
Rate Mitigation Options for Class B Electricity Consumers

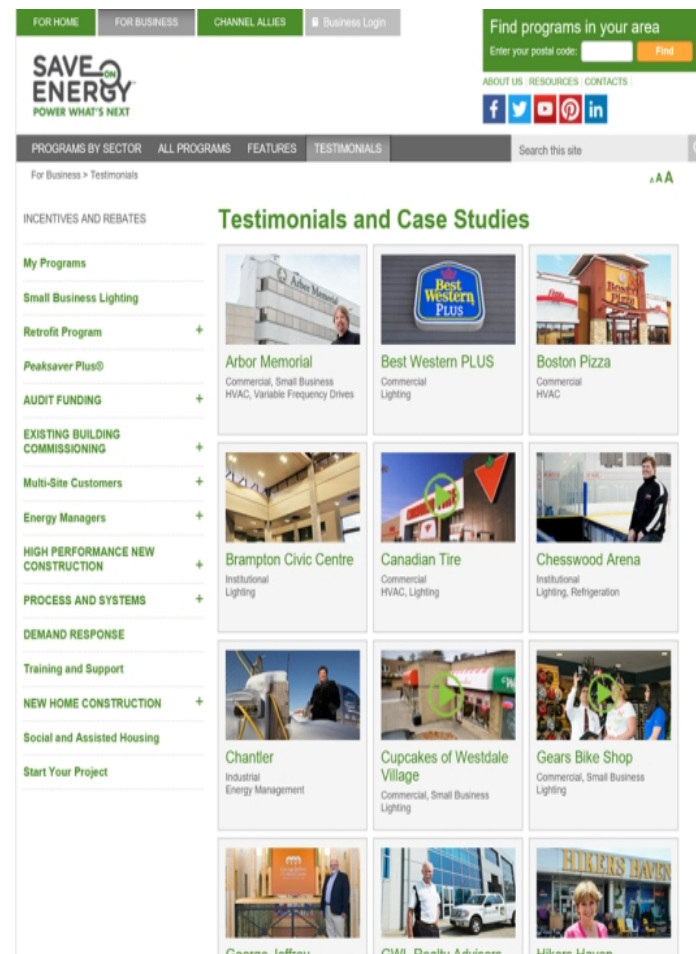
Working Draft

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Context

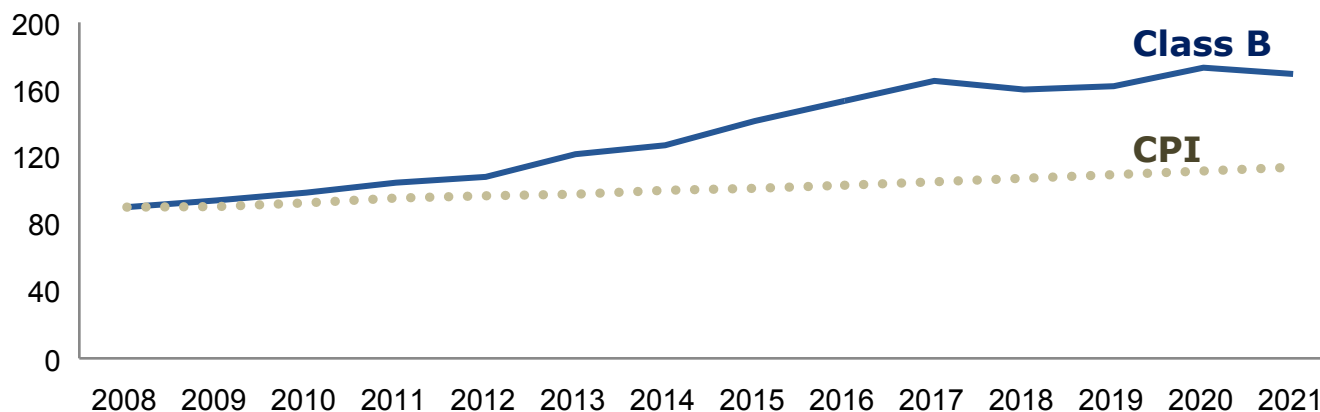
- Non-Regulated Price Plan (Non-RPP) Class B electricity consumers comprise about 50,000 customers, including many smaller manufacturers, retail establishments (e.g., restaurants, smaller grocery stores) and municipal buildings.
- Through saveONenergy, many Non-RPP Class B consumers have already taken advantage of energy efficiency programs to reduce electricity bills.
 - Although saveONenergy programs like Process and Systems Upgrade Incentive (PSUI) exist, these programs generally require significant investment on behalf of the customer in addition to the incentives.
 - 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.
 - ENERGY is currently facilitating an Independent Electricity System Operator (IESO) study of energy conservation opportunities for the Canadian Federation of Independent Grocers. See appendix for more information.
- In Fall 2017, educational events hosted by the Ontario Chamber of Commerce (OCC) and the Ontario government are intended to address energy literacy in the business community.



