City of Richmond

Report to Committee

To:	General Purposes Committee	**Date:**	August 27, 2012
From:	Cecilia Achiam, MCIP, BCSLA Interim Director, Sustainability and District Energy	**File:**	01-0370-01/2012-Vol 01
Re:	**Provincial Carbon Tax Review – Recommended Input from the City of Richmond**		

Staff Recommendation

That as input to the Provincial carbon tax review, a letter be sent to the Minister of Finance, with copies to the Premier, Minister of Environment, UBCM and Metro Vancouver Board of Directors, conveying that:

1. The City of Richmond supports the continuation of the carbon tax as a means to reduce greenhouse gas emissions with the understanding that:
   a. the tax is applied in a manner that offsets disproportionate impacts to low-income or other vulnerable populations;
   b. the tax is applied in a manner that does not result in a loss in competitiveness for local businesses; and
   c. the Province continues the Climate Action Revenue Incentive Program (CARIP) for local governments.

2. The City of Richmond requests that the Province conduct detailed studies and incorporate further public consultation and engagement with local governments and other stakeholders, to evaluate appropriate tax rates, scope and structure; and

3. The City of Richmond requests that the Province direct a portion of the carbon tax revenue, and/or establish alternative funding sources, to support local government actions and other investments that will reduce community emissions.

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Att. 1

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Finance Division	☑		
Community Social Development	☑		
Transportation	☑		
REVIEWED BY SMT SUBCOMMITTEE	INITIALS:	REVIEWED BY CAO	INITIALS:

Staff Report

Origin

The Province is seeking written submissions to contribute to its review of the carbon tax. This report responds to the Province's request and supports the following Council Term goal pertaining to sustainability:

> Council Term Goal #8.1: "*Continued implementation and significant progress towards achieving the City's Sustainability Framework, and associated targets.*"

Background

About the BC Carbon Tax

The BC carbon tax was implemented on July 1, 2008 as part of BC's efforts to reduce greenhouse gas (GHG) emission. The carbon tax places a 'price' on GHG emissions such that, in the long run, the market will respond in a way that emissions will be inherently reduced and the climate better protected. The tax applies to a portion of BC's greenhouse gas emissions, namely those arising from the burning of fossil fuels. This accounts for approximately 70% of GHG emissions. The carbon tax does not apply to GHG emissions resulting from industrial processes.

The carbon tax was designed to be revenue neutral, with tax revenues returned to taxpayers through reductions in other taxes. A portion of the carbon tax revenue is used for personal income tax cuts. In this regard, the BC carbon tax reduces tax on income while placing a cost on pollution. The tax revenue also funds corporate tax cuts to reduce impacts to business. Revenue is also directed at providing tax credits to populations who are impacted to a greater degree (e.g., low-income populations, northern and rural homeowners).

The tax was introduced at an initial rate of \$10/tonne of CO_2e[1] and has increased, as planned, by \$5/tonne per year until July 1, 2012. The current rate is \$30/tonne. This works out to be 7.2 cents per litre of gasoline, 8.3 cents per litre of diesel, and \$1.50 per gigajoule of natural gas.

The 2010/2011 carbon tax revenue was \$741 million and the cost of tax reduction was \$865 million. The 2012/2013 forecasted carbon tax revenue is \$1.1 billion and the cost of tax reductions is \$1.2 billion. Further background on the BC carbon tax, including information on carbon tax rates in other jurisdictions, is provided in **Attachment 1**.

BC Carbon Tax Review

The Province announced a review of the carbon tax in the 2012 budget and will be assessing the impact of the policy as part of its 2013 budget preparations. The review is to cover all aspects of the carbon tax, including revenue neutrality and B.C. businesses competitiveness. No further information is being provided on the nature of the review (e.g., level of detail, ongoing consultation, etc.) or on studies that evaluate the current level of effectiveness and recommendations for future consideration.

[1] CO2e, or carbon dioxide equivalent, is the standard unit used to measure greenhouse emission amounts.

The Province indicated that it was accepting written submission on the carbon tax from July 1, 2012 to August 31, 2012. A letter was sent by the Mayor to the Minister of Finance indicating that Richmond Council would be considering the matter in September. The Minister of Finance office has advised that City of Richmond comments will be provided to Ministry staff for consideration.

