Ontario

MINISTRY OF
ENERGY

Rate Mitigation

Foundation Briefing

January 2018

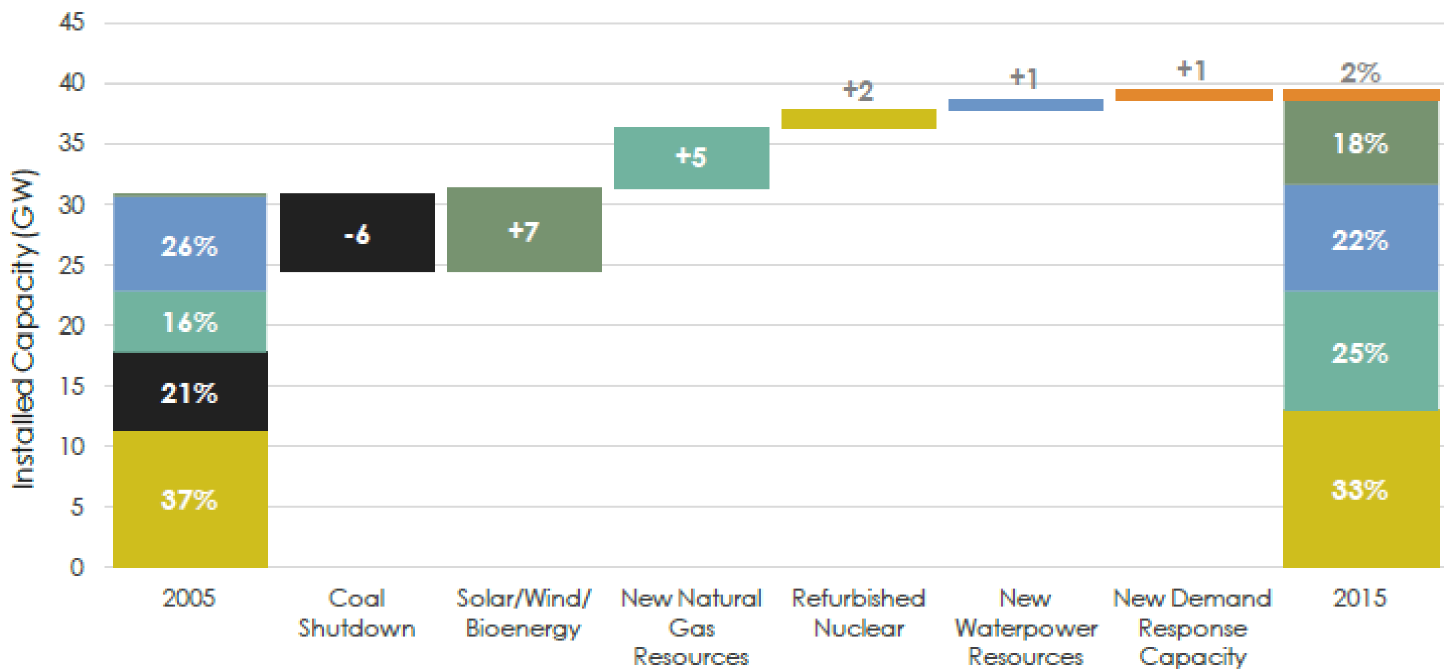
Outline

- Context
- Ontario's Fair Hydro Plan (OFHP):
  1. Refinancing Global Adjustment (GA);
  2. Expanding the Industrial Conservation Initiative (ICI);
  3. Broadening Distribution Rate Protection;
  4. Enhancing the Ontario Electricity Support Program (OESP);
  5. Introducing a New Affordability Fund;
  6. Implementing a First Nations On-Reserve Delivery Credit; and
- Ongoing Rate Mitigation – Electricity Sector Efficiencies

Context – Increasing Electricity System Costs

- In recent years, electricity prices have increased as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure (i.e., $70 billion investment in cleaner generation and in transmission and local distribution systems).

