Ontario

MINISTRY OF **ENERGY**

Electricity Pricing in Ontario

Presentation to Ontario Government Caucus
February 13,2017

CONFIDENTIAL DRAFT

Outline

1. **Understanding Your Bill** : An Overview of Electricity Pricing in Ontario

2. **Delivery Charge Relief for Ontarians** : Fixed Distribution Charges in every Local Distribution Company (LDC)

3. **Targeting Relief for Vulnerable Ontarians** : Enhancing our Rural, Remote Ratepayer Protection Plan; On Reserve First Nations; Low-Income <u>and</u> middle-income populations

4. **Global Adjustment** : Considerations & Options for broad-sector Rate Relief

5. **Communications & Next Steps** : Stop taking the hit; fight back and win.

Goal & Objective : Address electricity affordability with a meaningful, comprehensive plan. Allow Budget 2017 and follow on initiatives to pivot Government and Premier away from electricity prices defensive.

Overview of Electricity Pricing in Ontario

- Electricity pricing is generally based on the principle of full cost recovery. Payments to the province's generation fleet are recovered as they are incurred.

- Prior to 2002, consumers were charged a fixed price per kilowatt hour (kWh) that bundled together generation, transmission and distribution costs.

- Today, bills break out the costs for generation, transmission and distribution - prices reflect the cost to produce and deliver electricity.

- For the past several years, electricity prices have increased at a faster pace than the consumer price index as significant costs have been incurred to update generation, transmission and distribution infrastructure.

- Further price increases are expected in the short-term as additional projects come on line.

Residential Electricity Prices

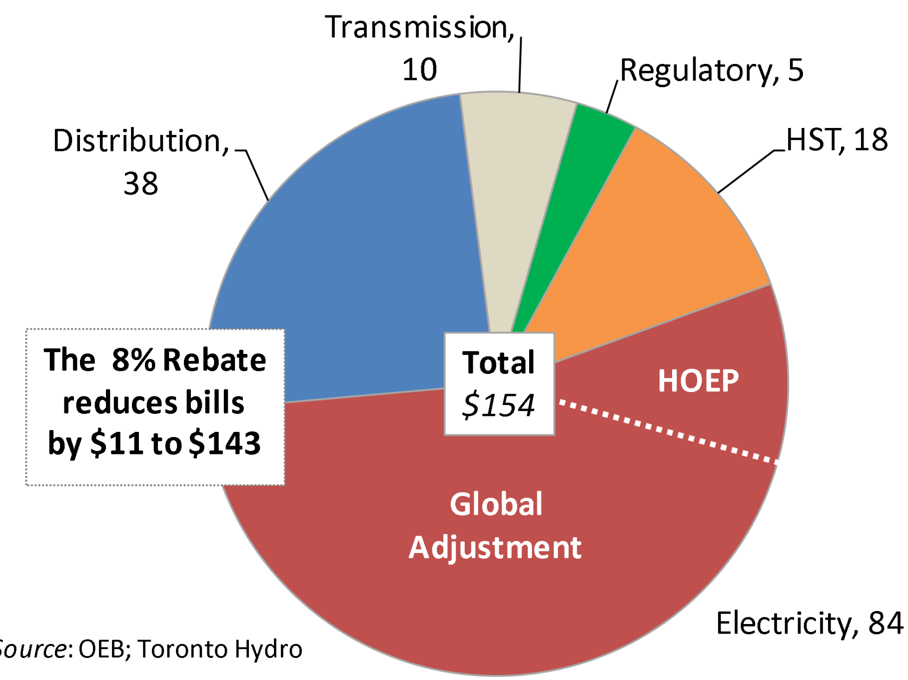
- There are approximately 4.5 million residential consumers in Ontario.

- The Regulated Price Plan includes nearly all residential consumers, as well as family farms, and some small businesses. Regulated Price Plan consumers pay a Time of Use (TOU) rates regulated by the OEB, which is set every six months. *Small businesses the size of a typical convenience store or hairdresser would be RPP customers.*

- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.

- Rural customers, in particular those with electrical heating, generally pay higher monthly bills.

Typical Residential Monthly Bills ($)
As of January 1, 2017 (750 kWh/month)



