

2018-19 Program Review, Renewal & Transformation

Ministry of Energy Overview

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Date

Date

About the Ministry

- ▶ The Ministry of Energy oversees a \$20 billion electricity sector portfolio and a natural gas sector with about 3.5 million residential, commercial and industrial natural gas consumers, all with just over 200 FTEs.
- ▶ The Ministry has evolved from a policy ministry into delivering the government's top energy priority – providing Ontarians with an affordable supply of energy and more choices in their energy use – through the implementation of the Long-Term Energy Plan, and the administration of programs introduced through Ontario's Fair Hydro Plan.
- ▶ The Ministry also provides support to its ratepayer funded agencies – the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) – to ensure the successful delivery of key energy initiatives and policies.
- ▶ The Ministry's Government Business Enterprises have achieved significant revenue to contribute to the fiscal plan – \$860 million in net income attributed to the Province in 2016-17:
 - ▶ \$500 million net income from Hydro One;
 - ▶ \$342 million net income from OPG; and
 - ▶ \$18 million net income from Brampton Distribution Holdco. Incorporated.

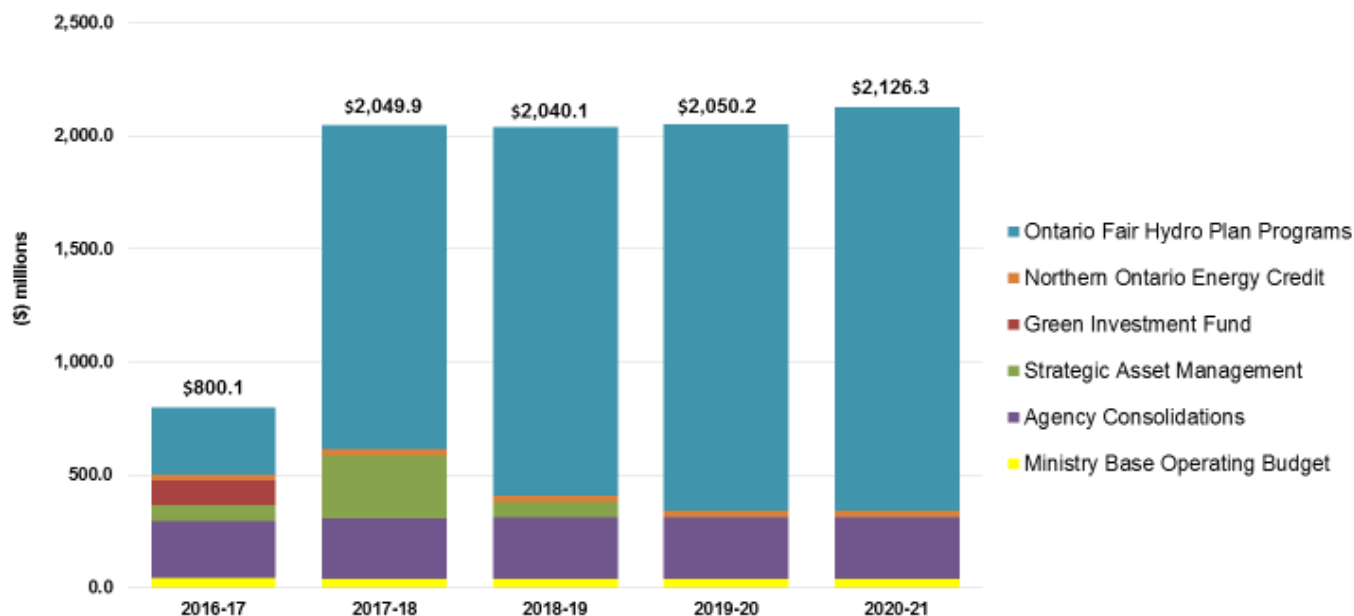
Ministry Mandate and Commitments

- ▶ Historically, the Ministry of Energy has been a policy development ministry that has successfully executed its mandate with just over 200 FTEs.
- ▶ The Ministry's focus on the energy consumer, and the commitment to providing an affordable supply of energy and ensuring fairness and consumer choice is highlighted through the 2016 Mandate Letter which includes:
 - ▶ Taking further action to mitigate the impact of electricity prices on consumers and businesses;
 - ▶ Developing the Province's next Long-Term Energy Plan;
 - ▶ Promoting energy conservation and the adoption of renewable energy
 - ▶ Supporting the growth of the low-carbon economy and reductions in greenhouse gas pollution;
 - ▶ Engaging with Indigenous partners in energy planning decisions and supporting economic development and reconciliation; and
