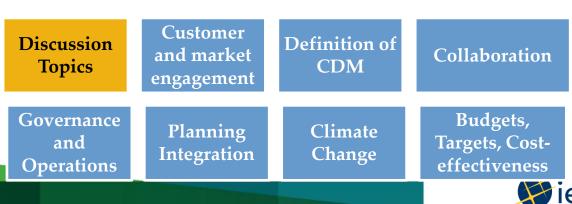
Mid-Term Review: 2015-2020 Conservation Framework

Update for IESO Stakeholder Advisory Committee February 21, 2018



Overview

- Key objectives and outcomes of Mid-term Review
 - Review assessed Conservation First Framework (CFF) and Industrial Accelerator Program (IAP) implementation against any stated policy goals within directions from the Minister of Energy and Long Term Energy Plan (LTEP)
 - Key outcome: IESO to provide recommendations to the Minister of Energy to address any identified challenges or opportunities
- IESO updated SAC in May and August 2017 on initial discussions topics covered with Mid-term Advisory Group.
- Focus today will be to summarize key findings and feedback received from stakeholders that will inform IESO recommendations on Mid-term review



STAKEHOLDER FEEDBACK WAS GATHERED THROUGHOUT THE MID-TERM REVIEW PROCESS AND USED TO INFORM THE OPPORTUNITIES

CUSTOMERS

- Would like to see more flexibility in the frameworks tending towards a holistic, integrated approach to energy management.
- Value simplicity in the application and administrative processes that support programs.
- Would like to ensure equitable access to programs is protected with the target exchange.
- Strongly supported consistent and continuous program availability (both within and beyond this framework).
- Interested in providing feedback into current programs and the future framework and would like to see how their feedback is integrated.

IESO

- Would like a more formal avenue for stakeholders to provide feedback into programs and the framework.
- Need additional visibility into anticipated framework performance at the LDC level.
- Desire to have oversight into the LDC target exchange to ensure alignment with policy objectives.
- Need for re-distribution of funding to alleviate additional demands on central services.
- IAP account managers have heard that customers
 experience a perceived trade-off between energy
 efficiency projects and other policies and programs (e.g.,
 cap and trade and Industrial Conservation initiative).

LDCS

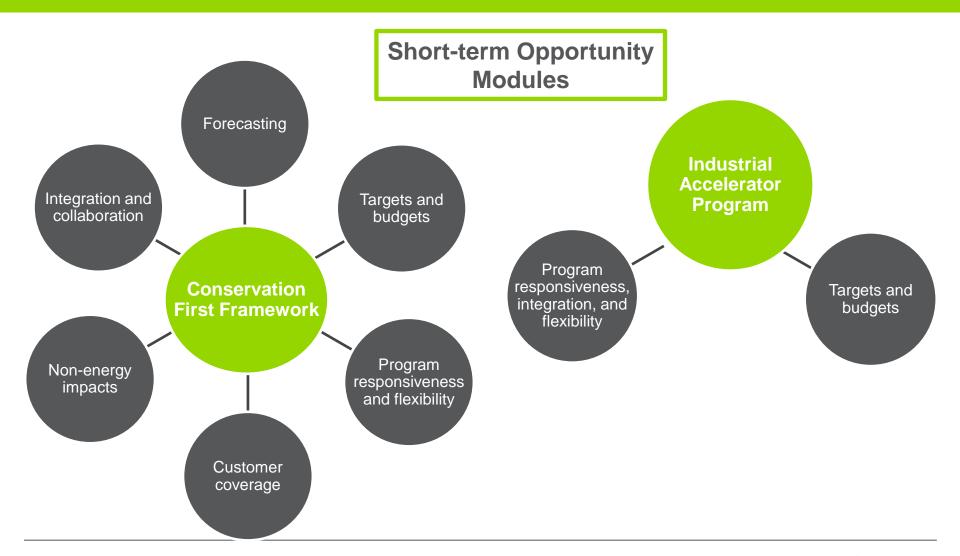
- Value their position in the market and connection with customers and interested in a larger integrated program delivery role.
- Desire an LDC-led target exchange and would like additional mechanisms to alleviate budgetary pressures.
- Would like to see consistent, informed, and transparent decision making with respect to framework adjustments and approval of working group recommendations.

THIRD PARTIES/OTHER STAKEHOLDERS

- Reiterated the desire for customer continuity between frameworks and provincial consistency of program offerings.
- Desire more consistency in program administration across the province.