Source: OEB; Toronto Hydro

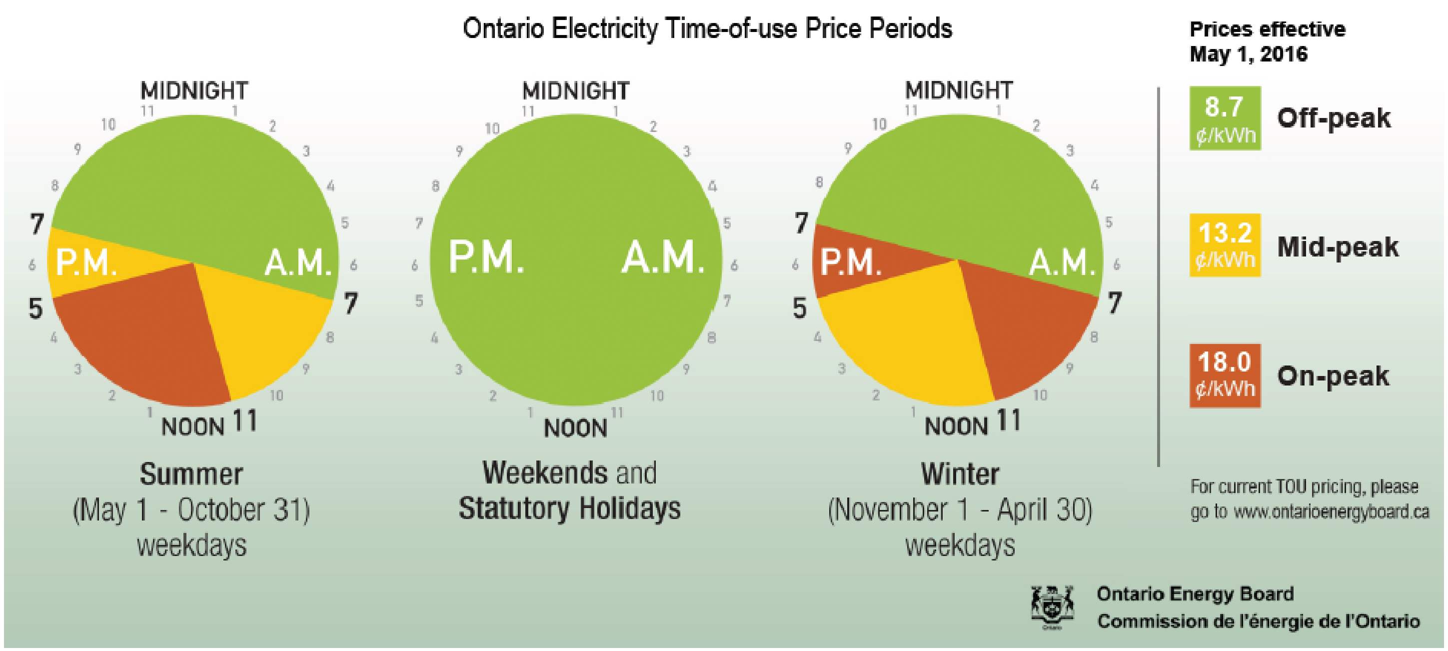
Residential Bill Components

Component	***Sub-components***	***Notes***	***Monthly Cost for a Typical RPP TOU consumer in Toronto (May 1, 2016)***
Electricity	Hourly Ontario Energy Price (HOEP) + Global Adjustment (GA)	The Electricity line reflects the cost of generation. Two components: HOEP = Market Clearing Price Global Adjustment = Contracted Generation Payments	$84
Delivery	Transmission + Distribution	Poles & Wires. Local Distribution Companies = Your LDC Transmission = Hydro One “Electricity Highways” Line Loss = Physics	$48
Regulatory	IESO fees, rural/remote rate protection	Fees, Social Programs & Market Administration.	$5
HST	n/a	Applied at a rate of 13%	$18
		Total:	**$154**

Residential and Small Business Consumer Electricity Pricing

Regulated Price Plan (RPP):

- There are a total of about 4.8 million residential and small business consumers participating in the RPP. About 4.5 million of those consumers pay Time-of-Use (TOU) prices under the RPP. RPP prices are adjusted every six months (in May and November) by the Ontario Energy Board based on projected supply cost over the next 12 months and true-up to actual costs incurred to date.
- TOU prices are intended to provide an incentive to consumers to shift consumption away from high demand periods when the cost to meet province-wide demand is higher.



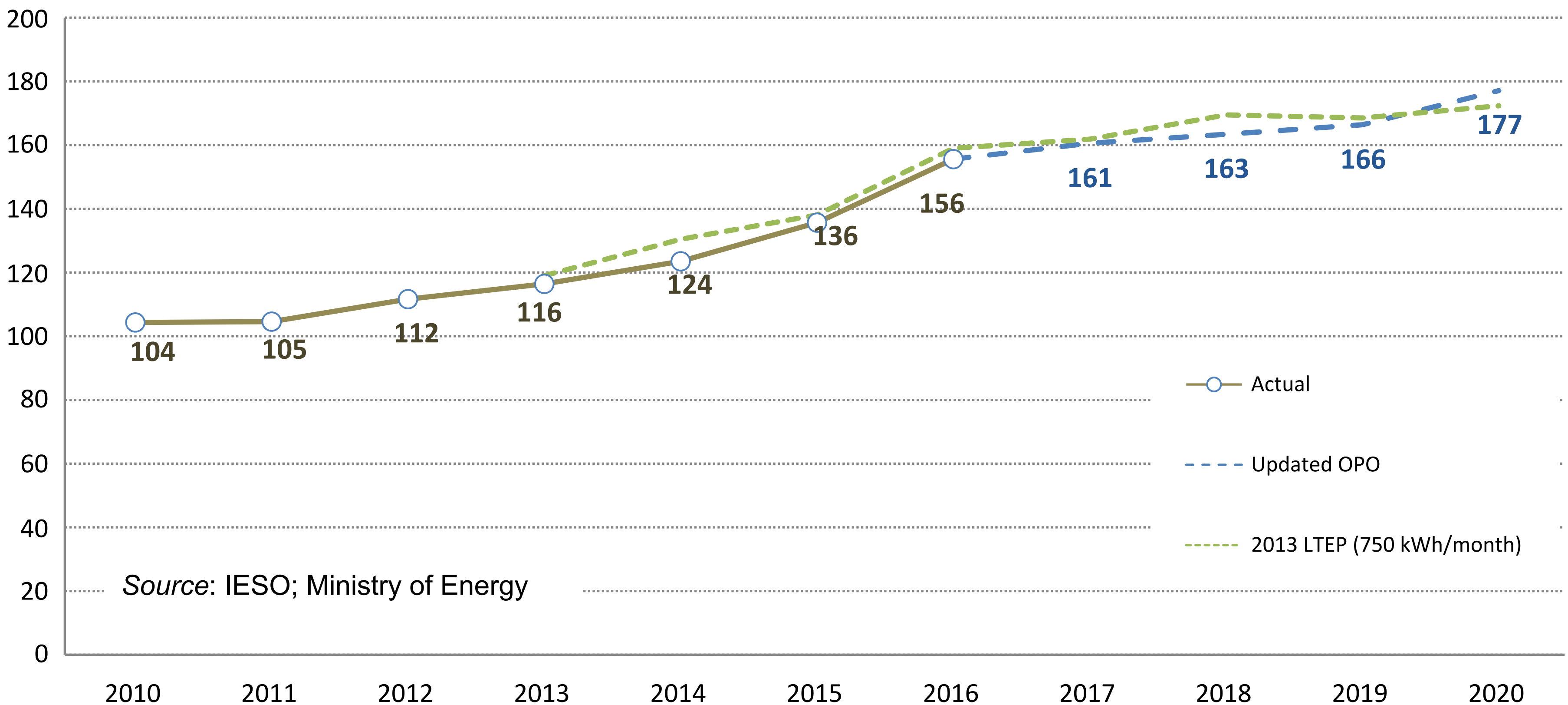
The Cost Challenge

- Prior to 2003, no significant new investments had been made in electricity generation in Ontario in almost 10 years.
- The Conservatives left Ontario's electricity system in a mess and reliance on dirty coal was leading to smog and respiratory illnesses.
- At a time when demand rose by 8%, local generation fell by 6% - the equivalent of Niagara Falls running dry.
- During the 5 years of NDP rule, hydro rates went up 40% and no new supply was built
- When in government, NDP cancelled conservation programs
- Ontario Liberals invested ~$35-billion in new cleaner generation, replacing coal and reducing smog days
- We invested ~$15-billion in new and rebuilt power lines; about 14,000 kilometers of new transmission to enhance reliability
- But we now know that the form of procurement that had been undertaken over the past decade didn't always deliver results at the lowest possible cost for ratepayers (eg. Samsung; Feed-in-Tariff standard offer procurement & gas plant relocation negotiations).

