

NO: R023

COUNCIL DATE: **February 24, 2014**

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **February 18, 2014**

FROM: **Sustainability Manager**

FILE: **0512-02**

SUBJECT **Climate Action Revenue Incentive Program (CARIP) Reporting Requirements**

RECOMMENDATION

The City Manager's Department recommends that Council receive this report as information.

INTENT

The purpose of this report is to provide an update on progress made by the City toward meeting the climate action goals contained within the BC Climate Action Charter, and to fulfill the annual CARIP grant requirement to report publicly on our plan and progress toward climate action goals.

BACKGROUND

At the 2008 UBCM Convention, the Honourable Premier Gordon Campbell announced the Climate Action Revenue Incentive Program (CARIP) to offset the carbon tax paid by local governments who have committed to the goal of becoming carbon neutral in their corporate operations under the BC Climate Action Charter. To be eligible for the CARIP conditional grant, local governments were required to:

- Sign on to the BC Climate Action Charter, and by doing so commit to the goal of becoming carbon neutral for corporate operations by 2012; and
- Report publicly on their plan and progress toward meeting their climate action goals, using a set template.

In 2010, Council approved a Corporate Emissions Action Plan (CEAP) which outlines priority actions for the City to reduce corporate GHG emissions and energy use, and sets the target of a 20% reduction in emissions by 2020. To support this work, since 2009 the City has been completing an annual inventory of corporate fuel use and GHG emissions related to fleet and building operations.

At the Council meeting of September 10, 2012, Council considered Corporate Report No. 187; 2012 which described the 2012 carbon neutral strategy for the City, namely that the City will "make progress" towards corporate carbon neutrality and invest funding that it would otherwise spend in buying carbon offsets in City-based projects that will reduce carbon emissions in Surrey.

DISCUSSION

A reporting Template was designed for local governments to fulfil the reporting requirements for CARIP; this report was redesigned for 2012 to reflect the status of the carbon neutral framework.

Interim CARIP Public Reports for 2013 will be accepted by the March 7, 2014 deadline in cases where the local government needs more time to collect information needed to complete the Carbon Neutral Progress section of the Template. Once the City receives the information needed to complete and finalize the Carbon Neutral Progress section of the Template, staff will update the Interim CARIP Report, make it public, and resubmit it as the City's Final CARIP Report to the Province on or before June 2, 2014.

Completion of the Final CARIP Report will include options for balancing the City's carbon footprint. To that end, calculations and discussions are underway including through Metro Vancouver, regarding the allocation of carbon credits from the Vancouver Landfill gas capture project.

The City of Surrey's Interim CARIP Public Reporting Template for 2013 is completed and attached for information; it outlines key actions undertaken by the City to reduce GHG emissions in 2013 and intended actions for 2014, both in the corporate and community spheres. Outcomes from 2013 at a community level include the following:

- Council approval of the Community Climate Action Strategy, which includes a Climate Adaptation Strategy to plan for the expected impacts of climate change and a Community Energy & Emissions Plan to address greenhouse gas and energy reductions;
- The RFQ process was initiated for the new biofuel facility that will process Surrey's organic waste into compressed natural gas;
- The King George node District Energy Feasibility study was completed;
- The Surrey Rapid Transit Study, led by TransLink and the Government of BC in partnership with the City of Surrey, the City of Langley, and Metro Vancouver, was completed in March 2013;
- The City continued to support sustainable transportation for schools through the Safe and Active Schools Program, the School Travel Planning program, and new "bike to school" training;
- Council approved in principle a draft energy efficiency density bonusing policy for the West Clayton Stage 1 NCP;
- A DC Fast Charge electric vehicle charging station was installed at the Surrey Museum; and
- MODO car share vehicles were made available to the public at City Centre (City Hall) and Gateway Skytrain Station.

