
Reduce Energy Costs and Promote Equitable Energy Access (LTEP Deck No. 1)

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CONFIDENTIAL DRAFT

Overview

- A primary policy objective for the Ministry is to ensure that the energy sector is responsive to the needs and requirements of the consumers it serves.
- As the energy system enables the requirements of modern life and supports the provincial economy, critical functional characteristics of the system would include:
 - Recovery of costs in a fair, equitable, and affordable manner;
 - Clear and open sector operation that is easily understood and accessed by consumers;
 - Serving as an enabler of economic development and competitiveness;
 - Promoting open access and confirming the sector serves the interests of all Ontarians; and
 - Ensuring reliable service and other performance outcomes that serve the public interest.
- Since 2003, Ontario has made necessary investments to modernize the energy sector - \$35B+ in cleaner generation and \$15.5B in transmission and distribution. In the course of making these improvements, challenges to operational objectives have arisen.
- As the Ministry prepares the next Long-Term Energy Plan (LTEP), there is opportunity to address these challenges and promote equitable and affordable access to the energy sector, both in terms of grid connection and interaction with sector organizations.
- This deck presents an overview of these challenges, the related feedback received through the LTEP consultation process, and options and recommendations for inclusion in LTEP.

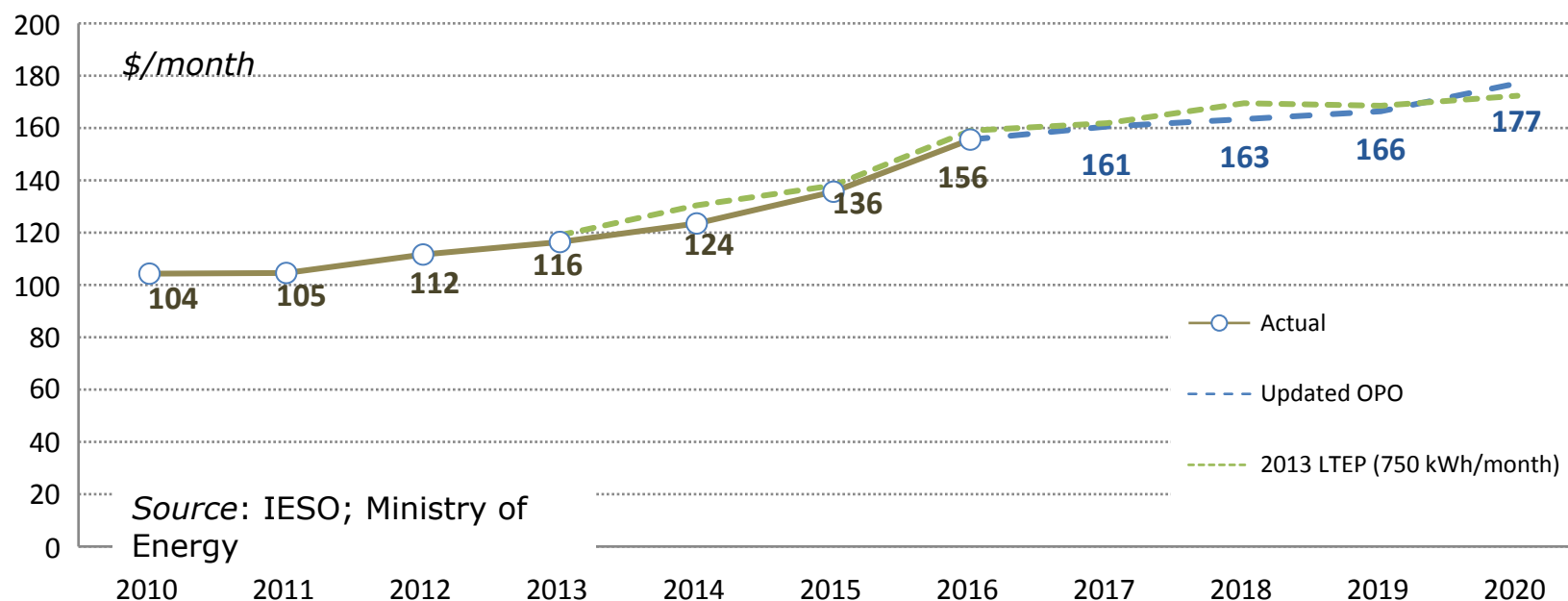
Reducing Energy Costs and Promoting Accessibility

- Since 2013, a number of actions have been taken to reduce overall electricity system costs:
 - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, subject to regulatory approvals, which is expected to save ratepayers as much as \$600 million;
 - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least \$1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
 - Removing an expected \$3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
 - Ontario will reduce electricity system costs for consumers by about \$70 million from previous forecasts by importing up to 2 terawatt hours annually of clean hydro power from Québec at targeted times when natural gas would otherwise be used.
- The Ministry has also adjusted the electricity support framework to help consumers manage costs. This included the removal of the Debt Retirement Charge for residential consumers and the introduction of the Ontario Electricity Support Program.
- The 2013 LTEP committed to ensuring that where possible and appropriate, industrial electricity rate mitigation would be provided. Since 2013, the government expanded the Industrial Conservation Initiative (ICI) by lowering the threshold to 1 MW and removing sector restrictions.
- In addition, a number of reforms have been implemented to make the energy sector more transparent and responsive to consumers. These include the introduction of the Ontario Energy Report, the merger of the IESO and OPA, and improved utility performance monitoring through the Renewed Regulatory Framework for Energy.

Context – Historical and Forecast Residential Electricity Prices

- Residential electricity consumer's prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
 - Note:** The typical residential bill is currently below the 2013 LTEP forecast.