Cost Challenge – Residential Electricity Prices

- Electricity prices continue to be a concern for many; particularly those that rely on electric heat.

Typical Residential Electricity Bills
Historical and Forecast in $/month

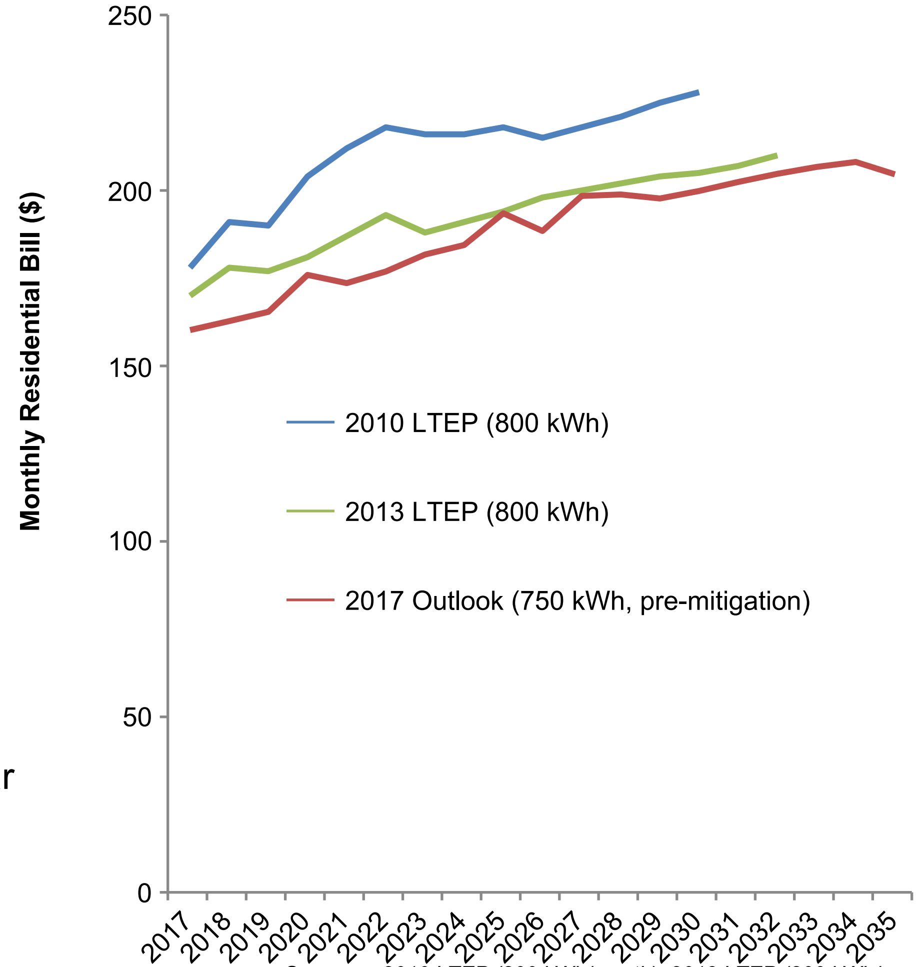


Source: IESO; Ministry of Energy

2017 Outlook Significantly Lower than 2010, 2013 Long-term Energy Plan Projections: Mitigation Actions To Bend The Cost Curve

Since 2013, this government has taken a number of actions to reduce electricity ratepayer costs, including:

- Renegotiating the Samsung Agreement - $3,9 billion in savings
- Reducing FIT (solar & wind) prices saving ratepayers at least $1,9 billion.
- Introducing a competitive procurements for large solar & wind - $1,5 billion in savings
- Suspending the second round of the Large Renewable Procurement; avoiding $3,8 billion in costs
- Deferring the construction of two new nuclear reactors, saving up to $15 billion
- Maximizing the value of our existing nuclear resources; Pickering ongoing operation & Bruce Power contracting / risk transfer - $2,3 billion saved



Sources: *2010 LTEP (800 kWh/month); 2013 LTEP (800 kWh/month); Revised Ontario Planning Outlook (750 kWh/month as of December 2016).*

Proposed Support Programs : Ontario Values

1. Fixed Distribution Charges : Reducing Volatility Based on Your Consumption; *Increasing Fairness for Consumers*

2. *Expanding* Rural & Remote Ratepayer Protection Plan

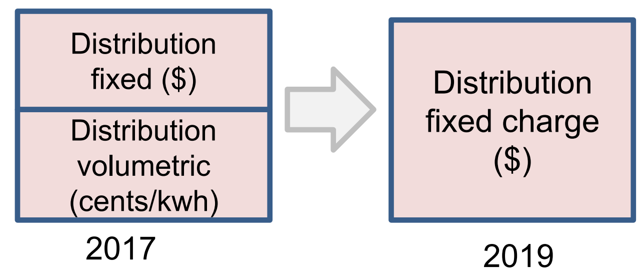
3. Low – Income Support : *Enhancing* the Ontario Electricity Support Program (OESP)

4. First Nation Communities

Reducing Volatility Based on Your Consumption; *Increasing Fairness for Consumers*

- Distribution charges are transitioning (2019 for most LDCs, 2023 for Hydro One) from a mix of fixed and volumetric charges to a fully fixed charge. The OEB believes this is a more equitable way to charge for distribution service.

- There is opportunity to provide tax-based funding to accelerate the benefits of fixed rates for those who would see rates go down without impacting the phase in timeline for lower volume customers who will see their distribution costs rise.

