

Q&A Responses – Annual Auditor General Report

AG Related Issues

Q1. Is it true that the Independent Electricity System Operator (IESO) provided the AG with support to show the impact of this subsidy on the average household electricity bill—which is projected to increase 23% (or \$34.07 per month) from 2015 to 2020 even after applying this reduction?

The report inaccurately implies that these increases can be directly attributed to cap and trade, which is not the case.

The majority of these identified electricity bill increases were included in the 2013 Long-Term Energy Plan (2013 LTEP), which did not contemplate cap and trade.

The 2013 LTEP forecast also does not include recent changes that the government is taking to reduce electricity cost, such as:

- Providing an 8 per cent rebate, equivalent to the provincial portion of HST for consumers eligible for the Regulated Price Plan (RPP) beginning January 1, 2017. It would benefit approximately 5 million eligible electricity consumers including residences, small businesses and farms; with savings of about \$130 annually or \$11 each month for a typical residential consumer.
- Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program. This would decrease total electricity bills by an average of \$540 a year or \$45 each month when combined with the 8 per cent rebate;
- Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit. Current ICI participants shift their electricity consumption to off-peak hours to reduce their bills by about one-third;
- Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program is expected to remove up to \$3.8 billion in costs relative to the 2013 LTEP forecast, meaning the typical residential electricity consumer would avoid an average of approximately \$2.45 on their electricity bill; and
- Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.

The final approach to how auction proceeds will be recycled has not yet been finalized. The Ministry of the Environment and Climate Change and the Ministry of Energy continue to work together on finalising the approach.

If pressed:

In 2020, cap and trade is forecast to add less than 40 cents to the average annual residential bill and about \$2.15/MWh to the average large industrial electricity price. However, industrial and commercial electricity consumers will see the impact of cap and trade offset through the recycling of cap and trade proceeds.

If pressed:

The forecasted 23% number referenced in the Auditor General's report reflects the 2013 Long-Term Energy Plan (2013 LTEP).

We are currently in the process of updating our Long-Term Energy Plan and the increase is subject to change given that the projection would be impacted by differences in supply and demand factors, along with the recent changes that the government has undertaken to reduce electricity costs in the province.

Q2. The Ontario Energy Board (OEB) is now saying the increase for a typical residential natural gas consumer will be \$6 to \$7. The government has been saying the impact will be \$5. At over 3.3 cents per cubic meter, this represents about a 30% bump to the current natural gas supply charge.

The cost of cap and trade is a modest increase on a fuel that is currently at a low price.

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.

The OEB regulates the natural gas sector in Ontario with a strong mandate to protect the public interest and ensure that consumers receive reliable, cost-effective natural gas service.

On November 15, 2016, the natural gas utilities filed their cap and trade compliance plans with the OEB.

On November 24, 2016, the OEB issued its interim decision establishing the rates to be effective January 1, 2017.

- For Union Gas, the OEB approved an interim rate of approximately 3.36 cents per cubic meter to cover residential cap and trade costs, which amounts to approximately \$6.17 per month for their typical residential customer consuming 2200 cubic meters per year.
- For Enbridge Gas Distribution, the OEB approved an interim rate of approximately 3.35 cents per cubic meter to cover residential cap and trade costs, which amounts to approximately \$6.67 per month for their typical residential customer consuming 2400 cubic meters per year.

It should be noted that these are interim rates. The final rates for 2017 will be determined through a full hearing at the OEB starting in early 2017.

In addition, the government is taking steps to help homeowners improve the energy efficiency of their homes, reduce their energy bills and cut greenhouse gas GHG emissions.

Cap and trade auction proceeds are being reinvested in programs like the Ontario Green Investment Fund (GIF) to help people lower their GHG emissions and address the cost increases from GHG-emitting energy sources.

Q3. Now that the Ontario Energy Board (OEB) has issued its interim rate order for natural gas, when will a full hearing occur and what are the next steps?

The Ontario Energy Board (OEB) is required to review and approve the cap and trade rates used by natural gas utilities before the costs can be recovered from rate payers.

The OEB regulates the natural gas sector in Ontario with a strong mandate to protect the public interest and ensure that consumers receive reliable and cost effective natural gas service.

