# Climate Action Revenue Incentive Program (CARIP) Public Report for the year, 2013

**District of Maple Ridge** Metro Vancouver



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# **General Information**

Name of Local Government	District of Maple Ridge
Member of Regional District (RD)	Metro Vancouver
Regional Growth Strategy (RGS) in region	Yes
Population	77,402 (2013)



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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	In addition to the CEEI, the District has used a combination of the Sustainability Action Plan, Performance Reporting Scorecards with reduction targets to measure progress.

# 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</i> (LGA)? If yes, please identify the targets set. If no or in progress, please comment.
Answer	Yes
Additional Information	The District's OCP, Section 5.6, Policy 5-45 states: "The District of Maple Ridge has a goal to reduce community greenhouse gas emissions by 33% below 2007 levels by 2020 and 80% by 2050".

#### 1.3 Reduce

#### **Supportive Community Wide Actions**

Action Type	Broad Planning
Actions Taken this Year	<ul> <li>Continued discussions with TransLink to develop improved transit solutions for our community.</li> <li>Completed update of the Maple Ridge Transportation Plan.</li> <li>Completed Environmental Management Plan.</li> <li>Hosted "What if Your House Had an Energy Bill of Zero" discussion where local experts will lead a discussion about a the possibility of a community scale home retrofit project in Maple Ridge.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue discussions with TransLink to develop improved transit solutions for our community.</li> <li>Develop implementation and funding strategy for Strategic Transportation Plan.</li> </ul>

	• Environmental Management Strategy Implementation planned, pending Council approval.
Action Type	Building and Lighting
Actions Taken this Year	Continued to promote:Increased density in the Town CentreParticipation in Earth Hour event.
Proposed Actions for Next Year	Continue to promote:Increased density in the Town CentreParticipation in Earth Hour event.

Action Type	Greenspace
Actions Taken this Year	• Continued to:Support Park Acquisition PolicyWith community partners to provide education and promote awareness of gardening opportunities and the importance of agriculture and eating localSupport development of a community garden plan and a garden asset map including looking for partnerships on beautification projects, gardens, community gardensDevelop programs and projects to preserve and enhance the natural assets of Maple Ridge with local community groups.
Proposed Actions for Next Year	• Continue to:Support Park Acquisition PolicyWork with community partners to provide education and promote awareness of gardening opportunities and the importance of agriculture and eating localSupport development of a community garden plan and a garden asset map including looking for partnerships on beautification projects, gardens, community gardensDevelop programs and projects to preserve and enhance the natural assets of Maple Ridge with local community groups.

Action Type	Transportation
Actions Taken this Year	<ul> <li>Continued discussions with TransLink to develop improved transit solutions for Maple Ridge.</li> <li>Completed update of the Maple Ridge Transportation Plan.</li> <li>Installed eight electric vehicle charging stations.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue discussions with TransLink to develop improved transit solutions for Maple Ridge.</li> <li>Develop implementation and funding strategy for Strategic Transportation Plan.</li> </ul>

Action Type	Waste
Actions Taken this Year	<ul> <li>Expanded:Environmental education throughout all Community Services Programs and special events. Themes such as composting and crafts related to environmental educational booths were hosted at a number of community events and festivals.</li> <li>Continued:Recycling education/outreach programs.</li> <li>Advocating for increased diversion of recyclable and compostable commodities with Metro Vancouver Waste Management staff.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Ridge Meadows Recycling Society will facilitate implementation of new Recycling Regulations EPR program for Printer Paper &amp; Packaging (PPP).</li> <li>Deliver education and information on PPP program</li> <li>Continue: <ul> <li>Recycling education/outreach programs.</li> <li>To advocate for increased diversion of recyclable and compostable commodities with Metro Vancouver Waste Management staff.</li> </ul> </li> </ul>

Action Type	Water/Sewer
Actions Taken this Year	<ul> <li>Continued:</li> <li>Support of Low Flow Toilet Rebate Program.</li> <li>Publication of season specific sprinkling regulation notices in the local paper.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue to:</li> <li>Support Low Flow Toilet Rebate Program.</li> <li>Publish season specific sprinkling regulation notices in the local paper.</li> </ul>

