ONTARIO ENERGY REPORT Q2 2017

APRIL – JUNE 2017
ELECTRICITY

Ontario Grid-Connected Peak Demand (Q2)

21,168 MW

set June 12, 2017, 6:00 pm EST

Source: IESO

Ontario Grid-Connected Peak Demand (for 2017)

21,168 MW

set in Q2 – June 12, 2017, 6:00 pm EST

Source: IESO

Transmission Grid-Connected Generation Output (Q2)

Nuclear	21.6 TWh	62.9 %
Hydro	10.0 TWh	29.2 %
Wind	1.8 TWh	5.1 %
Gas	0.7 TWh	2.0 %
Solar	< 1 TWh	0.5 %
Biofuel	< 1 TWh	0.3 %

Source: IESO

Conservation Savings (Q2)

Net Peak Demand Savings	14 MW
Net Energy Savings	141 GWh

Source: IESO

Commodity Cost – Class A (¢/kWh)

	Q2	YTD
Hourly Ontario Energy Price (Unweighted average)	0.56	1.36
Global Adjustment (Average, Class A)[1]	5.38	4.80
Total	**5.94**	**6.16**

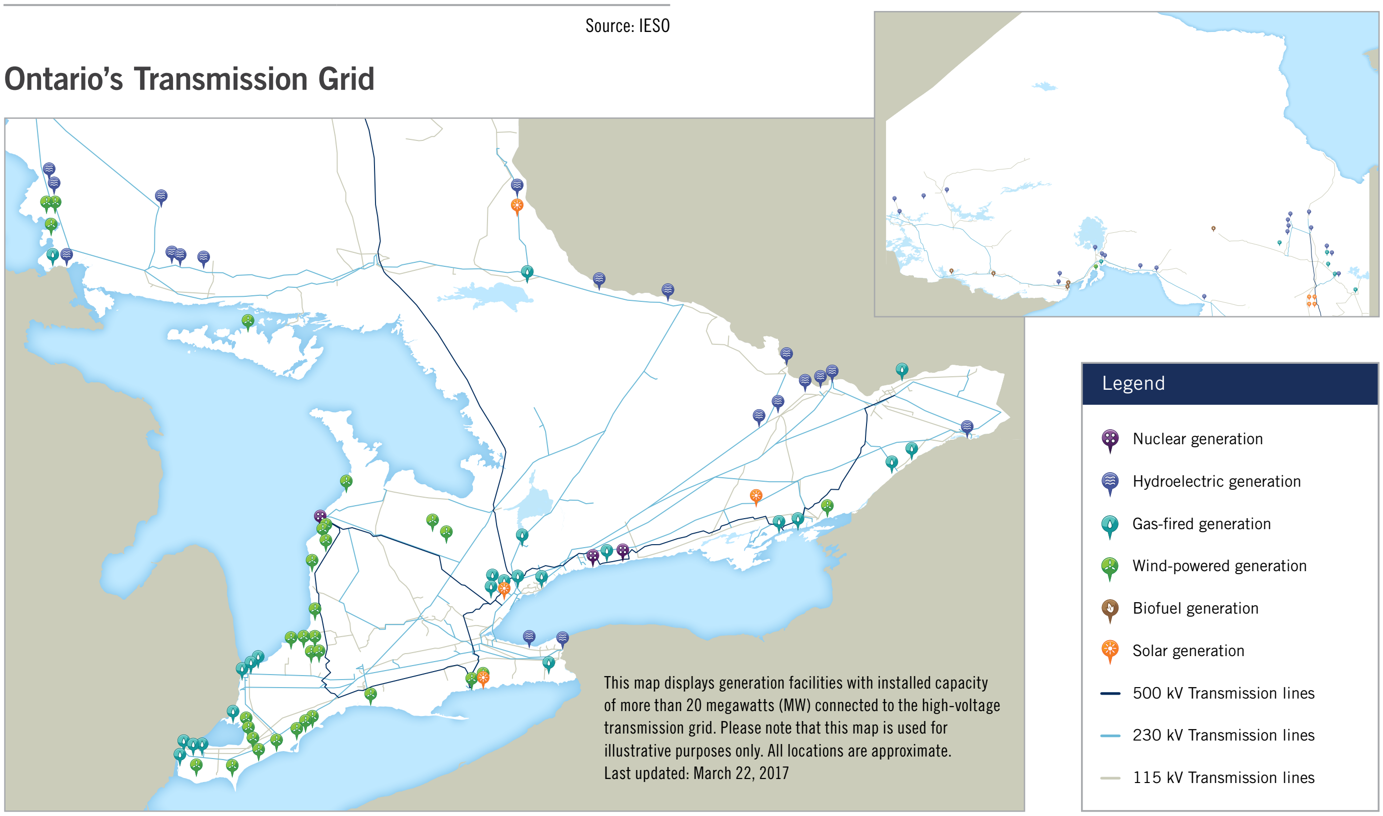
Source: IESO

Commodity Cost – Class B (¢/kWh)

	Q2	YTD
Hourly Ontario Energy Price (Weighted Average)	0.67	1.53
Global Adjustment (Average, Class B)[1]	11.93	9.84
Total	**12.60**	**11.37**

