

#109

**COMPLETE**

**Collector:** Email Invitation 2 (Email)  
**Started:** Wednesday, February 28, 2018 10:38:03 AM  
**Last Modified:** Wednesday, May 30, 2018 11:13:48 AM  
**Time Spent:** Over a month  
**Email:** eanderson@ladysmith.ca  
**IP Address:** 184.69.120.238

---

## Page 2: LOCAL GOVERNMENT INFORMATION

**Q1 Name of Local Government** **Ladysmith, Town of**

---

**Q2 Name of member Regional District** **Cowichan Valley**

---

**Q3 Regional Growth Strategy (RGS) in your region** **No**

---

**Q4 Population** **5,000 - 9,999**

---

**Q5 Submitted by:**

**Name** **Aria Mac Coll**  
**Position** **Financial Services Coordinator**  
**Email Address** **amaccoll@ladysmith.ca**  
**Phone Number** **250.245.6414 ext.6210**

---

## Page 3: BROAD PLANNING ACTIONS

**Q6 2017 Community-Wide Broad Planning Actions**

1. **Provided a draft of the Waterfront Area Plan after community input**
  2. **Participated in multi-stakeholder watershed management committee**
  3. **Worked with Stz'uminus First Nation to connect and make operational the waste-water (sewer) connection; continued implementing opportunities for shared infrastructure and services with Stz'uminus First Nation; second water/sewer agreement and building inspection agreements.**
-

2017 CARIP Climate Action/Carbon Neutral Progress Survey

**Q7** Additional 2017 Community-Wide Broad Planning  
(Optional - separate each reported action with a "\")

Respondent skipped this question

**Q8** Community-Wide Broad Planning - Actions Proposed for 2018

1. **Finish first phase of Waterfront Area Plan**
2. **Continue to work with the Stz'uminus First Nation and other neighbouring communities to provide services and shared infrastructure.**

**Q9** 2017 Corporate Broad Planning Actions

1. **Begin educating corporation regarding Energy Step Code**
2. **Continued to use the Town's website to educate the public and developers about the type of development preferred in Ladysmith**

**Q10** Additional 2017 Corporate Broad Planning Actions(Optional - separate each reported action with a "\")

Respondent skipped this question

**Q11** Corporate Broad Planning - Actions Proposed for 2018

1. **Continue to educate corporation regarding Energy Step Code**
2. **Continue to use the Town's website to educate the public and developers about the type of development preferred in Ladysmith**

**Q12** What is(are) your current GHG reduction target(s)?

Overall reduction based through factoring expansion of services

**Q13** Are you familiar with your community's community energy and emissions inventory (e.g. CEEI or another inventory)?

Yes

**Q14** What plans, policies or guidelines govern the implementation of climate mitigation in your community?

Community Energy and Emissions Plan ,  
 Integrated Community Sustainability Plan ,  
 Community-Wide Climate Action Plan ,  
 Official Community Plan (OCP)

**Q15** Does your local government have a corporate GHG reduction plan?

Yes

Page 4: BUILDING AND LIGHTING ACTIONS

**Q16** 2017 Community-Wide Building and Lighting Actions

1. Continued implementation of specific recommendations in Community Sustainability Plan, Community Energy Plan and Community Visioning Plan
2. Building Energy Efficiency desired outcome through rezoning

**Q17** Additional Community-Wide Building and Lighting Actions (Optional - separate each reported action with a "\")

Respondent skipped this question

**Q18** Community-Wide Building and Lighting - Actions Proposed for 2018

1. Building Energy Efficiency desired outcome through rezoning

**Q19** 2017 Corporate Building and Lighting Actions

1. Continued to consider energy improvements for all repairs and capital projects
2. As part of the comprehensive asset management plan, upgraded heating and cooling system plans.

**Q20** Additional 2017 Corporate Building and Lighting Actions (Optional - separate each reported action with a "\")

Respondent skipped this question

**Q21 Corporate Building and Lighting - Actions Proposed for 2018**

1. **Continue to consider energy improvements for all repairs and capital projects**
  2. **As part of the comprehensive asset management plan, upgrade heating and cooling system plans.**
- 

**Q22** Is your local government aware of the BC Energy Step Code? **Yes**

---

**Q23** Is your local government planning on implementing the BC Energy Step Code? **No**

---

Page 5: ENERGY GENERATION ACTIONS

**Q24 2017 Community-Wide Energy Generation Actions**

1. **New single family homes are required to be solar and hot water ready**
  2. **Provided incentives for energy-rating building**
- 

**Q25** Additional 2017 Community-Wide Energy Generation Actions (Optional - separate each reported action with a "\") **Respondent skipped this question**

