

Energy

Electricity Price Mitigation

TB/MBC Feb 15, 2017	Cabinet Feb 15, 2017	Announcement Feb 16, 2017	Effective Date July 1, 2017
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This government's commitment	"The government will also take steps, through investments in residential energy efficiency, to ensure that the net impact of cap and trade on electricity cost would actually provide a modest benefit of up to \$2 per month, on average, to residential consumers. – <i>Ontario Budget 2016</i> "We're going to come out with what we can do [on hydro bills] before the budget," – Premier Wynne, January 18 2017
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SUMMARY OF PROPOSAL

The Ministry of Energy is seeking Cabinet approval to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all residential [and other] electricity consumer classes by:

1. Refinancing Global Adjustment assets in order to defer ratepayer Global Adjustment costs (similar to re-financing a mortgage).
2. Explore expanding the powers of the OPG or using other mechanisms to take on responsibility for management of deferred ratepayer Global Adjustment costs, including borrowing up to \$2.2B in 2017/18 and \$XB by [end date] and [other powers/responsibilities including authority to establish subs].
3. [possible Supports for Class B – conservation efforts]
4. Enhancing electricity support programs and shifting the costs of those programs from the rate base to the tax-base:
 - Enhance [details based on option] the Rural or Remote Electricity Rate Protection (RRRP);
 - Expand the Ontario Electricity Support Program (OESP);

- Establish a Local Distribution Company (LDC) Affordability Fund; and
 - Provide support to on-reserve First Nations customers.
5. Ongoing activities to bend the future cost curve of electricity:
- Ontario Energy Board (OEB) – Identify opportunities for OEB red-tape reduction and future LDC efficiencies and rates.
 - Independent Electricity System Operator (IESO) – Modernize Ontario’s electricity market through electricity Market Renewal initiatives.

The proposal will require a number of legislative, regulatory and other changes, while maintaining other public policy objectives such as ensuring electricity ratepayers are protected. This includes policy approval to amend the legislated authority of the OPG to include **XX**.

Terms you need to know

- **Global Adjustment (GA)** – Amount that accounts for differences between the market price of electricity and rates paid to regulated and contracted generators and for conservation programs. The GA is collected from all electricity ratepayers in Ontario.
- **Local Distribution Companies (LDCs)** – Local electricity utilities, responsible for distributing power from transmission lines to people's homes (e.g., Hydro Ottawa, Toronto Hydro, etc.)
- **Regulated Price Plan (RPP)** - Since April 2005, the Ontario Energy Board (OEB) has administered an electricity price plan that provides stable and predictable electricity pricing, encourages conservation and ensures the price consumers pay for electricity better reflects the price paid to generators. This pricing plan is known as the Regulated Price Plan (RPP). About 5 million residential consumers, small businesses and farms are eligible for the RPP.
- **R1 customer -**
- **R2 customer -**
- **Ontario Power Generation (OPG)** – A business corporation owned by the province that owns and operates generation assets, including nuclear and hydro, and generates approximately two thirds of Ontario’s electricity.
- **Ontario Energy Board (OEB)** – A Crown Agency that independently regulates Ontario’s electricity and natural gas sectors in the public interest. Implements an open and transparent process to allow for stakeholders to comment on various items.
- **Independent Electricity System Operator (IESO)** – An independent capital corporation that operates the transmission electricity grid in Ontario. Balances the supply of and demand for electricity in Ontario and then directs its flow across the province’s transmission lines, including interties with other jurisdictions.
- **Class A Consumer** – large commercial and large industrial consumers with average peak load size above 3 MW, subject to eligibility. Class A consumers pay GA based on their electricity consumption during the five highest peak demand hours during the year.
- **Class B Consumer** – commercial, institutional and small industrial consumers,

typically with load size between 0.05 – 3 MW. Class B consumers pay GA as a flat rate applied to electricity consumption. Class B consumers include those that choose not to become Class A.

What is the expected cost to government?

The proposal would cost \$200M in the current year, \$652M in 2017/18, growing to \$709M in 2018/19 and beyond. This is not in the government's fiscal plan and so represents an additional pressure on the plan.

