

City of Richmond

Report to Committee

To:

General Purposes

Date:

August 20, 2007

From:

George Duncan

File:

10-6125-07-02/2007-Vol

Chief Administrative Officer

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Re:

Recommended Strategic Climate Change Response Agenda for the City of

Richmond

Staff Recommendation

- 1. That Council adopt the Climate Change Response Agenda as outlined in Attachment 3, and,
- 2. That staff report back to Council on a recommended level of service for advancing the Climate Change Response Agenda based on the findings from the City's enhanced sustainability initiative and its review of the City's sustainability needs and priorities, and,
- 3. That Richmond Council support the UBCM Climate Change Charter in principle.

George Duncan

Chief Administrative Officer

(4338)

Att. 3

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Policy Development & Corp	oorate Progra	ms Y ⊠N □ 1)2	41
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO	YES	NO

Staff Report

Origin

The City of Richmond has pursued a number of initiatives regarding climate change. Most recently, Council approved a study to assess the climate change risks and vulnerabilities specific for Richmond.

Effectively responding to climate change is a long-term and challenging endeavour. A key challenge for the City of Richmond will be to integrate new ideas and potential action initiatives in a manner which is cost-effective and results in meaningful benefits for the local community.

To support this goal, this report recommends that the City adopt a strategic approach to climate change response and presents a proposed overarching Response Agenda for guiding City action.

This report also provides background and recommendation on the proposed UBCM Climate Change Charter.

Background

Climate Change Response Needs

To a large extent, efforts to address climate change have been focussed on reducing sources of greenhouse gas (GHG) emissions - the main contributors of climate change. Recent scientific assessments, however, have indicated that while climate change impacts can be reduced through source reduction activity, impacts are no longer completely unavoidable. As a result, it is increasingly being recognized that climate change response strategies need to direct action towards both:

- problem minimization (e.g., reducing the degree by which climate change will occur) and
- impact management (e.g., reducing severity and scope of impacts, and adapting to unavoidable change).

Opportunities

While climate change poses a significant challenge, it can also present opportunities for advancing sustainable community initiatives. This is because many specific action initiatives which reduce impacts of climate change naturally support the emergence of greater sustainable living (e.g., live-work-play communities, less reliance on the automobile, high performance buildings, ecological productive green space, strengthened local food security, locally resilient economies, community safety, etc.).

Given current levels of concern and interest in climate change, it is anticipated that the climate change agenda will present leveraging opportunities (e.g., senior government programs, funding, partnerships, etc.) for pursuing progressive community action and advancing local sustainability.

Current City of Richmond Initiatives - Climate Change & Sustainability

The City is currently in the process of developing an enhanced sustainability initiative aimed at advancing corporate sustainability performance. This sustainability initiative encompasses a broad range of topics and objectives, all essential for the long-term well-being of the Richmond community. Climate change response is one of the many important areas of consideration under the broader sustainability umbrella.

To-date, the City of Richmond has undertaken a number of initiatives related to climate change (Attachment 1). Many of these initiatives have been directed towards greenhouse gas reduction. However, the City has recently initiated action in strategic adaptation planning with the undertaking of a Richmond Climate Change Risk and Vulnerability Assessment. This study will identify potential risk areas for Richmond from climate change impacts and identify priorities for future City action. The City has also conducted various community engagement initiatives. Most recently, the City has partnered with the BC Sustainable Energy Association to support the delivery of climate change workshops in Richmond schools.

UBCM Climate Change Charter

A major theme of this year's upcoming UBMC Convention is Climate Change. The UBCM have been working with the Province and have prepared a Climate Action Charter (Attachment 2). This Charter establishes a joint local-provincial commitment to climate change and greenhouse gas reduction. The commitments for local government are:

- (i) be carbon neutral in respect of operations by 2012¹,
- (ii) measure and report on community's GHG emissions profile; and
- (iii) create complete, compact, more energy efficient rural and urban communities²

The Charter is to be signed at the Convention by the Province and UBCM and local governments are provided with the opportunity to sign as well.

