
Rate Mitigation Options for Class B Electricity Consumers

Working Draft

August 2017

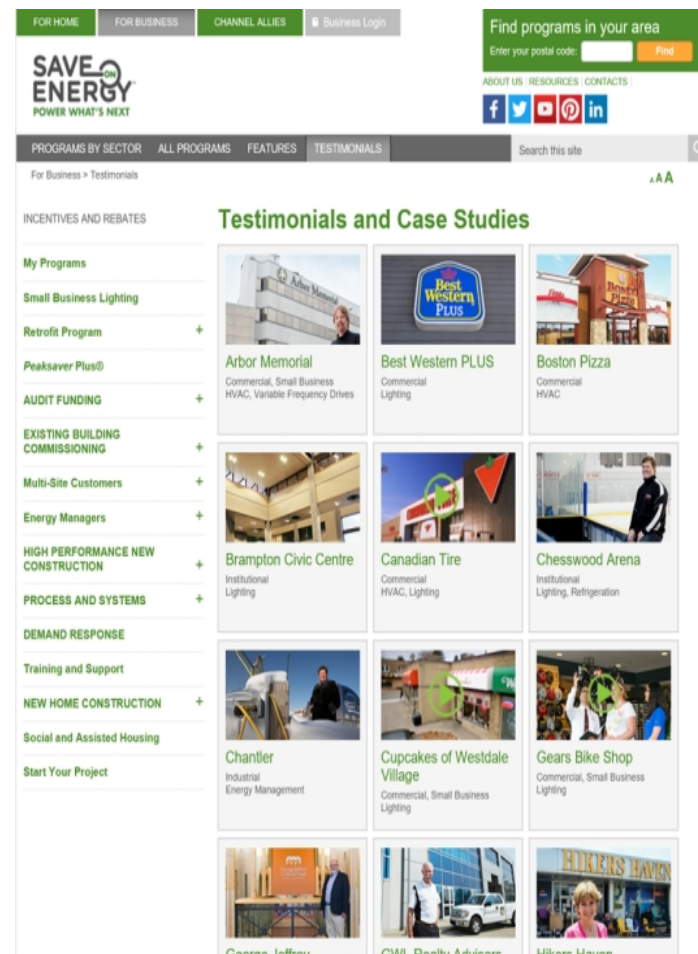
CONFIDENTIAL DRAFT

Context

- Ontario's Fair Hydro Plan (OFHP) has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers.
 - As many as half a million small businesses and farms are also benefitting from the reduction.
 - Lower-income Ontarians and those living in eligible rural communities are receiving even greater reductions, as much as 40 to 50 per cent.
- These measures include:
 - The 8 per cent rebate – funded by the tax-base – introduced in January 2017.
 - Refinancing the GA to provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.
 - Shifting cost recovery for Rural or Remote Rate Protection (RRRP) and Ontario Electricity Support Program (OESP) from electricity bills to provincial revenues, lowering regulatory charges for all consumers by approximately \$3/MWh.
- An important principle behind OFHP is that its measures do not shift system costs from one cohort of ratepayers to another.

Context (cont'd)

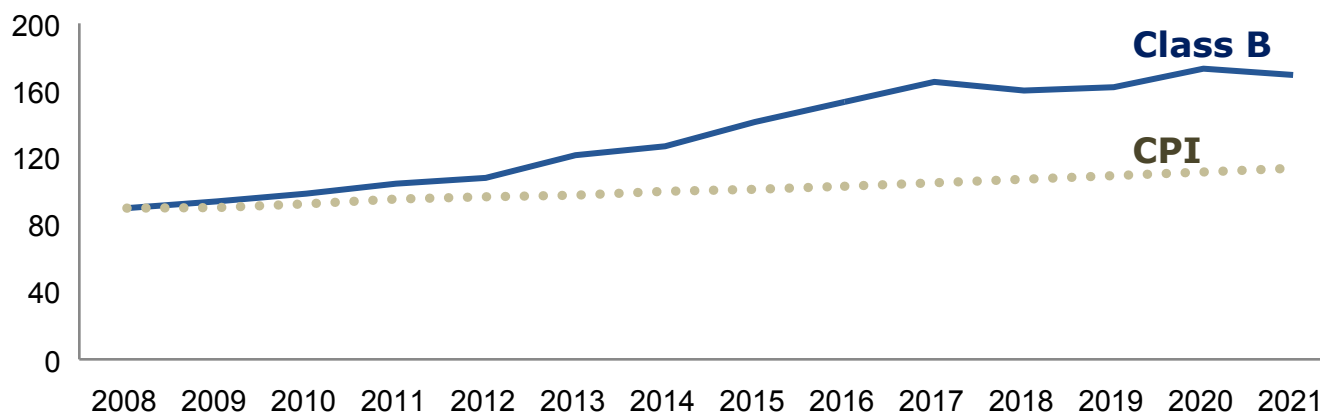
- Non-Regulated Price Plan (Non-RPP) Class B electricity consumers comprise about 50,000 customers, including many smaller manufacturers, retail establishments (e.g., restaurants, smaller grocery stores) and municipal buildings.
- Through saveONenergy, many Non-RPP Class B consumers have already taken 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 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)

