REGIONAL DISTRICT OF NANAIMO

SUSTAINABILITY SELECT COMMITTEE WEDNESDAY, JUNE 13, 2012 2:00 pm

(RDN Committee Room)

AGENDA

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DELEGATIONS

MINUTES

2-3 Minutes of the Sustainability Select Committee meeting held on Wednesday, April 16, 2012.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

4-22	Memorandum of Agreement – Regional Emission Reduction Projects
23-24	Revised Eligibility Criteria for Electric Vehicle Charging Station
25-27	Provincial Incentives for Electric Vehicle Planning and Infrastructure
	Community Energy and Emissions Plan (Verbal Presentation)

ADDENDUM

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

IN CAMERA

<u>Distribution</u>: J. Stanhope (Chair), A. McPherson, H. Houle, M. Young, B. Veenhof, B. Dempsey, J. Kipp, D. Brennan, M. Lefebvre, C. Burger, D. Willie

J. Fell, C. Mason, P. Thorkelsson, P. Thompson, C. Midgley, M. Donnelly, J. Finnie

For information only: G. Holme, J. Ruttan, B. Bestwick, D. Johnstone, T. Greves, G. Anderson

D. Holmes, M. Brown, T. Graff, F. Manson, M. Pearse, L. Burgoyne, Matt O'Halloran

REGIONAL DISTRICT OF NANAIMO

MINUTES OF THE SUSTAINABILITY SELECT COMMITTEE MEETING HELD ON WEDNESDAY, APRIL 18, 2012 IN THE RDN COMMITTEE ROOM

Present:

Director D. Brennan

Director A. McPherson

Director H. Houle

Director M. Young

Director B. Veenhof

Director B. Dempsey

Director J. Kipp

Acting Chairperson

Electoral Area A

Electoral Area C

Electoral Area H

District of Lantzville

City of Nanaimo

Director C. Burger City of Parksville Alternate

Also in Attendance:

Director J. Fell Electoral Area F

P. Thorkelsson General Manager of Development Services

C. Midgley Manager, Energy & Sustainability

J. Frumento
M. Donnelly
K. Sanders
Sustainability Coordinator
Manager, Water Services
Recording Secretary

Regrets:

Director J. Stanhope Chairperson
Director M. Lefevre City of Parksville

Director D. Willie Town of Qualicum Beach

CALL TO ORDER

The meeting was called to order at 2:02 pm by the Chair.

BUSINESS ARISING FROM THE MINUTES

Director Houle requested copies of the attachments of the DWWPTA minutes. Copies will be forwarded to all the SSC members.

Director Veenhof inquired about the status of the Raven Coal project, and whether the RDN will have an opportunity to provide comment on proposals to transport the coal. Mr. Thorkelsson indicated that the period for public comment had closed, and that no new information was available at present. Information on the status of the Raven Coal project is available on the Canada Environmental Assessment Agency website: http://www.ceaa.gc.ca/050/documents-eng.cfm?evaluation=55529

Sustainability Select Committee Minutes April 18, 2012 Page 2

MINUTES

MOVED Director Houle, SECONDED Director Veenhof, that the minutes of the Drinking Water and Watershed Protection Technical Advisory Committee meeting held on February 14, 2012 be adopted.

CARRIED

MOVED Director Houle, SECONDED Director Veenhof, that the minutes of the Sustainability Select Committee meeting held on February 15, 2012, be adopted.

CARRIED

REPORTS

2012 Green Building Incentive Program

MOVED Director Kipp, SECONDED Director Houle, that the proposed 2012 Green Building Incentive Program be approved, with flexibility for staff to distribute funds as necessary across the different incentives, and to report back to the Committee quarterly with program updates.

CARRIED

Climate Smart Small Business Engagement Program

MOVED Director Veenhof, SECONDED Director Houle, that the RDN become a host community for the Climate Smart Business Engagement Program.

DEFEATED

ADJOURNMENT

MOVED Director Houle, SECONDED Director Burger, that this meeting be adjourned.

CARRIED

Time: 3:30 pm

CHAIRPERSON



MEMORANDUM

TO: Paul Thorkelsson DATE: June 6, 2012

General Manager, Development Services

FROM: Chris Midgley FILE:

Manager, Energy and Sustainability

SUBJECT: Memorandum of Agreement – Regional Emission Reduction Projects

PURPOSE

To consider support for a Memorandum of Agreement between the Regional District of Nanaimo, the City of Nanaimo, the District of Lantzville, the City of Parksville and the Town of Qualicum Beach to undertake regional emission reduction projects in pursuit of carbon neutral operations.

BACKGROUND

The Regional District of Nanaimo and each of the four member municipalities are signatories to the Climate Action Charter - a non-legally binding commitment between the signatory local government, the Union of BC Municipalities, and the Province of BC signalling the intent of all parties to show leadership in taking collaborative action on reducing emissions causing climate change.

Specifically, articles 5(a)(i)-(iii) of the Charter state that signatory local governments agree to develop strategies and take actions to achieve the following goals:

- Being carbon neutral in respect of their operations by 2012;
- Measuring are reporting on their community's GHG emissions profile; and
- Creating complete, compact, more energy efficient rural and urban communities.

Of these, the commitment to achieve carbon neutral operations has generated the greatest discussion.

In the simplest terms, carbon neutral operations means that there is no net increase in atmospheric greenhouse gases as a result of local government operations. To achieve this, local governments must:

- 1. **Inventory:** Identify all sources of greenhouse gas emissions within their corporate operations and measure those emissions in units of carbon dioxide equivalent (CO₂e);
- 2. Reduce: Reduce those emissions however practical;
- 3. Offset: Purchase carbon offsets¹ for the emissions that cannot be reduced; and
- 4. **Report:** Publicly report on progress toward this goal on an annual basis.

