

CONSERVATION FRAMEWORK MID-TERM REVIEW

FUTURE STATE DISCUSSION

SEPTEMBER 21, 2017

NAVIGANT

DISCLAIMER

This report was prepared by Navigant Consulting Ltd. (Navigant) for the Independent Electricity System Operator. The work presented in this report represents Navigant's professional judgment based on the information available at the time this report was prepared. Navigant is not responsible for the reader's use of, or reliance upon, the report, nor any decisions based on the report. **NAVIGANT MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED.** Readers of the report are advised that they assume all liabilities incurred by them, or third parties, as a result of their reliance on the report, or the data, information, findings and opinions contained in the report.

TABLE OF CONTENTS

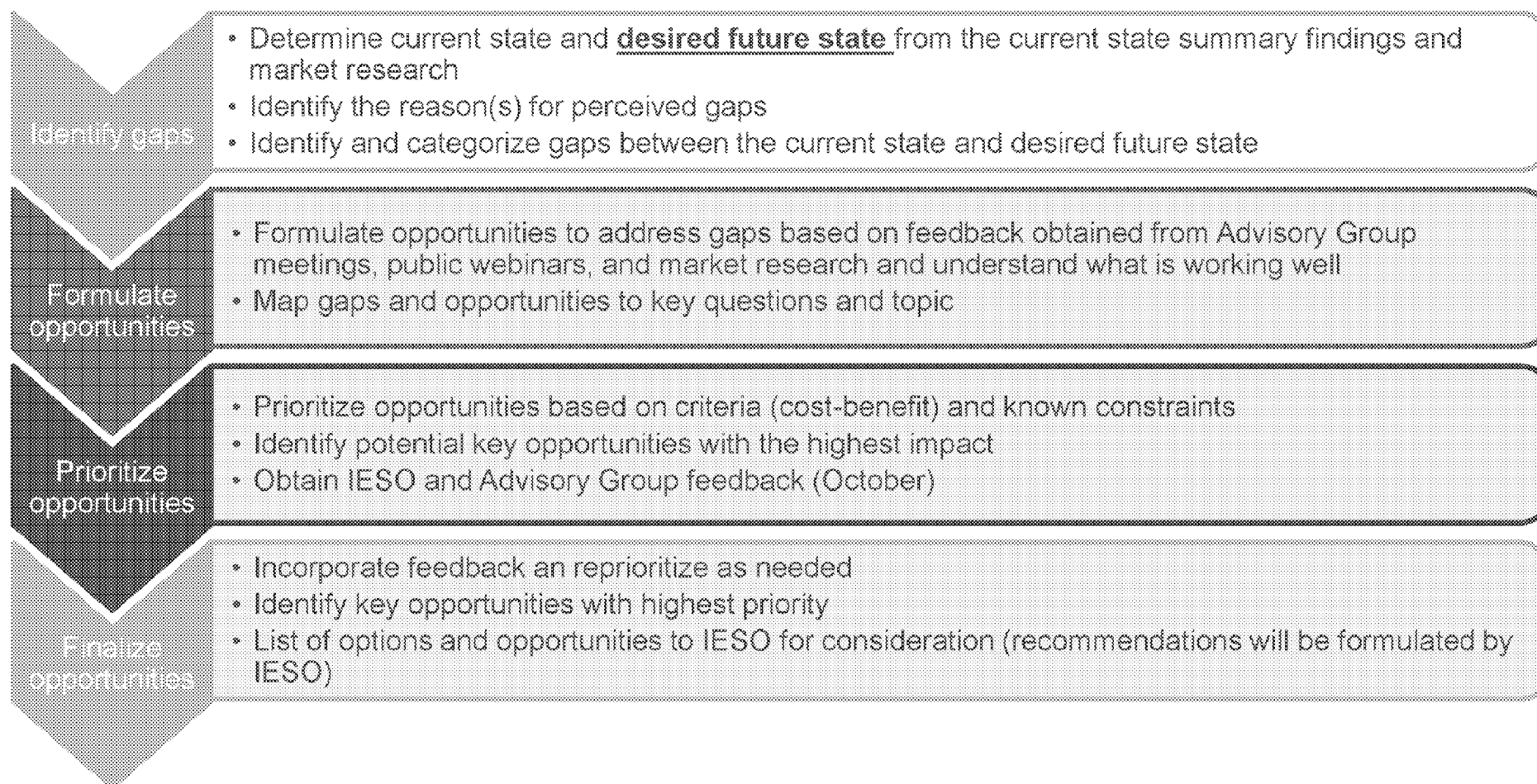
- Review approach to future state and opportunity development
- Review policy mapping
- Discuss future state principles