Action Type	Other Actions
Actions Taken this Year	• Continued to:Promote Climate Smart's 'Smart Business Program'Promote, support and host EarthDay eventExpand environmental education throughout all District Community Services programs and special events. Themes such as composting and crafts related to environmental education hosted at a number of community events and festivalsWork with community partners to provide education and promote awareness of gardening opportunities and the importance of agriculture and eating locally.
Proposed Actions for Next Year	<ul> <li>Send request to Province for continuation of funding of the LiveSmart program.</li> <li>Continued to:</li> <li>Promote Climate Smart's 'Smart Business Program'.</li> </ul>

- --Promote, support and host EarthDay event.
- --Expand environmental education throughout all District Community Services programs and special events. Themes such as composting and crafts related to environmental education hosted at a number of community events and festivals.
- --Work with community partners to provide education and promote awareness of gardening opportunities and the importance of agriculture and eating locally.

#### **Direct Community Wide Actions**

Action Type	Buildings
Actions Taken this Year	<ul> <li>Developed business case model for energy efficiency in multi-family and mixed use developments. This was contingent upon grant funding which was cut, so project was cancelled.</li> <li>Request for Expression of Interest and Request for Proposal issued for the site that was purchased in 2011 to encourage building of mixed use, residential and commercial in the Town Centre. With waning local market demand for mixed use, multi-family housing, coupled with surplus inventory in Maple Ridge, the decision was made in early 2013 to suspend the public process until market conditions improved.</li> <li>Continued to: <ul> <li>Support Town Centre Investment Incentive Program to attract residential and commercial construction and encourage and support the use of environmentally sustainable building construction methods and materials, and to encourage energy efficiencies and alternative technologies.</li> <li>Host twice yearly Builders Forums which include the dissemination of information on energy efficiency and green building technology.</li> </ul> </li> </ul>
Proposed Actions for Next Year	<ul> <li>For the District Lands purchased in 2011 to encourage building of mixed use, residential and commercial in the Town Centre, we are currently exploring market conditions and options and will be reporting to Council to determine next steps.</li> <li>LED Streetlight new development pilot project.</li> <li>Continue to: <ul> <li>Support extension for one year the commercial portion of the Town Centre Investment Incentive Program to attract residential and commercial construction and encourage and support the use of environmentally sustainable building construction methods and materials, and to encourage energy efficiencies and alternative technologies.</li> <li>Host twice yearly Builders Forums which include the dissemination of information on energy efficiency and green building technology.</li> </ul> </li> </ul>

Action Type	Energy Generation
Actions	<ul> <li>Continued to promote the Town Centre Investment Incentive Program to encourage</li></ul>
Taken this	development that uses alternate/renewable energy, including solar, wind, water,
Year	geothermal and biomass.

#### Proposed Actions for Next Year

• Extended for one year the commercial portion of the Town Centre Investment Incentive Program to encourage development that uses alternate/renewable energy, including solar, wind, water, geothermal and biomass.

Action Type	Transportation
Actions Taken this Year	<ul> <li>Installed eight Electric Vehicle Charging Stations.</li> <li>Continued:</li> <li>Promotion of the District's Town Centre Investment Incentive Program to concentrate density closer to transit options.</li> <li>Enhancement of the transportation network to facilitate all modes of transportation through provision of bike lanes, sidewalks, road improvements.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Extended for one year the commercial portion of the District's Town Centre Investment Incentive Program to concentrate density closer to transit options.</li> <li>Continue to enhance the transportation network to facilitate all modes of transportation through provision of bike lanes, sidewalks, road improvements.</li> </ul>

Action Type	Waste
Actions Taken this Year	<ul> <li>Implemented pilot recycling program at Memorial Peace Park.</li> <li>Expanded:</li> <li>Range of items accepted at Recycling Depot as a result of EPR programs, including electronic devices, records, CDs, electronic toys, power tools and exercise equipment).</li> <li>Recycling Depot drop off items to include Styrofoam and used cooking oil.</li> <li>Solid Waste Garbage &amp; Recycling regulations bylaw to include commercial properties.</li> <li>Continued:</li> <li>Working towards pickup program by Recycling for foodscraps/yard trimmings.</li> <li>Expansion of Recycling pick up services.</li> <li>Expansion of number of business involved in the Recycling Program.</li> <li>Development of framework to include commercial properties into the property tax structure for commercial recycling services.</li> <li>Working towards 'zero waste'-implement ""Strive for 75"".</li> <li>Twice yearly Brush Chipping Program.</li> <li>Promotion of expanded Recycling Depot operations.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue with pilot recycling program at Memorial Peace Park.</li> <li>Install bottle and can recycling baskets to garbage containers in community and city parks.</li> <li>Revise Solid Waste Bylaw to include Metro Vancouver's upcoming ban on organic material in the garbage stream.</li> <li>Continue to:Work towards pickup program by Recycling for foodscraps/yard trimmings.</li> </ul>

