

**Ministry of Agriculture
BRIEFING NOTE FOR MINISTER FOR DECISION**

Ref: 176476

Date: September 12, 2012

Issue: Ministry of Agriculture Submission to Ministry of Finance for Carbon Tax Review.

Background:

- The Province announced a review of the carbon tax in Budget 2012. The agriculture sector, specifically food producers, was identified as a priority. Ministry of Finance invited submissions for the review, with an August 31, 2012 deadline for submissions external to government.
- The former Minister of Finance, Kevin Falcon has publically signalled an interest in addressing the effect on agriculture as a sector but not in rescinding the tax.
- The total estimated carbon tax revenues generated from the agri-food sector (including aquaculture production) increased from \$9.1 million in fiscal 2008/09 to \$28.6 million in fiscal 2012/13 (See Table 1). This represents 1% of total sector revenues and 3% of total provincial carbon tax revenues. The primary agri-food sector contributes 0.80% to provincial GDP.
- Based on a 2007 analysis in which fuel consumption was identified as one of the commercial fishing fleet's largest operating costs s.13
- In April 2012, the province introduced the Carbon Tax Rebate Program for greenhouse vegetable and floriculture growers with \$7.6 million in carbon tax relief, for fiscal 2012-13 only.

Discussion:

- Climate change models predict increased weather variability and more severe weather events. Research conducted under the BC Agriculture Council's Climate Action Initiative indicates that climate change will have significant impacts on agricultural production and adaptation of the agri-food sector is key to the sector's long-term viability.
- The following issues should be considered in assessing options for relief to the agriculture sector:
 1. **The Cost to Government:** The agri-food sector wants carbon tax revenues collected from the sector to be fully rebated in order to help address their competitiveness issues. A full rebate to industry would reduce government revenue by an estimated \$28.6 million per year.
 2. **Expected Costs of Adaption to Climate Change:** Most agri-food sectors require adaptation strategies to deal with climate change. The key actions that industry needs to take are listed in the executive summary of "BC Agriculture Climate Change Adaption Risk + Opportunity Assessment" (attached). Some costs related to planning and developing best practices will be minimal while other costs related to the development of new technology and infrastructure could be significant.
 3. **Carbon Tax Impact Variability in Agriculture Subsectors:** The impacts of the carbon tax vary significantly by product sector because of the different amounts and types of fuels used to produce different products (See Table 2).

4. **Opportunities to Reduce Emissions:** For some, including the greenhouse and floriculture industries, mitigation rather than adaptation is the more pressing need. Opportunities identified require substantial and costly research and development in new technologies (list attached).
5. **Industry Expectations:** The agri-food sector contends that the carbon tax is reducing their competitiveness in both domestic and export markets as BC is the only jurisdiction in North America to impose such a tax. The agriculture industry is expected to request an exemption from the carbon tax.

Options: The following options reflect the discussion above:

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Proposed Next Steps:

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Approved / Not Approved

Norm Letnick, Minister

Date Signed

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Table 1

Table 1: BC Agriculture Sector – Estimated Carbon Tax

	Gasoline	Diesel	Propane	Natural Gas		
Fuel Use Volumes	<i>(megalitres)</i>	<i>(megalitres)</i>	<i>(megalitres)</i>	<i>(Gigajoules)</i>		
2006	108.5	140.4	5.6	5,716,000		
2007	109.8	178.4	6.7	5,716,000		
2008	108.6	140.2	7.5	5,716,000		
2009	93.5	131.8	5.9	5,716,000		
2010	112.2	142.1	6.0	5,716,000		
Carbon Tax Rates	<i>cents/litre</i>	<i>cents/litre</i>	<i>cents/litre</i>	<i>cents/GJ</i>		
2008/09	2.41	2.76	1.53	49.66		
2009/10	3.62	4.14	2.3	74.49		
2010/11	4.82	5.52	3.06	99.32		
2011/12	6.03	6.90	3.83	124.15		
2012/13	7.23	8.28	4.59	148.98		
Carbon Tax Payable (\$ millions)	Gasoline	Diesel	Propane	Natural Gas	Total	Cumulative
2008/09	\$2.4	\$3.8	\$0.1	\$2.8	\$9.1	\$9.1
2009/10	\$3.7	\$5.7	\$0.1	\$4.3	\$13.8	\$22.9
Estimated 2010/11	\$5.1	\$8.1	\$0.2	\$5.7	\$19.1	\$42.0
Projected Estimate 2011/12	\$6.4	\$10.1	\$0.2	\$7.1	\$23.9	\$65.9
Projected Estimate 2012/13	\$7.7	\$12.1	\$0.3	\$8.5	\$28.6	\$94.5