Fiscal Impact (\$M)	16-17	17-18	18-19	19-20	20-21
Legacy Rural or Remote Rate Protection (RRRP)*	-	126	130	133	136
RRRP 2016 – Speech from the Throne Expansion*	-	117	120	123	127
Accelerating Fixed Rates for Hydro One**	-	61	51	40	29
Harmonizing Fixed Rates for Hydro One and High Cost LDCs***	-	150	149	150	152
Ontario Electricity Support Program 50% Enhancement	-	178	239	290	334
First Nation Rate	-	20	20	20	20
LDC Affordability Fund****	200	-	-	-	-
<i>Fiscal Impacts – Sub Total</i>	200	652	709	756	798
Change in 8% Rebate (Option 1)*****		-138	-120	-171	-147
Change in 8% Rebate (Option 2)*****		-75	-56	-106	-86

Notes:

*Current regulatory framework calls for RRRP to increase by average distribution rate increase. Forecast assumes 2.6% annually though is subject to OEB proceedings.

**Funding for accelerating fixed rate benefits is completed as the move to fixed rates is accomplished over OEB timelines.

***Cost forecasts assumes 2.6% annual rise in distribution rates; will be subject to 2017 Hydro One cost of service application. Until move to fixed rates is complete, fiscal projection is subject to consumer consumption patterns that may change due to extreme weather or other factors.

**** Funding for the LDC Affordability Fund is one-time in 2016/17.

***** The 8% rebate represents savings compared to fiscal plan due to the bill reduction from GA financing and other mitigation measures.

The impact of moving program funding from the electricity rate base to the tax base is approximately \$XXX/year and would result in approximately \$XX savings/month for a typical residential electricity bill.

[Fiscal impact if accounting overturned / AG analysis]

There is inherent risk in the financial summary because the calculations are highly dependent on estimates for the cost of borrowing and xxx. This is similar to the initial projections for the cost of the 8% rebate in September 2016. At the time of initial approval, the cost projection for the 8% rebate was \$1B for the first year. The projections were refined over the following two months, resulting in a revised estimate of \$1.2B for the first year.

How will the changes be communicated?

Public high-profile announcement and communications would occur in February 2017. Stakeholder outreach/technical briefings will be held with [all tbc - LDCs, Ontario Chamber of Commerce, Association of Major Power Consumers of Ontario, Ontario Energy Board low-income table, Association of Municipalities of Ontario], and others.

The changes will be positioned as:

- Building on the January 2017 8% HST rebate.
- A plan to benefit all ratepayers in a meaningful way.
- The most vulnerable will receive significant rate relief.

CABINET OFFICE ANALYSIS

The proposal aims to provide further rate relief to Ontario electricity ratepayers. The proposal builds on earlier electricity rate mitigation initiatives, including the ORECA [spell out], which was announced in September 2016 in the Throne Speech, Ontario Clean Energy Benefit (OCEB), ending the electricity Debt Retirement Charge (DRC), and the Ontario Electricity Support Program (OESP) that targets low-income households.

Since 2010, electricity prices have risen considerably in Ontario, particularly for families and small businesses. The price of electricity is among the highest priority items for Ontarians. Prices are forecast to continue to increase as additional renewable energy generation is brought online. Ontario currently provides rate mitigation to various electricity consumers through a combination of tax-based and rate-based programs. Rate-based programs are funded by shifting costs from one electricity consumer group to another.

Ontario produces and publishes a Long Term Energy Plan every four years, with the next LTEP scheduled for release in the spring of 2017. LTEP principles that will guide decision-making are affordability, reliability, clean energy, community and Indigenous engagement and conservation and demand management. Through extensive consultation with the public, stakeholders and Indigenous partners through the fall of 2016, the LTEP will identify priorities (e.g., conservation, key transmission projects). Elements of this proposal [list them] would be combined with new policy or program announcements in the LTEP to provide the comprehensive future planning perspective for Ontario's energy sector.

Under the proposal, all electricity consumers will benefit from one or more of the proposed electricity price mitigation initiatives.

Refinancing Global Adjustment assets in order to defer ratepayer costs

The GA accounts for the fixed costs, including capital costs, of running Ontario's generation fleet, as well as the cost of conservation programs. The GA is instrumental in maintaining a reliable electricity system by ensuring that sufficient generating capacity is available. The GA has risen over the past decade as the province has entered into renewable energy contracts, invested in greenhouse gas (GHG) emissions-free renewable and nuclear generation facilities.

