
Impact of Cap and Trade Auction Proceeds – Recycling to Small Manufacturers

Working Draft

November 2016

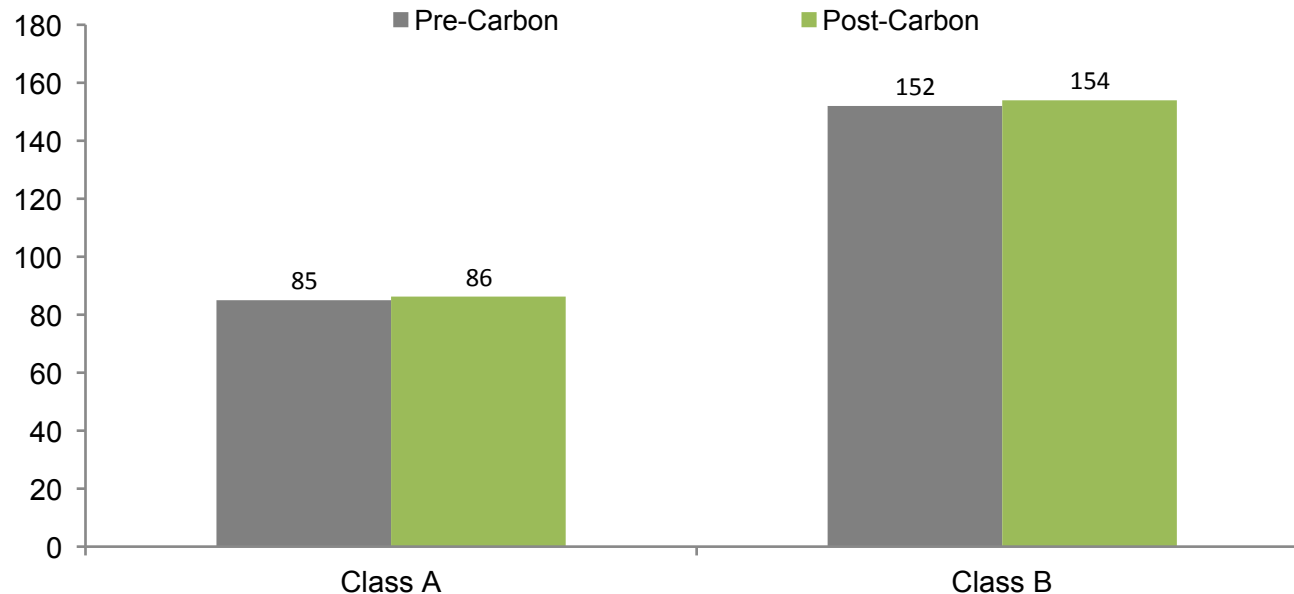
CONFIDENTIAL DRAFT

Context – Current Electricity Prices

- The chart below shows the all-in electricity price for Class A (large industrial) and Class B (small-medium enterprise) electricity consumers before and after the impact of cap and trade (absent of proceeds recycling).