Source: IESO

Ontario's Transmission Grid

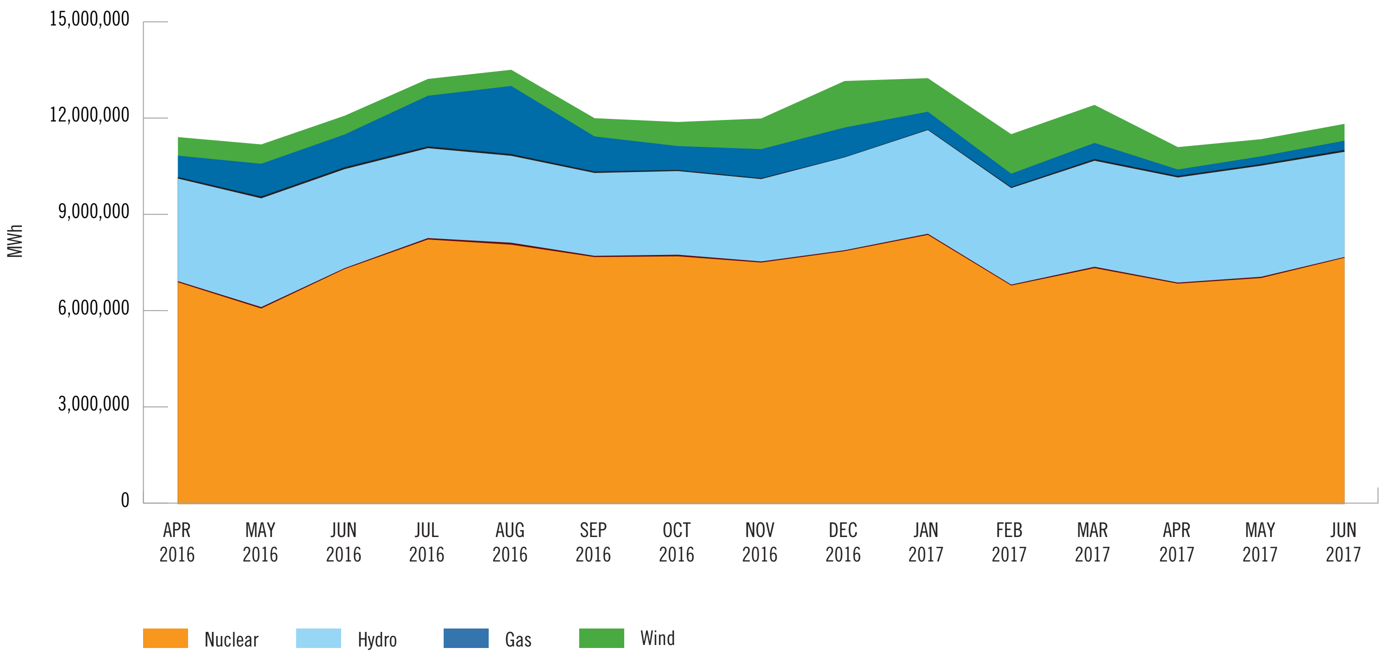


1. Class A customers are large electricity consumers that pay Global Adjustment based on their proportion of energy use during the five hours of the year with the highest demand. All other customers are Class B.

Electricity Supply

Monthly Energy Grid Output by Fuel Type

Ontario's bulk electricity grid has a diverse supply mix, featuring baseload generators that provide energy around the clock, intermittent generators that generate when they are able (primarily wind and solar), and flexible generators that can change their output quickly (primarily natural gas).



Note: Total MW value may not add up to sum of column totals due to rounding.

Source: IESO

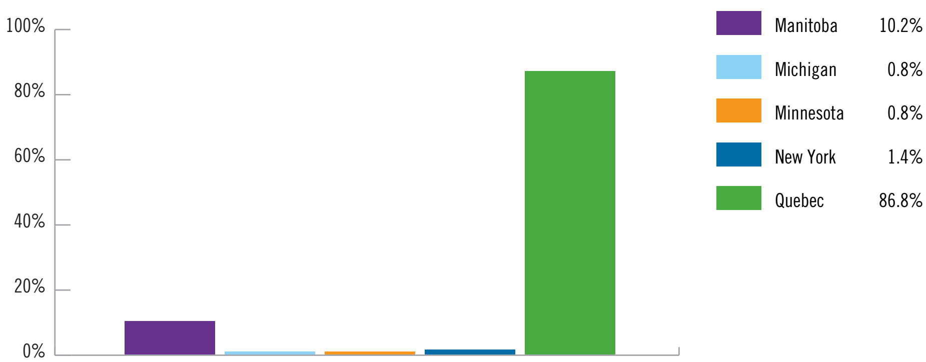
The data shown above is sourced from a report developed by the IESO, available at reports.ieso.ca/public/GenOutputbyFuelMonthly/PUB_GenOutputbyFuelMonthly.xml. The report uses settlement data to provide information for all self-schedulers, intermittent and dispatchable Ontario generators registered as a Market Participant. The report – which includes all grid-connected generators, plus those embedded generators that are also registered as market participants – is published monthly as per the Physical Settlement calendar.

Imports and Exports

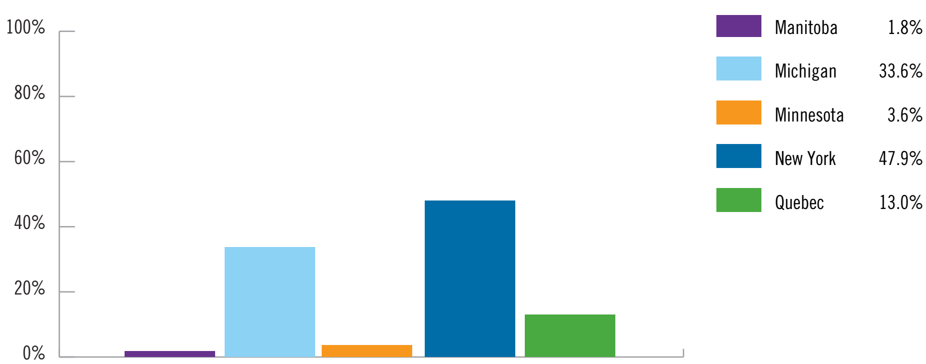
Ontario is connected to a large, stable network of transmission systems across North America, which supports system reliability and economic efficiency. Imports compete against domestic generation to provide energy at the best possible price and to support the province's needs during periods of high demand. Ontario also exports energy when prices are higher, which helps to bring in revenue that helps offset other system and infrastructure costs and can help maintain system reliability during times of surplus generation.

Ontario imports and exports power across 26 interties with two provinces and three states. While Ontario is electrically interconnected with Manitoba, Michigan, Minnesota, New York and Quebec, the interties allow for electricity trade in transactions that can reach across eastern North America, contributing to a more diversified and competitive pool of supply.

Imports



Exports



Q2 (GWh)	Manitoba	Michigan	Minnesota	New York	Quebec	Total
Imports	97.36	7.64	7.23	13.51	828.28	**954.02**
Exports	85.82	1,587.5	172.27	2,267.98	616.7	**4,730.27**

Note: Numbers may not add up to totals due to rounding. Source: IESO

Installed Capacity Connected to Transmission Grid

Changes to installed transmission grid capacity in this quarter highlight the continuing process of renewal in Ontario's electricity sector. While nuclear, hydroelectric and natural gas production accounted for the vast majority of bulk supply, new wind, biofuel and solar generators continued to connect to the transmission grid.

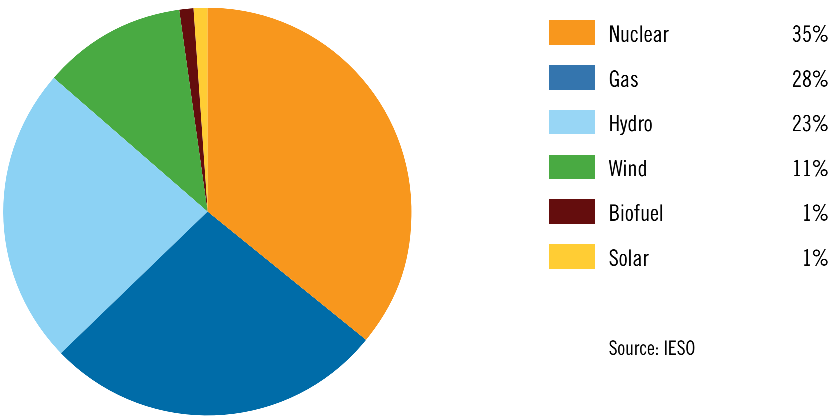
The IESO Active Generation Contract List provides the status of individual contracted electricity supply projects within different IESO procurement programs. The list is limited to generation facilities under contract to the IESO.

New Facilities Registered in Q2

The following projects have completed commissioning and the market entry process and are included as part of total installed IESO Market Participant generator capacity:

- Greenfield South – 334 MW
- Southgate Solar – 50 MW
- Windsor Solar – 50 MW
- Peter Sutherland Senior Generating Station – 29 MW

Grid-Connected Generation Capacity



Note: Data include all transmission-connected generation facilities and distribution-connected facilities that are Market Participants. Numbers may not add up to totals due to rounding.