- As shown in the chart below, in the eleven year period between 2005 and 2015, government added new generating capacity to Ontario's grid to restore reliability, replace coal and meet environmental objectives.

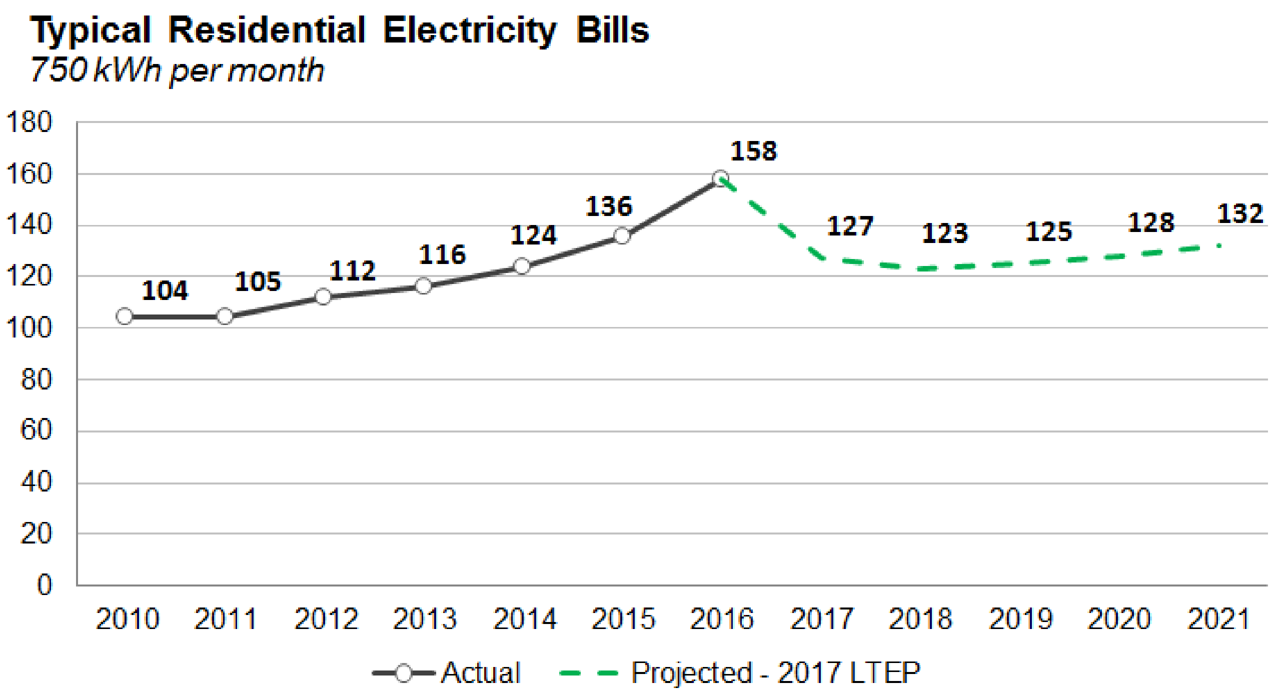


Source: IESO Ontario Planning Outlook

Context – Electricity Prices

- Electricity prices generally outpaced inflation in the years up to and including 2016. OFHP lowered typical residential bills by 25 in July 2017, resulting in a significant decreases in residential bills for calendar year 2017, as seen in the chart below.

- There have been several government policies that have impacted electricity prices over the past several years, including: HST, the Industrial Conservation Initiative, the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC).