Some of the contracted generation assets are expected to have a useful life that extends beyond the term of their current financial contracts (typically 20 years). Similarly, conservation costs are recovered through the GA on an annual basis while conservation

initiatives provide benefits to the electricity system over many years. Many of these assets operate well beyond their current contracts.

The proposal defers some of the current costs to ratepayers by recognizing the longer term benefit of these assets to the electricity system. The cost to ratepayers is lowered in the short term by borrowing money, but increases over the long term **at 3% each year** – up to a maximum of XX above the true cost of GA – until the borrowed money is paid back over an XX year financing period. Only XX% rate relief can be justified by amortizing contracts over the useful life of the underlying assets. Reducing electricity rates beyond this amount is dependent on increased borrowing.

Those ineligible to receive the GA rate relief will benefit from one or more of the other initiatives under this proposal (**e.g., [list others]**).

Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	Not eligible for the 8% rebate (> 50 kW or > 250,000 kWh/year)
• Residential Regulated Price Plan consumers • Residential retail consumers • Multi-unit residential buildings and other facilities used as residential rental units • Long-term care homes and school residences • Regulated Price Plan eligible farms • Small businesses - Coffee / snack retailer - Convenience store - Apparel store - Hair salon - Small insurance office	• Class A consumers - Manufacturer - Large grocery store - Mines - Auto assembly plants • Class B consumers (except farms that have opted out of the Regulated Price Plan) - Commercial offices (low rise) - Hotel - General warehousing

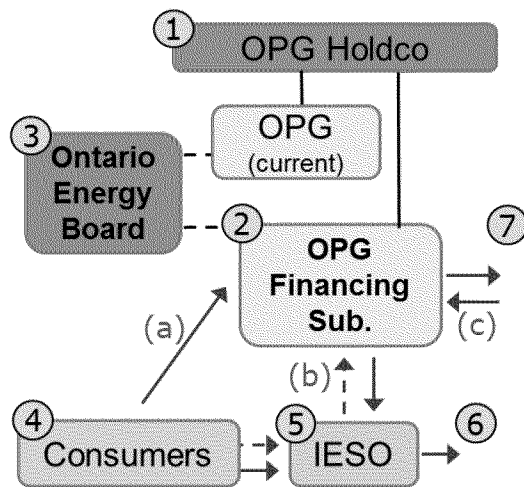
Mechanism to deliver the deferral of GA costs

In order for the GA refinancing not to impact the current fiscal plan, an entity that the province does not govern would be needed to finance and administer the debt. This entity would need to meet Government Business Enterprise accounting treatment. Through this proposal, the Ontario Power Generation (OPG) would be restructured through legislation to be able to assume this responsibility.

In order for **[the new subsidiary of OPG]** to meet the Government Business Enterprise accounting control, the following conditions need to be met:

- separate entity with power to contract, sue and be sued,
- delegated financial and operational authority to carry on a business,
- sells good and services to individuals and organizations outside of the government reporting entity as its principal activity,
- It can maintain operations and meet liabilities from revenues received from sources outside of the government reporting entity.

[description of rationale for OPG plan, necessary steps, details on Governance, financing, recovery and contractual/legislative considerations]



1. OPG would create a holding company which would own shares in the existing OPG Inc., as well as a new Financing Subsidiary.
2. The OPG Financing Sub. funds part of the GA and (a) would have a legislative right to recover associated principle, interest and administrative costs from customers (settled via service agreement with IESO)
3. OEB, while continuing to regulate the current OPG, provides light-touch oversight of the OPG Financing Sub., as well as the GA smoothing mechanism
4. Consumers pay IESO a portion of the GA in early years. In the future, the OPG Financing Sub. recovers principle, interest and administrative costs from consumers. Customers bill presentation remains unchanged (costs should diminish in early years).
5. The IESO pays generators (in early years), partially from consumers and partially financed by the OPG Financing Sub. (b) The IESO provides collection services to the Financing Entity under a service contract
6. Generators continue to receive payments from IESO according to existing contract / regulatory structures
7. The OFA or a 3rd party lender funds the GA shortfall in early years and (c) receives payments from the OPG Sub. as debt is repaid.