Source: IESO

The table below shows the increased use of renewable resources for generating electricity in the province.

Grid-Connected Generation Capacity

Year (MW)	Nuclear	Hydro	Coal	Gas*	Wind	Biofuel	Solar	Total
Q2 2017	12,978	8,480	0	10,277	3,983	495	380	**36,592**
2016	12,978	8,451	0	9,943	3,923	495	280	**36,070**
2015	12,978	8,432	0	9,942	3,504	495	240	**35,591**
2014	12,947	8,462	0	9,920	2,543	455	40	**34,367**
2013	12,947	7,939	2,291	9,920	1,725	124	0	**34,946**
2012	12,998	7,947	3,293	9,987	1,511	122	0	**35,858**
2011	11,446	7,947	4,484	9,549	1,412	122	0	**34,960**

* Units that use natural gas, oil or are dual fuel, such as Lennox, NP Kirkland and NP Cochrane, are included in the Gas category.

Source: IESO

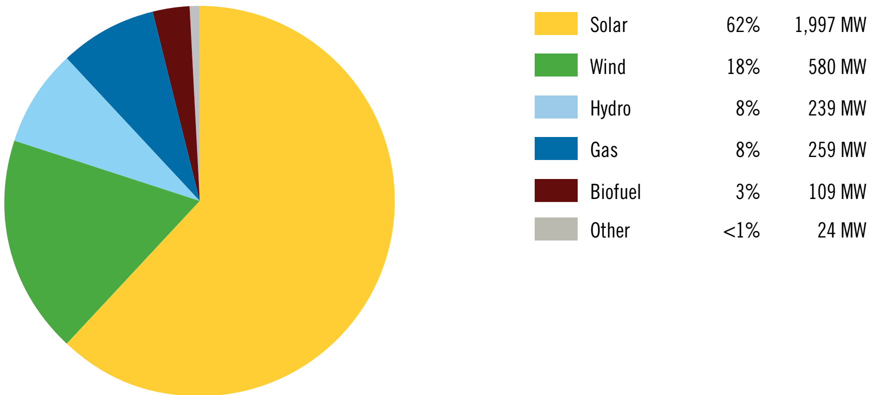
Note: Numbers may not add up to totals due to rounding.

Embedded Generation (IESO-contracted)

Embedded generators supply electricity to local distribution systems, helping to reduce demand on the transmission grid and supporting some of the needs of local communities. While wind and solar make up the majority of contracted embedded generation, the IESO has contracted for increasing amounts of hydroelectric, combined heat and power, natural gas and biofuel systems that will also connect to local distribution networks.

By the end of Q2 2017, there was 3,208 MW of contracted generation in commercial operation within local distribution systems.

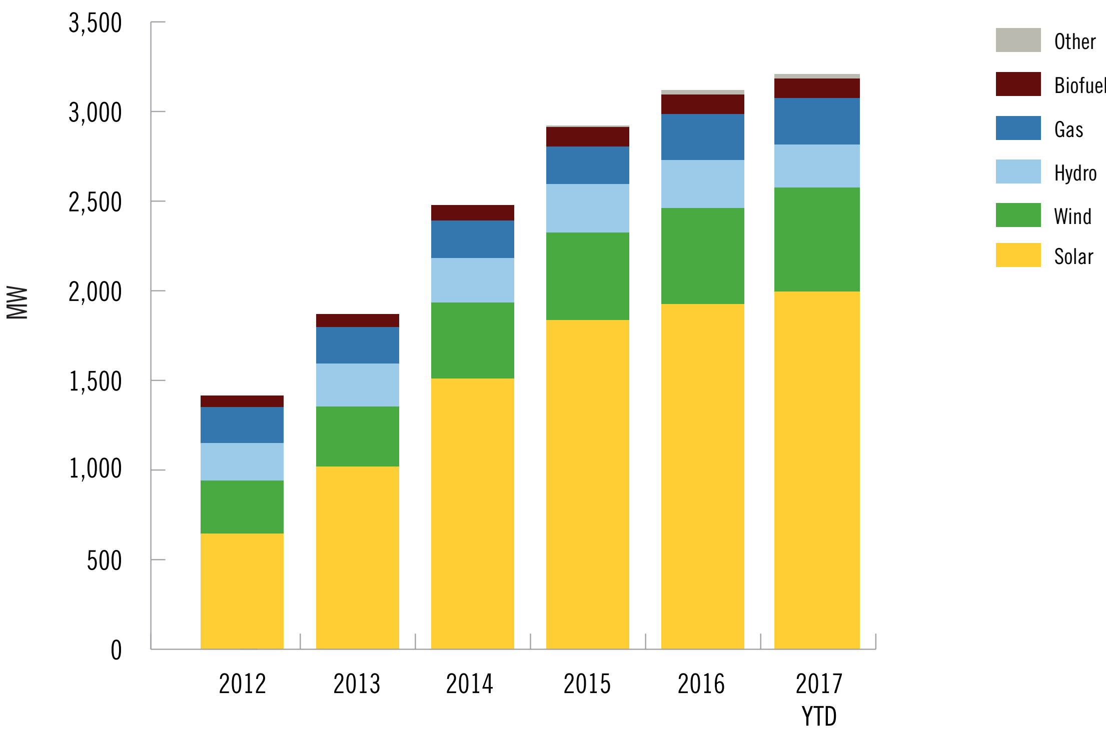
Contracted Embedded Generation Capacity in Commercial Operation (Q2)



Note: Numbers may not add up to totals due to rounding. Source: IESO

The table below shows the increased use of embedded generation to supply electricity to local distribution systems in the province.

Contracted Embedded Generation Capacity in Commercial Operation



Note: Total IESO-contracted embedded generation in commercial operation at end of each period. Numbers may not add up to totals due to rounding. Source: IESO

The data shown above are sourced from the IESO Progress Report on Contracted Supply. The report provides a quarterly update on the status of supply and procurement initiatives that are under development or in commercial operation, by fuel type, and aggregates total capacities as stated in each contract, which differs from values on installed capacity used for operation purposes. The report is available at www.ieso.ca/power-data/supply-overview/transmission-connected-generation.

Total Grid-Connected and Contracted Embedded Generation Capacity

This chart shows all grid-connected capacity and IESO-contracted capacity in the province. It is calculated by adding the two capacity categories listed above.

Year	Nuclear	Hydro	Coal	Gas	Wind	Biofuel	Solar	Other	Total
2017 Q2 (MW)	12,978	8,719	0	10,535	4,562	603	2,377	24	**39,799**
2017 Q2 (%)	33%	22%	0%	26%	12%	2%	6%	<1%	

Note: Numbers may not add up to totals due to rounding. Source: IESO

Available Capacity at Peak 27,747 MW (Q2)

Peak Demand	21,168 MW (Q2)	Operating Reserve Requirement	1,620 MW (Q2)
Minimum Demand	10,167 MW (Q2)		Source: IESO

Available capacity is all installed grid-connected capacity, less allowances made for seasonal derates, planned outages and the capacity of energy-limited resources. Reserves are required to ensure that the forecast Ontario Demand can be supplied with a sufficiently high level of reliability. Operating Reserve is the amount of supply resources required to handle the loss of the largest contingency on the grid, plus the loss of half the amount of the second largest contingency. More information on the criteria, tools and methodology the IESO uses to perform resource adequacy assessments can be found at www.ieso.ca/power-data/market-summaries-archive.