 - ▶ Driving efficiencies and maximizing return on investment from the electricity sector.
- ▶ The introduction of Ontario's Fair Hydro Plan, in March 2017, has added significant program administration to the core mandate of the Ministry. -

Expanded Mandate and Commitments

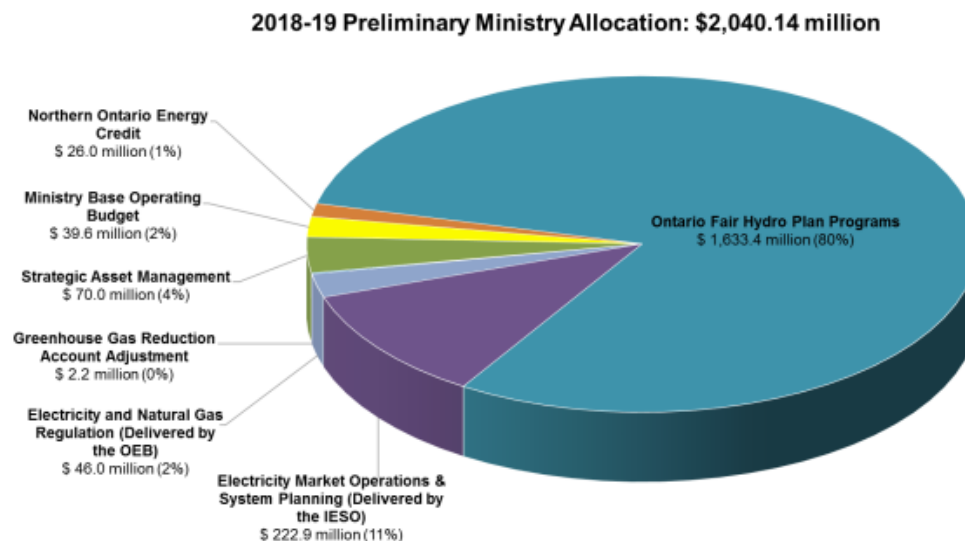
- ▶ The Ministry has created a broader strategy to mitigate the impact of electricity prices on consumers and businesses through the introduction of Ontario's Fair Hydro Plan. This has resulted in additional program delivery responsibilities and the accountability of five new permanent transfer payment programs, that were approved by Cabinet.
- ▶ This requires more staff resources to manage the additional responsibilities that come with the administration of new permanent programs such as legislative and regulatory changes, forecasting, data modelling and analysis, financial analysis, risk management, communications and contract management integral to the day-to-day ongoing oversight and administration of these Fair Hydro Plan programs.
- ▶ In addition to program delivery to mitigate the impact of electricity prices, the Ministry's policy responsibilities has expanded considerably due to the following high-priority commitments:
 - ▶ Developing the Province's strategic energy framework through the Long-Term Energy Plan, which includes new and updated initiatives, including the Smart Grid Fund, International Energy Demonstration Fund, and enhancing consumer protection over Unit Sub-Metering Providers.
 - ▶ Implementing CCAP initiatives to combat global climate change, including Energy & Water Reporting Benchmarking, energy efficiency rebate programs through the Green Investment Fund, Green Button Implementation, and continued support of cap and trade implementation
- ▶ The Ministry is temporarily managing the additional workload with 19 risk-managed FTEs. This short-term strategy is not sustainable. The continuation of these risk-managed positions will result in significant pressure within the Ministry as the current vacancy rate is 2.3% (4 FTEs).

