On the implementation of a carbon tax in the Northwest Territories: recommendations

Ecology North's response to

the Government of the Northwest Territories' discussion paper
« Implementing Pan-Canadian Carbon Pricing in the Northwest Territories »

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ECOLOGY NORTH

The motivation

The Paris Agreement

To limit global warming to 1.5 to 2°C, the world must reduce their carbon emissions by 50% per decade. This is the rule of thumb that boiled down from the Paris Agreement (COP21). Bringing this direction to the Northwest Territories gives us a significant 46% reduction in greenhouse gases emissions before 2025—a challenge indeed but not impossible!

How to get there — the role of a carbon tax

The International Monetary Fund[1], the World Bank[2] and the International Energy Agency[3] are all in favor of putting a price on carbon and support it as an efficient measure to curb greenhouse gases emissions.

Carbon tax, carbon trading system, cap and trade: regardless of the mechanism, some action needs to be taken on tackling climate change and it starts with carbon emissions. The Government of the Northwest Territories is moving forward with a carbon tax and Ecology North is strongly supportive of that action. A carbon tax is easier and quicker to implement and requires less administrative support than an emissions trading system.

Not all carbon taxes are made the same, and this paper is suggesting a 'made in the north' carbon tax must be developed with a clearly laid out framework, clear objectives and show leadership on the national stage.

It must also be noted that a carbon tax is but one tool to fight climate change, and must be used in conjunction with legislation, regulation, education and other innovative means. Climate change is the greatest threat to global humanity, and the NWT is already experiencing severe climate change impacts. Our Territory has the means and is already paying for the impacts and we must show climate leadership now, or we cannot expect others to.

What should be the objectives of carbon pricing ?

This is the primary question that we believe the Department of Finance should focus on, and this will provide a clear framework to develop an effective carbon tax regime. There are several objectives highlighted that we would like to highlight in this response that should be used to critically address the questions that the Department put forth in the survey.

#1) **Greenhouse gas reductions** – This should be the most important criteria in developing a response to carbon pricing. Will the action proposed reduce greenhouse gases (and by how much). Every decision point must first address this criteria, and the effectiveness of every action taken with the revenue recieved should be compared against the reduction of greenhouse gas reductions.

#2) **Cost of Living** – This is obviously an important component, but there should be caveats when looking at cost of living. The GNWT must take a longer term view to the cost of living in the NWT. One of the primary drivers to the high cost of living is the high and fluctuating cost of fossil fuels. To make real and significant long term reductions in the cost of living, it is imperative to reduce the flow

[1] « After Paris : Fiscal, Macroeconomic, and Financial Implications of Climate Change ». The International Monetary Fund Staff Discussion Note. Web. Accessiblet at : http://www.imf.org/external/pubs/ft/sdn/2016/sdn1601.pdf

[2] « We Support Putting a Price on Carbon ». The World Bank Group. Web. Accessible at : http://siteresources.worldbank.org/EXTSDNET/Resources/carbon-pricing-supporters-list-UPDATED-110614.pdf

[3] « Energy Efficiency Policy and Carbon Pricing ». The International Energy Agency. Web. Accessible at : https://www.iea.org/publications/freepublications/publication/energy-efficiency-policy-and-carbon-pricing.html

of money leaving the NWT to pay for these fossil fuels. Therefore, the focus on reducing cost of living should be on reducing fossil fuel use, as this will lead to long-term significant reductions (dealing with the cause not the symptoms).

#3) **Economic Development** – As will be noted below, the carbon tax if implemented effectively will encourage responsible economic development. But the GNWT, must get out of the mindset that economic development equates to non-renewable resource extraction. The transition to a green economy will create considerable economic development opportunities that must be nurtured and stimulated.

What products to tax?

We believe all products with direct related carbon emissions should be taxed. This gets to criteria number 1) reduction of greenhouse gas emissions. It is a simple, administrative process to tax fuels based on their greenhouse gas emission factors.

What to do with revenues from the carbon tax?