Conservation

As part of the Conservation First Framework (CFF) for 2015-2020, the province established a target of 7 terawatt-hours (TWh) in electricity savings[2] to be achieved through conservation programs offered by local distribution companies (LDCs). The province also established a target of 1.7 TWh to be achieved through the Industrial Accelerator Program (IAP), which is delivered by the Independent Electricity System Operator (IESO) to transmission-connected customers. Overall the province expects to achieve 8.7 TWh in savings by December 31, 2020.

As of 2017 quarter 2, LDC delivered CFF Programs have achieved 3,155 GWh in electricity savings representing 45% of the 2020 CFF target and the IESO delivered IAP Program has achieved 232 GWh in electricity savings representing 14% of the 2020 IAP target. For more details on quarterly results please see the quarterly IESO Conservation Progress Report via the IESO Conservation Reports website: www.ieso.ca/power-data/conservation-overview/conservation-reports.

Conservation Portfolio Progress – Results (as of 2017 Q2)[3]

Incremental Progress		2017 Q2 Incremental	2015-2017 Q2 Incremental	2020 Target Progress (%)
LDC Delivered Programs	Peak Demand Savings (MW)	14	417	-
	Energy Savings (GWh)	141	3,155	45
IESO Delivered IAP Program	Peak Demand Savings (MW)	0	27	-
	Energy Savings (GWh)	0	232	14
Total Portfolio	**Total Peak Demand Savings (MW)**	**14**	**444**	**-**
	Total Energy Savings (GWh)	**141**	**3,387**	**-**

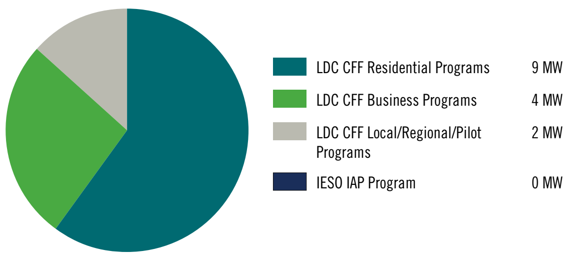
Note: Numbers may not add up to totals due to rounding. All reported LDC activity and savings are based on projects reported and invoiced to the IESO only. Any projects that have an installation date in Q2 2016 are excluded. Source: IESO

2. All conservation metrics above are presented as 'net' savings which take into consideration the actual influence of the program on participants (e.g., estimating free-ridership and spill over savings). Furthermore, all savings presented above persist until the year 2020 at the end-user level (e.g., accounting for transmission and distribution system line losses). To align savings with generation level metrics, values should be increased by factor of 6.7% for distribution system level savings or a factor of 2.5% for transmission system level savings.

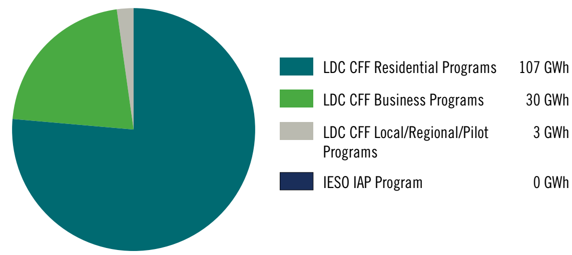
3. Results presented are 'reported' (i.e. 'unverified') based on project installation dates corresponding to the indicated period and are based on projects reported and invoiced to the IESO as of 2017 Q1.

Incremental Savings (2017 Q2)

Peak Demand Savings



Annual Energy Savings



Note: Numbers may not add up to totals due to rounding; negative values due to adjustments to prior periods. Source: IESO

Demand Response (DR)

Demand response and peak savings programs benefit the electricity system and lower energy costs for consumers by contributing to overall peak savings for the province.

Demand response in the wholesale market is being transitioned from the contract-based Capacity-Based Demand Response (CBDR) program to an annual DR Auction. The DR Auction provides a transparent and cost-effective way to select the most competitive providers of DR, while ensuring that all providers are held to the same performance obligations. As the approximately 500 MW of capacity from CBDR contracts expire, that expiring capacity will be made available for competitive selection in the DR Auction.

The second annual DR auction was held in December 2016 and successfully secured 445.2 MW and 477.5 MW of DR capacity for the summer and winter commitment periods, respectively, which became available in May 2017. The auction resulted in both increased participation and prices for DR capacity that are 12 to 17 percent lower than those achieved in 2015.

More information on the Demand Response Auction is available at: www.ieso.ca/en/sector-participants/market-operations/markets-and-related-programs/demand-response-auction

Peak Savings

The Industrial Conservation Initiative (ICI) encourages large consumers to shift their energy use away from system-wide peaks. Customers who are able to reduce their impact on peaks benefit the system by reducing the need to build new infrastructure. In 2016, ICI is estimated to have reduced peak demand by 1,300 MW. Participating customers are assessed an individual Global Adjustment (GA) rate, based on the percentage that their demand contributes to the top five system coincident peaks measured during a defined base period.

The table below lists the top five daily peaks for the most recent base period, which began on May 1, 2016, and ended on April 30, 2017.

Top 5 Peaks: Hours & System-Wide Consumption (Base Period: May 1, 2016 to April 30, 2017)

Date	Hour Ending	Net Ontario Load (MW)	Embedded Generation (MW)	Total (MW)
August 10, 2016	18	22,636.692	572.321	**23,209.013**
September 7, 2016	17	22,526.876	635.985	**23,162.861**
August 11, 2016	17	22,317.771	789.884	**23,107.655**
July 13, 2016	18	22,188.464	753.156	**22,941.620**
August 12, 2016	17	21,904.371	765.541	**22,669.912**

Note: The value in the Total (MW) column is the number used to calculate a customer's Peak Demand Factor.
The above values are used for the adjustment period July 1, 2017 to June 30, 2018. Source: IESO

Information on peak tracking can be found at www.ieso.ca/sector-participants/settlements/global-adjustment-for-class-a