Context (cont'd)

- Non-RPP Class B consumers' electricity commodity cost reflects the sum of the wholesale market price (i.e., Hourly Ontario Energy Price (HOEP)) and volumetric Global Adjustment (GA).
 - Non-RPP Class B consumers are typically too large for the Regulated Price Plan (RPP) and would not receive GA refinancing through Ontario's Fair Hydro Plan.
 - Many Non-RPP Class B consumers are also not eligible for the expanded Industrial Conservation Initiative (i.e., not manufacturing and/or below 500 kW).
- The chart below highlights that the cost of electricity for non-RPP Class B consumers has risen faster than CPI since 2008.

Illustrative All-In Electricity Prices (\$/MWh)

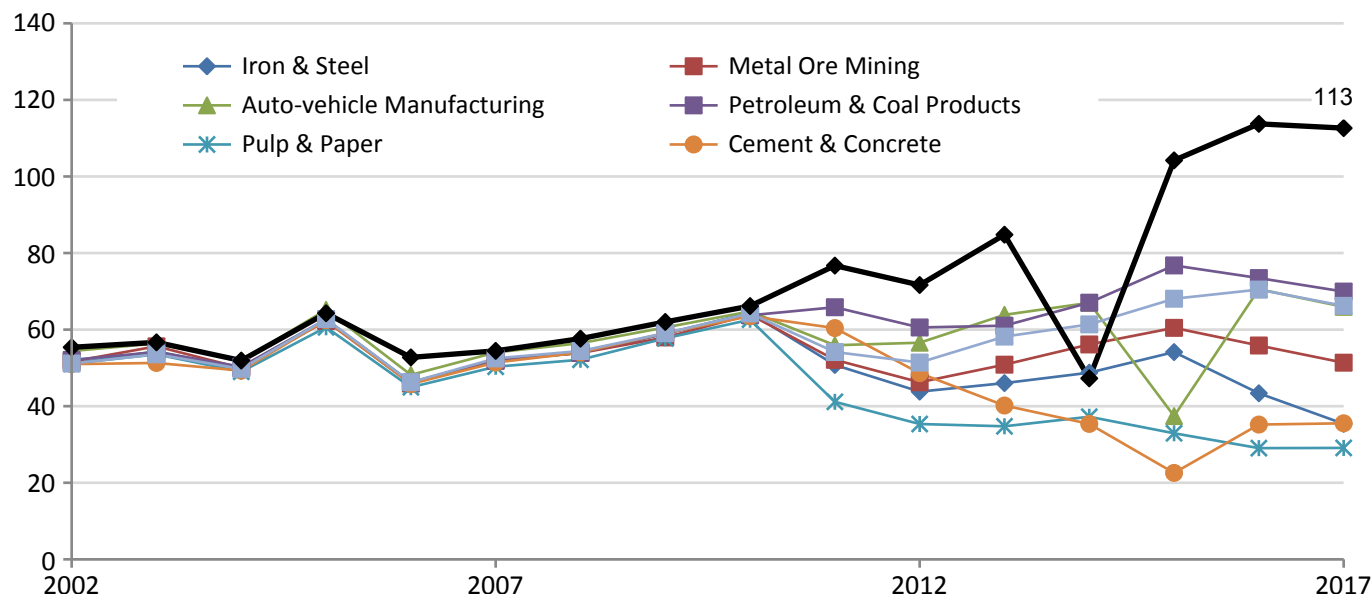


Source: IESO; OEB; Ministry of Energy

Context (cont'd)

- Non-RPP Class B electricity consumers pay higher electricity prices compared to Class A due to their inability to qualify for the Industrial Conservation Initiative (ICI).
 - Even if they were eligible for ICI, many are unable to reduce consumption during peak hours to fully take advantage of ICI.