¹ An offset is a financial instrument that represents a reduction or removal of one tonne of greenhouse gas emissions. The offset acts as an investment in project that could not occur without the financial contribution in the form of the offset. The attribute that a project could not have occurred without the offset is an essential criterion commonly referred to as 'additionality'.

Memorandum of Agreement: Regional Emission Reduction Projects June 6, 2012 Page 2

The reason the carbon neutral commitment has generated so much discussion orients around the implications of purchasing offsets for emissions that cannot be reduced.

Financially, carbon offsets for corporate emissions represent a new cost to local governments. In reality, the costs involved are relatively small, as outlined in the Financial Implications below. Typically, the dollar value of offset purchases has not been the source of controversy. Concern has instead focused on the legitimate perception that purchasing offsets represents investing local taxpayer dollars outside the community or region a local government represents. Considering a local government's responsibility is to foster the social, economic and environmental well-being of the communities they serve, spending local taxes on projects that benefit private interests outside the RDN seems contradictory to this duty.

Addressing this concern requires taking a proactive approach to developing regional emission reduction projects that offer multiple benefits to residents of the region. The RDN has undertaken research in recent years to clarify how this could work. A key finding of one research project, "Carbon Management in the RDN: Rural Removals, Reservoirs and Sinks" was that developing local emission reduction projects would be difficult for the RDN acting alone because of the relatively small quantity of emissions to offset (about 2,000 tonnes of CO₂e). With so few emissions, the fixed cost of offset project management and verification would overwhelm total project costs. The threshold to reach before seriously considering a custom, local project is suggested to be approximately 10,000 tonnes CO₂e.

Taken together, corporate emissions from the Regional District of Nanaimo and the four member municipalities approach this 10,000 tonne threshold. Table 1 provides an estimated emission inventory for each of the local governments in the RDN.

TABLE 1: Estimated Corporate Emissions Inventories for RDN Local Governments

Local Government	Estimated 2012 Emissions (tonnes CO₂e)*
Regional District of Nanaimo	1,805
City of Nanaimo	6,360
District of Lantzville	43
City of Parksville	432
Town of Qualicum Beach	624
Total	9,264

^{*}Source: Extrapolations from Corporate Energy and Emission Plans developed between 2005-2007

Consolidating five corporate emission inventories into a single, aggregated regional local government emission inventory spreads fixed costs of project development and implementation over a greater quantity of emissions to be reduced, enhancing the financial viability of emissions reduction projects.

Memorandum of Agreement: Regional Emission Reduction Projects June 6, 2012 Page 3

In addition, by acting together, the concept of a 'local' project is expanded to the boundaries of the entire region, including municipal jurisdictions. This increases the opportunities for a wide range of project types across a larger, more diverse geographical area when compared to acting alone.

For these reasons, the Memorandum of Agreement provided as Appendix 1 formalizes a collaborative, region-wide approach to developing, investing in, and implementing regional emissions reduction projects for the purpose of achieving corporate carbon neutral operations.

ALTERNATIVE

- 1. That the Regional Emission Reduction Projects Memorandum of Agreement be endorsed.
- 2. That the Regional Emission Reduction Projects Memorandum of Agreement be revised.
- 3. That alternate direction be provided to staff.

LEGAL IMPLICATIONS

The attached Agreement has been reviewed deemed appropriate by the solicitor for the Regional District of Nanaimo. It is not intended as a legally binding agreement with the full force and effect that would entail.

Instead, the attached MOA is intended as a general commitment to work together on mutually beneficial projects that fulfill each local government's obligation to achieve carbon neutral operations by investing in regional emission reduction projects, and lays out the minimum criteria for participating in that effort.

For example, Section 2.4 in the Agreement states that:

Nothing in this agreement obliges any or all Parties to participate in a particular regional emission reduction project, or prevents any or all parties from opting out of a particular emission reduction project.

Similarly, the Agreement is not intended to supersede the authority of the RDN Board of Directors. As noted in Section 4.6:

Nothing in this agreement is intended to fetter the discretion of the RDN Board of Directors to provide final approval to proceed with a project, including the release of reserve funds for detailed project development and implementation.

FINANCIAL IMPLICATIONS

There are various financial implications associated with achieving carbon neutral operations, notably the dedication of staff resources to understand, measure and report on corporate emissions and the actual dollar cost of offsetting emissions. These costs are attributable to the commitment to achieve carbon neutral operations, and would be incurred with or without participating in this Agreement.

Table 2 shows estimated offset costs for each local government in the region as a proportion of total annual expenditures when using the common default value of \$25 per tonne for purchasing offsets:

TABLE 2: Estimated Offset Costs as a Proportion of Total Annual Expenditures for RDN Local Governments

Local Government	Total Annual Expenditures (2012 Budget)	Total Estimated Offset Cost (Based on \$25/ tonne)	Total Offset Cost as a Percent of Total Annual Expenditures
Regional District of Nanaimo	\$91,063,523	\$45,125	0.05%
City of Nanaimo	\$160,370,000	\$159,000	0.10%
District of Lantzville	\$2,625,519	\$1,075	0.04%
City of Parksville	\$10,724,700	\$10,800	0.10%
Town of Qualicum Beach	\$12,304,766	\$15,600	0.13%
Total	\$277,088,508	\$231,600	0.08%

Financial implications that result from participating in this Agreement include an increased dedication of staff time due to the effort needed to identify and implement credible regional emission reduction projects. This is in contrast to the ease of effort in simply purchasing offsets from a third party such as the Pacific Carbon Trust or Offsetters. Absorbing the cost of additional staff effort produces the benefit of investing over \$230,000 in local RDN communities for the direct benefit of local residents, rather than sending that money out of local jurisdictions. This significant financial benefit to local communities is the fundamental reason for participating in the Agreement.