Expand Recycling pick up services.
Expand number of business involved in the Recycling Program.
Develop framework to include commercial properties into the property tax structure for
commercial recycling services.
Work towards 'zero waste'-implement ""Strive for 75"".
Offer twice yearly Brush Chipping Program.
Promote expanded Recycling Depot operations.

Action Type	Water/Sewer
Actions Taken this Year	<ul> <li>Continued:</li> <li>Offering Low Flow Toilet Rebate Program.</li> <li>Publishing season specific notices in the local paper regarding sprinkling regulations.</li> <li>Update of stream mapping project.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue to:</li> <li>Offer Low Flow Toilet Rebate Program.</li> <li>Publish season specific notices in the local paper regarding sprinkling regulations.</li> <li>Update stream mapping project.</li> </ul>

Action Type	Greenspace
Actions Taken this Year	<ul> <li>Acquired, planned, designed and developed three community parks.</li> <li>Developed Greg Moore Trail and Maple Ridge to Pitt Meadows trail connection (under Golden Ears Bridge).</li> <li>Installed additional bear proof waste cans at greenbelt interface areas.</li> <li>Developed an invasive species management program recommendation for Council's consideration</li> <li>Coordinated BC Hydro greening tree replacement program.</li> <li>Continued:</li> <li>Supporting Bear Aware program.</li> <li>Hosting Arbor Day Tree planting.</li> <li>Protecting environmentally sensitive areas through dedication or covenant.</li> </ul>
Proposed Actions for Next Year	<ul> <li>If funding is approved, retain consultant to work on Invasive Plant Management Strategy.</li> <li>Continue to:</li> <li>Support Bear Aware program.</li> <li>Host Arbor Day Tree planting.</li> <li>Protect environmentally sensitive areas through dedication or covenant.</li> </ul>

Action Type	Other Actions
Actions Taken this Year	<ul> <li>Work with Haney Farmers Market to explore external funding sources to achieve a sustainable funding formula into 2014</li> <li>Work with Haney Farmers Market on promotion and networking into 2014.</li> <li>Continued to: <ul> <li>Promote Haney Farmers Market events.</li> <li>Promote Golden Harvest event.</li> <li>Expand and support School Neighbourhood Garden Initiatives.</li> </ul> </li> </ul>
Proposed Actions for Next Year	<ul> <li>Progress the District's standing in the Partners for Climate Protection (PCP) program.</li> <li>Continue to:</li> <li>Promote Haney Farmers Market events.</li> <li>Promote Golden Harvest event.</li> <li>Expand and support School Neighbourhood Garden Initiatives.</li> </ul>

# **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	Corporate energy and emissions inventories have been completed for 2007, 2008, 2009, 2010, 2011, 2012 and 2013 (Interim).
Question	What tool are you using to measure, track and report on your corporate emissions?
Answer	SMARTTool. In Fall of 2012, the District of Maple Ridge began using the Province's SMARTTool program to help measure our GHG emissions.

# 2.2 Reduce

# **Supportive Corporate Actions**

Action Type	Broad Planning
Actions Taken this Year	<ul> <li>Completed BC Hydro Energy Manager Year 3 work plan.</li> <li>Continued to:</li> <li>Implement Workplace Conservation Awareness Program.</li> <li>Update Strategic Energy Management Plan.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Support and participate in BC Hydro Energy Management Program for year 4 work plan.</li> <li>Continue to:</li> <li>Implement Workplace Conservation Awareness Program.</li> <li>Update Strategic Energy Management Plan.</li> </ul>

Action Type	Building and Lighting
Actions Taken this Year	Continued to:Promote and participate in Earth Hour EventReport energy consumption versus targets.
Proposed Actions for Next Year	Continue to:Promote and participate in Earth Hour EventReport energy consumption versus targets.

