

## Summary of Nova Scotia Cap and Trade Program Development - March 20, 2017

On March 15, 2017, the Nova Scotia Department of Environment hosted a stakeholder consultation session regarding the development of Nova Scotia's Cap and Trade Program, supported by a summary document released prior to the session. The objective of the session was to present some early program design options being considered, provide an opportunity for stakeholders to ask questions, and elicit feedback. The final date for submission of stakeholder comments and feedback was March 31, 2017, although there will be "additional opportunities for stakeholders to participate and provide feedback throughout 2017.

From the perspective of liquid biofuels, the primary opportunity here is to provide a low-carbon, emissions abatement opportunity for transportation and heating fuels. The Province is proposing that these fuels be regulated at the point they are brought into Nova Scotia for local consumption, as opposed to the point of combustion/emission as is the case with other sectors. This creates a unique challenge, in that the regulated entity (fuel distributors) aren't able to directly implement new technologies that reduce emissions, by increasing combustion efficiency for example. Therefore, incorporating low-carbon biofuels may help them meet their emissions obligations. A number of questions will ultimately need to be answered to execute on this opportunity:

- What is the verifiable emissions reduction potential of incorporating a liquid biofuel into the petroleum fuel supply chain, in terms of tonnes of CO<sub>2</sub>e?
- What is the cost to achieve this reduction?
- How does the cost to achieve a reduction of 1 tonne CO<sub>2</sub>e compare with the price of 1 compliance unit, which is equal to 1 tonne CO<sub>2</sub>e?

The following highlights the major takeaways from both the summary document and the presentation at the stakeholder consultation session.

- The Cap and Trade system is Nova Scotia's approach to complying with the federal carbon pricing benchmark under the Pan-Canadian Framework on Clean Growth and Climate Change.
- Nova Scotia has already achieved significant reductions in GHG emissions through regulatory measures targeting the electricity sector, which was responsible for 44% of GHG emissions in 2014. Transportation was 2<sup>nd</sup> at 27%, followed by residential heat at 9%.
- The cost of these regulatory measures has largely been borne by Nova Scotia ratepayers, which the Provincial government has argued constitutes a form of carbon pricing, an argument the Federal government has accepted. The result is a modification to certain calculations used to determine pricing mechanisms.
- The Cap and Trade system would cover a range of sectors, including electricity.
- The carbon price benchmark will be \$10/CO<sub>2</sub>e in 2018, rising to \$50/tonne in 2022. Emissions targets are 30% below 2005 levels by 2030, which Nova Scotia is already very close to achieving through the electricity measures mentioned previously.

- There will be a hard cap on emissions from the sectors covered under the system, which will decline over time, but it is not yet clear exactly what the emissions cap will be for the first and subsequent years.
- At least initially, the Nova Scotia system will not be linked with Cap & Trade systems in other jurisdictions.
- If a regulated entity's actual emissions are below their emissions allocated by the System administrator (Government), they can choose to sell the excess allowances or bank them future use. Each allowance will be equal to one metric tonne of GHG emissions, measured in carbon dioxide equivalents (CO<sub>2</sub>e).
- If a regulated entity's actual emissions are above their allocated emissions, they will need to obtain allowances from other program participants. Alternatively, they could also purchase offset credits from sectors outside the cap program if they are available.
- To ensure system integrity, there will be GHG emissions monitoring, reporting, verification (MRV), compliance enforcement, and penalties.
- Program Scope – identifies what entities and emissions are covered by the program.
  - At a minimum, will cover fossil fuels like gasoline, diesel, natural gas, heating oil, propane, coal and petroleum coke.
  - The point of regulation determines the point in the supply chain that is responsible for participation in the program.
  - It is proposed that the system will cover combustion and fixed-process (non-combustion) emissions from the following sources, with no voluntary participation:
    - Industrial facilities w/ more than 100,000 tonnes CO<sub>2</sub>e, at point of emission.
    - Electricity generation at point of emission.
    - Petroleum product suppliers (>200L/year) at point of product import.
    - Natural gas distributors (Heritage Gas) where gas is transferred from pipeline.
    - Households not directly responsible, leaving ~20 mandatory participants.
  - Other options being considered include:
    - Cover all industry at the fuel supplier/distributor level.
    - Cover all industry with a threshold lower than 100,000 tonnes of emissions.
    - Allow voluntary participation above a min threshold, subject to MRV.
  - Questions being asked:
    - Should ID'd mandatory participants have a different point of regulation than proposed?
    - Implications of ID'd points of regulation?
    - Different GHG threshold for industrial facilities?
    - Only cover combustion emissions?
    - How to treat new, large and expanding facilities that compete in global markets?
    - Allow voluntary participation?
- The Cap – the emissions limit that applies to all mandatory participants, equal to the sum of all allowances. The cap will be set in 3-year compliance periods, beginning in 2018 – 2020, declining at a predictable rate. Process of setting the cap is still underway in coordination with the Federal Government.
  - Questions being asked:

- What abatement opportunities exist to support GHG reductions in the 2018-2023 period?
    - At what cost can these abatement opportunities be achieved (per tonne of GHG reduction)?
    - Are 3-year compliance periods appropriate?
- Allowance Distribution – how emissions allowances will be allocated and distributed to program participants.
  - It is proposed that allowances will be distributed to program participants free of charge (as opposed to being auctioned), based on one of the following approaches:
    - Historical and projected emissions
    - Output
    - Fixed-sector benchmark
  - Questions being asked:
    - Benefits and risks associated with each methodology?
    - Allowance distribution frequency to support participants' planning?
    - Any other methods?
    - Should allowances be auctioned?
- Program Design Features – How to support continued functioning of the system, prevent manipulation, reduce administrative costs, support regulatory certainty, promote transparency.
  - Proposed approach:
    - Registration – all participants required to register with coordinating body to ID ultimate owner of allowances. Each would have two accounts: a trading account for trading allowances and compliance account to satisfy obligations of carbon limits.
    - Trade Rules – Trades must be submitted and confirmed by two account reps from seller, one from receiver.
    - Program rules – Participants subject to a holding limit to prevent domination by single entity.
    - Strategic reserve – a portion of allowances from current and future years held back for direct purchase by participants at set prices to ensure availability of allowances for purchase and moderate upward price pressure.
  - Questions being asked:
    - Will these features enable effective functioning of the program?
    - Any other key design features?
    - Is strategic reserve supported by stakeholders?
    - What percentage of allowances should be held in reserve and what should the price tiers be?
- Compliance flexibility mechanisms – provide flexibility for participants.
  - Proposed approach:
    - Banking – ability to save allowances across compliance periods, allowing multi-year planning and limiting price variability.
    - Multi-year compliance periods – allows smoothing of emissions to account for variability in a single year. Participants are only required to ensure they have

- enough allowances to cover their allocation at the end of the compliance period (called true-up). Borrowing from future periods is not allowed.
- Offsets – real, additional, enforceable, verifiable and permanent reductions of GHG emissions that occur outside the cap system, but can be used by participants to meet compliance obligations. Must be generated in NS. Enables sectors not covered by the cap to participate and generate revenue for investing in low-emission technologies. Limited to a certain percent of emissions.
  - Questions being asked:
    - Do these features support the transition to the program effectively?
    - Should borrowing of allowances be allowed?
    - Alternative compliance periods?
    - Any other mechanisms?
    - What offset opportunities exist in NS? If so, what potential emission reduction?
    - Should there be a limit to the proportion of offset credits for participants to use to satisfy compliance obligations?
  - Compliance and Enforcement Requirements – ensures effective oversight so compliance obligations are met and real emissions are reduced.
    - Proposed approach:
      - Following compliance period, participants with an obligation must surrender compliance units (either allowances or offset credits) equal to their emissions during the period (proposed 3 years). Referred to as true-up.
      - Participants whose emissions exceed their compliance units, provide fraudulent or misleading info, or otherwise violate program rules will face penalties.
      - Participants must submit verified emissions reports by June 1 for previous year.
      - Participants must partially true up for 30% of annual emissions by November 1 each year. They must true up for 100% of their emissions by November 1 in the year following the end of the compliance period.
    - Questions to be asked:
      - Support the 30% annual true-up?
      - Any other mechanisms?