SUSTAINABILITY IMPLICATIONS

By participating in an Agreement to develop and invest in regional emission reduction projects for the purpose of achieving carbon neutral operations, the RDN and member municipalities will be acting collaboratively to take action on climate change by offsetting corporate emissions while also ensuring that doing so results in direct benefits for residents of the region. In addition, investing the cost of offsets in projects within the region generates opportunities for local businesses to develop in this emerging sector. This is consistent with Board policies, priorities and values that acknowledge the importance of taking action to address climate change, recognize the opportunities to strengthen and diversify the local economy, and use tax dollars in a way that balances fiscally responsibility with fostering the social, economic and environmental well-being of residents in the region.

SUMMARY/ CONCLUSIONS

The Regional District of Nanaimo, the City of Nanaimo, the District of Lantzville, the City of Parksville and the Town of Qualicum Beach are all signatories to the Climate Action Charter, which commits each jurisdiction to achieve carbon neutral operations for the year 2012 and beyond. This commitment involves offsetting corporate emissions, which creates a new cost to local governments. While the actual

Memorandum of Agreement: Regional Emission Reduction Projects June 6, 2012 Page 5

cost is relatively low when considered in the context of overall annual local government expenditures, the fact that this could entail investing local tax dollars outside a community a local government serves has generated considerable controversy.

To overcome this principled objection to purchasing offsets, the attached Memorandum of Agreement concerning Regional Emission Reduction Projects establishes a commitment to collaborate on the development and implementation of emission reduction projects within our region. This is intended to ensure that any investment by local governments in achieving carbon neutral operations remains within and directly benefits residents of the Regional District of Nanaimo and member municipalities. There are challenges and costs associated with this approach, but the end result will be significant benefits from local tax dollars remaining with the community as well as increased support for development of the economic sector emerging around the practice of carbon measurement and management.

RECOMMENDATION

That the Regional Emission Reduction Projects Memorandum of Agreement be endorsed by the RDN Board and forwarded to the member municipalities.

Report Writer

General Manager Concurrence

CAO Concurrence

APPENDIX 1:

Regional Emission Reductions for Carbon Neutral Operations

Memorandum of Agreement

THIS AGREEMENT made the day of , 2012,

BETWEEN:

REGIONAL DISTRICT OF NANAIMO

a corporation incorporated under the *Local Government Act*6300 Hammond Bay Road
Nanaimo, BC V9T 6N2

(the "RDN")

AND:

CITY OF NANAIMO

a municipal corporation incorporated under the *Local Government Act*455 Wallace Street
Nanaimo, BC V9R 5J6

("Nanaimo")

AND:

DISTRICT MUNICIPALITY OF LANTZVILLE

a municipal corporation incorporated under the *Local Government Act*7192 Lantzville Road, P.O. Box 100
Lantzville, BC VOR 2H0

("Lantzville")

AND:

CITY OF PARKSVILLE

a municipal corporation incorporated under the *Local Government Act* 100 E. Jensen Avenue, P.O. Box 1390 Parksville, BC V9P 2H3

("Parksville")

AND:

TOWN OF QUALICUM BEACH

a municipal corporation incorporated under the *Local Government Act*201 - 660 Primrose Street, P.O. Box 130
Qualicum Beach, BC V9K 1S7

("Qualicum Beach")

(Jointly known as "the Parties"; and in reference to municipal corporations only [exclusive of the RDN], jointly known as "the Member Municipalities".)

WHEREAS:

- A. The RDN under the *Local Government Act*, and the Member Municipalities under the *Community Charter*, each have the power to make agreements with other public authorities respecting the undertaking, provision and operation of activities, works and services; and
- B. The RDN under the *Local Government Act*, and the Member Municipalities under the *Community Charter*, each include among their purpose fostering the economic, social and environmental well-being of their respective communities; and
- C. Each of the Parties are signatories to the Climate Action Charter; and
- D. Article 5(a)(i) of the Climate Action Charter states that in order to contribute to reducing Greenhouse Gas (GHG) emissions, signatory Local Governments agree to develop strategies and take actions to achieve being carbon neutral in respect of their operations by 2012; and
- E. Achieving Carbon Neutral Operations will require investment in projects that result in quantifiable, credible and verifiable reductions in GHG emissions.
- F. The Parties now wish to collaborate in a manner to ensure that investment in emission reduction projects fosters the economic, social and environmental well-being of the communities and jurisdictions that comprise the region, and in a manner that falls within their authorities under the *Community Charter* and *Local Government Act*.