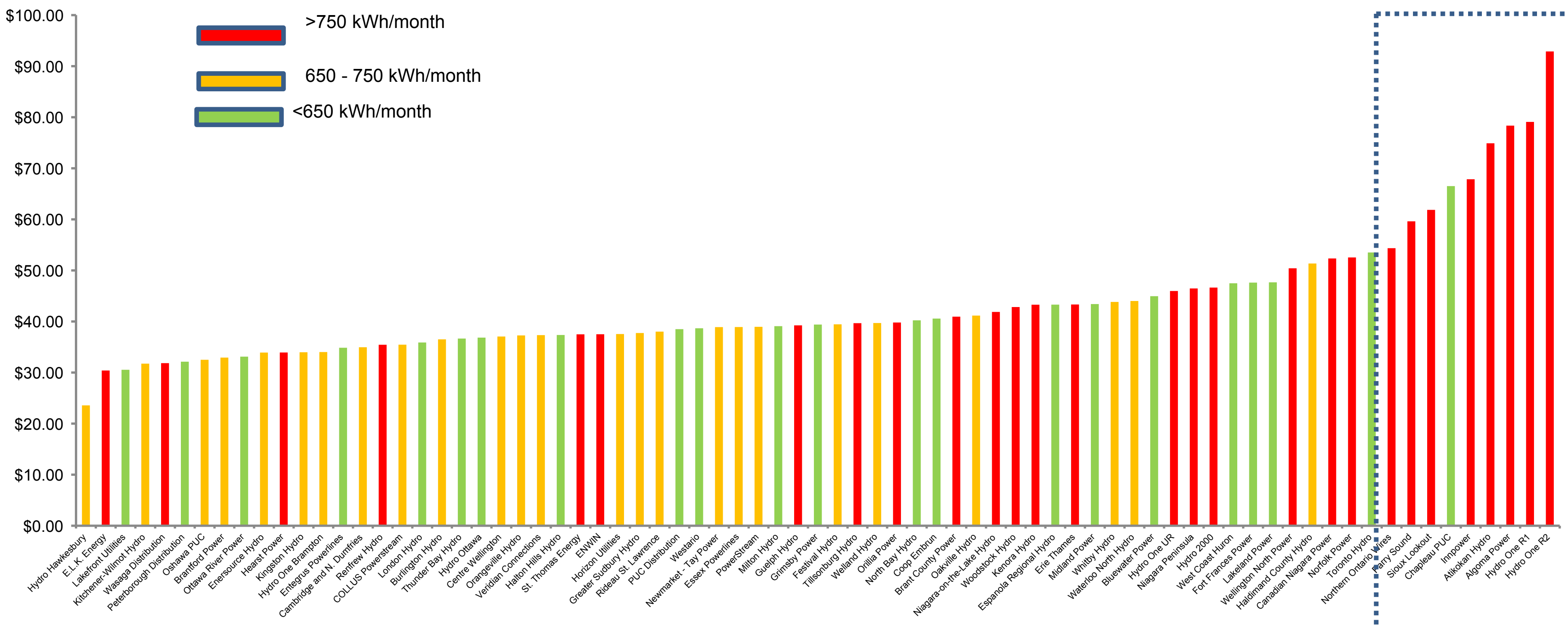


As LDCs transition to a single fixed charge to access the system, customers with the lowest consumption will pay more for distribution, while customers with high consumption will pay less.

Accelerating & Subsidizing the Fixed Rate Benefit

- The OEB is gradually phasing-in the move to fixed rates in order to mitigate the impact of these increases to below-average volume consumers. Most LDCs will receive fully fixed rates by 2019. Hydro One will be transitioned over a longer timeframe (2022-2023).
- The table below shows what delivery costs would be by LDC when fully implemented.

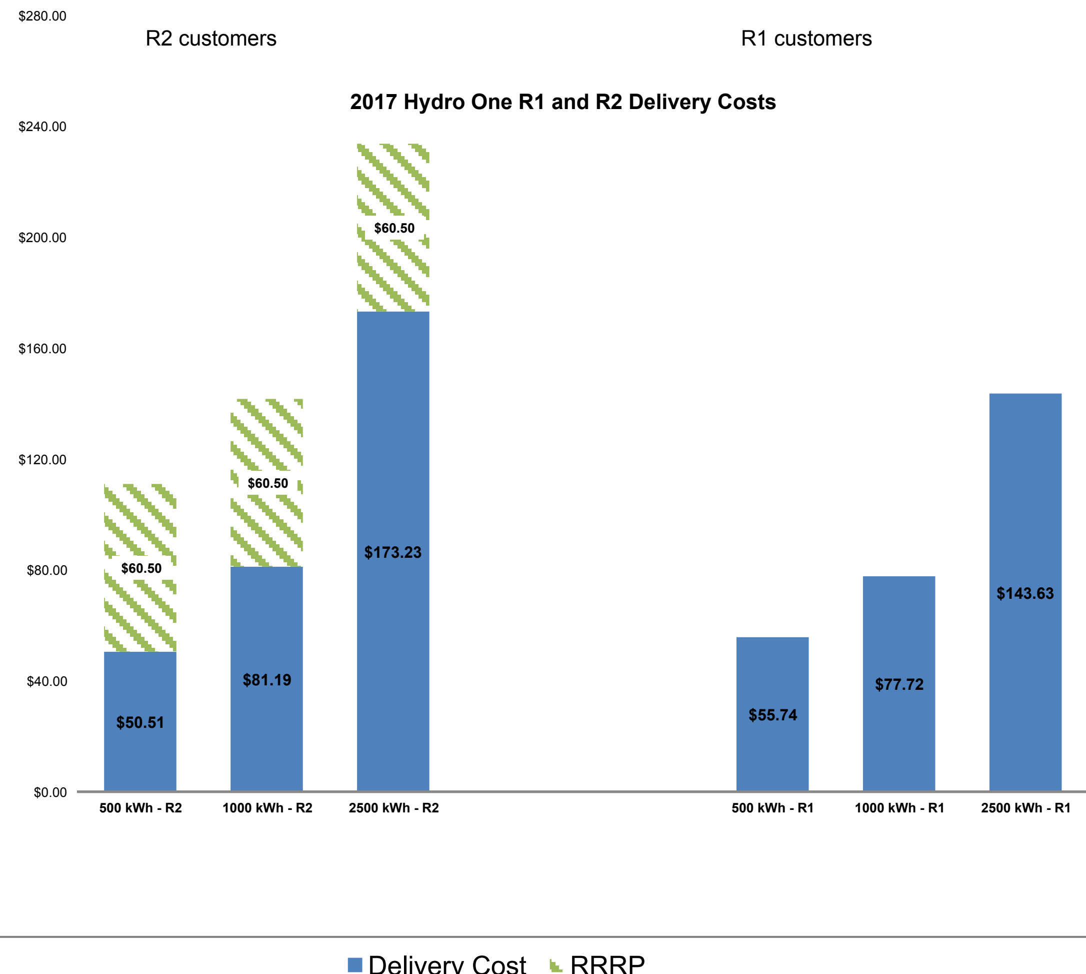
Monthly Residential Delivery Bill at LDC Residential Monthly Average Consumption: Assumes a Proxy for Monthly Fully Fixed Distribution Rate



