

Green Shift Analysis

The Liberal Party of Canada recently released further details on their Green Shift Policy. The Canadian Federation of Agriculture is pleased to see that many of the proposed Green Shift programs address the concerns of Canadian farmers and recognize the environmental services farmers provide. However, the incentives and programs introduced do not go far enough to offset the costs farmers will incur as a result of the Carbon Tax.

Areas of CFA Support

- The \$400 million refundable Emission Reduction Credits program is a positive step for Canadian Agriculture. It will reward farmers for their sustainable land management and will begin to develop a market for the ecological goods and services they provide ahead of a full cap-and-trade system.
- The \$250 million Green Farms Fund and the \$1.7 billion accelerated capital cost allowance are good incentive programs for Canadian farmers. The CFA appreciates that the Green Shift recognizes and supports the important role agriculture can have in providing ecological goods and services and addressing environmental issues important to Canadians.
- The CFA is pleased to see that the Green Shift proposes \$1.2 billion to improve science, research and development. However, it is essential to Canadian farmers that these proposed funds represent a stable commitment to research beyond the 4 year Green Shift plan.
- The Green Shift does recognize the burden a carbon tax will have on the agriculture community by providing rebates and tax cuts; however, while supported by the CFA, these will not go far enough to offset the burden of a carbon tax.
 - *Personal income tax reductions*
 - Low income bracket –reduced to 13.5% from 15%
 - Middle income brackets – reduced to 21% from 22% and 25% from 26%
 - *Business Income Tax*
 - The business income tax rate will be reduced 1%.
 - Child tax benefit – \$350 per child per year
 - Refundable employment credit – \$250 per year for those earning less than \$50000
 - Green rural credit – an annual \$150 per year credit for every rural tax filer

Areas of CFA Concern

- The carbon tax could cost farmers upwards of \$165 million dollars in the fourth year of the plan.
- Farmers will be forced to absorb the full cost of the carbon tax as the market sets the price of their goods; they cannot pass on their increased operating costs.

Farmers will be effected by the tax directly in the fuels they use and also indirectly by increased cost of shipping and fertilizer. The technology incentives and movement towards a cap-and-trade system in the Green Shift represent an encouraging direction for Canadian agri-environmental policy, but they will not be enough to offset the cost of the carbon tax.

The Green Shift Summary – How the plan will effect you

The carbon tax will impact farmers immediately through rising fuel costs. To compensate farmers, the Green Shift provides direct income tax cuts as well as potential tax rebates depending on the individual circumstances of the farmer.

The Green Shift also recognizes *environmental goods and services* provided by farmers by introducing compensation for activities they undertake to reduce greenhouse gas emissions. This comes in the form Emission Reduction Credits, with farmers receiving \$10/tonne of carbon reduced or sequestered.

COSTS				COMPENSATION	
Increases in fuel costs				Personal Income Tax Reductions:	
Fuel type	Unit cost	1 st year price increase	4 th year price increase	<ul style="list-style-type: none"> • Low income bracket –reduced to 13.5% from 15% • Middle income brackets – reduced to 21% from 22% and 25% from 26% 	
Diesel	¢/litre	0	7	Rebates <ul style="list-style-type: none"> • Child tax benefit – \$350 per child per year, • Refundable employment credit – \$250 per year for those earning less than \$50000, • Green rural credit – an annual \$150 per year credit for every rural tax filer 	
Natural gas	\$/GJ	0.5	2		
Kerosene	¢/Litre	2.6	10.2		
Propane	¢/Litre	1.5	6.1		
Increases in Transportation Costs					
Increases in Fertilizer Costs					

The Green Shift also includes rebates and incentives for Green Technology, but they require an initial investment by the farmer.

Investment in Green Technology (solar panels, methane capture etc.)	Green Technology Support <ul style="list-style-type: none"> • Faster depreciation on purchased green technology, • Rebates on purchased green technology.
---	---

Emission reduction credits are available to farmers but will also have associated costs before they can be accessed.