Preliminary Multi-Year Allocation (2016-17 to 2020-21)



- ▶ Between 2016-17 and 2017-18, the Ministry's allocation increased 156% to enable the implementation of new programs and initiatives within its expanded mandate.
- ▶ While the Ministry's responsibility has grown significantly, the allocation for its own base operating budget has not increased.

Preliminary Allocation for 2018-19



- ▶ Only 2.0%, or \$39.6 million, of the Ministry's allocation is discretionary for spending on delivering its policy mandate and commitments outside of the Fair Hydro Plan.
- ▶ The largest component of the Ministry's allocation is its Fair Hydro Plan initiatives which account for 80%, or \$1,633.4 million of its allocation. These programs are demand-driven entitlement programs and spending is non-discretionary
- ▶ The consolidation of fiscally neutral agencies – the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) – account for 13%, or \$268.9 million, of the Ministry's allocation. These entities would have no impact on the fiscal plan since expenses are fully cost recovered from the rate base.

Key Performance Indicators

	Energy conservation	Costs of electricity	Maintaining low emissions	OPG/Hydro One Income	Innovation
KPI	Continue to increase energy efficiency and conservation in Ontario	Minimize annual growth of electricity costs consistent with Ontario's Fair Hydro Plan	Maintaining low electricity sector emissions in support of the province's climate change targets	Net Income contributions to the Province from OPG and Hydro One	Supporting the energy innovation sector and modernizing Ontario grids
Outcome Measures	Current Value: 13.5 TWh in 2015 Target Value: 30 TWh in 2032	Current Value: \$128 in 2017-18 Target Value: \$195 in 2034-35	Current Value: 3.9 Mt in 2017-18 Target Value: 5.5 - 8.1 Mt in 2034-35	Current Value: \$842M in 2016-17 Target Value: \$1,001M* in 2018-19 *reflects decrease of Hydro One ownership from ~71 to ~45% 2018-19	Current Value: 38 projects by March 31, 2017 Target Value: 50 new projects by March 31, 2022
Outcome Statement	Conservation is the cleanest and most cost-effective energy resource and offers consumers a way to reduce their energy bills and reduces the need to build new electricity infrastructure.	The Province will hold typical residential bill increases to the rate of inflation for four years under Ontario's Fair Hydro Plan.	By refurbishing emission-free nuclear capacity and sourcing clean renewable power, Ontario will maintain a low emissions profile and help achieve the Province's Greenhouse Gas (GHG) emission reduction targets.	By driving increased revenues and reduced costs at OPG and Hydro One, the Province's net income flowing from these entities will grow to enable the Province to support ongoing policies and programs across the Province.	Investing in innovative energy projects contributes to a modernized grid in Ontario and helps create local jobs and economic growth.
Goal	Providing Ontarians with an affordable supply of energy and more choices for their energy use.				

Approach to Ministry Plan

- ▶ The Ministry has developed a plan to deliver its mandate and commitments within its preliminary allocation, while contributing significant savings to the fiscal plan.
 - ▶ In administering the Fair Hydro Plan, rigorous due diligence was undertaken on the five transfer payment programs, including reviewing the underlying forecast assumptions. Based on the analysis, the Ministry is able to contribute a portion of its allocation back to the fiscal plan to support other priority projects across the government.
 - ▶ The Ministry's core mandate has expanded to include program delivery of the OFHP, however, its base budget has remained unchanged. In order to deliver on this expanded mandate, the Ministry is requesting to realign a small portion of surplus from its OFHP transfer payment allocation to administer these programs.
 - ▶ The Ministry has identified internal offsets to manage the pressures of key 2017 LTEP initiatives, which were approved by Cabinet, including the Smart Grid Fund and the International Energy Demonstration Fund.—
- ▶ The table below outlines the Ministry's net contribution from its 2018-19 PRRT Plan.