Appendices:

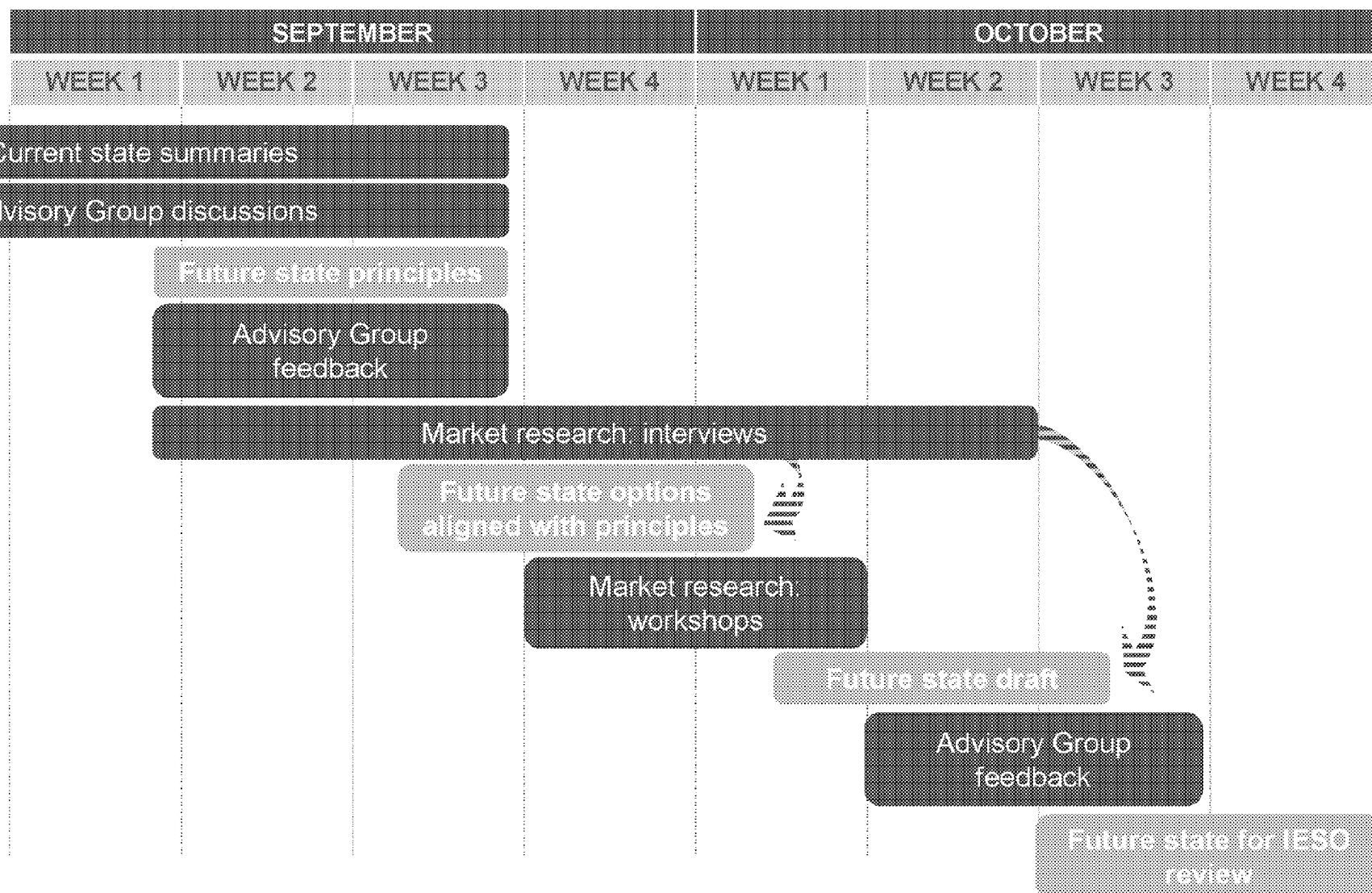
- Key questions by topic
- Themes identified by topic