NOW THIS AGREEMENT WITNESSES that in consideration of their mutual aspirations and obligations, the Parties agree with the others as follows:

PART 1: DEFINITIONS

- (a) Additional: The concept that a project's emission reductions and/or removal enhancements must go beyond what would have occurred in the absence of the project. Generally, projects are deemed to be additional when the incentive of having a greenhouse gas reduction recognized as an emission offset or reduction credit overcomes or partially overcomes financial, technological or other obstacles to carrying out the project.
- (b) Carbon Dioxide Equivalent (CO₂e): A universal unit of measurement for greenhouse gas emissions based on the relative climate impact, or global warming potential, of six classes of greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂0), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆). Carbon dioxide equivalent is usually measured in tonnes, but any unit of mass can be used.
- (c) **Carbon Neutral Operations**: An outcome of an organization's management of energy use and emissions such that there is no net increase in carbon dioxide equivalent entering the atmosphere as a result of an organizations normal activities.
- (d) **Corporate Emission Inventory**: For this agreement, the total quantity of emissions, measured in tonnes of CO₂e produced by a local government as a result of the energy used in the delivery of its services.
- (e) **Corporate Energy Use:** The total energy consumed in the delivery of local government services, including fossil fuels and electricity.

Regional Emission Reductions for Carbon Neutral Operations

Memorandum of Agreement

- (f) **Credible:** With respect to an offset or emission reduction, credible means supported by calculations and compliant with procedures or policies that include a description of quality assurance and quality control, record keeping and data management.
- (g) **Emissions**: Substances released into the atmosphere. Emissions occur through natural processes and as a result of human activities. For this agreement, emissions refer specifically to greenhouse gas emissions, as defined below.
- (h) **Emission Factor:** The total quantity of greenhouse gases emitted per unit of energy consumed, as measured in units of CO₂e.
- (i) **Emission Reduction Project:** A project that results in a real, additional, credible and quantifiable reduction in greenhouse gas emissions, or removal of atmospheric greenhouse gases.
- (j) **Greenhouse Gases (GHGs)**: The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Less prevalent but very powerful greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6).
- (k) Global Warming Potential: The relative measure of how much heat a greenhouse gas traps in the atmosphere. Global warming potential is calculated over a specific time interval, commonly 100 years, and is expressed in relation to carbon dioxide, which has a global warming potential of one.
- (I) **Lead Party:** The jurisdiction within the Regional District of Nanaimo selected to research, develop, **implement** and coordinate a regional emission reduction project.
- (m) **Local**: For the purpose of this agreement, local means within boundaries of the Regional District of **Nanaimo**, including member municipalities.
- (n) **Local Government Operations:** All activities undertaken by an incorporated local government, whether a municipality or regional district, in the delivery of the services it provides.
- (o) Management Committee: For the purpose of this agreement, the Management Committee is comprised of the Chief Administrative Officers of the Regional District of Nanaimo, the District Municipality of Lantzville, the City of Parksville and the Town of Qualicum Beach, and the Deputy City Manager of the City of Nanaimo, or their appropriately designated alternate.
- (p) Offset: A carbon offset is a financial instrument that represents a reduction or removal of one tonne of greenhouse gas emissions. The offset acts as an investment in a reduction or removal project that could not occur without the financial contribution in the form of the offset.
- (q) **Offset Cost:** The dollar value of a carbon offset, as paid per tonne of GHG emission reductions or removals.
- (r) Pacific Carbon Trust: The Provincial Crown corporation established in 2008 to deliver BC-based greenhouse gas offsets, to help clients meet their carbon reduction goals and to support the growth of BC's low-carbon economy.

- (s) **Protocol:** The established, recognized and generally accepted set of methods and procedures for determining the total quantity of offsets or reduction credits associated with an emission reduction project.
- (t) **Quantifiable:** With respect to an offset or emission reduction, quantifiable means capable of being measured in units of CO₂e according to generally accepted methods or protocols.
- (u) **Regional:** For the purpose of this agreement, regional means within boundaries of the Regional District of Nanaimo, including member municipalities. Same as 'local', above.
- (v) **Regional Local Government Emission Inventory**: The aggregated emission inventory made up of the individual corporate emission inventories for each of the local governments that comprise the Regional District of Nanaimo.
- (w) **Regional Emission Reduction Project:** An emission reduction project that occurs within the boundaries of the Regional District of Nanaimo, including the member municipalities.
- (x) Reduction Credit: A verified, non-salable credit representing one tonne of CO₂e that results from projects undertaken for the purpose of reducing a corporate or regional local government inventory.
- (y) **Reserve Fund:** A statutory fund created by bylaw by a municipal council or a regional board to set aside funds for a specified purpose.
- (z) **Verifiable:** The ability to check or test, by an independent and certified party, to ensure that an emission reduction project actually achieves emission reductions commensurate with the credits or offsets it receives.

PART 2: AGREEMENT

Rationale

- 2.1 Emission reduction projects that foster the economic, social and environmental well-being of the communities and jurisdictions that comprise the region are those that retain local tax dollars within the region; provide direct, tangible benefits to residents of the region; and result in credible, quantifiable reductions in GHG emissions.
- 2.2 For each party acting individually, the ability to undertake emission reduction projects of a sufficient scale to achieve carbon neutrality within its own boundaries may be limited by:
 - (a) A lack of available opportunities due to the constraints of attempting to operate within a specific geographic area; and
 - (b) An insufficient corporate emission inventory to implement an economically viable emission reduction project, as measured by cost per tonne of emissions.
- 2.3 By acting together, the ability to undertake emission reduction projects of a sufficient scale to achieve carbon neutrality within the region may be enabled by:
 - (a) Increased opportunities for a wide range of potential project types available across a larger, diverse geographic area; and

(b) Enhanced financial viability of projects resulting from a larger, aggregated regional corporate emission inventory, allowing fixed project costs to be distributed over a greater quantity of emissions to be reduced.

