Ontario

MINISTRY OF
ENERGY

Rate Mitigation Options for Class B Electricity Consumers

Working Draft

February 2017

CONFIDENTIAL DRAFT

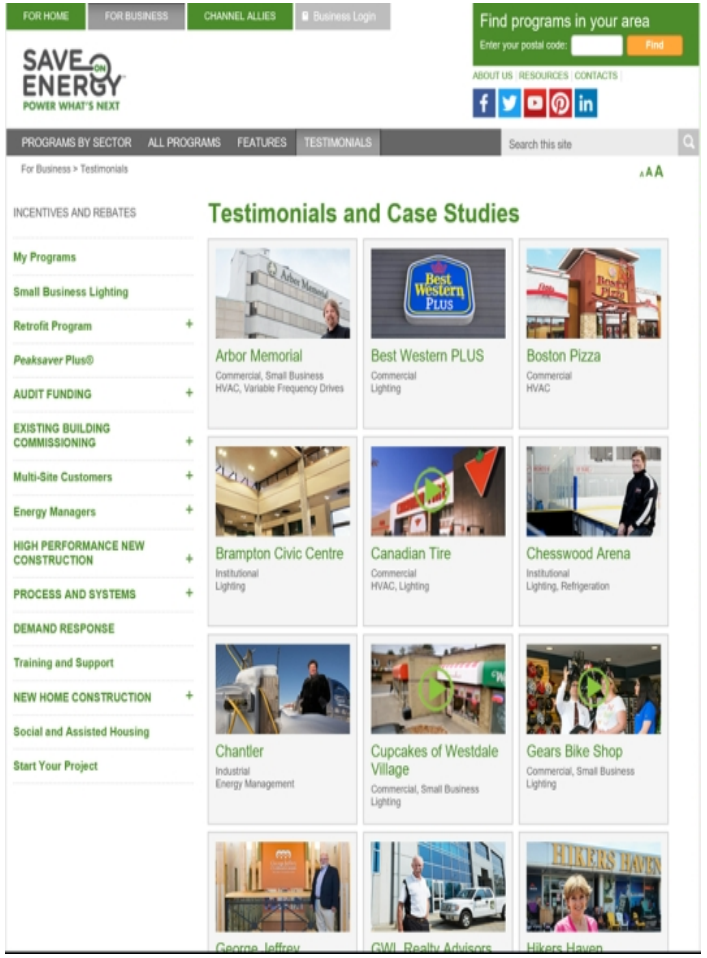
Context

- Class B electricity consumers comprise about 50,000 customers, including many mid-size manufacturers (i.e., automotive parts suppliers, plastics manufacturers), large commercial buildings (i.e., office blocks, mid-sized shopping malls) and broader public sector facilities (i.e., hospitals, college campuses).

- Through saveONenergy, many Class B consumers have already taken advantage of energy efficiency programs.

  - Although saveONenergy programs like Process and Systems Upgrade Incentive exist, these programs generally require significant investment on behalf of the customer in addition to the incentives and therefore may be difficult to take advantage of.

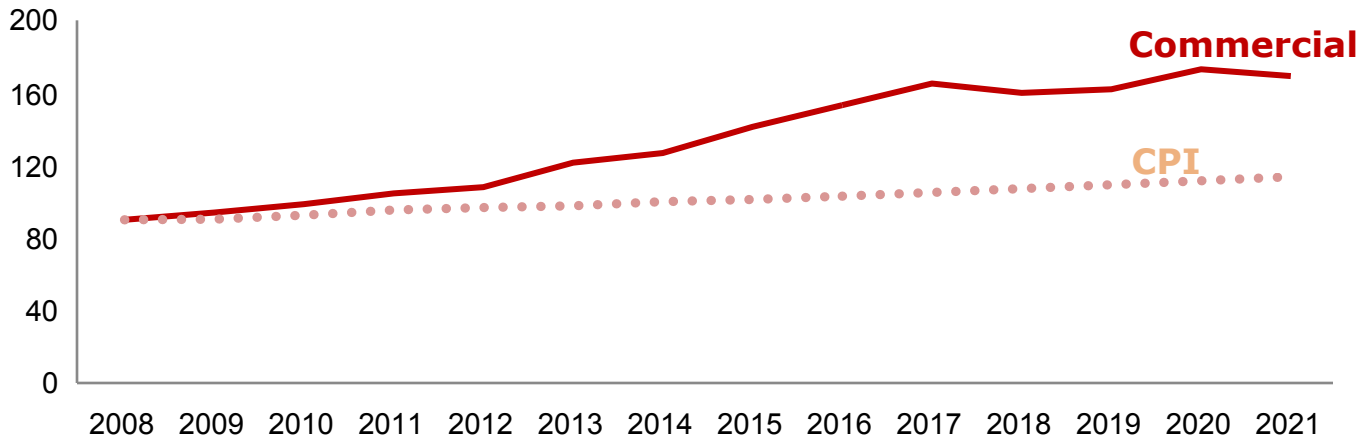
  - For Class B manufacturers whose electricity consumption is primarily based on process activities (e.g., injection moulding, welding, etc), traditional conservation measures like lighting and ventilation upgrades have limited benefit.