APPROACH TO OPPORTUNITY DEVELOPMENT

- The schematic below outlines the proposed methodology to identify gaps with the Conservation First Framework and Industrial Accelerator Program and to develop opportunities to address these gaps



FUTURE STATE DEVELOPMENT



NAVIGANT COMPLETED A MAPPING OF POLICY OBJECTIVES

LTEP 2013	Directions to IESO: CFF
CCAP	Directions to IESO: IAP
	Conservation First

60 unique items

E.g., Providing long-term, stable conservation funding (LTEP 2013)

Segmented into **8** categories

Cost efficiency	11
Customer choice	11
Energy affordability	7
Energy savings	12
Greenhouse gas reductions	11
Innovation	2
Integration with planning	3
Market transformation	3

E.g., Innovation

- Encouraging innovation and the adoption of new technologies
- Establishing approval criteria for conservation programs

Classified into **3** types

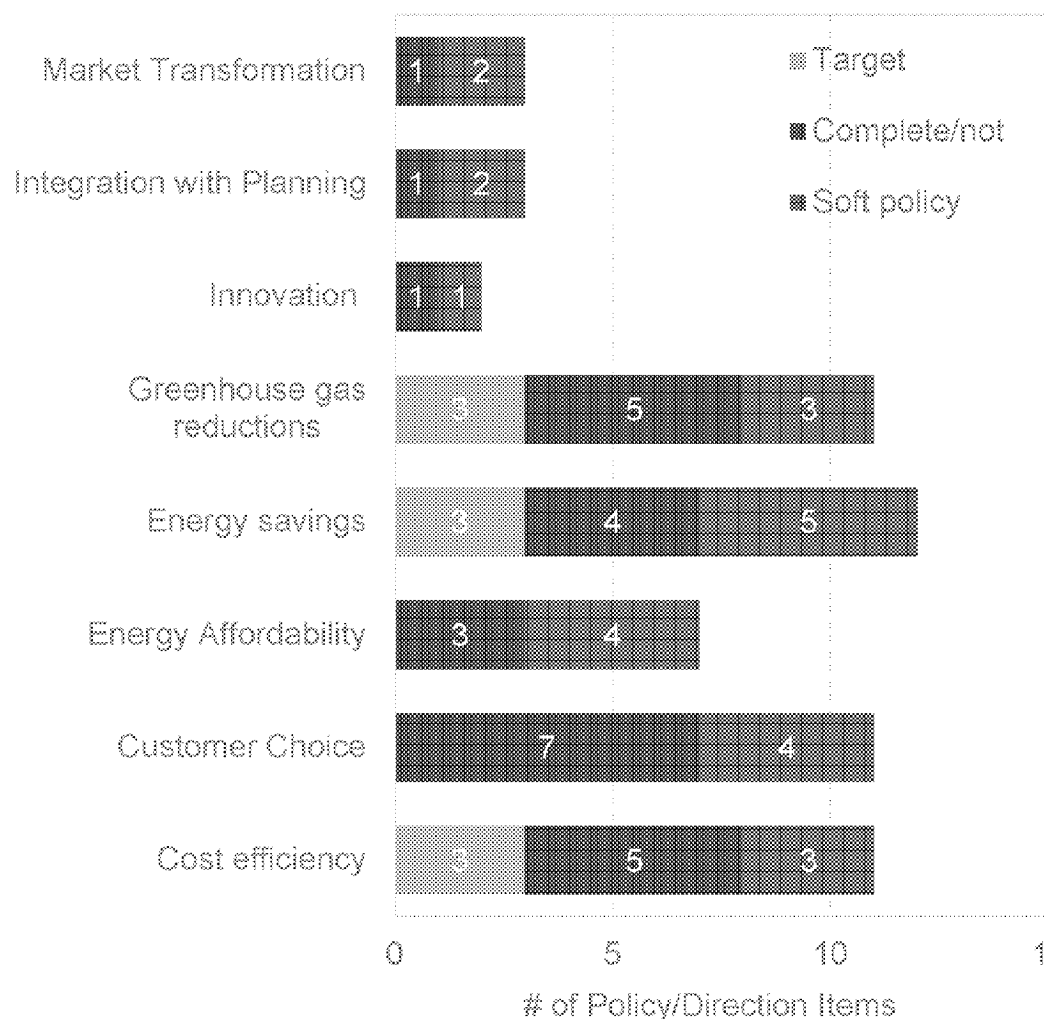
Complete/not: policies and Directions require a certain action that is either complete or incomplete