Carbon credit verification costs (An outside auditor must be hired)	<ul style="list-style-type: none"> • \$10/tonne of reduced or sequestered carbon
---	---

Detailed background

Areas of Support

Emission Reduction Credits

This \$400 million program will run over 4 years and be the precursor to a full cap and trade system. Farmers will receive \$10 for every tonne of verified carbon they sequester on the farm through activities such as no-till, manure management and land set-asides. The Canadian Federation of Agriculture is pleased to see this program as it rewards farmers for their sustainable land management and develops a market for the ecological goods and services they provide.

Green Technology

A \$250 million Green Farms Fund will offer rebates to farmers if they purchase green technology such as anaerobic digesters and more energy efficient equipment. The fund will also go towards supporting the further development of green farm technology. In addition, the proposed \$1.7 billion accelerated capital cost allowance will allow investments in green technology to depreciate faster, resulting in a larger tax deduction. The CFA supports any proposal which recognizes that farmers provide important ecological goods and services. The Green Farm Fund is a positive first step in increasing farmer's ability to purchase and utilize technology that can help them reduce energy costs as well as address environmental issues. However, the CFA continues to encourage government to create markets for ecological goods and services to allow agriculture to maximize the effectiveness of their technological investments.

Research and support

The CFA supports continued investment in quality research to develop and improve farm technology and practices. The CFA is pleased to see that the Green Shift proposes \$1.2 billion to improve science, research and development tax. However, it is essential to Canadian farmers that these proposed funds represent a stable commitment to research beyond the 4 year Green Shift plan, so technology and advancements can be utilized and implemented well into the future.

Income Tax and Rebates

- *Personal income tax reductions*
 - Low income bracket –reduced to 13.5% from 15%
 - Middle income brackets – reduced to 21% from 22% and 25% from 26%
- *Business Income Tax*
 - The business income tax rate will be reduced 1%.
- Child tax benefit – \$350 per child per year

- Refundable employment credit – \$250 per year for those earning less than \$50000
- Green rural credit – an annual \$150 per year credit for every rural tax filer

The income tax reductions and rebates included in the Green Shift are a welcome relief from the burden a carbon tax will have on farmers, however, they do not go far enough to offset the expected costs of a Carbon Tax.

Areas of Concern

Carbon Tax

Although the Green Shift will not increase diesel prices in the first year, it proposes to raise the cost by 7 ¢s by the fourth year of the plan. The cost of natural gas, propane and kerosene will also rise \$2, 6.1¢ and 10.2¢ respectively. These taxes will significantly increase the cost of doing business for farmers; which they have no way to pass on as the market dictates the price of their goods. In addition to direct cost increases on the fuels they use, farmers will see an increase in their indirect costs for shipping and fertilizer. The incentives within the green shift are welcome and will encourage farmers to adopt green technology and provide ecological goods and services, but they do not go far enough to offset the impact of the carbon tax. The CFA believes that this tax will unfairly burden farmers and encourages government to implement more incentive based policies, develop markets for ecological goods and services (such as cap and trade) and increase research to help farmers develop within the green economy.

2006 Average diesel usage per farm in Canada and the Provinces

	Litres/farm
Canada	10333.8
Atlantic Provinces	9434.8
Newfoundland and Labrador	8602.1
Prince Edward Island	6058.8
Nova Scotia	14650.9
New Brunswick	4538.9
Quebec	9388.8
Ontario	4925.6
Manitoba	14206.9
Saskatchewan	14505.2
Alberta	13271
British Columbia	7075.2

Data Source: CANSIM Table 1530039 and 1280010

Green Shift – Projected Costs for Canada and Provinces

According to StatCan CANSIM Table 1530034, greenhouse gas emissions from Canada's crop and animal production sector totalled 66,460 kilotonnes in 2004. Given that the target price per tonne of emissions in the Green Shift plan is \$40/tonne, this would indicate that the potential bill for these emissions would be about \$2.65 billion if all emissions were taxed. However, taxes have so far only been placed on some liquid and gaseous fuels and so the total cost will be significantly lower.