Analysis

Climate Change - The Need for A Strategic Approach

It is widely recognized that climate change is a cross-cutting issue, with the potential to significantly affect a wide range of community interests, including flood management, extreme weather response, energy, transport, agricultural viability, forestry, water resources, natural areas and processes, and community health. Further complexity arises from the continually evolving science, the limited assessment of impacts at the local level and the layers of action that needs to be taken across all levels of government and society.

Solid waste facilities regulated under *the Environmental Management Act* are not included in operations for the purposes of this Charter.

Examples: foster a built environment that supports a reduction in car dependency and energy use, establish policies and processes that support fast tracking of green development projects, adopt zoning practices that encourage land use patterns that increase density and reduce sprawl.

Such complexity requires that climate change response strategies by local governments need to be well-considered. Action taken at the local level needs to be evaluated and directed towards those initiatives that best leverage opportunities and meet local needs and priorities. Specific local government action also needs to optimize use of limited community resources, focus on initiatives within municipal responsibility and help ensure that appropriate action is being taken by all parties.

Given the degree of inherent complexity, responding effectively to climate change requires the adoption of a sustained effort and strategic approach.

Recommended Approach – Adoption of a Strategic Response Agenda

The City of Richmond has undertaken a wide range of action towards addressing climate change, including international policy advocacy, GHG emission reduction, sustainable community development, early adaptation planning and community outreach. While the City has embarked on a number of important action items, individual initiatives have largely been pursued in isolation and have not been part of an overarching strategic approach.

Accordingly, in order to focus future action towards priority areas in a comprehensive manner which results in meaningful impact, this report recommends that the City adopt an overarching Climate Change Response Agenda.

The proposed Response Agenda, presented in Attachment 3, is based on the 3 pillars of action areas:

- 1. **Empower** help the corporation and community understand and respond to climate change and work to ensure that other levels of government and sectors of society are taking adequate action
- 2. **Prevent** reduce the source of the problem (GHG reduction/ sustainable development initiatives)
- 3. **Prepare** mitigate impacts and better enable the corporation and community to adapt to unavoidable changes (e.g., increased flood protection measures, agricultural resiliency strengthening, sustainability-based development, etc.).

Defining characteristics of the proposed Response Agenda include:

- sets a simple and engaging framework that is long-term and strategic;
- strives to balance durable efforts to reduce emissions with preparations for the impacts of a climate change;
- places priority on engagement with the wider community (e.g., City corporation, public, industry, business, other levels of government, etc.) in recognition that action must be taken by all.

The Response Agenda outlines current City action and identifies a strategic pathway for concurrent advancement in all three pillars. Each pillar identifies the need for the development of detailed strategic plans, outlining objectives, progress measures and action initiatives.

The Response Agenda is intended to establish an overall picture of City of Richmond climate change response action and enable the City to convey its overarching response agenda. This in turn, is anticipated to:

- establishes a framework for managing and strategically advancing corporate initiatives related to climate change,
- provide a communication tool for **showcasing leadership**, conveying the City's response strategy to the broader community, and **inspiring action** from others
- more effectively enable the City to capitalize on opportunities for advancing action initiatives, including positioning Richmond to get the best possible access to potential climate change funding and partnership opportunities
- better enable Richmond to monitor and track progress of the degree of corporate response
- **support** the City's sustainability initiative.

The rate of which the City advances through the proposed Response Agenda is dependent upon available resources. Currently, climate change response planning is being conducted as an additive initiative to existing work programs. However, it is anticipated that to make the most meaningful advancement in the overall Response Agenda and pursue a least-cost path for the City, additional resources (e.g., expertise, financial, etc.) will likely be required.

At this point, however, recommended timelines and associated service levels have not been identified. This is because the City's sustainability initiative is currently evaluating the suite of corporate sustainability needs and exploring financial measures for implementation. It is recommended that the rate of advancement of the Climate Change Response Agenda be determined in consideration of the City's enhanced sustainability initiative and a review of overall corporate sustainability priorities and needs.

