Natural Gas Demand Side Management Stakeholder Advisory Group Report to the OEB

November 11, 2024

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1.0 Introduction and Overview

This report documents feedback and recommendations received from the Natural Gas Demand Side Management (DSM) Stakeholder Advisory Group (SAG). The SAG was involved in detailed discussions related to Enbridge Gas Inc.'s (Enbridge) future natural gas DSM plan. As part of this engagement, the SAG also worked closely with Ontario Energy Board (OEB) staff on the development of a natural gas energy efficiency achievable potential study (APS). The SAG worked professionally and collaboratively with Enbridge to give input and feedback on many aspects of its upcoming multi-year DSM plan application. This included programs for residential, income-qualified, commercial and industrial customers, performance targets, shareholder incentives, in addition to a number of policy considerations.

Feedback and recommendations from non-utility members of the SAG are intended to help inform parties and the OEB as part of Enbridge's upcoming DSM plan application proceeding. OEB staff's engagement with the SAG was in response to direction in the OEB's Decision and Order approving a new DSM plan for Enbridge from 2023 to 2025 (the DSM Decision).¹ The OEB indicated that it needed assurance that a robust consultative process had been followed, which included a provision for a meaningful opportunity to participate, a record of what was discussed and a summary of how Enbridge incorporated the results of the consultation into its next DSM plan.

The OEB also stated the following, which has been used by the SAG to guide its work and this report:

"The DSM SAG should meet on a regular basis during the term of the 2023-2025 DSM plan with the objective of providing input on the makeup of Enbridge Gas's next DSM plan to ensure it will align with the OEB's direction to achieve increasing levels of natural gas savings with the ultimate objective of Enbridge Gas's DSM Plan helping reduce overall natural gas consumption. The primary work items that the DSM SAG should undertake include: input on an updated natural gas achievable potential study to inform Enbridge Gas's next DSM Plan, provide input to Enbridge Gas on its draft 2026-2030 DSM Plan before it is filed with the OEB, including recommendations on how to prioritize what programs should be expanded and how to generate the greatest level of cost-effective natural gas savings. OEB staff is expected to lead the development of the DSM SAG's Report that should include a summary of the work the SAG has completed, a list of all recommendations and material concerns about the DSM plan that remain unresolved within the DSM SAG."²

The OEB's DSM Decision listed several activities for the SAG to undertake, encouraging the group to address as many as practical while prioritizing efforts to respect the time and resources each item may require.

¹ EB-2021-0002, Decision and Order, November 15, 2022

² Ibid, p. 91

In concluding its guidance for the SAG, the OEB acknowledged the potential for divergent perspectives, stating: "The OEB expects that parties will work cooperatively and strive to reach consensus on as many aspects of Enbridge Gas's future DSM plan application as possible. Ultimately, Enbridge Gas will be responsible to defend its application and the proposals within. Although not a requirement, gaining the agreement of the DSM SAG should be considered a top priority to allow for a more efficient and effective regulatory process."³

Consistent with the OEB's direction, the SAG has worked collaboratively, strived for consensus where possible and documented its conclusions and recommendations in this report. A list of consensus recommendations can be found in Appendix A. Non-utility members acted professionally and provided expert opinion and recommendations to help facilitate the completion of the APS and inform Enbridge's DSM plan development.

The recommendations outlined below have been provided to Enbridge by the non-utility members of the SAG. OEB staff participated in all SAG discussions and largely support the non-utility member consensus recommendations. Enbridge's responses to nonutility member recommendations will be included in its DSM plan application. Ultimately, non-utility members that may represent intervenor groups and thus participate in the OEB's proceeding to review Enbridge's application will offer their opinion and support based on the actual proposals put forth by Enbridge in its application. This is expected to include additional supporting details and analysis that could not be provided due to the time constraints of this process. It is the expectation of all involved that recommendations made in this process be consistent with those made in any formal OEB proceeding, subject to new information and the opportunity to review the collection of all proposals as a package, with the most relevant policy direction providing critical context. Additionally, it needs to be acknowledged that there will be additional topics and discussion points raised, either in response to Enbridge's proposals or independently by parties in the proceeding which the SAG has not discussed. It is a reasonable expectation that SAG members are likely to provide additional input or have new opinions related to these items that may expand on feedback provided in this engagement or be entirely new.

The group collectively acknowledged that not all stakeholder perspectives were perfectly represented on the SAG. Because of this, there will likely be some level of disagreement among stakeholders regarding the SAG's recommendations. The group acknowledged that this is a practical reality, which the OEB also concluded in its findings when establishing the SAG. Nonetheless, the SAG is hopeful that its feedback is useful to parties and the OEB when reviewing Enbridge's DSM plan application and leads to some regulatory efficiencies.

³ Ibid, p. 92

2.0 Stakeholder Advisory Group

2.1 Membership

On March 1, 2023 the OEB issued a <u>letter</u> confirming the membership to the Natural Gas DSM SAG and confirmed the updated membership to its DSM Evaluation Advisory Committee (EAC).

The OEB's Decision and Order on Enbridge Gas Inc.'s (Enbridge Gas) DSM plan required an enhanced stakeholder engagement process, including a new OEB staff-led advisory group, to inform the development of Enbridge's next multi-year DSM plan from 2026-2030.

The OEB indicated that it expected the SAG to provide input on the OEB's upcoming natural gas conservation potential study and the makeup of Enbridge's next multi-year DSM plan. As part of the DSM Decision, the OEB indicated that it expects Enbridge's next multi-year DSM plan to achieve increasing levels of natural gas savings and contribute to greater reductions in overall natural gas consumption.

The OEB also indicated that the EAC will continue as a sub-committee of the SAG. However, the OEB indicated that any recommendations or decisions made by the EAC are not subject to the agreement of the SAG. Rather, working items from the EAC will be shared periodically with the DSM SAG for informational purposes.

The OEB selected seven (7) non-utility members for the SAG and four (4) non-utility members for the EAC. Representatives from OEB staff (who acted as the Chair for SAG meetings) and Enbridge Gas were also confirmed as members of the SAG. Additionally, the OEB included observers representing EPCOR, the Independent Electricity System Operator (IESO), Natural Resources Canada, the Ministry of Energy and Electrification and the Ministry of Environment, Conservation and Parks.

Throughout the consultation process, two non-utility members, Jay Shepherd and Ted Weaver, resigned from the SAG. While their contributions were considered by the group, all conclusions, feedback and recommendations included below are only reflective of the active members. Discussion topics and comments provided by these two members were left for the remaining non-utility members to consider, however, consensus and agreement noted throughout the report is only representative of the non-utility members active throughout the duration of the SAG engagement.

The current non-utility members of the SAG and EAC include:

Stakeholder Advisory Group Members

- Erika Lontoc, Erika Lontoc Consulting
- Francis Wyatt, Green Energy Economics
- Robert Wirtsafter, Wirtsafter Associates, Inc.
- Chris Neme, Energy Futures Group

• Ted Kesik, University of Toronto

Evaluation Advisory Committee

- Robert Wirtsafter, Wirtsafter Associates, Inc.
- Chris Neme, Energy Futures Group
- Katherine Johnson, Johnson Consulting Group
- Dan Violette, Rolling Energy Consulting

The OEB's direction of what work activities should be considered, by whom and in what priority sequence, is included in the table below.

Activity	Responsibility	Priority Level	Completed
Updated Natural Gas Conservation Potential Study	OEB Staff	High	Yes. SAG feedback summarized below and incorporated as part of the development of the APS.
DSM SAG report on the next DSM Plan application before it is filed with the OEB	OEB Staff	High	Yes.
Input on Future DSM Programs	Enbridge Gas	High	Yes. SAG feedback and recommendations are summarized below and will be considered by Enbridge as part of its DSM plan development.
Opt-out Protocols for the Large Volume Program	Enbridge Gas	Medium	Yes. SAG members were briefed on Enbridge's developments and provided an opportunity to submit feedback. Enbridge will be including a discussion and proposal as part of its DSM plan application.
Research and development Plan	Enbridge Gas	Medium	Yes. Enbridge provided information to the SAG regarding its research and development plan.
Review Target Adjustment Mechanism	OEB Staff	Medium	Yes. SAG feedback and recommendations are summarized below.
Consideration of New Programs	Enbridge Gas	Low	Yes. SAG feedback and recommendations are summarized below.
Review of Avoided Costs	OEB Staff	Low	Yes. SAG feedback and recommendations are summarized below.

Table 1 – SAG Activities

Terms of Reference

As instructed by the OEB in the DSM Decision, Terms of Reference were established for the SAG. The Terms of Reference outlined the group's priorities and scope of work, roles and responsibilities, issues resolution procedures, confidentiality and how to address conflicts of interest, amongst other administrative items. The final document was posted on the OEB's Engage With Us <u>webpage</u>.

2.2 Project Timelines

The SAG began formal meetings in April 2023. Initial input focused on establishing the Terms of Reference, developing a general work plan and identifying key issues to

discuss, including input on broader policy considerations. The group shifted focus to the APS and provided significant input and review, primarily between May to December 2023. Appreciating the time constraints, the group worked collaboratively to support the completion of the APS in phases so that Enbridge would have sufficient information to undertake internal planning for its future DSM programs. Specific attention was given to completing the potential analysis for each sector to allow for program development and stakeholder engagement. This process led to draft final industrial sector potential results being made available in January 2024, commercial potential results in March 2024 and residential potential results in April 2024. Feedback and recommendations on the APS are included in a standalone chapter below.

While the APS analysis was in its latter stages and the SAG APS sub-committee continued to meet, the full group had limited meetings in the early part of 2024, as attention shifted to providing input on Enbridge's future DSM programs. The group met regularly between March and September to discuss Enbridge's future DSM programs and related items, including shareholder incentive, performance target and net-to-gross considerations. Detailed feedback on each sectoral program is included in standalone chapters below.

Several broader stakeholder meetings were also held during the SAG engagement period. These were convened to provide status updates to all interested parties that have actively participated in past DSM proceedings. Enbridge hosted four sessions (one in March, two in August and one in October) while OEB staff held a pre-application conference in June. These sessions were useful in that they provided an ability to engage a broader group of stakeholders (intervenors from Enbridge's past DSM proceeding were invited) at various intervals of the process to provide progress updates, receive general feedback and respond to areas of interest. Although each session was timebound and materials were of a reasonably detailed level considering the timing of engagement amidst active program planning, SAG members were able to consider important ratepayer and environmental perspectives directly from parties.

2.3 General Process Feedback and Future Considerations

The SAG offered some recommendations for the OEB to consider regarding the overall engagement and process. SAG members agreed that the sequence and schedule of events was not ideal. The SAG recommended that if a similar process is undertaken in the future, consideration be given to a standalone process at the outset to address any potential policy concerns and considerations. The SAG acknowledged that the OEB had recently released an updated DSM policy framework in conjunction with the approval of Enbridge's 2023-2025 DSM plan, but agreed that ideally, there would have been an opportunity for stakeholder consultation regarding potential policy updates required in consideration of future DSM programming. The SAG noted that in a changing environment and increasing levels of expectations of energy efficiency programs, having an open policy consultation at the outset would enable the OEB to understand the perspectives of various stakeholders and clearly establish the baseline for any future work to be completed, including direction on acceptable budget levels. As is

highlighted below, the group considered current policy direction and identified several areas it believes the OEB and stakeholders should consider updating to optimize future DSM programming in Ontario.

Similarly, the SAG agreed that future analysis of available potential energy efficiency opportunities should focus on more detailed analysis of specific sectors and segments of customers and rely on empirical field data as opposed to academic theoretical assumption-based modelling exercises such as the APS. In any event, the SAG recommended that future potential analysis be afforded sufficient time to be completed and without the expectation that Enbridge be actively working on DSM plan development and program design simultaneously.

The SAG recommended that ongoing stakeholder consultation be directed by the OEB. However, SAG members agreed that the level of rigor undertaken through the SAG process is not needed on an annual basis. Rather, during an approved plan term, Enbridge should hold open meetings periodically with interested parties to provide plan and program updates, solicit stakeholder feedback, and ensure a process of continual improvement. Some members suggested that as part of the in-term stakeholder process, a small subset of experts be convened to provide more detailed feedback to Enbridge to help optimize its programs, potentially in concert with the OEB's evaluation efforts.

SAG members were of the view that this process was useful from the perspective that such a detailed engagement has not taken place in the past. SAG members agreed that it is important to periodically undertake a detailed, comprehensive review of plan details. SAG members agreed that the composition of the group likely limited the overall impact of the group's recommendations due to the lack of formal ratepayer and environmental representation on the SAG. However, the feedback on policy considerations should be useful in advancing broader stakeholder opinion and the recommendations, most of which were consensus, related to program development should provide the basis for stakeholders to have confidence that industry experts have thoroughly reviewed key program concepts and proposals and have concluded that they are largely consistent with best practice and there are no material omissions.