Typical Residential Electricity Bills Historical and Forecast

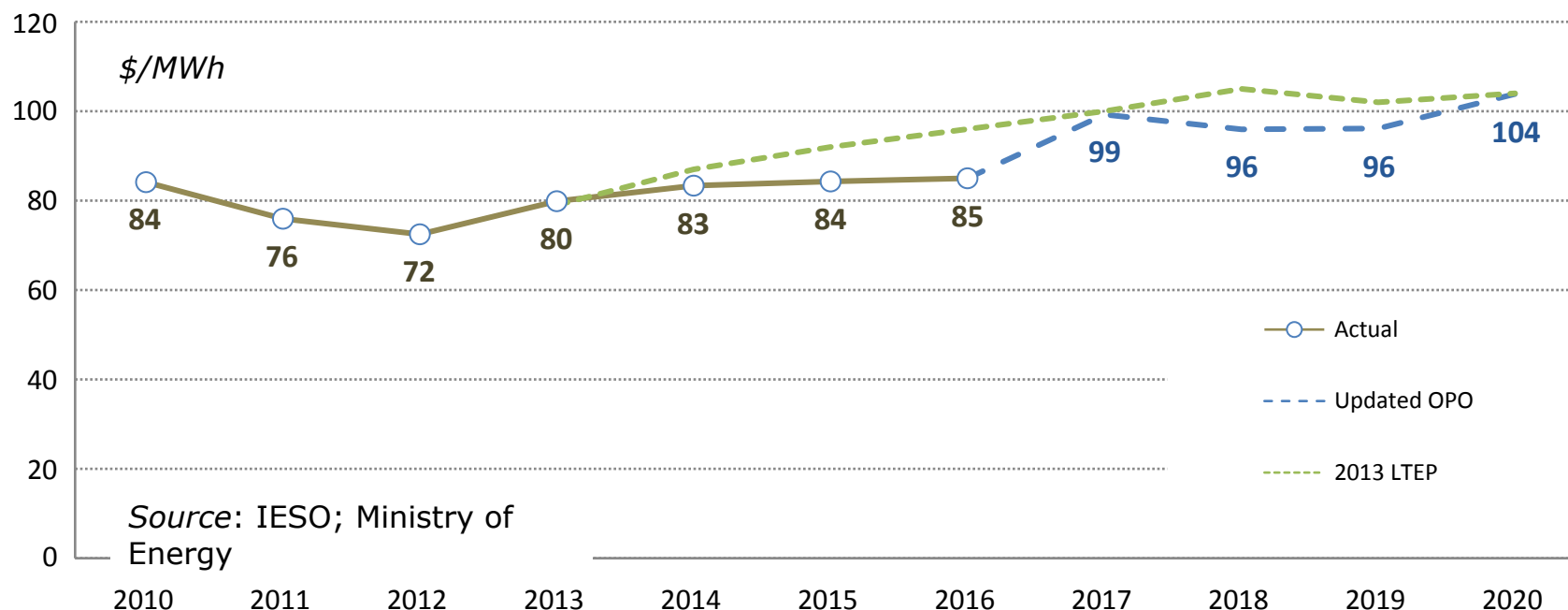


Note: The 2013 LTEP forecast for residential bills was based on 800 kWh/month without RRRP or electric heating; the above has been rebased to 750 kWh/month for comparison purposes. Typical residential are based on Toronto Hydro. The updated OPO forecast above includes the 8% rebate to offset the provincial portion of HST, ICI expansion and RRRP expansion.

Context – Historical and Forecast Large Industrial Electricity Prices

- Industrial electricity prices continue to be a concern for many businesses.
 - Note:** The typical industrial electricity price is currently below the 2013 LTEP forecast.

Typical Class A Electricity Prices Historical and Forecast



Note: The 2013 LTEP forecast for industrial reflects a transmission connected Class A electricity consumer. The updated OPO forecast above includes ICI expansion and RRRP expansion.

Current Context

- Following the 2016 Throne Speech, actions were announced to further reduce electricity costs by:
 - Providing an 8% rebate (\$11/month savings), updating RRRP (\$45/month savings), expanding ICI (up to one-third savings for participants), suspending the LRP II and the EFWSOP (up to \$3.8 billion in cost savings) and recycling proceeds to industrial/ commercial consumers.
- The energy sector is continuing to evolve to seek efficiencies and improve service for customers:

Recent Energy Sector Reforms

Structure	Cost Allocation	Consumer Protection	Utility Best Practices
• MergeCo Approval • Increased OEB Oversight (Bill 112)	• Fixed distribution costs • Natural gas expansion • OEB Report on First Nations rate	• Energy Consumer Protection Act • OEB consumer engagement initiatives • Creation of Hydro One Ombudsman	• Corporate Governance • Cybersecurity • Consumer complaint reporting

- Stakeholders and consumers continue to flag that the energy sector is costly and inaccessible, and that it is difficult to properly gauge the value provided by the system. The Long-Term Energy Plan is an opportunity to gather this feedback and develop additional initiatives to improve the affordability and accessibility of the energy sector.

Stakeholder Feedback Summary

- Through LTEP stakeholder and public engagement sessions, EBR submissions, and additional stakeholder outreach, the Ministry has collected significant feedback on issues of affordability and accessibility

Prices

Electricity mitigation

Natural Gas mitigation

Bending the cost curve

- Cost certainty:** homes/businesses want predictability of costs.
- Delivery Charge:** Customers not aware what it covers. Unfair that it varies across province.
- Industrial Competitiveness:** Prices are putting Ontario at a competitive disadvantage in attracting investment. Need more support for all sizes of businesses.
- LDC issues:** Customers identifying rising costs; challenge for utilities as they account for ~20% of bill.
- RPP changes:** More TOU prices should be offered to recognize differences in homes/businesses' consumption patterns and incent the desired consumer behaviour to shift loads.
- Support from Tax-Base:** More funding is needed from tax base given supply mix/costs are locked in.
- Engagement/communication:** More efforts are needed to explain the different components of bill, why they have gone up and what support programs are available for different customer groups.
- Utilize existing assets:** Government should re-contract with existing supply as contracts expire through competitive price auctions.

