

Yukon Conservation Society position on a Yukon Carbon Tax

Prepared for a carbon tax discussion between Yukon Government and YCS
June 29th 2017

The Yukon Conservation Society (YCS) is a grassroots environmental non-profit organization, established in 1968. Through a broad program of conservation education, input into public policy, and participating in project review processes, we strive to ensure that the Yukon's natural resources are managed wisely, and that development is informed by environmental considerations.

Reducing Yukon's GHGs – through energy conservation, efficiency and renewable energy – and becoming a model low-carbon sustainable territory is very much a goal of YCS.

This paper provides the Yukon Conservation Society's recommendation on how Yukon could apply the carbon tax to achieve the Yukon's share of Canada's Paris commitments.

Context

Canada is a party to the Paris Climate Accord, and has committed to reducing its emissions to 30% below 2005 levels by 2030. As an integral part of Canada, Yukon can be expected to similarly reduce its emissions. Yukon's Climate Change Action Plan does not yet include territory wide emission reduction targets, but Yukon Government internal emissions were to be capped in 2010 and reduced by 20% by 2015 and carbon neutral by 2020.

According to a recent paper by the past head of the United Nations Framework Convention on Climate Change¹, we have 3 years, until 2020, to begin reducing carbon emissions. Specific actions it called on to be implemented by 2020 include:

- *Buildings*: 3% of buildings each year are converted to net zero, so that by 2050, all buildings produce as much zero-carbon energy as they consume.
- *Transport*: Electric vehicles make up at least 15% of new car sales by 2020, a major increase from the present. Also required are commitments for a doubling of mass-transit utilization in cities, a 20% increase in fuel efficiencies for heavy-duty vehicles and a 20% decrease in greenhouse-gas emissions from aviation per kilometre travelled.
- *Electricity*: Needs to be completely de-carbonized at the same time as it expands to power transport and heat buildings. New fossil fuel generation systems must NOT be built after 2020.

¹ <https://www.nature.com/news/three-years-to-safeguard-our-climate-1.22201>

The current Yukon government campaigned and was elected in 2016 on a platform of implementing the carbon tax as developed by Ottawa, with a promise that all carbon tax revenue would be returned to Yukon people.

Yukon government is still working out how to apply a carbon tax. There is still uncertainty around what this tax will look like in the territories. Canada is developing a system for the northern territories, yet we do not know its final shape – nor do we know what, if any, exemptions will be contemplated by Canada or Yukon. There are sectors (placer mining, for example, where big bulldozers are used in off-grid mines) that are pushing for an exemption because they say there is currently no alternative to using fossil fuels for their operations.

Some still question whether or not Yukon should implement a carbon tax, arguing that Yukon's emissions are insignificant and that it would unfairly burden industry and Yukoners living in poverty.

Some points to consider:

- According to the latest figures available,² Yukon alone, with a population of only 36,000, emits more than each of the 13 lowest-emitting countries, all of which have committed to reduce their emissions under the Paris Climate Accord.
- The cost of a carbon tax on food and supplies trucked into Yukon will be less than a fifth of a cent per pound.³
- Sometimes lost in the rhetoric around carbon taxes and how they might affect individuals is the notion that: “The carbon tax is not about rewarding individuals. The reward is a planet we can all live on.”
- Yukon has a Climate Change Action Plan that does not include a Yukon-wide greenhouse gas emission reduction goal.

Application of a Carbon Tax

A \$10/ton carbon tax works out to under \$200 per person per year. However, big mines produce some of the carbon (11%), and after deducting government- and utilities-produced carbon, **the average Yukoner's share works out to about \$150.**⁴

² CAIT Climate Data Explorer. 2017. Washington, DC: World Resources Institute. Available online at: <http://cait.wri.org>

³ Renewable energy pioneer and YCS friend John Maissan tells us that NRCan has figures of 2 to 3 km per litre for semi trucks [LINK](#).

If we round down to 2 km/litre that would be 1500 litres for a 3000 km trip to Yukon. A carbon tax of \$50 per tonne would add \$0.10 per litre or \$150 per truckload.

If that truck carries a full 40 ton load, the tax works out to \$0.0019 per pound. I.E., less than one fifth of a cent per pound. This is not economy-shattering nor personal budget-shattering.

⁴ Figure derived from [http://www.env.gov.yk.ca/publications-maps/documents/Yukon Transportation Sector GHG Emissions Final Updated Report March 2015.pdf](http://www.env.gov.yk.ca/publications-maps/documents/Yukon_Transportation_Sector_GHG_Emissions_Final_Updated_Report_March_2015.pdf)

Therefore, if all the carbon tax is remitted to Yukoners, at about \$150/a year, this would mean that those who manage to be frugal, or who are able to avoid driving and flying and live in smaller homes – a below average consumer – would get more net benefit from a rebate than those who consume the most, which is what a carbon tax is supposed to do.