Enhancing electricity support programs and shifting cost from the rate base onto the tax-base:

RRRP Enhancement (Delivery Charge Relief):

Currently, RRRP is an \$XX million program paid for by the ratepayers. For an average residential customer, the cost of supporting RRRP is roughly \$1.58 per month. For other customers, the cost can range from \$65 for a greenhouse to \$8,000 for a medium industrial. RRRP helps to offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province. Part of the program helps fund the costs of Hydro One customers in the lowest density service areas (R2 customers). Distribution costs vary across LDCs, and distribution costs are highest for R2 and R1 customers.

The OEB is gradually moving towards fixed distribution rates in order to mitigate the impact of increases to low volume consumers. Most LDCs would receive fully fixed rates in 2019/2020, with Hydro One transitioned by 2022/2023.

The ministry proposes to:

- move the RRRP from the rate base to the taxbase
- Accelerate the benefit of fixed distribution rate for high cost LDCs (cost decreases for ~20k consumers)
- Harmonize the fixed distribution rates at \$38/month for R2, R1 and the high cost LDCs (enhanced benefits for ~280k consumers and new cost decreases for ~420,000 consumers)

Ontario Electricity Support Program (OESP) Expansion:

The OESP is an income-tested, application based program that lowers electricity costs of the most vulnerable consumers by providing a rebate directly on electricity bills. There are two benefit scales; the basic program credits by income and household size (credits range from \$30/month to \$50/month); the enhanced benefit credits for Indigenous, electric heat consumers and certain medical devices (credit ranges from \$45/month to \$75/month).

The ministry is proposing to:

- move the OESP from the rate base to the tax base
- Increase OESP monthly credits by 50%

LDC Affordability Fund

The Home Assistance Program provides eligible low-income customers with energy efficiency upgrades and education, at no cost, to help improve the energy efficiency and comfort of their homes. Program eligibility is aligned with other low-income support programs such as the OESP and the program is delivered by LDCs.

Some electricity customers who struggle to pay their electricity bills do not meet the definition of a low-income household and therefore are not eligible for the Home Assistance Program.

The ministry is proposing to:

- Establish an “Affordability Fund” for LDCs in 2016/17 that would help struggling customers who do not qualify for low income programs and cannot upgrade their homes without financial assistance. The Fund would be funded through the tax base
- Over time the Fund could help these customers get back on track with their bills and also save on disconnection costs
- The Fund would be targeted to customers on an as-needed basis (vs. widely marketed as an open-intake program)

Provide support to on-reserve First Nations customers

First Nation and Political-Territorial Organization leaders have advocated for the need for electricity rate relief for on-reserve customers and the review of delivery charges associated with transmission and distribution within the context of historical grievances.

The ministry is proposing to:

- Eliminate the delivery charge for all on-reserve First Nations residential customers and eliminate the monthly service charge for customers of licensed distributors which charge a bundled rate. This would provide residential customers an average monthly benefit of \$85 at a total annual cost of up to \$20 million.
- Automatically qualify on-reserve First Nations residential customers (~21,500 customers)

- Enable greater information sharing between distributors and band councils to identify all on-reserve First Nations customers
- Fund these supports through the tax base

Ongoing activities to bend the future cost curve of electricity:

Ontario Energy Board (OEB) – Identify opportunities for OEB red-tape reduction and future LDC efficiencies and rates.

[details]

Independent Electricity System Operator (IESO) – Modernize Ontario's electricity market through electricity Market Renewal initiatives.

[details]

Expected Impacts of the Proposal on Electricity bills:

The expected impact of this proposal to an average residential customer bill in July 2017 is a 25% decrease. This includes the 8% rebate that came into effect on January 1 2017. The expected impact to an average Class B commercial consumer is **XXX**.

Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-27	-27	-27	-34	-29
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		123	126	128	131	133
8% rebate		-10	-10	-10	-10	-11
HST		16	16	17	17	17
Revised Bill (includes HST)	163	129	132	135	137	140
Year-over-Year Change		-21%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-24%	-28%	-25%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	162	157	159	170	166
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-2%	-2%	-2%	-2%	-2%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	88	90	84	92	93
Year-over-Year Change		-2%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-4%	-4%	-4%

[include ENERGY caveats on calculations]

Stakeholder Considerations:

General public

Residential and Small Business

Industrial and Commercial Consumers

Northern communities

First Nations

eNGOs

[others]

Delivery:

The initiatives in this proposal would be announced in February 2017, with the price mitigation measures in effect for July 1, 2017. The LTEP will be released to the public in [April 2017] and would reinforce/integrate with this proposal.

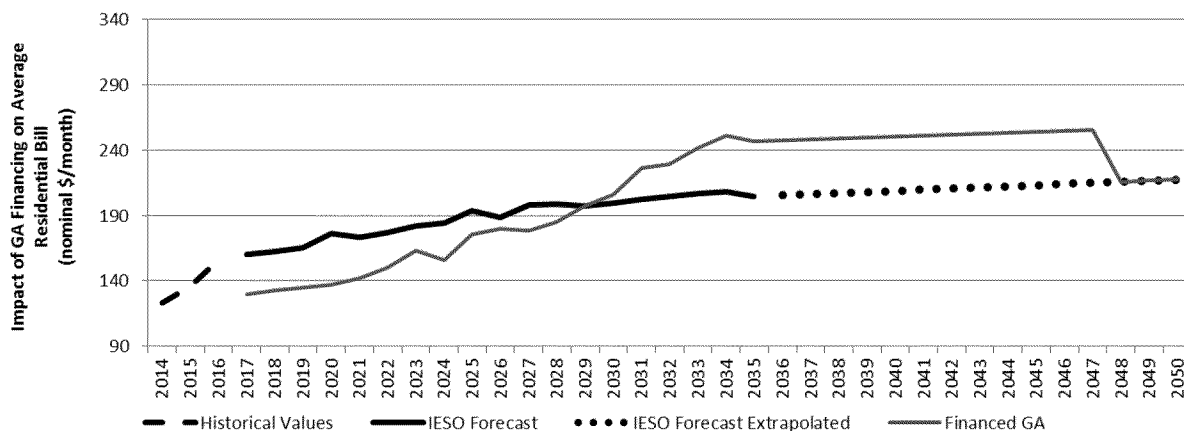
[details on OPG/mechanism delivery]

[details on rollout of expanded social programs]

Risks and Considerations:

Future Impacts to Electricity Rates

Borrowing money to defer GA costs for ratepayers would lower costs in the short term but result in a more rapid rise in electricity prices in the future. Electricity prices would increase to an estimated \$46-51 above the actual cost of electricity on an average monthly bill over the next 12-17 years). The proposal may create the expectation that the government is committed to reducing or holding constant the absolute cost of electricity for consumers.



The GA asset refinancing is structured and delivered in a similar fashion to the former Debt Retirement Charge (DRC). It is likely that the government will be criticized for replacing the DRC with a new, larger stranded debt. The debt retirement charge was removed from residential bills in 2016 and will be removed for remaining customers in 2018.

Future repayment cost estimates are based on both variable interest rates and anticipated number of customers. Programs aimed at expanding/encouraging energy generation, storage and conservation may result in homes and businesses reaching net-zero draw on the energy system, ultimately meaning a lower number of customers. A lower number of

customers would mean increased repayment costs for remaining customers (possibly a very high percentage of their electricity bill). Possible mitigation is xx

Not all generating assets will continue operations at the end of their contract. Nuclear licensing or low demand conditions would mean that some generators will shut down at the end of their contract. Future ratepayers would be paying for these assets that no longer produce power.

Economic Impacts

Higher ratepayer costs in the future could impact the economy by XX.

Provincial Credit Rating and Borrowing

The significant amount of additional provincial borrowing needed to finance the GA and associated risks (interest rates, repayment timelines) could put pressure on the Province's credit rating and overall borrowing capacity.

Rating agencies and investors in the Province's debt may view this borrowing as an obligation of the Province, regardless of accounting treatment. Depending on the magnitude of the debt incurred, the Province's borrowing cost may be impacted.