Operating Expense (\$ Millions)	2018-19	2019-20	2020-21
Net Savings – Ontario Fair Hydro Plan Initiatives*	20.6	29.1	51.5
Net Savings – Strategic Asset Management**	35.0	-	-
LTEP Commitment - Smart Grid Fund	(20.00)	(18.00)	(15.00)
LTEP Commitment - International Energy Demonstration Fund	(1.50)	(3.00)	(4.00)
Contribution to the Fiscal Plan (+Surplus / -Deficit)	34.10	8.10	32.50

*Net savings after realigning internal Ministry resources to support the Fair Hydro Plan.

** Net savings after potential pressures related to share sale negotiations with the Métis Nation of Ontario.

Ontario Fair Hydro Plan Update

Millions (\$)	2018-19	2019-20	2020-21
Updated Forecast – Ontario Rebate for Electricity Consumers	(22.0)	(21.0)	(24.0)
Updated Forecast – Ontario Electricity Support Program	(29.4)	(61.0)	(87.0)
Updated Forecast – On-Reserve First Nation Delivery Credit	(0.4)	0.9	1.9
Updated Forecast – Rural or Remote Rate Protection	(233.3)	(244.1)	(255.8)
Distribution Rate Protection	260.1	291.7	309.0
Administrative of Ontario Fair Hydro Plan Programs (include 19 FTEs)	4.40	4.40	4.40
Net Fiscal Impact (Savings / Expenditure Increase)	(20.6)	(29.1)	(51.5)

- ▶ The current allocation for its Electricity Price Mitigation initiatives – Ontario Rebate for Electricity Consumers, Ontario Electricity Support Program, First Nations On-Delivery Credit, Rural or Remote Rate Protection – is \$1,633.4 million.
- ▶ Prior to its roll-out, initial program forecasts were determine through historical data and assumptions on a number of variables including program uptake, weather, consumption, electricity rates, etc.
- ▶ Since implementation, the Ministry has, with the support of risk-managed positions, collected and analyzed updated program data to produce revised forecasts that result in program savings, to be partially used to offset other program pressures.
- ▶ The Ministry is risk-managing 19 positions to provide rigorous due diligence and cover a variety of program delivery functions to help with the increase in workload. This includes:
 - ▶ Forecasting, data modelling and analysis;
 - ▶ Oversight on policy, regulation and legislative changes;
 - ▶ Providing financial and risk management expertise and oversight;
 - ▶ Developing internal control framework to ensure the financial integrity;
 - ▶ Overseeing program performance and identifying operational issues;
 - ▶ Managing contracts and agreements that are integral to the day-to-day ongoing administration;
 - ▶ Designing and implementing a program evaluation framework; and
 - ▶ Communications and marketing support.

Ontario Fair Hydro Plan Update (con't)

- ▶ The Ministry's FTE cap has remained at just over 200 FTEs. As of September 2017, it has a low vacancy rate of 2.3% or 4 FTEs.
 - ▶ The continuation of these risk-managed positions is not sustainable and will result in significant pressure within the Ministry.
- ▶ To manage this pressure, the Ministry is proposing to re-appropriate a small portion of the Fair Hydro Plan budget towards funding 19 permanent FTEs, starting in 2018-19, to support program delivery of the permanent transfer payment programs.
- ▶ The Ministry will re-appropriate \$4.4 million into payroll and program delivery costs for 19 FTEs (\$4.4 million represents only 0.28% of the allocation for the program being managed):
 - ▶ \$2.8 million in salary and wages and office administration; and
 - ▶ \$1.6 million in programs delivery and communications costs.

