



APPENDIX C.2:
MARKET
RESEARCH
SUMMARIES

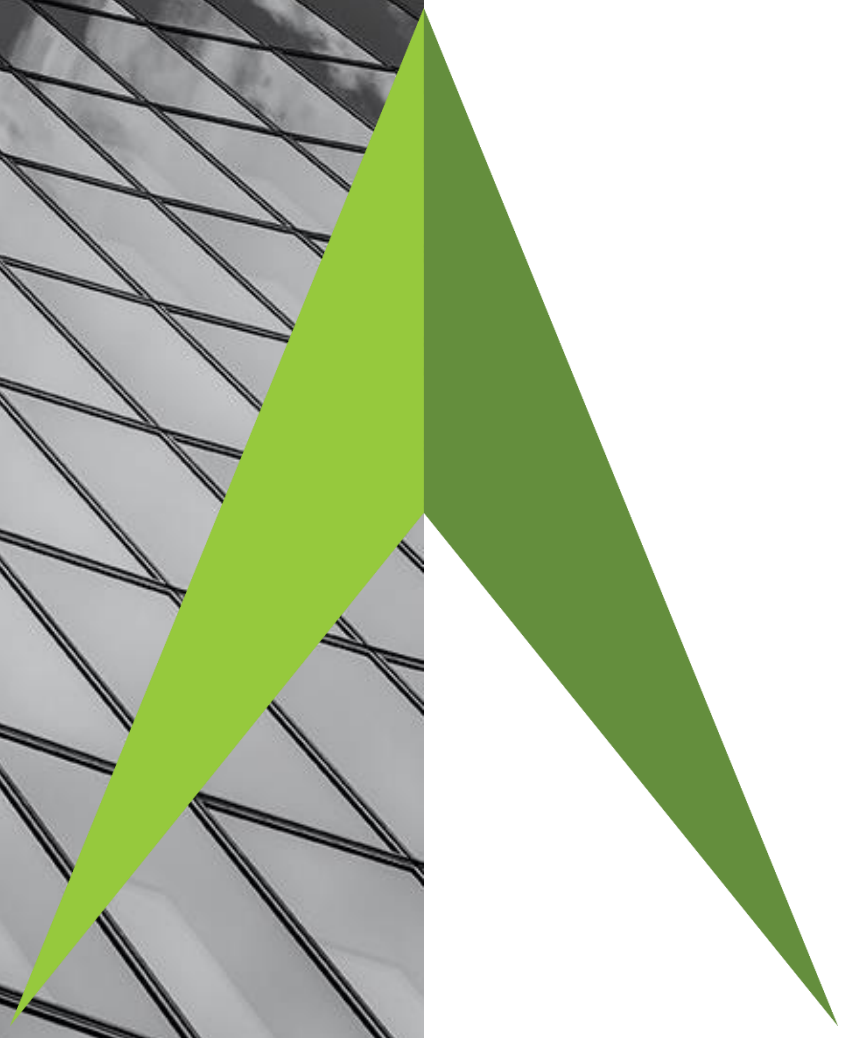


II. WORKSHOPS

- i. LDCs and gas utilities
- ii. IESO
- iii. Customers
- iv. OEB

WORKSHOPS WERE CONDUCTED WITH FOUR STAKEHOLDER GROUPS

Workshop	Description	Date	Attendees
LDCs and gas utilities	Presentation and comments on mid-term review findings to date. Guiding principles exercise to determine what LDCs and gas utilities value in a CDM framework. Scenario assessment of four different potential directional changes to the CFF framework: minimal disruption, program/sector accountability, climate and collaboration alignment, and innovation focus	Oct. 2	~25 – 30
IESO	Presentation and comments on mid-term review findings to date. Alignment exercise to understand the potential internal barriers to implementing changes to the framework. Discussion and solution generation of key framework challenges identified: working group structure, IESO visibility into LDC forecasts, small utilities with big projects, and non-delivering LDCs. Further discussion on the challenges associated with a one-size-fits-all framework and what a program sector/accountability framework scenario could look like.	Oct. 3	~10 – 15
Customers	Presentation and comments on mid-term review findings to date. Guiding principles exercise to determine what customers value in a CDM framework. Discussion of anticipated changes to customers' businesses in the future and how a CDM framework could support those changes.	Oct. 16	~20 – 15
OEB	Presentation and comments on mid-term review findings to date. Discussion of key cross-cutting questions that impact both CDM and DSM frameworks and CDM and climate efforts. Topics of discussion included: planning integration, climate change, and collaboration.	Oct. 20	~5 – 10



i. LDCS AND GAS UTILITIES

LDCS AND GAS UTILITIES COMMENTED ON AND ADDED TO THE FINDINGS OF THE MID-TERM REVIEW TO DATE

Definition of CDM needs to align with policy goals and government initiatives.