Context (cont'd)

- Class B consumers are too large for the Regulated Price Plan (so do not qualify for the 8% rebate for small businesses or Time-Of-Use pricing) and too small to be Class A (so do not qualify for the Industrial Conservation Initiative (ICI) for large consumers).
- Price mitigation initiatives could be provided to Class B to address stakeholders' concerns (e.g., Coalition of Concerned Manufacturers of Ontario, etc).
- The chart below highlights that the cost of electricity for Class B consumers has risen faster than CPI.

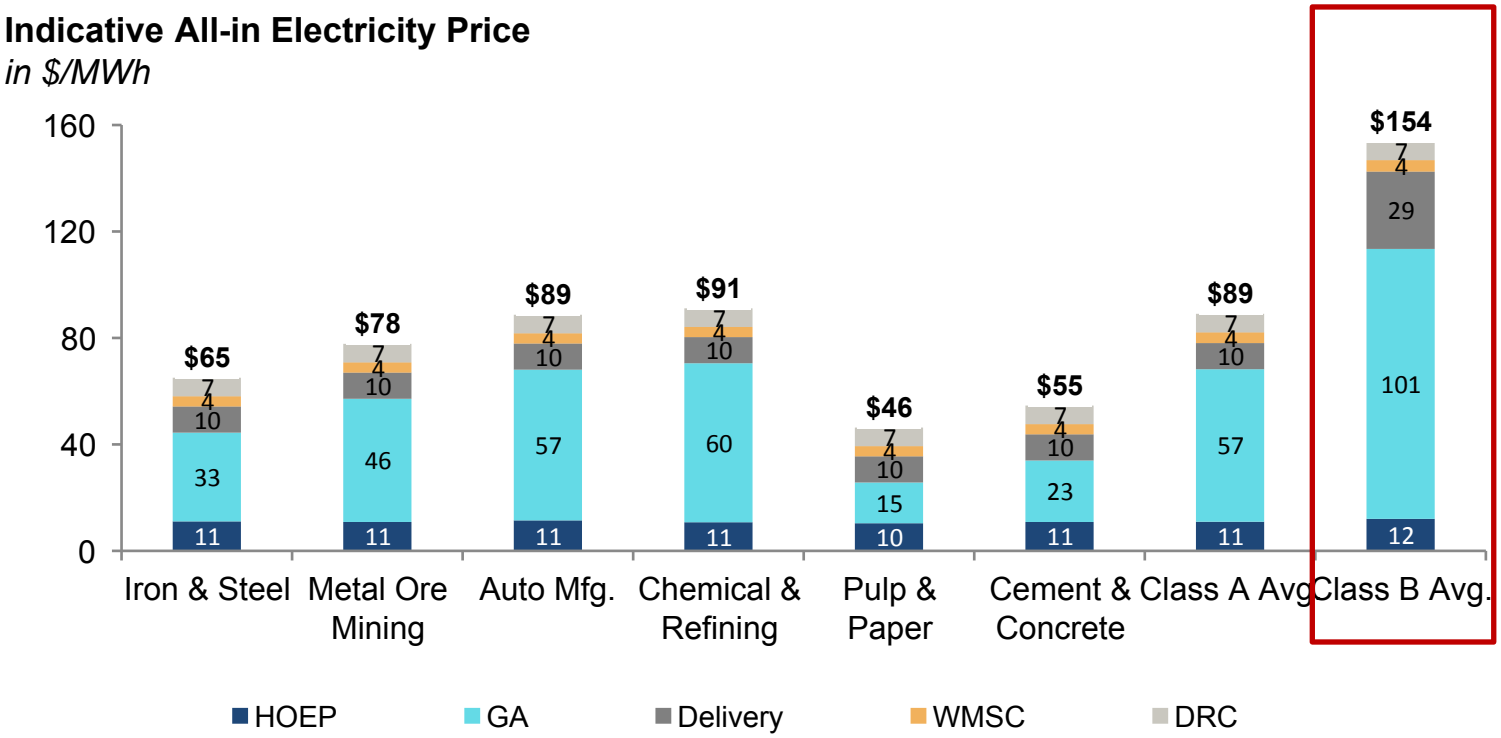
Illustrative Electricity Prices in $/MWh



***Source*:** IESO; OEB; Ministry of Energy

Context (cont'd)

- Class B electricity consumers pay higher electricity prices compared to Class A due to their inability to qualify for Industrial Conservation Initiative (ICI):



Note: Estimates reflect year-to-date June 2016.

