

**REQUEST FOR PROPOSALS No. 20-001**

**Corporate Carbon Neutral Consultant**

**Addendum 1**

**Issued: January 9, 2019**

**10 Pages**

**Closing Date & Time: on or before 3:00 PM Pacific Time on January 17, 2020**

**QUESTIONS & ANSWERS**

**Question 1)** One of the scope items is to "compare the 2004 baseline to the 2018 baseline (from the Climate Action Rebate Incentive Program reporting) in the five categories of buildings, lighting, water and wastewater, vehicle fleet, and corporate waste." As the 2018 CARIP report only provides total GHG emissions for that year, will the Consultant be provided the relevant data to calculate the breakdown of the 2018 GHG emissions across those five categories?

**Answer 1)** The successful proponent will be provided all relevant data upon the kick-off meeting.

**Question 2)** With regards to the statement in the RFP: "The RDN has been carbon neutral since 2012 due to landfill gas capture and organics composting projects", could you please confirm the offsets from each of these projects in 2012 and 2013?

**Answer 2)**

**NB** the emission reductions from organic diversion are not 'offsets'. They are reductions from 'Option 1D Household Organic Waste Composting Projects' developed for local governments by the Province of BC, as described in the 'Becoming Carbon Neutral Guidebook' available here:

<http://www.toolkit.bc.ca/sites/default/files/BecomingCarbonNeutralGuideV3.pdf>

Year	Reported Corporate Emission Inventory	Organic Diversion Reductions	LFG Offsets
2012	1,721 t CO <sub>2</sub> e	1,721 <sup>1</sup> t CO <sub>2</sub> e	0 t CO <sub>2</sub> e
2013	1,236 <sup>2</sup> t CO <sub>2</sub> e	928 <sup>3</sup> t CO <sub>2</sub> e	0 t CO <sub>2</sub> e

<sup>1</sup> The calculation for reductions from organic diversion in 2012 aggregated household organic waste collected and diverted between 2010 and 2012, when the RDN began curbside collection of household organic waste. This yielded emission reductions totaling 2,003 tonnes, of which 1,721 tonnes were applied to 2012 corporate emissions. The remaining 282 tonnes were carried forward to be counted against future years' emissions.

<sup>2</sup> The actual corporate emission inventory for 2013 was 1,709 t CO<sub>2</sub>e however a revision to the 2012 emission factor for electricity provided by BC Hydro revealed an overcount of 191 t CO<sub>2</sub>e in 2012. This was deducted from the 2013 inventory, resulting in a total of 1,518 t CO<sub>2</sub>e. The 282 tonnes of reductions remaining from prior years' organic waste diversion was further counted against the 2013 corporate inventory, resulting in 1,236 t CO<sub>2</sub>e reported for 2013 corporate emissions.

<sup>3</sup> The 928 t CO<sub>2</sub>e value represents the total reductions from household organic waste collected in 2013 alone.

**Question 3)** The RDN website states that the landfill gas project "has resulted in reducing annual greenhouse emissions from the landfill by roughly 21,606 tonnes of carbon dioxide equivalent." However, based on the CARIP reports, the RDN only received a total of 21,123 tonnes of offsets over the entire life of the landfill gas facility. Please confirm that RDN will only receive 21,123 tonnes of offset credits in total over the 10+ years of the life of the landfill gas capture facility?

**Answer 3)** Confirmed. As of January 1, 2016, the RDN owned 21,123 verified, validated offsets arising from the Landfill Gas Capture project at the Cedar Rd. Landfill. Any reductions due to combustion of methane captured at landfills from the period January 1, 2016 – present cannot be offsets due to all requirements under the Provincial Landfill Gas Regulation coming into effect by that date. Verified and validated offsets created prior to April 15, 2015 are owned by other parties.

**Question 4)** According to the carbon offset numbers from the landfill project listed in the CARIP reports, the balance of reductions eligible to carry over into 2019 should be 7,459.18 tCO<sub>2</sub>e. This is based on:  
21,123 - 5,000 (Community Carbon Marketplace) - 1,488.70 (2015) - 1,691.92 (2016) - 2,907.22 (2017) - 2,576.00 (2018)  
However, the 2018 CARIP report, reported that the balance at the end of 2018 was 11,523.86 tCO<sub>2</sub>e. Could you please clarify?

**Answer 4)** This inquiry has revealed a calculation error by the RDN in the 2018 CARIP report. The 2018 emission inventory should have been reported as 2,445 t CO<sub>2</sub>e. The balance of verified, validated offsets owned by the RDN is 7,590.16 tCO<sub>2</sub>e.