Outcomes at a corporate level include:

- Implementation continued of the Corporate Emissions Action Plan;
- The City continued to participate in BC Hydro's Workplace Conservation Awareness program to reduce electricity consumption in Surrey's indoor pools and libraries;
- Staff supported the development of sustainable transportation modes to get to work at new City Hall. Incentives include personalized commute planning, preferred carpool

- parking, end-of-trip facilities for cyclists, carsharing program with Modo Car Co-op, transit rebates on monthly passes, and introduction of pay parking at New City Hall;
- The City continued to partner with SFU's School of Mechatronics to refine a lifecycle assessment tool that compares the economic and environmental costs and benefits of conventional and alternative fuel vehicles;
 - Continued energy retrofits were undertaken in civic facilities, including boiler and lighting upgrades;
 - The Buildings' division mobile inspector program was launched, helping building inspectors do more work from the road, plan efficient trips, and reduce the number and length of trips made; and
 - Organics bins were distributed to key City facilities in 2013;

By completing the Template and making it public through this Corporate Report, the City is fulfilling the annual CARIP grant requirement to report publicly on our plan and progress toward climate action goals.

SUSTAINABILITY CONSIDERATIONS

Staff continue to pursue sustainability initiatives that further the goals of the Surrey Sustainability Charter. Implementation of the Sustainability Charter will advance the City towards the 2058 sustainability vision as contained in the Charter. Providing this public report on climate action goals and progress will facilitate the City's CARIP application and commitments under the Carbon Neutral framework.

CONCLUSION

The Surrey Sustainability Charter sets out a vision of sustainability for the City of Surrey and acts as an overarching policy document for decision-making. The Corporate Emissions Actions Plan now being implemented includes key actions to reduce corporate GHG emissions and to minimize energy use in the City's corporate operations. The recently-approved Community Climate Action Strategy is now being implemented, with clear strategies to reduce community GHG emissions and energy use. The attached Template outlines the actions taken by the City in 2013 to achieve the commitments that it made in signing the BC Climate Action Charter.



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Sustainability Manager

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Climate Action Revenue Incentive Program (CARIP) Public Report

Climate Action Revenue Incentive (CARIP)

Public Report for YEAR 2013

City of Surrey

Metro Vancouver

Report Submitted by

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March 15, 2013

General Information

Name of Local Government	City of Surrey
Member of Regional District (RD)	Metro Vancouver
Regional Growth Strategy (RGS) in region	Yes
Population	501,100

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Community Wide Actions for 2013

1.1 Measure

Community Wide Measurement Actions

Question	Have you been using the Community Energy and Emissions Inventory (CEEI) to measure progress? What else have you been using instead of/in addition to CEEI?
Answer	Yes
Additional Information	CEEMap Tool

1.2 Plan

Community Wide Targets

Question	Does your OCP(s) have targets, policies and actions to reduce GHG emissions, as per the requirements under the <i>Local Governments Act (LGA)</i> ? If yes, please identify the targets set. If no or in progress, please comment.
Answer	Yes
Additional Information	33% per capita reduction below 2007 levels by 2020; 80% per capita reduction by 2050

1.3 Reduce

Supportive Community Wide Actions

Action Type	Broad Planning
Actions Taken this Year	<ul style="list-style-type: none"> Community Energy Emissions Plan (CEEP) was adopted by Council Climate Adaptation Strategy was adopted by Council alongside the CEEP as part of Surrey's overall Community Climate Action Strategy Surrey's new OCP, "PlanSurrey2013" passed the first reading by Council in December and includes energy and emissions policy
Proposed Actions for Next Year	<ul style="list-style-type: none"> Implementation of the Community Climate Action Strategy Adoption and implementation of the new OCP

Action Type	Building and Lighting
Actions Taken this Year	<ul style="list-style-type: none"> Land Use and Building are two key sectors advanced through the adoption of the CEEP and PlanSurrey2013. Diverse strategies are proposed to focus density and growth and support retrofits and energy-efficient new construction. Partnered with LiveSmart BC's Business Energy Advisors to promote energy assessments and retrofits. Participated in BC Hydro and FortisBC pilot program to incentivize common-area and in-suite upgrades in market rental buildings. Project Green Suites launched, engaging residents of multi-family buildings to conserve energy, waste and water
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue implementation of the CEEP and OCP strategies Continue supporting and integrating third-party energy retrofit programs Complete and evaluate Project Green Suites pilot program