On November 24, 2016, the OEB issued its “Interim Rate Order” approving the natural gas utilities interim rates effective January 1, 2017 based on the natural gas utilities’ compliance plans filed with the OEB on November 15, 2016.

Due to the similarities of the filed compliance plans from the natural gas utilities, the OEB has determined that it will hear the rate applications in a combined proceeding. That proceeding is expected to commence in early 2017.

In terms of next steps, the OEB has directed the natural gas utilities by December 4, 2016 to provide a copy of their compliance plans to all intervenors in their previous cost of service rate hearings along with a copy of the OEB’s Notice. In addition, the utilities are to immediately post a copy of their compliance plans and the OEB Notice on their websites in prominent place and to make a copy available for public review at their head offices. Within the coming week, the OEB Notice will be published in a variety of media.

The OEB Notice identifies the purpose of the hearing and encourages all customers of the natural gas utilities to become involved. Options available to participate include:

- Filing a letter of comment at any time before the end of the hearing; and
- Apply to become an intervenor by January 9, 2017, which will permit full participation in the proceeding including the asking of questions, filing of evidence and final argument.

The OEB has yet to determine if this will be a written or oral hearing. Parties who are interested in this matter are encouraged to write to the OEB and explain which option they prefer along with rationale by January 9, 2017. Further details on the hearing are expected from the OEB shortly.

The OEB's final determination on cap and trade rates for 2017 will be issued at the conclusion of its hearing in the form of a final rate order.

Q4. The Ministry of Environment and Climate Changes website indicates that natural gas conservation programs can help save households \$7 to \$11 per month. Which specific programs are being referenced here and what is the upfront cost to the program participant?

The estimate is based on analysis provided by the Ontario Energy Board (OEB). The OEB has indicated that a typical residential customer who participates in utility natural gas conservation programs could save approximately \$7 to \$11 per month, in addition to any financial incentives provided to the customer(**Source:** OEB, February 2016).

Note that these are typical customer savings estimates. Savings for specific customers would depend on a variety of factors including the types of measures being installed, age of the home and energy consumption patterns.

The specific programs being referenced here are Enbridge and Union's home audit and retrofit programs and Enbridge's smart thermostat program.

For the home audit and retrofit programs, customers are eligible to receive incentives towards the cost of energy audits and the installation of energy efficiency measures such insulation, furnaces and boilers. Typical project costs after applying program incentives range from \$3,000 to \$4,000 (**Source:** Enbridge and Union, July 2016).

For the smart thermostat program, customers are eligible to receive a rebate for the purchase of a smart adaptive thermostat. Typical costs after applying the program rebate range from \$150 to \$250 (**Source:** Enbridge and Union, July 2016).

Q5. AG has indicated in the past that “From 2006 to 2014, electricity consumers have already paid a total of \$37 billion, and they are expected to pay another \$133 billion in Global Adjustment (GA) fees from 2015 to 2032.” Why are Ontarians paying for “out of market” costs for electricity generation via the GA?

Separating out the Global Adjustment (GA) from the spot market price (i.e., the Hourly Ontario Energy Price) is not an accurate or reasonable characterisation of the cost of electricity as a commodity.

The vast majority of electricity generators in Ontario are contracted by the Independent Electricity System Operator (IESO) or regulated by the Ontario Energy Board (OEB). These generators are generally paid fixed prices for their output or have contractual minimum revenue requirements to cover their fixed costs.

In Ontario's electricity system, payments to generators are made up of two components – the Hourly Ontario Energy Price (HOEP) and the GA. The GA simply reflects costs associated with contracted and regulated generation, such as nuclear, natural gas and renewables and the cost of conservation programs.

All generators receive HOEP for the electricity they supply. HOEP is determined by supply and demand conditions in the wholesale market and generally reflects the marginal cost of electricity generation in the province.

Contracted and regulated electricity generators receive payments to make up the difference between the revenue generated through the wholesale market and their expected contracted or regulated revenue. This difference is recovered from/returned to the GA.

GA varies from month to month, responding to changes in both the HOEP and contract terms; however, the all-in commodity price is reasonably stable over time. When the market price is higher, a greater proportion of generating costs are recovered through the market and GA payments decrease. Similarly, when the market price is lower, GA is higher.