Purpose

- 2.3 For these reasons, the Parties have established this agreement for the following purposes:
 - (a) to formalize a collaborative, region-wide approach to developing, investing in, and implementing regional emission reduction projects for the purpose of achieving carbon neutrality with respect to local government operations;
 - (b) to establish a process for consolidating the emissions measured individually by each of the Parties into a single, regional local government emission inventory in order to determine the quantity of emissions, as measured in tonnes of carbon dioxide equivalent (CO₂e), to be reduced on an annual basis; and
 - (c) to create the financial mechanism(s) necessary to enable each of the Parties to contribute a dollar amount equal to their individual corporate emission inventory multiplied by an agreed upon price per tonne of CO_2e for investing in regional emission reduction projects.
- 2.4 Nothing in this agreement obliges any or all Parties to participate in a particular regional emissions reduction project, or prevents any or all Parties from opting out of a particular regional emission reduction project.

PART 3 NATURE OF OBLIGATIONS

Maintain a Corporate Emission Inventory

3.1 Each Party agrees to track and record corporate energy use associated with the delivery of local government services. The reporting requirements for energy consumption necessary to access the Provincial Climate Action Revenue Incentive Program (CARIP) provide the minimum necessary information for fossil fuel use. Corporate electricity consumption must also be tracked and recorded. Energy use will be tracked in the following units:

Electricity	kwh
Natural Gas	GJ or m3
Gasoline	litres
Diesel	litres
Propane	litres
Heating Oil	litres

Any other fuel sources consumed in the delivery of local government services as indicated on the CARIP reporting template.

3.2 Total energy consumption for different energy sources will be converted to tonnes of carbon dioxide equivalent (t CO2e) in a manner consistent with accepted methodologies, and using accepted emission factors. The *Draft Methodology for Reporting B.C. Local Government Greenhouse Gas Emissions* produced by the BC Ministry of Environment dated August, 2011 or later, and as updated from time to time includes emission factors for each of the above-noted fuels, and provides an accepted methodology for calculating corporate emission inventories.

Regional Emission Reductions for Carbon Neutral Operations

Memorandum of Agreement

- (a) Emission factors for a variety of common energy sources, as listed in the *Draft Methodology for Reporting B.C. Local Government Greenhouse Gas Emissions* are attached as Schedule 1 to this agreement.
- 3.3 Unless the Parties agree otherwise, it will be the responsibility of staff at the RDN to aggregate the energy use data or corporate emission inventories provided by the Parties into one regional local government emission inventory.
- 3.4 The Parties agree to provide consumption data for electricity and fossil fuels to the RDN for the purpose of aggregation twice yearly, as near as reasonably possible to June 30; and as near as reasonably possible to December 31.
- 3.5 Paragraph 3.4 is intended to distribute the work load required to develop a regional local government emission inventory over the course of a year. If meeting this provision is not possible for one or more of the Parties, it is imperative that annual consumption data or an annual corporate emission inventory be shared as soon after December 31 as is reasonably possible.
- 3.6 If a Party fails to, or chooses not to provide energy consumption data or a corporate emission inventory for a given year by the following March 1, that Party will be deemed to have withdrawn from this agreement and is pursuing carbon neutral operations on its own.

Sharing of Emission Quantification Tools

- 3.7 The Parties agree to share with each other any tools (spreadsheets, software, other) developed or purchased for the purpose of quantifying or inventorying corporate emissions.
- 3.8 When the sharing of quantification tools is not possible because of copyright, contractual or other reasons, the Parties agree to disclose the name of the tool in use, as well as general details regarding the financial and staff resource implications associated with the use of the tool.
- 3.9 If a tool for calculating emissions becomes available that meets the needs of local governments in British Columbia, and that facilitates the implementation of this collaborative agreement, the Parties agree to consider investing in that tool.
- 3.10 The Parties agree to pursue discussions with the Province to determine whether the SMARTTool, developed by the Province of British Columbia, can meet the collective need outlined in this agreement.

Establish a Reserve Fund for the Purpose of Investing in Regional Emission Reduction Projects

- 3.11 Insofar as they lawfully can, the Parties agree to use their respective authorities to establish a statutory reserve fund by bylaw, for the purpose of investing in regional emission reduction projects.
- 3.12 The purpose of the Reserve Funds referred to in paragraph 3.11 is that each Party would transfer into its reserve fund a dollar amount that equals the total quantity of local government emissions generated in a calendar year as measured in tonnes of CO2e multiplied by an agreed upon dollar value per tonne.
- 3.13 For emissions generated in the year 2012, the dollar value per tonne will be \$25.00.

- 3.14 The Parties agree to reassess this dollar value per tonne annually at a time that coincides with annual budget preparations.
- 3.15 If the parties are unable to agree on a dollar value per tonne of CO2e after thirty (30) days, then the dollar value per tonne will be deemed to be the dollar value per tonnes for carbon offsets sold through the Pacific Carbon Trust.
- 3.16 If a Party fails to or chooses not to set aside funds for the purpose of investing in regional emission reduction projects by the end of each fiscal year, that Party will be deemed to have withdrawn from this agreement.