Action Type	Energy Generation
Actions Taken this Year	<ul style="list-style-type: none"> RFQ process initiated for new biofuel facility that will process Surrey's organic waste into compressed natural gas Council approved the District Energy (DE) System Utility's Policy on Utility Rate Setting and Regulation King George DE Feasibility Study completed
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue moving biofuel facility forward; planned to be operational in 2015 Integrate DE development into broader land use and infrastructure planning, as outlined in the CEEP and PlanSurrey2013

Action Type	Green Space
Actions Taken this Year	<ul style="list-style-type: none"> Surrey's Biodiversity Conservation Strategy (BCS) is nearing completion and will guide the protection of valuable habitat hubs and corridors Continued and expanded volunteer-based stewardship programs, including Surrey Natural Areas Partnership (SNAP), Salmon Habitat Restoration Program (SHaRP), Surrey Youth Stewardship Squad, Friends of the Forest, and Releaf programs.
Proposed Actions for Next Year	<ul style="list-style-type: none"> BCS to be brought to Council for approval Final OCP (PlanSurrey2013), including new DPA for sensitive ecosystems to be approved by Council Entering partnership with UBC to use remote sensing technology to measure the spread of invasive species, and stress levels in Cedar trees

Action Type	Transportation
Actions Taken this Year	<ul style="list-style-type: none"> Continuation of the Transportation Lecture Program in partnership with SFU's City Program PlanSurrey2013 identified FTDA's and includes policies to encourage complete and compact development along designated rapid transit corridors The Surrey Rapid Transit Study, led by TransLink and the Government of BC in partnership with the City of Surrey, the City of Langley, and Metro Vancouver, was completed in March. The City supports sustainable transportation in schools through the Safe and Active Schools Program, the School Travel Planning program, and new "bike to school" training
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continued implementation of the City's Transportation Strategic Plan, Cycling Plan, Walking Plan, and Greenways Plan Implementation of transportation strategies outlined in the CEEP and PlanSurrey2013 Continue and expand sustainable transportation programs in schools

Action Type	Waste
Actions Taken this Year	<ul style="list-style-type: none"> Project Green Suites launched, engaging residents of multi-family buildings to conserve energy, waste and water
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue exploring ways to support waste diversion in multi-family residences

Action Type	Water/Sewer
Actions Taken this Year	<ul style="list-style-type: none"> Continuation of the "Operation Save H2O" program to educate and raise awareness of high water usage and impacts Continued development of Integrated Stormwater Management Plans (ISMPs). Project Green Suites launched, engaging residents of multi-family buildings to conserve energy, waste and water
Proposed Actions for Next Year	<ul style="list-style-type: none"> Target completion of all ISMPs for Surrey Continue outreach programs, including Operation Save H2O and Project Green Suites

Action Type	Other Actions
Actions Taken this Year	<ul style="list-style-type: none"> Continued funding High School Climate Challenge workshops in Surrey high schools Continued funding Climate Change Showdown workshops in Surrey elementary schools, delivered by the BC Sustainable Energy Association Participation in the Coastal Cities at Risk research initiative with SFU, as well as other regional initiatives to plan and prepare for sea level rise and other climate impacts
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue participation in various school, community and research programs

Direct Community Wide Actions

Action Type	Buildings
Actions Taken this Year	<ul style="list-style-type: none"> • Council approved in principle a draft energy efficiency density bonusing policy for the West Clayton Stage 1 NCP. Implementation is in progress. • City-wide design guidelines in PlanSurrey2013 include guidelines for low carbon and energy efficient design
Proposed Actions for Next Year	<ul style="list-style-type: none"> • Complete roll-out of the energy efficiency density bonusing policy and the low carbon and energy efficient design guidelines

Action Type	Energy Generation
Actions Taken this Year	<ul style="list-style-type: none"> • Construction is nearly complete on Surrey's first district energy (DE) system, the civic centre's geo-exchange system that will power Surrey's new City Hall and City Centre Library. • Implementation underway on 2012 by-law requiring all developments within the service area and over a certain size be compatible with and/or connect to the DE system.
Proposed Actions for Next Year	<ul style="list-style-type: none"> • The City's first DE system in City Centre will become operational • Separate DE systems will be constructed near the three existing Skytrain stations in City Centre, eventually connecting to create an integrated system.

