



## BACKGROUND – A CARBON TAX IN MANITOBA

### Revenue from a carbon tax of \$50/tonne of emissions – Manitoba 2014

| Type of Fuel                  | Carbon Tax | Total Amt. Consumed | Total Revenue        |
|-------------------------------|------------|---------------------|----------------------|
| Clear Gasoline (per liter)    | 0.1112     | 1,555,060,000       | \$172,922,672        |
| Clear Diesel Fuel (per liter) | 0.1278     | 814,767,000         | \$104,127,223        |
| Aviation Fuel ( per liter)    | 0.1230     | 135,361,000         | \$16,649,403         |
| Jet Fuel (per liter)          | 0.1305     | 9,660,000           | \$1,260,630          |
| Natural Gas (per cubic meter) | 0.0950     | 2,169,888,000       | \$206,139,360        |
| Propane (per liter)           | 0.0770     | 239,000             | \$18,403             |
| <b>TOTAL</b>                  | --         | --                  | <b>\$501,117,691</b> |

### What would the revenue be used for?

The revenue from this tax would go towards green infrastructure, direct transfers to households, and reductions in payroll and/or income taxes. This could result in:

- 1) \$130 carbon tax dividend paid back to every Manitoban resident;<sup>i</sup>
- 2) 3.9 per cent reduction in personal income taxes; and,
- 3) \$167 million for infrastructure investments designed to reduce emissions.

### What impact would the tax have on reducing GHG emissions?

A \$50/tonne tax on CO<sub>2</sub> equivalent emissions would reduce emissions from road transportation by 5% (281 kt/year).<sup>ii</sup>

## How could \$167 million reduce emissions in Manitoba?

It could provide incentives for Manitobans to switch to more sustainable vehicles such as electric cars.<sup>iii</sup>

It could make Winnipeg's bus fleet all electric within four years – resulting in emissions reductions of 48 kt/year.<sup>iv</sup>

It could eliminate transit fares in Manitoba – thereby increasing ridership, while also reducing emissions and traffic congestion at the same time.

It could help Manitobans to better insulate their houses.

It could ensure we compost more in Manitoba, which would reduce methane emissions from garbage dumps.

It could fund the transition towards sustainable agriculture.<sup>v</sup>

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<sup>i</sup> Based on  $\$501,117,691 / 3 = \$167,039,230 / 1,272,000$  2014 Manitoba Population = \$131.32

<sup>ii</sup> Based on a U.S. study of the impact of fuel taxes on change in fuel consumption, the short-term elasticity estimate is  $-0.46$ . This means that for every per cent change in the price of fuel due to the tax, the amount of fuel consumed drops by  $-0.46$  per cent. A \$50/tonne carbon tax would raise the price of gas and diesel by 11.1 cents per liter. Using a base price of \$1.00/liter before the carbon tax, the change in fuel consumed by the carbon tax would be  $[(11.1/100) \times -0.46] = 0.05106 = -5.1\%$ . 2,369,827,000 liters of gas and diesel were sold in Manitoba in 2014, a 5.1% reduction would mean 120.861 million fewer liters of fuel consumed due to a \$50/tonne carbon tax. This would result in 281.7 fewer kilotonnes of CO2 equivalent GHG emissions.

<sup>iii</sup> Switching about 5% of person vehicle fleet to electric could reduce Manitoba's emissions by about 281 kt.

<sup>iv</sup> Winnipeg transit operates a fleet of 585 buses. A new electric bus costs approximately \$1 million per bus. An all-electric fleet would eliminate the use of about 18,000,000 liters in diesel fuel, which would result in annual emissions reductions of approximately 48 kilotonnes.

<sup>v</sup> Restoring the funding for the Manitoba Sustainable Agricultural Practices program could reduce emissions by 22-36 kt per year based on the Government's 2010 Report Under the *Climate Change and Emissions Reductions Act*.