

## Climate Action Revenue Incentive Public Report



Photograph of City of Nanaimo's Reservoir #1 Energy Recovery Facility courtesy of Bill Sims, City of Nanaimo Manager of Water Resources

2015

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### **BROAD PLANNING ACTIONS**

Broad planning refers to high level planning that sets the stage for GHG emissions reductions, including plans such as Official Community Plans, Integrated Community Sustainability Plans, Climate Action Plans or Community Energy Emissions Plans. Land use planning that focuses on Smart Growth principles (compact, complete, connected, centred) plays an especially important role in energy and GHG reduction.

### COMMUNITY-WIDE

### 2015 Community-Wide Broad Planning Actions

|  | Actions   |
|--|---|
| 2015 Community-Wide<br>Broad Planning<br>Actions | The City began working on an "Environment Framework for Nanaimo" to<br>assess the impact of existing programs and policies, and gaps in service.<br>This is aimed at building community environmental stewardship<br>opportunities. |

### 2016 Community-Wide Broad Planning Proposed Actions

|   | Actions  |
|---|--|
| 2016 Community-<br>Wide Broad<br>Planning Proposed<br>Actions | This City will complete the Environment Framework mentioned above. |

### CORPORATE

### 2015 Corporate Broad Planning Actions

| 2015 Corporate | An Anti-idling Policy was adopted. The implementation of this included Anti-     |
|----------------|--|
| Broad Planning | Idle decals on City Fleet vehicles, Anti-Idle and Eco Driving training delivered |
| Actions        | by Fleet department staff and driver trainers, Anti-Idle brochures developed     |
|                | to be included in all new employee packages, and an anti-idle shut down          |
|                | option is included in tender documents where the option is available             |
|                | (currently on 16 medium and heavy duty trucks). The City updated the             |
|                | Energy Conservation and Management Policy to include this.                       |

The City's began to develop a "Green Meeting" checklist for committees, commissions and council meetings.

The City also updated our Energy Conservation and Management Policy which addresses more efficient energy use, waste reduction, GHG emission reduction, and environmentally friendly heating and cooling.

### 2016 Corporate Broad Planning Proposed Actions

Actions

|  | Actions  |
|--|--|
| 2016 Corporate<br>Broad Planning<br>Proposed Actions | The City of Nanaimo plans to review and update the Corporate Climate Action Plan.            |
|  | The City will complete the "Green Meeting" checklist mentioned above.                        |
|  | The City will continue to work on the "Environmental Framework for Nanaimo" mentioned above. |

### **Snapshot Questions**

# Does your local government set aside funds in a climate reserve fund or something similar?

Yes, the City of Nanaimo has a Regional Emissions Reduction Reserve.

### Does your local government have a corporate GHG reduction plan?

Yes. The City of Nanaimo's OCP and Sustainability Action Plan discusses our GHG reduction goals.

### What is your current GHG reduction target (s) as identified in your OCP or RGS?

The City of Nanaimo's GHG reduction target as stated in the OCP and Community Sustainability Action Plan is to reduce 2007 emissions by 3% by 2020 and by 39% by 2050. The City had previously adopted Provincial guidelines until we could prepare our own CEEI. This was prepared by Stantec in 2011 and it was recommended that we lower the Provincial targets so that they are more attainable.

# Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?

Yes. The City measures this as part of our Balanced Scorecard program.

# What plans, policies or guidelines govern the implementation of climate mitigation in your community?

The City of Nanaimo's Sustainability Action Plan and the Official Community Plan.

### **BUILDING AND LIGHTING ACTIONS**

Low-carbon buildings use the minimum amount of energy needed to provide comfort and safety for their inhabitants and tap into renewable energy sources for heating, cooling and power. These buildings can save money, especially when calculated over the long term. This category also includes reductions realized from energy efficient street lights and lights in parks or other public spaces.