SEVERAL SHORT-TERM (2018 – 2020) OPPORTUNITIES TO IMPROVE THE CFF AND IAP WERE IDENTIFIED AND GROUPED INTO OPPORTUNITY MODULES

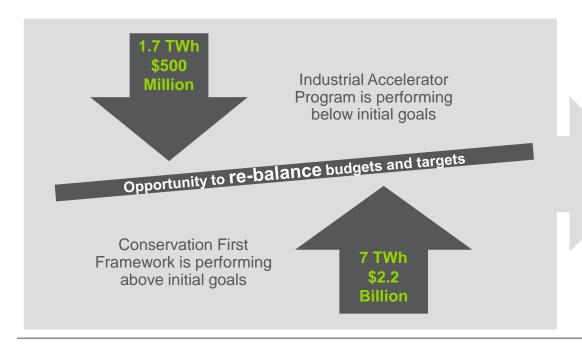


THERE IS AN OPPORTUNITY TO SHIFT BUDGET AND TARGET BETWEEN IAP AND CFF TO REBALANCE OBSERVED PERFORMANCE

MID-TERM REVIEW FINDING

CFF is performing well and it is expected to exceed the 7 TWh target within its \$2.2 billion budget.

IAP is trending below the original 1.7 TWh target achieving greater cost-efficiencies than forecasted and well below the \$500 million budget.



RESULTING ACTION

- The IESO is seeking to rebalance the 8.7 TWh and \$2.7 Billion budget between the Conservation First Framework and Industrial Accelerator Program through amending Ministry Direction in Q1 2018.
- IESO is reviewing feedback obtained through the mid-term review to understand opportunities for a central funding pool.

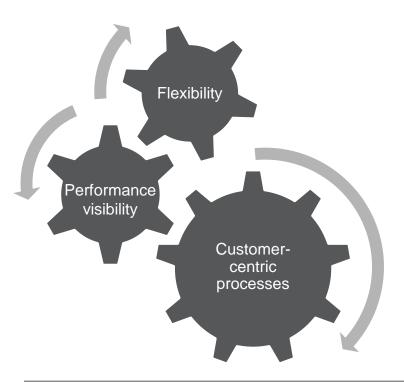
2015 - 20208.7 TWh \$2.7 Billion

UPDATE: Amending Direction received February 8, 2018

THERE ARE OPPORTUNITIES TO IMPROVE FLEXIBILITY, PROCESSES, AND VISIBILITY IN PERFORMANCE WITHIN BOTH FRAMEWORKS

MID-TERM REVIEW FINDING

Similar challenges with flexibility, customer-centric processes and contracts, visibility into performance exist within both frameworks.



RESULTING ACTION

Conservation First Framework:

- IESO and LDCs are in discussions to determine how to evolve Working Group structures and/or governance to better respond to market needs.
- IESO to initiate a formal stakeholder engagement process to support Working Groups and obtain regular feedback on programs and the framework from all stakeholders.
- IESO and LDCs seeking how best to share data between entities to better estimate framework performance and other indicators to support decision making.

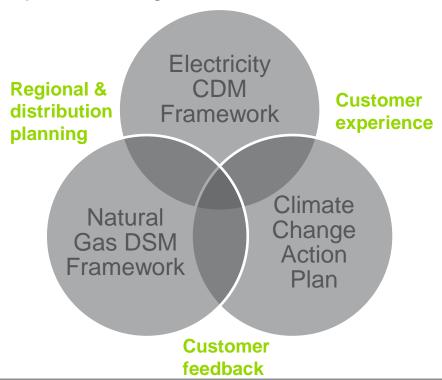
Industrial Accelerator Program:

IESO is reviewing feedback from mid-term review to determine where improvements can be made to increase flexibility, continue to transition to more customer-centric processes and contracts, and increase visibility into program performance.

THERE ARE OPPORTUNITIES TO FURTHER COLLABORATE IN THE SHORT-TERM LEADING TOWARDS GREATER INTEGRATION ACROSS FRAMEWORKS

MID-TERM REVIEW FINDING

Customers and other stakeholders see value in integration across frameworks. Increased collaboration across frameworks recognized as a first step to enable integration.



RESULTING ACTION

- IESO and Ministries are discussing attribution issues across frameworks as they arise (e.g., joint programs between GreenON, natural gas utilities, and IESO/LDCs).
- Opportunities to improve integration of CDM and other non-wires alternatives with distribution and regional planning will be further investigated as a result of LTEP 2017.
- IESO is reviewing mid-term review findings to determine how best to pilot greater integration across the various frameworks and how best to measure and communicate on current collaborative efforts.