Target: a quantitative metric is stated in the policy or direction, e.g., energy savings, cost-effective

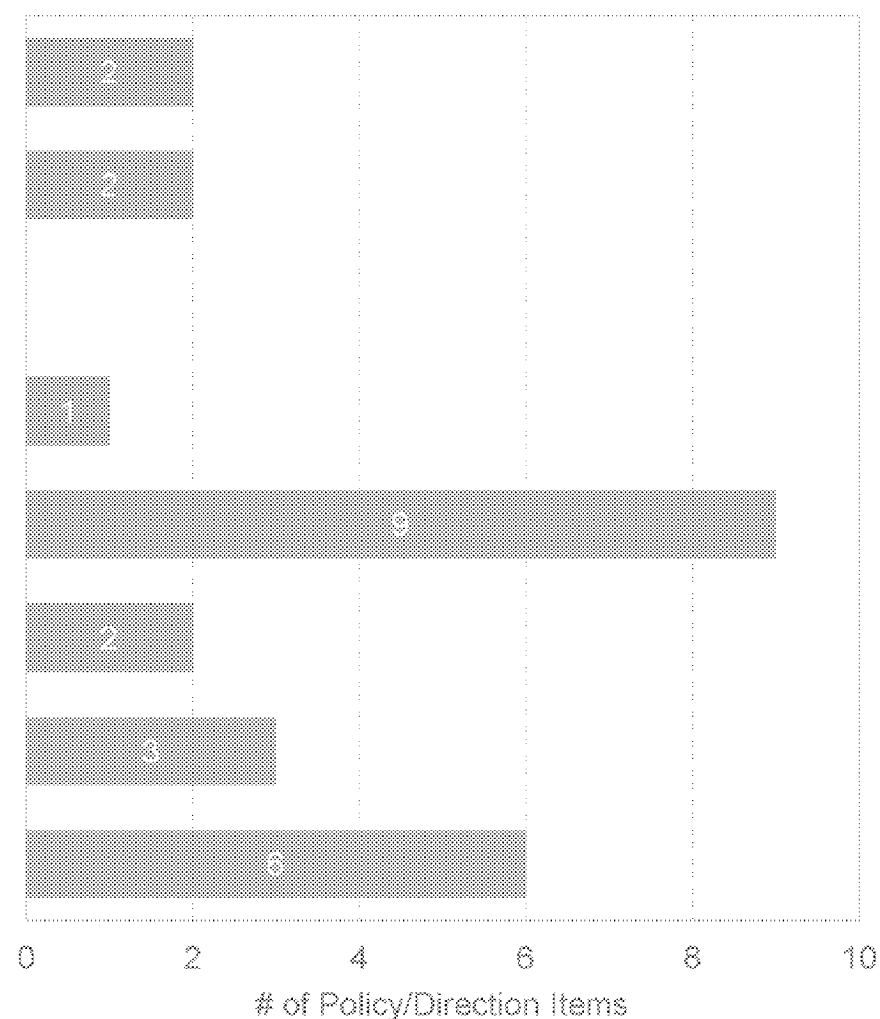
Soft policy: aspirational or over-arching soft policy or Direction

MAJORITY OF POLICIES AND MINISTERIAL DIRECTIONS ARE NOT METRIC OR TARGET BASED

Results of Policy Mapping:



Metrics Tracked by IESO:



THERE ARE COMPETING PRIORITIES WITHIN THE INITIAL AND EVOLVING POLICY OBJECTIVES

Some examples of competing priorities:

Cost efficiency while maintaining provincial consistency and offering programs to all customer segments

Integration with planning while maintaining provincial consistency (one size does not fit all when it comes to integration with regional needs)

Enabling customer choice while maintaining a focus on cost efficiency, provincial consistency, and energy savings targets

Energy savings as a metric and target while considering greenhouse gas reductions

Innovation and market transformation while maintaining cost efficiency and energy affordability

Others?