Source: 2017 LTEP; Ministry of Energy

Context – Pre-OFHP Rate Mitigation Actions

Actions prior to OFHP to mitigate rising electricity prices include:

- Rebating an amount equal to the provincial portion of the HST to reduce eligible residential, small business and farm electricity bills by 8%, effective January 1, 2017. The rebate is expected to reduce typical residential bills by $110 ~~130~~ annually.
- Expanding the Rural or Remote Rate Protection (RRRP) program, by providing an average reduction of $540 annually when combined with the 8% rebate. The RRRP is intended to help mitigate the higher delivery charges paid by Ontarians living in low-density areas.
- Expanding the Industrial Conservation Initiative (ICI) by lowering the threshold from 3 MW to 1 MW and removing sector restrictions, allowing approximately 1,000 additional consumers to benefit on top of the existing 300 participants. ICI allows large consumers to lower bills by up to one-third by reducing consumption during peak hours.
- For other actions taken to bend the cost curve, please see the appendix.

Other existing rate relief programs include:

- The Ontario Electricity Support Program (OESP) which provides relief directly on the bills of low income consumers who have applied and meet the eligibility criteria.
- SaveOnenergy for Home, which provides incentives for consumers to manage electricity bills through improved home energy efficiency
- The Northern Ontario Energy Credit (NOEC), which provides targeted assistance to low- to moderate- income individuals and families living in northern Ontario
- The Ontario Energy and Property Tax Credit (OEPTC), which provides low- to moderate-income individuals and families with relief on the sales tax they pay on energy and property taxes.
- The removal of the Debt Retirement Charge (DRC) from the bills of all residential consumers, effective since January 1, 2016, which saves the typical ratepayer about $65 per year.
- In addition, the Ontario Energy Board (OEB) has implemented a province-wide strategy through the Low-Income Energy Assistance Program (LEAP) that offers emergency financial assistance up to $600 annually, special customer service rules, and energy conservation programs to qualifying electricity and natural gas consumers.

Ontario’s Fair Hydro Plan

- As of January 1, 2017, the *Ontario Rebate for Electricity Consumers Act, 2016*, provides an 8 per cent rebate equivalent to the provincial portion of the Harmonized Sales Tax (HST) to eligible consumers (i.e., residential, small business and farms).

- As of July 1, 2017, the *Fair Hydro Act , 2017* has reduced electricity bills by 25 per cent, inclusive of the 8 per cent, for eligible consumers (i.e., residential, small business and farms). The initiative includes a number of measures:

  - **Refinancing Global Adjustment:** OFHP proposes to spread the cost of investment more evenly over the years ahead, providing immediate and significant relief to today’s ratepayers.
  - **Expanding ICI:** The ICI expansion has allowed manufacturers between 500kW and 1MW to benefit from the program, in addition to the large consumers over 1MW who are already eligible.
  - **Broadening RRRP:** Distribution rate protection provides delivery charge relief for the customers of the Local Distribution Companies (LDCs) with the highest delivery charges in the province, allowing a total of 800,000 residential consumers to benefit from the program, up from 350,000.
  - **Expanding OESP:** Proposed changes have increased OESP credits by 50 percent and allow more Ontarians to benefit from the program. The government would also implement a strategy to drive uptake towards 100 percent.
  - **Establishing a new Affordability Fund:** The Fund will provide energy efficiency measures to Ontarians who are not eligible for the Save on Energy Home Assistance Program, and who need support to improve the energy efficiency of their homes.-
  - **Implementing a First Nations On-Reserve Delivery Credit:** The government eliminated the delivery charge for all on-reserve First Nations residential customers of a licensed electricity utility through a delivery credit.
  - **Bending the Cost Curve:** OFHP includes improving sector efficiency and modernizing Ontario’s electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

1. GA Refinancing

- The majority of the province's electricity generators are under 20-year contracts. Government expects that many of these generators will be able to operate past their contract term.

- By recognizing that generation assets are expected to continue to provide benefit to future ratepayers, beyond the term of current contracts, future ratepayers are expected to be able to utilize these assets and reduce the need to finance the development of new generation assets.

- A portion of the costs covered by the GA are being financed to reduce pressure on electricity ratepayers.

- In the later years, when some system costs are expected to be reduced due to continued operation of existing assets under 20-year contracts, the cost of financing would be recovered from ratepayers.