3.0 Achievable Potential Study

Background

OEB staff oversaw the development of a natural gas conservation APS in response to direction provided by the OEB in the DSM Decision.¹ OEB staff retained Guidehouse Canada Ltd. (Guidehouse) to undertake the APS, with input provided by the SAG over the course of 2023 and 2024. The final APS report and supporting Excel-based workbooks can be found on the OEB's Engage with Us <u>webpage</u>.²

Overview

As part of the DSM Decision, the OEB had expressed an interest in at least three APS scenarios being analyzed: annual absolute reductions in natural gas sales year-over-year of 0.5%, 1.0% and 1.5%.³ The APS year-over-year potential reduction outcomes were determined relative to 2023 reference year sales. The targets were selected based on the direction provided by the OEB in its EB-2021-0002 Decision and Order, which indicated that the OEB was interested in an APS that considered scenarios that target annual year-over-year reductions in natural gas sales of 0.5%, 1% and 1.5%. For the APS, this was interpreted to mean that cumulative potential should be sufficient to deliver the requisite annual reduction in consumption relative to the reference year. The potential required to meet these targets is substantial since the underlying reference forecast used for this study assumes substantial growth, absent the effects of programmatic DSM.

It is important to note that 2022 was used as the base year, in that data corresponding to that year in the reference forecast was used to determine the distribution of consumption by end-use and sub-sector. However, 2023 data from the reference forecast was used as the start year, in that the targets are all differences in consumption relative to the forecast for 2023. Some SAG members noted that this target definition relative to a 2023 reference year resulted in an APS output that provided little value to the exercise of building a 2026-2030 DSM plan in terms of forecasting reductions, as the APS' starting year to derive savings targets does not align with the starting year of the 2026-2030 DSM plan.⁴ Ultimately, project schedule constraints prevented the alignment of the savings target reference year with the starting year of the 2026-2030 DSM plan.

Table 1 below summarizes the six scenarios analyzed as part of the APS. The 0.5% and 1.0% year-over-year annual reduction scenarios suggested by the OEB were included in the analysis. Note that because Enbridge is forecasting an average annual increase in sales of 0.65% without DSM, the 0.5% and 1.0% absolute reductions translate to approximately 1.15% and 1.65% annual reductions relative to forecast annual sales. Based on recommendations from the SAG and to support the OEB's review of the next DSM plan, OEB staff decided to replace the 1.5% year-over-year target (equivalent to 2.15% annual reduction relative to forecast sales) with a maximum achievable scenario to show the full extent of natural gas savings that could be achieved under unconstrained conditions. Further, the factors considered by each

scenario (i.e., measures included and carbon value) were varied across the scenarios to provide insights into the end results based on different potential regulatory outcomes.

Scenario	Target	Measures Included	Carbon Value
A	0.5% year-over-year reduction in sectoral consumption relative to 2023 reference year sales	Energy efficiency & fuel switching	Federal carbon price
В	1.0% year-over-year reduction in sectoral consumption relative to 2023 reference year sales	Energy efficiency & fuel switching	Social cost of carbon
С	Maximum Achievable	Energy efficiency & fuel switching	Social cost of carbon
D	Maximum Achievable	Energy efficiency & fuel switching	Federal carbon price
E	Maximum Achievable	Energy efficiency	Federal carbon price
F	1% year-over-year reduction in sectoral consumption relative to 2023 reference year sales	Energy efficiency & fuel switching	Federal carbon price

Table 2 – Summary of APS Scenarios

The APS is based on input data available at the time of the study and is intended as one of several potential points of reference to inform Enbridge's next DSM plan. SAG members agreed that the APS should not be relied upon as a prescriptive input to Enbridge's next DSM plan as the methods of analysis included within an APS greatly differ from those required by Enbridge when developing its DSM plan. SAG members acknowledged some inherent realities of an APS, including the need to make numerous assumptions based on limited data that are assumed to apply equally to all customers (i.e., potential studies are based on average savings, average costs, etc.), resulting in numerous limitations to the direct application of APS results on Enbridge's DSM plan.

Non-utility members agreed that an APS should be viewed as directionally informative and not as a prescriptive source to determine the measures that should be included in a utility DSM plan. Non-utility members suggested that at best the APS should be used to provide context to the scale and magnitude of Enbridge's proposed DSM budgets over the 2026-2030 term. Even then, it is important to recognize that the study estimated only the total costs of acquiring savings and does not address whether portions of those costs might be borne by the IESO and electric LDCs (for measures affecting both gas and electricity consumption) or by federal, provincial and/or local governments. Further, it is important to note that all program costs estimated by the APS are associated with net achievement and do not account for any rebates paid to free riders. Consideration needs to be made to scaling up program budgets output by the APS to account for any effects of free ridership on program spending.

Non-utility members noted that since the APS relies on a largely academic and theoretical basis, it cannot consider potential program designs that might be deployed, including specific paths to market, and measure groupings. Instead, the APS may be useful in identifying possible opportunities in the various sectors and provides a

directional indication as to the level of natural gas consumption savings available.-SAG members cautioned that the OEB and intervenors will need to consider Enbridge's proposed DSM plan application based on the merits of the specific proposals and consider historic program performance, industry feedback on how influential Enbridge's offers have been on participation and adoption, future market outlooks, jurisdictional comparisons, and expert opinion (which non-utility SAG members have provided in their feedback on all of Enbridge's proposed programs).

To be considerate of the evolving DSM landscape, this version of the APS included both energy efficiency and fuel switching measures in a fully integrated manner for the first time. Due to the ongoing development of broader electrification efforts and fuel switching measures in each sector, particularly the electric and hybrid heat pump market, empirical data was limited or not available for certain applications. As a result, expert judgement was relied upon for some inputs and in other cases (e.g., the entire industrial sector), electrification measures were omitted completely. Non-utility members indicated that although positive improvements (e.g., development of different scenarios for heat pump sizing and selection for the residential sector) were made generally in this area of the APS, the lack of empirical data and cost-effectiveness of electrification and fuel switching measures both limited the overall potential natural gas savings reported. As a result, non-utility members agreed that there are likely significantly greater opportunities for natural gas savings from electrification than identified in the APS, particularly from the commercial and industrial sectors.

Process for APS Completion

To develop the APS, OEB staff provided oversight and general guidance to Guidehouse. SAG members, including staff from Enbridge and non-utility members, worked collaboratively and provided input for Guidehouse's consideration. Prior to going into the details that follow, it is important to note that an APS has thousands, if not tens of thousands, of discrete inputs and assumptions. SAG review of every input was therefore not possible. What was reviewed was based on a prioritization of the inputs and assumptions that are expected to be the most impactful.

Schedule and Project Plan

The initial project plan and schedule were developed by OEB staff and Guidehouse, who subsequently presented it to Enbridge and the non-utility SAG members for input. Feedback from the SAG was that the original project schedule of approximately 10 months was overly optimistic and unrealistic considering the nature of the study and the level of stakeholder input and engagement the OEB expected. SAG members agreed that a more realistic timeline for APS completion would allow for timely consideration of the results by Enbridge Gas to support its development of a DSM plan intended to be inmarket for January 2026. APS draft results were shared regularly with SAG members, including Enbridge Gas, throughout the development process. Ultimately, the APS data set was not finalized until September 2024 and the APS report was not delivered until October 2024.

3.1 Measure Characterization

OEB staff divided SAG members into measure characterization sub-committees, each tasked with developing sector specific measure lists (i.e., residential, including low-income, commercial, and industrial). These sub-committees were chaired by OEB staff, with discussions led by Guidehouse and consisted of SAG representatives including staff from Enbridge, and non-utility SAG members with relevant experience in the respective sector.

SAG members provided input on measure characterization inputs, however, SAG members were not informed of the mechanisms that Guidehouse's model used to develop outputs, such as how measures were prioritized or layered. SAG members noted that this was particularly difficult and limited their ability to provide useful feedback in some instances and understand the broader implications of decisions. Further, it was challenging, if not impossible, for individual non-utility SAG members to fully review and critique all key assumptions for the study due to the sheer volume of said assumptions. Although Enbridge Gas has the benefit of multiple staff which could be deployed to analyze key assumptions, the number that could have benefitted from critique was still too great to allow for a review of all assumptions. With that said, Enbridge Gas was very limited in the staff it could divert from DSM plan development, which was being done in parallel to the APS to support review of APS outputs with the intent of reviewing and providing input to as many critical assumptions as possible.

It should be noted that the final measure list, particularly for the industrial sector, included some measures that were deemed to be bundled. The residential and commercial sectors included some measures that were representative of the average of a given type of measure. This was recommended by Guidehouse in response to feedback from some SAG members to incorporate aspects of a top-down approach to improve the output of the study. Some SAG members expressed reservations toward this approach, as it raised the potential of misinterpretations during measure list reviews. In general, SAG members had different views on the value and appropriateness of bundled measures.

Led by Guidehouse, the measure characterization sub-committees provided significant input and recommendations in the development of the sector measure lists, including the necessary input data associated with each (e.g., cost, natural gas savings, applicability, etc.). This work spanned months and involved regular meetings with the teams to review and comment on deliverables prepared by Guidehouse and asynchronous review and comment. With each round of review, the measure lists were further developed with incremental attributes added over time. OEB staff was responsible for determining the point at which the measure lists were deemed complete, and the project could proceed to the technical potential task.

3.2 APS Outputs

SAG input was considered by Guidehouse as it developed technical, economic, and achievable potential. OEB staff established a sub-committee consisting of one nonutility SAG member from each of the sector-specific measure characterization subcommittees and Enbridge staff. The new sub-committee was tasked with reviewing and providing feedback to Guidehouse on the potential outputs for all three sectors analyzed as part of the APS. Guidehouse engaged the SAG in multiple rounds of review and comment for each potential output for each sector. The sub-committee operated in a similar fashion to the measure characterization sub-committees, in that regular meetings were held to review and comment on deliverables as they were prepared and subsequent asynchronous review and comment.

The sub-committee also provided input regarding what sensitivity analysis to undertake. Various options were considered, including increasing natural gas commodity costs to reflect those associated with renewable natural gas, using the sensitivity module built into Guidehouse's APS model to adjust select parameters, modifying the carbon value, and shifting the suspected year when Ontario's electricity system becomes winterpeaking. Based on the input received from the sub-committee, OEB staff decided that the best use for the APS sensitivity analysis was to re-run Scenario B (1.0% natural gas savings target) with the federal carbon price applied in lieu of the social cost of carbon. This output was selected as it would provide the OEB and stakeholders with another full scenario and complete set of outputs to compare estimated natural gas savings potential and budget levels based key variables that will likely garner material attention as part of the next DSM plan application. Further, use of the federal carbon price for the sensitivity provided a 1.0% targeted natural gas reduction scenario that was aligned with the existing DSM Framework.⁵

3.3 APS Conclusions and Interpretation

Discrete natural gas savings potential and the associated DSM program budgets output by the APS can be found in the final APS report, as well as the supporting Excel-based workbooks on the OEB's Engage with Us webpage.⁶ From the final APS results, a series of high-level conclusions can be drawn; a selection of which are presented below.

- 1. Achieving some of the higher levels of natural gas consumption savings estimated by the APS requires a significant expansion of DSM programs and funding. Further, the ability to achieve the targeted natural gas reductions specified by the OEB over the long-term can be achieved only through substantial amounts of electrification.
- 2. Little reliable data is available to characterize the opportunities, technical suitability, and costs of electrification. As a result, the commercial and industrial electrification potential is likely understated in the APS.

 Considerable uncertainty exists around the technical suitability and cost of electrification of commercial space-heating, especially in existing buildings. These concerns have been reflected in the estimated technical suitability of these measures and their incremental costs.

SAG members agreed that the APS is directionally informative, in that it can be used to provide a directional understanding of high-level opportunities and their costs. The APS brings value as a tool to support the spending magnitude required of a DSM program that includes electrification. Further, it can be used to provide a flavour of where savings opportunities lie (e.g., proportion of energy efficiency versus electrification opportunities). However, SAG members agree that the APS should not be viewed as a definitive plan of what can be realistically achieved by a DSM plan. In particular, the ranking of measures output by the APS should not be blindly transferred over to a DSM plan without consideration of data and information through other sources, for example historical DSM program experience.

SAG members agreed that the APS is not and should not be used as a primary input to Enbridge Gas' next DSM plan or to the development of future natural gas savings targets, as specified by the OEB in its EB-2021-0002 Decision and Order.⁷ The APS is an analysis of discrete scenarios and cannot by its nature be reflective of every market dynamic that a DSM plan would need to respond to. For this reason, the APS should be considered as a secondary input or as part of a broader suite of inputs to DSM plan development.

The APS report itself and the associated appendices (including but not limited to Appendices B and E) detail the important interpretation considerations of the APS. However, it is important to briefly discuss the most pertinent consideration that had a material contribution to the SAG interpretation recommendations above, that being data uncertainties and limitations. Select uncertainties introduced by data limitations are noted below, however, a full review of the APS report is recommended to gain a full appreciation of data-based uncertainties and limitations.