Action	Туре	Transportation
Acti Takei Ye	n this	Continued to:    Promote Bike to Work Week.    Promote and participate in the Commuter Challenge.
Prop Action Next	ns for	Continue to:Promote Bike to Work WeekPromote and participate in the Commuter Challenge.

Action Type	Water/Sewer
Actions Taken this Year	• Review 248 Street pump station proposed actions for possible implementation to reduce energy costs or improve energy management.
Proposed	Complete review of 248 Street pump station proposed actions for possible

Actions for implementation to reduce energy costs or improve energy management.  Next Year
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Action Type	Other Actions
Actions Taken this Year	<ul> <li>Implemented provincial requirements to include contractor fuel consumption with District of Maple Ridge GHG emissions inventory.</li> <li>Continued to:         <ul> <li>Meet our obligations with GHG emissions reporting in alignment with provincial requirements.</li> <li>Support and participate in the Mexico City Pact.</li> </ul> </li> </ul>
Proposed Actions for Next Year	• Continue to:Meet our obligations with GHG emissions reporting in alignment with provincial requirementsSupport and participate in the Mexico City Pact.

# **Direct Corporate Actions**

Action Type	Building and Lighting
Actions Taken this Year	<ul> <li>Installed additional occupancy sensors in Municipal Hall and Operations Centre.</li> <li>With BC Hydro's assistance, audit Leisure Centre for occupancy lighting sensors.</li> <li>Upgraded bandstand lighting at Memorial Peace Park and upgraded street pathway lighting at Memorial Peach Park to LED lights.</li> <li>Began upgrade to Hammond Park sportfield lighting to more energy efficient lighting.</li> <li>Began modification of configuration logic at emergency generators serving reservoirs which allows reduced run time during power outages resulting in a measurable electrical savings of \$5,000 annually and system savings in equipment fatigue and reduced fueling cycles.</li> <li>Report to update Council on LED pilot project at Abernethy and 224 Street, and to request endorsement to further research this technology's viability.</li> <li>Continued to search for the right lighting technology that will be cost effective and energy efficient for the District's street lights.</li> <li>Updated rooftop heating, ventilation and air conditioning units at Operations Centre.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Because costs have gone down, reassess business case to investigate whether making the change to LED signage at the Leisure Centre and Library is cost effective.</li> <li>Audit of Operations Centre for occupancy lighting sensors with BC Hydro assistance.</li> <li>Assess business case for Maple Ridge Business Centre parking lot lighting upgrade.</li> <li>Complete upgrade to Hammond Park sportfield lighting to more energy efficient lighting.</li> <li>Complete modification of configuration logic at emergency generators serving reservoirs.</li> <li>Upgrade Greg Moore Youth Centre and 2nd floor gym at Leisure Centre lighting from 400w mercury vapour high bays to six lamp T5s fluorescent fixtures.</li> <li>Pilot LED streetlighting project in a new subdivision - to be determined.</li> </ul>

• Continue to search for the right lighting technology that will be cost effective and energy efficient for the District's street lights.

Action Type	Fleet
Actions Taken this Year	<ul> <li>Completed analysis of fuel consumption which indicated the hybrid fleet of 30 units, three electric cars and one electric truck are significantly reducing the annual fuel consumption. On average each electric car saves \$1,400 per year in fuel consumption. Total projected fuel savings over the life of all 33 hybrid and electric vehicles will be significant. This combined with other efficiencies has resulted in a nominal 1% increase of fleet rates in 2014 despite a net 2% increase in fuel purchase costs 2012 to 2013 and a 27% spike in fuel purchase costs in 2011.</li> <li>Fleet review of rates, revenues and efficiencies.</li> <li>Purchased three electric vehicles</li> <li>Continued: <ul> <li>Addition of hybrid vehicles to the District's Fleet.</li> <li>To promote use of pedal bikes in Youth Services as an alternative to using a fleet vehicle.</li> </ul> </li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue to:</li> <li>Add hybrid vehicles to the District's Fleet.</li> <li>Promote use of pedal bikes in Youth Services as an alternative to using a fleet vehicle.</li> </ul>

Action Type	Waste
Actions Taken this Year	<ul> <li>Launch pilot of paper towel composting program at Municipal Hall.</li> <li>Continued:</li> <li>Corporate Recycling program.</li> <li>Corporate composting program.</li> <li>Recycling surplus electronic equipment.</li> </ul>
Proposed Actions for Next Year	• Continue:Corporate Recycling programCorporate composting programRecycling surplus electronic equipment.