Analysis

BC Carbon Tax – Local Considerations

1. Reducing Greenhouse Gas Emissions

Carbon taxes are generally considered to be important measures for reducing GHG emissions and contributing towards safeguarding communities from potential adverse economic, social and environmental conditions that may arise from climate change. While it is too early to be certain, initial reviews suggest that the BC carbon tax is being effective in reducing greenhouse gas emissions (**Attachment 1**).

2. Considerations for Vulnerable Communities

Carbon taxes support reducing impacts to third parties and future generations. By embedding the cost of GHG emission production into today's transactions, carbon taxes help better ensure that those who receive a given benefit are responsible for paying the full costs. In this regard, carbon taxes help reduce costs for future communities.

However, carbon taxes can also result in disproportionate social impacts. Although they have overall lower carbon footprints, lower-income populations experience greater impacts from a carbon tax relative to higher income households. This is because they spend a greater proportion of their income on energy, have lower ability to absorb additional costs for basic living expenses and less ability to invest in newer energy efficient technologies and alternatives (e.g., hybrid cars, high performance furnaces, etc.). Populations living in northern and rural communities also tend to experience greater proportional impacts. To address these discrepancies, a portion of the BC carbon tax revenue is returned to low-income and other vulnerable populations through tax credits. However, it is not known whether these measures are sufficient and further information is needed to evaluate the effectiveness of remediation measures.

3. Considerations for Business

Limited information was found on the economic impact of the BC carbon tax. One study reported that it was unlikely that the BC carbon tax had adversely affected the province's economy given that British Columbia's GDP growth has outpaced the rest of Canada's (by a small amount) since the carbon tax came into effect. The study noted that the finding in BC fits with evidence from other countries where carbon tax shifts, in place for over a decade, resulted in neutral or slightly positive effects on GDP.

A portion of the revenue from the BC carbon tax is returned to businesses through annual tax cuts and credits. In Spring 2012, the Province provided a one-time tax rebate to BC greenhouse growers to help offset disproportionate impacts from the carbon tax. It is not known whether the measures currently in place are sufficient in addressing disproportionate impacts to specific businesses. The Province has advised that the carbon tax review will include a comprehensive assessment on the competitiveness of BC businesses and in particular, B.C.'s food producers.

4. Implications for City of Richmond Policy – Community-Wide GHG Reduction Targets

Under Provincial legislation, local governments are required to establish targets and incorporate them into their Official Community Plans. Richmond Council has met this legal requirement and has established a GHG emission reduction target of 33% reduction from 2007 levels by 2020. As an important GHG emission reduction measure, the BC carbon tax is helping to achieve targets established by the City of Richmond and other local governments.

5. Implications for City of Richmond Policy – Corporate Carbon Neutrality Commitment

The BC carbon tax has implications for operating budgets for local governments. The carbon tax provides an incentive for local governments to reduce costs from lower consumption of taxed fuel and helps increase the business case for investing in less-GHG intensive operations.

At the same time, the carbon tax can also increase immediate costs and/or provide revenue stream for supporting corporate GHG emission reduction. Through the CARIP, those local governments who have signed the BC Climate Action Charter[2] are reimbursed for the amount paid in carbon tax. The City of Richmond has signed the BC Climate Action Charter and has established a dedicated account, the City's Carbon Neutral Provisional Account, where the City's carbon tax reimbursements are directed. This account serves as an important funding source to support the City in meeting its carbon neutral commitments.

6. Considerations Pertaining to Revenue Distribution

Revenue from carbon taxes is distributed in various ways among the jurisdictions that have enacted them (**Attachment 1**). In some cases, revenue is used to support climate mitigation actions. Whereas the BC carbon tax is a mechanism for deterring consumption of high-GHG emitting energy sources (i.e., fossil fuels), it currently does not help fund community investments that provide alternatives (e.g., transit upgrades, transportation-demand side measures, large-scale renewable energy projects, enhanced recycling services, etc.).

Currently, local governments and other institutions such as TransLink, do not have the level of funding that is needed to realize low-GHG emission communities As such, there is increasing interest to explore options for using a portion of the BC carbon tax revenue to support community climate mitigation actions. A change in this way would mean that the carbon tax would serve both as a deterrent (i.e., through added costs to high-GHG emission sources) and as an enabler (i.e., by providing funding to support community-based low-GHG alternatives).