- The primary data input to industrial measure characterization was limited to industrial assessment data which focused only on small to medium sized US customers developed by parties that may not have the specialized expertise necessary to industry-specific and/or site-specific opportunities. This data source also focused primarily on historically cost-effective-measures rather than comprehensive assessments and only on efficiency (i.e., no electrification measures).
- 2. There is a lack of available studies on which to base assumptions about the current mix of opportunities for building envelope measures in the current housing stock. This is one example where SAG expert judgement was leveraged to address one data limitation challenge.
- 3. Uncertainty exists around the practicality and cost of some commercial electrification opportunities. These concerns are reflected in technical suitability

and the incremental costs of some measures. This is one example where a lack of data restricts the degree to which the APS outputs could be aligned with realworld activities.

- 4. The study analyzed only measures that are currently commercially available. This likely understates potential, particularly in the medium to longer-term when new technologies are likely to emerge.
- 5. The study largely assumed that current costs and performance of efficiency measures will remain unchanged over the next twenty years. In other words, it does not account for the potential of economies of scale to drive down measure costs or for the evolution of technology to continue.

3.4 APS Future Considerations

SAG members recommended that the OEB should not commission or produce an allencompassing natural gas potential study. APSs are too broad and as a result, the outputs are of limited value to be applied to a practical effort, such as the development of a DSM plan. In lieu, the OEB should consider leveraging-primary research or data collection that focuses on specific subsectors, such as audits conducted by individuals with specialized expertise in select industry or market sectors, to gain an understanding of market participants potential for energy conservation.

4.0 DSM Policy Framework Considerations

The group acknowledged that the OEB just considered many policy issues as part of the most recent DSM proceeding and approved an updated DSM policy framework. The group agreed that for practical purposes, non-utility member feedback and Enbridge's pending multi-year DSM plan application must proceed based on the guidance provided in the OEB's DSM Decision and the current policy framework.

Non-utility members agreed that should participants in Enbridge's next multi-year DSM plan proceeding raise policy concerns (for example, regarding the primary objective of DSM, reasonableness of guiding principles, or other structural items), that these be addressed separately, either simultaneous to the DSM plan application proceeding (but not directly applicable) or immediately following the OEB's decision. This way, updated policy direction will be available to inform Enbridge's DSM planning efforts for its next multi-year plan.

Non-utility members agree that, generally, the proposals presented by Enbridge throughout this engagement include positive improvements which should lead to an increase in cost-effective natural gas savings. Non-utility members agreed that the evolution and ramp-up of DSM efforts should not be impeded or slowed due to requests for the OEB to reconsider its recently issued policy direction. Rather, considerations of clarified or updated policy direction should happen separately and be applied to the future DSM plan.

If, through a separate process, the OEB determines that significant policy updates are reasonable, it could then consider the urgency and pace at which the updated policy direction should be incorporated by Enbridge. This may lead to considerations of a mid-term assessment and plan updates or direction to be considered by Enbridge and stakeholders in advance of Enbridge's next multi-year DSM plan application. All of which should be based on the nature and materiality of any potential policy changes.

Non-utility members shared a number of possible policy considerations throughout the engagement. These have been summarized in the table below. Many of these items are too broad to be acted upon by the SAG. The group did not achieve consensus on the broader items. Other items are more discrete and have direct application to Enbridge's current DSM plan (for example, consideration of net-to-gross values and application as part of plan development and annual performance and are in response to OEB direction in the DSM Decision). These more discrete items have been discussed in greater detail in the sections that follow.

No.	General Policy Consideration	Notes
1	What specific outcome(s) does the OEB expect ratepayer funded DSM to produce?	It is crucial for the OEB to be very clear on what outcomes it expects Enbridge to achieve, including clarity and specifics on future natural gas reductions.
2	Is it appropriate to include decarbonization as a primary policy objective?	An improved understanding of likely pathways and cost implications of decarbonizing buildings and industry is critically important in addressing the OEB's articulated goals of "meaningful reductions in annual natural gas sales with consequent cost savings for ratepayers" and the role of DSM. This consideration will be made even more challenging by the higher costs that will be borne by ratepayers in decarbonizing Ontario's gas and electricity systems should energy efficiency, which non-utility members agreed is the least costly decarbonization tool, is under-invested in now. If and how reductions in carbon emissions is incorporated as part of DSM considerations warrants discussion.
3	How should Enbridge's activities as a whole, inclusive of system planning, DSM, IRP and other areas, be considered on a combined basis?	In order to properly determine the most effective path forward for Enbridge as part of an evolving energy landscape that includes policies targeted at reducing carbon emissions, it will be necessary to discuss and consider all natural gas utility activities in a combined manner to determine the most effective strategy, and reasonable costs, going forward.
4	Should the role of DSM and integrated resource planning be aligned, particularly in the context of the impacts of electrification?	Included within this would be a more comprehensive consideration of need and appropriate costs of future capital expansion projects, stranded assets, overall costs and bill impacts.
5	How should critical inputs, such as the cost of carbon and discount rate, be valued and applied as part of analysis of cost- effectiveness and program benefits?	The value of reducing natural gas can vary widely and have a material impact on the program choices depending on the inputs used as part of key calculations when determining the value of Enbridge's DSM programs, particularly in an evolving energy landscape with an increasing focus on fuel switching from gas to electric.
6	How should alternative approaches and methodologies for setting budgets and targets from other jurisdictions be considered?	What has been successful in other jurisdictions, including areas such as policy guidance on major topics (budgets, targets), plan development process, and stakeholder engagement, that should be adopted in Ontario?

Table 3 – General Policy Considerations – Non-Consensus

No.	General Policy Consideration	Notes
7	Should the central components of Enbridge's DSM plan, including how budgets, targets and incentives are structured, be reassessed?	If natural gas energy efficiency is relied on to a greater extent as part of the energy transition, inclusive of material increases in budget and goals, it may be beneficial for the OEB to conside the fundamental structure of how Enbridge is compensated and incentivized to ensure the most effective use of ratepayer funds and have greated certainty in achieving expected outcomes. The following areas were acknowledged as outside the scope of the SAG and identified for additional consideration:
		 a) the OEB awarding DSM program delivery to successful vendors (which can include Enbridge) through a competitive bidding process b) developing an inclusive DSM delivery rate structure that includes program costs, lost revenues and an incentive premium only recoverable on the basis of verified natural gas savings realized c) including both incentives and penalties to establish a risk-reward framework for Enbridg and ratepayers;

4.1 Targets and Shareholder Incentive

As part of the DSM Decision the OEB indicated that "in the future, the OEB expects DSM programs to result in a greater reduction of total natural gas consumption, and it would be appropriate for alternative or additional shareholder incentive structures to be considered by Enbridge Gas and the SAG in the development of the next DSM plan."⁴ Consistent with this direction, the SAG discussed shareholder incentive options.

As part of this discussion, a natural continuation extended to non-utility recommendations regarding how future natural gas savings targets should be focused and how Enbridge should consider arranging its performance scorecard.

Non-Utility Member Consensus Recommendations

Non-utility members agreed that Enbridge's DSM plan should primarily focus on natural gas savings. Further, non-utility members recommended that Enbridge not develop sector specific scorecards. Rather, Enbridge should develop one annual performance scorecard that is made up of metrics that focus on total natural gas savings with specific

⁴ Ibid, p. 60

focus in those areas that require specific attention to ensure equitable results and access to programming.

Non-utility members agreed to the following metric categories and the general weighting of metrics as shown in the table below.

Metric	Weight	Notes
Total Annual Natural Gas Savings (excluding Large Volume)	50%	Non-utility members agreed that ultimately, Enbridge should be focused on maximizing annual natural gas savings and optimize across the portfolio. Former metrics dedicated to commercial and industrial savings are captured in this broader metric. This maintains the OEB's main objective for ratepayer funded DSM that it results in meaningful reductions in overall annual natural gas sales with consequent cost savings for ratepayers.
Income Qualified Annual Natural Gas Savings	20%	Non-utility members agreed that it is important to have specific metrics for income-qualified, residential and small
Residential Annual Natural Gas Savings	15-20%	business programming so that sufficient resources are dedicated to these segments and Enbridge is motivated to
Small Business Annual Natural Gas Savings	10-15%	deliver results. Ultimately, this will help ensure a greater level of equity across the portfolio.
Large Volume Annual Natural Gas Savings	1%	Non-utility members agreed that there still remain cost- effective savings opportunities and that a minimum level of effort should be required in the Large Volume segment.

Table 4 – Recommended Annual Performance Scorecard Structure

Non-utility members agreed that a utility shareholder incentive is not intended, nor should be used, to attach a metric to all utility activity. The group engaged in discussion related to the need for Enbridge to incorporate various enabling, capacity building, and market support activities. Non-utility members agreed that discrete performance metrics for each of these items are not needed, nor are they appropriate. The greater the number of metrics, the less focus is assigned to the core objectives. Rather, non-utility members agreed that, if reasonably challenging natural gas savings targets are set for multiple years, Enbridge will be required to pursue and implement a sufficient amount of ancillary activity.

Non-utility members also agreed that it is reasonable to continue with first-year annual natural gas savings as the primary metric (as opposed to annual lifetime savings), but only if the OEB include a requirement that in order for Enbridge to be eligible for any shareholder incentive amounts, it must, on an annual basis, continue to meet the weighted average measure life threshold established in the 2022 DSM Decision (i.e., 14.3 years) to ensure focus on deeper measures that will continue to provide savings, unless the makeup of the new plan requires reconsideration of the specific average measure life value, which should be requested by Enbridge as part of its application to the OEB. Related to this recommendation, non-utility members suggested that the OEB consider the value of undertaking an assessment and review of the current measure

lives for key measures in Enbridge's portfolio so the most accurate estimate of measure lives are used as part of program evaluation.

4.2 Natural Gas Savings Levels

The group acknowledged the OEB's expectations provided in the 2022 DSM Decision that stated:

"For the approved three-year term of the pending DSM plan, the OEB is satisfied that the level of targets are reasonably sufficient considering the budget levels and mix of approved programs. The OEB is not prepared to apply a blanket increase to the proposed targets as suggested by some parties. However, the OEB is of the view that a greater understanding is required of the relationship between adjustments to targets and budgets and the impacts of increases to either has on the overall DSM plan, including performance metrics, program opportunities, and overall costs including rate impacts. This is an area that should be explored further, likely as part of the next natural gas conservation potential study and is expected to be a significant component of consultations undertaken by the SAG."⁵

Non-utility member comments and feedback on the APS was discussed in Section 3.1. This includes several considerations regarding the overall level of savings. With respect to the interaction between spending and natural gas savings, non-utility members acknowledged that generally, Enbridge will require growing budget levels and likely a higher average \$/m3 to meet growing natural gas savings targets, particularly if certain levels of focus on smaller and vulnerable customers is maintained (as opposed to bigger, more sophisticated commercial and industrial customers where natural gas reductions can be achieved more cost-effectively).

Enbridge provided illustrative natural gas savings forecasts by sector (broken down further by each anticipated offer within each sector) with commensurate budget requirements when it provided program proposal presentations to the group. The savings levels presented by Enbridge have been summarized in the program sections of this report, along with general budgets for each sector. Non-utility members acknowledged that the general level of savings relative to spending was directionally consistent with their expectations, however, non-utility members were not in a position to provide detailed feedback on the specific savings levels and budgets presented. Nonutility members provided feedback on the sectoral based programs so that Enbridge could consider additional opportunities to maximize natural gas savings and use its future budgets as effectively as possible. Non-utility members agreed that in order to provide the level of feedback that would be useful to Enbridge, they would require detailed information, which could not be provided in the limited amount of time available following the completion of the APS and Enbridge needing to file its DSM plan

⁵ Ibid, p. 65

application. This additional information would ideally include the detailed build-up of the budget and savings underpinning Enbridge's proposed goals and budgets. It was suggested that this could be provided in the form of a detailed spreadsheet for each program/offer, where Enbridge lists all measures it plans to promote; the estimated per unit incremental cost, savings and lives of each measure; the estimated rebate/incentive level per measure; the estimated number of measures that will be installed each year, along with an assumed NTG; and the estimated non-incentive budget per program. Providing comparable values for actual claimed savings and budgets for the most recent program year(s) (2023 or 2024) would provide valuable context.

Additionally, it was also suggested that the ability to do more focused research and analysis of how comparable programs in other jurisdictions are developed and budgeted can provide value for future considerations.

4.3 Adjustments to Targets

Non-utility members acknowledged the OEB's direction related to Enbridge's future DSM plan is that it will have fixed targets to allow for greater certainty of natural gas savings in the future. The group also considered the OEB's request to review the practice of annual target adjustments relative to prior year performance and provide recommendations on the most ideal balance of risk between Enbridge and customers based on changes to input assumptions and adjustment factors. Non-utility members agreed that Enbridge's future targets should not be adjusted to account for prior year results as had been done in the past through the current target adjustment mechanism.

The non-utility members provided recommendations on how the OEB should update its policy regarding adjustments for applying updated NTG ratios which is discussed in Section 4.6.

Non-utility members also discussed adjustments to targets should unexpected circumstances develop, such as changes in building code, equipment standards and Technical Reference Manual. Some non-utility members thought it would be reasonable that the OEB consider adjusting approved targets in certain situations. Other members did not think that any adjustments should be made, noting that Enbridge will be seeking approval of a multi-year plan so has the ability to make adjustments over that period, particularly since it will have a full suite of programs, offers and measures to all customer types and the ability to move funds into different areas.