Smart Grid Fund and International Energy Demonstration Fund

Millions (\$)	2018-19	2019-20	2020-21
Funding to support LTEP Commitment for an updated Smart Grid Fund (Offset by internal Ministry surplus)	20.00	18.00	15.00
Funding to support LTEP Commitment for an International Energy Demonstration Fund Pilot Program (Offset by internal Ministry surplus)	1.50	3.00	4.00

- ▶ The Ministry is investing in innovative technologies to modernize and improve the efficiency of Ontario's grid, driving down costs to customers and providing customers with more choice.
- ▶ In July 2016, Cabinet approved the Ministry's Long-Term Energy Plan, including a commitment to develop an updated Smart Grid Fund and an International Energy Demonstration Fund.
- ▶ The Ministry proposes to fund these LTEP Commitments using offsets from within the Ministry's preliminary allocation.

Smart Grid Fund

- ▶ In August 2017, TB/MBC approved a five-year \$60 million Smart Grid Fund (SGF) program and directed the Ministry to provide a program update through 2018-19 PRRT.
- ▶ The SGF is a key component of the government's Grid Modernization Policy to overcome barriers to innovation, and supports important jobs and economic growth outcomes in the energy innovation sector.

International Energy Demonstration Fund

- ▶ The Ministry has worked with MIT/MEDG/MRIS to develop a \$10.5 million, five-year program.
- ▶ The IEDF would provide financial support to Ontario companies to demonstrate their technologies internationally, in new operating environments, while supporting economic development in Ontario.

Strategic Asset Management

Millions (\$)	2018-19	2019-20	2020-21
Strategic Asset Management Allocation	(70.00)	-	-
Métis Nation of Ontario Transaction Costs	30.00	-	-
Legal and Financial Costs Associated with Negotiations	5.00	-	-
Net Fiscal Impact (Savings / Expenditure Increase)	(35.0)	-	-

- ▶ The Ministry's Strategic Asset Management program has contributed significant revenue to the Province through the sales of Hydro One and Hydro One Brampton.

Hydro One Brampton:

- ▶ In 2017, the Province finalized the sale of Hydro One Brampton, generating approximately \$615 million in revenue, of which approximately \$108 million will be contributed to the Trillium Trust, with the remainder to flow to the Consolidated Revenue Fund and be used for ongoing Brampton Holdco expenses.

Hydro One:

- ▶ In November 2015, the Province completed the Hydro One Ltd. IPO and raised approximately \$1.83 billion in gross proceeds and approximately \$116 million from related share sales. Hydro One secondary share offering was completed in April 2016, generating approximately \$2 billion in gross proceeds.
 - ▶ In May 2017, the Ministry completed the broadening of ownership of Hydro One. The final share sale raised approximately \$2.8 billion in gross proceeds.
- ▶ As share sales are completed, the Ministry requires only a portion of this allocation to offset potential pressures related to share sale negotiations with the Métis Nation of Ontario in relation to broadening the ownership of Hydro One. While it is expected that these costs will materialize in 2017-18, they could occur in 2018-19 depending on progress of negotiations and timing of closing.

Equity Injections to support Global Adjustment Refinancing

Millions (\$)	2018-19
Operating Asset to support equity injections to the Ontario Power Generation (OPG) to support Global Adjustment Refinancing	1,100.00

- ▶ The Fair Hydro Plan refinances a portion of the Global Adjustment (GA). The financing allows electricity costs to be spread out and over present and future generations, providing immediate rate relief to residential consumers.
- ▶ OPG was appointed as the Finance Services Manager to refinance the GA costs and will use the funds in order to keep its capital structure in line, as it supports the implementation of the Fair Hydro Plan.
- ▶ In order to keep its capital structure in line, OPG requires a 44 percent equity injections on an ongoing basis from the Ministry of Energy.
- ▶ The equity injection to support GA refinancing is fiscally neutral.
- ▶ Initial forecasts estimates \$1.1 billion will be required for 2018-19. This number is based on the average estimated annual GA refinancing cost of \$2.5 billion for the first ten years of which 44 percent will be funded through the equity injection.
- ▶ As part of its annual business plan, OPG is required to submit equity requirements forecasts. OPG's Business Plan is expected to be submitted November/December 2017.
 - ▶ An updated forecast of the equity injection will be provided to TB/MBC when the Ministry submits OPG's 2018-20 Business Plan.