7. Considerations Pertaining to Tax Rate and Scope

Details on the BC carbon tax rate and scope are provided in **Attachment 1**. As noted in the attachment, recommendations have been made to increase the carbon tax rate in order to increase its effectiveness and better meet Provincial and local GHG emission reduction targets. Increased rates would also provide greater options for providing revenue to support desired GHG emission reduction action. However, further assessment would be needed on potential associated socio-economic impacts and whether these could be adequately managed through tax credits or other mechanisms.

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[2] The BC Climate Action Charter is a voluntary agreement whereby local governments commit to being carbon neutral in their operations. The CARIP provides a mechanism to ensure that local governments do not pay twice for their emissions (e.g., through the carbon tax and through carbon neutral commitment requirements).

There may also be merit, given the value in supporting emission reductions across all sources and ensuring fairness, in assessing whether more emission sources should be included in the carbon tax. Greater scope may also mean greater opportunity for revenues to support GHG reduction action. However, further study is again necessary as the option to broaden the scope of the carbon tax should be evaluated against other alternatives, including proceeding with a cap-and-trade program as originally planned.

Input provided by Metro Vancouver

A letter has been sent by the Metro Vancouver Board to the Minister of Finance conveying that:

1. Metro Vancouver Board supports the carbon tax, and
2. Metro Vancouver requests that the Province:
    a. Provide a 90 day extension to the comment period to allow local governments to conduct a more thorough review
    b. Earmark a portion of the carbon tax revenue and other funding sources for local government actions that will reduce community emissions; and
    c. Continue to increase the carbon tax provided that:
        - Impacts to low income households are mitigated,
        - A portion of the funding is dedicated to a regional climate action fund for GHG emission reduction projects in the region,
        - Local governments continue to receive CARIP funds.

Recommended Action – Proposed Input from the City of Richmond

1. Provide Support for the Carbon Tax

Given that it is regarded as an effective GHG emission reduction measure, it is recommended that the City of Richmond express its support for the continuation of the carbon tax with the understanding that:

a. the tax is applied in a manner that offsets disproportionate impacts to low-income or other vulnerable populations;
b. the tax is applied in a manner that does not result in a loss in competitiveness for local businesses; and
c. the Province continues the CARIP program for local governments.

2. Request that Detailed Studies be Conducted with Public Consultation and Engagement with Local Governments and other Key Stakeholders

Given the need for more assessment information, it is recommended that the City of Richmond request that the Province undertake detailed studies to better support decision-making pertaining to tax rate and scope. It is envisioned that the studies would evaluate the impacts (positive and negative) of the carbon tax since its inception and model potential benefits and costs in the future. The consultation process would be designed to enable the public, local governments and other key stakeholders to review the findings and provide further input.

3. Request that Carbon Tax Revenue be Used to Fund Local Government Action and other Community Projects that Provide Low-GHG Emission Alternatives

Given the need for greater fiscal support to reduce greenhouse gas emissions, it is recommended that the City of Richmond request that the Province enable the carbon tax revenue, and/or establish alternative funding sources, to support local government action and other community-based projects that provide on-the-ground low-GHG emission alternatives.

Financial Impact

There is no financial impact from the recommendations made by this report.

Conclusion

In 2008, the Province introduced a tax on carbon as a means to embed costs of greenhouse gas emissions. The Province is currently conducting a review of the BC carbon tax and has requested input from interested parties. This report outlines important local implications of the tax, including it being a measure to support meeting the City of Richmond's GHG emission reduction targets. Other key considerations include the need to ensure that unintended socio-economic impacts are mitigated and that consideration be given to using carbon tax revenue to support needed transit improvements and local government GHG emission reduction action.

This report recommends that the City of Richmond express its support for the continuation of the carbon tax in a manner that protects businesses and addresses impacts to low-income and other vulnerable communities. It also recommends that the City of Richmond request that the Province undertake further studies to support decision-making pertaining to alternative tax rates and scope, and that further consultation and engagement be conducted. In addition, this report recommends that the Province be requested to review carbon tax revenue distribution with the objective of providing fiscal support for local community greenhouse gas emission reduction programs and initiatives.