Notes: The summaries capture the overall feedback and is at a higher-level. Summaries from individual table discussions are available for reference.

Proposed LTEP Initiatives

- The Ministry has investigated 11 discrete initiatives to address identified challenges and promote affordability and accessibility across the energy sector.

Reducing Energy Costs	Accessibility
1. Enhancement of the Ontario Electricity Support Program.	1. Strengthening LDC Accountability to Consumers
2. Reform of the Rural or Remote Rate Protection program.	2. Enhancing Sector Transparency and Consumer Literacy.
3. Commercial and Industrial Competitiveness through New and Enhanced Rate Mitigation Measures.	3. Protecting Tenants through Rate Regulation of Sub-Metering Providers.
4. Introduction of an Indigenous Rate Program.	4. Ensuring a Modern, Streamlined and Cost-Effective Regulatory Process
5. Removing Costs from the Distribution Sector	5. Regulatory Flexibility and Financial Support for Natural Gas Expansion
6. Low-Income Conservation Programs	

- Some of these initiatives require further analysis and evaluation prior to determining full scope and an appropriate path to implementation.

Next Steps

- Revise proposed initiatives based on feedback.
- Return with initiative-specific briefings with additional analysis, as required.
- Determine affordability measures through parallel rate mitigation discussions.
- Incorporate feedback from agencies.
- Finalize proposals for inclusion in Cabinet submission.

Reducing Energy Costs

1. Enhancement of the Ontario Electricity Support Program

Recommendation:

- **Decision:** Move OESP to the tax-base
- **Exploratory:** Consider options to expand OESP eligible amounts, potentially up to 50% more than currently offered.

Engagement

- LTEP consultations did not gather recommendations specific to the OESP, although the issue of high and rising electricity prices was a common theme for LTEP feedback.

Considerations

- Low income consumers spend disproportionately more on electricity as a portion of their earnings, where a household that earns \$20,000 and consumes 750 kWh/ month spends about 9% of the total income paying this bill.
- The OESP provides some relief for recipients, however it is funded through the rate base, increasing electricity costs for all consumers.
- Shifting costs from the rate base to the tax base would require amendments to existing legislation and regulations. Further legal analysis is required.
- An enhancement to the OESP credits could result in criticism from those customers that are slightly above the income thresholds, and from low income households who do not qualify because they do not receive an electricity bill.
- Delivering the program through the tax system (and not via bills) could also be explored if the program is funded by the tax-base.

1. Enhancement of the Ontario Electricity Support Program

Impacts

- **Forecast:** Expanding OESP is not expected to impact Ontario's demand forecast.
- **Prices:** If the OESP were funded by the tax-base and/or OESP credit amounts were enhanced by 50%:
 - Single low income consumers would see an increase from \$30 to \$45/mth; and
 - Families of four with electric heat would see an increase from \$55 to \$82.50/mth.
- No consumers would be worse-off as a result of this expansion due to moving the program to the tax-base.
- Potential savings* for 750 kWh/mth and 1 MWh/mth residential and industrial consumer:

Year	2017	2018	2019	2020	2021	2022
Savings 750 kWh(\$s)	0.57	0.79	0.98	1.13	1.29	1.44
Savings 1 MWh (\$S)	0.76	1.05	1.31	1.51	1.71	1.92

- Potential costs** of shifting costs to the tax base for the OESP, and OESP enhanced:

Year	2017	2018	2019	2020	2021	2022
OESP (\$M)	108	150	186	215	243	272
OESP + 50% (\$M)	162	226	279	322	365	408

- Forecast does not account for the approximately 142,000 low-income households OEB estimated are ineligible since they do not directly receive an electricity bill, and could potentially be included in any move to administer the program via the tax system.
- **Regional Impacts:** OESP expansion is not expected to address regional disparity, though an expansion variant could be considered where rural consumers with high distribution rates and are already OESP-eligible receive an enhanced benefit.

*Projections assume program grows to 100% of eligible consumers by 2022.

**Cost forecast assumes 10% administration costs

2. Reform of the Rural or Remote Rate Protection Program

Recommendation

- **Decision:** Move Rural or Remote Rate Protection (RRRP) to the tax-base.
- **Exploratory:** Consider expansion of tax-based RRRP funding to further reduce distribution costs to rural and northern consumers, potentially broadening program eligibility.

Engagement

- The impacts of rising electricity costs are a predominant theme of LTEP consultations. Much stakeholder and public feedback noted delivery costs in particular as an increasing burden.
- This was particularly true in rural and/or northern communities served by Hydro One where distribution costs are significantly higher than the provincial average.
- Feedback was also received regarding the province-wide RRRP charge, as some communities and LDCs indicated a perceived unfairness for their customers to subsidize the delivery costs of others.

2. Reform of the Rural or Remote Rate Protection Program

Considerations

- Moving RRRP to the tax-base is consistent with policy direction to take costs out of the system. As RRRP is fundamentally a rural community support program, moving program costs to the tax-base is justified.
- The historic policy objective of RRRP was to contain rural distribution costs to a level closer to those of other customers in the province. As the program had not received increased funding in over a decade, the differential between rural and other distribution rates increased significantly.
- The recent amendments to RRRP (as part of the Speech from the Throne rate mitigation package) has attempted to address this disparity, and has moved Hydro One R2 rates closer to the range of LDC rates. As these rates remain at the high end of this range, however, more assistance may be warranted.*
- Lowering Hydro One R2 rates below those of other LDCs or expanding RRRP to support LDCs not currently considered low-density may cause equity issues and would challenge regulatory principles that costs should be recovered from those driving costs.