**Question 5)** According to the document available upon request, in 2016, Cowichan Energy Alternatives (CEA) used 1,430 tCO<sub>2</sub>e against the 5,000 tonnes listed through the Community Carbon Marketplace. Then in 2017, CEA used an additional 1,399 tCO<sub>2</sub>e in credits. Are these credits accounted for in the CARIP reporting? Or as they are drawn against the 5,000 tonnes that were sold to CEA, are they now separate from any credits the RDN has to account for?

**Answer 5)** 5,000 tonnes of validated, verified offsets were transferred to the Community Carbon Marketplace (CCM) to sell on behalf of the RDN. Any offsets sold by the CCM are 'owned' by the purchaser and retired by the CCM. Technically, the RDN owns any unsold offsets however the RDN has relinquished access to them, preferring revenues generated by their sale, as managed by CCM. The transfer of 5,000 tonnes of offsets to the CCM for management and sale is identified in the RDN CARIP reports. Whether they have been retired or not is irrelevant for CARIP reporting purposes. The RDN has the ability to terminate the agreement with the CCM if, in its sole discretion, it deems termination to be in its best interest. The agreement between the RDN and the CCM is confidential in nature and

will not be circulated. The document available upon request has been updated, and is now found as Addendum Attachment 1

**Question 6)** Is the Regional District of Nanaimo able to provide a list of the types of building (offices, libraries, theatres, storage, works yards, etc.) that City has in its portfolio and which will be included in the Corporate Carbon Neutral Plan scope (specific building details are not requested).

**Answer 6)** Please see Addendum Attachment 2

20-001 Attachment 1

Year	Total Emissions GHG's tCO2e	Carbon Neutrality	Carbon reduction Projects (tCO2e) Organics collection	Landfill Credits Earned tCO2e	Landfill Gas Revenue Generation
2009					
2010	1,640.00				
2011	2258.26				
2012	1871.51	Began tracking carbon Neutrality 0.0 tCO2e			
2013	1236.40	0.0 tCO2e	928		
2014	1619.4	0.0 tCO2e	878.7	Starting balance 21,123	
2015	2717.5	0.0 tCO2e	1228.8	1,488.7 & RDN transferred 5000 tCO2e to CEA to manage on behalf of RDN	
2016	2,738.72	0.0 tCO2e	1,046.8	1,691.92	Revenue received from CEA: \$16,450.91
2017	3962.92	0.0 tCO2e	1,055.7	2907.22	Revenue Received from CEA: \$15,186.56
2018	3791	0.0 tCO2e	1,346.0	2445 Carry Forward: 7590.16 tonnes	
2019					
2020					

**Notes:**

1. RDN Corporate Goal: 80% reduction below 2007 levels by 2050.
2. In 2014, The Regional District of Nanaimo verified and validated 21,123 tonnes of offsets arising from an existing landfill gas collection project. Of these, in 2015, 5,000 tonnes were listed through the Community Carbon Marketplace. The remainder will be subject to future listings as well as counted against RDN corporate emissions for the purpose of achieving carbon neutral operations.
3. 2019 - Corporate Climate Action Reserve Fund current balance: \$609,000.
4. Coordinated the release of over \$100,000 from the regional Corporate Climate Action Fund to enable investments in higher efficiency infrastructure, vehicles and equipment, including \$40,500 for condensing boilers at Ravensong Pool, \$30,000 for variable frequency drive pump controllers at the Departure Bay Pump Station and \$10,000 for an independent assessment of the District 69 Arena.
5. In 2015, the Greater Nanaimo Pollution Control Centre produced approximately approx. 790,000kWh of electricity by using biogas to run the cogeneration engine (equivalent to the power usage of 70 homes for one year). In 2016, approximately 236,200 kWh of electricity was produced at the Greater Nanaimo Pollution Control Centre for using Biogas. This system has lost efficiency over the years and requires some further review to improve efficiency.
6. Captured and diverted landfill gas for electricity generation at the Cedar Road Bioenergy Centre (actual values for electricity generated not known).
7. A total of \$138,000 in funding has been secured for corporate energy efficiency initiatives.

**Sustainability Reserve Fund Allocations:****2020 CARIP - Corporate Climate Action Reserve Fund - 1-3-1517-0078 -Bylaw 1650**

- Corporate Carbon Neutral 2032 Plan the Board approved - \$50,000
- Electric Vehicle charging station grant application through Clean BC will initially require \$222,222 (this will be replenished once the grant requirements have been met). Fund with a net final requirement of \$60,000.