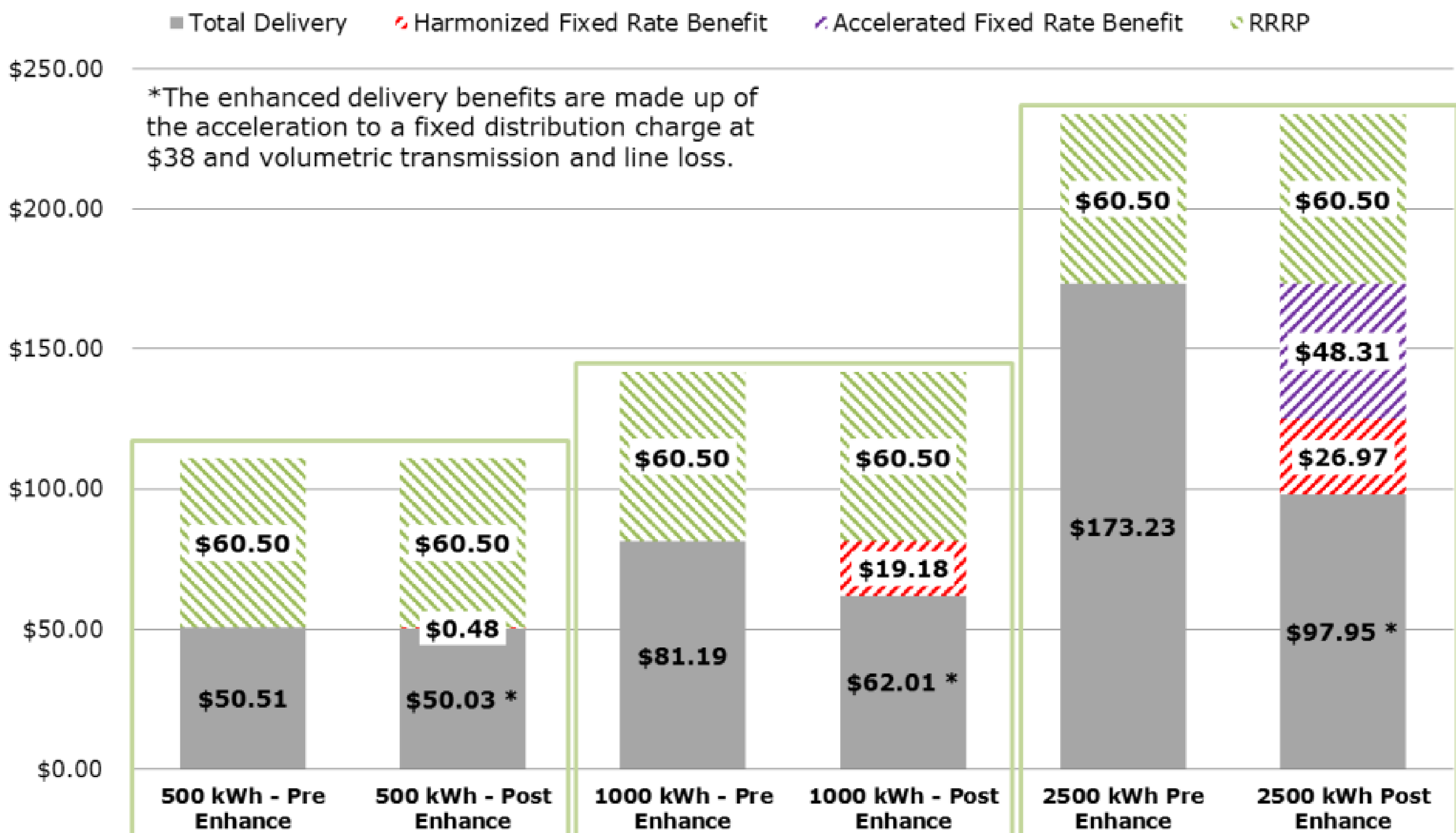
**2017 Approved and Proposed (Decisions Pending – rates are subject to change)*

Rural or Remote Rate Protection Program : Current

- From 2001-2016 the program provided $125.4M to help defray distribution costs in rural, northern and remote communities. In the 2016 Speech from the Throne, this funding was expanded by $116.4M to a total of $241.9M.
- As of Jan 2017 Hydro One’s least dense customers [“R2 Class”] receive $60.50/month off their distribution costs.