Non-utility members agreed that Enbridge should make best efforts to identify any program areas that it deems highly sensitive to external forces (for example, heat pumps), so that the OEB and intervenors can consider if any additional flexibility is required.

Non-utility members recommended that if NTG values from future evaluations vary in a material way from the non-utility member estimates provided through this process (e.g. +/- 10%) that the OEB allow targets to be recalibrated once and then not adjusted

throughout the remainder of the next plan term. Non-utility members agreed that it would be reasonable to consider a one-time target amendment to recognize NTG values determined through evaluations, appreciating that the updated NTG values recommended by the non-utility members are only educated estimates, and empirical results will be available, which have the potential to impact savings in either a positive or negative manner. Non-utility members agreed that this would provide for reasonable flexibility early in the next plan period and recognize the variability in actual versus estimated results in response to a number of program changes, some material in nature.

4.4 Shareholder Incentive

Non-utility members discussions regarding shareholder incentive options primarily centered on the current structure whereby the OEB approves an eligible annual shareholder incentive amount and performance scorecards. Non-utility members recommended to maintain the general structure currently in place.

Non-utility members considered the current shareholder incentive structure, including the maximum amount available each year (\$20.9 million in 2023, increased annually for inflation), earning thresholds (\$0 until a minimum of 75% of scorecard target is met, 40% of maximum available between 75-100%, 60% of maximum available between 100-125%) and considered if any updates should be considered. Non-utility members agreed the OEB should consider the following changes.

4.4.1 Amount Available at 100% of planned performance

Acknowledging that the OEB is seeking greater results from Enbridge's DSM efforts, non-utility members reviewed the current shareholder incentive structure, which has largely remained unchanged since 2016, and identified potential updates for the OEB's consideration.

The group acknowledged that Enbridge's recent shareholder incentive earnings has not come close to reaching the maximum available shareholder incentive and has averaged \$5.47 million (or approximately 65% of the \$8.36 million available at 100%, or 26% of the maximum \$20.9 million available at 125% achievement) between 2020 and 2023 (based on draft 2023 results).

Instead of basing the maximum available shareholder incentive on a fixed dollar figure, non-utility members recommended that the future shareholder incentive structure revise the amount available at 100% to an amount equal to 5.0% of Enbridge's total annual budget. Non-utility members agreed that the shareholder incentive available at 100% target achievement should remain at 5.0% of budget for the next DSM plan term and be reviewed and considered relative to the OEB's expectations and natural gas savings targets approved.

Based on Enbridge's estimated budget figures for 2026 of \$240 million, this would result in an eligible shareholder incentive of \$12 million should Enbridge meet 100% of all its performance scorecard targets.

Non-utility members agreed that the increase in amount at 100% is important to provide the proper signals to Enbridge to ensure the important goals the OEB expects to be met from its DSM programs are achieved.

Additionally, non-utility members agreed that the increase in amount at 100% from the approved 2023 amount of \$8.36 million to \$12 million reflects a reasonable shift in focus, particularly with the OEB's expectation that increasing levels of natural gas savings are to be met. Non-utility members agreed that the current scorecard structure does not achieve a proper balance in motivating performance, particularly since budget levels are determined on the basis that those funds are required to meet the 100% savings goals. Additionally, non-utility members noted that setting the 100% shareholder incentive value at 5% of budget is generally lower than other jurisdictions when compared to those included in expert evidence provided in Enbridge's last DSM proceeding, with most others being closer to 8.0% of budget, with Massachusetts' incentive that is 3.5% of its budget being lower, but with significantly higher annual budgets.⁶

4.4.2 Earnings Thresholds

Non-utility members also agreed to the following recommendations to other aspects of the shareholder incentive structure:

- a) Consensus that three earnings thresholds should continue to be established
- b) Consensus that lower and upper bands should be revised slightly to acknowledge increased levels of uncertainty in the new plan term due to changing energy landscape.
 - i. Lower band: 70%
 - ii. Target: 100%
 - iii. Upper band: 130%
- c) Consensus that the current requirement to meet lower band is maintained before any incentive is available (therefore, no incentive dollars can be accessed below 70% target achievement)
- d) Consensus that a change in pace of earning between bands be revised from current 40/60 split between lower and upper thresholds results in a more reasonable balance in available rewards, acknowledges that it has been challenging for Enbridge to meet 100% of targets in the past, and appreciates that budgets approved do not allow for significant expansion of efforts beyond 100% target, particularly to achieve 30% greater savings.
 - i. 0-100% of available annual shareholder incentive (i.e., 5% of annual budget) for achievement from 70% to 100%

⁶ Ibid, Exhibit L.OEB STAFF.1, p. 28, Table 6

ii. 100-200% of available annual shareholder incentive for achievement above 100% to 130%.

An example of this structure on a \$240M annual budget is below:

- a) Shareholder Incentive at 100% = Annual budget (\$240M) x 5% = \$12M
- b) Achievement below 70% of target = \$0
- c) Achievement from 70% to 100%, available shareholder incentive increases linearly, up to \$12M at 100% target achievement
- d) Achievement above 100 to 130%, available shareholder incentive increases linearly, up to a max of 10% of annual budget or \$24M at 130% target achievement

4.4.3 End-of-Term Incentive

The group generally discussed the OEB's current End-of-Term incentive structure for absolute reductions in gas sales. Non-utility members agreed that this type of incentive is important given the pending provincial climate goals in 2030. Non-utility members also agreed that DSM is not the only Enbridge activity that affects the magnitude of gas sales. Thus, while such an incentive included as part of a future DSM plan would provide helpful direction to Enbridge, it might be even more effective if adopted as a broader incentive across all Enbridge activities such as through a rates case.

4.5 DSM Plan and Program Considerations

As part of the DSM Decision, the OEB instructed the SAG to provide input on the programs that will make up Enbridge's next DSM plan. The group actively discussed and provided feedback to Enbridge on all proposed programs which is discussed in greater detail later in this report.

As an overarching guide to program considerations, non-utility members largely agreed with the premise that ultimately, decarbonizing the energy system entirely would represent an ideal state (albeit, far beyond the scope and ability of Enbridge's DSM programming). To achieve this, non-utility members noted that Enbridge will need to employ strategies that are realistic, cost-effective, and flexible enough to react to evolving technology and market conditions. The group agreed that unless a more cost-effective means to decarbonizing emerges (which many think is highly unlikely), electrification will need to be a major contributor to accomplishing this objective. Non-utility members noted that the types of measures to include in a DSM program should consider the long-term implications and avoid locking consumers into using fossil fuels for many years to come, where other practical, cost-effective options exist.

Non-utility members agreed that when choosing what measures to include as part of its DSM programs, Enbridge should follow the prioritized list below:

- 1. Measures that decrease energy usage, regardless of the fuel source (e.g., weatherization that would still provide savings if the heating system were later switched from gas to electric)
- 2. Electrification measures (switching from gas to electric)
- 3. Measures that make gas equipment more efficient in existing buildings.

There was discussion about incentives for gas equipment for new construction centered on Enbridge's relationship with builders and the potential to influence the new construction market and more generally promote natural gas in new buildings. Nonutility members generally supported incentives for gas efficiency measures in new buildings with some suggesting that this effort should be led by a fuel agnostic organization. Some non-utility members suggested that there should not be any incentives for gas equipment in new construction to discourage long-term gas usage. Others noted that if incentives for gas equipment do not exist, it may lead to continued gas connections, but without efficiency gains. However, it was acknowledged that with the high minimum efficiency standards for residential gas furnaces put in place by government several years ago, the remaining energy savings potential from gas furnace rebates is very small.

Although the group agreed that electrification and decarbonization of space and water heating should be an important part of future DSM plans, some non-utility members noted that the question of the ideal program administrator and delivery agent should be considered, noting the fundamental conflict of interest present with Enbridge as a gas distribution company (particularly in the new construction market). The group acknowledged that these considerations are beyond the scope of the SAG.

Comments were also provided by some non-utility members related to the range and types of programs Enbridge can and should offer. Some examples provided were residential home energy benchmarking reports. This is an area that the OEB has rejected in the past as a standalone offering. Non-utility members agreed that this should be reconsidered. While not all agreed that the offering should contribute towards savings goals, all agreed that, at a minimum Enbridge should be allowed to use home energy benchmarking reports to drive customers to available offers, and act as a form of marketing. All members also supported the benefit of benchmarking towards a multi-year goal targeting reduction in gas sales volumes.

Similarly, non-utility members also agreed that other program areas, including market transformation, education, research and development, workforce development, capacity building and innovation should all be considered as they will all be critical in helping develop key aspects of the industry that will be required if future DSM plans will be able to achieve absolute reductions in natural gas sales volumes. Some non-utility members suggested that the OEB consider allowing Enbridge to claim savings from market transformation efforts, including advancing codes/standards, where it can show that its DSM efforts have led to these savings and improvements. Non-utility members

acknowledged this is a very challenging area to definitively determine Enbridge's role which will also require certain considerations as part of evaluation efforts.

4.5.1 Attribution of Benefits from Partnerships

Non-utility members also discussed the current policy guidance related to attribution of benefits. Non-utility members agreed that it is in the best interest of ratepayers to encourage Enbridge to seek all possible collaboration opportunities, including funding, program support, opportunities in various markets, marketing, etc. Non-utility members agreed that new partnership and collaboration opportunities will likely continue to grow. both in the number of engagements and size of each engagement – the recent partnership between Natural Resources Canada and Enbridge being one example. Non-utility members could not agree to an ideal approach for a framework to attribute natural gas savings and overall program benefits, but generally agreed that the simple approach of allocating savings and benefits relative to entities' funding contribution is likely not ideal. This approach doesn't acknowledge the role of each party, whose efforts lead the initial work, who has greater responsibilities as part of the partnership, etc. Some non-utility members were of the view that it may be easiest for all involved if instead of constructing an attribution framework, the OEB acknowledged that Enbridge collaborating and partnering with other entities will lead to better overall results and as such, it should be encouraged to do so. Similarly, with an expectation that Enbridge will be collaborating more in the future, non-utility members acknowledged the need for the OEB and intervenors to consider the impact on Enbridge's natural gas savings targets and how and when the impacts of potential future partnerships be addressed (for example, at or after partnership agreements are determined, or at the outset of the plan term. Non-utility members noted there are complexities with each option).

The group largely agreed that providing Enbridge with a high level of flexibility will allow it the possibility to be able to react to the market and pursue opportunities, which are likely to only continue to grow as more focus is placed on achieving climate goals. However, non-utility members also noted that there are likely reasonable thresholds for which Enbridge should inform the OEB of changes to its plan. Additionally, accompanying a high level of flexibility is the expectation that there needs to be a similar high level of accountability on Enbridge relative to its actions and the ultimate outcomes of its efforts.

4.6 Program Evaluation (Input Assumptions and Adjustment Factors)

Non-utility members provided several recommendations regarding net-to-gross values as they relate to Enbridge's programs. The recommendations below would represent changes to the OEB's current policy guidance related to NTG values. Non-utility members appreciate that, similar to its other policy recommendations, other interested stakeholders may take differing views. Supporting rationale has been provided below to assist the OEB and parties when considering this topic. As part of the DSM Decision the OEB instructed the SAG to review the practice of adjusting targets and evaluated results in a given year to account for updates input assumption. The OEB asked the SAG to provide recommendations on the ideal balance of risk between Enbridge and customers based on changes to input assumptions and adjustment factors.⁷

Non-utility members acknowledged the OEB's direction that future targets be set based on a fixed natural gas savings value, which are DSM savings that are the equivalent to certain percentage reduction thresholds in annual natural gas sales.

Members also agreed that it was reasonable to continue the practice of calculating savings from mass market programs based on assumptions in the OEB's Technical Resource Manual (TRM). If changes to TRM values were made during an evaluation cycle, those changes would apply to savings for the next DSM program year.

With respect to net-to-gross (NTG) values for Enbridge's programs, non-utility members provide the following recommendations.

4.6.1 Net-to-Gross Values

4.6.1.1 Custom Commercial and Industrial Offers

As part of discussions related to Enbridge's proposed commercial and industrial programs, non-utility members identified that the current net-to-gross values were those that were the result of an evaluation conducted by the OEB several years ago in relation to Enbridge's 2018 custom commercial and industrial programs. Non-utility members agreed that the 2018 NTG values were quite dated and likely non-reflective of the influence its future programs are likely to have on customer participation in 2026. Non-utility members indicated that Enbridge should be using NTG values that are the best estimate of expected NTG levels relative to the programs that are proposed to be available as part of its next DSM plan application.

Non-utility members stressed the importance that as part of its planning process, Enbridge develop budgets and targets with estimated NTG values that consider future programs. It was acknowledged by non-utility members that forecasting budgets and targets for future programs with a NTG ratio that is too high or too low provides risk to ratepayers (through inflated budgets that are not required to meet the natural gas savings targets, or a windfall shareholder incentive for Enbridge) or Enbridge (through natural gas savings targets that cannot be met).