### COMMUNITY-WIDE

### 2015 Community-Wide Building and Lighting Actions

|                   | Action  |
|-------------------|---|
| 2015 Community-   | The City provides a Woodstove Exchange Program for citizens upgrading their |
| Wide Building and | woodstoves that do not meet CSA B415.1 standards. These woodstoves must     |
| Lighting Actions  | be replaced by low emission heating sources to qualify for the rebate.      |

### 2016 Community-Wide Building and Lighting Proposed Actions

|  | Action  |
|--|---|
| 2016 Community-<br>Wide Building and<br>Lighting Proposed<br>Actions | The City will provide the Woodstove Exchange program again in 2016. |

### CORPORATE

### 2015 Corporate Building and Lighting Actions

|  | Actions   |
|--|---|
| 2015 Corporate<br>Building and<br>Lighting Actions | A heat recovery system was installed at the Beban Recreation Centre. This system recovers waste heat from the ice plant refrigeration system and uses it to heat the main swimming pool.  |
|  | Continuous Optimization Program (COP) Studies are underway for Nanaimo<br>Aquatic Centre, Nanaimo Ice Centre, and Beban Park Recreation Centre. This<br>involves examining current equipment and operations to identify efficiencies. |
|  | Sustainability Lighting Upgrades converting old technology to new LEDs.   |

### 2016 Building and Lighting Proposed Actions

| 2016 Building and<br>Lighting Proposed<br>Actions | A Boiler Plant review and a Thermal Energy Study will be completed at Beban<br>Park Recreation Centre.   |
|---|--|
|   | An Energy Reduction Sustainability Study will be completed at the Nanaimo<br>Aquatic Centre. This will explore solar heating and exhaust reclaim of pool air<br>handling units.  |
|   | The Continuous Optimization Program mentioned above is nearing completion.<br>Implementation of measures to ensure maximum efficiency will be in 2016 and<br>conclude in 2018. Results of the process improvements will be measured and<br>verified.                                       |
|   | The City will be preparing a Business Case Study to look at converting street<br>lighting City wide from High Pressure Sodium (HPS) to LED. Currently the City is<br>paying the difference between HPS and LED to developers installing street<br>lights to begin this conversion process. |

### **ENERGY GENERATION ACTIONS**

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery (e.g. from biogas and biomass), geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighbourhoods through district energy or co-generation systems.

### COMMUNITY-WIDE

### 2015 Community-Wide Energy Generation Actions

|   | Action  |
|---|---|
| 2015 Community-<br>Wide Energy<br>Generation<br>Actions | No Community-Wide Energy Generation Actions were taken in 2015. |

### 2016 Community-Wide Energy Generation Proposed Actions

|                  | Action  |
|------------------|---|
| 2016 Community-  | No planned Community-Wide Generation Actions proposed for 2016. |
| Wide Energy      |   |
| Generation       |   |
| Proposed Actions |   |
|                  |   |

### CORPORATE

### 2015 Corporate Energy Generation Actions

| 2015 Corporate<br>Energy Generation<br>Actions | Reservoir No 1 Energy Recovery Facility in operation resulting in 686,720 kWh of electricity produced.   |
|--|--|
|  | As mentioned previously, the City of Nanaimo implemented a heat recovery system at Beban Park Recreation Centre. This system recovers waste heat from the ice plant refrigeration system to heat the main swimming pool. |

### 2016 Energy Generation Proposed Actions

Action

| 2016 Energy         | No Energy Generation actions proposed for 2016. |
|---------------------|---|
| Generation Proposed |   |
| Actions             |   |

### **Snapshot Questions**

Is your local government developing or constructing a district energy system or a renewable energy system? No.

Is your local government operating a district energy system or a renewable energy system?

No.

Is your local government connected to a district energy system that is operated by another energy provider? No.

Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit? http://www.toolkit.bc.ca/tool/integrated-resource-recovery-irr Yes.

### **GREENSPACE ACTIONS**

Greenspace refers to parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites.

### COMMUNITY-WIDE

### 2015 Community-Wide Greenspace Actions

|   | Actions  |
|---|--|
| 2015 Community-<br>Wide Greenspace<br>Actions | Tree Planting Projects - Street trees planted on Haliburton Street, at Neck<br>Point (natural restoration project), and Hawthorne Park. Public volunteers<br>and Neighbourhood Associations participated in planting native shrubs and<br>trees. Tree planting greatly improves local air quality and contributes to<br>carbon sequestration.          |
|   | Invasive Plant Management Program - Efforts include public education to raise<br>awareness of priority invasive plants in Nanaimo. Volunteers are also<br>gathered for invasive plant removal projects in Parks throughout the City.<br>Invasive Plant control helps improve the resiliency of our local natural<br>ecosystems as the climate changes. |
|   | Parks Development – Nye, Janes, Jesters Way, Cottle Creek, Linley Valley<br>Drive, and Bourbon Parks formalized for public use. These parks provide urban<br>forest and green space for the community that also serves as habitat for local<br>species.  |
|   | Greenhouse Installed at Beban Park to encourage and support urban food gardening.  |