Rate Mitigation Options

- Options for consideration include:
  1) GA Smoothing for All;
  2) Lower the Cost of Global Adjustment (GA) by Funding a Portion of Conservation through the GGRA;
  3) Remove Debt Retirement Charge Early (DRC) for Non-RPP Class B Consumers; and
  4) Provide Tax-Based Assistance Package for Class B Consumers (i.e., SMEs).

- The options listed above can be combined to reduce prices for all electricity consumers including Class B or to target Class B specifically.

1. GA Smoothing for All – Residential Bills Lowered by 20% (with Tax-Base Funded 8% Rebate and Social Programs, 2% increase)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

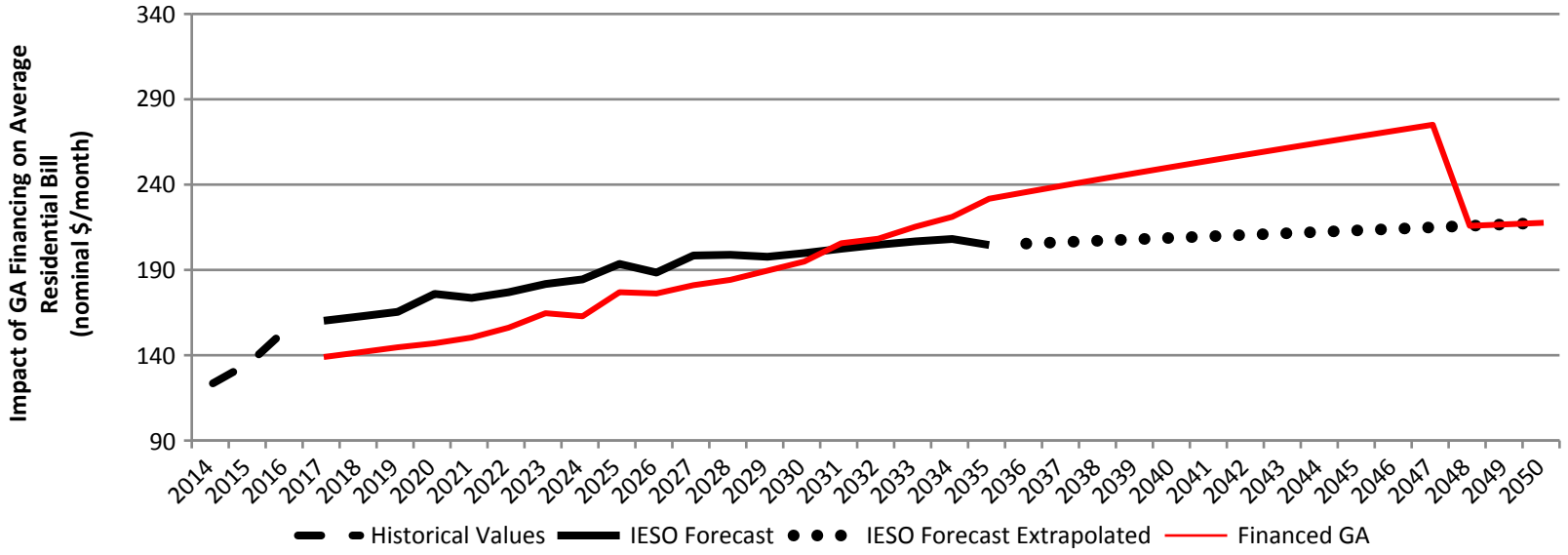
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	**163**	**172**	**175**	**178**	**189**	**187**
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-19	-19	-18	-26	-21
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		131	134	137	139	142
8% rebate		-11	-11	-11	-11	-11
HST		17	17	18	18	18
Revised Bill (includes HST)	**163**	**138**	**141**	**144**	**146**	**149**
Year-over-Year Change		-16%	2%	2%	2%	2%
Change from Forecast		**-20%**	**-20%**	**-19%**	**-23%**	**-20%**

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**	**137**	**132**	**134**	**135**	**138**
Year-over-Year Change		-14%	-4%	2%	1%	2%
Change from Forecast		-17%	-18%	-17%	-22%	-18%

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**	**72**	**74**	**69**	**70**	**76**
Year-over-Year Change		-20%	3%	-7%	2%	7%
Change from Forecast		-21%	-20%	-21%	-26%	-21%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. RPP does not include customers on retail contracts.