Current All-In Electricity Price

in \$/MWh

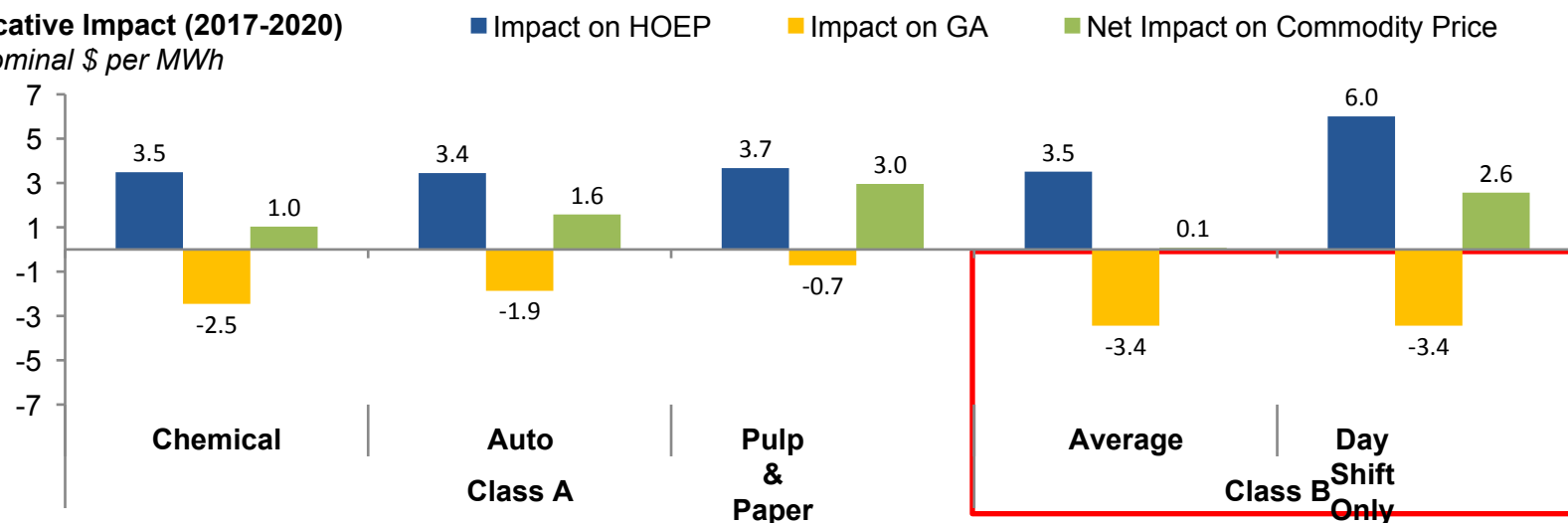


Note: Reflects a year-to-date September 2016 price for the average transmission-connected Class A consumer and for a 1 MW Class B load connected to Toronto Hydro. For illustrative purposes, the estimated impact of cap and trade for 2017 is included above.

Cap and Trade Impact on Electricity Consumers

- There is significant variation in the commodity cost paid by electricity consumers due to differences in their Global Adjustment (GA) costs:
 - GA paid by Class A electricity consumers varies depending on their ability to take advantage of the Industrial Conservation Initiative (ICI) and reduce consumption during peak hours. Under ICI, large electricity consumers pay GA based on their share of peak demand during the five peak hours of the year.
 - GA paid by Class B electricity consumers is a volumetric rate that is applied to every unit of electricity consumption.
- Because of this variation, the net impact of cap and trade on the Hourly Ontario Energy Price (HOEP) and GA varies. For example, a medium sized Class B business that predominantly operates during the day would pay higher HOEP (due to increased carbon content in on-peak electricity) but the same unit rate GA as all other Class B consumers.

Indicative Impact (2017-2020)
in nominal \$ per MWh



Illustrative Impact to Electricity Consumers (2017-2020)

Option	GHG Reductions in 2020* (Mt)	Total (2017-2020)	Class B Commercial Impact** (\$/MWh)		Class A Industrial Impact*** (\$/MWh)		
			Day Shift Only **** (e.g., small manufacturer)	Average	High GA (e.g., chemical)	Medium (e.g., auto)	Low GA (e.g., pulp)
CCAP estimate was based on recycling via GA to offset the average industrial consumer	3.25	\$1.32 billion	\$2.30	- \$2.50	- \$1.10	\$0	\$2.35
1. Global Adjustment (GA) recycling (Targeted amounts to Class A and Class B electricity consumers)	3.25	\$1.10 billion	\$0.75	- \$1.70	- \$6.90	- \$4.50	\$0.60
2. Volumetric recycling in “all hours” (as assumed in the September 12 Cabinet submission)	3.25	\$1.10 billion	- \$0.20	- \$2.70	- \$3.25	- \$2.70	- \$1.30
3. Volumetric recycling in “off-peak hours” *****	3.27	\$1.10 billion	\$0.80	- \$2.70	- \$3.15	- \$2.50	- \$1.60

* **Note:** 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.

** **Note:** Most residential consumers pay under the Regulated Price Plan (RPP). For simplicity, all non-RPP Class B consumers are referred to as “Class B/Commercial” throughout the deck. On September 15, 2016, the government introduced legislation that would provide an 8% rebate equal to the provincial portion of the Harmonized Sales Tax (HST) to consumers eligible for the RPP, such as residential households, small businesses and farms – exceeding the 2016 Budget commitment.

*** **Note:** The above benefits do not include the cost of ICI expansion (impact of about \$1/MWh) and the RRRP update (impact of about \$0.76/MWh). Proceeds recycling is net of the cost of carbon and represents an estimated average of the proceeds required over the first compliance period (2017-2020).

**** **Note:** The amount recycled to Class B is based on offsetting the impact of carbon, along with providing a small benefit to offset the cost of ICI expansion and RRRP. In order to offset the impact based on a 70% on-peak Class B consumer, an additional annual average of \$85 million would be required under volumetric “all hours” and an additional annual average of \$220 million would be required under volumetric “off-peak hours”.

***** **Note:** Based on IESO’s definition of on peak (hours 8 to 23 Monday to Friday) and off-peak (all remaining hours in the week) for informal purposes; the wholesale market does not use a formal definition of “on-peak” and “off-peak” hours.