Identify and Share Potential Regional Emission Reduction Project Ideas

- 3.17 All parties are encouraged to identify potential regional emission reduction projects.
- 3.18 All Parties are encouraged to solicit regional emission reduction project ideas from their constitutents, including members of the public, non-government organizations and the local business community.
- 3.19 Any Party may, of its own accord, undertake research or engage qualified consultants to identify potential emission reduction projects.
- 3.20 Any Party undertaking such work agrees to share Requests for Proposals, Requests for Qualifications, the results of such work, and any other related files with the other Parties.
- 3.21 Regional emission reduction projects must adhere to accepted emission reduction or offset protocols and/ or methodologies.
 - (a) If a regional emission reduction project appears to have merit, but a formal protocol is absent, the Parties may develop a project protocol or methodology. Should this work be undertaken, the Parties agree to collaborate with the Green Communities Committee (GCC) to ensure that any protocol or methodology developed provides a benefit to other local governments in British Columbia
- 3.22 The costs of such work will be borne entirely by the Party undertaking the work until the project has the support of the remaining Parties.
- 3.23 Once a potential regional emission reduction project idea is identified, the Parties will develop that project in accordance with Part 4: Process

PART 4: PROCESS

Management Committee

- 4.1 The project proponent will present the regional emission reduction project idea at the next available Management Committee meeting.
- 4.2 The Management Committee will determine by consensus:
 - (a) whether the project offers sufficient regional benefit, and otherwise appears to merit further investigation;

- (b) whether project implementation is consistent with existing statutes, including local government authorities as described in the *Community Charter*, *Local Government Act*, or other *Act* or regulation; and
- (c) which of the Parties has the resources, including available staff and budget to be the Lead Party to lead preliminary project development in a timely way.
- (d) In the absence of agreement of all Parties to pursue a proposed project, nothing in this agreement prevents one or more of the Parties from using any funds set aside under this agreement for the purpose of such projects.

Preliminary Project Development

- 4.3 The Lead Party will allocate the staff time and other resources necessary to determine, at a minimum:
 - (a) a preliminary estimate for the total project cost;
 - (b) a preliminary estimate for the total quantity of emissions reduced as a result of the project; and
 - (c) requirements for third-party involvement for detailed project development and implementation and verification.
- 4.4 Costs associated with preliminary project development must be borne entirely by the Lead Party.

RDN Sustainability Select Committee

- 4.5 As a Select Committee of the RDN Board of Directors, the Sustainability Select Committee includes representatives from each of the parties to this agreement. A preliminary project report including the information outlined in paragraphs 4.3 (a)-(c) will be prepared by the Lead Party and presented to the RDN Sustainability Select Committee. The Sustainability Select Committee will:
 - (a) recommend to the RDN Board that the project proceed as outlined by the Lead Party;
 - (b) recommend to the RDN Board that the project proceed, but with suggested changes or revisions;
 - (c) make some other recommendation.

RDN Board of Directors

4.6 Nothing in this agreement is intended to fetter the discretion of the RDN Board of Directors to provide final approval to proceed with a project, including the release of reserve funds for detailed project development and implementation.

Project Implementation

4.7 Once a project is approved by the RDN Board of Directors:

- (a) the Lead Party will proceed immediately with project development and implementation of the project; and
- (b) all other Parties must pay to the Lead Party within 30 days of RDN Board approval an amount equal to that Party's share of the total estimated project cost as presented to the Board.

Project Cost Sharing

- 4.8 Unless agreed otherwise, financial contributions toward project development will be provided by all Parties based on the ratio between an individual Party's corporate emission inventory, and the total regional local government emission inventory.
- 4.9 For 2012, an estimate for the regional local government inventory will be determined by summing the individual emission inventories of each Party, as publicly reported in each Party's Climate Action Revenue Incentive (CARIP) Public Report for 2011, or as provided by each Party. This inventory is attached as Schedule 2 to this agreement.
- 4.10 Total project costs for any one year must not exceed the total annual cost for achieving Carbon Neutral Operations as described in Sections 3.12 and 3.13.
- 4.11 The Lead Party will make all reasonable efforts to ensure that approved projects are sufficiently complete to enable the inclusion of reductions in annual public progress reporting toward carbon neutral operations as required by the Province of British Columbia.

PART 5: REPORTING

Reporting to the Public

5.1 Upon project completion, the Lead Party will provide formal public reporting of results from Regional Emission Reduction Projects to the RDN Board of Directors and Municipal Councils.

CARIP Reporting Template

5.2 Each Party will report their share of reductions resulting from Regional Emission Reduction Projects in the CARIP Reporting Template as provided by the Province, and in accordance with Provincial reporting deadlines.

PART 6: AMENDMENT, TERM, AND WITHDRAWAL

Amendment

- At the outset of each year of the term of this agreement, all parties will be provided with an opportunity to suggest amendments to this agreement.
- At the outset of each year of the term of this agreement, the Parties will review, update and amend as necessary:
 - (a) the dollar value per tonne of CO₂e;
 - (b) the emission factors for the energy sources that contribute to each Party's corporate emission inventory; and

(c) the Regional Local Government Emission Inventory, as the cumulative sum of the individual corporate emission inventories for each of the Parties.

Term

- 6.3 This agreement will continue until the earlier of:
 - (a) the date when any and all commitments or obligations for the Parties to achieve carbon neutral operations are either satisfied or cease;
 - (b) the date when all Parties have withdrawn from this agreement in accordance with Section 5.5 Withdrawal, below; or
 - (c) five years from the date of the making of this agreement, at which point all Parties will have the opportunity to extend this agreement.

Withdrawal

- 6.4 A party may withdraw from this agreement, if deemed in its best interest, subject to the following conditions:
 - (a) that Party has not already committed to lead a preliminary project development or detailed project development, implementation and verification process;
 - (b) that Party agrees that funds already disbursed or released for the purpose of project development and or implementation cannot be reimbursed.
- 6.5 A Party will be deemed to have withdrawn from this agreement if the obligations under this agreement are not fulfilled.