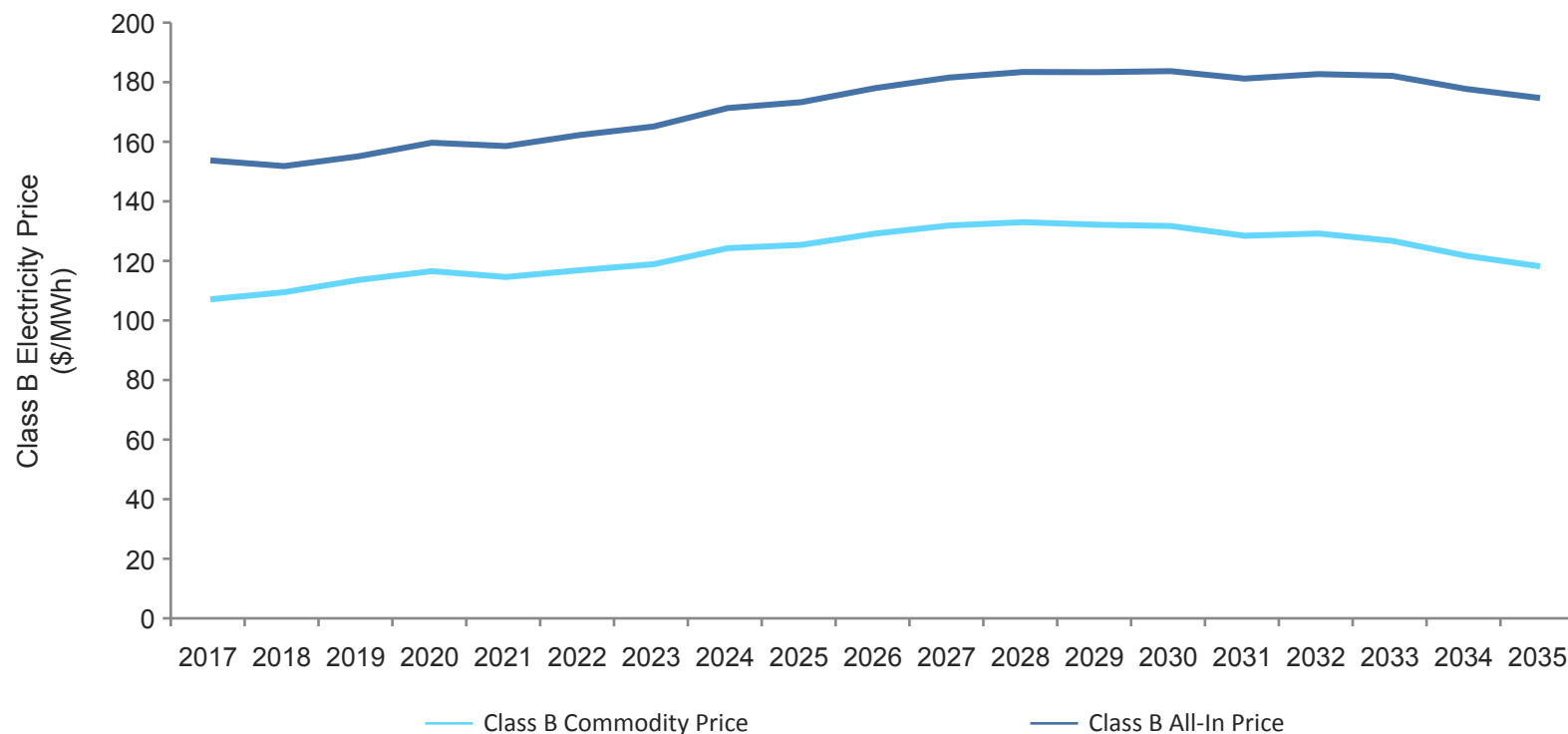
Indicative Electricity Commodity Cost (\$/MWh)
average HOEP + GA for Class A Sectors and Class B



Note: Estimates reflect year-to-date June 2017 reflecting average Hourly Ontario Energy Price (HOEP) and GA. Based on estimated averages for transmission-connected Class A consumers by industrial sector, and based on average weighted HOEP for Class B and actual Class B GA.