1. GA Smoothing for All (Borrow $3.3 billion in 2017, Residential Bills Lowered by 20%)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax *($/month)*	-18.8	-18.6	-18.4	-25.6	-20.6	-18.4	-15.2	-19.1	-14.7	-10.9	-15.4	-13.0	-7.2	-4.4	2.8	3.1	7.6	11.5	24.0	26.7	29.3	31.9	34.4	36.9	39.3	41.7	44.1	46.4	48.7	51.0	53.2	0.0
Total Accumulated Debt *($ billion)*	3.3	6.8	10.4	15.5	19.9	24.1	28.0	32.8	37.1	40.9	45.7	50.3	54.2	57.8	60.2	62.7	64.6	65.8	64.7	63.1	60.9	58.1	54.6	50.5	45.6	40.1	33.7	26.6	18.6	9.8	0.0	0.0
Total Change in Accumulated Debt *($ billion)*	3.3	3.5	3.6	5.1	4.4	4.3	3.9	4.8	4.3	3.8	4.8	4.6	3.9	3.6	2.4	2.5	1.8	1.2	-1.0	-1.6	-2.2	-2.8	-3.5	-4.1	-4.8	-5.6	-6.3	-7.1	-8.0	-8.9	-9.8	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation with no limit above the true cost of GA in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. RPP does not include customers on retail contracts.

2. Lower the Cost of Global Adjustment (GA) by Funding a Portion of Conservation Through the GGRA

- Under the Climate Change Action Plan (CCAP), Ontario committed $1 billion to $1.32 billion of intended Greenhouse Gas Reduction Account (GGRA) funding over the 2017 to 2020 period to keep electricity rates affordable.

- Conservation supports the reduction of GHGs by avoiding/deferring future energy infrastructure investments and reducing natural gas peaking generation and related GHGs.
  - Electricity conservation programs between 2015 and 2020 are expected to result in 1.3 Mt of GHG reduction in 2020, equivalent to taking 300,000 cars off the road in that year.

- The cost of conservation could be shifted away from the rate-base to provide price mitigation for all electricity consumers, including Class B.

- Assuming the CCAP funding is spread equally over the four year period at $250 million to $330 million annually, Class B commercial and small industrial consumer would be reduced by up to $2.50/MWh. See below for the corresponding estimates.
  - Alternatively, funding could be ramped over the course of the four year period – starting at a lower funding envelope in 2017 and increasing over time to total $1 billion to $1.32 billion.

Estimated Benefit	2017	2018	2019	2020	2021
Class B ($/MWh)	1.90 – 2.50	1.90 – 2.50	1.90 – 2.50	1.90 – 2.50	1.90 – 2.50
Class A ($/MWh)	1.20 – 1.56	1.20 – 1.56	1.20 – 1.56	1.20 – 1.56	1.20 – 1.56
Residential Bill ($/750 kWh)	1.43 – 1.90	1.43 – 1.90	1.43 – 1.90	1.43 – 1.90	1.43 – 1.90

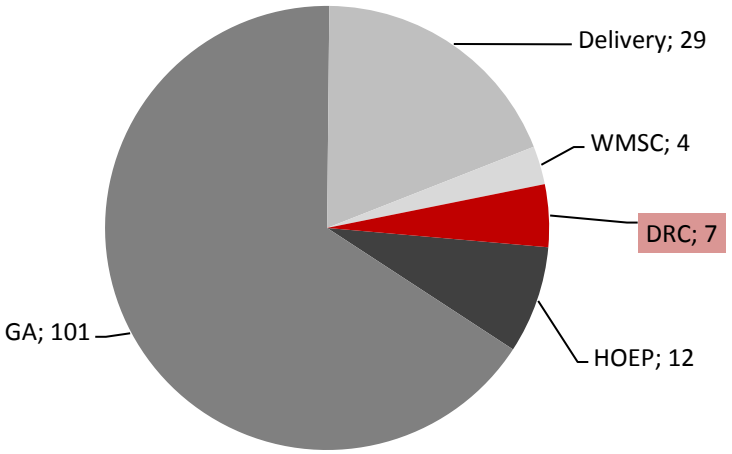
3. Remove Debt Retirement Charge Early (DRC) for Non-RPP Class B Consumers

- The Debt Retirement Charge (DRC) has already been removed from residential bills. For all other consumers the DRC is scheduled to be removed by April 2018.