- All RPP-eligible consumers are eligible for the reduction, including residential consumers, and most small business and farms. RPP-eligible consumers who have chosen to sign a contract with an electricity retailer are also eligible. Actual ratepayer savings varies depending on distribution company and consumption patterns.

- A typical Toronto Hydro consumer, using 750 kWh per month, has seen a savings of 25% when combined with other OFHP rate mitigation measures. Typical bills will follow inflation until 2021, before increasing to repay financed GA costs.

2. Expanding the Industrial Conservation Initiative (ICI)

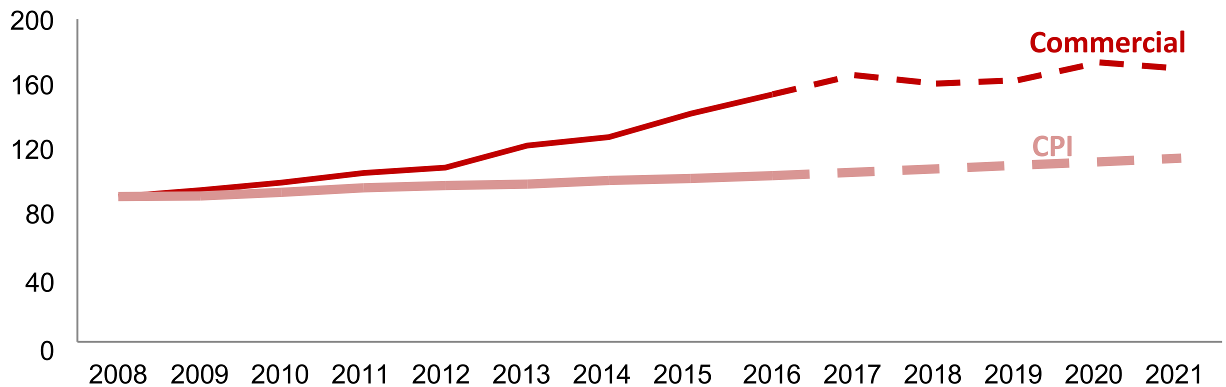
- OFHP includes enhanced support for the industrial sector, targeted at small and mid-size commercial and industrial consumers.

- Newly eligible ICI consumers include many mid-size manufacturers (i.e., automotive parts suppliers, plastics manufacturers), large commercial buildings (i.e., office blocks, mid-sized shopping malls) and broader public sector facilities (i.e., hospitals, college campuses).

- Newly eligible ICI consumers are too large for the Regulated Price Plan (so do not qualify for the 8% rebate for small businesses or Time-Of-Use pricing) and were previously too small to be Class A~~.~~

- The chart below highlights that the cost of electricity for Class B consumers has risen faster than CPI.

Illustrative Electricity Prices
in $/MWh



Source: IESO; OEB; Ministry of Energy

2. Expanding the ICI (cont'd)

- ICI allows large consumers to lower electricity bills by up to one-third by reducing consumption during the five system peak hours of the year. This benefits companies financially and saves system costs by deferring the need for new peaking generation in the longer term.

- ICI participants are billed GA on the basis of their contribution to province-wide peak demand in the five highest demand hours of the year.

- The ICI eligibility threshold for participation was recently lowered to from 3 MW to 1 MW and sector restrictions were removed, allowing additional consumers to opt-in to ICI to potentially save on their electricity costs (i.e., and become Class A consumers): New participants saw the change on their bills in July 2017.
  - Prior to lowering the ICI eligibility threshold, electricity consumers with peak demand between 3 and 5 MW could only participate in ICI if they belonged to the following sectors: manufacturing, mining, data processing, refrigerated warehousing and greenhouses.

- Ontario's Fair Hydro Plan extended eligibility to small manufacturers with an average monthly peak demand between 500 kW and 1 MW. The change applies to manufactures with the North American Industry Classification System (NAICS) 31-33 and 1114 (i.e., greenhouses).