Collaboration is happening naturally. Positive outcomes should be captured, but there is a balance needed between visibility and administration.

LDCs can be a good vehicle to achieve other policy objectives (e.g., climate).

One customer group will lose whether or not there is a target exchange (need to allocate resources).
Question of risk and where it lies.

Program approvals (re-design or new programs) seen as a large pain point.

Multiple programs in market from different entities creates customer confusion.

LDCS AND GAS UTILITIES WERE PRESENTED WITH FOUR FRAMEWORK SCENARIOS FOR DISCUSSION IN SMALL GROUPS

Minimal disruption

Description: Only focus on improving key items identified through the current state summaries for the second half of the framework.

LDC Commentary/Reactions:

- **Framework changes should be an evolution rather than revolution.**
- Minimal disruption not in the best interest of all, there needs to be some disruption to at least begin to align with climate policy through expanded delivery model for LDCs.
- IESO tools (such as iCON) are not appropriate for the market, tools should be designed around programs not vice versa (by customer facing entities).
- CFF is working well and only requires tweaks.
- Needs to be clear policy direction from government (there is a lot of “wait and see”).

Program/sector accountability

Description: Programs are transitioned to central program administration and delivery, while LDCs focus on program administration and delivery where a local presence makes sense.

LDC Commentary/Reactions:

- **LDCs should be accountable for design, delivery, and administration.**
- Centralized delivery model for any program is not desired. LDCs have closest contact with customers.
- Cooperation is minimal because goals are not clearly defined.
- Role of IESO limited to EM&V and funding.
- Integrated climate and CDM framework to avoid customer confusion.

LDCS AND GAS UTILITIES WERE PRESENTED WITH FOUR FRAMEWORK SCENARIOS FOR DISCUSSION IN SMALL GROUPS

Climate and collaboration alignment

Description: Increased focus on collaboration with natural gas and Green Ontario Fund programs to work towards the provincial climate policy objective.

LDC Commentary/Reactions:

- In the short-term, measure GHG savings and figure out ways of incenting GHG savings, but new targets should be more of a long-term consideration.
- Modify definition of CDM to consider the impact on targeted needs (e.g., load shifting, CHP) and cost effectiveness.
- Putting demand back into consideration may help. Need MOE and MOECC collaboration.
- Can leverage existing channels to integrate climate into CDM framework.
- Important not to create customer confusion.

Innovation focus

Description: Changes focus on improving the ability for new programs to be approved and delivered in the marketplace and adding new players with new approaches and technologies.

LDC Commentary/Reactions:

- Improve ability to be nimble. Need streamlined approach for programs to easily access incentives, need to remove barriers, and reduce program confusion. Focus on complimentary programs and one access point for customers.
- Sector-based delivery approaches and innovation.
- Should have the ability to expand working group membership to channel partners where it makes sense. Clear accountability and roles is critical.
- Should not have target exchange open to third parties (LDCs only), targets should stay the same for the balance of the framework.