It is recommended that the Climate Change Response Agenda be adopted in advance of the sustainability initiative as a means to:

- demonstrate corporate leadership and establish an overall picture of City of Richmond's intentions with respect to climate change
- establish an overarching framework for better managing existing initiatives,
 evaluating new initiatives as part of an overall strategy and guiding future action towards Richmond's priority areas
- establish a foundation for meeting climate change challenges in a time—relevant manner
- provide input into the sustainability initiative on climate change response needs; and,
- better enable the City to leverage climate change opportunities.

If adopted, the Climate Change Response Agenda will be shared with the Richmond School Board and other interested parties.

Recommended Approach – UBCM Charter

Staff recommend that the City of Richmond support the UBCM Charter in principle. However, the City of Richmond has only been advised of this proposal in September and has not had the opportunity to assess the implications of carbon neutrality for Richmond. Further clarification is needed on:

- what is meant by carbon neutral³
- · what support and funding is available
- · what strategies are available with BC Hydro and other major partners
- what are other priorities for climate change response, and other sustainability focus areas are required.

A key consideration is to ensure that whatever commitments the City makes, that we are in a position to fulfill them in a robust and credible manner, and that these commitments support the suite of City priorities and strategic approach.

Staff recommend that the Charter be available for signature over the next 6 months and the City of Richmond make a decision on support in the Fall of 2007.

Alternatively, if Council would like to sign at the Convention, consideration could be given to adopting a similar strategy as the District of Saanich. The District has committed to carbon neutral by the year 2008. This is to be met by depositing funds to offset municipal GHG emissions into Carbon Neutral Reserve Fund. This may not be considered to be carbon neutral to all given that it does not actually balance GHG emission with GHG reduction.

Financial Impact

There is no financial impact associated with the adoption of the proposed Climate Change Response Agenda. Needs for additional resources will be assessed as part of the City's enhanced sustainability initiative and provided to Council for consideration at a later date. Immediate costs would be expected for pursuing climate neutrality.

Conclusion

Early efforts towards addressing climate change have predominately focussed towards reducing greenhouse gas emissions. Recent scientific evidence has now indicated that climate change is no longer completely preventable. As such, it has become clear that climate change response is going to require a much greater and more comprehensive effort, necessitating initiatives to continue to reduce emissions while at the same time seeking action to best address unavoidable impacts.

³ There are a number of models and definitions of carbon neutral.

To assist the City in meeting these new challenges, this report recommends the City of Richmond adopt an overarching Climate Change Response Agenda based on 3 concurrent pillars of action: *Empower*, *Prevent* and *Prepare*.

It is envisioned that this overarching framework will strengthen the current City's action by embedding a strategic and comprehensive approach towards corporate climate change response, and succinctly conveying the City of Richmond's action agenda.

A UBCM Climate Change Charter is being presented at this year's Convention. This Charter establishes a non-legally binding commitment of local governments to achieve carbon neutrality in municipal operations by 2012. Staff recommend that the City of Richmond support the Charter in principle.

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Margot Daykin, M.R.M. Assistant Manager - Environmental Programs

MD:md (4130)

Attachment 1: Overview - City of Richmond's Climate Change Action Initiatives

City of Richn	City of Richmond: Climate Change Action Initia	ange Action Initiatives	
Action Area			Current Initiatives
		Local Community Outreach	Anti-idling School Campaign
Empower	Community	Raise awareness and support community	Recycling and Water Conservation Education
•	Engagement	action for reducing energy consumption	1-Tonne Community Challenge (complete)
		and greeninouse gas (Uniu) emissions	Alternative Transportation Activities (e.g., Island City by Bike, etc.)
			Climate Change School Program
	Supporting	International Government Liaison	Council support for Kyoto Protocol
Prevent	Global Action	Support international efforts for reducing GHG emissions globally	Council endorsement of the Toronto Declaration and Communiqué
			Urban development policies for reducing car-dependency
	Sustainable Community	Community Planning Reduce energy consumption and GHG	(OCP policy for reducing urban sprawl and encouraging compact complete communities, supporting light rail transit and encouraging alternative forms of transportation, bike and greenway planning, etc.)
	riaming	emissions through community planning, transportation-demand management and	Dedication of Richmond Nature Park
		natural resource protection.	Tree Protection Bylaw
			ESA Development Permit
			Urban Forest Management Strategy
	Richmond	City Servicing	Water Metering Program
	Community GHG Emissions Reduction	Reduce the amount of GHG emissions produced from the consumption and production of potable water. Reduce the amount of GHG emissions produced from landfills.	Curbside Recycling Program