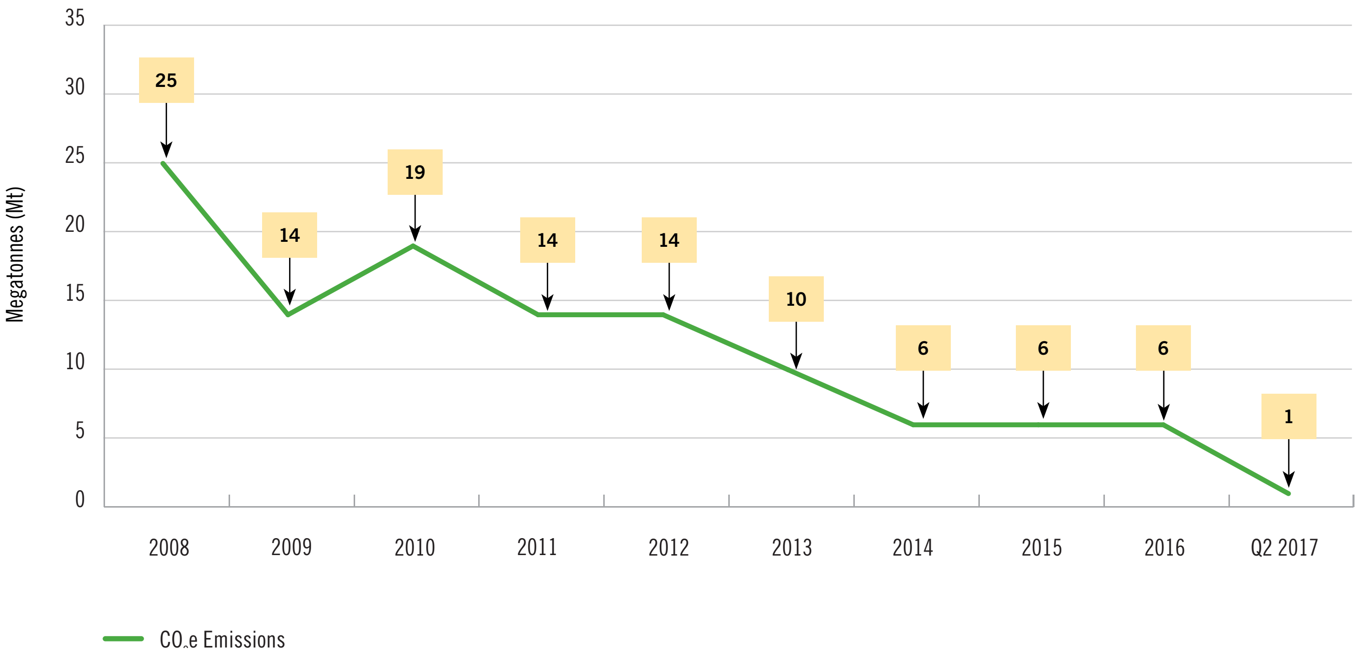
More information on the ICI is available at www.ieso.ca/-/media/files/ieso/document-library/global-adjustment/ici-backgrounder.pdf?la=en.

Greenhouse Gas Emissions

The marked decline in greenhouse gas emissions (measured in tonnes of CO_2 equivalent) is a result of the phase-out of coal-fired electricity generation in the province and uptake of renewable generation and conservation measures. Emissions of oxides of sulphur (SO_2) – which are predominantly a by-product of coal combustion — have also shown a marked decrease with the phase-out of coal-fired electricity.

Greenhouse Gas Emissions for the Ontario Electricity Sector

The chart below shows annual greenhouse gas emissions (measured in tonnes of CO_2 equivalent) for the years 2005-2016. Year-to-date greenhouse gas emissions in Q2 2017 totalled approximately 1 Megatonne (Mt).



Source: IESO, Environment Canada, Ontario Ministry of Environment and Climate Change

Air Contaminants

Air contaminants, including oxides of sulphur (SO_x), oxides of nitrogen (NO_x) and fine particulate matter ($PM_{2.5}$), are also released during combustion of fossil fuels.

Air Contaminants for the Ontario Electricity Sector (Tonnes)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 YTD (Q2)
SO_x Emissions	76,020	30,768	38,448	11,971	10,342	10,192	847	620	462	**84**
NO_x Emissions	38,314	24,389	28,130	18,988	19,077	17,183	11,520	8,877	7,630	**1,569**
$PM_{2.5}$ Emissions	1,314	1,779	2,120	562	478	439	281	249	215	**75**

Source: IESO, Environment Canada

Electricity Demand

Electricity demand is generally shaped by several factors that have differing impacts – those that increase demand (population growth, economic change), those that reduce demand on the grid (conservation, embedded generation) and those that shift demand (time-of-use rates, the Industrial Conservation Initiative). The impact of each of these factors on electricity consumption varies by season and time of day.

Even as the Ontario economy has moved beyond the 2008 recession, demand has remained flat. This trend is expected to continue as capacity and energy margins remain adequate and can be attributed in part to the successful implementation of conservation initiatives.

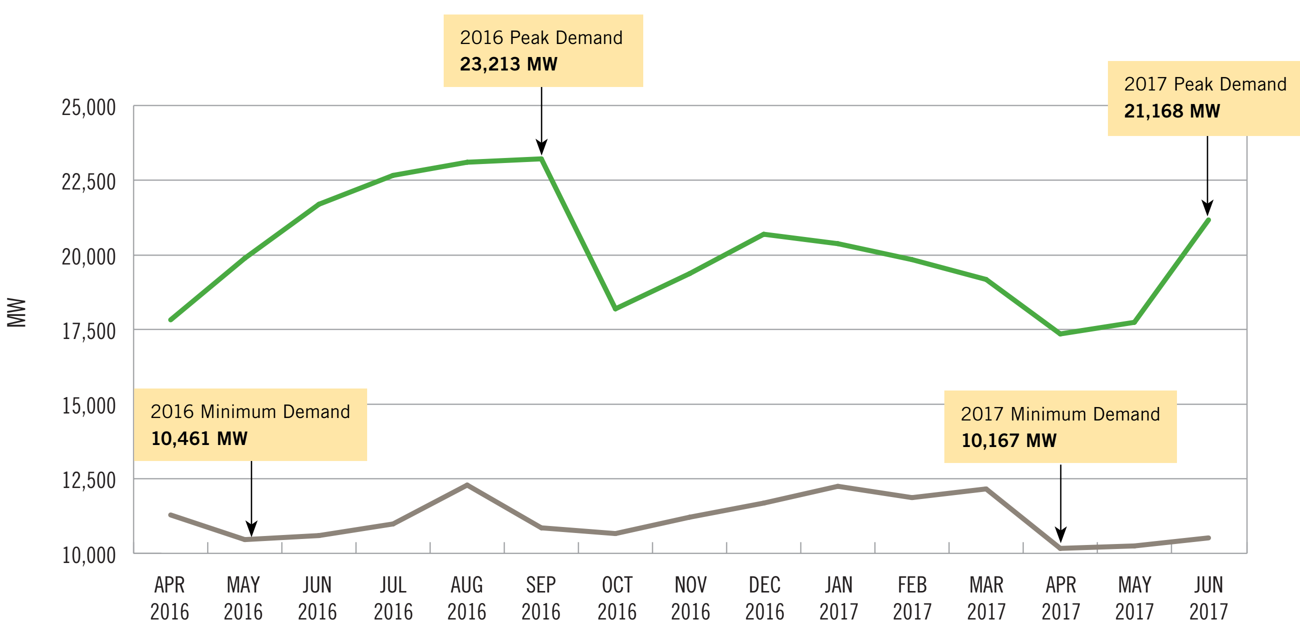
Growth in embedded solar and wind generation capacity and on-going conservation initiatives reduce the need for energy from the bulk power system, while also putting downward pressure on peak electricity demands.