Funding and Resources for Climate Change Action Plan (CCAP) Initiatives

Millions (\$)	2018-19	2019-20	2020-21
Funding from GGRA to support Microgrid Technology for Diesel Reduction	9.80	19.80	19.80
Funding from GGRA for 3 additional permanent FTEs, and funding, for program administration related to CCAP initiatives	0.45	0.45	0.45

- ▶ As part of the Climate Change Action Plan, the Ministry is responsible for initiatives that decarbonize an emissions-heavy fuel sector, which supplies most of energy needed in the province for transportation, heating and manufacturing.
- ▶ In summer 2017, the Ministry submitted GGRA Intake Forms to MOECC for its Microgrid Technology for Diesel Reduction program which aims to reduce diesel use in First Nations where grid connection is not viable.
- ▶ This is a three year, \$50 million program, offset from GGRA, that is tracking to the Minister's Roundtable on Climate Change in November, 2017.
- ▶ In addition, the Ministry is requesting an increase of \$0.45 million starting in 2018-19 for permanent staffing resources and operational costs, including \$0.30 million in salaries and wages.
- ▶ The requested FTEs will support the Ministry's CCAP initiatives (Microgrid Technology for Diesel Reduction and Electric Vehicle Overnight Charging Program) and would cover a variety of positions essential to program delivery.

Report Backs and Ministry Realignment

Report Back on Affordability Fund

- ▶ The Ministry will provide updates on program design and implementation.
- ▶ The Ministry will continue to assess the need for an additional funding request, considering Fund results and electricity customer needs.

Report Back on Electric Vehicle Overnight Charging Program

- ▶ The Ministry's preliminary allocation includes out-year funding for Electric Vehicle Overnight Charging Program, to be funded by GGRA. The Ministry will provide an update on status.

Temporary FTE transfer to MAG

- ▶ The Ministry of Energy will extend the temporary transfer of 1 FTE to the Ministry of the Attorney General in 2018-19 for additional legal services support dedicated to Energy.

Temporary FTE transfer to MGCS

- ▶ The Ministry of Energy will extend the temporary transfer of 1 FTE to the Ministry of Government and Consumer Services in 2018-19 for services to support Energy & Water Reporting Benchmarking initiative.

Internal Realignment

- ▶ Internal realignment of \$0.86 million from Services to Salary & Wages to ensure that the Ministry has sufficient payroll allocation.

Key Ministry Risks

Risk Description	Financial Impacts	Mitigation / Action	Risk Status
Electricity Rate Mitigation Programs Electricity Rate Mitigation Programs account for \$1,633.4 million, or 80%, of the Ministry's 2018-19 preliminary allocation. These programs represent the largest fiscal risk exposure to the Ministry as they are tied to legislation that entitles recipients to funding. Actual fiscal costs may fluctuate depending on external factors (e.g. electricity prices, consumption, weather, and general economic and demographic factors of consumers). The Electricity Rate Mitigation Programs have significantly expanded the Ministry's mandate, while staff capacity has remained unchanged. The Ministry is currently risk-managing 19 FTEs above its allocation to support the administration of six transfer payment programs.	\$4.4 million	The Ministry will continue to collect and analyze actual program data in order to update Electricity Rate Mitigation Program forecasts. The Ministry has identified a decrease in the out-year costs these programs and will internally realign resources to meeting program administration needs starting in 2018-19.– The Ministry is also requesting 19 permanent FTEs during the 2018-19 PRRT to mitigation the administrative needs.	High