CONTINUOUS IMPROVEMENTS WILL ENSURE BETTER ALIGNMENT OF THE FRAMEWORK TO STATED POLICY OBJECTIVES

MID-TERM REVIEW FINDING

There are minor adjustments which would improve administrative components of the Conservation First Framework to better align with policy objectives.

> **Ensuring** Target exchange customer criteria coverage Integrating Attribution and non-energy collaboration impacts

RESULTING ACTION

- LDCs to continue to lead target exchange efforts.
- IESO released target exchange criteria in January 2018 to ensure policy objectives such as customer coverage and cost efficiencies are maintained.
- IESO is reviewing mid-term review findings surrounding adequate customer coverage and how best to integrate non-energy impacts in framework.
- IESO is reviewing current allocation of program savings and funding between entities to ensure direct connection between funding and resulting savings.

THERE ARE SIX PRINCIPLES NAVIGANT'S REPORT HAS IDENTIFIED AS IMPORTANT TO CONSIDER FOR THE POST 2020 FRAMEWORK

PRINCIPLES

Regardless of policy direction, principles are important to integrate into framework design. PRIORITIZE CUSTOMER **CONTINUITY**

Changes to framework and programs occur gradually. Funding beyond 2020 is communicated well in advance to maintain momentum and customer/market confidence.

EVIDENCE-BASED REVIEW OF ROLES AND **RESPONSIBILITIES**

Independent third party review to critically assess the role of all entities best positioned to design, deliver, and administer energy efficiency programming in Ontario.

TRANSPARENCY IN COSTS AND DRIVE TOWARDS **OVERALL COST REDUCTION**

Costs across entities are tracked and recovered consistently within a framework. Framework incentives and drivers emphasize both managing costs within a budget and reducing costs overall.

SAVINGS ATTRIBUTION **FOLLOWS SPENDING**

Savings are allocated to the entity that funds the resources savings to ensure a strong connection between incentives and cost-efficiency in delivery.

CONTINUE TO ENHANCE AND PRIORITIZE CUSTOMER **EXPERIENCE**

Focus framework design on continuing to enhance customer experience and simplify participation processes. Continue to integrate feedback into design.

PRIORITIZATION OF POLICY **OBJECTIVES**

Clear articulation of primary and secondary policy objectives to enable more informed and transparent decision making when policy trade-offs exist.

THERE ARE FIVE APPROACHES NAVIGANT HAS IDENTIFIED AS IMPORTANT TO CONSIDER WHEN DESIGNING THE POST 2020 FRAMEWORK

SOME CONSIDERATIONS What frameworks to integrate? E.g., evaluation, funding, criteria, etc. **DEGREE OF** Implementation challenges: significant change to structures, including **FRAMEWORK** regulatory processes **INTEGRATION** · Integration needed at the policy level · Funding sources and level of integration with core programs (stand-**DEGREE OF** alone funding or part of programs) **APPROACHES** SUPPORT FOR Modified structures and criteria (e.g., cost-benefit) INNOVATION Transition between pilot to core programs Considerations when designing **ENABLING THE** key elements of DELIVERY OF Seek to establish targets that align with regional planning needs a framework. SYSTEM CDM opportunities associated with specific system needs **BENEFITS** Important to connect priority objectives with accountability and targets **DESIGNING** (targets tend to drive majority of behaviours in the framework) **TARGETS** Ability to modify targets as market conditions and policy evolves · When managing diversity within a framework, it can be difficult to ONE SIZE DOES provide fair and consistent oversight NOT FIT ALL · Careful consideration what is required from which entities must be considered against administrative efforts and policy objectives

Key Questions to be Discussed:

- In your view, are the actions that are either being considered or undertaken in the short-term sufficient and appropriate to address the challenges and opportunities identified through the mid-term review process?
- Stakeholders expressed an interest in providing increased input into the framework post 2020. What does successful stakeholder engagement look like as the post 2020 framework is being developed?

Other considerations from SAC?