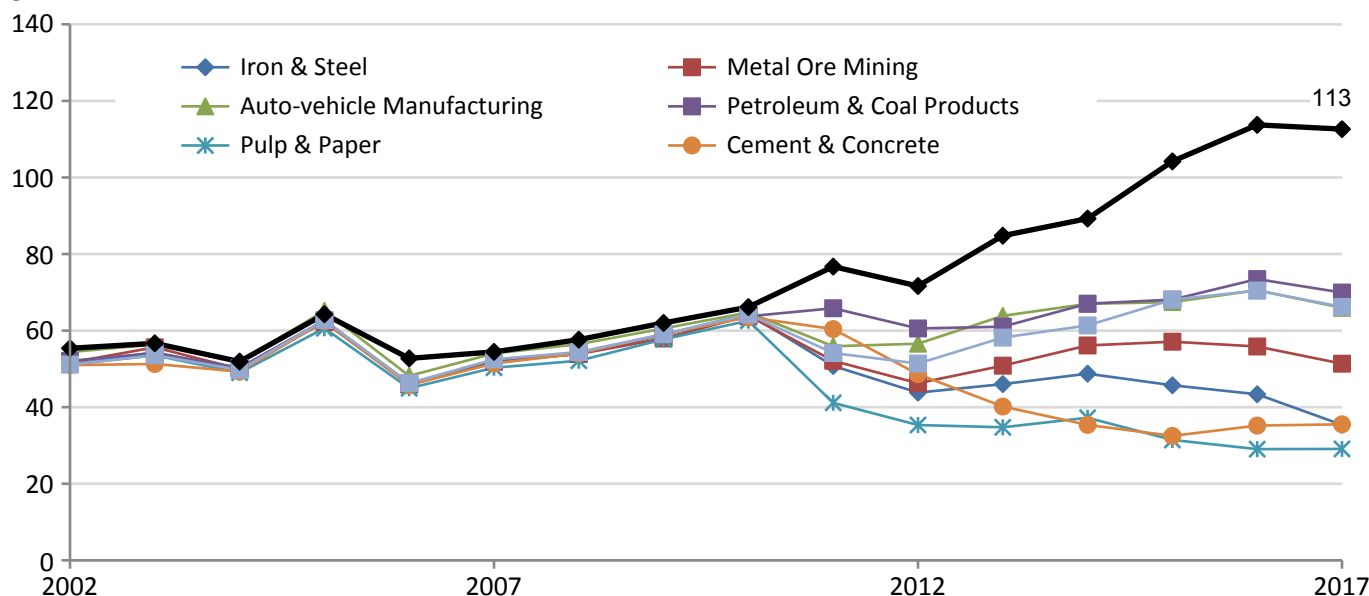


Source: IESO; OEB; Ministry of Energy

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.