PART 7: PURCHASE OF CARBON OFFSETS

- 7.1 If Regional Emission Reduction Projects do not yield reductions equal to or in excess of the Regional Local Government Inventory for a given year, each party may either:
 - (a) purchase carbon offsets from a seller of their choice to make up the shortfall; or
 - (b) acknowledge that carbon neutrality will not be achieved for that year, and report on the progress that has been made toward carbon neutrality as a result of reductions from participation Regional Emission Reduction Projects.
- 7.2 Nothing in this agreement prevents any of the Parties from opting to use reserve funds to purchase carbon offsets instead of participating in Regional Emission Reduction Projects.
- 7.3 Opting to purchase carbon offsets over participation in Regional Emission Reduction Projects to achieve carbon neutral operations does not constitute withdrawal from this agreement.
- 7.4 The intent to purchase carbon offsets over participation in Regional Emission Reduction Projects must be made known to all Parties prior to RDN Board approval to implement the Regional Emission Reduction project(s).

IN WITNESS WHEREOF the parties hereto executed this Agreement as of the day month and year first above written.

REGIONAL DISTRICT OF NANAIMO by its authorisignatories:	ized)	
)	
Name:)	
Name:)	
City of Nanaimo by its authorized		
signatories:)	
Name:)	
Name:)	
District Municipality of Lantzville by its		
authorized signatories:))	
Name:)	
Name:))	

CITY OF PARKSVILLE by its authorized signatories:)))
Name:)))
Name:	}
TOWN OF QUALICUM BEACH by its authorized signatories:	
Name:	
Name:	

Schedule 1: Emission Factors for Common EnergySources (2012)

Energy Source	<u>Unit of Measure</u>	CO2e per unit
<u>Electricity</u>	<u>kwh</u>	22-25 grams per kwh
Natural Gas	<u>GJ</u>	51 kg per GJ
Gasoline	litres	2.41 kg per litre
Diesel	litres	2.69 kg per litre
Propane	<u>litres</u>	1.54 kg per litre
Heating Oil	litres	2.84 kg per litre



Schedule 2:

Draft Regional Local Government Inventory (Extrapolated from Corporate Emission Inventories Completed between 2005-2007)

Local Government	Corporate Emission Inventory	Percent of Regional Inventory
City of Nanaimo	6,360	68.6%
District Municipality of Lantzville	43	0.5%
City of Parksville	432	4.7%
Town of Qualicum Beach	624	6.7%
Regional District of Nanaimo	1,805	19.5%
Total	9,264	100.0%





MEMORANDUM

TO: Chris Midgley DATE: June 13, 2012

Manager, Energy and Sustainability

FROM: Jennifer Frumento **FILE:** 6780-50

Sustainability Coordinator

SUBJECT: Revised Eligibility Criteria for the Electric Vehicle Charging Station Incentive

PURPOSE

To revise the eligibility criteria for the electric vehicle charging station incentive to increase uptake and demonstrate support for local green industry.

BACKGROUND

With a recommendation from the Sustainability Select Committee, the 2012 Green Building incentive program received approval at the regular Board meeting held April 24, 2012. The Program now includes an incentive for the purchase of a residential Level 2 electric vehicle (EV) charging station. Five \$250 rebates for the installation of an EV charging station are available as of May 1, 2012 to eligible residents.

The intent of the incentive is to enable residents to install a residential Level 2 Electric Vehicle Charging Station, providing immediate emission reductions and encouraging clean energy vehicle deployment in the Regional District. The incentive currently requires residents' participation in the Provincial incentive program for Clean Energy Vehicles, which became effective December 1, 2011. The Provincial program requires the purchase of a new EV from a major vehicle manufacturer. The proposed changes to the eligibility criteria are to align the eligibility date with the Provincial program and to allow the inclusion of charging stations for hydrocarbon vehicles converted to EVs.

Based on the number of electric vehicles sold to residents in the RDN, it is expected that the uptake of the EV charging station rebate will be low, therefore aligning the eligibility date with the Provincial program is not likely to jeopardize the availability of incentives over 2012. Aligning the RDN eligibility date with the Provincial program will eliminate possible confusion around multiple start dates and allow for the inclusion of any early adopters in the Region.

Converting an existing hydrocarbon fuelled vehicle to an EV ensures that a fully operable vehicle can be made emissions-free, providing immediate emissions reductions as well reducing the resources required to scrap the vehicle and replace it with a newly manufactured EV. A local company based in Electoral Area F performs conversions and sells kits to convert hydrocarbon fuelled vehicles to EVs. Because they are not selling new EVs, they are not included in the Provincial Clean Energy Vehicle program. Changing the eligibility requirements for the RDN incentive to include converted vehicles would demonstrate support for local green industries and encourage the permanent conversion of vehicles already on the road into emissions-free EVs.

ALTERNATIVES

- 1. That the RDN modify the eligibility criteria for the EV charging station rebate.
- 2. That the RDN not modify the eligibility criteria for the EV charging station rebate.

FINANCIAL IMPLICATIONS

The Green Building Incentive program currently includes five \$250 incentives for a total of \$1,250. The proposed changes may encourage the incentives to be distributed quicker, but no new funds are required.

These changes are also not expected to add to administration time, as the number of incentives is small and the verification of the converted vehicles can be made simple by requesting a copy of the invoice for the conversion as well as the charging station.

SUSTAINABILITY IMPLICATIONS

Modifying the eligibility criteria of the EV Charging Station incentive to align with dates for the Provincial rebate program and to include charging stations for converted EVs will encourage a greater uptake of EVs in the Region. A greater penetration of EVs in the RDN will support several of the Board's Strategic Priorities, including encouraging clean energy, reducing GHG emissions, and encouraging local green businesses.