- Eliminating DRC earlier would save $7/MWh for <u>all</u> non-RPP Class B consumers.
  - This would represent a 4% reduction for a Class B consumer based on current prices.

- Options include:
  1) Shifting DRC which otherwise would be paid by Class B to Class A consumers. This could require extending the legislated DRC retirement date;
  2) Providing a reduction in DRC rather than complete elimination for Class B; or
  3) Removing the DRC completely for non-RPP Class B.

Typical Non-RPP Class B Price
in $/MWh



Fiscal Impact ($M)11	2017-18	2018-19
1) Shift Class B DRC to Class A*	197	-197
2) Reduce DRC by $3.50/MWh	148	-
3) Remove DRC completely for Class B	295	-

*** Note:** Estimates assume elimination of DRC is retroactive to January 1, 2017 and could be reflected in bills as early as April 1, 2017. Legislative / regulatory amendments to shift the cost to Class A would come into effect by January 1, 2018.

4. Tax-Based Assistance Package for Class B Consumers (i.e., SMEs)

- Consideration could be given to provide a comprehensive package of tax-based measures to reduce prices for Class B consumers, including:
  - Lowering corporate taxes for SMEs;
  - Tax credits; and
  - Tax-based incentives.

- Tax-based incentives are offered in a number of jurisdictions such as New York, Minnesota, Iowa and South Carolina to reduce the cost of electricity that retain jobs or are considered electricity intensive.

- Fiscal impacts would vary depending on the design of the strategy. Further analysis would be required on the potential impacts for consumers and the fiscal plan. Ministry of Energy will work with MEDG, TBS and MOF as necessary.

Considerations – Ratepayer / Fiscal Impacts

- Below are estimated ratepayer and fiscal impacts:

Class B Impact ($/MWh)	2017	2018	2019	2020	2021
GA Financing for All	-25	-25	-24	-34	-28
Fund a portion of Conservation through GGRA**	-2.5	-2.5	-2.5	-2.5	-2.5
Eliminate DRC for Non-RPP Class B	-7	-	-	-	-
Tax-based Initiatives	TBC	TBC	TBC	TBC	TBC

Fiscal Impact ($M)	2017-18	2018-19	2019-20	2020-21	2021-22
GA Financing for All *	-	-	-	-	-
Fund a portion of Conservation through GGRA**	225-330	225-330	225-330	225-330	225-330
Eliminate DRC for Non-RPP Class B	295				
Tax-based Initiatives	TBC	TBC	TBC	TBC	TBC

***Note:** GA smoothing does not have a fiscal impact because it is assumed that both legal authority and accounting treatment are met.
****Note:** Funding via the Greenhouse Gas Reduction Account (GGRA), estimated impact illustrates the high end of the range.

Considerations

Global Adjustment Smoothing

- GA smoothing accounting / legal analysis is ongoing.

Lower the Cost of Global Adjustment (GA) by Funding a Portion of Conservation Through the GGRA

- It is difficult to quantify the legal risk of a successful constitutional challenge to the cap and trade program associated with a single initiative in isolation. The risk will depend on a holistic assessment of the amount of money deposited into the GGRA and the character of all initiatives supported by cap and trade auction proceeds.

- In principle, there should be only a low risk if the government used cap and trade auction proceeds to defray the ongoing costs of conservation programs currently funded out of the global adjustment mechanism. This is because the programs are collectively expected to reduce CO2 emissions by hundreds of thousands of tonnes each year which seems to fit squarely within the regulatory purpose of the CCMLcE Act.

- However, initiatives which provide a rebate on electricity attract particular scrutiny as they tend to incent consumers to use more rather than less electricity which may frustrate the purpose of the CCMLcE Act. To the extent that funding conservation costs out of the GGRA constitutes a substantial portion of total GGRA spending, it will invite further scrutiny and will increase the legal risk of a successful challenge.

Remove Debt Retirement Charge Early (DRC) for Non-RPP Class B Consumers

- There is precedent for removing DRC from electricity consumers' bills. Effective January 1, 2016, DRC was removed for residential electricity bills. However, removing DRC early would only provide Class B consumers relief until April 2018 (i.e., approximately 1-yr of relief).

Provide Tax-Based Assistance Package for Class B Consumers (i.e., SMEs)

- The Ministry of Energy would work with MOF and MEDG to develop targeted tax-based credits and initiatives.