INITIAL THOUGHTS ON PRIMARY FUTURE STATE PRINCIPLES

- **Primary guiding policy:**
 - **Customer coverage:** CDM continues to be delivered to all customer segments
 - **Cap on budget of \$2.2 Billion for CFF to deliver 7 TWh**

- **Initial guiding principles for future state:**
 - **Cost efficiency:** CDM continues to be a cost efficient and cost competitive resource
 - Changes to the framework continuously drive towards improvements in acquisition costs and cost effectiveness
 - **Customer experience:** customer interactions with the framework will continue to be improved
 - Changes to the framework focus on improving the customer experience

APPENDIX A: KEY QUESTIONS BY TOPIC

KEY QUESTIONS

Customer and market engagement & Satisfaction:

- How do customers view the Save on Energy brand? How can customers' perception of the Save on Energy brand be improved?
- Are programs meeting the needs of the customer? How can the customer experience be improved?
- Are there any customer or sector specific gaps in the framework?
- Is the framework itself creating challenges for the customer or market participants who could support CDM/DSM?

Definition of CDM Key:

- How has the definition of CDM changed over time in Ontario?
- Is the current definition appropriate to achieve the policy objectives of the framework and to align with Ontario's broader GHG reduction goals?
- How does the definition of CDM in Ontario align with the definition of CDM/DSM in other jurisdictions?

Collaboration:

- Have the expected outcomes of 1) delivery efficiencies and 2) customer convenience been achieved through collaborative efforts undertaken to date?
- What other outcomes has collaboration generated?
- Should additional collaboration be enabled? If so, how? If not, why not?
- What are the barriers to collaboration and what are some options to tackle these barriers?
- If collaboration should be encouraged, are there structural changes that can be addressed in the current or future frameworks (2020+)?

KEY QUESTIONS

Governance and operations:

- Are the structures, internal processes, and accountabilities in place clear, effective, and efficient?
- What can be done to improve these structures?
- Are there additional tools and/or changes that can better support framework objectives?
- Are the views of interested stakeholders adequately being reflected in decision-making?
- Do existing processes and Working Groups adequately facilitate the inclusion and consideration of the views of interested stakeholders?
- What are some key considerations thinking beyond 2020?

Planning integration:

- How do CDM programs and the CFF fit into the broader planning context (today and in the short, medium, and long-term)?
- How can customers be better engaged in the various planning processes?
- What can be done to address barriers of implementing incremental CDM solutions from the IRRP? (specifically with respect to the approach, performance metrics, measurement, and governance)
- How can the opportunities for further integration of CDM solutions in the IRRP be encouraged from various stakeholders? What are the barriers to implementation?

KEY QUESTIONS

Climate change:

- What do Ontario's current climate policy and plans mean for the CFF and the Industrial Accelerator Program?
- Is the current structure of CFF and IAP conducive to supporting Ontario's climate change policy objectives? Why or Why not?
- Should CDM targets, budgets, and/or structure be adjusted in light of the Climate Change Action Plan (CCAP) and broader climate policy? If so, how? Should other aspects of the CFF and IAP be adjusted in light of Ontario's climate change policy objectives? If so, how?
- What are the implications for customers with the introduction of CCAP?

Budgets, targets, cost effectiveness

- Are the metrics that measure success aligned with goals and policy objectives?
- Should targets be adjusted given framework goals and policy objectives? If so, how? What about beyond 2020?
- Should budgets be adjusted given framework goals and policy objectives? If so, how? What about beyond 2020?
- Do the detailed results provide any additional insights that might change how to adjust targets or budgets?
- What are some alternate approaches and what could be the impact on cost effectiveness? Are these approaches appropriate for the second half of the framework? Beyond 2020?
- What are some methodologies to reduce reliance on incentives? Are these methodologies appropriate for the second half of the framework? Beyond 2020?