It is misleading to suggest that GA represents an additional cost, when in actuality it reflects a portion of the total commodity cost of electricity.

The \$37 billion cost reflects the sum of GA from 2006 to 2014 in nominal dollars from the Independent Electricity System Operator's (IESO) website. These figures can be found on IESO website at: <http://www.ieso.ca/Pages/Participate/Settlements/Global-Adjustment-Archive.aspx>

The \$133 billion cost, referred to in the AG's 2015 Annual report, reflects the total forecast GA from 2015 to 2032 in real 2012 dollars. These costs can be found in the 2013 LTEP modules at: <http://www.powerauthority.on.ca/power-planning/long-term-energy-plan-2013> (i.e., pg. 55 of Module 4).

In 2015, the total cost of electricity service was about \$20 billion in nominal dollars. Of this 64% was the cost of electricity generation (i.e., about \$13 billion). This can be found in IESO's 10-Year Review at: <http://ieso.ca/Documents/OPO/MODULE-1-State-of-the-Electricity-System-20160901.pdf>

Note: Adding GA from 2015 would increase the \$37 billion total by about \$10 billion.

Q6. Why has the Ontario Energy Board (OEB) decided to include the cap and trade charge as part of the delivery charge on the bills of natural gas customers? Isn't this just a tax that is being buried in utility bills?

The Ontario Energy Board (OEB) regulates the natural gas sector in Ontario with a strong mandate to protect the public interest and ensure that consumers receive reliable, cost-effective natural gas service.

The OEB has provided a number of reasons for their decision to include bill charges related to cap and trade in the delivery charge of natural gas bills.

The costs of complying with Ontario's cap and trade program are part of the ongoing operations of the natural gas utilities. Ongoing operations costs are included in the delivery line on utility bills.

Cap and trade costs are similar to conservation program costs in that they are borne by all energy consumers. Conservation programs and GHG emissions reduction programs funded through cap and trade are designed to encourage consumers to reduce their energy/fuel usage. The costs of energy conservation programs are included in the delivery charge of electricity bills, and are not broken out.

The inclusion of cap and trade costs in the delivery line of natural gas bills follows this model.

Research conducted by the OEB shows that consumers want simpler bills and information that help them manage their costs. The research shows that, when reviewing their monthly bills, consumers focus their attention on the amount they consumed and the total bill price; with limited attention to specific line items.

A review of other jurisdictions with cap and trade programs indicates there isn't a standard approach to bill presentment.

Other Issues

Q7. Is it true that government's 2013 Long-Term Energy Plan did not consider emissions in the province's future energy-supply mix?

Since 2003, Ontario has invested more than \$35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables – this represents about 40% of our current supply.

Ontario eliminated coal-fired electricity generation, replacing it with cleaner sources of energy, which has decreased electricity sector emissions by approximately 80 per cent since 2003.

It is not true that greenhouse gas (GHG) emissions were not contemplated in relation to decisions regarding generation targets. Ontario's 2013 Long-Term Energy Plan (2013 LTEP) includes targets for renewable energy: 10,700 megawatts (MW) for wind, solar and bioenergy to be online by 2021 and 9,300 MW for hydroelectricity to be online by 2025.

Ontario now has approximately 15,900 MW of wind, solar, bioenergy and hydroelectricity energy online.

Ontario is reviewing the LTEP, including largest, most open and comprehensive province-wide consultation and engagement in Ministry of Energy history. Engagement sessions are open to the public, and focus on the future of Ontario's energy system and the government's plan to maintain a reliable supply of clean, affordable electricity.

Q8. The Auditor General's report claims that the Ministry of the Environment and Climate Change (MOECC) plans to spend up to \$1.32 billion between 2017 and 2020 to offset the financial impact of cap and trade on residential and commercial electricity bills, and thereby decrease emissions by 3Mt. Can the Ministry of Energy confirm these numbers?

The \$1.32 billion was an initial estimate at the time of the publication of the Climate Change Action Plan (CCAP). The decision regarding the final approach for proceeds recycling has not been determined. A number of options are still under consideration.

With respect to the 3 Mt referenced in the report, it represents "planned/committed" electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (2013 LTEP). The forecast amount of greenhouse gas (GHG) emissions savings is based on planned and committed electricity projects that have not yet been funded by electricity ratepayers.