Context (cont'd)

- The chart below shows that the commodity price forecast and all-in electricity price forecast for Non-RPP Class B electricity consumers is expected to remain high.



Source: Commodity price based on forecast HOEP and GA for Class B electricity consumers. DRC ends April 1, 2018. Illustrative distribution charge is based on a 500 kW consumer connected to Toronto Hydro operating 55% of the time. Line losses are excluded.

Rate Mitigation Options

- Options for consideration include:
 1. MEDG delivered tax-based program to lower SMEs electricity rates, including Non-RPP Class B consumers;
 2. Remove Debt Retirement Charge (DRC) early for Non-RPP Class B consumers;
 3. ~~Other measures:~~ Fund efficiency improvements for Class B consumers that reduce Greenhouse Gas (GHG) emissions from the Greenhouse Gas Reduction Account (GGRA)
 - ~~– Shift costs by funding a portion of the Conservation costs through the Greenhouse Gas Reduction Account (GGRA);~~
 - ~~– Expand the Industrial Electricity Incentive (IEI) to make it more broadly available; and~~
 - ~~– Provide tax-based assistance package for Non-RPP Class B consumers.~~
- The options listed above either reduce prices for all electricity consumers or target Non-RPP Class B specifically.
- Consideration could be given to combining some of the above options to provide both broad and targeted relief.

Tax-Based Program to Lower SMEs Electricity Rates

- MEDG has initiated discussions with the Ministry of Energy on the development of a new tax-based program to support economic development in Ontario by offering an electricity cost subsidy (i.e., rebate) for SMEs, including Non-RPP Class B consumers, such as:
 - All SMEs and non-profit organizations;
 - Non-service sector SMEs;
 - Strategic sector SMEs (e.g., manufacturing, select primary industries, sectors with risk of leakage);
 - Electricity intensive enterprises (e.g., mining); and
 - New businesses and/or investments to existing businesses in Ontario.
- MEDG has indicated that the cost of the subsidy (i.e., rebate) could equal the difference between an eligible participant's actual electricity rate and the guaranteed rate.

Considerations

- A guaranteed electricity price would provide eligible participants certainty with respect to electricity prices (i.e., especially those in electricity-intensive sectors such as manufacturing, mining).
- Currently, it is unclear what the level of participation and cost will be for the new program. Further program scoping by MEDG is required to inform the development of a cost estimate for the program.
 - Fiscal impacts would vary depending on the design of the strategy. The program cost could range from \$50 million to \$500 million per year depending on level of participation (i.e., the total volume of electricity consumption).
- Due to natural fluctuations in the electricity market, program costs could be subject to fluctuation that could create a degree of uncertainty for the fiscal plan. To mitigate such uncertainty, total annual program cost could be capped similar to what is done for other tax-based programs (e.g., Northern Industrial Electricity Rate Program). In addition, once implemented, such a subsidy may be difficult to phase out despite the intended term length of potentially five to ten years.

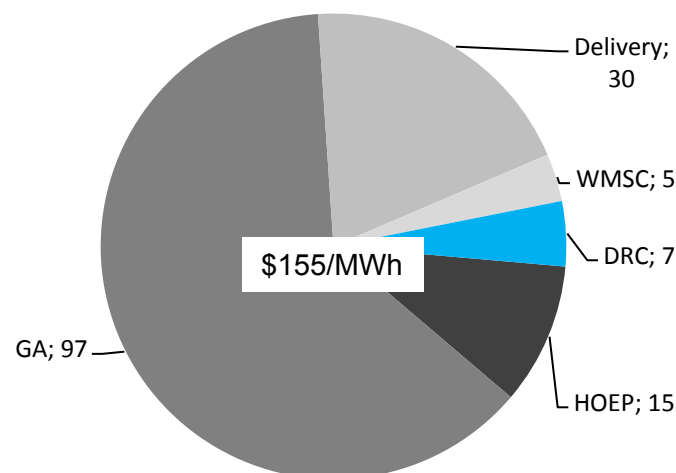
2. Remove DRC for Non-RPP Class B Consumers

- Remove the Debt Retirement Charge (DRC) for Non-RPP Class B consumers early.