Canada's carbon pricing program contemplates the tax steadily rising to \$50/ton; however, the Organization for Economic Co-operation and Development calculates that to achieve our Paris commitments purely through a carbon tax, the tax would need to be \$130/ton.

Therefore, acknowledging that \$130/ton would be politically difficult in the Yukon, and that \$10 - \$50/ton is not effective alone, YCS recommends a carbon tax implementation plan that returns part of the tax directly to consumers in the form of rebates, and directs some of the revenue towards encouraging greater efficiency in carbon-emitting sectors, thereby maximizing the reduction impacts

Considering that half of Yukon's GHGs come from driving, and a fifth from heating buildings,⁵ it is clear that if we could drastically cut (and ultimately eliminate) the emissions from these sectors, we would achieve our Paris commitments and meet the targets implied in the Yukon Climate Change Action Plan.

The long distances between Yukon communities mean that range anxiety associated with the limited capacity of electric vehicle batteries is a real issue in Yukon, despite the reality that the vast majority of driving takes place within 20km of home. YCS would like to see some carbon tax revenue directed towards better **Public Transit** and encouraging a shift towards **Plug In Electric Vehicles (PEVs)** – both hybrids, which have range-extending gas engines, and pure battery vehicles.

Actions that have been adopted around the world to encourage the uptake of electric vehicles include:

- Eliminate GST on PEVs.
- Access to free parking for PEVs.
- Subsidized insurance for PEVs.
- A network of FREE level 2 (240 volt) charging stations installed at maximum intervals of 150 km on all Yukon highways with grid access.
- Exempt PEVs from battery deposit systems.
- Set a target for PEV market penetration, and apply a \$5,000/PEV rebate until it is achieved – the Ontario target is 5%, which translates to about 1000 PEVs in Yukon.
- Cheaper/free licensing for PEV taxis.

⁵ Ibid

- Property Tax refunds for developers /landlords who install level 2 charging stations.
- In partnership with other level of governments – municipal/First Nations:
 - PEV charging parking stalls
 - Charging stations
 - A legislated target: 20% of new government-owned vehicles shall be PEVs by 2020

When driving EVs is cheaper than driving internal combustion engines (ICEs), and there is a reliable and convenient network of charging points, new vehicle purchases of EVs will become the best option – even without subsidizing the purchase of EVs.

Similarly, if some of the steadily increasing carbon tax revenue is directed towards reducing the amount of energy used to heat buildings, through retrofits to insulation and the installation of super efficient electrical heating systems such as heat pumps, we will be addressing another 20% of our GHGs.

Policy recommendation

Returning all the revenue from the carbon tax to residents is the stated aim of Yukon government. If the rebate takes the form of a cheque sent directly to individual Yukoners, frugal behaviour would be rewarded. However, this alone would not enable making big-ticket choices, at least not unless one is already wealthy. For example, converting one's home from oil or gas heating to an air source heat pump is very expensive for most people. Ditching one's cheap-to-buy gas guzzler for a PEV is expensive and beyond the reach of many people.

YCS therefore respectfully recommends that the Yukon direct part of its carbon tax revenue towards rewarding frugal emitters and people living in poverty in the form of rebates, and part of the revenue towards a fund that would enable low- and zero-carbon choices, tackling as priorities the transportation and building sectors.

Yukon has an Energy Strategy and a Climate Change Action Plan. The documents are produced by different departments and are not tightly integrated. The main driver of climate change is how we use energy. YCS therefore respectfully recommends that Yukon immediately revisit both plans and integrate them into one overarching climate and energy plan.

YCS respectfully recommends Yukon immediately set a carbon emission reduction goal to aid in crafting the carbon pricing regime.

Conclusion

Yukon is fortunate that 97% of our electricity is hydro, wind or solar and we have a popular micro generation policy that is steadily adding PV and micro hydro capacity to the grid. We are rolling out an Independent Power Producers Policy designed to encourage larger operations such as wind farms, PV arrays and micro hydro. With a smart grid that incorporates PV and wind, backstopped with existing hydro, we can feasibly electrify our transportation and heating sectors without burning fossil fuels.

Thus, Yukon is in a fortunate position: we CAN massively reduce our GHGs and do so without causing hardship to our residents. We hope that the suggestions in this paper will encourage government to craft a smart plan that improves housing, energy and transportation infrastructure while reducing carbon emissions.