**2018-19 Energy & Sustainability Reserve Fund allocations**

No allocations

**2017 CARIP - Corporate Climate Action Reserve Fund - 1-3-1517-0078 -Bylaw 1650**

- Emission reduction projects: Fire halls \$10,000 ea. for a total of \$90,000
- Building Inspection Hybrid vehicle - \$8,000 top up
- Ravensong assessment work for energy reduction initiatives \$15,000

**Carbon Neutral Initiatives Reserve Fund - 1-3-1517-0079 -Bylaw 1662**

- Wood Stove Exchange Grant for Green Building Initiatives \$20,000
- Green Building fund from Building Inspection: \$20,000

**2016 Energy & Sustainability | Regional Sustainability Initiatives Reserve Account - 1-3-1600-0011**

- Funds allocated: \$15,000 Nanaimo Aboriginal Centre. (\$10k distributed, \$5k still outstanding).
- Projected budget \$16,877.13 (Green Building Incentives)
- Bowser Village Centre wastewater collection and treatment system. \$300k design project is funded through a gas tax grant

**2015 - Corporate Actions Taken in 2015**

- Ravensong Aquatic Centre investment of -\$15,000 for a comprehensive energy study.
- Oceanside Place Arena Corporate investment of \$25,000 for a heat recovery system.
- Corporate Climate Action Fund (CCAF) and received approval for funding (CELP-\$20,000; CCAF-\$25,000)
- Corporate investment of \$90,000 for rural fire hall efficiency assessments and upgrades.

**2013 -2014 Corporate Climate Action Fund**

- Introduced a new high efficiency, hybrid electric vehicle in to the corporate vehicle pool fleet; \$8,000 toward purchase of gas-electric/hybrid vehicle
- \$30,000 toward high efficiency pump motor controller at Departure Bay Pump Station.
- Corporate support for \$8,000 for the purchase of a Hybrid electric vehicle for the Building Inspection service.
- Gained ownership of (est.) 21,123 verified tonnes CO2e emission reductions (offsets) arising from landfill gas capture – a regional emission reduction project that will enable the RDN to earn, revenues from offsets, achieve carbon neutral operations for 10+ years, or a combination of both. Solid Waste Proposed Actions Verify and sell and/or retain the rights to 21,123 tonnes of GHG offsets from landfill gas collection project.

## **20-001 Attachment 2 for Question 6 Buildings in Regional District Portfolio**

List of Regional District of Nanaimo buildings, as per Asset Insurance Appraisal dated 2012:

- NANOOSE FIRE HALL
- HALLBERG FIRE HALL
- SPRUSTON ROAD WATERTANK
- PUBLIC WORKS
- SOLID WASTE
- ADMINISTRATION BUILDING
- SCALE HOUSE
- TRANSFER STATION BUILDING #1
- TRANSFER STATION BUILDING #2
- NANAIMO LANDFILL
- MAINTENANCE SHOP
- SCALE HOUSE
- EQUIPMENT SHED BUILDING
- OFFICE
- LUNCHROOM ADDITION
- FIRST AID SUPPLY STATION
- LEACHATE TREATMENT LIFT STATION #2
- PAPER STORAGE BUILDING
- STEEL STORAGE BUILDING #2
- LANDFILL GAS COLLECTION SYSTEM
- STEEL ODOUR CONTROL BUILDING
- NANOOSE FIRE HALL
- HALLBERG FIRE HALL
- SPRUSTON ROAD WATERTANK
- PUBLIC WORKS
- SOLID WASTE
- ADMINISTRATION BUILDING
- SCALE HOUSE
- TRANSFER STATION BUILDING #1
- TRANSFER STATION BUILDING #2
- NANAIMO LANDFILL
- MAINTENANCE SHOP
- SCALE HOUSE
- EQUIPMENT SHED BUILDING
- OFFICE
- LUNCHROOM ADDITION
- FIRST AID SUPPLY STATION
- LEACHATE TREATMENT LIFT STATION #2