---

**Q26 Community-Wide Energy Generation - Actions Proposed for 2018**

1. **New single family homes are required to be solar and hot water ready**
  2. **Provide incentives for energy-rating building**
- 

**Q27 2017 Corporate Energy Generation Actions**

1. **Implemented a sustainability elements into Waste Water Treatment Plant – solar energy, effluent heat recover for building heating & cooling.**
- 

**Q28** Additional 2017 Corporate Energy Generation Actions (Optional - separate each reported action with a "\") **Respondent skipped this question**

---

**Q29 Corporate Energy Generation - Actions Proposed for 2018**

1. **Review options for powering Bio-Solids Composting Site**

---

**Q30** Is your local government developing or constructing... **A renewable energy system**

---

**Q31** Is your local government operating... **None of the above**

---

**Q32** Is your local government connected to a district energy system that is operated by another energy provider? **No**

---

**Q33** Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit? **Yes**

---

**Q34** Are you familiar with the 2017 "List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments"? **No**

---

Page 6: GREENSPACE/NATURAL RESOURCE PROTECTION ACTIONS

**Q35 2017 Community-Wide Greenspace Actions**

1. **Provided and supported a mandate for the Invasive Species Committee.**

2. **Provided support for community gardens.**

3. **Continued to work with the school district to utilize common park spaces.**

---

**Q36** Does your local government have policies, plans or programs to support local food production? **Yes**

---

**Q37** Additional 2017 Community-Wide Greenspace Actions (Optional - separate each reported action with a "\") **Respondent skipped this question**

---

**Q38** Community-Wide Greenspace - Actions Proposed for 2018

1. **Continue to provide and support a mandate for the Invasive Species Committee.**
  2. **Provide support for community gardens.**
  3. **Continue to work with the school district to utilize common park spaces.**
- 

**Q39** 2017 Corporate Greenspace Actions

1. **Continued to use Town-owned properties for food production.**
  2. **Parks, Recreation & Culture Committee regularly reviewed the PRC Master Plan to support the protection and stewardship of wildlife, habitat, and other natural system support functions.**
  3. **Work with arborists to provide a report on tree maintenance and tree replacement in green spaces.**
- 

**Q40** Additional 2017 Corporate Greenspace Actions (Optional - separate each reported action with a "\")

**Respondent skipped this question**

---

**Q41** Corporate Greenspace - Actions Proposed for 2018

1. **Continue to use Town-owned properties for food production.**
  2. **Parks, Recreation & Culture Committee will continue to review the PRC Master Plan to support the protection and stewardship of wildlife, habitat, and other natural system support functions.**
- 

**Q42** Does your local government have urban forest policies, plans or programs?

**No**

---

---

Page 7: SOLID WASTE ACTIONS

**Q43** 2017 Community-Wide Solid Waste Actions

1. **Educated the public on contamination of recycling.**
- 

**Q44** Additional 2017 Community-Wide Solid Waste Actions (Optional - separate each reported action with a "\")

**Respondent skipped this question**

---

**Q45** Community-Wide Solid Waste - Actions Proposed for 2018

1. **Educate the public on contamination of recycling.**

---

**Q46** 2017 Corporate Solid Waste Actions

1. **Continued to upgrade composting facilities, composting studies, composting training, and staffing of compost facility.**
2. **Support local regional facility**
- 

**Q47** Additional 2017 Corporate Solid Waste Actions (Optional - separate each reported action with a "\")

**Respondent skipped this question**

---

**Q48** Corporate Solid Waste - Actions Proposed for 2018

1. **Support local regional facility**

---

**Q49** Does your local government have construction and demolition waste reduction policies, plans or programs?

**No**

---

**Q50** Does your local government have organics reduction/diversion policies, plans or programs?

**Yes**

---

Page 8: TRANSPORTATION ACTIONS

**Q51** 2017 Community-Wide Transportation Actions

1. **Improved sidewalk and pedestrian crosswalks within downtown.**
2. **Incorporated Master Transportation Plan in 5-year budget.**
3. **Continued the updating of the Roads in DCC program as part of an overall DCC program update.**
4. **Hosted a Public works week to engage students and families in understanding aspects of public works, included transportation.**
- 

**Q52** Additional 2017 Community-Wide Transportation Actions (Optional - separate each reported action with a "\")

**Respondent skipped this question**

---

**Q53** Community-Wide Transportation- Actions Proposed for 2018 **Respondent skipped this question**

---

**Q54** 2017 Corporate Transportation Actions

1. **Completed and Implemented Master Transportation Plan.**
  2. **Continued to consider electric vehicles for future purchases, and continued to fund the two electric charging stations for municipal use.**
- 

**Q55** Additional 2017 Corporate Transportation Actions (Optional - separate each reported action with a "\") **Respondent skipped this question**