### 2016 Community-Wide Greenspace Proposed Actions

|  | Actions  |
|--|--|
| 2016 Community-<br>Wide Greenspace<br>Proposed Actions | Departure Creek Restoration - Working with Snuneymuxw First Nation,<br>Fisheries and Oceans Canada, and the local neighbourhood association to<br>conduct a stream habitat assessment and archeological impact assessment to<br>determine if stream relocation and a riparian restoration project can proceed.<br>This project will improve the habitat value of Departure Creek, making it a<br>more resilient system for the future. |
|  | Street trees to be planted on Machleary and Kennedy Streets in cooperation with the Nanaimo Old City Association as further effort to improve our air quality.   |

Stream Restoration Projects - Working with Snuneymuxw First Nations to complete four concept plans for stream restoration projects to improve fish access upstream

Vancouver Island Beggartick Restoration - Work is being completed at Third Street Park (Buttertubs Marsh) to establish a population of Vancouver Island Beggartick. This will provide habitat for migratory birds and species at risk through stewardship and protection.

Expansion of Pawson Park Urban Food Garden.

### CORPORATE

### 2015 Corporate Greenspace Actions

|  | Actions   |
|--|---|
| 2015<br>Corporate<br>Greenspace<br>Actions | Buttertubs Marsh Conservation Management Plan Review – Started to review<br>the existing Management Plan for the Buttertubs Marsh Conservation<br>Management Area working with the Nature Trust of British Columbia and<br>Ducks Unlimited Canada. The goal is provide a clearer direction on restoration<br>and habitat enhancement projects within the Marsh. |
|  | City Hall Garry Oak Ecosystem Plantings. There is a 20 square metre site adjacent to City Hall which serves as an educational opportunity on urban naturalization and biodiversity.   |
|  | The City of Nanaimo completed a environmental assessment on a 26.7 acre<br>piece of City owned Brownfield property on the waterfront downtown known<br>as 1 Port Drive (previously a CP Rail yard). This study was performed to<br>determine the level and type of contaminants present so that appropriate<br>development plans could be made.                 |

### 2016 Greenspace Proposed Actions

| Act | ions  |
|-----|-------|
| πu  | 10113 |

| 2016 Greenspace  | Amendment to the Management and Protection of Trees Bylaw that will              |
|------------------|--|
| Proposed Actions | provide developers with a replanting option whereby they can deposit cash-in-    |
|                  | lieu into an Urban Forest Strategy Fund for future plantings. This is to provide |
|                  | a solution where planting space is not available on a development site where     |
|                  | trees were removed.  |
|                  | Adopt the updated Buttertubs Marsh Conservation Management Area.                 |
|                  | Complete the Linley Valley Park Environmental Assessment and Park Plan.          |
|                  | 1 Port Drive will use the results of the Environmental Assessment completed in   |

2015 to start working on Master Plan for the site. This will outline development opportunities and the environmental issues identified will be addressed.

### **Snapshot Questions**

**Does your local government have urban forest policies, plans or programs?** Yes, the City of Nanaimo's 2010 Urban Forest Management Strategy.

### SOLID WASTE ACTIONS

Reducing, reusing, recycling, recovering and managing the disposal of the residual solid waste minimizes environmental impacts and supports sustainable environmental management, greenhouse gas reductions, and improved air and water quality.