Action Type	Water/Sewer
Actions Taken this Year	<ul> <li>Replaced boiler at Hammond Outdoor Pool.</li> <li>Development of specification for installation of computerized irrigation control system with rain sensors to minimize water consumption.</li> </ul>
Proposed Actions for Next Year	• Select contractor for installation of computerized irrigation control system with rain sensors to minimize water consumption.

Action Type	Greenspace
Actions Taken this Year	<ul> <li>Continued:</li> <li>Tribute tree planting program at cemetery sites.</li> <li>Acquisition of greenbelt and park space areas.</li> <li>To update of stream mapping project.</li> <li>Installation of aquifer signage.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue:</li> <li>Tribute tree planting program at cemetery sites.</li> <li>Acquisition of greenbelt and park space areas.</li> <li>To update of stream mapping project.</li> <li>Installation of aquifer signage.</li> </ul>

Action Type	Other Actions
Actions Taken this Year	<ul> <li>Installed energy efficient photocopiers District-wide.</li> <li>Used email to distribute minutes and agendas to advisory committee members instead of paper copies (Clerks Dept).</li> <li>Implemented ebilling solutions for taxes and utilities.</li> <li>To reduce paper, energy and other resources:Municipal auditors working paper file is now electronic.</li> <li>Increased use of electronic documents in the Tax &amp; Utilities system.</li> <li>Electronic processing of online banking documents.</li> <li>Continued to:Build on the Citrix and thin client infrastructure to deliver further efficiencies in reduced administrative burden, hardware costs and energy consumption.</li> <li>Deliver virtualized servers as the corporate standard to reduce costs, administrative burden, energy consumption, hardware failures and footprint.</li> </ul>
Proposed Actions for Next Year	<ul> <li>Continue to:</li> <li>Build on the Citrix and thin client infrastructure to deliver further efficiencies in reduced administrative burden, hardware costs and energy consumption.</li> <li>Deliver virtualized servers as the corporate standard to reduce costs, administrative burden, energy consumption, hardware failures and footprint.</li> </ul>

# **Carbon Neutral Progress Reporting - Final**

#### 3.1 Carbon Neutral Progress Reporting - Final

Emissions/Offsets	Tonnes CO2e
Annual corporate emissions using SMARTTool or equivalent inventory tool-Final	2283
Emissions from services delivered directly by the local government-Final	1953
Emissions from contracted services-Final	330
Less: GHG reductions being claimed for this reporting year from Option 2 - GHG reduction projects	
Option 2 Project A: Vancouver Landfill Gas Capture Optimization Project	1665
Balance of corporate emissions for this reporting year.	618

#### 3.2 Making Progress on Your Carbon Neutral Commitment

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If your community has not achieved carbon neutrality for this reporting year please describe the actions that you intend to take next year to move you toward your carbon neutral goal.

#### **Answer**

The District of Maple Ridge is making progress on our carbon neutral commitment. Because Maple Ridge is a growing community, reducing our GHG emissions is challenging.

Although our direct emissions have decreased, with the requirements the Province introduced in 2012 to include contractor fuel consumption emissions for new and renewed contracts, the addition of the contractor fuel consumption has increased our overall consumption from the previous year.

We are working our way to make our corporate operations more 'green' and efficient, effectively changing the way we do business with the intent of reducing our overall carbon footprint. This is not an exhaustive list of actions; for more details, please refer to the actions posted in the body of this document. Projects we are doing for 2014 include:

- Continued support and promotion of the District's Town Centre Investment Incentive Program to attract residential and commercial construction and encourage and support the use of environmentally sustainable building construction methods and materials, and to encourage energy efficiencies and alternative technologies. The commercial component of this program has been extended for another year to the end of 2014.
- Continued support with an Energy Manager on staff to participate in BC Hydro Energy Management Program.
- Replacement of inefficient fleet vehicles with electric/hybrid vehicles.

Some of the projects we have implemented recently include:

- Renovate/retrofit Fire Hall #1 has been recognized with LEED gold designation.
- In partnership with the BC SPCA, construct BC's first LEED Animal Shelter.

Ongoing energy efficient up	ogrades at the Leisure	e Centre and Operation	is Centre.