

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

TYPICAL RESIDENTIAL RATES

- Effective May 1, 2015, the typical residential monthly bill is about \$155 after tax – for the Regulated Price Plan (RPP).¹
- **2016 to 2020** - in the short term a higher **3.2%** projected annual average residential bill increase (LTEP 2013) – due to the expiry of the Ontario Clean Energy Benefit (OCEB) on December 31, 2015 – a 10% residential rebate program.

2015 Residential Actuals & LTEP Projections / Month by Component

(\$ Nominal)	2015*	Actual		2013 LTEP Projection	
		2018	2023	2028	2032
Electricity	82	93	99	103	104
Delivery	48	53	61	68	74
Regulatory	5	6	6	7	7
DRC	6	6	-	-	-
HST	18	21	22	23	24
OCEB	-16	-	-	-	-
Public Total	143	178	188	202	210

*Toronto Hydro TOU customer 800 kWh/month; total may not add due to rounding. The 2013 LTEP estimates that residential bills are projected to increase by 2.8% annually on average over the next 20 years.

- **2016 to 2032**: - in the long term a moderate rate of **1.7%** avg. annual increase in residential bills is projected, which is in line with neighbouring jurisdictions.²

RPP TOU Prices

- RPP prices are reviewed twice per year by OEB and are adjusted as required on May 1 and November 1. Current TOU rates effective May 1, 2016 are as follows:
 - Off-peak: 8.7 ¢/kWh (weekdays 7pm-7am, all day weekends/holidays)
 - Mid-peak: 13.2 ¢/kWh (weekdays 7-11am and 5-7pm)
 - On-Peak: 18.0 ¢/kWh (weekdays 11am-5pm)

¹ Ministry of Energy analysis of Toronto Hydro rate order.

² 2013 LTEP, Figure 7, p. 18.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

SYSTEM INVESTMENT FACTS

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy.
- Since 2003, the Province has invested more than \$35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
- This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.
- Approximately 90% of all power generated in 2015 was from clean sources – water, nuclear, wind, solar, and bioenergy.
- Over the same period, Hydro One has invested \$15 billion to enhance and renew its transmission and distribution systems.

Investment Type	Amount	Cost
Generation		
Renewables	7,450 MW	23.9
Nuclear	3,555 MW	6.5
Natural Gas and Other Fuels	5,186 MW	5.3
Transmission & Distribution	15,000 kilometres	15

HYDRO QUEBEC ANNUAL REPORT

- Hydro Quebec publishes an annual report comparing electricity prices in major North American cities, one of its tables (below) demonstrates that Toronto's monthly residential bills are **5.9% below average**.
- Data show that Ontario electricity prices are competitive to those in other jurisdictions, and Toronto prices are significantly lower than some of our U.S. peer cities, for example:
 - Boston, MA – 104%
 - Chicago, IL – 16%
 - New York – 96%
 - San Francisco – 82%

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

RESIDENTIAL MONTHLY BILLS ON APRIL 1, 2015 (in CA\$)

Summary Table (excluding taxes)

	Consumption 1,000 kWh	Variance from Average
Canadian Cities		
Montréal, QC	71.91	-53%
Calgary, AB	116.55	-23%
Charlottetown, PE 3	156.17	3%
Edmonton, AB 4	115.47	-24%
Halifax, NS	160.30	5%
Moncton, NB	122.98	-19%
Ottawa, ON	148.62	-2%
Regina, SK	143.72	-5%
St. John's, NL 5	115.53	-24%
Toronto, ON 3	143.07	-6%
Vancouver, BC	102.90	-32%
Winnipeg, MB	81.09	-47%
American Cities		
Boston, MA	300.33	98%
Chicago, IL 3	167.90	10%
Detroit, MI 3	177.67	17%
Houston, TX 3	123.57	-19%
Miami, FL 3	123.12	-19%
Nashville, TN 3	144.51	-5%
New York, NY 3	289.04	90%
Portland, OR 3	139.36	-8%
San Francisco, CA 3	276.94	82%
Seattle, WA	124.37	-18%
AVERAGE	152.05	

3) These bills have been estimated by Hydro-Québec and may differ from actual bills.