Fiscal Pressure

This proposal does not align with the 2016 Budget fiscal plan and there are no proposed offsets identified. The proposal does not include a scheduled review period or an end date, resulting in an ongoing fiscal pressure that could only be removed by xx [tbc depending on final proposal]. The cost projections in this proposal are highly sensitive to interest rates and other assumptions.

The extent of fiscal pressures is also dependent on other factors (e.g. the Auditor General could reverse the accounting treatment; impact would be XXB on the fiscal plan in XX year). The role of the OPG external auditor would be xx.

Mechanism or Plan for OPG

- Accountability
 - Need to balance independence with new powers provided by legislation.
 - accountability to the government or the public, amount of government control of the entity, including future rate increases.
- New structure
 - Transition from delivery agency to financial agency – not the current expertise of OPG. Possible dilution of OPG focus on current high priority responsibilities (electricity generation and nuclear refurbishment).
 - New agency/structure would be unique to Canada – uniqueness reduces likelihood of all risks being known/mitigated. Highly specialized expertise would be required.
 - Connection to BPS compensation framework/lack of national comparator.

- Unknown transaction, admin, consultant costs.
- Debt
 - Opportunity for significant shifting of the Ontario's electricity sector over the lifespan of the repayment (30 years). Through sector/policy/government position shifting, possibility of new entity/structure abandoning debt and Ontario having to take a write down.
 - Risk transfer / portion of debt that Ontario would be responsible for would be the higher risk portion
 - Repayment plan highly dependent on interest rates (e.g. 1% increase in interest rate = 10% increase in cumulative interest cost, 2% increase = 20%)
- Public perception/reaction (could be seen as similar to the process preparing Hydro One for IPO)

Industrial and Commercial sector

The impact of cap and trade has been added to electricity bills as of January 2017. Class B consumers have raised concerns about the cost of electricity and its impact on their business competitiveness.

If Class B electricity consumers, such as commercial and small industries, do not receive the benefit of GA Smoothing (i.e., because it is only targeted to RPP consumers) – consideration could be given to provide measures to off-set electricity costs.

Alternative Options Considered:

- 1) Status quo – in the absence of this proposal electricity rates are forecasted to increase in the short med and long term by xx.
- 2) X% rate relief across all consumer classes funded from the fiscal plan – providing a X% rate relief to all consumers would ensure that residential, small business, commercial and industrial consumers would receive the benefit. The projected cost would be approximately \$XXB/year.
- 3) Capping the amount an LDC can bill consumers for distribution service at a specific cost, with distribution costs that exceed this cap covered by the support from the fiscal plan. This would have been temporary until the completion of the OEB-mandated move to completely fixed distribution costs (scheduled for 2019, 2020-2022 for Hydro One).
- 4) Procuring additional hydroelectricity from Quebec, would require upgrade the transmission infrastructure
- 5) Other options considered (vs OPG restructuring) have included using the Independent Electricity System Operator (IESO) and/or creating a new special purpose entity, independent from the Province that would be dedicated to GA refinancing.

Linkages:

Long Term Energy Plan

[details]

Electricity Rate Mitigation Initiatives

The Ontario Rebate for Electricity for Electricity Consumers Act, 2016, (ORECA) put in place an 8% rebate for residential, small business customers and farms beginning January 1, 2017.

The OCEB was a five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. OCEB expired on December 31, 2015.

The government also recently ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and put in place the low-income targeted Ontario Electricity Support Program (OESP), effective 2016.

Ontario's Climate Change Action Plan (CCAP)

The CCAP, released in summer 2016, reiterated the 2016 Budget commitment and stated that Ontario intends to invest in initiatives that both reduce greenhouse gas (GHG) emissions and ensure that the net impact of cap and trade would not result in an overall increase in electricity costs for commercial and industrial consumers, and that there would be a modest benefit of up to \$2 per month, on average, to residential consumers.

Specifically, the CCAP committed to “use cap and trade proceeds to offset the cost of greenhouse gas pollution reduction initiatives that are currently funded by residential and industrial consumers through their bills.” Redirecting cap and trade auction proceeds to lower the cost of electricity could offset investments/initiatives that provide new GHG emissions reductions (e.g., non-emitting generation and conservation programs).

[AG report on LTEP projections]

Other Jurisdictions

[to be inserted]

PROPOSED CABINET MINUTE