Ontario Grid-Connected Peak Demand – as of end of Q2

21,168 MW

set in Q2 – June 12, 2017, 6:00 pm EST

Ontario Monthly Peaks and Minimums



Source: IESO

Forecast Demand Peaks

The demand for electricity on the provincial grid is forecast on a rolling 18-month basis. An assessment is done to assure the adequacy of the existing and proposed generation and transmission facilities to meet demand needs. The chart below presents normal weather forecasts, representing a typical peak for the time of year, and extreme weather forecasts that reflect severe weather conditions. The impacts of time-of-use rates and the Industrial Conservation Initiative – which incent customers to reduce demand in peak demand hours – are also factored into the demand forecast in this report.

Season	Normal Weather Peak (MW)	Extreme Weather Peak (MW)
Winter 2017-18	21,761	22,869
Summer 2018	22,278	24,656
Winter 2018-19	21,715	22,522

Source: IESO 18-Month Outlook

Q2 Ontario Grid-Connected Energy Demand

Year	Total (TWh)
2017	**30.6**
2016	**31.98**
2015	**31.58**
2014	**32.71**
2013	**32.91**
2012	**33.58**

Note: Total does not include the impact of embedded generation to reduce demand. Source: IESO Power Data, Demand Overview

Historical Totals – Annual Ontario Grid-Connected Energy Demand

Year	Total (TWh)	Change Over Previous Year
Q2 2017	**64.9**	
2016	**137**	0
2015	**137**	-2.8
2014	**139.8**	-0.9
2013	**140.7**	-0.6
2012	**141.3**	-0.2
2011	**141.5**	-0.4

Note: Total does not include the impact of embedded generation to reduce demand. Source: IESO Power Data, Demand Overview

Electricity Prices

Commodity Cost

Commodity cost comprises of two components, the wholesale price (the Hourly Ontario Energy Price) and the Global Adjustment. The commodity cost is only a portion of the total energy bill.

Class A

Month (¢/kWh)	APR 2016	MAY 2016	JUN 2016	JUL 2016	AUG 2016	SEP 2016	OCT 2016	NOV 2016	DEC 2016	JAN 2017	FEB 2017	MAR 2017	APR 2017	MAY 2017	JUN 2017	2017 YTD
HOEP*	0.57	1.2	1.87	2.10	3.05	1.53	1.15	1.50	1.94	2.04	2.01	2.45	0.97	0.26	0.47	**1.36**
Average Class A Global Adjustment Rate	5.75	5.6	5.27	4.90	4.22	4.73	5.18	5.30	4.80	4.52	4.45	3.67	4.90	5.66	5.56	**4.80**
Total Cost of Commodity	**6.32**	**6.8**	**7.14**	**7.00**	**7.27**	**6.26**	**6.33**	**6.80**	**6.74**	**6.56**	**6.46**	**6.12**	**5.87**	**5.92**	**6.03**	**6.16**

*(Unweighted) average of Hourly Ontario Energy Prices to reflect a typical (flat) industrial consumption profile.

Source: IESO

Class B

Month (¢/kWh)	APR 2016	MAY 2016	JUN 2016	JUL 2016	AUG 2016	SEP 2016	OCT 2016	NOV 2016	DEC 2016	JAN 2017	FEB 2017	MAR 2017	APR 2017	MAY 2017	JUN 2017	2017 YTD
HOEP**	0.61	1.34	2.02	2.34	3.29	1.75	1.24	1.61	2.09	2.16	2.11	2.60	1.11	0.32	0.59	**1.53**
Class B Global Adjustment Rate	11.13	10.75	9.55	8.31	7.10	9.53	11.23	11.11	8.71	8.23	8.64	7.14	10.78	12.31	11.85	**9.84**
Total Cost of Commodity	**11.74**	**12.09**	**11.57**	**10.65**	**10.39**	**11.28**	**12.47**	**12.72**	**10.80**	**10.39**	**10.75**	**9.74**	**11.89**	**12.63**	**12.44**	**11.37**

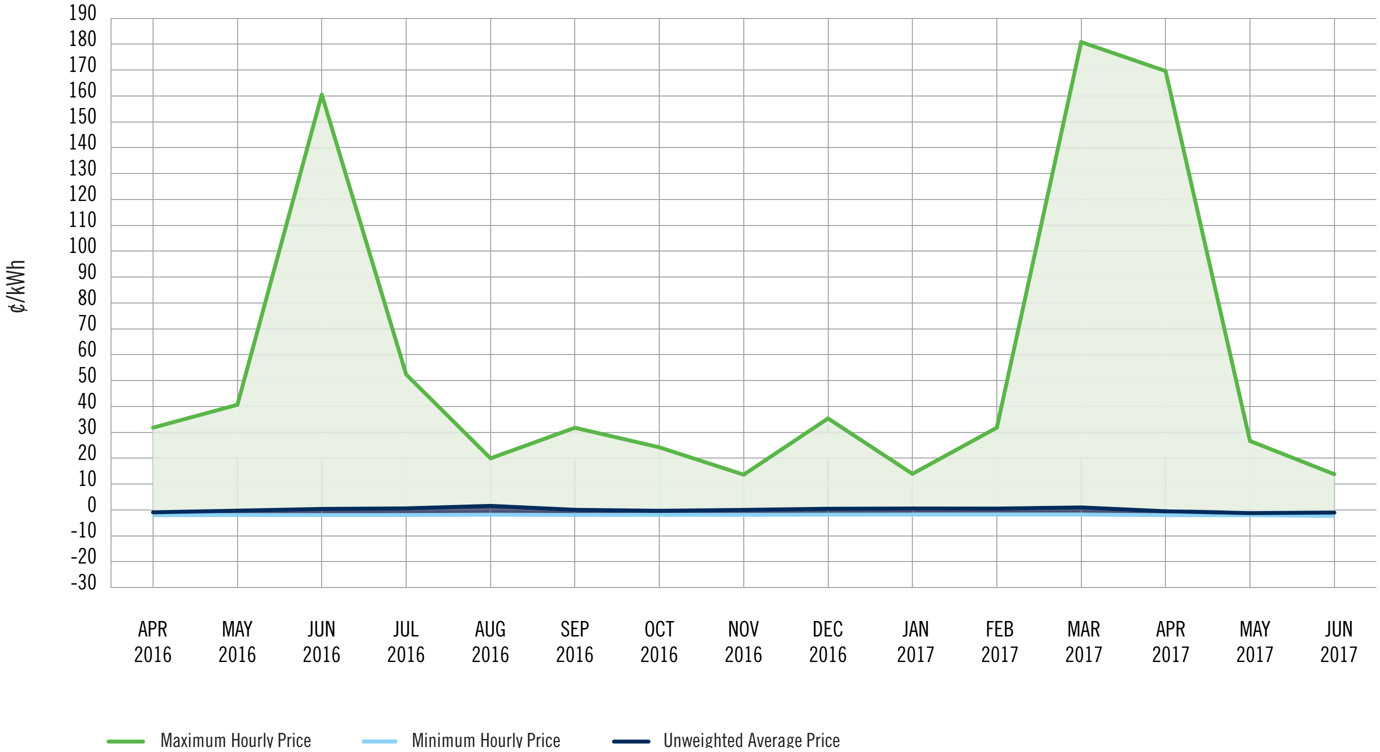
**Averages are weighted by the amount of electricity used throughout the province within each hour to broadly reflect the consumption profile of Class B (i.e., residential and commercial) consumers.