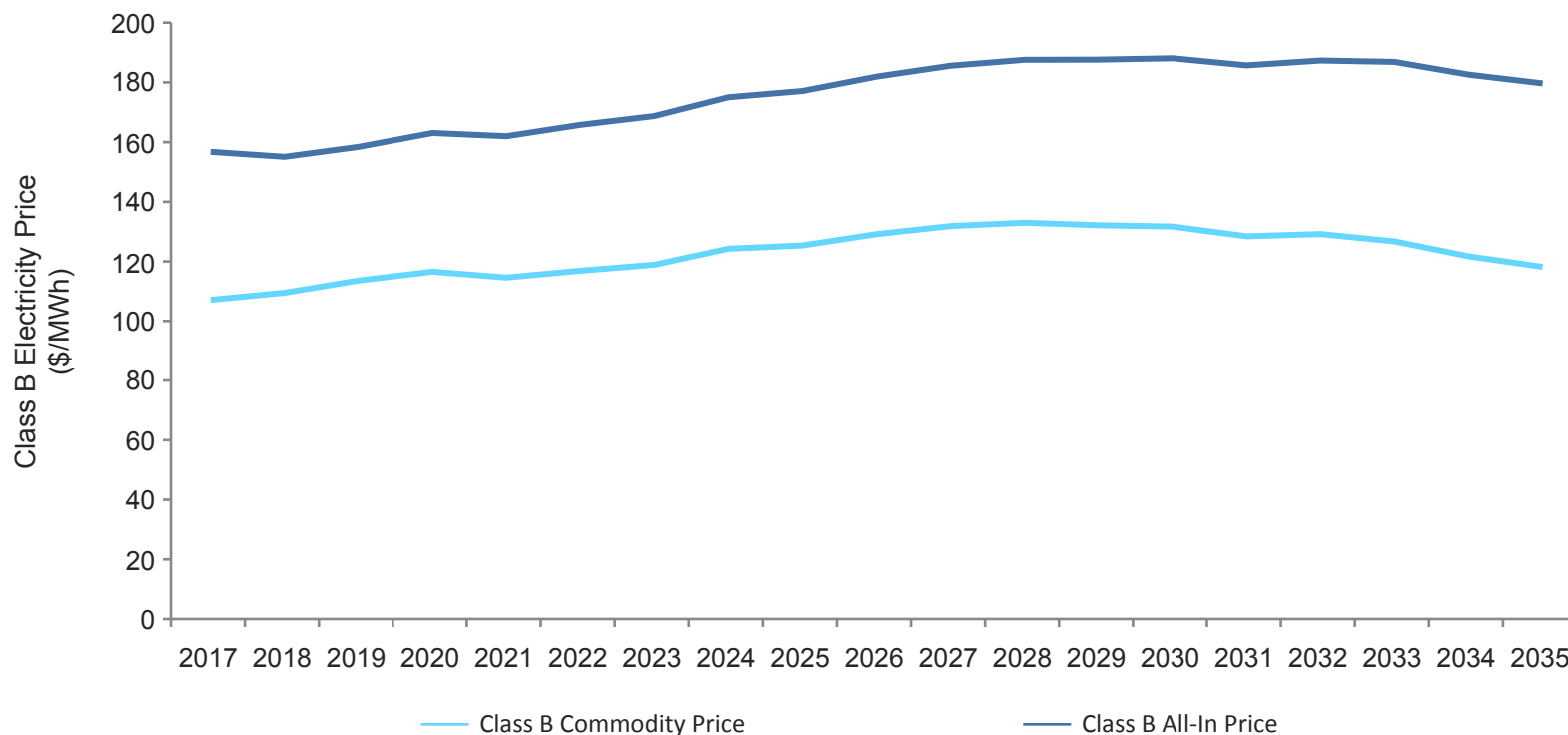
Indicative Electricity Commodity Cost (\$/MWh)
average HOEP + GA for Class A Sectors and Class B



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; and
 3. Fund efficiency improvements for Class B consumers that reduce Greenhouse Gas (GHG) emissions from the Greenhouse Gas Reduction Account (GGRA).
- 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.
- The options outlined above also utilize the principle employed for Ontario's Fair Hydro Plan that costs not be shifted between ratepayer classes and instead involve shifting costs from the rate-base to the tax-base.
 - Any new measure for Class B consumer that does not use fiscal funds (or GGRA funds) would shift costs from Class B to residential and/or industrial consumers.