AN ACTIVITY BRAINSTORMING BOTH SHORT TERM CHANGES AND A FRAMEWORK BEYOND 2020 UNCOVERED SEVERAL KEY THEMES

Alignment and collaboration

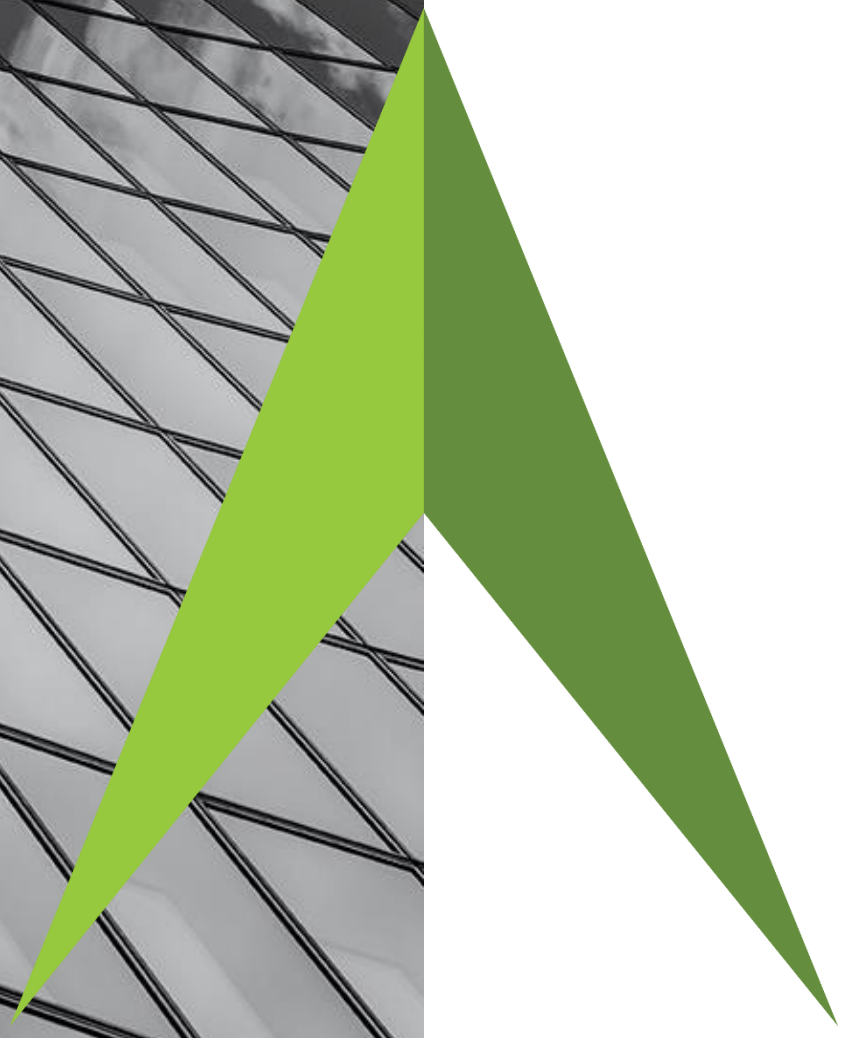
Adapting programs to align with climate

Broader, flexible definition of CDM

Clear accountability and decision making

Future builds on LDC success

Collaboration needs to have a purpose



ii. IESO

IESO DISCUSSION AND SOLUTION GENERATION OF KEY FRAMEWORK CHALLENGES IDENTIFIED

IESO Visibility

Description: *the CDM plans are force fit and do not provide meaningful insight into what LDCs will actually achieve. LDCs do internal forecasting with pipeline data, so CDM plans are just a requirement. This causes a challenge that IESO does not know actual progress towards budgets and targets. CDM plans take a lot of resources*

IESO Commentary/Reactions:

- **Collaboration, partnerships, and tools to improve the quality of and ability to forecast.**
- IESO has already requested LDC forecasts, but may need a more regular view into pipeline and/or to leverage existing LDC forecasts rather than forcing them into CDM Plan.
- More forecasting of the central services budget and communication of this should be done.

Big projects, small LDCs

Description: *Driving the concern for smaller utilities around budgets. One project takes a substantial part of budget (with associated effect on achievement to target)
Difficult to accurately forecast to support participation in a target exchange.*

IESO Commentary/Reactions:

- **Target exchange, central management, or budget re-allocation are all options to support this issue.**
- Target exchange allows for sharing between LDC to allow small LDCs to accommodate these projects.
- Budget re-allocation could allow for large projects. Central management could be a solution for large projects.
- Flag and identify where issues with LDCs with big projects are and determine how prevalent the issue is (i.e. it might not be that big of an issue)

IESO DISCUSSION AND SOLUTION GENERATION OF KEY FRAMEWORK CHALLENGES IDENTIFIED

Non-Delivering LDCs

Description: some LDCs are opting out of province wide programs which means central services is being over-burdened.