Sources: Statistics Canada, BC Ministry of Finance.

Table 2:

Estimated Carbon Tax Impacts on BC Agriculture – by sector

Sector	Gasoline (\$ 000)	Diesel (\$ 000)	Natural Gas (\$ 000)	Total (\$ 000)
Grain	134	429	-	563
Dairy	246	1,229	183	1,658
Cattle	552	1,708	-	2,269
Poultry	77	80	366	523
Fruit & veg	91	136	-	227
Greenhouse & nursery	135	185	2,135	2,455
Other	716	841	366	1,923
Total	1,951	4,608	3,050	9,609

Source: BC Agriculture Council

CARBON TAX REVENUE FROM THE AGRICULTURE SECTOR – OPPORTUNITIES FOR CLIMATE CHANGE ADAPTION PROGRAMS

Regional Agricultural Adaptation Strategies

Many of the most significant climate change impacts for agriculture cannot be managed at the farm level alone. Broad based planning and action are required for adaptation in a number of areas including effective management of: water and land resources; drainage and erosion; and the spread of pests, diseases and invasive plants. For this reason, developing regional strategies for agricultural adaptation is a high priority.

Building on the current pilot project, funding the development of regional agricultural adaptation strategies would bring together local governments, researchers, provincial government and industry partners to enhance the resources available for adaptation planning and future management. Participation, particularly from over-stretched producer organizations, would be strengthened by the potential to access the “enhancement fund” for implementation of priority items.

Regional Agricultural Adaptation Enhancement Fund

While development of regional strategies is an important first step, funding support for implementation of high priority actions will help to ensure that these strategies become a reality. The enhancement fund could support:

- engineering or feasibility studies;
- partnership-based emergency management planning;
- high priority regional infrastructure upgrades (cost-shared);
- regional level adaptation research (example: hydrology and groundwater studies, risk analysis, coordinated drainage and soil moisture studies, upgrading climate monitoring etc.); and
- regional management strategies for adaptation (example: wildlife monitoring and management, invasive species monitoring and management etc.).

Agricultural Adaptation Applied Research Fund

Research to support innovation and enhance resilience is essential for improving adaptive capacity. BC’s agricultural organizations currently manage various research activities (at times partnering with government) but there are growing gaps in the applied research field. Broad research priority areas can be identified up front, but the most effective adaptation research will be defined by industry priorities. Areas of need identified to date include:

- Trials for resilient agronomy and variety selection/improvement.
- Monitoring and management for pest, diseases and invasive species.
- Demonstration and piloting for new technologies and management strategies.
- Economic modelling and cost-benefit analysis for adaptive practices and technologies.

On-Farm Water Management Enhancement Fund

The most significant climate change impacts for agriculture are likely to be caused by shifts in precipitation and concurrently, by changes in the province's hydrological cycles. In recent years, producers in a number of BC's agricultural regions have experienced extreme events – extended dry periods and droughts, excessive rains and flash flooding – that are expected to become more frequent and intense.

There are a number of water management enhancements that producers can invest in to help to manage and moderate negative impacts. These investments could be encouraged through provision of incentives for water management including:

- Engineering and expertise to assess/evaluate and plan.
- Water storage.
- Irrigation efficiency.
- Drainage/pumping.
- Erosion management.
- Riparian management and restoration.