Impacts/Modeling

- **Forecast:** RRRP expansion is not expected to affect the electricity demand forecast.
- **Prices:** Depending on the level and method of expansion, eligible consumers could see significant on-bill savings. Potentially up to ~\$20/month for the average customer, depending on LDC service territory.
 - With the program moving to the tax-base, it is not anticipated that any consumer would be negatively affected by an expansion and would in fact see a reduction in Regulatory costs.
- **Regional Impacts:** As Hydro One R2 customers are located across the Province, distribution costs are not an example of regional disparity but one between urban and rural communities. Expanding RRRP would reduce the difference between urban and rural distribution costs.

**For details on expansion options under consideration, including costs and ratepayer impacts, see the discussion on "Proposed Initiatives to Transform Ontario's Electricity Sector"*

3. Commercial and Industrial Competitiveness Through New and Enhanced Rate Mitigation Measures

Recommendation:

- **Decision:** Highlight the Ministry's ongoing work with key partners to implement rate mitigation measures for commercial and industrial consumers, e.g.,
 - Billing and participation in the expanded ICI program will begin in July 2017. The Ministry, working with the IESO and LDCs, will monitor uptake and continue to educate consumers about the program.
 - The Ministry continues to work with MOECC, IESO and OEB on the implementation of cap and trade auction proceeds recycling.
- **Exploratory:** Initiatives related to "Proposed Initiatives to Transform Ontario's Electricity Sector" are expected to promote competitiveness. These include empowering energy agencies to increase cost effectiveness and efficiency, procurement, financing and other cost shifting initiatives.

Considerations

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial and small industrial consumers (i.e., Class B) are higher by comparison. Stakeholders have continued to raise concerns regarding competitiveness, particularly as cap and trade comes into effect on January 1, 2017 and will increase energy costs.
- There is a high degree of differentiation amongst consumers within the commercial and industrial sectors in terms of size and consumption patterns which is reflected in the prices they pay.
- There are about 300 large electricity consumers in Ontario, most of which operate in the industrial sector and participate in the Industrial Conservation Initiative (ICI).
- Consumers in the commercial sector do not pay time-of-use prices and have less incentive to shift consumption than residential consumers.

3. Commercial and Industrial Competitiveness Through New and Enhanced Rate Mitigation Measures

Engagement:

- Based on stakeholder interest and feedback, actions were recently announced and are being implemented:
 - Participants in the ICI program can reduce electricity bills by one-third by reducing their electricity consumption during peak demand periods. Expanding ICI to those monthly peak demand greater than one megawatt, down from the 3 MW threshold, opens it up to more than one thousand newly eligible customers. In addition, sector restrictions have been removed and smaller institutional and commercial businesses are eligible to participate.
 - The government has committed to use a portion of cap and trade auction proceeds to keep electricity rates affordable for commercial and industrial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured, the need for wholesale market renewal and greater electricity consumer choice.

Impacts/Modeling

- **Forecast/Pricing:** LTEP modelling will have to make assumptions about ICI uptake now and in the future, which will impact demand and industrial/commercial pricing.
- **Regional:** The ICI program is not regionally specific. There are no plans to develop new regionally specific rate mitigation programs.

4. Introduction of An Indigenous Rate Program

Recommendation

- **Decision:** Based on LTEP engagement and feedback from other forums, the ministry recommends the implementation of a program to help mitigate rates for on-reserve indigenous community. The program should be funded through the tax base.
- **Direction:** The ministry agrees with the OEB report's recommended approach to adopt a 100% delivery credit for on-reserve First Nation customers. This approach resonates with input received at LTEP sessions and is supported by the Ontario Chiefs in Assembly.
- **Exploratory:** The ministry further recommends, based on feedback received at LTEP sessions and other forums, that the ministry work with relevant partners to identify how a First Nations Rate may apply to First Nations with unique circumstances, such as the Algonquins of Ontario, as well as possible application of the rate to off-reserve First Nations.

Impacts

- **Price impacts:** Eligible customers would receive an approximate \$75 benefit in summer months and \$100 benefit in winter months. Annual cost would be \$13-20 million or \$0.08-\$0.11 per residential monthly bill.

Engagement

- 16 Indigenous sessions were held with 162 attendees representing 79 Indigenous communities and organizations. Three written submissions were received.
- The most common issue raised was electricity affordability. Continued opportunities for involvement in the energy sector, funding for capacity building, skills training, staff, education and community energy plan implementation and conservation and housing were also frequently raised topics.

- Refer to additional details in briefing deck #4: Promoting Indigenous Energy Capacity and Leadership.

4. Introduction of an Indigenous Rate Program

Considerations

- Indigenous leaders have advocated for action on energy affordability for many years, through various forums.
- Energy affordability was a priority issue raised at all Indigenous LTEP sessions, most often linked to:
 1. Reconciliation of energy infrastructure built on Indigenous lands using Indigenous resources without appropriate Indigenous involvement and accommodation.
 2. The dramatic discrepancy between high monthly energy bills and the ability of many members to afford those energy rates.
- In fall 2016, the OEB investigated options for an on-reserve First Nations Rate. A report on their findings outlined options based on parameters set by the minister, evaluation criteria set by the OEB and a First Nations Advisory Council and feedback from a number of engagement sessions with First Nations and other stakeholders.
- First Nations with unique circumstances such as communities in the Additions to Reserve process or the Algonquins of Ontario, who have a strong outstanding Aboriginal rights claim but only one of the ten communities have a reserve, will be excluded from this benefit.
- First Nation members who have moved off-reserve due to circumstances beyond their control, such as lack of housing or access to special medical services, will be excluded from this benefit.
- All non-Indian Act First Nations will be excluded from this benefit.
- First Nations will continue advocating for the extension of this benefit to off-reserve members.
- Métis may argue that they should receive a similar benefit.

