

Q&A Responses:

Q. What happens when the cap and trade program comes into effect on January 1, 2017?

With the start of cap and trade on January 1, 2017, the Ontario Energy Board's (OEB) approved interim distribution rates for natural gas utilities will come into effect. Fuels suppliers for products such as gasoline, diesel and propane are also expected to reflect the carbon price in the price of their products as of January 1, 2017.

Natural gas consumers who are not large final emitters will have the OEB's interim rates applied to their consumption from January 1, 2017. This treatment extends to most natural gas-fired electricity generators, and will impact the price at which electricity generators offer their power into the Independent Electricity System Operator's (IESO) administered wholesale electricity market.

For regulated entities, the costs incurred by natural gas utilities to comply with cap and trade will be passed on to natural gas consumers, subject to review and approval by the OEB.

Q. What is the role of the Ontario Energy Board (OEB) in the cap and trade process as it relates to natural gas and electricity prices for residential consumers?

Under Ontario's cap and trade program, natural gas utilities in the province are the "point of regulation" for natural gas-fired electricity generators and users.

This means that natural gas utilities will purchase allowances to cover the greenhouse gas (GHG) emissions of natural gas-fired electricity generators and other natural gas consumers that are not directly covered under cap and trade.

Entities that are directly covered under cap and trade (i.e., large final emitters) include those that emit more than 25,000 tonnes of GHG emissions per year, as well as entities that emit more than 10,000 tonnes of GHG emissions per year and voluntarily opt-in to the cap and trade program. This GHG emission threshold is not applicable to the electricity sector.

Nearly all natural gas-fired generators will have carbon costs passed on to them from their natural gas suppliers regardless of their operations and GHG emissions. There are some limited exceptions for natural gas generators that connect to pipelines not regulated by the Ontario Energy Board (OEB) – these entities will have direct compliance obligations (i.e., they will need to purchase their own allowances).

As regulated entities, the costs incurred by natural gas utilities to comply with the cap and trade will be passed on to natural gas consumers subject to review and approval by the Ontario Energy Board (OEB).

Natural gas utilities filed their 2017 cap and trade compliance plans with the OEB on November 15, 2016. The OEB will review these compliance plans and set interim rates for recovery of cap and trade costs within the next few weeks. Natural gas utilities, such as Enbridge and Union, are expected to provide notice to customers on the interim rate in late November/early December. These interim rates will come into effect on January 1, 2017. **Note:** A full review and assessment by the OEB of these compliance plans will follow. The rate will be confirmed and/or adjusted with the full hearing.

Q. What will happen if cap and trade auction revenues are insufficient?

As noted in the September 2016 Cabinet Submission on Electricity Price Mitigation, should there be low demand for carbon allowances, auction proceeds would be less than the amount projected in the Climate Change Action Plan (CCAP). This could mean a short-fall for initiatives identified in CCAP.

However, regulated entities such as natural gas utilities are expected to purchase allowances commensurate with their greenhouse gas (GHG) emissions at each cap and trade auction, at the prevailing market price. The market price is expected to remain close to the floor (i.e., \$14 USD) through at least the first year of the cap and trade program.

Natural gas utilities will pass these costs on to their customers, which include natural gas-fired electricity generators; therefore, electricity price impacts will occur regardless of auction outcomes.

Note: Any shortfall in revenue from the auction would occur because other sectors (e.g., industry, transportation, etc.) did not buy sufficient allowances.

Q. Cap and trade comes into effect on January 1, 2017, but there won't be proceeds auction until March 2017 (i.e., no proceeds for recycling). What happens to commercial and industrial electricity consumers?

While Ontario's climate change legislation states that cap and trade auctions are to be held quarterly, the specific date is not legislated. It is expected that the first auction will be held in March 2017.

While the impact of cap and trade will be added to electricity bills as of January 1, 2017, the offsetting effect of proceeds recycling will likely not begin until proceeds are made available following the first cap and trade auction.

Because the first auction is expected to be held in March 2017, a minimum 3-month lag is expected. Under this construct, electricity consumers would receive proceeds recycling in April 2017 reflecting the carbon costs in January 2017. While the cost of carbon will increase the wholesale electricity price, this will not be explicitly noted on electricity bills. **Note:** Assuming that a volumetric recycling mechanism is used, it would likely appear as a credit through a separate line item on electricity bills.

Allowing for a 3-month lag would avoid the need for variance accounts which increase administrative complexity and are subject to interest costs. The lag will also give the Independent Electricity System Operator (IESO) and LDCs time to implement billing system changes.

In addition, given the low initial carbon price and the limited amount of greenhouse gas (GHG) emitting generation in Ontario, the financial impact for most electricity consumers over the first three month period will be modest. It should be noted that the Industrial Conservation Initiative (ICI) program also operates on a lag of one year, which is far more material for large electricity consumers.