### COMMUNITY-WIDE

### 2015 Community-Wide Solid Waste Actions

|  | Actions  |
|--|--|
| 2015 Community-<br>Wide Solid<br>Waste Actions | "Reuse Rendezvous" which is a City wide curbside swap meet. Residents were<br>encouraged to put out items that may be useful to others that they longer<br>want or can use.  |
|  | "Partners in a Cleaner Community" which is a community wide litter cleaning project done bi-annually. A variety of non-profits and volunteers set out to clean up neighbourhood streets, park areas, and boulevards.   |
|  | Educational publications including of a biannual recycling newsletter "Trash<br>Talk" and the annual collections calendars. This covers a variety of topics<br>relating to waste which is misdirected to the landfill when it can be recycled or<br>composted. |
|  | Recycling promotions at various City events such as the VIEX and Bathtub Days.   |
|  | Standard collection of organics (weekly) and garbage and recycling (biweekly).   |

### 2016 Community-Wide Solid Waste Proposed Actions

|  | Actions   |
|--|---|
| 2016 Community-<br>Wide Solid<br>Waste Proposed<br>Actions | The 2015 Community Wide Actions mentioned above will continue in 2016.  |
|  | Introduction of Automated Solid Waste Collection Services to 1/3 of the City.<br>This pilot project will utilize Labrie Expect Trucks with wheeled carts (80<br>garbage, 120 organic, and 240 recycling). |
|  | Additional promotion at City events through "Ask Us Anything" stalls located at events and popular destinations such at the VIEX and Woodgrove Mall.  |

### CORPORATE

### 2015 Corporate Solid Waste Actions

|  | Actions   |
|--|---|
| 2015<br>Corporate Solid<br>Waste Actions | The City of Nanaimo's "Green Group" which consists of voluntary participants representing all areas of the organization. The mandate of this group is to improve the environmental sustainability of the organization. The focus of this group in 2015 was to increase the knowledge of City staff towards the recycling and composting facilities available to them. |
|  | The City's solid waste collection contract was renewed and improvements were made to allow for the collection of "zero waste materials" including glass, film plastic, and Styrofoam.   |
|  | Recycling facilities were improved in multiple locations including parks, facilities, and fire stations.  |
|  | Collection of organic waste began in many park facilities.  |

### 2016 Solid Waste Proposed Actions

|   | Actions   |
|---|---|
| 2016 Solid<br>Waste Proposed<br>Actions | The City's "Green Group" will continue to promote increased recycling at the corporate level.   |
|   | Depending on the success of the Automated Solid Waste collection pilot, staff<br>may recommend to council that the City collect solid waste as opposed to a<br>contractor as there may be an opportunity for financial savings.   |
|   | Extend organic waste collection to Fire Stations.   |
|   | The City is playing an active role in the renewal of the Regions Solid Waste<br>Management Plan (the landfill is owned and operated by the Regional District<br>of Nanaimo). The City hopes for a more clear and stringent strategy on<br>Construction and Demolition waste as an outcome of the SWMP. Currently this<br>waste is shipped off island to Alberta or the United States. |
|   | Residents that will receive automated collection of Solid Waste will be able to place out 120 litres (previously 43) of organics beginning in November 2016. The bin sizes have been increased as we hope in the future to be able to collect yard waste in these bins.   |

### **Snapshot Questions**

# Does your local government have construction and demolition waste reduction policies, plans or programs?

No the City does not collect construction and demolition waste. The local landfill (owned and operated by the Regional District) has yet to ban C&D; however they charge a premium rate for its disposal. Due to this, many construction companies choose to ship their C&D waste off island to AB or the US.

The City is currently playing an active role in the renewal of the Regions Solid Waste Management Plan (SWMP). A clearer, more stringent strategy on C&D has been highlighted by the City as a preferable outcome of the SWMP.

# Does your local government have organics reduction/diversion policies, plans or programs?

Yes. At present residents are able to place out 43 litres of KW for weekly collection. As mentioned above, residents that will receive automated collection of Solid Waste will be able to place out 120 litres of KW for weekly collection beginning in November 2016. The increase in bin size was to accommodate for future collection of yard waste.

At present the local composting facility is unable to process comingled organics, however residents continually show interest in this service.

### **TRANSPORTATION ACTIONS**

Transportation actions that increase transportation system efficiency, emphasize the movement of people and goods, and give priority to more efficient modes, e.g. walking, cycling, ridesharing, and public transit, can contribute to reductions in greenhouse gas emissions and more livable communities.

### COMMUNITY-WIDE

# Actions2015 Community-<br/>Wide Transportation<br/>Actions |Expanded cycling network with 2.6 km of new cycling facilities including bike<br/>lanes, cycle track, and separated bike lanes. A pilot project on a cycle track<br/>and separated bike lanes was also completed.Actions |Accessibility was improved at four transit bus stops which promotes<br/>alternative transportation.Sidewalk network was expanded with 1km of new sidewalks and<br/>improvements were made to cross walks (pedestrian warning flashers, curb<br/>extensions).Facilitated expansion of Nanaimo Car Share by two vehicles.City provided staff time and assisted with the promotion of "Bike to Work<br/>Week".