IESO Commentary/Reactions:

- Risk of running out of central services budget is a definite possibility.
- Work towards gaining efficiencies and improving forecasting.
- Start over after the MTR with a new methodology and reallocate budgets and targets.
- Obtain budget from LDCs that opt out of province wide programs.

Working Groups

Description: working group decisions are slow and cumbersome. Smaller utilities voices not heard. There is decision by consensus (which questions the efficiency of decision making. Lack of authority.

IESO Commentary/Reactions:

- Better role definition, accountabilities, requirements, and decision making authority.
- Need high-level objectives for program design priorities so WGs can measure themselves against this.
- Different forum for day to day management vs program design.

IESO DISCUSSION ON OTHER FRAMEWORK CHALLENGES AND SCENARIOS

Sector Alignment

Description: Programs are transitioned to central program administration and delivery, while LDCs focus on program administration and delivery where a local presence makes sense.

IESO Commentary/Reactions:

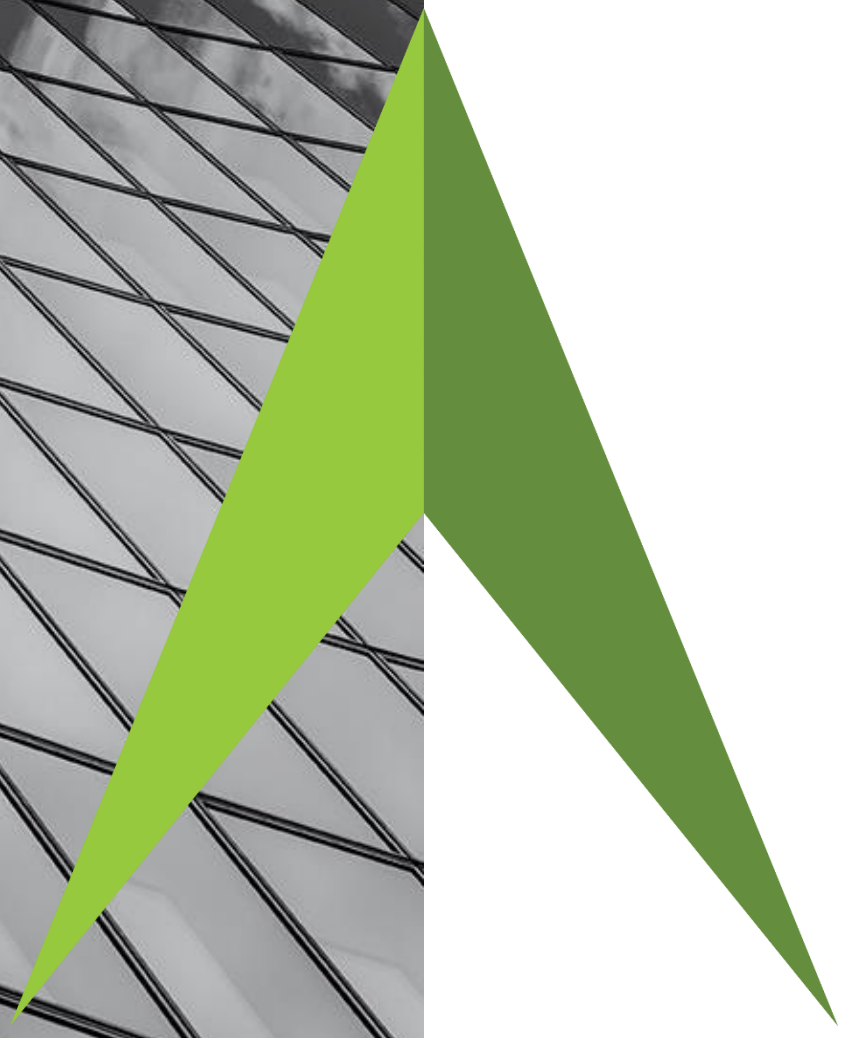
- It is important to determine which is the best entity to deliver to specific customers.
- Costs can increase with the procurement of multiple vendors for the same service.
- Multisite customers face challenges and sometimes need to submit dozens of applications. There is currently only a process for multi-site customers in the Retrofit program.
- LDCs add value when there is a unique customer segment or they have unique insights and can deliver more efficiently.