Next Steps for Mid-Term Review

- March 8: Final meeting with the Mid-Term Advisory Group to review stakeholder feedback, responses to stakeholder feedback, and provide final feedback into Mid-Term review process
- **Before June 1:** IESO to produce a report that provides Mid-Term review recommendations to the Ministry of Energy
- Q3 Q4 2018: It is expected that the Ministry to respond to Mid-Term review report through direction to the IESO



Appendix A: Mid-term Review Study Background



Mid-term Review Advisory Group and Engagement

- In November 2016 initiated pre-engagement process by publishing draft Conservation Mid-Term Review engagement plan and invitation for Advisory Group members on IESO website
- Comprehensive, open engagement adhering to IESO principles to ensure all LDCs, customers, channel partners, other interested parties have meaningful opportunities to provide feedback for consideration by the IESO
- Multi-stakeholder Mid-term Review Advisory Group formed as part of the engagement and includes the following members (see subsequent slides for details):
 - Five LDCs (representing different size utilities, regions)
 - Five customers (representing a mix of sectors, and distribution/transmission connected customers)
 - One service provider
 - One manufacturer
 - IESO (Chair plus support staff)
 - Observers



Public Engagements and Market Research

- Public engagements:
 - Five public webinars covering all discussion topics of the Mid-term Review completed from April 2017 through to October 2017, including a final webinar on the draft final report in February 2018
 - 26 participants (customers, LDCs, service providers, associations) have provided written comments to date
- One-on-one market research interviews completed in Q3 2017
 - 51 comprehensive interviews completed with customers, LDCs, service providers and associations
- Four in-person workshops completed in Q4 2017 with customers, LDCs, IESO and OEB (46 participants in total)



Mid-term review Advisory Group Members and Observers

| Mid-term Review Advisory Group Membership | | | | | |
|---|-------------------|--|--|--|--|
| Consumers (5) | | | | | |
| Housing Services Corp. | Parry, Myfanwy | | | | |
| Loblaw | Schembri, Mark | | | | |
| University Health Network | Rubinstein, Ed | | | | |
| CBRE Limited | Abraha, Amha | | | | |
| AMPCO | Anderson, Colin | | | | |
| Local Distribution Companies (5) | | | | | |
| Customer First Inc. | Barker, Chris | | | | |
| Hydro One | Katsuras, George | | | | |
| Entegrus Powerlines Inc. | Rodd, Margaret | | | | |
| Alectra | Bond, Raegan | | | | |
| Toronto Hydro-Electric System | Marchant, Michael | | | | |
| Electricity Service Providers/Consultants (2) | | | | | |
| | Kalyanraman, Guru | | | | |
| Nest Labs | Calin, Iuliana | | | | |
| IESO | | | | | |
| Chair | Nik Schruder | | | | |

Observer organizations

Ministry of Energy

Ministry of Environment and Climate Change

Ontario Energy Board

Environmental Commissioner of Ontario

Enbridge Gas Distribution

Union Gas Limited

Association of Major Power Consumers in Ontario

Canadian Solar Industries Association (CanSIA)

Electricity Distributors Association

Ontario Energy Association

ENWIN Utilities

Brantford Power Inc.

Cornerstone Hydro Electric Concepts Association

Energy+Inc.

Essex Powerlines Corporation

Oshawa PUC

Thunder Bay Hydro Electric Distribution Inc.

Veridian Connections Inc.

Roberts and Co.

Summerhill Group

build ABILITY

Burman Energy Consultants Group Inc.

ecobee

Just Energy Ontario LP

liteSMART

Ontario Clean Air Alliance

Building Owners and Managers Association



OVERVIEW OF MID-TERM REVIEW PROCESS

Issues were identified by the IESO and grouped into seven major topics that will guide the Framework Review through four key activities outlined below. The non-energy benefits topic will be explored as part of the final report pending inputs external to this study.

| Current State Summaries | | Market Research | Opportunities | Final Study Report | |
|--|---|--|---|--|---|
| Customer and market engagement and satisfaction Definition of CDM Collaboration Governance & operations Planning integration Climate change Budgets, targets, cost effectiveness | March 16 April 20 April 20 May 18 June 15 July 13 August 17 September 14 | Current State Summaries: Summarize the current state of each theme (e.g., existing operations, policies, progress, decisions, etc.) and are used as a basis for market research | To confirm and enhance content of the topic reports To gather insights into future framework improvements, design, and delivery | Research, analysis, market research inform potential modifications Cost-benefit and gap analysis to scope opportunities Consolidated list of medium-term (before 2020), and long-term (post 2020) opportunities for prioritization by the IESO | Consolidation of findings, feedback, and identification of issues and opportunities Methodologies and approach clearly discussed Out of Scope: New mass market research 2011-14 framework in-depth analysis New program design LDC Mid-term incentive Evaluation Measurement &Verification protocols Codes and Standards |
| Non-energy impacts | October 12 | | May to October | September to November | November to February |