5. Removing Costs from the Distribution Sector

Recommendation

- **Direction:** OEB to require LDCs to outline strategies and business cases (within the distribution system planning process) to address line losses, factoring in the total system cost impacts of losses to consumers. Financial rewards and penalties should be established so LDCs are incented to address losses where cost effective.
- **Exploratory:** Consider repealing the Standard Supply Service Charge (SSSC).

Engagement

- While review of EBR submissions is not yet complete, neither line loss nor SSSC as a specific topic has not yet emerged. However they can be considered part of a push for efficiency and cost reduction in the system which is a recurring theme.
- Many LDCs have assessed the issue of improving their losses but have found that the cost/benefit ratio has not allowed them to move forward with this capital expenditure. However the commodity portion of these costs does not factor into the cost/benefit assessment. Connecting LDCs to these costs may change these calculations.
- Many private technology developers have expressed to the Ministry that their technologies are capable of reducing losses on the distribution system, though cost effectiveness remains a question. For this reason, this initiative could be considered in parallel with the proposal for in-front of the meter conservation (see Conservation deck).

Impacts/Modelling

- **Forecast:** A robust line loss reduction strategy could reduce demand forecasts by ~1%/year.
- **Prices:** Any drop in an LDCs TLF would result in reduced Electricity, Delivery, and Regulatory charges – any charges that are calculated on the basis of loss-adjusted consumption. Expected decrease in the neighbourhood of ~1%. There could be an upward pressure on distribution rates as a result of additional investments, though cost/benefit assessments should protect customers. Repealing SSSC would save customers \$0.25/month.
- **Regional:** As Hydro One has the most opportunity to improve, rural consumers would benefit the most.

5. Removing Costs from the Distribution Sector

Considerations

- Line losses are a natural part of the delivery system, as assets age they will lose some of their efficiency due to use, weather and the normal wear and tear on them.
- LDCs submit their Distribution System Plans to the OEB for their rate applications. These plans outline the "health" of their assets and the timing, cost, and need of upgrading their systems. Upgrading assets will improve losses but all faulty assets cannot be replaced at once due to cost/benefit limitations.
- The OEB approves the Total Loss Factor (TLF) for each LDC, with a threshold of approximately 5%. LDCs that have a large service territory with less customers have a higher TLF.
- Hydro One customers (1.2 million) pay on average more for the TLF than any other LDC in the province. This is due to a combination of the nature of the vast area that is covered by Hydro One, as well as inefficiencies in existing infrastructure.
- A move to a lower TLF will ensure that LDCs work to maintain the health of their assets and set the bar for a more efficient infrastructure. Potential initiatives the OEB could contemplate include:
 - Considering loss impacts when siting renewable generation.
 - Pilot replacements of transformers under a new cost/benefit system that reflects avoided costs as a result of reduced losses.
 - Creating stronger loss performance standards, including improvement timelines, as part of the move to stricter performance requirements contemplated on slides 23-25. At the same time, allow LDCs to retain some of the benefit of exceeding the target as a means of incenting investment.
- SSSC is a legacy charge from the opening of the market intended to recover costs associated LDCs maintaining billing systems for customers who did not move to retail contracts. As LDCs remain the primary bill issuer and recover these costs through distribution rates, the SSSC is no longer required.

6. Low-Income Conservation Programs

Recommendation:

- **Decision:** Highlight successes for natural gas low-income programs: province-wide expansion and new programs. As well, update on progress to province-wide availability of low-income electricity conservation programs in 2017.
- **Decision:** Outline the collaborative work between MOECC and ENERGY to ensure alignment between existing low-income and proposed new CCAP low-income programs.
- **Direction:** Direct IESO to address the funding level for low-income programs through the formal CFF Mid-Term Review process. This would have no impact to the overall CFF budget, but may marginally reduce achievable CFF target.
- **Exploratory:** Pending decisions on ENERGY's price mitigation proposals, state intention to explore funding of low-income programs through the tax base.

Considerations:

- Conservation programs can help reduce energy bills and the frequency of utility bill arrears. However, low-income conservation programs have high acquisition costs.
- Under the electricity Conservation First Framework (CFF), LDCs plan to invest less in low-income programs overall than under the previous Framework, stating increased targets and limited budgets. Certain LDCs are not offering the core low-income program: the Home Assistance Program (HAP).
- The December 16, 2016 Minister's direction to the IESO will address the availability of low-income conservation programs by requiring that province-wide programs, including HAP, be delivered in all LDC service areas starting in 2017.
- The 2015-2020 natural gas Demand Side Management (DSM) Framework doubles annual budgets, encourages collaboration and integration of natural gas and electricity programs, and extends natural gas low-income programs across the province.

6. Low-Income Conservation Programs

Considerations (cont'd):

- Enbridge Gas and Union Gas offer detailed in-home energy assessments and the installation of energy-saving measures at no cost through programs for their low-income customers. Enbridge Gas also offers low-income new home and multi-family construction programs.
- CCAP commits to developing low-carbon technology incentive programs, with increased benefits for low-income households and vulnerable communities.
- Funding conservation programs through the tax base is separately being explored as part of ENERGY's price mitigation proposals.
- IESO and OEB will continue to explore opportunities to better align CFF and DSM programs, including as part of formal framework mid-term reviews (discussed in "Enhancing Commitment to Conservation" deck).
- IESO and LDCs have discussed setting aside a separate budget for low-income programs within the CFF budget, outside of the LDC's program portfolio. This is expected to result in fewer LDCs opting out of HAP and higher target participation.
- ENERGY is working with MOECC as part of an Inter-Ministry Working Group to ensure that programs offered by the proposed Ontario Climate Change Solutions Deployment Corporation align with existing programs and leverage existing infrastructure where possible.