- In addition, the government is assisting Class B participation in ICI through a targeted outreach campaign delivered by the Ontario Chamber of Commerce (OCC).

3. Broadening Rural or Remote Rate Protection (RRRP)

- Ontario's Fair Hydro Plan (OFHP) recognizes that there are opportunities to enhance support for vulnerable electricity consumers, including Ontarians living in low-density areas where the cost to deliver electricity is greater than in higher -density and urban areas. These customers can experience difficulty in reducing their electricity bill through conservation, particularly when reliant on electric heating.

- Rural or Remote Rate Protection (RRRP) currently mitigates some of the high costs of electricity distribution in rural or remote areas of the province. It is a legacy program of the old Ontario Hydro and has existed in its current form since 2001. It currently benefits approximately 350,000 customers. Part of the program helps fund the costs of Hydro One customers classified into the “R2” residential rate class (low density), who pay some of the highest delivery costs in the Province.

- As part of Ontario’s Fair Hydro Plan (OFHP), the Province broadened distribution rate protection to provide rate relief to customers served by Local Distribution Companies (LDCs) with some of the highest distribution rates.

- About 800,000000 customers now benefit from the enhanced rate protection. Residential customers from the following LDCs benefit from the broadened rate protection: Hydro One low density (R2) and medium density (R1) customers, Northern Ontario Wires, Lakeland Power (Parry Sound),), Chapleau Public Utilities Corporation, Sioux Lookout Hydro, InnPower, Atikokan Hydro and Algoma Power.

- OFHP also includes shifting cost recovery for RRRP and OESP through the tax base instead of through ratepayers, reducing regulatory charges for everyone and ensuring the programs continue to serve those in need.

4. Enhancing the Ontario Electricity Support Program (OESP)

- To mitigate the impact of rising electricity prices on low-income electricity consumers, the Ministry of Energy asked the OEB to develop and implement the Ontario Electricity Support Program (OESP) for January 1, 2016.
- The OESP is an income tested program which provides ongoing rate reduction directly on the bills of vulnerable consumers who have applied and meet the eligibility requirements.
- Ontario's Fair Hydro Plan recognized that electricity bills can represent a challenge for customers who pay a larger share of their income towards energy costs, such as low-income households and seniors on a fixed income. Effective May 1, 2017, OESP credit amounts increased by 50% and eligibility criteria were expanded so more Ontarians could participate in the program.
- The OESP was originally financed by a volumetric rate charged to all customers ($0.0011/kWh), which was held in a variance account managed by the IESO. The OESP charge ended on May 1, 2017 under the Fair Hydro Plan as a way to reduce costs for all customers. For an average residential household, this amounts to about $1 a month in savings. The program will be financed with government funds once the variance accrued from the volumetric charge is depletes.
- The Province is also aligning the OESP with other social assistance programs to help get more vulnerable consumers into the program so they can receive the support they need on electricity bills.
- The Ministry of Energy is currently finalizing legislative / regulatory changes to enable tax-based program financing. These changes will leave program administration with the OEB, but will give the Ministry oversight of spending activities.

4. Enhancing the OESP (cont'd)

OESP Credit Scales							
Household Income (After Tax)	**Household Size (Number of people living in household)**						
	1	2	3	4	5	6	7+
< $28,000	$45	$45	$51	$57	$63	$75	$75
$28,001 - $39,000	$40	$40	$45	$51	$57	$63	$75
$39,001 - $48,000	$35	$35	$35	$40	$45	$51	$57
$48,001 - $52,000	$35	$35	$35	$35	$35	$40	$45
Over $52,001	$35	$35	$35	$35	$35	$35	$35

Household Income (After Tax)	**Household Size (Number of people living in household)** **Energy Intensive**						
	1	2	3	4	5	6	7+
< $28,000	$68	$68	$75	$83	$90	$113	$113
$28,001 - $39,000	$60	$60	$68	$75	$83	$90	$113
$39,001 - $48,000	$52	$52	$52	$60	$68	$75	$83
$48,001 - $52,000	$52	$52	$52	$52	$52	$60	$68
Over $52, 001	$52	$52	$52	$52	$52	$52	$52

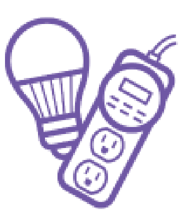
Red cells: new eligibility categories under the FHP that came into effect on May 1, 2017.