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MD:md

Additional Detail Pertaining to the BC Carbon Tax

Effectiveness in Reducing Greenhouse Gas Emissions

Climate change has been projected to result in significant levels of social, environmental and economic impacts[3]. While there are differing opinions, carbon taxes are generally considered to be one of the most effective tools for reducing greenhouse gas emissions. A key factor contributing to unsustainable conditions is the failure to include the complete costs in a given transaction. These unaccounted "costs" are transferred to third parties and future generations. Carbon taxes help to address unintentional market failures pertaining to greenhouse gas emissions by formally recognizing and embedding a cost reflective of this pollution.

Various jurisdictions have used carbon taxes as a means to embed costs and support GHG emission reduction (Table 1).

Table 1: Examples of Current and Pending Carbon Taxes

Jurisdiction	Carbon Tax Rate	Start Date
Finland	\$78 (transportation fuels); \$39 (heating fuels)	1990
Norway	\$16-\$86 (depending on the sector)	1991
Sweden	\$106 (individual use) \$23 (industry)	1991
Quebec	\$3	2007
British Columbia	\$30	2008
Switzerland	\$39 (rising to \$65 in 2013)	2008
Ireland	\$26	2010
Australia	\$23	2012
South Africa	\$15	2013

Emission reductions that are explicitly due to carbon taxes are difficult to measure. Some jurisdictions have quantified reductions in overall emissions, while other jurisdictions have examined impacts that are due to programs funded by carbon tax revenues.

With only four years since first implementation, it is particularly difficult to quantify the exact impact of the BC carbon tax. The Province's own review of the carbon tax notes that:

"There are positive signs that B.C. is experiencing a shift toward less fossil fuel use and lower emissions while continuing to grow its economy. Emissions in B.C. went down by 4.5 per cent from 2007-2010, while GDP growth through 2011 was above the Canadian average. At the same time B.C. is attracting green investment and green technologies with twice the Canadian average adoption of hybrid vehicles, 20 per cent of all Canadian LEED gold building registrations since 2007, and a 48 per cent increase in clean technology industry sales from 2008-10."

[3] Overall costs and risks from climate change have been estimated to be equivalent to a loss of at least 5% of global GDP each year (Stern Review, 2007).

Another study reports that the carbon tax is likely having a positive impact given that BC fuel sales (subject to the tax) have decreased by 15% while the rest of Canada's per capita sales have increased by 1%. This report notes that economic growth per capita in BC was consistent with growth in the rest of Canada. Another study reports that while major shifts to lower-carbon sources of energy have yet to be seen in BC (likely due to the short time frame since implementation of the carbon tax), there is strong evidence showing that carbon emissions have been reduced in jurisdictions that have had carbon taxes in place for longer periods and at higher rates. These findings are consistent with local modelling research. In 2010, Metro Vancouver commissioned a study that evaluated the effectiveness of various different policy measures for reducing greenhouse gas emissions. This study found that a carbon tax is an effective measure, third only to renewable fuel standards and building code changes.

Current Scope of the BC Carbon Tax

Currently, the BC carbon tax captures about 70% of the Province's emissions. This means that a price for emissions is not being applied to approximately 30% of emissions. These are emissions from non-combustion sources which include:

- non-energy agricultural uses and wastes (@10%);
- fugitive sources which cannot currently be accurately measured (@10%);
- non-combustion industrial process emissions (@6%); and
- net deforestation (@5%).

Non-combustion industrial process emissions were going to be addressed through the implementation of a cap-and-trade system as part of the Western Climate Initiative. However, BC has yet to move forward to the implementation phase with the other partners in the Initiative (California and Quebec). The B.C. Climate Action Team has recommended that the Province either expand the carbon tax to cover all GHG emissions – including those from industrial processes – or include these additional emissions as part of a cap-and-trade system by 2012, and that this be done in light of progress made towards B.C.'s reduction targets, policies in other jurisdictions and key economic factors.

BC Carbon Tax Rate

While BC's carbon tax is a pioneer in North America, carbon pricing in other parts of the world are as high as \$106/tonne of CO_2e. Various estimates have been made on what reductions would result from differing carbon tax rates. Estimates of a rate in the range of \$50 to \$120/tonne of CO_2e have been found to be needed to achieve a 20% emission reduction. The Provincial Climate Action Team has recommended that the carbon tax be increased after 2012 if deemed necessary to meet GHG reduction targets in BC. In addition to GHG emission reduction effectiveness, other important factors, such as business competitiveness and social impacts, should also be considered.