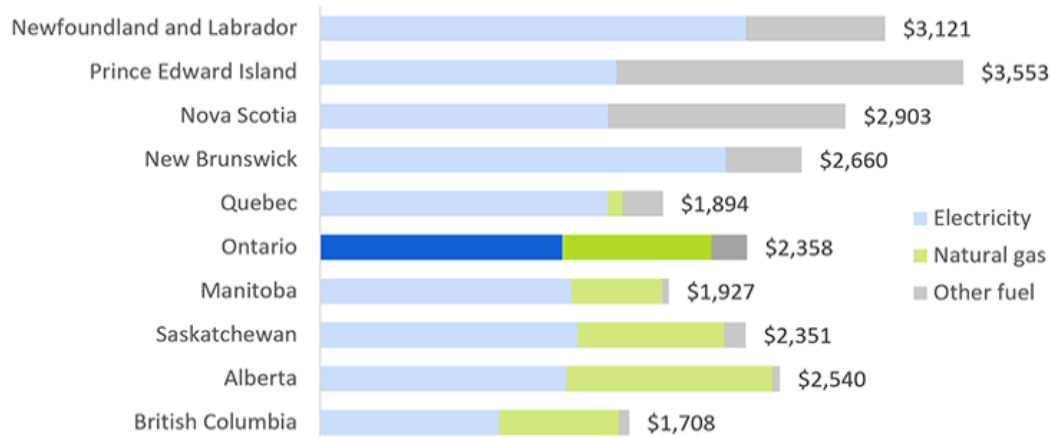
ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

FAO COMMENTARY ON HOME ENERGY COSTS IN ONTARIO

- The Financial Accountability Office of Ontario (FAO) commentary on Home Energy Costs in Ontario (August 25, 2016) shows, energy costs are increasing in all provinces.
- The FAO report noted that on average, families in **Ontario spend less money on electricity than every province, with the exception of British Columbia**. It also noted that total home energy costs in Ontario are in the middle of the pack when compared to other Canadian provinces. Households in Ontario spend about the same on energy as families in Quebec, Manitoba and Saskatchewan.
- Ontario has already done the heavy lifting in terms of rebuilding aging transmission infrastructure and transitioning off cheap-but-dirty coal-fired generation. This means that even though Ontario is already in the middle of the pack for Canadian jurisdictions, Ontarians aren't forecasted to see the kind of electricity price increases coal-dependent provinces like Alberta and Saskatchewan are.

FAO Report Figures

Figure 1: Average Household Home Energy Cost, 2014*



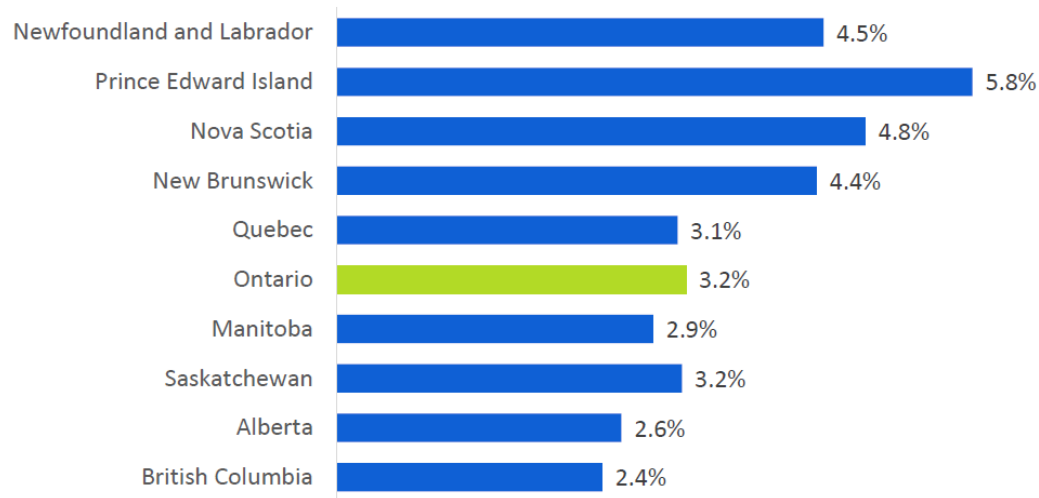
[For an accessible description of Figure 1 click here](#)

Source: FAO analysis of data from the Statistics Canada Survey of Household Spending.