City of Richm	ond: Climate Cha	City of Richmond: Climate Change Action Initiatives	
Action Area			Current Initiatives
	Richmond Comorate GHG	Procurement Reduce energy consumption and GHG emissions from City supplies	Environmental Purchasing Policy/Guidebook
Prevent	Emissions	Building & Lighting Energy	High Performance Building Policy ¹
	Keduction	Reduce energy consumption and GHG	Energy Management Program
		emissions from City buildings and facilities	Use of LED Street Lighting
			Green Fleet Policy
		Green Fleet	Resolution to Purchase Hybrids/Smart Cars
		Reduce City vehicle fleet's GHG	Works Yard Idle-Free Campaign
			City Car-Pool program
			Use of 5 % Biodiesel
		Engineering Services Reduce energy consumption and GHG emissions of engineering services	Use of Directional Drilling Practices (reduces material needs and transport of material to site)
			Biodiesel Demonstration Project
	Research &	Advancing GHG Emission Reduction	District Geothermal Utility System Exploration
	Innovation		Eco-Industrial Networking Study

Target established to meet or exceed LEED gold for new facilities > 2000 m2 and meet performance standards of LEED Silver certification as a minimum requirement for major renovations to existing facilities and new City Buildings smaller than 2000 m2. A variety of varying initiatives are undertaken to meet LEED standards and may include measures such as use of alternative energy sources (solar, geothermal), energy efficiency techniques (daylighting, energy efficient lighting, etc.), stormwater management (detention ponds, green roofs, etc.), water conservation techniques (e.g., low-water use toilets/fixtures; use of grey water, etc.) and use of environmentally-preferred products (locally produced, low toxicity, etc.).

City of Richm	ond: Climate Cha	City of Richmond: Climate Change Action Initiatives	
Action Area			Current Initiatives
Prepare	Strategic Planning	Understanding Richmond Risks & Vulnerabilities	Climate Change Scoping Study
		Flood Risk Management	Flood Management Strategy
	Protection Measures	Flood Protection Measures	Dyke Management Program

Attachment 2: UBCM Climate Change Charter

THE BRITISH COLUMBIA CLIMATE ACTION CHARTER BETWEEN

THE PROVINCE OF BRITISH COLUMBIA (THE PROVINCE)

AND

THE UNION OF BRITISH COLUMBIA MUNICIPALITIES (UBCM)

AND

SIGNATORY LOCAL GOVERNMENTS

(THE PARTIES)

(1) The Parties share the common understanding that:

- (a) Scientific consensus has developed that increasing emissions of human caused greenhouse gases (GHG), including carbon dioxide, methane and other GHG emissions, that are released into the atmosphere are affecting the Earth's climate;
- (b) the evidence of global warming is unequivocal and the effects of climate change are evident across British Columbia;
- (c) reducing GHG emissions will generate environmental and health benefits for individuals, families, and communities;
- (c) climate change and reducing GHG emissions are issues of importance to British Columbians;
- (d) governments urgently need to implement effective measures to reduce GHG emissions and anticipate and prepare for climate change impacts;
- (e) protecting the environment can be done in ways that promote economic prosperity; and
- (f) it is important to take action and to work together to share best practices, to reduce GHG emissions and address the impacts of climate change.

(2) The Parties acknowledge that each has an important role in addressing climate change and that:

- (a) The Province has taken action on climate change, including commitments made in the 2007 Speech from the Throne, the BC Energy Plan, and the Western Climate Initiative on climate change;
- (b) Local Governments have taken action on climate change, including planning livable, sustainable communities, encouraging green developments and transit oriented developments, and implementing innovative infrastructure technologies including landfill gas recapture and production of clean energy; and
- (c) these actions create the foundation for the Parties to be leaders in affecting climate change.