Key Ministry Risks

Risk Description	Financial Impacts	Mitigation / Action	Risk Status
Métis Nation of Ontario Negotiation in Relation to Broadening the Ownership of Hydro One Ministry reported back to TB (September 13th) and Cabinet (September 28th) and obtained a revised mandate for discussions with MNO. Discussions are currently underway. Depending on the terms and timing of the final agreement, the Ministry may require up to \$35 million in 2018-19 in support of the MNO negotiation and settlement.	\$35 million	The Ministry will report back to TB/MBC for approval prior to finalization of the term sheet.	High
Affordability Fund Trust The Affordability Fund is a \$200 million program that serves households who are not eligible for low income conservation programs and unable to make energy efficiency improvements without support. On March 6, 2017, TB/MBC approved \$100 million for the establishment of the Fund as part of the government's Ontario Fair Hydro Plan. Depending on program results and electricity customer needs, the Affordability Fund Trust could require additional funding in 2018-19.	Up to \$100 million	The Ministry will provide regular updates to TB/MBC through Quarterly Reports including spending to date, results to date and a value for money assessment, starting Q4 2017-18. The Ministry will continue to assess the need for additional funding based on program results and electricity customer needs.	High

Stakeholder Management / Engagement Plans

Key Stakeholder Groups	Issues / Considerations	Stakeholder Engagement / Communications Strategy
Residential, Farms and Small Businesses Consumers	- Necessary investments in modernizing our electricity system led to increases in the cost of electricity service for residential, farm and small business electricity consumers. - Ontario Fair Hydro Plan has provided reductions to electricity bills.	- Extensive province-wide consultations for the updated Long-Term Energy Plan took place in fall 2016. - Ensure engagement of stakeholders and communication regarding existing and new conservation initiatives as they are developed and implemented. - Communication about the implementation of new Ontario Fair Hydro Plan electricity price mitigation initiatives.
Commercial and Industrial Consumers	- Necessary investments in modernizing our electricity system have led to increases in the cost of electricity for commercial and industrial electricity consumers. - Some reduction in bills due to Ontario Fair Hydro Plan initiatives, but less impact than for residential consumers.	- Extensive province-wide consultations for the updated Long-Term Energy Plan took place in fall 2016. - Existing programs provide some relief to large industrials; ICI programs expansion will extend relief to some smaller consumers. - Ministry working with Ontario Chambers of Commerce to raise awareness of programs available to businesses.
Indigenous Communities	Broadening the ownership of Hydro One.	The Province reached an agreement in principle with Chiefs of Ontario for shares of Hydro One in July 2016 and is working to close the transaction by year end 2017. The Province will work with Chiefs of Ontario to ensure an effective and coordinated communications plan upon close. The Province is also engaged in discussions with the Métis Nation of Ontario in relation to broadening the ownership of Hydro One.

Appendix: Ministry Program Inventory and Outcomes

- ▶ Through consultations with the Centre for Excellence, the Ministry has refined its PRRT program inventory to align to its expanded mandate for Ontario's Fair Hydro Plan and other high-priority policy commitments.
- ▶ The updated program inventory provides a comprehensive view of the Ministry's programs and initiatives, and will assist in measuring output and outcomes that align with the broader strategic mandate of the Ministry of Energy.

Program Inventory		Initiatives
1	Rate Mitigation	Ontario Electricity Support Program, Rural or Remote Rate Protection, On-Reserve First Nations Delivery Credit, OPG Share Purchase, Affordability Fund
2	Ontario Rebate for Electricity Consumers	
3	Long-Term Energy Plan Initiatives	Conservation Initiatives, Green Energy Initiatives, Indigenous Energy Agreement
4	Innovative Energy Technologies	Smart Grid Fund, International Energy Demonstration Fund
5	Climate Change Action Plan, Greenhouse Gas Reduction Account initiatives	Electric Vehicle Overnight Charging Program, Microgrid Technology for Diesel Reduction
6	Strategic Asset Management	Strategic Asset Management Indigenous Participation
7	Electricity and Natural Gas Sector Regulation	Ontario Energy Board
8	Electricity System Market Operations & System Planning	Independent Electricity System Operator
9	Ontario Clean Energy Benefit <i>(program ended 2015-16)</i>	
10	Northern Ontario Energy Credit <i>(Administered by Ministry of Finance)</i>	
11	Internal Functions	Minister's Office, Deputy Minister's Office, Legal Services, Communications, Corporate Services, Policy Development and Implementation