*Note: Most recent year for which these data are available.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

Figure 2: Average Household Home Energy Cost as a Share of Average After-Tax Income, 2014*



Source: FAO analysis of data from the Statistics Canada Survey of Household Spending.
*Note: Most recent year for which these data are available.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

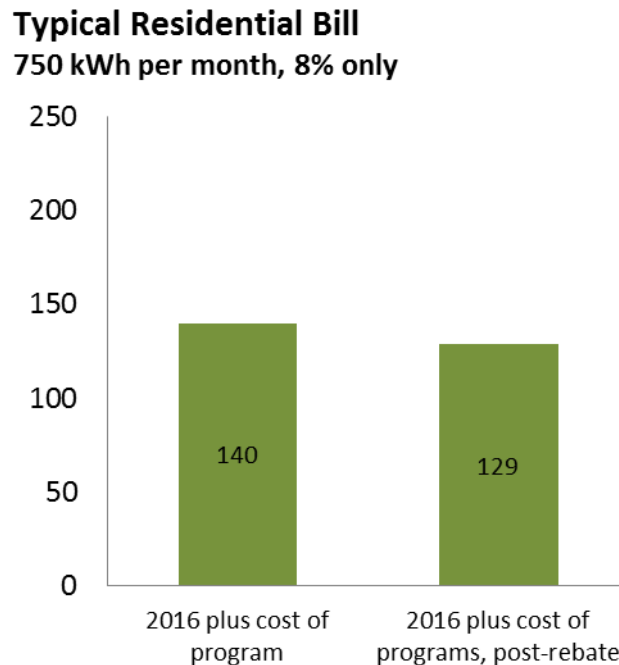
PROGRAMS / INITIATIVES TO REDUCE RESIDENTIAL ENERGY COSTS:

Initiative	Key Information	Notes
Rate Mitigation Legislation	• \$130 – annual savings for average household (\$11 per month) • \$540 – annual savings for eligible rural customers (\$45 per month)	Take effect on January 1, 2017 (if passed).
OESP	• \$30 to \$50 – monthly on-bill rebate for eligible customers • \$45 to \$75 – monthly on-bill rebate for those with unique electricity needs • 137,000 – number of Ontario households accepted as of September 16, 2016	Program took effect on January 1, 2016.
DRC	• \$65 – average annual savings for removing DRC from residential bills • April 1, 2018 – date DRC will be removed from all other bills	DRC removed from residential and small commercial bills on January 1, 2016.
LEAP	• \$500 – one-time annual emergency relief for electricity bills ○ \$500 also available for natural gas • \$600 – if home is electrically heated	Also provides flexible customer service rules re: utility treatment of LEAP customers.
NOEC	• For 2016 benefit year: ○ \$146 – annual credit for eligible individual ○ \$224 – annual credit for eligible family	Part of Ontario Trillium Benefit.
OEPTC	• For 2016 benefit year: ○ \$1,008 – maximum amount for individuals / families ○ \$1,148 – maximum amount for qualifying seniors	Part of Ontario Trillium Benefit.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

Ontario Removing Provincial Taxes from Electricity Bills

- To help people in their everyday lives, Ontario is taking action and rebating provincial taxes from residential and small business electricity bills starting January 1, 2017.
- More than 5 million families, farms, and small businesses will see immediate bill reduction, with the average Ontario residential electricity bill reduced by 8% or \$11 each month.
- The following chart illustrates the average residential impact based on 2016 cost parameters:



- Eligible classes of consumers include all those eligible for the Regulated Price Plan (homes, multi-unit residential, small business, etc...) as well as additional facilities used as residential rental units (Ex: long-term care homes).
- Local Distribution Companies will administer the rebate and comply with on-bill messaging requirements as prescribed by Regulation.

Modernizing Rural and Remote Rate Protection (RRRP)

- To help offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations, the government put in place the Rural or Remote Rate Protection (RRRP) framework.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

Monthly Total Bill*, Typical 750 kWh per Month Customer			Monthly Total Bill*, 1,500 kWh per Month Customer (electric heat)	
Rate Class	Total Bill with RRRP	Total Bill without RRRP	Total Bill with RRRP	Total Bill without RRRP
Hydro One R2	\$182.87	\$214.37	\$321.38	\$352.88
Hydro One R1	N/A– does not receive RRRP	\$158.36	N/A – does not receive RRRP	\$284.81
Remote Community	\$87.27	\$712.43	\$170.44	\$1,445.11