Action Type	Transportation
Actions Taken this Year	<ul style="list-style-type: none"> • Six level-2 electric vehicle charging stations and one DC Fast Charge station are implemented at public facilities across Surrey • Modo car share vehicles are available to the public at City Centre (City Hall) and Gateway Skytrain Station • Continued to require new fuel service stations and major renovations to existing stations to offer alternative fuels • Continued expansion of bicycle routes, including 13 new km of greenways
Proposed Actions for Next Year	<ul style="list-style-type: none"> • Eight level-2 electric vehicle charging stations to be implemented at Surrey's new City Hall • Continue expansion of active transportation infrastructure, including bike routes and greenways • Transit priority measures such as queue jumpers to enhance transit service along King George Boulevard is being considered

Action Type	Waste
Actions Taken this Year	<ul style="list-style-type: none"> Continued implementation of the organics waste collection program, which saw a 43% reduction in landfilled waste within the first three months and has enabled the City to reach its 2015 target of 70% waste diversion
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue implementation of the organics waste collection program and other measures to increase waste diversion

Action Type	Water/Sewer
Actions Taken this Year	<ul style="list-style-type: none"> Continued implementation of the mandatory water metering program for new developments and voluntary metering program for existing residences Continued water conservation efforts, such as the water sprinkling restrictions and educational initiatives
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue implementation of existing efforts

Action Type	Green Space
Actions Taken this Year	<ul style="list-style-type: none"> As part of PlanSurrey2013 and the BCS the City is: strategically acquiring land for ecosystem conservation purposes; identifying natural areas for protection in the preparation of Secondary Plans; encouraging and implementing greener development and building practices to improve water, air, soil and habitat quality; and, implementing Development Permit Areas and Guidelines for the protection of the natural environment and Biodiversity. 41.1 hectares (99.1 acres) of parkland was added in 2013
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue implementation of measures to acquire and protect green space in Surrey

Question	Is there any activity that you have been engaged in over the past year(s) that you are particularly proud of and would like to share with other local governments? Please describe and add links to additional information where possible.
Answer	<ul style="list-style-type: none"> Completion of the Community Energy and Emissions Plan

Corporate Actions for 2013

2.1 Measure

Corporate Measurement Actions

Question	What steps has your local government taken toward completing its corporate emissions inventory?
Answer	The City of Surrey established a corporate energy and emissions inventory in 2009, and used data from 2005 through 2009 to create a baseline. The corporate energy and emissions inventory is updated annually. In 2013, vendors delivering "traditional services" as defined by the province were required to report on fuel use as part of the inventory.

Question	What tool are you using to measure, track and report on your corporate emissions?
Answer	The City uses the Pembina Institute's excel-based CoolTool to calculate emissions, and is working on integrating energy use accounting into the City's new financial management system that is currently being rolled out.

2.2 Reduce

Supportive Corporate Actions

Action Type	Broad Planning
Actions Taken this Year	<ul style="list-style-type: none"> Continued implementation of our Corporate Emissions Action Plan, which sets a 20% GHG reduction target by 2020
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue implementation of our Corporate Emissions Action Plan and tracking progress on emission reductions over time

Action Type	Building and Lighting
Actions Taken this Year	<ul style="list-style-type: none"> Continued participation in BC Hydro's Workplace Conservation Awareness program to reduce electricity consumption in Surrey's indoor pools and libraries
Proposed Actions for Next Year	<ul style="list-style-type: none"> Expand participation in BC Hydro's Workplace Conservation Awareness Program to include arenas and RCMP divisions, as well as indoor pools and libraries Continue to design new facilities to optimize energy efficiency where possible

Action Type	Energy Generation
Actions Taken this Year	<ul style="list-style-type: none"> Continued to undertake studies on viable energy alternatives, when opportunities arise
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue to undertake studies on viable energy alternatives, when opportunities arise