1. 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);
 - **Export-focused manufacturers;**
 - 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

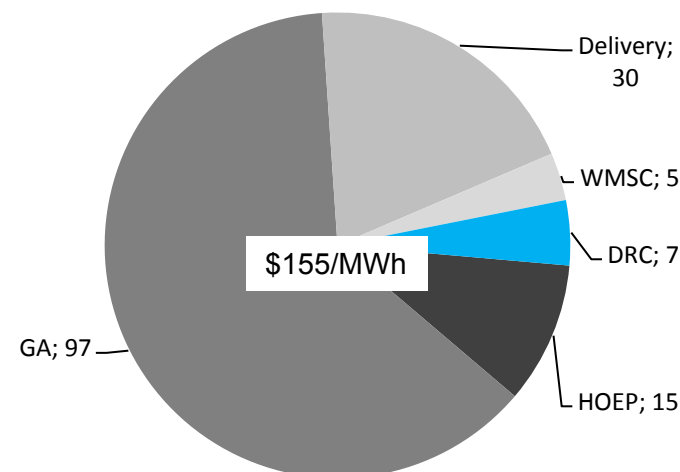
- Remove the Debt Retirement Charge (DRC) for Non-RPP Class B consumers early.

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.

Ending DRC for Class B consumers on December 31, 2017 would impact the tax-base by approximately \$74 million. (~~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 for year-to-date June 2017.

3. Fund Efficiency Improvements for Class B Consumers

- The Greenhouse Gas Reduction Account (GGRA) could fund efficiency improvements for Class B consumers that reduce Greenhouse Gas (GHG) emissions.

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.
- Efficiency improvements support 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 (figures to be updated with final LTEP Outlook).
- Some companies would likely not be able to benefit from a new efficiency program:
 - Many companies have already made, or are in the process of making, significant changes to improve the energy efficiency of their processes, often with support from conservation programs.
 - Some companies would likely argue that they are unable to improve efficiency and therefore would be disadvantaged under such a program.
 - Impacts on companies that did participate could vary widely dependent on program design.
- A new efficiency program could overlap with existing conservation programs such as the Process and Systems Upgrade Initiative.

3. Fund Efficiency Improvements for Class B Consumers

Considerations (Continued)

- The Green Ontario Fund (GOF) is already planning to offer programs for which Class B consumers will be eligible:
 - MOECC's May 30, 2017 Treasury Board submission indicated that \$40 million would be allocated to Low-Carbon Technology Incentives for SMEs (in addition to a \$220 million extension to the GIF Target GHG Program for technology demonstration, delivered by the Ontario Centres of Excellence).
 - These programs are expected to help business customers, including Class B, reduce GHG emissions.
 - The IESO will be engaged in program design for low-carbon technology incentives. Their involvement in an enhanced Class B efficiency program would mitigate program duplication.
- In Québec, since April 1, 2017, Transition énergétique Québec (TEQ) is the new public body responsible for “supporting, encouraging and promoting the energy transition, innovation and efficiency”. TEQ offers, through Hydro-Québec (HQ):
 - The Buildings Program, which offers customers financial assistance to implement energy efficiency measures while carrying out projects in commercial or institutional buildings; and
 - The Demand Response program, which gives companies the opportunity to propose a project that would allow them to reduce their buildings' power demand during Québec's winter electricity peaks (i.e., early morning and late afternoon). In return, the company receives financial assistance from HQ (i.e., \$70 for each kilowatt reduced).

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 held discussions with CFIG on June 19 and August 2, 2017:
 - On June 19, 2017, ENERGY and CFIG discussed the possibility of undertaking a market research study with the IESO.
 - On August 2, 2017, 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:

- IESO to develop and share a draft scope of work with CFIG in August 2017.

Industrial Electricity Support Programs

- The table below provides an overview of existing program participation:

Existing Industrial Electricity Support Program	Annual Consumption (TWh)	Annual Cost (\$M)	Type of Cost / Who Pays	# of Participants
ICI	28	1,000	Rate-base	300
IEI	2.5	160	Rate-base	22
NIERP	7	120	Tax-base	26

Note: Values are estimated and shown for 2016. According to IESO, the industrial sector constitutes over 34 TWh of total electricity demand. The estimate for ICI is an approximate number. ICI participation is expected to increase significantly following recent expansions to the program. The IESO awarded IEI contracts to 22 companies. As of June 2017, there are 19 Northern Ontario industrial companies representing 26 facilities participating in NIERP.