*before HST

- Today, RRRP is a \$175-million program. For an average residential customer, the cost of supporting RRRP is roughly \$1 per month. For other customers, the cost can range from \$65 for a greenhouse to \$8,000 for a medium industrial.
- The majority of the program funding (\$125.5 million) is provided to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 330,000 R2 customers. The current program provides a rebate of \$31.50. The proposed update to the program would increase the benefit to \$60/month.
- Ontario is proposing to increase the RRRP available to R2 customers by \$110M. This would see an increased benefit of ~\$29, pending submission by Hydro One to the Ontario Energy Board for approval. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh/month.
 - This would increase the R2 portion of the RRRP to \$235 million with a monthly impact on an average residential consumer of ~\$0.60.
- Combined with the 8% rebate, the average R2 consumer would see benefits of approximately \$45/month, or \$540/year.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

- Credits are based on income level and household size, and range from **\$30 to \$50 per month**:

OESP Monthly Credit Amounts by Household Income Level

Household Income (After Tax)	Household Size (Number of people living in household)						
	1	2	3	4	5	6	7+
\$28,000 or less	\$30	\$30	\$34	\$38	\$42	\$50	\$50
\$28,001 – \$39,000			\$30	\$34	\$38	\$42	\$50
\$39,001 – \$48,000					\$30	\$34	\$38
\$48,001 – \$52,000							\$30

Source: <https://ontarioelectricitysupport.ca/FAQ>

- Some **energy intensive customers will receive higher credit amounts – \$45 to \$75 per month** (e.g. electric heating, users of electrical medical devices like oxygen concentrator, mechanical ventilator, and First Nation, and Métis consumers:

OESP Monthly Credit Amounts by Household Income Level – Energy Intensive

Household Income (After Tax)	Household Size (Number of people living in household)						
	1	2	3	4	5	6	7+
\$28,000 or less	\$45	\$45	\$50	\$55	\$60	\$75	\$75
\$28,001-\$39,000			\$45	\$50	\$55	\$60	\$75
\$39,001-\$48,000					\$45	\$50	\$55
\$48,001-\$52,000							\$45

Source: <https://ontarioelectricitysupport.ca/FAQ>

- The thresholds for eligibility for the OESP are based on Statistics Canada's Low-Income Measure (LIM). Consultations with low-income advocates during the development of the OESP revealed a preference to rely on LIM to determine eligibility for the program.

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

Table: OESP Application Status as at September 19, 2016	
Total Applications	222,715
Energy Intensive Applications	91,742
Consent Forms Received	161,756
Applications Accepted/Notified	137,613
Applications Denied	14,887
First Nations Applications	7,640
Metis Applications	2,392
First Nation and Metis Applications	202

- Research tells us that social assistance programs here and in other jurisdictions get about 40% enrolment over time.
- The OESP is on-track to meet this participation level:
 - The OEB has already received applications to cover nearly 40% of potentially eligible customers.
 - To date, less than 3% have been deemed ineligible.
 - We plan on evaluating its performance at regular intervals.

Low-Income Energy Assistance Program

- LEAP is a comprehensive province-wide strategy to help qualifying low-income consumers manage their energy consumption and related costs - introduced by the OEB in January 2011. It includes:
 - Emergency financial assistance: A one-time grant towards your electricity or natural gas bill if you are temporarily in an emergency situation
 - Special rules that utilities must follow when dealing with customers with limited finances (e.g. waiving security deposits, allowing longer payment times).

Ontario Energy and Property Tax Credit

- Since July 2012, the Ontario Energy and Property Tax Credit provides low- to moderate-income individuals and families with sales tax relief – credited against energy and property taxes.
- The credit is paid monthly as part of the Ontario Trillium Benefit and delivered through the income tax system.
- In the 2016 benefit year, **amounts up to \$1,008 and \$1,148 per year** will be paid to qualifying individuals or families and to seniors respectively

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

Northern Ontario Energy Credit

- The Northern Ontario Energy Credit is a refundable tax credit for low- to middle-income individuals and families living in northern Ontario.
- Maximum annual credit **for an individual is \$146, and for a family (including single parents) is \$224.**

saveONenergy Conservation Programs

- Series of programs in place to help consumers manage rising electricity prices through the installation of energy saving measures, or by using energy wisely
- Delivered by electricity utilities. Examples include:
 - saveONenergy Heating and Cooling Initiative – rebates toward the purchase of more efficient equipment
 - saveONenergy Coupons – in-store rebates on energy-efficient products
- Home Assistance Program – home energy assessments and installation of electricity saving measures for eligible low income customers
- Retrofit Program –up to 50% of project costs for assisted and social housing buildings for equipment replacement projects