***Totals do not sum due to dollar values that are rounded down to cents.

Source: IESO

Monthly Wholesale Electricity Prices

The wholesale electricity price fluctuates by the hour. This chart shows the highest, lowest and average wholesale prices for each month. The monthly price varies depending on factors in the electricity market that shift the energy price higher or lower. A higher average monthly price exerts a downward pressure on costs that needs to be recovered through Global Adjustment, illustrated below.



Source: IESO

Time-of-Use Pricing under the Regulated Price Plan (RPP)

In accordance with the mandate provided under the *Ontario Energy Board Act, 1998*, the OEB developed the Regulated Price Plan (RPP), which provides residential and small business consumers with stable and predictable electricity pricing and encourages conservation. The plan has been in place since 2005.

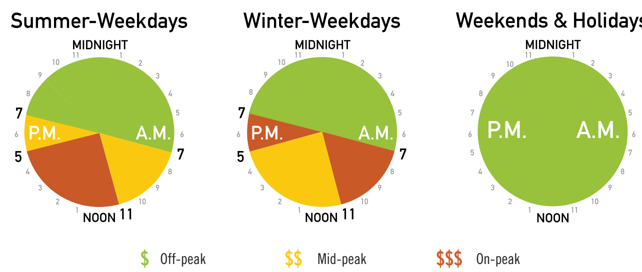
RPP consumers with eligible time-of-use (or "smart") meters that can determine when electricity is consumed during the day pay RPP prices under a time-of-use price structure. The prices for this plan are based on three time-of-use periods per weekday. These periods are referred to as off-peak, mid-peak and on-peak and are shown in the figure below. The hours for mid-peak and on-peak periods are different in the summer and winter months to reflect energy consumption patterns in those seasons, as explained below.

The *Ontario Fair Hydro Plan Act, 2017* came into effect on June 1, 2017. This legislation established the framework under which eligible consumers (referred to in the legislation as "specified consumers") saw their electricity bills reduced effective July 1, 2017 and by which bill increases can, through adjustments to the commodity price, be held to the rate of inflation starting in May 2018. Under this new legislation, the OEB reset RPP prices effective July 1, 2017 to achieve a 25% total bill reduction for a "hypothetical regulated rate consumer" relative to what RPP prices would have been on May 1, 2017 without any regard to the government's Fair Hydro Plan. The RPP time-of-use prices set by the OEB effective July 1, 2017 are set out below.

Some "specified consumers" that are eligible for bill reductions under the *Ontario Fair Hydro Plan Act, 2017* are not paying RPP prices, either because they are not eligible for the RPP or because they have chosen to opt out of the RPP in favour of a retail contract or market-based pricing. These "specified consumers" receive their bill relief in the form a reduction to the Global Adjustment charges that they would otherwise pay. To that end, the OEB also set a credit amount – referred to by the OEB as the "GA Modifier" that will apply to reduce the GA charges payable by these consumers. The GA Modifier has been set by the OEB at -$32.90 effective July 1, 2017. The new, lower RPP prices and the GA Modifier set by the OEB will be in effect until April 30, 2018. At that time, the OEB will reset RPP prices and the GA Modifier in a way that holds increases to the rate of inflation in accordance with legislation.

Summer and Winter Time-of-Use Hours

The RPP time-of-use periods are different in the summer than they are in the winter to reflect seasonal variations in how customers use electricity. During the summer, people use more during the hottest part of the day, when air conditioners are running on high. In the winter, with less daylight, electricity use peaks twice: once when people wake up in the morning and turn on their lights and appliances, and again when people get home from work. The time-of-use (TOU) prices applicable in Q3 2017 for RPP consumers with eligible time-of-use meters are shown in the table below.



Source: OEB

RPP Time-of-use prices effective July 1, 2017

Time-of-use RPP Prices – ¢/kWh	Off-Peak	Mid-Peak	On-Peak	Average Price
Price (¢)	6.5	9.5	13.2	8.2

Sample Residential Monthly Bill

	Electricity	Delivery	Regulatory	DRC*	HST	8% Provincial Rebate	Total Bill
Monthly Cost ($)	61.62	50.26	3.28	0.00	14.97	(9.21)	**120.92**

Source: OEB

*The Debt Retirement Charge (DRC) ceased being effective for residential customers effective as of December 31, 2015.

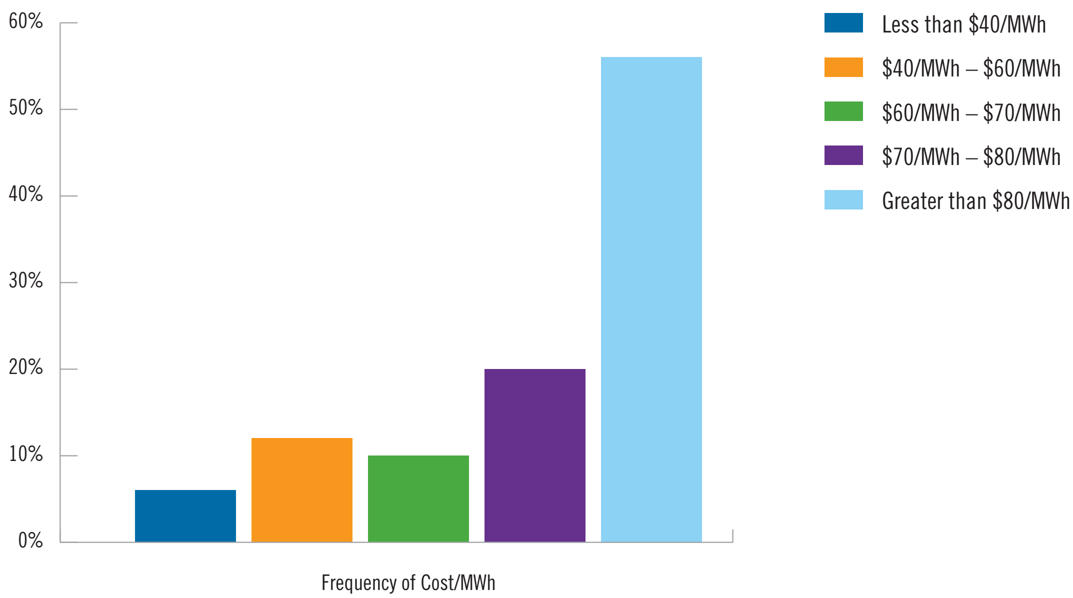
This table shows a monthly bill for a Toronto Hydro residential RPP TOU customer with monthly usage of 750 kWh[4] as of July 1, 2017, with 65% of consumption occurring off-peak, 17% occurring mid-peak and 18% occurring on-peak. For consumers in other service territories, delivery charges will vary depending on which utility serves them. For additional information please see the OEB's bill calculator www.oeb.ca/consumer-protection/energy-contracts/bill-calculator.

4. On April 14, 2016, the *Report of the Ontario Energy Board: Defining Ontario's Typical Electricity Customer* was released in which the OEB determined that 750 kWh per month would be the standard used for illustrative purposes.