A healthy balance of carrot and stick measures should be implemented for the program to succeed. The cost of living in the Northwest Territories being already high, an additional economic burden on citizens could spark public outrage and put a negative public opinion towards the program. At the same time, a weak system, too forgiving, would not be effective in reducing the carbon footprint of the territory.

Provide clear metrics

Metrics should be put forward to measure the effectiveness of all revenue recycling strategies. Revenue options must be evaluated to first target the 'low-hanging fruits' with high carbon intensity (criteria #1). The impacts on NWT citizens and households will be mitigated by progressive tax reductions, and economic development by the green economy.

Tax credits to reduce impact on low income and remote communities

Ecology North suggest redistributing roughly 10% of the revenues from the carbon tax to progressive tax rebates. Rebates should be designed to help those with limited means to adapt their carbon footprint. This rebate will increase in total value as the tax increases annually.

Provide incentives to spark proactivity and innovation

The remaining 90% of revenues should be redistributed to Northerners — both industries and citizens — in the form of incentives for the implementation of various forms of carbon emission reducing technologies. These might include incentives on building retrofits (energy efficiency measures : better insulation, better airtightness, triple-pane windows, incandescent or fluorescent light bulb swap program from light-emitting diodes, etc.), improving the efficiency of new infrastructure or incentivizing the transformation of transportation equipment (rebate on electric vehicle purchases, incentives on the installation of electric vehicle charging stations, etc.) or new renewable energy generation equipment (solar panels, windmills, etc.) for communities, businesses or individuals.

Energy efficiency should be a measure to be prioritized before renewable energy production.

Return on investment: doing the math

The proposed incentives should be rated based on their return of carbon emissions reduction per dollar. The 'low-hanging fruits' could easily be identified to speed up reaching the Paris Agreement targets.

General revenue

We are adament that money from a carbon tax should not go to general revenues. This would not be effective in reducing carbon emissions, and would limit the effectiveness of the tax to achieve the

objectives. This will also create resentment on behalf of the population and business community toward a carbon price and the government.

Returning the revenue
Revenues recieved should absolutely not be returned to residents as tax breaks, especially as tied to consumption. This would totally cancel the purpose of the carbon tax and would make the whole exercise a farce, and might just earn the NWT a climate change fossil award.

Creating new development opportunities

A small share of the 90% of revenues generated by the carbon tax could be distributed to research, development and design of new systems for northern innovation. The implementation of a carbon tax in Sweden generated considerable innovative low-carbon technologies[4] such as biofuels and district heating systems, which in turn developed Swedish expertise in this field, and led to a boom in the green economy. This lead to new economic prospects for the country and helped develop their economy while protecting their environment.

Holistic design and an integrated approach
Ecology North believes this is a important opportunity to rethink our system and spark consultations on how to redesign our system.

Returning revenues to industries : drive competition and innovation
Just like for citizens, the share of carbon tax generated revenues returned to industries should be proportional to the return on investment in terms of carbon reductions. With an exception, the 10% that is provided as tax rebates should partially come from industry based revenue.

OneThere should be yearly competition to give territorial money into projects returning the highest potential reduction in carbon emissions.

How should increasing revenues be incorporated into the recycling program?
Increasing revenues will provide more opportunities to tackle emissions reductions that initially did not make economic sense.

Allocating resources for climate change adaptation
NWT will be incresingly impacted by climate change, and the costs will continue to rise. Climate change adaptation is a proactive response to these challenges to the finances of the Territory. A small portion of the revenue should be made available to adapation activities that reduce the risks from climate change. We recomend that as the fund increases the proportion available to adaptation increases.

Inspiration from around the globe

Sweden first imposed a carbon tax in 1991. The ton of carbon was then priced at CAD$ 40. In 2017, it oscillates around CAD$ 175. Sweden is considered to be one of the most innovative and dynamic economies in the world, with high standards of living, in a climate not so different from ours.

[4] « Sweden's carbon-tax solution to climate change puts it top of the green list ». The Guardian. Published April 29 2008. Web. Accessible at : https://www.theguardian.com/environment/2008/apr/29/climatechange.carbonemissions

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Hopeful future

Key recommendations

Ecology North is strongly supportive of the Government of the Northwest Territories' efforts to implement a strong, effective carbon tax system.