Stakeholder feedback/engagement:

- EDA: dedicate a portion of cap and trade proceeds to fund more residential programs.
- CHEC: fund rate-based social programs through the tax base so that they don't penalize other rate payers.
- Poverty Task Force: invest more in efficient and affordable heating programs for households and non-profit housing units.

Accessibility

1. Strengthening LDC Accountability to Consumers

Recommendation

- **Direction:** Direct the Ontario Energy Board (OEB) to examine and implement options to continue the work of the Renewed Regulatory Framework by enhancing utility performance through incentives for improved performance and penalties for poor performance in key areas. Options could include:
 - Optimization of investment planning, including tying return on equity (ROE) to performance and risk;
 - Strengthen LDC Scorecard by connecting it to LDC financial performance through earnings sharing or penalties paid to consumers;
 - Revise rate-setting to reflect tightening productivity requirements and capital cost avoidance
 - Create regulatory incentives for LDCs to pursue efficiencies and service sharing agreements.

Impacts/Modeling:

- **Forecast:** Recommended option should not have a material impact on the electricity forecast.
- **Prices:** Improved LDC performance should have a downward pressure on the distribution portion of the total electricity bill, with modest total bill impact.
 - Distribution rates only account for roughly 20% of the total electricity bill.
 - Opportunities for improved efficiencies and increased LDC performance may have moderate price impact on distribution rates, but are likely to result in mitigating increases rather than driving decreased rates.
 - Direct payments to consumers for failing to meet a performance threshold (ex: \$20 for an extended outage) would have greater bill impact but would be rare and intermittent in occurring.
- **Regional:** Different LDCs are currently operating at differing levels of operational performance and efficiency. Customers of highly-performing LDCs may see less of an impact than customers of poorly-performing LDCs, who have greater opportunity for improved performance.

1. Strengthening LDC Accountability to Consumers

Engagement

- Stakeholders provided general input on improving the regulatory framework.
- LDCs are looking for regulatory mechanisms that allow and encourage utilities to deliver services that meet the needs of consumers and are responsive to the changing environment.
- LDCs particularly expressed interest in expanding shared-service agreements with other LDCs.

Considerations

- Like other components of Ontario's electricity system, distribution sector costs have risen as investments have been made to update and modernize system infrastructure. Over the same time period, distribution sector productivity and cost efficiency have decreased. This trend raises concern that customers are not realizing a net benefit from sector cost increases, as customers receive less value from the distribution bill.
 - For the period 2002-2012, sector productivity has decreased by an annual average of -0.93% when including Hydro One and Toronto Hydro, the worst performers.
- The OEB, through the Renewed Regulatory Framework for Energy (RRFE), has since 2012 attempted to move the distribution sector towards a performance/outcomes-based regulatory framework. While new reporting requirements such as the LDC performance scorecard are positive developments, RRFE does not tie these system performance expectations to LDC financial performance.
- The 2013 LTEP included a commitment to review the implementation of the LDC Scorecard and develop additional policy options.

1. Strengthening LDC Accountability to Consumers

- Performance-based options have the potential to indirectly incent consolidation (in a manner that returns benefits to consumers), improve customer experience, and potentially reduce ROE in an equitable manner in the event performance expectations are not met.
- Encouraging shared partnerships on services between utilities will help reduce costs in the back end and encourage further innovation for small to medium sized utilities.
- Under the Ontario Energy Board Act, the OEB's role is established as an independent regulator with authority to establish appropriate mechanisms to regulate local distribution companies (LDCs). The Minister of Energy holds broad responsible for energy sector outcomes over the long-term and is accountable for the OEB's fulfillment of its mandate as well as the OEB's performance.

Example of utilities sharing services and driving innovation:

Grid Smart City

- Thirteen LDCs working together to achieve greater economies of scale, efficiency and effectiveness.



CHEC

- CHEC, an association of 15 LDCs and modeled after a cooperative to combine resources

Centre Wellington
Collus PowerStream
InnPower
Lakefront Utilities
Lakeland Power
Midland Power Utility
Niagara-on-the-Lake
Orangeville Hydro
Orillia Power
Ottawa River Power
Renfrew Hydro
Rideau St. Lawrence
Wasaga Distribution
Wellington North
West Coast Huron

2. Enhancing Sector Transparency and Consumer Literacy

Recommendation:

- **Exploratory:** The Ontario Energy Report (OER) could be leveraged to provide more information on Global Adjustment to the public.
- **Exploratory:** Initiatives to increase accessibility and a consumer centric approach could be pursued. The LTEP could reference the OER and the Ministry's efforts to improve energy literacy.

Considerations:

- The need for a more engaged, energy literate public was highlighted in the Drummond Report, the 2013 Auditor General's Annual Report, and the 2013 and 2016 LTEP stakeholder consultation sessions.
- In response, the Ministry launched emPOWERme in 2013. It includes class room-focused fact sheets, videos, interactive tools, infographics and other energy-focused educational resources.
- In December 2016, Premier Wynne expressed an interest to provide more detail about the Global Adjustment (GA) to consumers.
- A link to the OER could be added to electricity bills to increase consumer awareness of the available resources

Engagement:

- In 2014, the Ministry, working with the IESO and OEB, launched the Ontario Energy Report (OER) website. In addition to quarterly reports on electricity, natural gas and oil, the site includes links to many other electricity sector publications and reports.
- Consumers voiced concerns during the 2017 LTEP consultations regarding the need for increasing transparency of Global Adjustment, while simultaneously asked for increased bill simplification.
- The Ministry also actively promotes energy literacy via Twitter, and more recently, through social media channels such as LinkedIn and Facebook.
- In the past, the Ministry supported Pollution Probe and the Mowat Centre's efforts to promote energy literacy.