Non-utility members agreed that if the NTG values from the OEB's NTG evaluation of 2018 programs is used to develop budget and savings forecasts, budgets will be proposed at levels higher than necessary, either leading to inefficient use of ratepayer funding or budget figures and bill impacts not reflective of the actual costs to achieve the expected natural gas reductions.

⁷ Ibid, pp. 82-83

Non-utility members agreed that these outcomes are not ideal nor necessary. Enbridge acknowledged that should it be instructed to rely on historic NTG values it would likely result in it receiving a shareholder incentive windfall. If the non-utility members' expectation that future NTG evaluations will result in improved results Enbridge will be credited with more net savings and in turn, qualify for higher shareholder incentive earnings. Enbridge and non-utility members agreed that this would not be reasonable.

Non-utility members agreed that the NTG values from the OEB's study of 2018 custom commercial and industrial DSM programs would not be consistent with program delivery of Enbridge's new suite of programs that will be in market in 2026. Non-utility members agreed that Enbridge's proposed program changes, most notably the increase in customer incentives, have a high probability to reduce free ridership.

For context, the NTG values determined through the OEB's evaluation of 2018 programs were:⁸

- 1. Commercial (aggregate 54%)
 - a. Multi-Unit Residential Building (MURB) 70.6%
 - b. Municipal, Universities, Schools, and Hospitals (MUSH) 29.5%
 - c. Other 30.7%
- 2. Industrial (aggregate 50%)
 - a. Agriculture 51%
 - b. Manufacturing 37.8%

Non-utility members noted that changes to core program components, enabling initiatives, delivery approaches, and customer incentives are the primary factors that lead to changes and improvements in NTG values.

The OEB's Evaluation Contractor, DNV, also provided updates to the group based on its ongoing study of NTG values of Enbridge's 2023 programs. DNV indicated that the draft final free ridership values of 2023 programs are 31.5% for custom commercial, 36.5% for industrial, and 72.05% for large volume. Non-utility members acknowledged that these results show positive developments and Enbridge's programs producing lower free ridership levels than in the past.

Non-Utility Member Consensus Recommendations

Non-utility members agreed that updated, estimated NTG values should be developed for all of Enbridge future programs, noting that greater consideration should be given to the most influential programs and/or measures.

Non-utility members agreed that although it is industry best practice to conduct NTG evaluations through the use of surveys and interviews with program participants to test the program's influence on their decision-making, that there is no perfect way to precisely assess a program's influence.

⁸ 2018 Natural Gas Demand Side Management Free Ridership Based Attribution Evaluation, March 13, 2020

The group also stressed the importance of regularly evaluating NTG impacts, including both free ridership and spillover, and to do so as close to the customer's decision to proceed with the energy efficiency upgrade incentivized through Enbridge's program as possible. However, in instances where recently evaluated results are not available, or for new programs or those with material changes which require a time delay before an evaluation can take place, non-utility members agreed that it is reasonable for proxy, or estimated values to be determined through a structured expert panel decision-making forum (also known as the Delphi method).

Through the course of several meetings with the SAG and members of the OEB's Evaluation Advisory Committee, the group reached a consensus recommendation that Enbridge should use 75% as the updated NTG estimated value for its future custom commercial program and 70% for its future custom industrial program. As noted below, these values are inclusive of both free-ridership and spillover. The non-utility member recommended estimate NTG values for future custom commercial and industrial programs were developed during the course of the OEB's NTG evaluation of Enbridge's 2023 programs. Ultimately, the recommended NTG values for future programs represent an increase of approximately 5% (after incorporating both free ridership and spillover results from the 2023 evaluation).

To establish recommendations on specific NTG values to use, non-utility members began with discussions of the benefits of developing a range estimate, with suggestions including anywhere from 60% to 80%. Non-utility members experience in other jurisdictions was that NTG values tended to be higher than those found in Ontario, but that many factors, including program, market differences, and evaluation approach, all contribute to difficulties in simply applying NTG values from one jurisdiction to another.

The group also considered NTG information from other jurisdictions, including California, New York, Illinois, Wisconsin and Massachusetts. Enbridge provided analysis of program incentive dollars per term and natural gas savings to provide context in terms of how impactful changes in incentive values may be to overall savings as a result of the program. The comparator NTG values ranged from a low of 50% in New York to a high of 83% for Massachusetts, with a simple average of approximately 73% NTG ratio for custom offers in the other jurisdictions. Non-utility members considered these to be helpful comparators, while acknowledging that there are always differences across jurisdictions, including program design, delivery, service territories, maturity of programming, customer makeup, overall scale of efficiency plans amongst others. Non-utility members agreed that these differences made direct comparisons and application difficult, but that using these values as an input into the proxy discussion was reasonable. Non-utility members agreed that although individual values should not be used as the basis for a new proxy value for Enbridge's future programs, the trend that other jurisdictions have materially higher NTG values and higher incentive dollars per energy savings confirms the reasonableness of considering an updated proxy NTG value.

Based on all this information, the group agreed on the consensus recommendation that Enbridge use updated estimate NTG values as part of plan development. The group noted that the ability for Enbridge to improve NTG, through thoughtful project screening practices and influential offer components, including financial incentives and expert project support, can lower free ridership. Additionally, with a greater focus on trade allies and general awareness and education, Enbridge has the opportunity to increase the level of spillover, which would provide broad benefits. Non-utility members acknowledged that Enbridge has yet to develop a comprehensive and integrated approach that discretely includes increasing spillover as an objective of its offers. Some members acknowledged that this may be due to spillover appearing to be a lower priority evaluation item. However, until spillover is included as an objective of its offers, non-utility members agreed that it is more reasonable to recommend values that represent a continuation of the increasing trend in free ridership values seen from the 2018 programs to 2023 programs.

Non-utility members agreed that the updated NTG estimate values should assume modest spillover contribution and agreed that it would be reasonable to apply a 3% spillover estimate to the total NTG estimate (as a reminder NTG = 1 - FR + SO. Therefore, custom commercial NTG = $75\%^9$ and custom industrial NTG = $70\%^{10}$ for industrial). Non-utility members agreed that in response to the proposed program changes, namely the material increase in available customer incentives and ability for customers to access greater amounts for individual projects, NTG values should continue to improve.

Non-utility members stressed the importance of regular, ideally annual, NTG assessments, inclusive of both free ridership and spillover, to ensure the OEB, ratepayer representatives and Enbridge are receiving timely feedback to inform program results and future program delivery.

4.6.1.2 Prescriptive Commercial Offer

Non-Utility Member Consensus

Non-utility members discussed the need and reasonableness of updated NTG values for Enbridge's future prescriptive commercial offers. Non-utility members reviewed the list of measures included in the proposed prescriptive commercial offer and compared to the OEB's NTG evaluation results of Enbridge's 2017 DSM program. The OEB's Evaluation Contractor, DNV, provided some insights related to the previous prescriptive NTG assessments, noting that for certain measures, there was limited participation which resulted in very small sample groups for some measures. However, DNV noted that although some measures were evaluated based on a small sample, the projects included within that sample represented a substantial percentage of commercial prescriptive offer savings in the year evaluated. DNV noted that good evaluation practice is to continually review NTG values, discuss as part of evaluation planning, including receiving feedback from OEB staff, Enbridge and the EAC on areas that should be updated to address potentially outdated or unreasonable values.

⁹ Custom Commercial NTG = 1 – 0.28 (free ridership) + 0.03 (spillover)

¹⁰ Custom Industrial NTG = 1 - 0.33 (free ridership) + 0.03 (spillover)

Non-utility members agreed that although some NTG values appeared low, no proposals for updated values or supporting information was provided by Enbridge. Therefore, non-utility members agreed current evaluated values are generally reasonable. Non-utility members agreed that prescriptive NTG values should be reviewed on the basis of prioritizing those measures that are forecast to provide the greatest level of impact on future portfolio level natural gas savings.

Non-utility members agreed that Enbridge should include any relevant information as part of its DSM plan should it be of the view that discrete updates to specific measure level NTG values for its commercial prescriptive offer that need to be updated.

4.6.1.3 Income Qualified Program

Non-Utility Member Consensus

Non-utility members agreed that the OEB's current policy of using a NTG value of 1.0 for income qualified programs remains reasonable and should be continued. Non-utility members confirmed that this is consistent with the approach in other jurisdictions.

4.6.1.4 Residential Program

Non-Utility Member Consensus

Non-utility members acknowledged that the current deemed NTG value of 95% for the residential program is likely within the range of anticipated utility influence. Non-utility members discussed experience in other jurisdictions and reviewed NTG values from recent evaluations that were collected by OEB staff from publicly available sources, which largely showed that an overall 90% NTG value is reasonable.

Based on this review and expert opinion, non-utility members agreed that Enbridge should incorporate the following updated NTG estimated values for its residential offers:

- Residential whole home: 90% (made up of 20% free ridership and 10% spillover)
- Smart thermostat: 86% (made up of 21% free ridership and 7% spillover)
- Single Measure Heat Pumps: 91% (made up of 31% free ridership and 22% spillover)

For all other single measures that may be included, non-utility members could not provide a recommended NTG value due to the inability to consider the merits for any individual value.

Non-utility members recommended that the OEB undertake NTG evaluations of Enbridge's residential program that include free ridership and spillover.

4.6.2 Application of NTG values

Non-utility members agreed that the OEB should consider the following guiding

principles as the foundation for how it values and includes NTG as part of its consideration of Enbridge's DSM portfolio and programs.

- 1. Prospectively apply the best estimate of the NTG impacts expected from the implementation of Enbridge's DSM plan and proposed programs.
- 2. Avoid unreasonable risk to ratepayers and the utility. This could include:
 - a) Ratepayers incurring risk if a pessimistic NTG assumption is used to set savings targets and future evaluation finds the NTG value to be considerably higher than that used to set savings targets, such that savings are inflated but targets unadjusted and higher shareholder incentives are recovered as a result.
 - b) The utility incurring risk if there are fixed savings targets for each year of its DSM plan, an overly optimistic assumption about NTG is used at the outset of a multi-year plan for setting those targets, future OEB evaluations finds the NTG to be considerably lower such that savings in future years are reduced but targets are unadjusted and lower shareholder incentives are earned as a result.
 *Of note, minor fluctuations in NTG values would not present unreasonable risk, so this is primarily considering large variations.
- The process to update key assumptions and/or adjustment factors (i.e., NTG values) should be done in a manner to motivate Enbridge to maximize NTG (minimize FR, maximize SO), which could include applying new results on a prospective basis, providing EGI with results during program implementation to allow it to apply corrective measures, etc.
- 4. NTG evaluations to be inclusive of free ridership and spillover should be included in future studies to produce net savings.

4.6.3 Process to Apply Updated Net-to-Gross Values

Members also discussed what process should be used to incorporate updated NTG values, inclusive of the estimated values recommended by the non-utility members and updated NTG values that come as a result of an OEB evaluation.

As part of these discussions non-utility members considered the impacts of how the timing of when updated NTG values were applied would impact ratepayers and Enbridge related to budgets (and costs), natural gas savings and performance targets and eligible shareholder incentives.

Non-utility members acknowledged the OEB's current policy indicates that for custom programs, updated NTG values should be applied retroactively to the program year that was the subject of the NTG evaluation. Alternatively, the OEB's current policy for prescriptive or mass market DSM programs indicates that updated NTG values are applied prospectively as Enbridge does not have control over who participates.

Enbridge suggested that for new measures, in the event there isn't research to support a NTG ratio, a default NTG of 80% should be applied until that measure is evaluated.

Non-utility Member Consensus Recommendations

Non-utility members agreed that the OEB should apply updated NTG values on a prospective basis for all programs/offers. Non-utility members acknowledged that Enbridge has a greater level of influence and control over participants in its custom commercial and industrial offers, but that applying the updated NTG values prospectively strikes a reasonable balance of risk between ratepayers and the utility – as long as NTG assumptions are updated regularly (e.g., annually). Non-utility members recommended that the OEB consider adopting an approach for updating NTG values on an annual basis in a similar manner to that used in Illinois. The following general structure was supported by all non-utility members:

- 1. NTG values are determined (i.e., approved) at the outset of the plan term by the OEB, with the granularity of the NTG values commensurate with the impacts of the program/offer/measure.
- 2. Each year, annual adjustments to NTG values are considered by the EAC when there's a basis for making a change (e.g., an evaluation has taken place, a party has identified a value that requires consideration, etc.)
- 3. The OEB's Evaluation Contractor proposes its initial recommendation for changes to NTG values based on their assessment of relevant information (including recent evaluation results, NTG results from other jurisdictions, documentation and proposals from Enbridge and/or EAC members, etc.).
- 4. EAC members, including both non-utility and utility members, try to come to consensus on revised NTG values, informed by information provided by the independent evaluator.
- 5. If consensus is reached by members of the EAC, the agreed-to NTG value is used prospectively for all programs/offers/measures and included as part of the program implementation and evaluation for the program year that immediately follows.
- If the EAC does not reach consensus, the OEB's Evaluation Contractor, based on its expert judgement and independent review (and the benefit of the discussion among the EAC and Enbridge), determines the updated NTG value to be applied going forward.