### 2015 Community-Wide Transportation Actions

### 2016 Community-Wide Transportation Proposed Actions

|  | Actions  |
|--|--|
| 2016 Community-<br>Wide Transportation<br>Proposed Actions | Plans to expand the bike network another 3.5 kms with bike lanes, multiuse trail, shared lanes and neighbourhood bikeways. The City will also be Installing a pedestrian / cycling permanent count station on the E&N Trail. |
|  | Plans to further improve accessibility to five transit stops promoting alternative transportation.   |
|  | Plans to further expand the sidewalk networks and improve crosswalks including; 0.5 kms of sidewalks, pedestrian warning flashers at 2 locations and curb extensions at 2 locations.   |
|  | The City of Nanaimo will continue to support Car Share through access to City Streets and integrate this program into new multi-level family developments.   |
|  | Continued support for the community event "Bike to Work Week"  |

### CORPORATE

### **2015** Corporate Transportation Actions

|  | Actions  |
|--|--|
| 2015<br>Corporate<br>Transportation<br>Actions | Investment into alternative fuel for the City's fleet and equipment. This includes the purchase and conversion of/to electric cars, Zambonis, a golf cart, blowers and weedeaters. The City also purchased CNG and propane powered trucks. |
|  | Four stroke weedeaters were purchased as the fuel burns cleaner than two stroke weedeaters.  |
|  | Monthly fuel reports are sent to all departmental managers so that they can monitor their fuel consumption and efficiency.   |

### 2016 Transportation Proposed Actions

Actions

| 2016 Transportation<br>Proposed Actions | Two CNG Refuse Collections trucks have been ordered and will be delivered<br>in 2016. In addition, the City will continue to invest in alternative fuel<br>vehicles and there are plans to purchase electric, CNG and propane vehicles<br>in 2016. |
|---|--|
|   | Plans to integrate complete street principles into updated street design standards.  |
|   | Completion of the Downtown South Alignment study for the E&N Trail.  |

### **Snapshot Questions**

Does your local government have policies, plans or programs to support walking, cycling, transit, electric vehicles or other? Yes, the City of Nanaimo's Transportation Master Plan.

Does your local government have a Transportation Demand Management (TDM) strategy (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide incentives to encourage individuals to modify travel behavior)? Yes, although it is limited. Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)? Yes.

### WATER AND WASTEWATER ACTIONS

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces greenhouse gas emissions.

### COMMUNITY-WIDE

### 2015 Community-Wide Water and Wastewater Actions

Actions

| 2015 Community-<br>Wide Water and<br>Wastewater Actions | Water restrictions were elevated to Stage 2 for the first time. This resulted in a 20% reduction in water consumption.   |
|---|--|
|   | Community education provided to Grade 4 and 5 students through field trips to Nanaimo's watershed to inform students of our water supply.  |
|   | Every year the City of Nanaimo offers a Toilet Rebate Program to the community. This will provide a cash rebate to citizens replacing old toilets with new high-efficiency toilets that require only 4.8 litres per flush. |

### 2016 Community-Wide Water and Wastewater Proposed Actions

Actions

| 2016 Community-<br>Wide Water and<br>Wastewater<br>Proposed Actions | To harmonize watering restrictions region-wide for consistent messaging,<br>better understanding, and uptake. Currently the City of Nanaimo and the<br>Regional District of Nanaimo have different restrictions which were imposed<br>at different times which caused some confusion in the public. |
|---|---|
|   | To continue field trips with Grade 4 and 5 students to Nanaimo's watershed.<br>The Toilet Rebate Program will continue in 2016.   |