Orange cells: new eligibility categories to ensure that OESP is available to those deemed financially eligible for social assistance but were previously ineligible for OESP.

Purple cells: new eligibility categories to ensure that, if financial eligibility categories for social assistance change in the future, clients will remain eligible for OESP.

5. Establishing an Affordability Fund

- As part of Ontario's Fair Hydro Plan, the government also announced the establishment of an Affordability Fund to provide energy efficiency measures to help those Ontarians not eligible for the Save on Energy Home Assistance Program (HAP), and who need support to improve the energy efficiency of their homes.
  - HAP, delivered by IESO, requires participants to meet a mandated definition of low-income consumers (from Statistics Canada).
- From 2015 to 2017, electricity distributors and other stakeholders indicated to the government that there was an immediate need to help customers in bill arrears and facing service disconnection.
  - Electricity distributors reported to the OEB that ~56,500 customers were disconnected in 2015 and over 58,000 customers were disconnected in 2016.
  - Electricity distributors also reported about 400,000 residential electricity accounts in arrears in 2016.
- A centralized delivery model through a Trust has been established to ensure independent oversight of funds and to facilitate efficient distribution of funds to electricity distributors.
- The Affordability Fund is expected to provide similar measures to the HAP program, at no cost.
- There are three levels of support available. The level each home qualifies for depends on net household income and average electricity bill. Measures offered may vary by participating electricity distributors.



Level 1: households receive a Home Energy Kit with energy-saving products they can install themselves (e.g. LEDs, power bars, hot water pipe insulation).

Level 2: Households may receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include ENERGY STAR appliances (e.g. air conditioners, refrigerators).

Level 3: For electrically-heated homes only, households receive an in-home visit from a professional Home Energy Advisor, a Home Energy Plan and upgrades that may include insulation and/or an ENERGYSTAR heat pump.

5. Affordability Fund: Current Status

- March 23, 2017: ENERGY, in collaboration with Hydro One, established an independent Trust (Affordability Fund Trust) to serve as an administrator for the Affordability Fund.

- March 24, 2017: ENERGY entered into a TPA to flow $100 million to the Affordability Fund Trust. Principles have been established as annexes to the TPA and in the Declaration of Trust to communicate government expectations to Trust.

- Summer 2017: Trust sought input from electricity distributors on various program design elements including eligibility criteria and recruitment of participants.

- September to early October 2017: Trust finalized the program design for the Fund. It is expected that program design will be an iterative process to enable continuous improvement based on feedback.

- October 24, 2017: The Fund was launched through a formal announcement and press release. The press release included information regarding a toll-free number and website (affordabilityfund.org) through which customers are able to submit an application form.

- January 2018: Trust expects to enter into implementation agreements with interested electricity distributors.

- Early 2018: Eligible customers are expected to start receiving measures through the Fund.

6. Implementing a First Nations On-Reserve Delivery Credit: Background

- Section 79.4 of the OEB Act provides for a delivery credit to offset the costs that make up the delivery line for on-reserve consumers, paid for through funds appropriated by the Legislature. It also provides for regulation making authority to define who is an on-reserve consumer and what areas constitute a “reserve”.

- The central piece of the FNDC regulation surrounds the eligibility criteria, which is limited to all First Nations residential on-reserve customers of a licensed electricity utility, regardless of whether the customer is seasonal or permanent. The definition of key terms, such as “reserve” and “member of a band”, are taken directly from the traditional meaning provided in the Indian Act.