4.7 Cost Effectiveness Screening

As part of the DSM Decision the OEB approved the continued use of the TRC-Plus test to determine the cost-effectiveness of DSM programs. However, the OEB indicated that it is "mindful that the accuracy of the inputs into the test will shape decisions related to what programs are offered. The SAG should discuss the accuracy of the 15% nonenergy benefits [NEB] adder, in coordination with the IESO, to ensure that an accurate value is being applied across natural gas and electricity conservation programs in Ontario."¹¹

4.7.1 Non-Energy Benefits

As a first step, OEB staff consulted with the IESO to understand the recent study it had conducted that focused on updates to various NEB components, including areas such as reduced financial stress, thermal comfort, reduced equipment OM&A, improved air quality, control over energy decisions, improved lighting, reduced spoilage, improved business outcomes and improved product quality. The IESO had developed updated values for each of these components on the basis of customer feedback it received as part of its annual evaluation of its electricity conservation programs. The IESO cautioned a direct application of its results as its updated values were based on feedback from electricity customers related to electricity energy efficiency programs and applicability to natural gas DSM programs may not be appropriate. Additionally, OEB staff observed large variation in year-to-year impact for each of the NEB components, which further supported a cautious approach to directly applying the IESO's updated values. The SAG agreed with this assessment and did not support the direct application of the IESO's updated NEB values.

OEB staff noted that it was considering the merits of a standalone natural gas NEB study. Non-utility members agreed that the 15% value is likely understated, and although supported additional research to produce an updated figure, cautioned the value of a detailed study due to the imprecise nature of customer feedback, particularly considering the inability to discretely and accurately develop empirical data to quantify the benefits considered as part of the NEB adder. Instead, the group suggested that it may be more practical (and less time intensive and costly) to develop an updated NEBadder value that is more general in nature, informed by values used in other jurisdictions and expert opinion from the SAG (and possibly the EAC). However, nonutility members cautioned importing values directly from other jurisdictions for the same reasons the group did not support simply accepting the IESO values. Other NEB values will be based on the energy efficiency portfolio of that state/province, including measures, incentive levels, program delivery approaches, history of programming, efficiency standards, etc. The SAG agreed that OEB staff should continue to consider methods for considering updated NEB values specific to Enbridge's natural gas DSM programs as part of OEB staff-led DSM evaluation work, with input from the EAC and the OEB's Evaluation Contractor.

4.7.2 Cost of Carbon

In addition to the NEB-adder, the group also discussed how to effectively value and incorporate carbon as part of the cost-effectiveness calculation. The group acknowledged direction from the OEB as part of the Mid-Term Report of the 2015-2020 DSM Framework where it stated that "[t]he cost of carbon, using the publicly available

¹¹ EB-2021-0002, Decision and Order, p. 83

federal carbon cost, will be explicitly included as part of all cost-effectiveness analyses."¹² Non-utility members recommended that the cost of carbon value included in both avoided costs (for Achievable Potential Study analysis and cost-effectiveness analysis) should be updated to reflect a value that better represented the true cost of avoiding greenhouse gas emissions.

Non-utility members acknowledged that the OEB's direction in the 2015-2020 DSM Mid-Term Report was provided at a time when different considerations were central to its guidance, but that the full direction from the OEB makes it clear that the cost of carbon should be considered in both cost-effectiveness and avoided costs and that future updates are reasonable:

"The OEB agrees that all material benefits of DSM should be recognized as part of the screening and cost-effectiveness analyses. As such, the OEB agrees that the cost of carbon should be added to the TRC-Plus cost effectiveness test. This will ensure that planning and cost-effectiveness analyses fully consider the costs and benefits of the DSM programs. The natural gas utilities should include the federal cost of carbon as part of future avoided cost updates, as it is the most relevant public data source currently available. The OEB will also include the cost of carbon in the cost-effectiveness analysis undertaken as part of the annual program evaluation work. Additionally, the OEB will maintain the non-energy benefit adder of 15% currently included in the TRC-Plus cost-effectiveness test. The OEB will further consider this topic as part of the post-2020 DSM framework development."¹³

Members provided various suggestions on how to value the cost of carbon as part of the cost-effectiveness test. Suggestions included that the cost of carbon be based on a proxy for the alternative to electrification, such as renewable natural gas or the marginal cost of GHG reduction outside of the natural gas sector. It was noted that if an appropriate alternative value to electrification is not used, then it may result in cost-effectiveness test results indicating that some forms of energy efficiency and electrification are not cost-effective when research findings show that they are cheaper than alternatives to decarbonizing gas. As part of the APS, OEB staff, with agreement from non-utility members, advised Guidehouse to apply the social cost of carbon based on the Government of Canada estimates¹⁴ due to the current carbon price acting as a floor value and not fully representative of the true cost of avoiding greenhouse gas emissions. Non-utility members agreed that at a minimum, the social cost of carbon be considered by the OEB as the baseline carbon value applied for DSM going forward.

 ¹² EB-2017-0127 / 0128, Report of the Ontario Energy Board, Mid-Term Review of the Demand Side Management (DSM) Framework for Natural Gas Distributors (2015-2020), November 29, 2018, p. 6
 ¹³ Ibid. p. 28

¹⁴ <u>https://www.canada.ca/en/environment-climate-change/services/climate-change/science-research-data/social-</u> <u>cost-ghg.html</u>)
4.7.3 Discount Rate

Non-utility members discussed the OEB's current guidance to use a 4% real discount rate to cost-effectiveness screening. Some members were of the view that 4% does not represent an accurate or representative societal discount rate. It was suggested that the OEB consider updating this value to 1-2% real to be consistent with current industry norms tying societal discount rates to risk free investment such as Canadian Treasury Bonds. Enbridge noted that the OEB did not give direction to update the discount rate and that collaborative programs with entities such as the IESO should use consistent inputs, noting the IESO also uses a 4% real discount rate. Non-utility members agreed that the discount rate applied to cost-effectiveness screening be included as a policy item to be updated for use in the future.

4.7.4 Avoided Electricity and Natural Gas Costs

As part of the DSM Decision the OEB indicated that:

"...the OEB is mindful that in the near-term, it is likely that greater emphasis will be placed on fuel switching and electrification. Therefore, it is important to continually ensure that customers have choice on various energy options. In order to allow for as accurate a comparison as possible, it is important that the most relevant avoided costs are being used in the calculation of cost-effectiveness, particularly between electricity and natural gas options. Therefore, the OEB encourages the SAG to consider reviewing key avoided costs, namely electricity avoided costs, and coordinate with the IESO as necessary. The outcomes of this review and any new proposals or updated avoided cost figures should be included as part of Enbridge Gas's next DSM plan application."¹⁵

Consistent with this direction, OEB staff led an assessment of the various aspects of avoided costs, largely with the EAC, with conclusions of these discussions provided to the SAG for information purposes and to seek any additional comments.

OEB staff coordinated initial updates with the IESO to understand when updated electricity avoided costs would be made available and how these should be used as part of DSM analysis. The IESO indicated that work and considerations of updated avoided electricity costs were ongoing. Non-utility members indicated the importance of using as up-to-date electricity avoided costs as possible and agreed that Enbridge should use the best available information regarding electricity avoided costs as provided by the IESO.

OEB staff led discussions to consider the usefulness to updates of natural gas avoided costs. Enbridge provided information regarding its current process to develop natural gas avoided costs, which includes the use of third-party consultants and certain proprietary modelling tools. Non-utility members agreed that ideally, a party other than Enbridge develop the natural gas avoided cost estimates due to Enbridge having

¹⁵ EB-2021-0002, Decision and Order, p. 84

particular viewpoint or vested interests. Non-utility members agreed that OEB staff should lead a collaborative study, similar to the approach used by the New England states, and hire an independent consultant team that develops avoided cost estimates through an engaged stakeholder process in a transparent manner. Until such results are available, non-utility members acknowledged that Enbridge's avoided costs are the most relevant, but urged Enbridge to provide as much additional information as possible on the basis of these avoided costs to help all interested stakeholders gain a better understanding.

5.0 Program Proposals and Recommendations

Non-utility member comments and recommendations regarding Enbridge's programs for each sector are provided below. Overall, non-utility members indicated they were supportive of Enbridge's general proposed program concepts (including key areas of focus, the mix of strategies, target markets, etc.)., including the proposed updates Enbridge presented, but not necessarily the levels of natural gas savings being proposed. Non-utility members indicated that time did not permit Enbridge to provide a detailed analysis of how its program budgets and savings were developed which will be necessary to review when reviewing the final program proposals.

Non-utility members stressed the need for expanded integration of Enbridge's DSM program with IESO energy efficiency programs – and any other available programs, whether from electric LDCs or various levels of government – across Enbridge's portfolio and recommended that Enbridge explore every opportunity to enable customers access to all energy efficiency opportunities in the easier approach possible.

Non-utility member recommendations on how current programs can be expanded, which areas have the greatest possibility to produce increased natural gas savings, and recommendations for new considerations are included within each sector program chapter. The non-utility members worked collaboratively amongst the group and with Enbridge. No material disagreements regarding program concepts remain outstanding.

Non-utility members reached consensus that as part of Enbridge's next DSM plan, greater emphasis on research and development will be needed. Research and development should not be isolated to any specific customer group/sector but done in a more comprehensive manner which includes market research and market intelligence actions. Non-utility members also recommended that a material amount of budget should be directed to research and development efforts with priority placed on understanding new technologies that can lead to material natural gas savings and/or have broad applicability, responsive to the needs of customers and opportunities across each sector (e.g., customer-specific, segment applicability, large vs small, etc.) and consideration of developing an Ontario-specific building demographic database to better direct energy efficiency efforts.

Additionally, non-utility members recommended that energy innovation should be considered more broadly, across all programs/sectors, in concert with any approved research and development budget/work. Non-utility members noted that it will be critical to have a material portion (e.g., approximately 5%) of its future DSM budget dedicated for the development and deployment of new ideas.

Some members suggested that a portion of the research and development budget, including funding for energy innovation projects, be dedicated to fund academic efforts to help develop ideas, host program concept competitions, invest in technology specific studies (e.g., industrial heat pumps), funding for capacity building to develop the skills needing in the industry to advance DSM programs, as well as funding for industry

experts to be brought in from other jurisdictions to host multi-day training courses, or expos, directly with customers. Some members suggested that the funding for some of these initiatives, academic research and competitions for example, should come from Enbridge's approved DSM budget, but that the utility act at an arms-length and not be directly involved to avoid any conflict of interest or appearance of bias.

Non-utility members also recommended that, in addition to the proposed level of natural gas savings and program budgets Enbridge includes in its application, Enbridge should also prepare information and analysis on isolated scenario(s) of program variability to be responsive to the OEB's direction for various levels of reductions in natural gas volumes throughout the 2026 to 2030 term, including a 1.0% reduction in annual gas sales by 2028. The group agreed that this should be done on a net natural gas savings basis and, at a minimum, be done at the sector level. The group noted its shared appreciation for the challenges in determining alternative approaches, but highlighted the value of identifying key underlying assumptions that have the greatest uncertainty and/or influence (for example, rapid adoption of hybrid rooftop units) and the impact changes in these assumptions could have on overall sector performance and costs. Non-utility members suggested that Enbridge consider providing the OEB with an approximation of the cost and high-level insights, supported by some analysis, on the approach it would have to take to achieve the 1.0% natural gas reduction target. This will enable the OEB and other stakeholders to determine the reasonableness of Enbridge's proposal.

5.1 Residential Program

Residential Program

5.1.1 Enbridge Sector Overview

Enbridge Gas engaged in discussions on its future residential program, including those for income qualified customers, with the SAG over several meetings throughout July and August 2024. Similar to the other sectoral programs, Enbridge provided presentations that included market overview, historical results and its program strategy for the residential sector.

Enbridge provided residential sector information, noting that there are over 3.5 million residential premises that collectively consume 8.2 billion m3 of natural gas annually. Customers within the residential sector can be broadly classified under the following segments:

- general residential, including detached homes, townhouses and rowhomes, and semi-detached homes, accounting for approximately 80% of customers and annual consumption,
- moderate income¹⁶, including detached homes, townhouses and rowhomes, and semi-detached homes, accounting for approximately 9% of customers and annual consumption, and
- income qualified, including detached homes, townhouses and rowhomes, semidetached homes, and municipal social housing, co-operative housing, non-profits privately owned, accounting for approximately 11% of customers and annual consumption.¹⁷

Segment	Residential	Moderate Income	Income Qualified ¹⁸
Building Types	Detached, Townhouses/Rows, Semi-Detached	Detached, Townhouses/Rows, Semi-Detached	Detached, Townhouses/Rows, Semi-Detached, Municipal Social Housing Co-ops, Non- Profits Privately Owned
Customers	Approx. 2.8 million (80%)	Approx. 0.33 million (9%)	Approx. 0.43 million (11%)

Table 5 – Residential Market Overview: Building Types

¹⁶ Moderate income eligibility is consistent with IESO program eligibility and ranges from \$67,144 for 1 person in the home to \$164,467 with 6 people in the home.

¹⁷ Income Qualified includes private market-rate (44%) and social housing providers (56%)

¹⁸ Income Qualified multi-residential includes private market-rate (44%) and social housing providers (56%)

Enbridge summarized the unique characteristics of each segment of the sector which are shown in the table below. Building characteristics for multi-family buildings are summarized in the income qualified program summary below.