One size fits all framework

Description: The framework treats projects, customers, and LDCs the same across the province. What are some of the challenges associated with this approach?

IESO Commentary/Reactions:

- The current framework does not have factors that allow IESO to modify framework parameters across LDCs, but there are mechanisms for LDCs to work together (target exchange, joint plans).
- Size does not necessarily determine effectiveness and it is a challenge to identify which entities are delivering more efficiently than others.
- A procurement to market could provide the option for LDCs to bid on their own area, but the market would not be limited to LDCs, and, in theory, this could bring costs down.
- In other jurisdictions, utilities usually work with third party delivery agents for jurisdiction-wide delivery of programs.



iii. CUSTOMERS

CUSTOMERS COMMENTED ON AND ADDED TO THE FINDINGS OF THE MID-TERM REVIEW TO DATE

- **Barriers:**
 - Current program structures and requirements can create strange results that are at odds with the ultimate objectives (e.g., less efficient unit to avoid the customer costs of measurement & verification)
 - Need to consider the customer costs of participating in programs (admin time and resources) which can negate any incentive benefits and result in low/no uptake of certain technologies
 - Data accessibility and consistency is a barrier
 - Can't just think of simplicity, also need flexibility in approach
- **Gaps:**
 - Other technologies need additional support (e.g., district energy)
 - Need to consider the whole building (moving away from simple projects)
 - Desire for additional education and information to enable operational and behaviour savings
- **Cross-fuel integration:**
 - Cross-fuel integration and consistency
 - There are differences in the electricity and natural gas processes, natural gas programs are easier to understand and work through
- **Enablers:**
 - Existing groups share best practices about energy management, programs (beyond just a CDM discussion)

CUSTOMERS IDENTIFIED PRINCIPLES TO GUIDE THE FRAMEWORK IN THE NEAR TERM AND LONGER TERM

Principles identified	Description (what the framework would enable)
Simplicity and alignment	<ul style="list-style-type: none"> • Customer centric, ease of use, alignment with operations and policy • No silo between electricity and gas programming
Transformation	<ul style="list-style-type: none"> • Innovation, flexibility, focus on end result vs. process • Creating step change in performance vs. incremental change • Continuity in funding
Results	<ul style="list-style-type: none"> • Impact and value visible to both parties (customer and LDC) • More customer focused, beyond kWh • Measurable, achievable, and sustainable • More appropriate allocation of risk
Flexibility	<ul style="list-style-type: none"> • Designing with more sector focus, avoiding social equity issues • Caveat that reductionist method doesn't fit everything (flexibility does not mean simplicity)
Supported	<ul style="list-style-type: none"> • Customers have technical and administrative resources available to support participation • Ability to leverage programs on a holistic level with lots of options • Consistent and fair decisions and responses

CUSTOMERS HIGHLIGHTED TENSIONS RESULTING FROM THE CURRENT FRAMEWORK AND HOW THEIR BUSINESSES ARE CHANGING

Tensions within the framework

- **Competing priorities** (*entities involved in the framework make their living on selling electricity*)
- **Customers left behind** (*structure not fair and equitable*)
- **Current players not effective** (*gas utilities are better positioned with experience and competence*)
- **Challenge on the power of LDCs** (*ability to approve/not approve projects, tension between different departments within the LDC*)
- **Onerous processes** (*requires high degree of certainty up-front*)

How businesses are changing

- **Data driving decision making** (*drives a need for transparency and communication*)
- **On demand analytics**
- **Transformational trends** (*transportation as a service, IoT, sharing economy and circular economy*)
- **Technology trends** (*EVs, fuel switching, decarbonization, battery storage, smart buildings, smart cities*)
- **Growing divide as technology accelerates** (*regions differ with respect to access to capital*)