3. Protecting Tenants Through Rate Regulation of Sub-Metering Providers

Recommendation

- **Exploratory:** Task the OEB with conducting an assessment of whether Unit Sub-Meter Providers (USMPs) charges should be regulated as a means to ensure that the OEB is adequately fulfilling its mandate to protect the interests of electricity customers, including those billed by USMPs, with respect to rates

Engagement

- While this issue has not emerged in the context of LTEP, OEB/ENERGY staff had raised this during discussions related to legislative amendments. ENERGY has also received letters from USMP customers citing concerns regarding the level of and lack of transparency with respect to USMP charges - staff have no recourse to offer these customers as unlike LDC rates there is no regulatory oversight of USMP charges.

Considerations

- Unit sub-meter providers (USMPs) are private companies which install 'unit sub-meters' for individual units in a multi-unit building (connected to an LDC's bulk meter) and bill unit occupants directly
- USMPs are licenced by the OEB (29 issued) and are subject to the OEB's 'Unit Sub-Metering Code'.
- USMPs are required to pass on LDC bill charges as measured by the bulk meter at cost but their additional monthly fees (for sub-metering and billing) and miscellaneous charges (e.g. disconnection) are not reviewed or approved by the OEB
 - USMP fees usually vary by building and by customer type and are typically not available online.

3. Protecting Tenants Through Rate Regulation of Sub-Metering Providers

Considerations (Cont'd)

- There were approximately 175,000 residential and small business unit sub-metering customers served by 7 USMPs as of December 2015 according to Ontario Clean Energy Benefit payment data
- As per O.Reg. 389/10 individual metering ('suite metering') is required in all new multi-unit buildings built after January 1, 2011 and is optional for pre 2011 buildings. To comply, buildings can choose either 'unit smart metering' by an LDC or unit sub-metering by a USMP. Some USMPs have recently lobbied government to mandate suite metering for all multi-unit buildings as a conservation measure
- The OEB Act contains an un-proclaimed provision which authorises the OEB to regulate USMP charges

Impacts/Modelling

- **Forecast:** Regulations of USMP charges is not expected to affect the electricity demand forecast or require modelling
- **Prices:** Regulation of USMP fees and charges may result in more consistent, transparent and potentially lower electricity bills for USMP customers. The OEB's assessment would have to include a cost-benefit analysis which would consider additional costs to the OEB to rate regulate this sector versus the benefits to the relatively small pool of USMP customers.
- **Regional Impacts:** USMP providers service multi-unit buildings in urban areas across the province

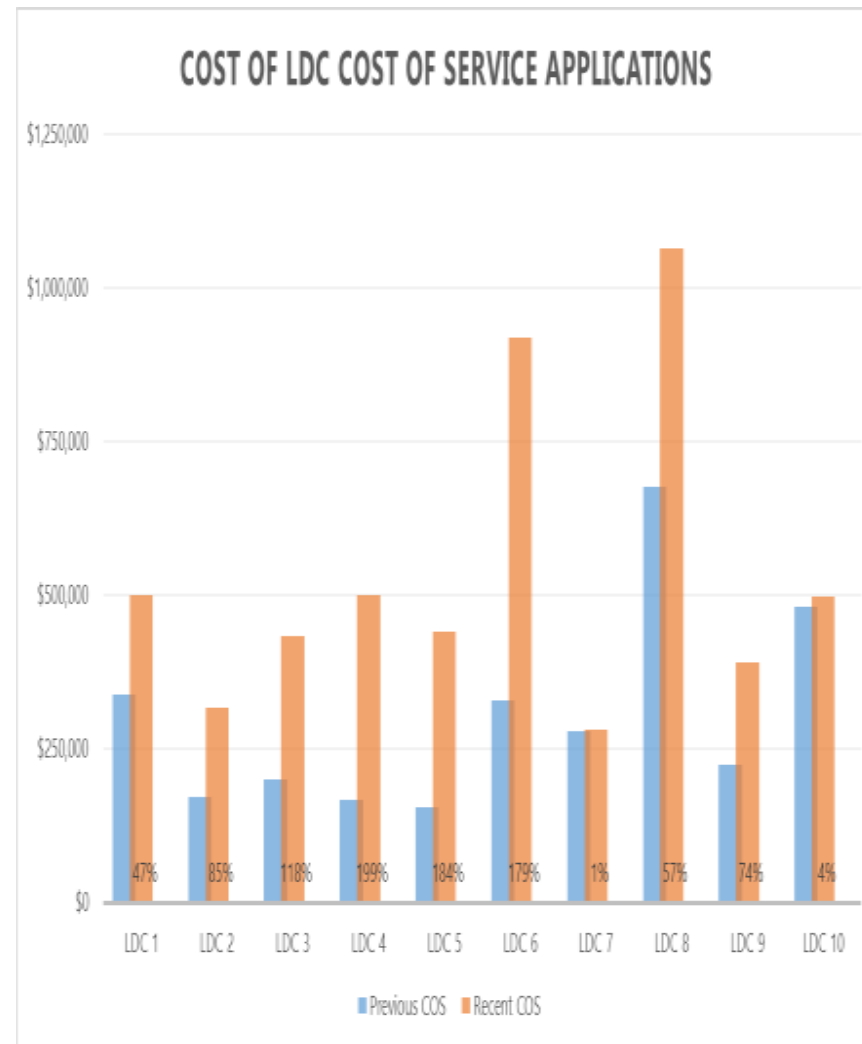
4. Ensuring a Modern, Streamlined and Cost-Effective Regulatory Process

Recommendation

- **Exploratory:** Ministry and OEB to work together to consider how the regulatory process can be reformed to clarify policy signals for regulated entities, ensure access and transparency for consumers, reduce costs and burdens, and better support and enforce new performance expectations.
- **Exploratory:** Consider moving OEB costs to the tax-base.