The Northwest Territories spends approximately a quarter of a billion dollars on fossil fuels annually[5], with the GNWT one of the larger purchasers. This money all goes outside of our borders. Ecology North believes that our government needs to take a longer-term view of this expense, and make every effort to reduce the enormous drain on our resources.

A carbon tax is just the tool to provide a revenue stream that pays for the programs that will drive a reduction in fossil fuel use. Just imagine a reduction by half of that expense within ten years, and what that will do to reduce the high cost (and variability) of fossil fuels. The spinoff benefits of energy efficiency and renewable energy deployment would create significant employment, taxation benefits, and many times greater payback for the economy as a whole.

Our key recommendations for a strong carbon tax mechanism are the following :

- Ensure poor and vulnerable communities are not excessively burdened by the direct and indirect costs of the carbon tax— using progressive-taxation reform that provides some, but not complete relief for the hardest hit portion of the population (the working poor);
- Make effective use of the revenue to provide funding for much needed energy programs, financing options, energy efficiency and renewable energy programs, that incent homeowners and businesses to make their buildings, transportation, and general lives less carbon intensive ;
- Spark innovation and healthy competition in the NWT business community to strive towards carbon reduction and innovative solutions to fossil fuel reductions;
- Implement government regulations to work alongside the carbon price and energy programs that reduce carbon emissions moving forward on new and existing infrastructure. (i.e. : building and transportation initiatives) ;
- The GNWT must acknowledge that a $50/tonne carbon tax is not sufficient to meet the Paris Agreement target [6], and should commit to more significant reductions.

Ecology North strongly believes that the NWT are in a position to provide global leadership on climate change. The North is in the spotlight for climate change impacts, and the Mackenzie Valley as one of the global hotspots of climate change provides additional emphasis for the NWT to tackle climate change at home, while demanding the rest of the world to stand up and take notice of the tremendous economic, social and cultural impacts but also of potential benefits that could be brought through a change in our ways of living.

[5] « Northwest Territories Energy Report ». Northwest Territories Energy. Web. PDF. Accessible at : http://www.assembly.gov.nt.ca/sites/default/files/11-05-20td36-166.pdf

[6] « A roadmap for rapid decarbonization ». Science Magazine. Published March 24, 2017. Web. Accessible at : http://science.sciencemag.org/content/355/6331/1269

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ANNEX : Questions from the GNWT Discussion Paper

Question : What should be considered when proposing revenue recycling options for business and industry?
Recycling options should take the form of incentives for retrofits or for research and development, and by tied to direct greenhouse gas reductions. Companies could bid on the dollars in the program based on the energy intensity of the reductions made.

Question : How much, if any, of the carbon tax revenue should be recycled to NWT households, businesses and industry through direct transfers?
10% of the carbon tax revenues should be redirected towards households in the form of a progressive tax credit.

Question : How much, if any, of the carbon tax revenue should be used for any direct GNWT spending for initiatives to reduce greenhouse gas emissions?
90% of the carbon tax revenues should be used to fund incentive programs for carbon emission reduction measures, based on highest reductions per dollar through competition for industries. Households should have access to incentive programs and money should be accorded to these based on the potential carbon emission reduction per dollar.

Question : Should carbon tax revenue recycling be tied to carbon consumption?
This would have very little effect on reducing carbon emissions and would discredit the system.

Question : Is it reasonable to mix carbon revenue recycling with broader policy objectives?
Yes, if this policy can be demonstrated to have additional carbon emissions reduction potential. For example, using recycled carbon revenue to bring improvements to the building code for new constructions — superinsulation, mandatory electric vehicle charging station in every new building, energy-efficient windows, etc— would insure that all new buildings do not cause problem in the future, therefore securing a prosperous, carbon-free future.

All policies should be evaluated based on their carbon emissions per dollar invested.

Question : Should the recycling approaches grow as revenues increase or should new approaches be introduced as revenues grow?
New approaches should be introduced as revenues grow. This will insure that there is no delaying in action on the basis of higher future incentives.

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