Please note that the 3 Mt reflects reductions that are relative to the 2013 LTEP rather than the Independent Electricity System Operator's Ontario Provincial Outlook (OPO). It is incorrect to use the OPO as the baseline.

As part of the package of rate mitigation initiatives announced following September 12th Throne Speech, the government intends to use a portion of the cap and trade auction proceeds to keep electricity rates affordable for commercial and industrial electricity consumers.

Q9. What about the fact that the Auditor General's report states that the increased cost of cap and trade will make natural gas the more economical option?

Fuels such as natural gas would also be subject to a carbon price under Ontario's cap and trade program. The price on carbon is forecasted to increase over the first compliance period (2017-2020).

The use of cap and trade auction proceeds to lower the cost of clean electricity would make it more competitive with traditionally cheaper fossil fuels, providing an incentive to fuel switch from fossil fuels to electricity consistent with the goals of the Climate Change Action Plan (CCAP).

As part of the package of rate mitigation initiatives announced in the 2016 Throne Speech, the government intends to use a portion of the cap and trade auction proceeds to keep electricity rates affordable for commercial and industrial electricity consumers.

Q10. What is the purpose of the Ontario Energy Board's (OEB) cap and trade framework?

This framework sets out how the OEB will determine if the costs that utilities incur for cap and trade related activities are reasonable, and how they will be recovered from gas customers.

The OEB expects that natural gas utilities will develop compliance plans to achieve their obligations – related to emissions from their own facilities from delivering natural gas and for the emissions related to customers' use of natural gas – under Ontario's Cap and Trade program.

The OEB is responsible for assessing the costs of utility compliance plans, not for the plans themselves. The OEB framework will help guide utilities as they develop and implement their compliance plans.

Q11. How will the Ontario Energy Board (OEB) ensure the natural gas utilities' Compliance Plans are cost-effective and protect consumers' interests?

The OEB has set out a clear set of measures and metrics, using carbon cost forecasts based on independent experts and market based data, to ensure that natural gas utilities' plans are cost-effective.

The OEB expects the natural gas utilities to look at both short and long-term options for complying with their cap and trade obligations. The OEB also expects those options be prioritized to the benefit of their customers.

The OEB's framework requires a robust annual monitoring of natural gas utilities' cap and trade activities to ensure costs being incurred are prudent before being recovered from customers. In addition, natural gas must demonstrate continuous improvements in their cap and trade actions.

Q12 How is the government helping consumers to reduce their energy bills and fight climate change at the same time?

The province is investing \$100 million from the Ontario Green Investment Fund (GIF) to help homeowners improve the energy efficiency of their homes, reduce their energy bills and cut greenhouse gas emissions.

Rebate programs that help people do energy-saving home renos and retrofits work — people want to upgrade their homes, lower their bills and protect the environment.

The investment is expected to enable additional audits and retrofits of around 37,000 additional homes and save approximately 1.6 Megatonnes of cumulative lifetime greenhouse gas emissions, contributing to the province's greenhouse gas (GHG) emissions reduction targets.

Q13. How much money do you expect this will save the average homeowner on their heating bill?

The rebates will help homeowners pay for the costs of the audits and retrofits— so they can save on the cost of construction or new equipment if they participate in the full programs.

The typical range of the rebates provided by the programs is \$500 to \$2000. After that, households will save on their energy bills year after year because they won't need to burn as much gas or fuel. Energy-efficiency home renos have been shown to save \$1.50 to \$4 for natural gas consumers for every dollar invested.

Q14. How much is the government spending on the GIF program and where is the money coming from?

The province is investing \$100 million from the Ontario Green Investment Fund (GIF) to help homeowners improve the energy efficiency of their homes, reduce their energy bills and cut greenhouse gas (GHG) emissions.

Ontario's Green Investment Fund is a \$325-million down payment on the province's cap and trade program to strengthen the economy, create jobs and reduce these environmentally harmful emissions.

Cap and trade proceeds are being reinvested in programs exactly like this, to help people lower their GHG emissions and literally insulate themselves from what we know will be the rising price of GHG-emitting energy sources.

Q15. 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.

Q16. 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.