### CORPORATE

### 2015 Corporate Water and Wastewater Actions

| 2015 Corporate | Extensive participation in region-wide water conservation and education |
|----------------|---|
| Water and      | efforts via Team Watersmart (www.teamwatersmart.ca). Team Watersmart    |

| Wastewater Actions | provides education on water conservation through workshops, outreach at summer events, children's on-line education material and more.   |
|--------------------|--|
|                    | Ongoing leak detection program to identify and repair of water mains.  |
|                    | Commissioned the City's Water Treatment Plant. This brought the City's water quality up to new Provincial standards. This plant was also designed to use gravity to feed the distribution system.  |
|                    | The City has been working with the Regional District of Nanaimo on an Inflow & Infiltration (I&I) reduction program. Inflow is from rainfall or snowmelt that enters the sewage system directly while infiltration is groundwater than enters the system through holes and cracks. This will reduce the amount of wastewater flow treated. |

### 2016 Water and Wastewater Proposed Actions

| 2016 Water and<br>Wastewater<br>Proposed Actions | Earlier watering restrictions (Stage 1 at April 1st and Stage 2 at May 1st).  |
|--|---|
|  | Ongoing efficiency upgrades to water system infrastructure (pump stations, reservoirs).   |
|  | Ongoing leak detection and repairs for water mains.   |
|  | Continued participation in region-wide efforts via Team Watersmart such as<br>"Nominate your Neighbour" where community members can nominate their<br>neighbours who go above and beyond to save water for weekly draws.  |
|  | A comprehensive I&I reduction strategy will be developed over the next<br>couple of years. This will include the installation of one permanent sanitary<br>sewer monitoring station per sewer catchment to determine the amount and<br>type of I&I. This will also document any I&I reductions achieved in the<br>catchments in the future from implementation of reduction strategies. |

### **Snapshot Questions**

Does your local government have water conservation policies, plans or programs? Yes, the City of Nanaimo's Water Conservation Strategy.

### **CLIMATE CHANGE ADAPTATION ACTIONS**

For local governments, adaptation to a changing climate can take the form of changes in policy, management, technology and behaviour that minimize negative impacts or exploit opportunities. It can involve both "hard" and "soft" solutions, including: changes in infrastructure engineering, planning, zoning, bylaws and public education.

### COMMUNITY-WIDE

### 2015 Community-Wide Adaptation Actions

Action

| 2015 Community- | No 2015 Community-Wide Adaptation actions. |
|-----------------|--|
| Wide Adaptation |  |
| Actions         |  |
|                 |  |

### 2016 Community-Wide Adaptation Proposed Actions

Action

| 2016 Community-  | No Planned 2016 Community-Wide Adaptation actions. |
|------------------|--|
| Wide Adaptation  |  |
| Proposed Actions |  |

### CORPORATE

### **2015** Corporate Adaptation Actions

| 2015 Corporate | Capital planning considers the impact of climate change on infrastructure. By  |
|----------------|--|
| Adaptation     | means of I&I, increased precipitation will have an impact on sewer flows. The  |
| Actions        | Metro Vancouver report, titled "Vulnerability of Vancouver Sewerage Area       |
|                | Infrastructure to Climate Change (March, 2008) is used to predict increases in |
|                | precipitation. As a result, hydraulic models were used for the sanitary sewer  |
|                | system and will be considered for future upgrades to this system.              |
|                |  |

### 2016 Adaptation Proposed Actions

|                                     | Actions   |
|-------------------------------------|---|
| 2016 Adaptation<br>Proposed Actions | The City will consider whether increases in I&I due to climate change should<br>be added to the design section of the City's Manual of Engineering Standards<br>and Specifications. |

### **Snapshot Questions**

Are you familiar with the Plan2Adapt guidance located on the Climate Action Toolkit Website? http://www.toolkit.bc.ca/Resource/Plan2Adapt Yes

Are you familiar with "Preparing for Climate Change - An Implementation Guide for Local Governments in BC? http://www.toolkit.bc.ca/Resource/Preparing-Climate-Change-Implementation-Guide-Local-Governments-British-Columbia Yes

Have you visited the climate change adaptation guidance page on the BC Climate Action Toolkit? http://www.toolkit.bc.ca/adaptation-challenges-and-opportunities Yes

### **INNOVATION AND PEER LEARNING**

This section provides the opportunity to showcase an innovative Corporate and/or Communitywide reduction or adaptation activity that your local government has undertaken and that has had a significant impact or has the potential to have a significant impact. You are welcome to repeat an action that has already been listed.Projects included here may be featured as success stories on the B.C. Climate Action Toolkit and/or shared with other local governments to inspire further climate action. Please add links to additional information where possible.