- Since July 1, 2017 the FNDC has provided eligible customers a credit equal to 100% of the electricity delivery charge on their electricity bills.
  - The response from the Chiefs of Ontario (COO) and communities has been overwhelmingly positive.
  - Data reported by IESO reveals that over 20,000 customers are receiving FNDC – this was the target number pre-launch and reflects a successful rollout.

- The Ministry of Energy, in collaboration with COO, crafted the policy in a manner which best reflected the needs and wishes of First Nations in Ontario and to meet the implementation date of July 1, 2017.
  - Some leaders of First Nations that do not have reserve lands have expressed concern about being excluded from eligibility, such as the Algonquins of Ontario and non-status First Nation groups.

6. Implementing a First Nations On-Reserve Delivery Credit: Current Status

- COO continues to advocate for the expansion of the FNDC to include Band-owned buildings. The Chiefs Committee on Energy focused on this issue at a meeting with Ministry of Energy on November 9, 2017 in advance of the Leaders in the Legislature & Energy Table meeting held on November 22, 2017. The Ministry has indicated that it is open to further discussions and needs data to assess the costs of program expansion.

- The Ministry has been asked to identify new initiatives that have not been identified through the PRRT process for the 2018 document, and put forward the expansion of the FNDC for consideration using data from Hydro One.

- Based on the preliminary estimates from Hydro One, the estimate for expanding the FNDC to include Band-owned buildings is $7.4M annually.

- To implement the FNDC expansion, regulatory changes would be needed along with Cabinet and Treasury Board approval. ENERGY could aim to present to Cabinet in Spring 2018 and enact an expanded FNDC on July 1, 2018.

- Expanding the FNDC program aligns with the 2015 Political Accord, promoting relationship building and working on projects of mutual interest. It also aligns with the principles communicated in the Ministry of Energy's 2017 Long Term Energy Plan.

Support Programs Fiscal Roll-Up

Fiscal Impact ($M)	16-17	17-18	18-19	19-20	20-21
RRRP Enhancements*	-	459	472	484	497
Ontario Electricity Support Program, including the 50% Enhancement & New Matrix Categories	-	186	261	325	375
On-Reserve First Nation Delivery Credit	-	20	20	20	20
Affordability Fund**	100	-	-	-	-
Total	100	665	753	829	892

***Note:** Current regulatory framework calls for RRRP to increase by average distribution rate increase. Forecast assumes 2.6% annually though is subject to OEB proceedings. Fiscal projection is subject to consumer consumption patterns that may change due to extreme weather or other factors. Does not include Algoma Power or Hydro One Remotes, which would continue to be on the rate-base.
****Note:** Funding for the Affordability Fund is one-time in 2016/17. ENERGY can apply for additional funds through 2018-19 PRRT based on performance and need.

On-going Rate Mitigation – Electricity Sector Efficiencies

- The government will continue to look for opportunities to improve sector efficiency and reduce system costs. This would include:
  - Working with the Ontario Energy Board (OEB) to:
    - Encourage shared partnerships on services between utilities, which would help reduce costs and encourage further innovation for small to medium-sized utilities;
    - Review business cases behind its regulatory requirements to reduce red tape and eliminate costs that LDCs indicate are creating pressures on operating expenses; and
    - Look at opportunities to further drive transmitter and LDC efficiencies and productivity improvements, including the use of innovative technologies and business processes.
  - Continuing to move forward with IESO’s Market Renewal, including projects such as:
    - Moving to “technology-agnostic” procurements through a capacity market will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible;
    - Moving to a single-schedule system (from the current two-schedule system);
    - More frequent intertie scheduling to better align with other jurisdictions and maximize existing assets; and
    - Implementing a day-ahead market.
  - Changes related to IESO’s Market, are estimated to save up to $5.2 billion over a ten-year period, leading to a reduction of:
    - About $1/month or less than 1% at current retail prices for a typical residential bill; and
    - About $1.30/MWh at current all-in prices for industrial and SME electricity consumers.