SUMMARY/ CONCLUSIONS

Encouraging the deployment of EVs in the Region contributes to several of the Board's Strategic Priorities, provides immediate emission reductions and encourages clean energy vehicle deployment in the Regional District. The changes proposed to the EV Charging Station incentive will encourage a greater uptake without increasing the cost or administrative demands of the Program. Changing the eligibility requirements to include converted vehicles demonstrates support for local green industries and encourages the permanent conversion of vehicles already on the road into emissions-free EVs. Aligning the eligibility date with the Provincial Clean Energy Vehicle program will ensure there is no confusion among residents wishing to participate in both programs.

RECOMMENDATION

Report Writer

General Manager Concurrence

CAO Concurrence

CAO Concurrence



MEMORANDUM

TO: Paul Thorkelsson DATE: June 7, 2012

General Manager, Development Services

FROM: Chris Midgley FILE:

Manager, Energy and Sustainability

SUBJECT: Provincial Incentives for Electric Vehicle Planning and Infrastructure

PURPOSE

To update the committee on Provincial incentives for electric vehicle planning and charging infrastructure.

BACKGROUND

For 2012, the RDN has budgeted \$35,000 to undertake an electric vehicle readiness plan and to invest in supporting infrastructure at RDN facilities. The source of the funding for this work is the Community Works Fund, which necessitates that the project focuses exclusively on Electoral Areas.

Since approving this project, the Province of BC has announced a planning and infrastructure incentive program to encourage increased deployment of electric vehicles across the Province. The Provincial funding provides up to 75% of eligible planning costs to a maximum of \$6,000 plus \$0.10 per capita. For the Regional District of Nanaimo, this would total approximately \$20,800. Applicants must also commit to installing one Level 2 charging station per \$1,000 received in planning support. Charging stations identified in the planning process will be pre-approved for the \$4,000 infrastructure incentive.

The opportunity here relates to the fact that the budget for the RDN Electric Vehicle Readiness Program can leverage support from the Provincial program, enabling the completion of a Regional Electric Vehicle Readiness Plan that includes the member municipalities. Senior staff at member municipalities have expressed interest in pursuing for a collaborative Electric Vehicle Readiness Plan.

The deadline to submit an application is June 27th, with completion of the planning phase by November 30th, 2012. Charging stations funded through the program must be installed by March 31st, 2013.

The RDN is prepared to lead the application process, and will coordinate with staff at the member municipalities as necessary to complete an application that best suits regional needs and expectations. Neither Board nor Committee endorsement is required to complete the application, though a Sustainability Select Committee recommendation to proceed with an application would demonstrate a commitment to the initiative at the highest levels of leadership in the organization.

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ALTERNATIVE

- 1. That the RDN Board support a regional scale application for Provincial incentives for electric vehicle planning and charging infrastructure.
- 2. That this report be received for information purposes only.

FINANCIAL IMPLICATIONS

The Province of BC is providing up to \$6,000 plus \$0.10 per capita for eligible applicants. Successful applicants are expected to install one charging station per thousand dollars in planning assistance, and each station identified in the planning phase will be pre-approved for up to \$4,000 in infrastructure incentives.

Additional to this funding is \$35,000 already budgeted for an RDN Electric Vehicle Readiness Plan. Funding support from the Province will allow a greater portion of the RDN budget to focus on policy development such as zoning OCP amendments (an ineligible cost for the program, but an essential component to a comprehensive plan), as well as RDN-owned infrastructure. This in turn reserves a greater portion of the Provincial incentives for planning in municipal jurisdictions and infrastructure owned by other interests, such as local malls or other parties identified through the planning process

SUSTAINABILITY IMPLICATIONS

Widespread adoption of electric vehicles is critical if transportation related greenhouse gas emissions are ever to be reduced. The lack of available charging infrastructure is one factor that inhibits the widespread adoption of electric vehicles. The RDN has recognized this and has committed resources to determining how best to prepare the region for electric vehicles, as well as to direct incentives to early adopters through the green building incentive program. The Province has also recognized this challenge and is moving aggressively to overcome the lack of publicly available charging infrastructure with a significant funding program.

In addition, the Region is uniquely positioned to capitalize on the economic benefits of supporting an emerging and growing sector. There is already a manufacturer of electric vehicles and conversion kits for conventional vehicles located in Electoral Area 'F', as well as an importer of slow speed neighbourhood electric vehicles in the City of Parksville. Partnering with the Province to support this entrepreneurial leadership in the region demonstrates a strong local government commitment to implementing solutions to build a more resilient, sustainable region.

SUMMARY/ CONCLUSIONS

An opportunity has recently arisen to pursue Provincial funding to plan and prepare for increased deployment of electric vehicles, and to provide incentives for electric vehicle charging infrastructure. This complements the RDN's intention to develop a regional Electric Vehicle Readiness Plan. The RDN is prepared to lead an application process that will meet the needs and expectations of member municipalities and the Regional District. The result of this work will be a clearer understanding of the steps necessary to make electric vehicles more accessible to early adopters in the region, and support wider electric vehicle use with necessary infrastructure. Up to \$20,800 could be available from the Province for planning, plus an additional \$4,000 for each charging station up to 20 charging stations.

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RECOMMENDATION

That the RDN Board support a regional scale application for Provincial incentives for electric vehicle planning and charging infrastructure.

General Manager Concurrence

CAO Concurrence

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