Note: The Ministry of Northern Development and Mines (MNDM) uses a “quarterly lag” to reconcile funding with respect to participants in the Northern Industrial Electricity Rate Program (NIERP).

Q. Cap and trade comes into effect on January 1, 2017, what happens to natural gas consumers?

The 2016 Budget estimated that cap and trade would increase the cost of natural gas by about 3.3 cents cubic meter in 2017 or about \$5 per month for a residential customer, based on an estimated consumption of approximately 1700 cubic meters (**Note:** Based on MOECC external modeller’s estimate). The actual costs will be determined through the gas utility compliance plans and associated customer rates.

The Ontario Energy Board (OEB) must review and approve the cap and trade rates used by the natural gas utilities before the costs of cap and trade can be recovered from consumers.

Natural gas utilities filed their cap and trade compliance plans with the OEB on November 15, 2016. The OEB will review these compliance plans and is expected to set interim rates within the next few weeks. Preliminary requests include:

- Union Gas has requested a rate of approximately 3.36 cents per cubic meter to cover cap and trade costs, which it indicates will cost their typical residential customer \$74 per year (or \$6.17 per month) based on their typical residential customer annual consumption of 2200 cubic meters.

- Enbridge has requested a rate of approximately 3.35 cents per cubic meter to cover their cap and trade costs, which it indicates will cost their typical residential customer \$80 per year (or \$6.67 per month) based on their typical residential annual consumption of 2400 cubic meters.

Natural gas utilities, such as Enbridge and Union, are expected to provide notice to customers on the interim rate in late November/early December. These interim rates will come into effect on **January 1, 2017**. The rate will be confirmed and/or adjusted with the full hearing.

The interim rates associated with cap and trade will be incorporated into the OEB's regular approval of the natural gas utilities Quarterly Rate Adjustment Mechanism (QRAM) filings. The QRAM filings are the utilities' regular process to update the natural gas rates, including commodity prices which are updated quarterly.

The QRAM filings for January 1, 2017 are due by December 10, 2016. They will include:

- The proposed commodity rate adjustments;
- The interim cap and trade rate; and
- Normal changes to the delivery rate.

Note: All of these will take effect on January 1, 2017.

Q. How will electricity imports be treated under cap and trade?

Two objectives are achieved by placing a “carbon price” on electricity imported into Ontario:

- Treats domestic electricity generation and imports equally (i.e., mitigates competitive disadvantages faced by Ontario generators under cap and trade); and
- Prevents CO₂ leakage from electricity imports (i.e., mitigates increased emissions arising from fossil fuel-based electricity generation from the US states displacing Ontario generation).

In 2015, ENERGY retained an independent consulting firm (i.e., Navigant) to develop the default emission factors (DEFs) for 2017, which are outlined in a technical report, entitled *Proposed Default Emission Factors for Ontario's Cap & Trade Program*. The publicly available report outlines a methodology that calculates DEFs based on the “marginal emission intensity” of generation resources.

To be compliant with Ontario's cap and trade regulation, electricity importers will apply DEFs to their electricity imports to determine the emissions associated with such imports:

- There are DEFs associated with various jurisdictions/balancing authorities (e.g., New York Independent System Operator, Manitoba, etc);
- Electricity importers would multiply the amount of imported electricity by the DEF associated with the jurisdiction to determine the associated emissions; and
- At the end of the first cap and trade compliance period (i.e., end of 2020) the electricity importer must provide allowances equal to this amount of emissions.

It should be noted that electricity importers into Ontario are under no obligation to include the cost of carbon in their offers and/or purchase allowances at each cap and trade auction. However, they are obligated to provide allowances at the end of the first cap and trade compliance period (i.e., end of 2020). **Note:** Electricity importers could purchase their allowances on the secondary market.

Note: The technical report that outlines the 2017 DEFs will likely be updated on an annual basis.

Q. How will prices for retail fuels such as gasoline and diesel be affected under cap and trade?

The 2016 Budget estimated that cap and trade would increase the cost of gasoline by about 4.3 cents/litre in 2017 (i.e., as result of a pass-through of compliance costs under cap and trade to end-use fuel consumers).

Fuel suppliers in the province are subject to Ontario's cap and trade legislation, and are required to have allowances by the end of the first compliance period in 2020 to offset the greenhouse gas (GHG) emissions from the fuel they provide to the market starting January 1, 2017.

It is anticipated that fuel suppliers will estimate their compliance costs of cap and trade (i.e., by looking at recent auction prices for allowances) and adjust their wholesale prices to reflect those costs as of January 1, 2017.

Note: Fuel suppliers in Ontario operate in a competitive market environment (i.e., not subject to economic regulation like the natural gas utilities). The timing and strategies used by fuel suppliers to comply with cap and trade will likely be influenced by competitive pressures. For example, fuels suppliers could decide to delay purchasing allowances until after Ontario links with California and Quebec, if they anticipate that market prices for allowances will be below auction prices. Adopting such a strategy could in turn affect the wholesale price impact.