- PAPER STORAGE BUILDING
- STEEL STORAGE BUILDING #2
- LANDFILL GAS COLLECTION SYSTEM
- STEEL ODOUR CONTROL BUILDING
- BRITCO PORTABLE OFFICE (CONTRACT)
- MOBILE EQUIPMENT
- YARD
- DUKE POINT WASTEWATER
- DUKE POINT TREATMENT PLANT
- PUMP STATION
- ULTRAVIOLET DISINFECTION SYSTEM
- STORAGE BUILDING
- NANAIMO WASTEWATER
- NANAIMO TREATMENT PLANT
- BOILER HOUSE
- BELT AND CENTRIFUGE HOUSE
- ECO-GENERATOR HOUSE
- OUTBUILDINGS - GREENHOUSE / SLUDGE DRYING BED
- OUTBUILDINGS - STORAGE SHED
- CHASE RIVER PUMPSTATION
- DEPARTURE BAY PUMPSTATION
- DEPARTURE BAY GENERATOR BUILDING
- WELLINGTON PUMPSTATION
- FRENCH CREEK WASTEWATER
- FRENCH CREEK TREATMENT PLANT
- GREENHOUSE / SLUDGE DRYING BED
- BELT AND CENTRIFUGE HOUSE
- STORAGE BUILDING
- PORTABLE SHOWER WASHROOM
- BAY STREET LIFT STATION
- HALL ROAD LIFT STATION
- LEE ROAD LIFT STATION
- FRENCH CREEK SEWER COLLECTION
- BREAKWATER LIFT STATION
- COLUMBIA LIFT STATION
- NANOOSE (FAIRWINDS) WASTEWATER
- FAIRWINDS TREATMENT PLANT
- FAIRWINDS LIFT STATION #1
- FAIRWINDS LIFT STATION #2
- FAIRWINDS LIFT STATION #3
- FAIRWINDS LIFT STATION #4
- FAIRWINDS LIFT STATION #5
- FAIRWINDS LIFT STATION #6

- FAIRWINDS LIFT STATION #7
- FAIRWINDS LIFT STATION #8
- FAIRWINDS LIFT STATION #9
- SURFSIDE SEWER
- KINCAID ROAD LIFT STATION
- BARCLAY CRESCENT SEWER
- BARCLAY CRESCENT SEWER LIFT STATION
- ARBUTUS PARK ESTATES WATER
- RESERVOIR
- FRENCH CREEK WATER
- RESERVOIR
- FRENCH CREEK PUMPHOUSE
- CHARTWELL WELL #2 / WELL #4
- CHARTWELL WELL #7
- MADRONA WATER
- RESERVOIR
- WELL #8 PUMPHOUSE
- WELL #4 / WELL #8
- NANOOSE WATER
- NANOOSE WELL #2 / WELL #3 / WELL #4
- BEACHCOMBER CONTROL ROOM
- BEACHCOMBER RESERVOIR
- CHLORINE BUILDING
- CHEMICAL STORAGE
- DOLPHIN RESERVOIR
- EAGLE HEIGHTS RESERVOIR
- SURFSIDE WATER
- SURFSIDE PUMPHOUSE
- WEST BAY ESTATES WATER
- PUMPHOUSE / FLOW CONTROL BUILDING
- FAIRWINDS WATER
- PUMPHOUSE / WELL #1
- PUMPHOUSE / WELL #2
- PUMPHOUSE / WELL #3
- RESERVOIRS
- CHLORINE BUILDING
- LIBRARY BOOSTER STATION BUILDING
- DECOURCEY WATER
- RESERVOIR / PUMPHOUSE
- NANOOSE BAY BULK WATER
- CRAIG BAY FLOW CONTROL BUILDING / BOOSTER PUMPHOUSE
- SAN PAREIL WATER
- BOOSTER PUMPHOUSE

- RESERVOIR
- WELLS
- MELROSE PLACE WATER
- PUMPHOUSE / RESERVOIR / WELL
- ENGLISHMEN RIVER WATER
- RESERVOIR
- CHLORINATION AND PUMPHOUSE
- WELL #2 AND #3
- WHISKEY CREEK WATER SYSTEM
- INTAKE PUMPHOUSE
- BOOSTER PUMPHOUSE
- UTILITIES WATERWORKS WAREHOUSE
- TRANSIT
- TRANSIT BUILDING
- TRANSIT PORTABLE
- RECREATION
- PARKSVILLE ARENA
- OCEANSIDE PLACE
- RAVENSONG AQUATIC CENTRE
- LEASED STORAGE FACILITY
- COMMUNITY PARKS
- ROLLO MCCLAY COMMUNITY PARK
- BOULTBEE COMMUNITY PARK
- NANOOSE ROAD COMMUNITY PARK
- REGIONAL PARKS
- HORNE LAKE CAVES CAMPGROUND
- MOORECROFT CAMP
- DESCANSO BAY CAMPGROUND
- OFFICE AND STORAGE BUILDING
- EQUIPMENT SHED AND SHOP
- OUTHOUSES
- WATER TREATMENT AND SUPPLY SYSTEM
- YARD
- TRAIL BRIDGES
- BARCLAY BRIDGE
- TOP BRIDGE
- HASLAM BRIDGE
- LIGHTHOUSE COMMUNITY TRAIL BRIDGES
- MCBEY BRIDGE
- WHARVES
- EMERGENCY WHARF