Action Type	Transportation
Actions Taken this Year	<ul style="list-style-type: none"> Support for sustainable transportation modes to get to work with the move to new City Hall. Incentives include personalized commute planning, preferred carpool parking, end-of-trip facilities for cyclists, car sharing program with Modo Car Co-op, transit rebates on monthly passes, and introduction of pay parking at New City Hall. The City continues to partner with SFU's School of Mechatronics to refine a lifecycle assessment tool that compares the economic and environmental costs and benefits of conventional and alternative fuel vehicles.
Proposed Actions for Next Year	<ul style="list-style-type: none"> Roll out of TDM measures for New City Hall Continue lifecycle tool partnership with SFU, and utilize for purchasing decisions, where appropriate

Action Type	Water/Sewer
Actions Taken this Year	<ul style="list-style-type: none"> Effort to design new City Hall meeting rooms and kitchens so as to minimize use of bottled water and disposable dishware (i.e. close proximity of kitchens allows reusable dishware to be used in meetings)
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue staff education on opportunities to reduce water use at work (e.g. discouraging bottled water at meetings)

Action Type	Other Actions
Actions Taken this Year	<ul style="list-style-type: none"> Opportunities to build on Surrey's Sustainable Purchasing agenda were pursued, including the electric vehicle pilot program and reduced number of office supply deliveries from Mills Basics
Proposed Actions for Next Year	<ul style="list-style-type: none"> Further sustainable purchasing actions will be pursued, including an update to the City's purchasing manual and an interdepartmental workshop to identify and prioritize opportunities over the coming years

Direct Corporate Actions

Action Type	Building and Lighting
Actions Taken this Year	<ul style="list-style-type: none"> Continued energy retrofits in civic facilities, including boiler and lighting upgrades Construction of the LEED-certified new City Hall, which includes a district energy system, green roof, electric vehicle charging stations, and more.
Proposed Actions for Next Year	<ul style="list-style-type: none"> Continue pursuing energy retrofit opportunities in civic facilities Grand opening of the new City Hall

Action Type	Energy Generation
Actions Taken this Year	<ul style="list-style-type: none"> Construction nearly completed on the geo-exchange district energy system that will power the New City Hall and City Centre Library
Proposed Actions for Next Year	<ul style="list-style-type: none"> New geo-exchange district energy system for City Hall and City Centre Library will be operational

Action Type	Fleet
Actions Taken this Year	<ul style="list-style-type: none"> Funding was confirmed from FCM to pilot four electric vehicles for three years The Buildings' division mobile inspector program launched, helping building inspectors do more work from the road, plan efficient trips, and reduce the number and length of trips made.
Proposed Actions for Next Year	<ul style="list-style-type: none"> Electric vehicle pilot to roll out with opening of New City Hall Continue roll out and monitoring of the mobile inspector program

Action Type	Waste
Actions Taken this Year	<ul style="list-style-type: none"> Organics bins were distributed to key City facilities in 2013. The City has seen a 10% drop in garbage tonnage generated at City Hall in 2013.
Proposed Actions for Next Year	<ul style="list-style-type: none"> Organics bins and education campaign will be expanded to more City facilities in 2014

Action Type	Water/Sewer
Actions Taken this Year	<ul style="list-style-type: none"> • Initiation of a new asset management program to enable staff to make more informed replacement strategies. • The City continued to invest in artificial turf fields and has a program to allocate surplus field rental revenues into replacement reserves for the future replacement of field surfaces. • Continued implementation of the Water Loss Reduction Program to minimize leaks from water infrastructure
Proposed Actions for Next Year	<ul style="list-style-type: none"> • Implementation of the Asset Management Decision Support Software • Continue investment in artificial turf fields • Continue implementation of the Water Loss Reduction Program

Action Type	Green Space
Actions Taken this Year	<ul style="list-style-type: none"> • The Parks Division is working on enhancing asset management for Park infrastructure and biological assets. The software supports preventative maintenance and is designed to optimize asset condition and prevent asset failure and premature replacement.
Proposed Actions for Next Year	<ul style="list-style-type: none"> • Roll out Asset Management Decision Support Software

2.3 Corporate Innovation

Question	Is there any activity that you have been engaged in over the past year(s) that you are particularly proud of and would like to share with other local governments? Please describe and add links to additional information where possible.
Answer	<ul style="list-style-type: none"> • Construction of the geo-exchange district energy system for City Hall and the City Centre Library. • TDM measures to support sustainable transportation modes for staff commutes