### **Community-Wide Innovation**

Realtor Energy Efficiency Program – The City partnered with the Regional District of Nanaimo and the Vancouver Island Real Estate Board to develop a Realtor Training program on Energy Efficiency. The program was designed with Realtors and is intended to act as a stepping stone toward a formal training program being adopted by the British Columbia Real Estate Association. By improving awareness and knowledge of home energy efficiency opportunities for home buyers and sellers, the City will benefit from lower GHG emissions as home buyers and sellers upgrade the energy efficiency of their homes.

Municipal Natural Capital Initiative – For 2016 / 17, the City of Nanaimo will participate in a National Pilot Study to more clearly define the economic value nature provides communities. The study will involve defining natural capital and incorporating it within the City's Asset Management process. Doing so will more clearly define the value, a wetland (for example) provides the community in storm water retention and water treatment. This study will support efforts to improve resiliency of local natural features, facing a changing climate.

### **Corporate Innovation**

City of Nanaimo Green Group - This group is committed to environmental sustainability in the workplace. Green Group activities are designed for staff by staff. This group aims to engage staff as champions of change and empower all employees to make environmentally sustainable choices.

### **PROGRAMS, PARTNERSHIPS, AND FUNDING OPPORTUNITIES**

Local governments often rely on programs, partnerships and funding opportunities to achieve their climate action goals. Please share the names of programs and organizations that have supported your local government's climate actions.

### Programs, Partnerships and Funding

Realtor Energy Efficiency Program - Real Estate Foundation, BC Hydro

**Municipal Natural Capital Project** - Real Estate Foundation, David Suzuki Foundation, Asset Management BC

**Water Treatment Plant** - Federal Government of Canada (Build Canada Fund, Gas Tax), Province of BC (Build Canada Fund), BC Hydro

**Environmental Assessment of 1 Port Drive** - Federation of Canadian Municipalities Green Municipal Fund

Vancouver Island Beggar-tick Restoration Project - Ministry of Environment Canada

**Burn it Smart** - B.C. Ministry of Environment provide funding to implement our Woodstove Exchange Program.

### 2015 CARBON NEUTRAL PROGRESS REPORTING

Local governments are required to report on their progress in achieving their carbon neutral goal under the Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee has established a common approach to determining carbon neutrality for the purposes of the Climate Action Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.Prior to completing this survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, especially Becoming Carbon Neutral: A Guide for Local Governments in British Columbia.

### Did you measure your local government's corporate GHG emissions in 2015? Yes

# *If your local government measured 2015 corporate GHG emissions, please report the number of corporate GHG emissions from services delivered <u>directly</u> by your <i>local government:*

(in tonnes of carbon dioxide equivalent)

### 4218

# *If your local government measured 2015 corporate GHG emissions, please report the number of corporate GHG emissions from <u>contracted</u> services:*

(in tonnes of carbon dioxide equivalent)

### 499

### Total Corporate GHG Emissions for 2015: 4717.0 tCO2e

### **Reporting Reductions and Offsets**

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions by one or a combination of the following actions:undertake Option 1 Projects (Green Communities Committee (GCC)-supported)undertake Option 2 Projects (alternative) community GHG emissions reduction projects that meet project eligibility requirementspurchase carbon offsets from a credible offset provider

### Household Organic Waste Composting

(in tonnes of carbon dioxide equivalent (tC02e))

### 1916

### **2015 OPTION 1 REDUCTIONS = 1916.0 tCO2e**

### **Corporate GHG Emissions Balance for 2015**

Your local government's Corporate GHG Emissions Balance is the difference between total corporate GHG emissions (direct + contracted emissions) and the GHG emissions reduced through GCC Option 1 and Option 2 projects and/or the purchase of offsets.

### 2015 CORPORATE GHG EMISSIONS BALANCE: 2801.0 tCO2e

### LOCAL GOVERNMENT INFORMATION

| Name of Local Government                      | Nanaimo, City of |
|---|------------------|
| Name of member Regional District<br>(RD)      | Nanaimo          |
| Regional Growth Strategy (RGS) in your region | Yes              |
| Population                                    | 50,000-99,999    |

### Prepared by:

| Submitted by:  | Michelle Loree            |
|----------------|---------------------------|
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