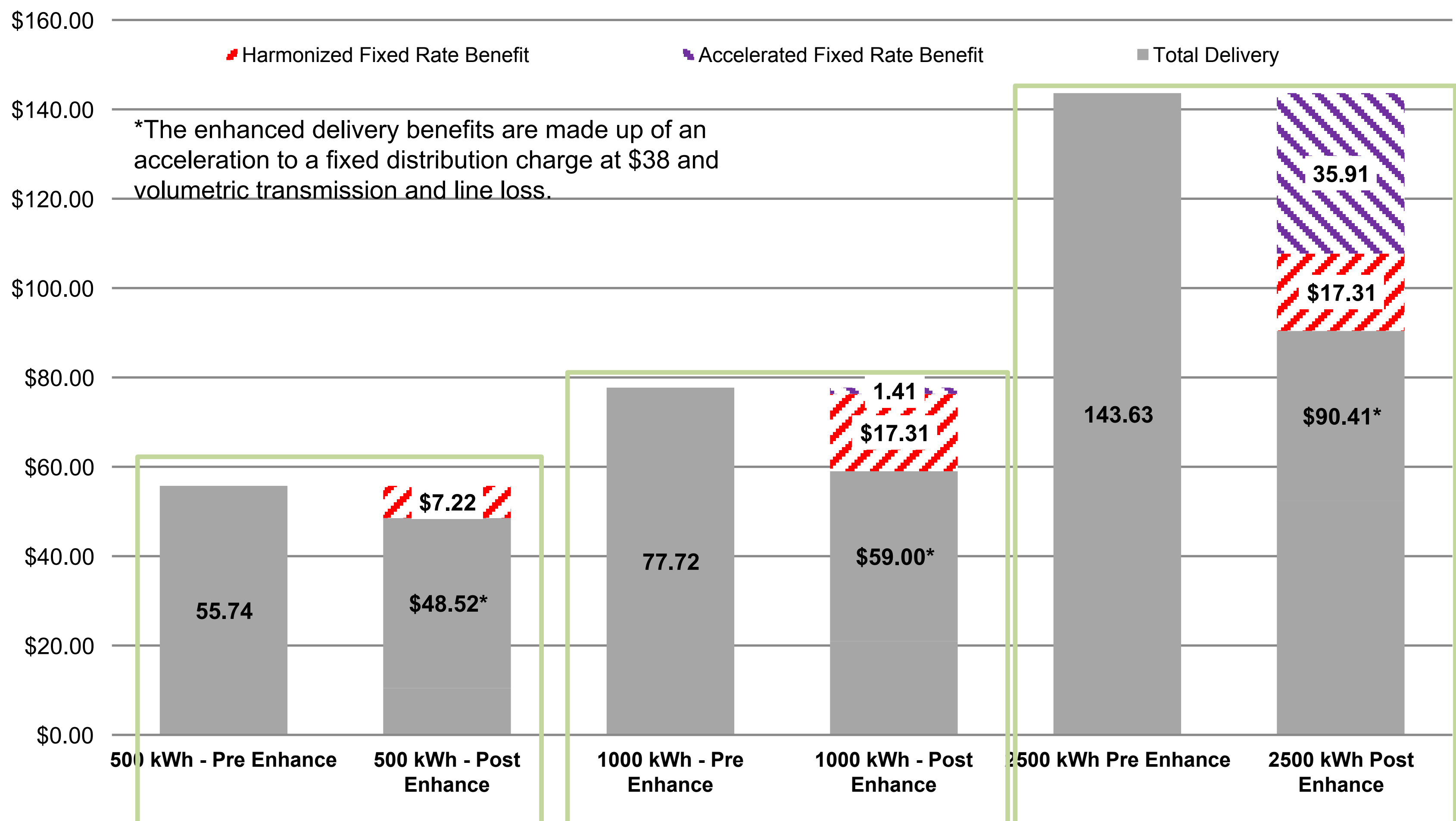


Hydro One (R2) – Subsidizing the Fixed Rate Benefit



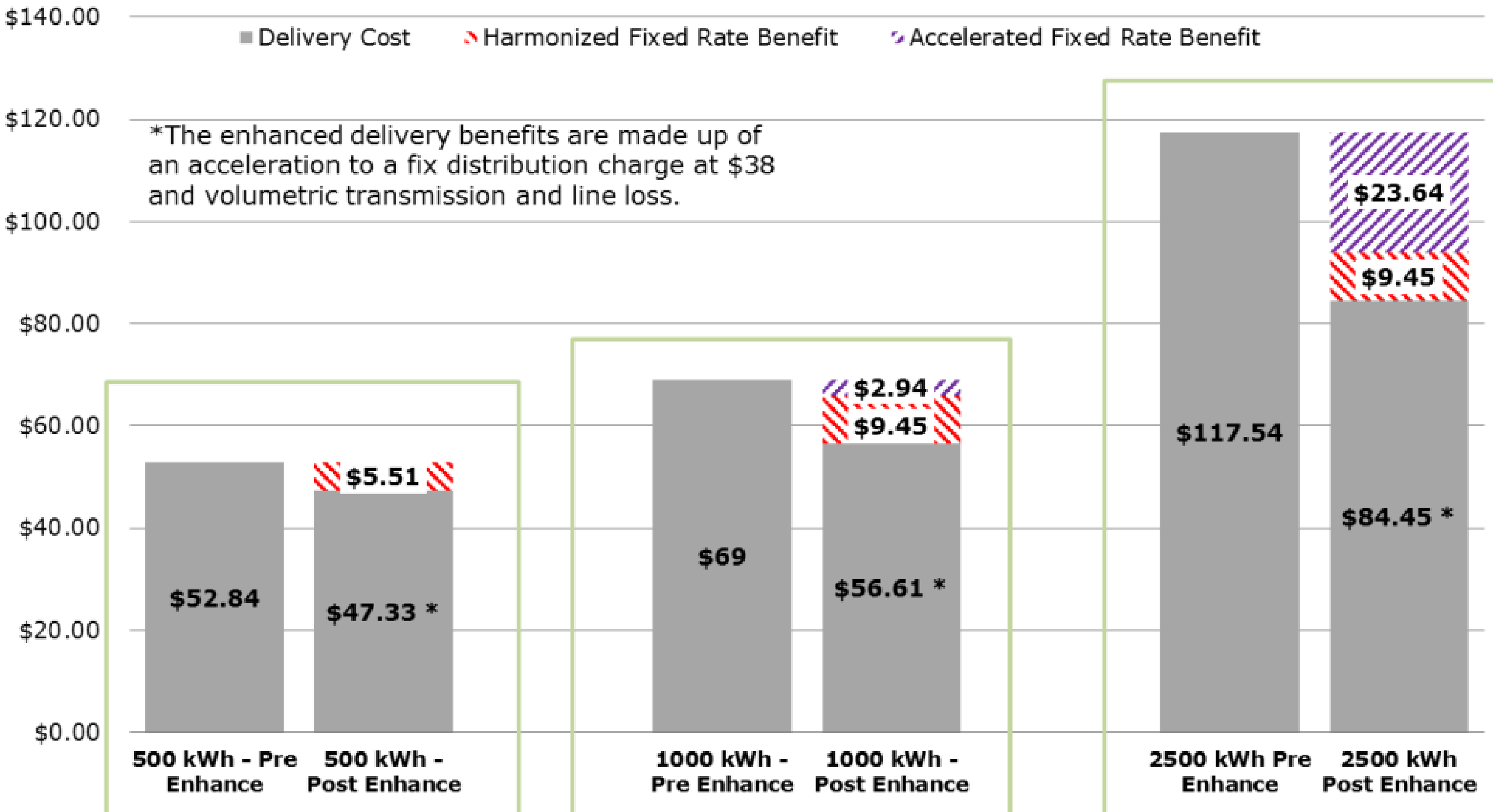
Note: *Rates are for 2017 (either approved or proposed)*

(Hydro One R1)



Note: *Rates are for 2017 (either approved or proposed)*

Subsidizing the Fixed Rate Benefit (Top 8 – by cost – LDC's)



**There are seven LDCs that would benefit from the accelerated fixed rate benefit and harmonized fixed rate benefit which have similar benefits such as Innpower

Note: *Rates are for 2017 (either approved or proposed)*

Ontario Electricity Support Program (OESP)

- The OESP, an income-tested, application based program that lowers electricity costs of the most vulnerable consumers, provides a rebate directly on bills.
- Increasing the benefit by 50% - on bill – for low income Ontarians
- Working to establish an entitlement program.