---

**Q56** Corporate Transportation - Actions Proposed for 2018

1. **Incorporate walking and cycling options into the 4th Avenue reconstruction**
- 

**Q57** Does your local government have policies, plans or programs to support: **Walking,**  
**Cycling,**  
**Transit,**  
**Electric Vehicles**

---

**Q58** 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) **No**

---

**Q59** Does your local government integrate its transportation and land use planning? **Yes**

---

Page 9: WATER AND WASTEWATER

**Q60** 2017 Community-Wide Water and Wastewater Actions

1. **Made second agreement for water and sewer utilities with Stz'minus First Nations. Implemented FN opportunity for shared infrastructure and servicing.**
  2. **Continued to enforce water restrictions on a regional scale. Continued to target for water conservation of 20% less than Canadian average.**
-



**Q61** Additional 2017 Community-Wide Water and Wastewater Actions (Optional - separate each reported action with a "\")

Respondent skipped this question

**Q62** Community-Wide Water and Wastewater - Actions Proposed for 2018

1. **Review water and sewer rates to encourage conservation**

**Q63** 2017 Corporate Water and Wastewater Actions

1. **Completed dam inundation study.**
2. **Completed design on Water Filtration Plant.**
3. **Continued to implement Liquid Waste Management Plan.**
4. **Started construction on Bio-solids composting facility on Thicke Rd.**

**Q64** Additional 2017 Corporate Water and Wastewater Actions (Optional - separate each reported action with a "\")

Respondent skipped this question

**Q65** Corporate Water and Wastewater - Actions Proposed for 2018

1. **Complete construction on Bio-Solids composting facility**
2. **Begin construction on Water Filtration Plant**

**Q66** Does your local government have water conservation policies, plans or programs?

Yes

Page 10: CLIMATE CHANGE ADAPTATION ACTIONS

**Q67** Is your local government concerned about any of the following impacts from a changing climate? (Please check top three)

- Warmer winter temperatures reducing snowpack** ,
- Increased temperatures increasing wildlife activity** ,
- Increased temperatures affecting reducing air quality**

**Q68** In the last year has your local government addressed the impacts of a changing climate using any of the following?

- Emergency response planning ,
- Natural/Eco asset management strategies, Infrastructure upgrades (e.g. stormwater system upgrades) ,
- Cross-department working groups,
- Changes to zoning and other bylaws and regulations ,
- Public education and awareness ,
- Other (please specify):  
Asset Management

**Q69** Climate Change Adaptation Actions Taken in 2017 Please elaborate on (as identified above or add new) key actions and/or partnerships your local government has engaged in to prepare for, and adapt to changing climate. Add links to key documents and information where appropriate.

Respondent skipped this question

**Q70** Climate Change Adaptation - Actions Proposed for 2018

1. Developer specific storm water management plan (Holland Creek Development)

**Q71** For more information please contact:

Geoff Goodall

**Q72** The following are key resources that may be helpful to your local government in identifying climate impacts, as well as, strategies, actions and funding to deal with them. Are you familiar with any of these adaptation resources?

- Indicators of Climate Change for British Columbia, 2016 ,
- Plan2Adapt, Climate Projections for Metro Vancouver ,
- Preparing for Climate Change: Implementation Guide ,
- Infrastructure Planning Grants (MAH) ,
- Federal Gas Tax Fund

## 2017 CARIP Climate Action/Carbon Neutral Progress Survey

**Q73** The following are key resources that may be helpful to your local government in identifying climate impacts, as well as, strategies, actions and funding to deal with them. For those resources that you have used, please indicate whether they were useful in advancing your work in climate change adaptation.

Indicators of Climate Change for British Columbia, 2016	<b>Useful</b>
Plan2Adapt	<b>Useful</b>
Climate Projections for Metro Vancouver	<b>Not Useful</b>
Climate Projections for the Capital Region	<b>Haven't Used</b>
Climate Projections for the Cowichan Valley Regional District	<b>Haven't Used</b>
Provinces of BC's BC Adapts Video Series	<b>Haven't Used</b>
Preparing for Climate Change: An Implementation Guide for Local Governments	<b>Useful</b>
The Public Infrastructure and Engineering Vulnerability Committee's (PIEVC) protocol	<b>Haven't Used</b>
Sea Level Rise Primer	<b>Haven't Used</b>
BC Regional Adaptation Collaborative Webinars	<b>Haven't Used</b>
www.ReTooling.ca	<b>Haven't Used</b>
Water Balance Model	<b>Haven't Used</b>
Water Conservation Calculator	<b>Haven't Used</b>
National Disaster Mitigation Program (NDMP)	<b>Haven't Used</b>
Community Emergency Preparedness Fund (CEPF)	<b>Haven't Used</b>
Municipalities for Climate Innovation Program (MCIP)	<b>Haven't Used</b>
Climate Adaptation Partner Grants (FCM)	<b>Haven't Used</b>
Infrastructure Planning Grants (MAH)	<b>Useful</b>
Federal Gas Tax Fund	<b>Useful</b>