Engagement

- Local Distribution Companies are concerned that regulatory processes have become increasingly costly, time-consuming and overly-prescriptive with limited cost-benefit analysis to justify.
- LDCs are hesitant to prepare comprehensive rate filings due to unclear guidelines. LDCs believe certain regulatory and reporting requirements placed on LDCs can be streamlined, and instead focus on achieving outcomes.
- Providing LDCs with regulatory clarity and consistency would assist in achieving new LDC performance expectations as contemplated on slides 23-25.



4. Ensuring a Modern, Streamlined and Cost Effective Regulatory Process

Considerations

- A number of reviews and changes have been introduced to the OEB regulatory and process framework in recent years in an attempt to become more consumer-focused and promote LDC efficiency and productivity. Such an initiative would represent a continuation of work the OEB has already begun.
- The OEB is an independent regulator and as such they set their own procedural and administrative rules (within the confines of existing legislation) and will ultimately determine how reforms are implemented in practice.
- Current performance measures designed by the OEB on its own operations have been assessed to be almost fully achieved, leaving little scope and incentives from within the regulator for further changes and improvements. However, there are general concerns that the regulatory process still requires further work to ensure LDC efficiencies are returned to consumers.
 - The Mandate Review of the OEB, underway in Q1 2017, can inform development of a new performance framework.
- As intervenor costs make up a large portion of OEB-assessed costs, the Ministry could encourage the OEB to continue to reform its consumer engagement practices.
- While moving OEB costs to the tax-base would result in on-bill savings for customers, such a move would need to be considered in light of the need to protect the OEB's independence in decision-making.

Impacts/Modeling

- **Forecast:** This initiative is not expected to affect Ontario's demand forecast.
- **Prices:** Across LDCs, costs for hearings have increased, separate and apart from inflationary increases. Hydro One's latest Custom IR application cost \$679,889 to file. The OEB's regulatory cost per customer in 2015 was \$5.71, up 39.3% over 2009. Enhanced cost effective regulatory processes is expected to result in downward pressure on distribution rates for consumers.
- **Regional:** Consumers served by LDCs that are larger and more operationally complex would experience the greatest benefits as these rate filings tend to drive OEB costs.

5. Regulatory Flexibility and Financial Support for Natural Gas Expansion

Recommendation:

- **Decision:** Support natural gas expansion noting the OEB decision and MOI funding, while recognizing that natural gas will not be available in every corner of the province.
- **Exploratory:** Seek to maximize the value of existing natural gas infrastructure while reducing GHG emissions through integrated energy solutions.

Engagement:

- Stakeholders identified that access to natural gas is urgently needed in rural Ontario to lower energy costs for homes and businesses, to facilitate industrial expansions and to attract investment.
- In February 2015, the Minister asked the Ontario Energy Board (OEB) to assess what options may exist to connect more communities to natural gas and to ensure the rational expansion of Ontario's natural gas transmission and distribution system.
- In November 2016, the OEB issued a decision on a generic hearing regarding natural gas expansion. The decision gives more flexibility to utilities (by allowing stand-alone rates and surcharges) to make expansion to unserved communities more economically feasible and encourages competition to service communities.
- Also supporting natural gas expansion is the plan from the Ministry of Infrastructure to support expansion by a loan and/or grant program.

Impacts/Modeling

- **Forecast:** Expansion of gas services is not anticipated to have a significant impact on electricity or gas demand on a provincial scale .
- **Prices:** Individual consumers could see major energy cost savings for space and water heating.
- **Regional:** Expansion will affect regional electricity and gas demand and associated planning on a community scale.

5. Regulatory Flexibility and Financial Support for Natural Gas Expansion

Considerations:

- Natural gas is commonly used as a heating fuel. Compared to other heating fuels, natural gas has a lower carbon footprint than propane or heating oil. Natural gas would have a higher carbon footprint than electricity or renewable sources like biomass (e.g., wood).
- Extensive natural gas infrastructure is in place in Ontario (approximately 75% of homes are heated with natural gas in Ontario). The infrastructure includes extensive storage and capacity to meet peak heating demands.
- The 2013 LTEP highlighted that Ontario wants to ensure communities can access natural gas to take advantage of low prices.
- Maximizing and maintaining the use of natural gas infrastructure can help keep costs down by avoiding “stranded asset” risk where ratepayers pay for minimally utilized / unused assets.
- Overall system costs need to be considered in the LTEP – natural gas can continue to play a role during the transition to a low carbon economy by meeting key needs (e.g., peak heating demand).
- Renewable Natural Gas (RNG) is an opportunity to leverage existing natural gas infrastructure and green the economy - RNG is a renewable fuel source that can help meet Ontario’s climate change objectives. Expanding natural gas to rural areas will increase pipeline connections to potential sources for RNG supply
- There may be niche economic opportunities for natural gas to replace higher carbon intensity diesel / gasoline in the transportation sector. Climate Change Action Plan has initiatives to support infrastructure expansion, a current barrier to natural gas use in the transportation sector.
- Due to high cost of pipeline connections, natural gas will not be economically viable for all regions / areas of the province. Other fuels (e.g., electricity, heating oil, propane, wood, etc.) will have to meet end user needs.