APPENDIX B: THEMES IDENTIFIED BY TOPIC

THEMES FROM ADVISORY GROUP MEETINGS

Topic	Themes
Customer and market engagement and satisfaction	• Need a jurisdictional review where appropriate to provide comparables for a better sense of how the CFF is performing • The review should consider the impact of government policy/announcements e.g., 25% reduction for electricity bills, greenhouse gas and climate change initiatives • Market research should include consulting engineers and agencies that represent customer segments
Collaboration	• The definition of CDM must be considered within the broader climate policy • The context of fuel switching has changed over time (away from electricity when the system was capacity constrained to more recent policy push towards electrification) and will need to be discussed in more detail during the climate change topic • Lack of measurement and data for collaboration • Valuable to demonstrate achievement of policy objectives: delivery efficiencies and customer convenience and understand the barriers and opportunities stemming from the industry structure within Ontario
Planning Integration	• Conflict between the fact that energy targets are assigned in the CFF and that planning is primarily focused on addressing peak demand • Timing of regional planning is not supportive of incremental conservation (not usually feasible to respond to short term needs) • LDC business models are not aligned with supporting incremental conservation • Minimal coordination between gas and electricity planning (different regulators, laws and planning processes for gas and electricity) could lead to integration issues and missed opportunities • Planning is primarily focused on the system-level, but the current regulatory environment causes incremental conservation to be seen as a local or regional solution • Many action items identified for improving planning in relation to conservation, may be better addressed through avenues outside of the CFF

THEMES FROM ADVISORY GROUP MEETINGS

Topic	Themes
Governance and Operations	• Key processes that have opportunities for improvement and potentially high impact: province-wide program changes and introduction of new province-wide programs, responsibility and authority, program operations (iCON, approvals prior to project initiation) • Roles, responsibilities, and processes surrounding working groups and CFIC and where the voices of the customer, manufacturers, service providers and other interested stakeholders is appropriately captured and whether a more formal/different process is needed • Roles, responsibilities, and processes surrounding competition and innovation and how the framework can enable more innovation and what are the implications • Inconsistency across the province in terms of interpretation of program rules, results (specifically net-to-gross), and project approvals with specific discussions around the difference between project approvals between electricity and natural gas programs • Other processes that could be improved with a smaller impact are: updated templates and processes for CDM plans, program business cases, customer interaction with EM&V processes and IESO-LDC audits
Climate Change	• Given future supply mix in Ontario, increased electrification may result in increased GHGs • There is an overlap between CDM and DSM targets and future CCAP programs and targets • Communication to customers could be confusing if there is no integration • Collaboration is required for integration between the three frameworks, but there is little policy guidance • Collaboration should be driven from the top down (i.e., amongst the ministries) to reduce duplication of efforts and increase cost-effectiveness • Overlap between CCAP objectives and CFF programs, CFF targets and budgets should be updated • More cost-effective to modify existing programs than add new programs to meet climate change goals • There will be a learning curve for customers to understand greenhouse gas reduction goals (which could increase electricity use) versus electricity reduction goals • Harmonization of targets between frameworks may be necessary in achieving integration. However, these targets must be carefully designed and must be cost-effective • CFF policy should be adjusted to include fuel-switching, and there is strong support for incentives for distributed energy resources

THEMES FROM ADVISORY GROUP MEETINGS

Topic	Themes
Budgets, targets, cost-effectiveness	• Not all policies and Ministerial directives are tracked and measured • Constraints surrounding LDC budgets and targets can conflict with policies and directives (for example providing province-wide coverage for all programs) • Many LDCs identified that their primary concern is running out of budget, as opposed to not meeting targets • There is support among many LDCs to provide continued conservation offerings to customers. However, LDCs believe budgets must be updated to allow for this • Progress to targets and budgets do not fully represent the true progress, as LDCs commit funds well in advance of savings being realized, a forecast by program taking into consideration acquisition cost trends and the pipeline committed and future projects of LDCs would provide a more accurate assessment • 2015 was a transition year for the framework, and should be judged accordingly, 2021 will also likely be a transition year with projects completing in the following framework • The 2020 energy target and need to manage acquisition costs results in less focus placed on projects that have savings with longer persistence that may have higher acquisition costs • LDCs are outperforming versus the APS, there is higher progress relative to the APS in the residential sector than in the business sector (this may change as additional data becomes available) • There are select LDCs that have "trapped" budgets, i.e. budgets allocated to an LDC that may not be spent within the 2015 to 2020 period and is not eligible for cost efficiency incentive. This could be addressed through a target/budget exchange mechanism • Minimal budget/target exchange activity between LDCs to date is in part due to uncertainty of the outcomes of the mid-term review process • Budget/target exchange could allow for LDCs or other organizations to gain incremental profits, and should be closely monitored • LDCs agreed that there is little need for a major change in the method for budget/target re-allocation, however there is concern with insufficient budget in the short-term for some LDCs that could be addressed through the current mechanism for exchange • A potential solution for the issue of LDCs running out of budgets is a form of floating budget, where LDCs can step in and help other LDCs meet their conservation target