### Page 11: OTHER CLIMATE ACTIONS

#### **Q74** 2017 Community-Wide Other Actions

- |    |  |
|----|--|
| 1. | <b>Continued to adopt highest standard of regional air quality standards</b> |
| 2. | <b>Continued to provide space for local farmers market.</b>                  |
| 3. | <b>Encouraged the 10% shift for local spending,</b>                          |
| 4. | <b>Donated food grown in Town gardens to the local food bank.</b>            |

#### **Q75** 2016 Corporate Other Actions

**Respondent skipped this question**

2017 CARIP Climate Action/Carbon Neutral Progress Survey

**Q76** Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)? **No**

---

**Q77** Have you used the CLIC? **No**

---

Page 12: INNOVATION AND PEER LEARNING

**Q78** Community - Wide Innovation **Respondent skipped this question**

---

**Q79** Corporate Innovation **Respondent skipped this question**

---

**Q80** For more information on actions described above contact: **Respondent skipped this question**

---

**Q81** Mitigation Programs, Partnerships and Funding **Respondent skipped this question**

---

**Q82** Adaptation Programs, Partnerships and Funding **Respondent skipped this question**

---

Page 13: 2016 CARBON NEUTRAL REPORTING

**Q83** Did you measure your local government's corporate GHG emissions in 2017? **Yes**

---

**Q84** If your local government measured 2017 corporate GHG emissions, please report the number of corporate GHG emissions from services delivered directly by your local government (in tonnes of carbon dioxide equivalent) Please note that as a result of the BC Recycling Regulation, local governments are no longer required to account for greenhouse gas (GHG) emissions from vehicles, equipment and machinery required for the collection, transportation and diversion of packaging and printed paper, in their annual CARIP reports.

411.54

---

**Q85** If your local government measured 2017 corporate GHG emissions, please report the number of corporate GHG emissions from contracted services (in tonnes of carbon dioxide equivalent):

3.56

---

**Q86** Total A: Corporate GHG emissions for 2017 (Direct GHGs + Contracted GHGs)

415.10 tCO<sub>2</sub>e

---

Page 14: REPORTING REDUCTIONS AND OFFSETS

2017 CARIP Climate Action/Carbon Neutral Progress Survey

**Q87** Energy Efficient Retrofits(in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e))

Respondent skipped this question

**Q88** Solar Thermal(in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e))

Respondent skipped this question

**Q89** Household Organic Waste Composting(in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e))

106.09

**Q90** Low Emission Vehicles(in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e))

Respondent skipped this question

**Q91** Avoided Forest Conversion(in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e))

Respondent skipped this question

**Q92** Total B: Reductions from all Option 1 Projects for 2017

106.09 tCO<sub>2</sub>e

**Q93** If applicable, please report the names and 2017 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) being claimed from Option 2 GHG Reduction Projects:

Respondent skipped this question

**Q94** Total C: Reductions from all Option 2 Projects for 2017

Respondent skipped this question

**Q95** If applicable, please report the name of offset provider, type of project and the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) from an offset provider for the 2017 reporting year. Note: Please do not include funds set aside in a climate action reserve fund.

Offset Provider Name

**Cowichan Energy Alternative - Community Carbon Market Place**

Offsets (tCO<sub>2</sub>e)

**309.01**

**Q96** Total D: Offsets purchased for 2017

309.01 tCo<sub>2</sub>e

**Q97** TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D)

415.10 tCO<sub>2</sub>e

**Q98** Corporate GHG Emissions balance for 2017 = (A- (B+C+D) =

0

---

**Q99** If applicable, please record any emissions reductions you will be carrying over for future years and the source of the reductions, including the year they were earned (e.g., Organics diversion, 2017 100 tCO<sub>2</sub>e).

**Respondent skipped this question**

---

**Q100** Balance of reductions eligible for carry over to the next year (tCO<sub>2</sub>e)(total of emissions reductions identified above)

**Respondent skipped this question**

---

**Q101** Does your local government set aside funds in a climate reserve fund or something similar?

**No**

---

---

Page 15: RECOGNITION

**Q102** Based on your local government's 2017 Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

**Level 4 - Achievement of Carbon Neutrality**

---

**Q103** Related to Level 3 recognition, if applicable, please identify any new or ongoing corporate or community-wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by your local government that reflects a significant investment of time and/or financial resources and is intended to result in significant GHG reductions.

**Respondent skipped this question**

---