Table 1: Current base program credits

Sliding Scale #1		Household Size						
		1 Person	2 Persons	3 Persons	4 Persons	5 Persons	6 Persons	7 or More Persons
Income Bracket	< $28,000	$30	$30	$34	$38	$42	$50	$50
	$28,001 - $39,000	-	-	$30	$34	$38	$42	$50
	$39,001 - $48,000	-	-	-	-	$30	$34	$38
	$48,000 - $52,000	-	-	-	-	-	-	$30

Table 2: Enhanced program credits

Sliding Scale #2		Household Size						
		1 Person	2 Persons	3 Persons	4 Persons	5 Persons	6 Persons	7 or More Persons
Income Bracket	< $28,000	$45	$45	$50	$55	$60	$75	$75
	$28,001 - $39,000	-	-	$45	$50	$55	$60	$75
	$39,001 - $48,000	-	-	-	-	$45	$50	$55
	$48,000 - $52,000	-	-	-	-	-	-	$45

Establishing a New LDC Affordability Fund

- Establishing an "Affordability Fund" for LDCs could provide a means to help struggling customers who do not qualify for low income programs and cannot upgrade their homes without financial assistance.
  - Over time the Fund could help these customers get back on track with their bills and also save on disconnection costs; and
  - The Fund would be targeted to customers on an as-needed basis

- ENERGY is currently in discussions with several large LDCs to determine the feasibility of establishing a Fund and to identify a willing funding partner(s).

- Recipients could receive measures similar to those available in existing conservation programs, e.g., weatherization, energy efficient appliances and lighting controls ranging from $3,500 to $5,000 per customer, at no or minimal cost. Consideration could also be given to including cold climate air source heat pumps for electrically heated homes.
  - As an illustration, with $200 million, the estimated reach of the fund could be 15,000 to 65,000 households, depending on measures and uptake.

Implementing On-Reserve First Nations Support

- First Nation and Political-Territorial Organization leaders have advocated for the review of delivery charges associated with transmission and distribution assets within the context of historical grievances and the need for electricity rate relief for on-reserve customers.
- The Minister committed to consider options for addressing the issue at the Apr. 18, 2016 First Nations-Ontario Energy Table meeting. The item was also discussed during the Hydro One negotiations with the Chiefs of Ontario (COO).
- In July 2016, the Minister of Energy issued a letter directing the OEB to prepare a report providing "*advice on options for an appropriate electricity rate (or rate assistance) for on-reserve First Nations electricity consumers.*"
- The OEB report recommended:
  - 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. The OEB estimates 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.

Tackling the Global Adjustment

- Global Adjustment (GA) represents the cost of contracted electricity resources, above and beyond what the market clearing price will pay (Hourly Ontario Electricity Price - HOEP)

- The Hourly Ontario Electricity Price (HOEP) has been depressed for a number of years, owing to macro-economic factors such as:
  - Shale Gas / Sustained Natural Gas Commodity Price Reduction (2009 - ???)
  - Moderate over-build of Electricity Resources; reduced demand post-2010 Global Recession
  - Clean Energy Supply – hydro, wind, solar, biomass, nuclear cost more than coal

- Global Adjustment (GA) includes all contracted forms of Energy Supply Agreements on a 20 year basis: Natural Gas Plants; Wind & Solar facilities have an anticipated asset value beyond the 20-year contracted term

- ENERGY / Ministry of Finance / Treasury Board : Looking at ways to smooth the payments across a longer time period.

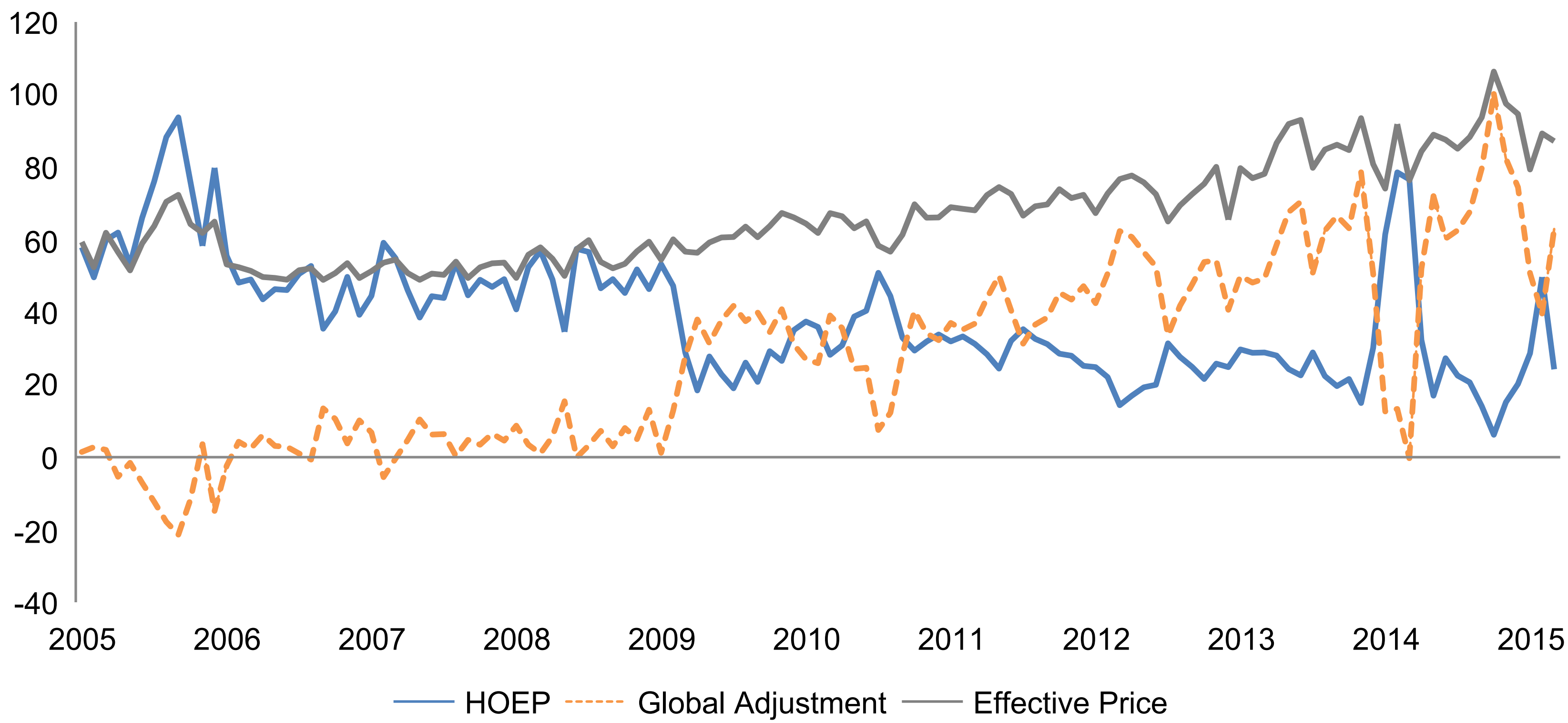
- Early stages of analysis – important to maintain confidentiality.