(3) This Charter acknowledges that:

(a) The interrelationship between each Order of Government's respective jurisdictions and accountabilities with respect to communities, and activities related to and within communities, creates both a need and an opportunity to work collaboratively on climate change initiatives;

- (b) both Orders of Government have recognized a need for action, both see that the circumstances represent a Climate for Change in British Columbia, and both are responding; and
- (c) the actions of each of the Parties towards climate change will be more successful if undertaken jointly with other Parties.

(4) The Parties share the common goals of:

- (a) Fostering co-operative inter-governmental relations;
- (b) aiming to reduce GHG emissions, including both their own and those created by others;
- (c) removing legislative, regulatory, policy, or other barriers to taking action on climate change;
- (d) implementing programs, policies, or legislative actions, within their respective jurisdictions, that facilitate reduced GHG emissions, where appropriate;
- (e) encouraging communities that are complete and compact and socially responsive; and
- (f) encouraging infrastructure and a built environment that supports the economic and social needs of the community while minimizing its environmental impact.

(5) In order to contribute to reducing GHG emissions:

- (a) Signatory Local Governments agree to develop strategies and take actions to achieve the following goals:
 - (i) being carbon neutral in respect of their operations by 2012, recognizing that solid waste facilities regulated under *the Environmental Management Act* are not included in operations for the purposes of this Charter.
 - (ii) measuring and reporting on their community's GHG emissions profile; and
 - (iii) creating complete, compact, more energy efficient rural and urban communities (e.g. foster a built environment that supports a reduction in car dependency and energy use, establish policies and processes that support fast tracking of green development projects, adopt zoning practices that encourage land use patterns that increase density and reduce sprawl.)
- (b) The Province and the UBCM will support local governments in pursuing these goals, including developing options and actions for local governments to be carbon neutral in respect of their operations by 2012.

(6) The Parties agree that this commitment to working together towards reducing GHG emissions will be implemented through establishing a Joint Provincial-UBCM Green Communities Committee and Green Communities Working Groups that support that Committee, with the following purposes:

- (a) To develop a range of actions that can affect climate change, including initiatives such as: assessment, taxation, zoning or other regulatory reforms or incentives to encourage land use patterns that promote increased density, smaller lot sizes, encourage mixed uses and reduced GHG emissions; development of GHG reduction targets and strategies, alternative transportation opportunities, policies and processes that support fast-tracking of green development projects, community gardens and urban forestry; and integrated transportation and land use planning;
- (b) to build local government capacity to plan and implement climate change initiatives;
- (c) to support local government in taking actions on becoming carbon neutral in respect of their operations by 2012, including developing a common approach to determine carbon neutrality for the purposes of this Charter, identifying carbon neutral strategies and actions appropriate for the range of communities in British Columbia and becoming reporting entities under the Climate Registry; and,
- (d) to share information and explore additional opportunities to support climate change activities, through enhanced collaboration amongst the Parties, and through encouraging and promoting climate change initiatives of individuals and businesses within communities.

(7)	Once a common approach to carbor will implement their commitment in	n neutrality is developed under section (6)(c), Signatory Local Governments n 5 (a) (i).
(8)	To recognize and support the GHG Charter, Signatory Local Government and commitments as an appendix to	emission reduction initiatives and the climate change goals outlined in this ents are invited by the other Parties to include a statement of their initiatives of this Charter.
(9)	This Charter is not intended to be legal effect.	egally binding or impose legal obligations on any Party and will have no
Signe	D on behalf of the PROVINCE OF BRIT	гіsh Columbia by:
	onourable Gordon Campbell	Date: September 26, 2007
Premie	er of British Columbia	
of Con Respon	onourable Ida Chong Minister nmunity Service and Minster nsible for Senior's and n's Issues	Date: September 26, 2007
Signe	D on behalf of the Union of Britisii	COLUMBIA MUNICIPALITIES by:
Presid	illor Brenda Binnie and ent of the Union of British bia Municipalities	Date: September 26, 2007
Signe	D on behalf of the SIGNATORY LOCA	L GOVERNMENT:

Date_____

(NAME OF LOCAL GOVERNMENT)

by:

Mayor/Chair

Appendix GHG reduction initiatives or commitments of Signatory Local Government

Note: Local Governments that choose to become Signatories may also choose to provide a statement of their individual commitments in a customized addendum to the main body of the Charter. Below is a sample version of the proposed addendum

SAMPLE

Addendum to The British Columbia Climate Change Action Charter For [Name of Local Government] is committed to

1. Implementing existing plans

Local Governments could list here plans they have developed and are in the process of implementing; for example:

- Community energy plan
- · Greenhouse gas emissions inventory
- Official Community Plan Smart Growth
- Community Action on Energy Efficiency Initiative (CAEE)
- Partners for Climate Protection, Federation of Canadian Municipalities
- District Energy System
- Eco-Industrial Project
- Transit Oriented Development Plan
- Landfill Gas Utilization

2. Continue to pursue activities

Local Governments could list here recent projects they have implemented; for example:

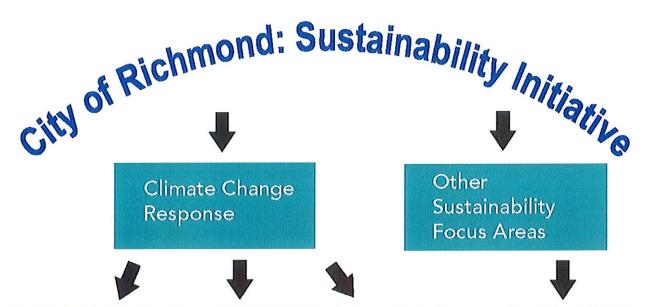
- · Bio-diesel fleet vehicle conversion
- E3 Fleet Program
- Greenhouse Gas Reduction Strategy
- Carbon Neutral Municipal Operations
- Organics Recovery
- Recycling and waste management plan
- Greenhouse gas local action plan
- Energy Efficient Municipal Operations
- Employee car-pooling
- Air quality planning

3. Preparing new plans, bylaws, policies, etc.

Local Governments could list here plans, bylaws, policies they are committed to develop; for example:

- Plan for being carbon neutral in respect of their operations by 2012
- Anti-idling bylaw
- Green Buildings BC for Local Governments
- Smart Growth Development Checklist
- Green Building Program Built Green and LEED standards
- Micro-generation projects (hydro, wind power, etc)
- Sustainable Community Servicing Plan
- Green Roof Policy
- · Greywater recycling policy and standards
- Pedestrian and transit friendly community design
- Local Purchasing Policy
- Streamlined Green Building Application Process

Attachment 3: City of Richmond - Climate Change Response Agenda



Empower

Corporate & Community Engagement: Enable Action

Phase 1: Various Outreach Initiatives

- Phase 2: Strategic Corporate Engagement Plan & Implementation
- Phase 3: Strategic Community Engagement & Implementation
- Phase 4: Report, Review & Improve

Prevent

Problem Minimization: Reduce GHG Emissions

Phase 1: Various GHG Reduction Action

- Phase 2: Measure (Conduct GHG Community and Corporate Inventory)
- Phase 3: Corporate GHG Reduction Plan (targets, measures, actions, implementation)
- Phase 4: Strategic Richmond Community GHG Reduction Plan (targets, measures, actions, implementation)
- Phase 5: Report, Review & Improve

Prepare

Impact Mitigation & Adaptation: Reduce Severity of Impacts

Phase 1: Richmond Vulnerability Assessment

- Phase 2: Mitigation & Adaptation Strategic Plan
- Phase 3: Implementation
- Phase 4: Report, Review & Improve

Examples

- · poverty alleviation
- sustainable economic development
- · agricultural viablity
- flood security
- etc

denotes current City of Richmond action

Sept 2007