and difficult it will be to adapt to the impacts later.

DISCUSSION

Surrey’s Community Climate Action Strategy includes both the Climate Adaptation Strategy (“CAS”) and Community Energy and Emissions Plans (“CEEP”). The CAS identifies the risks that Surrey is expected to face as a result of climate change and proposes actions to minimize the unavoidable costs and impacts while fostering a resilient community. It covers areas such as:

- Flood management and drainage;
- Infrastructure;
- Ecosystems and natural areas;
- Urban trees and landscaping;
- Human health and safety; and
- Agriculture and food security.

The CEEP provides a guide to reducing city-wide GHGs to reduce Surrey’s impact on future climate change as well as the amount of money Surrey residents spend on energy every year. It considers our influence over land use, transportation, buildings, energy infrastructure and solid waste. Together, this award-winning framework was identified as the first integrated mitigation/adaptation strategy in Canada at the time it was adopted.

One of the key functions of the City’s Sustainability Office is to work in collaboration with the other City departments to identify opportunities to advance actions from the CAS and CEEP within existing initiatives or operations. One such example is the development of the CFAS which followed from the work done through the CAS that identified coastal flooding from sea level rise as the highest climate-associated risk facing Surrey. The development of this strategy identified several infrastructure assets that required upgrading to protect Surrey neighborhoods that are particularly vulnerable to the impacts of climate change. As a direct result of this proactive planning process, the City was awarded over \$76 million from the Federal Disaster Mitigation and Adaptation Fund (“DMAF”) to support the construction or improvement of 13 of these assets. Through this project, Surrey continues to lead the way on climate change adaptation.

The Surrey Biofuel Facility is another example of a project, initiated in support of the CEEP, that attracted significant amounts of Federal government funding. Constructed in 2016, this project reduces GHGs associated with Surrey’s waste collection services and generates renewable natural

gas (“RNG”), which is used to fuel the trucks that collect the waste. RNG produced at this facility is also used to power the City’s district energy system, further reducing GHGs. This innovative approach to waste collection and RNG production was successful in attracting a grant from the Federal government for 25% of the cost of the \$70 million facility. As a result of Surrey’s leadership in this area, the City was sought by the province to help shape the policy and regulation around organic waste diversion and RNG accounting.

GHG Reduction Targets and Reporting Requirements

Another function of the Sustainability Office is to measure GHGs both from the City’s corporate operations and from the community and to report this information publicly. In 2010, Council adopted the Corporate GHG Emissions Action Plan, which included a target to reduce corporate GHG emissions by 20% by 2020. In the same year, the City also adopted community wide GHG reduction targets in the City’s Official Community Plan (“OCP”):

- A 33% per capita GHG reduction by 2020; and
- An 80% per capita GHG reduction by 2050.

Providing information annually on the City’s GHGs and reporting publicly on the progress toward the City’s climate action goals makes Surrey eligible to receive the Climate Action Revenue Incentive Program (“CARIP”) grant from the Provincial government, which is a rebate on the carbon tax paid by the City based on its corporate operations. These funds are intended to assist municipalities in reducing GHGs and have been used to support the operations of the Sustainability Office in Surrey. In order to maintain eligibility for the CARIP grant, it will be important to update the existing 2020 targets with new interim targets before the end of 2020.

Considering the latest climate science coupled with the continuing trend of more severe climate impacts occurring much sooner than expected, jurisdictions in the region and across the globe are updating their GHG targets to align with reductions required to keep global warming to safe levels. As new funding programs roll out at the Provincial and Federal level, it will be increasingly important for Surrey to demonstrate that it is following this best practice with regards to GHG targets.

Embedding Climate Action Across Departments

As is highlighted in the DMAF and Surrey Biofuel projects, initiatives that have strong connections to forward-thinking climate action are well-positioned to receive financial support from senior levels of government. The Federal government has recently established a guideline that infrastructure grants for projects over \$10 million require a GHG mitigation assessment as part of the application. While this was not a formal requirement in the past, the Sustainability Office has historically focused on embedding the principles of the Community Climate Action Strategy into the work of other departments and identifying future funding opportunities. Given the mounting level of public support for climate action, the expected response from senior levels of government will be to increase levels of funding for projects that have an impact. The municipalities best positioned to take advantage of that funding will be those with ‘shovel-ready’ projects that align with their strategy to achieve these updated GHG targets

Climate action planning is an emerging field that is being advanced in different ways across jurisdictions in Canada and globally. Staff in the Sustainability Office engage with intergovernmental groups across the Metro Vancouver region as well as more broadly across

North America to share best practices and learn about new approaches to climate action planning. Eliminating GHGs is a global imperative that requires governments of all levels to work together. Surrey has been a demonstrated leader in climate action planning creating a path for other cities to follow. Likewise, there are many lessons we can learn from other jurisdictions to help our transition to a zero-GHG economy.

Next Steps

Surrey's existing GHG reduction targets need to be updated to remain relevant beyond 2020. This will be important to ensure that Surrey continues to receive the annual CARIP grant which helps supports the City's overall sustainability goals. Further, by aligning these targets with current best practice, Surrey will be better positioned to receive financial support from senior levels of government as opportunities arise. The first recommended next step in this report is for staff to report back to Council within six months with proposed revisions to the existing corporate and community GHG reduction targets.

Surrey's existing GHG reduction targets were adopted in 2010 and the associated plans and policies required to meet those targets were largely unknown at the time. Since that time, advances have been made in the field of climate action and many of the solutions required are now in place across different jurisdictions around the world. The second recommended next step is for staff to report back within one year with an updated Community Climate Action Strategy that details specific actions and policies that will be required to meet the proposed GHG targets. Assumptions has shifted in the past year and existing plans and strategies need to be updated to account for the latest information, as well as senior government policy and resource allocation. Staff will look at the current suite of plans and strategies and propose updates and more detailed, sector-specific actions to reflect these changes.

The ultimate success of Surrey's Community Climate Action Strategy will require that staff across all departments are engaged in the planning process so that opportunities to integrate new initiatives within existing plans and budgets can be identified. Further, broad staff engagement in the planning process will lead to a sense of collective ownership over the plan and actions better designed to succeed.

SUSTAINABILITY CONSIDERATIONS

The work of the Community Climate Action Strategy supports the objectives of the Sustainability Charter 2.0. In particular, this work relates to the Sustainability Charter 2.0 themes of Built Environments & Neighbourhoods, and Infrastructure. Specifically, the initiatives support the following Desired Outcomes ("DO"):

- Neighbourhoods & Urban Design - DO 9: All aspects of planning, design and construction include climate change impacts, GHG mitigation, adaptation, and resiliency strategies.
- Emergency Preparedness & Prevention - DO 8: The community's critical infrastructure and systems are designed to withstand climate change impacts, natural events and disasters, and include emergency response and reconstruction plans;
- Energy & Climate - DO 6: The City anticipates changing weather patterns and sea level rise as a result of climate change, and implements appropriate infrastructure, land use planning and emergency response solutions that will be resilient over the long term; and
- Energy & Climate - DO 7: Per capita emissions are low and align with global GHG reduction targets.

CONCLUSION

The next steps recommended in this report are intended to address climate change risks facing Surrey residents and to guide the City's path to a zero-GHG community. By taking these steps now to improve and advance the Community Climate Action Strategy, Surrey is well positioned to continue to leverage additional financial support from senior levels of government; lead the way forward with innovative approaches to reducing GHG's; and collaborate with other local governments and economic partners to combine efforts and accelerate action.



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Appendix "T": Corporate Report No. Ro48; 2019 (appendix available upon request)