- Addressing the Global Adjustment as well as Ontario's arcane electricity "market" will require significant overhaul. But the time has come for structural reforms. Changing structures at a time of security of supply (enough generation) will lower risks.

- Stakeholders generally support updating IESO's electricity market with a "made in Ontario" approach

Historical Global Adjustment

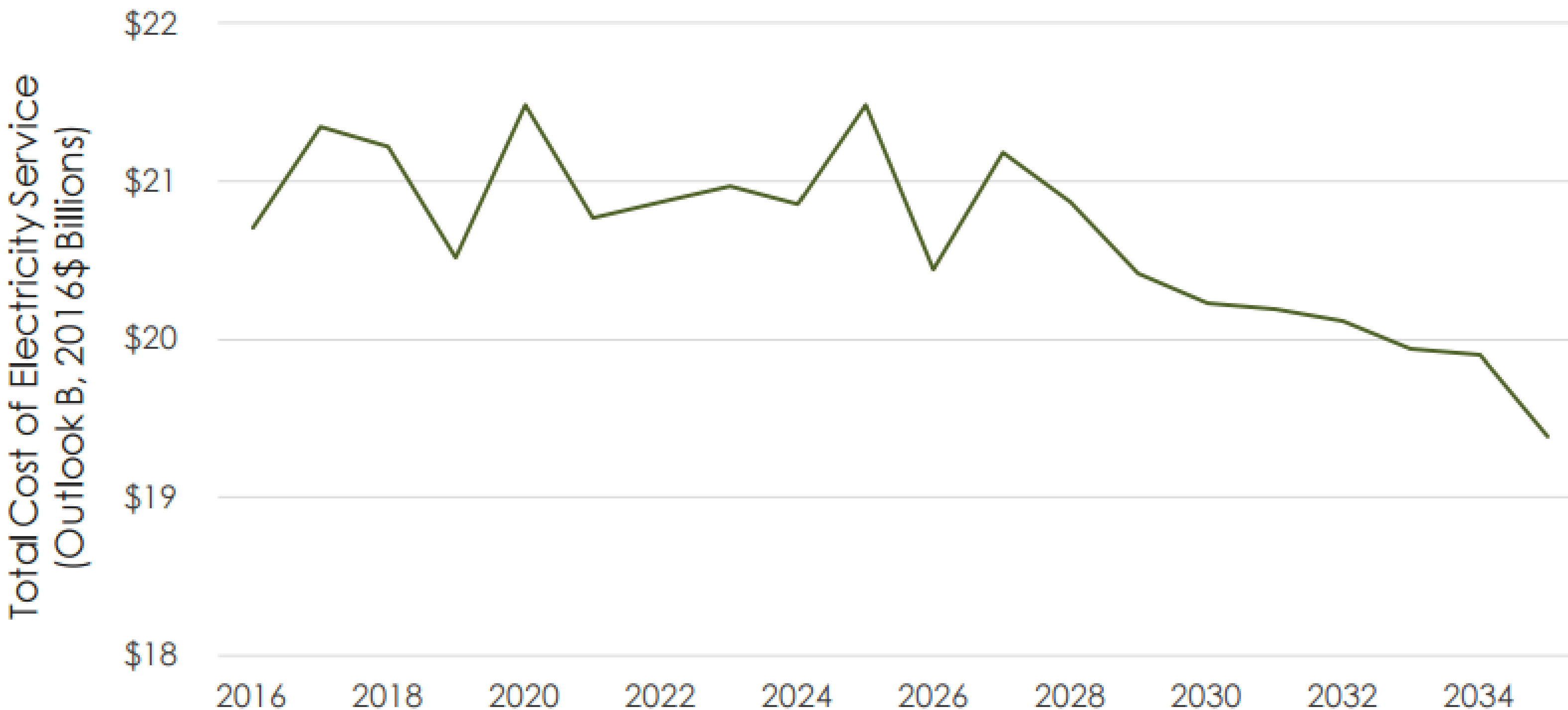
Commodity Cost of Electricity ($/MWh)



- Global adjustment experienced significant growth beginning in early 2009 as HOEP declined and IESO-contracted energy production increased.

Source: IESO

Total System Cost of Electricity (2016-2034)



Next Steps : Building a Comprehensive Package of Electricity Price Supports

- Better Management of the Global Adjustment : Broad Relief for all Consumers
- Removing Distribution Charge Volatility : Equity within your LDC Service Territory
- Enhancing Benefits for Rural, Northern, High-Cost Utilities
- Supporting Vulnerable Ontarians : FN Reserve Communities; Low-Income Populations & introducing a flexible 'Affordability Fund'

Communications Plan

- **Primary Narrative** : Broad / Province-wide Electricity Rate Relief, regardless of location or income thresholds.
- "Headline" level of reduction (percentage figure; yet to be determined)
- Recognition that costs have risen, for valid and important reasons; but that Premier Wynne and Ontario Liberals are committed to helping **ALL** families
- Address cost-of-living pressures that all Ontarians are struggling with
- **Secondary Narrative** : Enhanced programs to target with precision vulnerable communities (low / mid-income; electric heat, renters, FN Reserves; northern and rural Ontarians)
- This is a comprehensive plan of structural reforms to fundamentally address inequalities that have existed for decades in the electricity system
- The most extensive reform of the electricity sector in a generation (i.e. since "market opening" in 1999).

Communications Plan

- Electricity Sector “Budget”
  - Announcement & Technical Lock-up for media and staff
  - Full Suite of MPP Materials
    - News Release & Backgrounder
    - Draft Remarks for Local Announcements
    - Template OP-ED / Guest Column for local papers
    - Social Media products
    - Retail Print Materials (post-card; hand-outs, etc.)
- Updating Utility Bills
  - Ensure that new relief measures are highlighted when enacted (TBD / Summer 2017)
  - Reform and refresh LDC billing to update and simplify text
- Government Advertising Campaign
  - TV
  - Print Media
- Regional Media Markets
  - Echo Events; for days and weeks after the “main event”
  - Thibeault “Radio Tour” (call-ins; drive-time and talk-format programing)