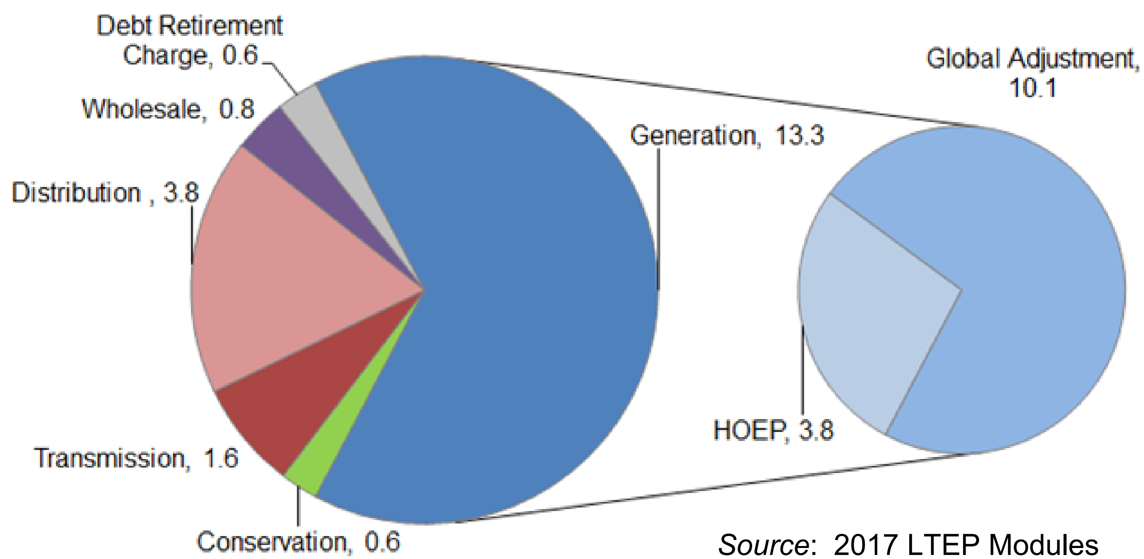
Appendix

Global Adjustment

- Contracted/regulated generators receive additional payments to make up the difference between the revenue generated through the wholesale market and their expected contracted/regulated revenue. This difference is recovered via the Global Adjustment (GA). GA also pays for conservation and demand response programs.

- GA has risen over the past decade as HOEP has remained relatively low and the province's electricity system has decarbonized.

2017 Electricity System Cost
$billion



Source: 2017 LTEP Modules

Bending the Cost Curve – Existing Rate Mitigation Measures

- Since 2013, the government has taken a number of actions to reduce electricity ratepayer costs, including:
  - Renegotiating the Green Energy Investment Agreement with Samsung, reducing contract costs by $3.7 billion.
  - Reducing Feed-In Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion.
  - Introducing a competitive Large Renewable Procurement (LRP) process to drive down costs by approximately $1.5 billion lower than the 2013 LTEP forecast.
  - Deferring the construction of two new nuclear reactors at Darlington, avoiding an estimated $15 billion in new construction costs.
  - Maximizing the value of our existing nuclear fleet by starting Bruce refurbishments in 2020 instead of 2016, thus helping to achieve $1.7 billion in savings and by continuing to operate Pickering up to 2024, pending regulatory approvals, which could save ratepayers about $600 million.
  - Suspending the second round of the LRP process and the Energy-from-Waste Standard Offer Program, which is expected to save up to $3.8 billion in costs relative to the 2013 LTEP forecast.
  - Limiting the Feed-In Tariff (FIT) 5 procurement target to 150 MW and suspending future FIT procurements – resulting in savings of up to $129 million.