Characteristic ¹⁹	Detached	Semi-Detached	Row/Townhouse
Average Consumption (m3)	2,560	1,958	1,602
Total Premises	2.540,580	315,233	555,548
Older than 1975	1,102,875	144,748	126,613
1975 - 2006	1,032,774	126,142	250,472
2007 - Present	336,755	42,264	159,892

Table 6 – Residential Market Overview: Segments

Enbridge provided an overview of historical results as shown in the figure below.





Enbridge highlighted several key market challenges in the residential sector. Energy literacy amongst customers is still an area identified by Enbridge that requires additional attention, particularly in helping customers understand the benefits of thermal envelope improvements. Similarly, with market participants, including contractors, trades people and vendors, Enbridge noted that, with the inclusion of new technologies such as heat pumps, it will be critical that installation practices and general understanding of technologies improve. Enbridge also noted the need to drive greater levels of

¹⁹ Premises refer to billing addresses and average consumption is provided on a per premise basis.

participation as the residential sector has low participation rates relative to the size of the market.

Enbridge's residential program design principles include the following items:

- 1) Explore collaboration/partnerships
- 2) Advance energy literacy
- 3) Incorporate flexibility of offers
- 4) Attract increased market activity
- 5) Promote envelope before mechanical upgrades
- 6) Increase participation and savings
- 7) Work towards the ability to scale offers
- 8) Focus on accessibility and equity

Enbridge discussed its three-prong approach to maximize energy savings in the residential sector. It proposed to focus its residential program strategy on capacity building, engagement and executing. Enbridge stressed the importance of a comprehensive package of initiatives to support diversified programming and savings opportunities across the residential sector. Part of this is building capacity in the residential market, both through customer focused initiatives such as advancing energy literacy and energy conservation awareness and market focused initiatives, including contractor training. Next, Enbridge noted it will seek to increase overall engagement with the ability for customers to take part in no or low-cost opportunities or subsidized market opportunities to engage customers with a focus on identification and execution of energy savings activities. Such initiatives to enhance engagement may include behavioural offerings, EnerGuide audits or Energy Savings Kits (weatherization and water savings). Finally, Enbridge's program strategy turns effort into action with customer focused initiatives that include flexible offers to allow customers options to meet their needs and execute on the increased capacity and engagement. Enbridge also stressed the need to develop multiple delivery paths to broaden reach.

5.1.2 Residential Program Proposal

Energy Education & Outreach

New offer aimed at enhancing residential customers' understanding of energy usage and promoting energy-saving behaviours. Customers will be able to opt-in and receive Home Energy Reports and information on other offers. Additionally, elementary school focused education program for Grade 5 students with the inclusion of Energy Savings Kits.

Smart Thermostats

Continuation of rebates for customers to replace existing thermostats with smart thermostat.

Single Measure

Aimed to reduce entry barriers in the Whole Home offer by simplifying processes and eliminating the need for audits. Key offerings include Professional Air Sealing, Heat Pumps, Attic Insulation, and Heat Pump Water Heaters delivered through contractors and trade ally network with a focus on right-sizing heat pump installations. Enbridge noted that due to challenges with utilizing the HOT2000 energy modelling software experienced when including heat pumps, its proposal now separates heat pump incentives as a standalone measure.

Moderate Income Direct Install

Prioritize moderate income communities that may not qualify for low-income programs but still face cost barriers. Enbridge will work with municipalities, target specific geographic regions based on high-density moderate-income zones and homes built before 1974 to maximize savings through air sealing, attic insulation and smart thermostats. The offer will be free for customers.

Whole Home Custom

Designed to motivate customers to pursue deeper savings when considering retrofits through a multi-measure approach. Customers must perform pre and post-EnerGuide audits and install a minimum of two measures (e.g., insulation, windows and air sealing). Enbridge discussed the inclusion of a bonus incentive for customers who install a heat pump after completion of envelope measures installed through the whole home custom offer.





\$18.2M

\$7.9M

\$1.0M

Res Moderate Income DI

Residential HERO

Residential Energy Education & Outreach

Assumes annual inflation rate of 2%

Does not include forecast for Admin spending

9%

4%

0%



Figure 3 – Forecast Residential Program Savings

5.1.3 Non-Utility Member Residential Program Considerations

5.1.3.1 Non-utility Member Consensus Recommendations

Non-utility members offered the following recommendations:

- 1. **Energy Education and Outreach**: Non-utility members provided the following recommendations:
 - a. Consensus that training and education in elementary schools should not be provided by Enbridge, and instead an independent technical advisor. One member indicated their concern and opposition for Enbridge leading any educational programs, other than perhaps supporting technical training in a trades school on key measures like heat pumps.
 - b. Assumptions related to behavioural changes due to Home Energy Reports should be tempered as experience in other jurisdictions has shown that first-year savings may be high but quickly decline in subsequent years. It was noted that the savings decline very quickly if they are not "re-acquired" through additional participation in subsequent years by the same customers. Additionally, and of greater importance, non-utility members indicated that it would be very problematic if Enbridge either (A) relied on behaviour programs for a large portion of their residential first year savings claims; and/or (B) got to keep re-counting the same first year savings, year over year, from participation by the same customers in the same behaviour program.
- 2. **Smart Thermostats**: Non-utility members were supportive of continuing to provide incentives for smart thermostats, but recommended that additional verification and assessment of savings assumptions be conducted to ensure

smart thermostats are delivering the level of natural gas savings expected based on current assumptions. Non-utility members also noted that prioritizing thermal envelope improvements will provide greater value to any smart thermostat installation.

A non-utility member also suggested that consideration should be given to the impacts of smart thermostats when used with cold climate heat pumps to ensure natural gas savings estimates and compatibility are understood prior to significant roll-out of either technology.

- 3. **Single Measure**: Non-utility members supported the inclusion of the single measure offer and recommended:
 - a. Enbridge limit available heat pump incentives to cold climate air source heat pump models (both in cases in which full electrification is contemplated and for ASHPs that are part of hybrid heating systems.
 - b. Enbridge consider upstream and/or midstream incentives for heat pump water heaters to help impact the market, similar to the approach taken in Vermont, Connecticut and Massachusetts.
- 4. **Moderate Income Direct Install**: Non-utility members supported inclusion of the moderate income direct install offer and recommended that Enbridge consider geographically targeted delivery.
- 5. **Whole Home**: Members were largely supportive of Enbridge's whole home offering and the enhancements. However, it was recommended that the following be considered:
 - a. Greater support to allow for greater level of air sealing improvements and air tightness testing.
 - b. An incremental incentive to drive greater completion of whole home thermal envelope improvements, particularly for those customers that install a cold climate heat pump.
 - c. A bonus incentive for customers to undertake weatherization efforts after installing a heat pump, similar to that proposed for customers to install a heat pump after undertaking weatherization upgrades.
 - d. Inclusion of triple glazed windows.

5.1.3.2 Non-Utility Members – Additional Considerations

Non-utility members offered several additional considerations to the program recommendations above. The list that follows did not have consensus support.

a) **Moderate Income Direct Install** – some members encouraged Enbridge to focus on training and building capacity in contractors specializing in attic insulation who can also perform air tightness testing through use of the blower door test, for application to all offers in the residential and income qualified

segments, as well as collaboration with the IESO, including consistent eligibility with its programming.

- b) Loan Program non-utility members suggested that Enbridge consider incorporating a loan program, however cautioned that this type of programming is not a panacea and typically only offers a modest impact to program uptake. It was suggested that Enbridge consider any current loan programs offered by municipalities and how its programs can be offered in a complementary way.
- c) Evolution Through Next Plan Term non-utility members agreed that Enbridge be given the flexibility to incorporate new program design, delivery and measures throughout the next DSM plan term, particularly should the OEB approve a 5year term, which members acknowledged as a longer term than is customary in other jurisdictions with some noting much longer than ideal in the context of fast changing markets and significant ramping up of effort. Throughout the next term period, members identified the likelihood of new technologies (e.g., heat pumps, building envelope cladding) and advancements in existing technologies. Members noted that there will likely need to be a certain level of acceptance that offering new and evolving technologies and providing the right level of support for deep energy retrofits will require significantly increased costs, particularly on a per project basis.
- d) Net-to-Gross Considerations non-utility members agreed that consistent with its recommendation that new net-to-gross values be applied prospectively for commercial and industrial programs, the same approach be applied to residential programs for consistency purposes.

5.2 Income-Qualified Program

5.2.1 Income Qualified Program Proposal



Figure 4 – Income Qualified Home Winterproofing Results 2019-2023

Home Winterproofing Offer

Enbridge's proposed Home Winterproofing offer will continue to offer no-cost upgrades to income qualified customers, including a free home assessment, energy efficient upgrades including insulation and windows that are damaged and compromising building envelope, draft proofing and a smart thermostat by qualified contractors. The Home Winterproofing offer will also increase its health and safety budget to reduce projects being disqualified due to pre-existing problems in the house, including such things such as mold and asbestos.

Enbridge highlighted its delivery approach which aims to have specific focus for the two housing segments:

- **Non-profit Housing Market:** Provide Concierge service for housing providers that includes tenant outreach, project planning and coordination, security measures and on-site coordination during home visits. Dedicated Enbridge staff to engage Indigenous on-reserve and off-reserve housing providers with culturally appropriate concierge service.
- **Owner-Occupied Market:** Leverage existing municipal partners' programs and networks to reach out to private low-income households with co-marketing activities. Enbridge will engage in community-based outreach and partner with front-line agencies to develop marketing campaigns that reflect community values, language and culture to reduce mistrust amongst marginalized customers.

Direct Install Heat Pumps Offer

The focus of this offer will be to help increase the ability for income qualified customers to upgrade to hybrid heating solutions, with types and sizes of heat pumps similar to those offered through the core residential program. Homes considered for heat pumps will need to have proper insulation and air sealing, with past participants contacted as they have completed these necessary thermal envelope upgrades.

Multi-Residential Offer

In addition to the Income Qualified program focusing on single-family homes, Enbridge also has income qualified offers for multi-residential buildings. Below is a summary of the multi-residential market and recent program results.

Characteristic	Social	Со-ор	Non-Profit	Private Market
Total Premises	1,969	332	753	2,357
Total Premises (%)	36%	6%	14%	44%
Consumption (m3)	146,413,364	21,736,319	44,462,133	222,097,213
Consumption (%)	34%	5%	10%	51%

Table 7 – Income Qualified Multi-Residential Segments

Figure 5 – Income Qualified Multi-Residential Results 2019-2023



Enbridge's proposed income qualified multi-residential program offer included multiple streams: custom, prescriptive downstream, direct install, and a new operational, retrocommissioning and behavioural offer. These are summarized in the table below.

Offer	Summary	Details
Custom	Measures that require site specific inputs to calculate savings or where multiple measures are implemented with interactive effects.	 \$3.00/m3 saved up to 75% of incremental cost to \$300k/project Bonus incentives (e.g. limited time offers) – Increase incremental cost to 100%
Prescriptive	Standalone measures with deemed or quasi-prescriptive savings calculations.	Incentives varies by measure and sizeBonus incentives
Direct Install	Turnkey solutions that includes installation at no cost to customers.	100% cost coverageNovitherm Panels
Energy Assessments / Energy Manager	Enabling activities to support projects by providing needed expertise, coaching and hand holding for small to medium providers.	 Energy Audits: No cost up to\$15K per project Energy Manager: No cost up to\$30K
Operational, Retro- Commissioning, Behavioural	Identification, implementation of no cost/low-cost measures.	 No cost pre and post assessment \$0.25/m3 saved

Table 8 – Income Qualified Multi-Residential Proposal

Figure 6 – Forecast Income Qualified Budget







Figure 7 – Forecast Income Qualified Budget Breakdown by Offer







Non-Utility Member - General Feedback

Non-utility members indicated they were supportive of Enbridge's general proposed income-qualified program concepts (including key areas of focus, the mix of strategies, target markets, etc.). Non-utility member recommendations are detailed below.

5.2.2 Non-utility Member Consensus Recommendations

Non-utility members agreed that the continuation of no cost opportunities for incomequalified customers is a critical component of Enbridge's future DSM plan. Non-utility members agreed that income qualified funding should continue to be ring-fenced and only used for income-qualified programming, that it should increase from current/prior program budgets and that the income qualified budget as a percentage of residential budget should be increased, but at a minimum, maintained. Similarly, natural gas savings targets related to the income qualified program should increase.