The following chart details the various taxes inherent within the Green Shift plan:

Canada	Amount used in 2006	Cost per Unit (\$)	Annual Cost to Agriculture after 4th year
Natural gas (gigajoules)	20,007,462	\$2.000	\$40,014,925
Gas plant natural gas liquids (litres)	272,400,000	\$0.015	\$4,086,000
Gasoline (litres)	1,498,700,000	\$0.000	\$0
Kerosene and stove oil (litres)	4,100,000	\$0.102	\$418,200
Diesel fuel oil (litres)	2,370,300,000	\$0.070	\$165,921,000
Light fuel oil (litres)	76,100,000	\$0.113	\$8,599,300
Heavy fuel oil (Litres)	50,800,000	\$0.124	\$6,299,200
			\$225,338,625

The total bill after the 4th year of the Green Shift plan would be \$225,338,625 across Canada. This data can be further broken down into the impact on individual provinces as well. The following table indicates the total cost to various provinces. Appendix A breaks the data down into both individual provinces and types of fuel.

	Annual Cost after 4th year
Newfoundland and Labrador	\$552,200
Prince Edward Island	\$1,343,200
Nova Scotia	\$6,109,800
New Brunswick	\$1,720,800
Quebec	\$23,394,081
Ontario	\$30,577,700
Manitoba	\$19,561,652
Saskatchewan	\$54,819,022
Alberta	\$54,733,166
British Columbia	\$11,563,487
Yukon, NWT, and Nunavut	\$738,600

Appendix A

	Energy Used	Cost per Unit	Calculated cost to Agriculture after 4th year
Newfoundland and Labrador			
Gas plant natural gas liquids (NGL's) (litres)	100,000	\$0.02	\$1,500
Motor gasoline (litres)	0	\$0.00	\$0
Kerosene and stove oil (litres)	0	\$0.10	\$0
Diesel fuel oil (litres)	4,800,000	\$0.07	\$336,000
Light fuel oil (litres)	1,900,000	\$0.11	\$214,700
		Total	\$552,200
Prince Edward Island			
Gas plant natural gas liquids (NGL's) (litres)	800,000	\$0.02	\$12,000
Motor gasoline (litres)	2,500,000	\$0.00	\$0
Kerosene and stove oil (litres)	0	\$0.10	\$0
Diesel fuel oil (litres)	10,300,000	\$0.07	\$721,000
Light fuel oil (litres)	5,400,000	\$0.11	\$610,200
		Total	\$1,343,200
Nova Scotia			
Gas plant natural gas liquids (NGL's) (litres)	2,800,000	\$0.02	\$42,000
Motor gasoline (litres)	8,900,000	\$0.00	\$0
Kerosene and stove oil (litres)	400,000	\$0.10	\$40,800
Diesel fuel oil (litres)	55,600,000	\$0.07	\$3,892,000
Light fuel oil (litres)	12,200,000	\$0.11	\$1,378,600
Heavy fuel oil (litres)	6,100,000	\$0.12	\$756,400
		Total	\$6,109,800
New Brunswick			
Gas plant natural gas liquids (NGL's) (litres)	1,000,000	\$0.02	\$15,000
Motor gasoline (litres)	23,700,000	\$0.00	\$0
Kerosene and stove oil (litres)	100,000	\$0.10	\$10,200
Diesel fuel oil (litres)	12,600,000	\$0.07	\$882,000
Light fuel oil (litres)	7,200,000	\$0.11	\$813,600
Heavy fuel oil (litres)	0	\$0.12	\$0
		Total	\$1,720,800
Quebec			
Natural gas (Gigajoules)	361,940	\$2.00	\$723,881
Gas plant natural gas liquids (NGL's) (litres)	108,200,000	\$0.02	\$1,623,000
Motor gasoline (litres)	198,500,000	\$0.00	\$0
Kerosene and stove oil (litres)	700,000	\$0.10	\$71,400
Diesel fuel oil (litres)	288,000,000	\$0.07	\$20,160,000
Light fuel oil (litres)	7,000,000	\$0.11	\$791,000