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

RURAL AND REMOTE CUSTOMERS

- The cost of distributing power to lower-density rural and remote areas is higher than for urban areas.
- Hydro One Networks serves customers throughout Ontario in rural, semi-rural and urban and suburban areas. Due to the wide geographical areas served, Hydro One has density based rates:

Urban High Density	• service area contains 3,000 or more customers • at least 60 customers for every kilometer of power line used to supply energy to the zone (called UR rate). • UR customers <u>do not receive</u> RRRP.
Medium Density	• service area contains 100 or more customers • at least 15 customers for every kilometer of power line used to supply energy to the zone (called R1 rate). • R1 customers <u>do not receive</u> RRRP
Low Density	• the remaining area not covered by Urban or Medium Density areas (called R2 rate). • R2 customers <u>do receive</u> RRRP.

- Remote areas refer to areas that are off-grid and are served by Hydro One Remote Communities Inc. These are exclusively in Northern Ontario.
- Through the Rural or Remote Rate Protection subsidy, Hydro One R2 customers currently receive a fixed subsidy amount of \$31.50 per month.
- The following table illustrates the level of support RRRP subsidy provides to customers.
- While 750 kWh is the provincial average monthly consumption, for example air access remote communities have on average higher consumption (e.g. 1,000 kWh or more). The table also shows consumption levels of 1,500 kWh per month for customers with electric heat. (This consumption level would vary due to temperatures, housing, etc...).

RRRP provides rate protection for customers living in areas of very low density – including Hydro One's R2 customers, customers of Algoma Power and customers of Hydro One Remote Communities and James Bay First Nation LDCs. Currently, recipients of RRRP receive a subsidy of \$31.50 per month or approximately \$380 annually.

- The government will introduce new measures to further reduce bills for rural and remote residential consumers. This includes more than 330,000 rural and remote electricity consumers who will be provided an additional \$110 million in support by modernizing the Rural and Remote Rate Protection (RRRP).

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

- This will decrease rural and remote delivery charges by an average of 20%

DISCONNECTIONS

Residential Disconnection Rates	2012	2013	2014	2015
BC Hydro	0.38%	0.30%	1.23%	1.88%
Hydro One	1.07%	0.25%	0.26%	0.86%
BC Hydro	0.38%	0.30%	1.23%	1.88%
Hydro Quebec	1.09%	0.97%	1.61%	1.54%

Note: BC Hydro uses fiscal years (April-March), while Hydro One and Hydro Quebec use calendar years (January-December). Residential disconnection rates are measured as the percentage of the total residential customer base. The rise in disconnection rates in Quebec and BC may be a product of their newly installed smart meters that have the ability for remote disconnection from a utility office. Hydro One is currently piloting the technology.

BC Hydro: "Disconnections for Non-Payment"

	FY2012	FY2013	FY2014	FY2015
Customers	1,671,412	1,689,050	1,709,071	1,727,945
Disconnections	6,376	4,995	20,940	32,564
Percent	0.38%	0.30%	1.23%	1.88%

Source: [BC Hydro 2015 Rate Design Application, Exhibit B-26, p.35](#)

Hydro Québec : « Débranchements résidentiels et commerciaux pour défaut de paiement »

	2012	2013	2014	2015
Clients	3,777,196	3,821,012	3,857,782	3,890,956
Débranchements	41 411	37 143	62 222	60 237
Pourcentage	1.09%	0.97%	1.61%	1.54%

Sources: [EU27: Débranchements résidentiels et commerciaux pour défaut de paiement; Hydro Québec Annual Report 2015](#))

ESTIMATES 2016
DEPUTY MINISTER'S TOP ISSUES
RESIDENTIAL RATES AND MITIGATION MEASURES

Hydro One

	2012	2013	2014	2015
Customers	1,101,761	1,106,925	1,106,663	1,141,369
Disconnections	11,752	2,784	2,918	9,772
Percent	1.07%	0.25%	0.26%	0.86%

(Source: Hydro One Briefing Note (from Communications), [OEB Yearbook of Distributors](#)).

Division/Branch: Strategic, Network and Agency Policy Division
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 ESTIMATES 2016ESTIMATES 2016