CUSTOMERS HIGHLIGHTED OPPORTUNITIES TO IMPROVE THE FRAMEWORK AND LEVERAGE THE TRENDS THEY ARE OBSERVING

More resilient and flexible

Resident-tenant engagement

LDC involvement in community projects

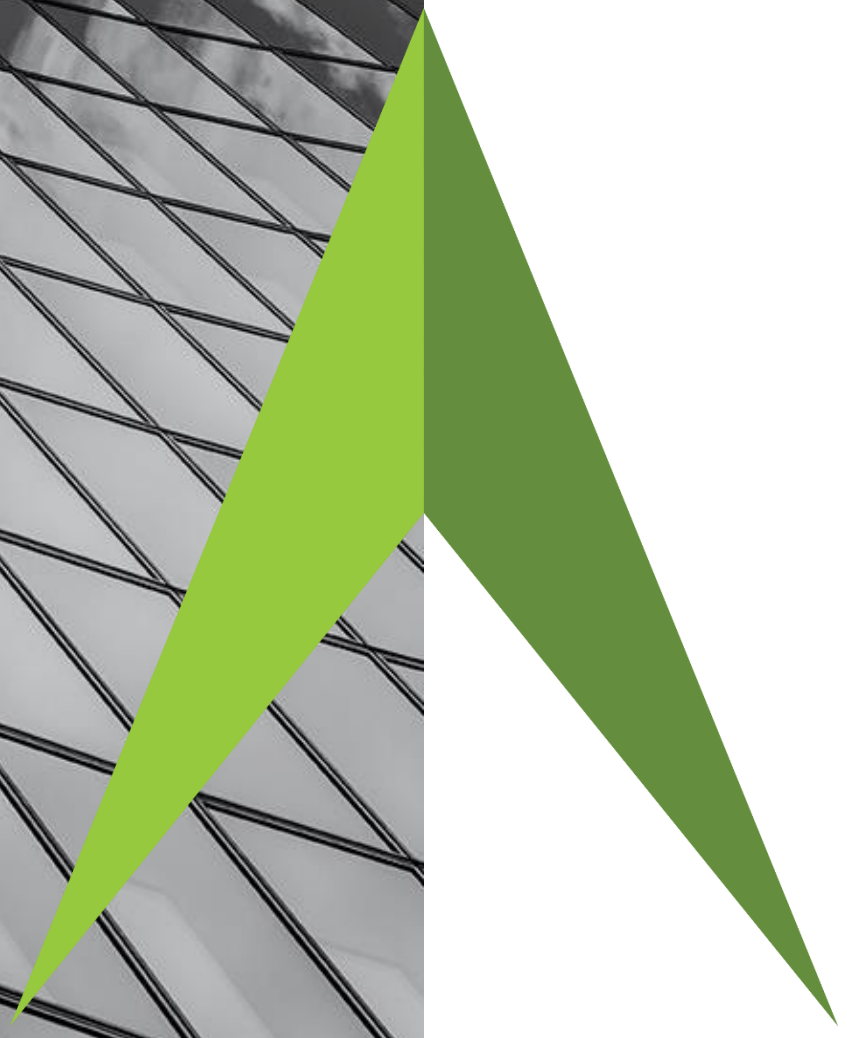
Passive design for buildings

Climate change

Storage

Big data and AI

Joint programs



iv. OEB

DISCUSSIONS FOCUSED ON THREE AREAS: CLIMATE CHANGE, COLLABORATION, AND REGIONAL PLANNING

Climate Change

- **Fuel switching is a challenging issue** because it cannot not be justified under the current framework
- Would be helpful to **understand what is being optimized** and consideration of a hierarchy of requirements
- **Objectives need to be clear** at the ministry level
- Achievable potential study could look similar to a **marginal abatement cost curve when climate is the focus**

Collaboration

- There are **challenges related to attribution, evaluation, and funding** between natural gas and electricity and these challenges increase with the introduction of climate change programs
- A **collaboration charter/guidelines** would be helpful to work through issues and determine how best to deal with them up-front rather than as issues arise
- There is a **trade-off between flexibility for the customer and evaluation rigour**
- Collaboration at the program level is difficult without **customer involvement in the process**
- Natural gas utilities have been asked to do **more collaboration and self-report their progress**
- **Interaction between natural gas utilities and cap & trade** is being investigated through the gas DSM review

Regional Planning

- **Incremental CDM** is best **addressed through the regulatory process** (regional planning)
- Moving incremental CDM through the regulatory process needs to be **tested to understand the real barriers**
- **Optionality in procedures** with a focus on outcomes was viewed positively by LDCs
- **Definition of CDM must align between OEB and IESO**