Heavy fuel oil (litres)	200,000	\$0.12	\$24,800
		Total	\$23,394,081
Ontario			
Natural gas (Gigajoules)	10,111,940	\$2.00	\$20,223,881
Gas plant natural gas liquids (NGL's) (litres)	116,900,000	\$0.02	\$1,753,500
Motor gasoline (litres)	363,300,000	\$0.00	\$0
Kerosene and stove oil (litres)	200,000	\$0.10	\$20,400
Diesel fuel oil (litres)	281,800,000	\$0.07	\$19,726,000
Light fuel oil (litres)	32,600,000	\$0.11	\$3,683,800
Heavy fuel oil (litres)	43,500,000	\$0.12	\$5,394,000
		Total	\$30,577,700
Manitoba			
Natural gas (Gigajoules)	44,776	\$2.00	\$89,552
Gas plant natural gas liquids (NGL's) (litres)	26,200,000	\$0.02	\$393,000
Motor gasoline (litres)	175,300,000	\$0.00	\$0
Kerosene and stove oil (litres)	500,000	\$0.10	\$51,000
Diesel fuel oil (litres)	270,700,000	\$0.07	\$18,949,000
Light fuel oil (litres)	700,000	\$0.11	\$79,100
Heavy fuel oil (litres)	0	\$0.12	\$0
		Total	\$19,561,652
Saskatchewan			
Natural gas (Gigajoules)	4,697,761	\$2.00	\$9,395,522
Gas plant natural gas liquids (NGL's) (litres)	2,300,000	\$0.02	\$34,500
Motor gasoline (litres)	223,400,000	\$0.00	\$0
Kerosene and stove oil (litres)	1,500,000	\$0.10	\$153,000
Diesel fuel oil (litres)	643,000,000	\$0.07	\$45,010,000
Light fuel oil (litres)	2,000,000	\$0.11	\$226,000
Heavy fuel oil (litres)	0	\$0.12	\$0
		Total	\$54,819,022
Alberta			
Natural gas (Gigajoules)	4,063,433	\$2.00	\$8,126,866
Gas plant natural gas liquids (NGL's) (litres)	8,400,000	\$0.02	\$126,000
Motor gasoline (litres)	394,300,000	\$0.00	\$0
Kerosene and stove oil (litres)	400,000	\$0.10	\$40,800
Diesel fuel oil (litres)	656,000,000	\$0.07	\$45,920,000
Light fuel oil (litres)	3,500,000	\$0.11	\$395,500
Heavy fuel oil (litres)	1,000,000	\$0.12	\$124,000
		Total	\$54,733,166
British Columbia			
Natural gas (Gigajoules)	731,343	\$2.00	\$1,462,687
Gas plant natural gas liquids (NGL's) (litres)	5,600,000	\$0.02	\$84,000
Motor gasoline (litres)	108,500,000	\$0.00	\$0
Kerosene and stove oil (litres)	300,000	\$0.10	\$30,600

Diesel fuel oil (litres)	140,400,000	\$0.07	\$9,828,000
Light fuel oil (litres)	1,400,000	\$0.11	\$158,200
Heavy fuel oil (litres)	0	\$0.12	\$0
		Total	\$11,563,487

Yukon, NWT, and Nunavut

Motor gasoline (litres)	500,000	\$0.00	\$0
Diesel fuel oil (litres)	7,000,000	\$0.07	\$490,000
Light fuel oil (litres)	2,200,000	\$0.11	\$248,600
		Total	\$738,600