Ontario Industrial Electricity Rates

Industrial electricity consumers can either be directly connected to the high-voltage transmission grid or receive electricity from their local distributor (e.g., Toronto Hydro). Directly-connected consumers do not pay distribution charges, thus lowering their electricity cost. The table below shows the distribution of average all-in prices for all directly-connected consumers in Ontario for 2016. In Ontario, electricity rates for large industrial consumers in Ontario vary by customer as they are determined by individual consumption patterns. Generally speaking, the less energy a large industrial uses during peak hours, the more these consumers reduce their impact on the provincial power system as well as their electricity costs. For most, the commodity cost incorporates both the fluctuating market price and the allocation of the Global Adjustment based on their energy use during peaks.

Transmission-Connected Industrial Rates[5] (2016)



Source: IESO and OEB

The table below shows average all-in electricity prices for a distribution-connected industrial consumer in several service territories.[6]

Distribution-Connected Industrial Rates (2016)

$/MWh	**Windsor (EnWin)**	**Hamilton (Horizon)**	**Ottawa**	**Sudbury**	**Toronto***
HOEP**	21.76	21.79	21.79	22.60	21.84
Class A Global Adjustment	46.26	46.33	46.34	48.05	46.44
Delivery	15.42	19.34	20.17	16.56	21.19
Regulatory	6.03	6.04	6.04	6.26	6.05
DRC	7.00	7.00	6.90	7.00	7.00
All-In Price	**96.46**	**100.49**	**101.23**	**100.47**	**102.53**

*The distribution cost estimate for an industrial customer in Toronto reflects the assumption that 1 kVA is 1 kW for billing purposes.
**HOEP is the arithmetic average for all hours in 2016. The Global Adjustment shown in the table is an average of all distribution-connected Class A consumers for 2016. Both quantities have been adjusted for losses using the applicable primary metered loss factor for each distributor.

Source: IESO and OEB

5. Does not include Northern Industrial Electricity Rate Program.
6. Data in the table is for a hypothetical consumer with a monthly peak demand of 5 megawatts and an 85% load factor, reflecting delivery and regulatory charges in effect in Q3 2017. Load factor is an expression of how much energy was used in a time period, expressed as a percentage of what would have been used if consuming at full potential for the entire period. A 30 day month is assumed.

2015 Indicative Industrial Electricity Prices (Canadian ¢/kWh)

The table below compares indicative retail industrial electricity prices across North American jurisdictions. For reference, Ontario – South reflects the average price for year-to-date May 2015. Ontario – North is based on the same figure, along with the 2 cent per kilowatt hour Northern Industrial Electricity Rate Program rebate. See footnote for more details.

	Jurisdiction	Cost
1.	Manitoba	4.67
2.	Quebec	5.17
3.	Washington	5.64
4.	Alberta	5.87
5.	**Ontario – North**	**6.35**
6.	Oklahoma	6.64
7.	Montana	6.68
8.	Kentucky	6.80
9.	British Columbia	7.04
10.	Iowa	7.06
11.	Louisiana	7.06
12.	**Canadian Average**	**7.31**
13.	Missouri	7.32
14.	Georgia	7.35
15.	Texas	7.37
16.	New Brunswick	7.48
17.	Arkansas	7.49
18.	Tennessee	7.53
19.	Alabama	7.58
20.	South Carolina	7.68
21.	Utah	7.70

	Jurisdiction	Cost
22.	Oregon	7.72
23.	West Virginia	7.80
24.	Saskatchewan	7.81
25.	Nevada	7.83
26.	Arizona	8.00
27.	Idaho	8.05
28.	North Carolina	8.09
29.	New Mexico	8.09
30.	Illinois	8.24
31.	**Ontario – South**	**8.35**
32.	Mississippi	8.41
33.	Newfoundland	8.65
34.	**U.S. Average**	**8.71**
35.	New York	8.72
36.	Indiana	8.74
37.	Ohio	8.75
38.	Wyoming	8.87
39.	Minnesota	8.89
40.	Prince Edward Island	8.90
41.	Colorado	9.05
42.	Michigan	9.13

	Jurisdiction	Cost
43.	Virginia	9.23
44.	South Dakota	9.31
45.	Kansas	9.54
46.	Nebraska	9.56
47.	Pennsylvania	9.59
48.	Wisconsin	9.87
49.	Nova Scotia	10.02
50.	North Dakota	10.75
51.	Florida	10.79
52.	Delaware	10.96
53.	Maryland	11.86
54.	Maine	12.64
55.	Vermont	13.14
56.	California	13.85
57.	New Jersey	14.44
58.	New Hampshire	17.17
59.	Massachusetts	17.56
60.	Connecticut	17.58
61.	Alaska	18.85
62.	Rhode Island	19.97
63.	Hawaii	31.10

Note: Estimates may differ from actual costs to a consumer based on location, connection, and operational characteristics. Prices exclude taxes and, in other jurisdictions, participation in any applicable jurisdictional benefit programs.

The Ontario industrial price is based on the average all-in price for year-to-date May 2015, and includes the Hourly Ontario Energy Price (arithmetic average), Class A Global Adjustment, delivery, wholesale market service charges and the Debt Retirement Charge. The 2 cent per kilowatt hour difference between northern Ontario and southern Ontario reflects the Northern Industrial Electricity Rate Program rebate.

All other Canadian prices (except Ontario) are from the Hydro Quebec Rate Comparison for rates effective April 1, 2015 for select local distribution companies servicing specific cities. Where Hydro Quebec reports prices for two cities in a province (e.g., Calgary and Edmonton), an average of the two is used; in provinces where only one city is reported (e.g., Vancouver in BC, Montreal in QC), that one price is used to represent the province for indicative comparison purposes. In the Hydro Quebec Rate Comparison, a large consumer reflects 5 MW with monthly consumption of 3,060 MWh.

American jurisdictions reflect year-to-date May 2015 data from the US Energy Information Administration's survey of approximately 500 of the largest electric utilities. The price reflects the average revenue reported by the electric utility from electricity sold to the industrial sector. The value represents an estimated average retail price, but does not necessarily reflect the price charged to an individual consumer. Prices are converted at an exchange rate of 1 USD = 1.30 CAD, an approximation of the average for 2015 (1 USD = 1.2787 CAD).

Electricity – What's New

A collection of electricity reports and publications.

Information	Published By	Date
18 Month Outlook	IESO	September 19, 2017
Quarterly Conservation Report (Q2 2017)	IESO	September 19, 2017
Progress Report on Contracted Electricity Supply (Q2 2017)	IESO	September 19, 2017
PowerNews	OPG	Summer 2017
OPG Quarterly Financial Results	OPG	August 11, 2017
Performance Reports (Pickering, Darlington)	OPG	Summer 2017
Darlington Refurbishment (Q2 2017)	OPG	July 1, 2017
Hydro One Quarterly Report (Q2 2017)	Hydro One	August 8, 2017
Regulated Price Plan Prices and the Global Adjustment Modifier for the Period July 1, 2017 to April 30, 2018	OEB	June 22, 2017
Electricity and Natural Gas Distributor Yearbooks	OEB	August 17, 2017