Considerations

- There is precedent for removing DRC from electricity consumers' bills.
 - Effective January 1, 2016, DRC was removed for residential electricity bills.
- Eliminating DRC earlier would save \$7/MWh for Non-RPP Class B consumers.
 - This would represent a 5% reduction for a Non-RPP Class B consumer based on current prices*.
- Removing DRC early would only provide Non-RPP Class B consumers relief until April 2018 (i.e., one year of relief). Note: Class A consumers would likely ask for similar treatment.

Typical Non-RPP Class B Price
in \$/MWh



*Note: Percentage reduction would vary depending on each consumer's demand profile and the local distribution company to which they're connected. Estimate is based on Toronto Hydro.

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

3. Other Measures – Shift Cost by Funding a Portion of Conservation Through the GGRA

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

Considerations

- Under the Climate Change Action Plan (CCAP), Ontario committed 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.
- Assuming the CCAP funding is spread equally over the four year period at \$330 million annually, Non-RPP Class B consumer bills 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
Class B (\$/MWh)	2.50	2.50	2.50	2.50
Class A (\$/MWh)	1.56	1.56	1.56	1.56
Residential Bill (\$/750 kWh)	1.90	1.90	1.90	1.90

3. Other Measures – Lower the Cost of GA by Funding a Portion of Conservation Through the GGRA (cont'd)

Considerations

- With respect to legal risks, 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 Climate Change Mitigation and Low Carbon Economy (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.
- Undertaking this initiative could lower the amount of refinancing required under Ontario's Fair Hydro Plan if the benefit to the typical residential electricity consumer is to be held at 25%.

3. Other Measures – Expand Industrial Electricity Incentive (IEI) to Make It More Broadly Available

- Expand the current Industrial Electricity Incentive (IEI) to make it more broadly available to electricity consumers willing to expand their existing facility or build a new facility. Note: There are currently 21 participants in IEI.
 - In 2012, the IEI was launched to provide a reduced price for industrial electricity consumers in Ontario. Applications were evaluated by IESO through a competitive process. In return for a contracted commitment to increase consumption, IEI participants were rebated charges over a defined time period.

Considerations

- To date, IEI has been allocated approximately 2 TWh of demand. In *2016 Navigant Report on IEI*, it was estimated that at an assumed Class A Global Adjustment (GA) rate of \$30 / MWh, the shift of GA costs is approximately \$60 million per year.
 - As Non-RPP Class B GA is higher than Class A GA, rebating Non-RPP Class B GA would increase the cost shift significantly.
- Expanding IEI to make it more broadly available to electricity consumers willing to expand their existing facility or build a new facility would provide further rate relief to Non-RPP Class B consumers.
 - The *2016 Navigant Report on IEI* considered an option that would remove the competitive nature of IEI and provide a standing offer to all applicants that meet the eligibility criteria. Note: Removing the competitive nature of IEI could include: eliminating the application timelines, competitive requirements (such as the Fixed Cost Contribution) and contractual commitments to adhere to incremental consumption milestone dates.
- Expanding access to IEI could result in a higher degree of administrative burden for IESO given how IEI is currently administered (i.e., participants are settled monthly on individual contracts),
- Depending on the funding source, this initiative would impact the fiscal plan or GA refinancing (e.g., increase the debt for GA refinancing).

3. Other Measures – 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.

Considerations

- 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 for firms 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.

Appendix

IESO Energy Use Study for Canadian Federation of Independent Grocers

- The Canadian Federation of Independent Grocers (CFIG) has identified electricity price challenges faced by its ~600 Ontario members:
 - As with other Class B customers, many grocers are not able to participate in ICI or receive GA refinancing through the OFHP.
 - CFIG claims that many of its members have already participated in available conservation programs.
- ENERGY staff met with CFIG on June 19 and August 2, 2017:
 - On the June 19th call, ENERGY and CFIG discussed the possibility of undertaking a market research study with the Independent Electricity System Operator (IESO)
 - On the August 2nd, ENERGY facilitated a call with CFIG and the IESO where it was agreed that the IESO would engage in a study along with CFIG in order to better understand energy consumption in the grocery sector, current opportunities/programs, and how conservation opportunities may be improved.
- Benefits of the study are expected to include:
 - Improved marketing of conservation programs to grocers;
 - New or enhanced conservation programs focused on grocers; and
 - Greater energy management capacity within the grocery sector.

Next Steps:

- **August 12, 2017:** IESO to develop and share a draft scope of work with CFIG.