Non-utility members had the following additional consensus recommendations related to the broader income qualified program:

- 1. For direct install heat pump opportunities, Enbridge should align home winterproofing opportunities so that the size of heat pump is optimized (and reduced) and consider implementing a program requirement where participation is restricted to homes built after 2000 or where the participant has completed the home winterproofing offer and/or (a) already has a reasonably efficient building envelope or (b) can be expected to see energy bill reductions. In all instances, only cold climate air-source heat pumps should be installed. Additionally, non-utility members agreed that full electrification should be considered when a case can be made that customer bills will go down. It was acknowledged that this only be for income qualified homes that are reasonable well sealed and insulated. However, non-utility members agreed that full electrification shouldn't be a blanket rejection.
- 2. Consider how to address cost impacts in rental scenarios when installing heat pumps, including impact on natural gas and electricity bills and tenant versus landlord/owner payment requirements. This was supported by non-utility member feedback that energy affordability should be a central component of all incomequalified offers.
- Incorporate building operator training as part of the income qualified multiresidential offer (but should not be income qualified specific as opportunities exist in the building market generally).
- 4. Include on-going/continuous training for income qualified multi-residential building operations staff and/or contractors
- 5. Develop greater market capacity for more qualified energy advisors, through free/subsidized training and/or direct incentives, so there are a greater number of qualified energy advisors for blower door assisted air tightness testing.
- In addition to the more general recommendation that Enbridge work with municipalities more closely, Enbridge should work with municipalities to identify, and help engage, low- and moderate-income neighbourhoods and eligible multiresidential buildings.
- 7. Enbridge should continue working with the IESO to ensure consistency and alignment between gas and electric programs for eligible income qualified customers.
- 8. Enbridge should target property management companies and asset managers to assist in optimizing delivery of the income qualified multi-residential offer.
- 9. Enbridge consider offering income qualified program support/contact staff in multiple languages and tenant engagement activities.

- 10. Enbridge consult with other market participants to ensure consistency in terminology and nomenclature between its offers and generally used terms, examples including supportive housing, long-term care facilities and assisted living facilities provided.
- 11. The Operational improvements, Retro-commissioning and Behavioural (ORB) offer is a high priority area with opportunities for both direct natural gas savings and the ability to enable other program opportunities with customers.

5.3 Commercial Program

5.3.1 Enbridge Sector Overview

Enbridge Gas engaged in discussions on its future commercial program with the SAG over several meetings throughout May 2024. Similar to the industrial sector, Enbridge provided a commercial market overview, discussed historical results, future outlook for the sector and its general sector strategy.

Enbridge provided details on the three main segments in the commercial sector: business (including long-term care, office, food service, retail, warehouses, entertainment and hospitality), multi-use residential buildings and the MUSH segment (municipal buildings, universities and colleges, primary and secondary schools, and hospitals or MURB). In total, there are approximately 235,000 premises across the commercial segments, with business premises accounting for approximately 87% of all premises. Consumption in the commercial sector is approximately 6.0 billion m3 with business accounting for approximately half, MURB 30% and MUSH at approximately 20%.

Enbridge summarized the unique characteristics of each segment of the sector which are shown in the table below.

Characteristic	Business	MURB	MUSH
Use of Natural Gas	Primarily space, water and cooking	Primarily space and domestic hot water	Space, water, cooking, CHP and other
Energy Efficiency Motivators	Cut costs, attract investors/tenants	Cut costs, property value, attract residents, comfort	Cust costs, sustainability (GHG reduction)
Decision Making	Tenant vs. Owner Corporate vs. Independent	Rental vs Condo Multiple vs. single properties	Centralized decision making
Key Influencers	Contractors/Engineering firms	Contractors/Engineering firms, Policies	Contractors/Engineering firms, Policies and grants
Typical Acceptable Payback Period	Typical 3 yrs Tolerance for 5 yrs	Typically 5 yrs Tolerance for 8-9 yrs	Typical 3-5 yrs Tolerance for 20 yrs
Asset Planning Cycle	EUL, annual or multi-year (2-5 year basis)	EUL, annual or multi- year (2-5 year basis)	EUL, annual and multi- year with rolling lists
New Technologies	Typically not early adopters	Typically not early adopters	Open to piloting new technologies

Table 9 – Commercial Market Overview: Segments

Enbridge informed the group of various common barriers across all commercial segments, including:

- Knowledge: low awareness of incentives/offers, technologies and the value and benefits of certain technologies;
- Resources: lack of capital, lack of time/resources, multiple layers of decision makers;
- Competing Priorities: prioritization of other items, including primary business interests, other investments that are perceived to have higher return, electricity efficiency projects, and are concerned about disruption to operations to install new equipment.

Enbridge also highlighted unique barriers for each segment of the commercial sector that include:

Small Commercial

- More pronounced financial, time and resource restrictions and awareness constraints, as well as greater inability to disrupt operations to install new equipment
- Lease agreements preventing tenants from making changes to the building
- Low priority to competing capital needs

Business

- Lease agreements preventing tenants from making changes to the building
- Uncertain if upgrading equipment will make a meaningful difference

MURB

• Tenant, resident and ownership structures can impact appetite and uptake of efficiency measures, especially in-suite

MUSH

- Bureaucracy and slow decision-making results in multi-year project planning commitments
- Prioritization of longer-term sustainability goals

Enbridge provided an overview of historical results as shown in the figure below. Of note, the fluctuation in net savings year over year is a result of natural changes in uptake of measures across the different sub-sectors (e.g., multi-residential, MUSH, etc.) which results in different overall net savings from the program.



Figure 9: Commercial Program Results 2020-2023

Enbridge highlighted several key market challenges that have been experienced recently and are expected to impact future programming. The most impactful of these to future DSM programming being the advancement in technologies and adoption of standards results in higher baselines, namely <u>Amendment 15 to the Energy Efficiency</u> <u>Regulations</u>. The impact of Amendment 15 will raise the baseline for commercial gas boilers to condensing efficiency levels in 2025. This will effectively eliminate the incentivization of gas boilers directly based solely on the Plated AFUE of the boiler, however, there remains a number of boiler related controls, improvements and optimizations, unrelated to the AFUE value that are not mandated or standardized that Enbridge will support, especially where many customers will be dealing with unoptimized systems as a result of the A15 requirement.

Other key market challenges include price increases, including cost of raw materials and labour, which has increased the cost of business significantly. Higher interest rates, generally poor economic conditions, and declining occupancy rates of commercial properties have also led to difficulties in advancing energy efficiency through recent DSM programs.

To address the barriers identified, Enbridge discussed its sector strategy, including how it hopes to unlock different aspects of market potential. The following figure was provided by Enbridge to outline its strategy.

Figure 10: Enbridge Commercial Program Strategy



Enbridge highlighted that its past programming and customer projects will not necessarily reflect future savings potential. Instead, going forward, Enbridge indicated that it expects a need to increase the focus beyond natural gas equipment replacement, focus more on building optimization, capacity building, ventilation and heat recovery and exploring hybrid solutions.

Enbridge highlighted how it is considering its go-to market strategies, emphasizing an increased focus on finding the right delivery channel (i.e., trade ally network, Enbridge energy solutions advisor, or third-party implementers) so that proper customer support (including internal decision-making and project facilitation) can be provided at the point in time when key decisions are being made (i.e., replace on burnout, maintenance and repair, major retrofit, capital and/or asset renewal, new build). Enbridge also highlighted how it is considering market enabling activities to help increase overall natural gas savings, which may include:

- Knowledge increase availability of site assessments, portfolio benchmarking, studies, and measurement to demonstrate value of investments and help quantify benefits; capacity building and training provided to customers and trade allies alike; and, avoid lost opportunities
- 2. **Resources** increase incentives to overcome financial constraints across sector; funding to support more comprehensive audits and studies.
- Competing Priorities providing customers with tailored conservation solutions; emphasizing non-energy benefits, aligning offers to address multiple concerns where possible.

Category	Offer			BUS	MURB	MUSH
Custom	Custom		Enhanced	Х	Х	Х
	 Proposed incentives: \$0.75/m3 saved up to 80% of incremental cost to \$200k/project Bonus incentives – bundled measures Negotiated incentives > 1 million m3/yr projects \$3.50/m3 saved for hybrid heat nump projects 					
	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>		Enhanced	Х	Х	Х
		Downstream	Proposed inc - 50% + in - Bonus in - Approxin saved	centives: acremental acentives nately ave	l cost cove	rage \$0.75/m3
			Enhanced	Х	Х	Х
Single/Multi- measure Pres improvements	Prescriptive	Direct Install	 Proposed incentives: Up to 100% cost coverage Approx. avg. cost: \$1.75/m3 saved (measure mix) Approx. \$3.50/m3 saved for hybrid RTUs 			
			Enhanced	Х	Х	Х
		Upstream	 Proposed incentives: 50%+ incremental cost coverage Approx. avg. cost: \$1.00/m3 saved 			
	Micro Business		New	Х		
	Proposed incentiv - No cost asses - Up to 100% c	/es: ssment cost coverage				
No cost/Low cost	Operational Improvement, Recommissioning, Behavioural (ORB)		New	х	х	Х
	Proposed incentiv - No cost pre a - \$0.25/m3 sav	/es: ind post assessment /ed				
Whole Building	Pay for Performance (P4P)		WIP	х		Х
New Construction	Building Beyond	l Code (BBC)	WIP	х	х	Х
Low Carbon Solutions	Energy Innovation		WIP	Х	x	x

5.3.2 Commercial Program Proposal

Forecast Budget and Target

Enbridge provided an overview of forecast budgets and targets between 2026 to 2030 as shown in the figure below.



Figure 11 – Commercial Program Forecast Targets 2026-2030





5.3.3 Non-Utility Member General Feedback

Non-utility members supported the proposed offers included within the commercial program noting that proceeding with these will achieve a good balance of opportunities for different commercial customers to participate through custom programs through the use of an Enbridge ESA, access prescriptive rebates with advice from trade allies, and mid-stream offers and select mass market incentives where available. Non-utility members noted that this mix of offers is common in leading jurisdictions and generally consistent with best practice program implementation. Non-utility members agreed that additional offerings targeted at microbusinesses and the operational, retrocommissioning and behavioural aspects of buildings are good additions. Additionally, non-utility members agreed that Enbridge allocate a fixed amount of funding aside for innovation (either determined as a prescribed dollar value or percent of overall portfolio spend) and that consideration should be given to if all innovation funding is pooled together across sectors or a portion dedicated to opportunities within each sector. Nonutility members suggested that, amongst other things, innovation funding could be considered to be used for new technology pilots and different delivery strategies. It was suggested by a member that this could also be a way to address market/customer segments that are further along in their efficiency paths, whereby funding is available for a wider group of potential participants to allow first-time, initial efficiency improvements to be made while also allowing leaders to continue to make energy efficiency improvements.

Non-utility members identified a number of program recommendations, enhancements and considerations, which are discussed in more detail below. However, non-utility members acknowledged that although they may have proposed alternative solutions, or have indicated their support for certain proposals suggested by Enbridge, that much of this has happened in isolation and without the benefit of seeing Enbridge's entire DSM portfolio assembled. Due to these restrictions, non-utility members agreed that as part of all DSM portfolios, trade-offs are required when considering the entire package of offerings and proposals, particularly when considering budget allocation and other key factors.

Non-Utility Member – Commercial Program Considerations

5.3.4 Non-utility Member Consensus Recommendations

Non-utility members supported Enbridge's commercial program proposal and offered the following recommendations:

1. Municipal Engagement: The group agreed that Enbridge should actively seek all opportunities to engage and partner with municipalities across the province to expand current collaboration. Non-utility members agreed that this will enhance programming, enable Enbridge and municipalities to leverage available funding and other resources, support local initiatives and expand the reach and participation of Enbridge's programs and trade ally network. Members highlighted the ability for municipalities to play a role in supporting utility programs through additional information to residents and businesses. Non-utility members also acknowledged that municipalities' capacity to provide additional support to Enbridge will likely be limited in most instances. To address this, it was suggested that Enbridge consider developing an offer or providing resource support to allow multiple municipalities access to a dedicated energy advisor. An example of an approach to consider is from Cape Light Compact where a utility staff person is assigned to several municipalities and spends one day per week at each, while also continuing a certain level of core utility responsibilities. The benefit of this approach is that, as opposed to Enbridge simply providing funding or access to energy auditors, each community gets the expertise, builds a database of resources and plans, and can increase their ability to work independently or in collaboration with other cities or towns. Additionally, this type of approach can be applied to school boards and hospitals.

Additionally, members noted that municipal policies, such as mandatory building performance standards, can be advanced through partnerships to help drive significant savings, possibly at lower cost, but acknowledged the need for a DSM regulatory policy to be in place to ensure the utility is incentivized to advocate and help support advancements in building performance standards, including reporting requirements, benchmarking, mandatory thresholds and reward systems.

- 2. Integration with Electricity Programming: The group stressed the importance of Enbridge partnering with the IESO to provide fully integrated programming opportunities for commercial customers to streamline processes, enable comprehensive efficiency upgrades and make better use of available funding. Non-utility members acknowledged that there are differing levels of integration. including a lower tier where Enbridge works with other partners for collaboration opportunities: to a higher tier where multi-fuel programs are developed independently with joint delivery; to the highest tier where multi-fuel programs are developed comprehensively and jointly and delivered to customers as a single point of contact, with one set of program requirements. Non-utility members agreed that the highest level of program integration is ideal and has a higher probability of success. Non-utility members acknowledged current limitations to fully integrated programming due to the IESO not having formal approval of its portfolio and programs beyond 2024 and Enbridge's future DSM plan requiring OEB approval, but stressed the significance of fully integrated offerings and an expectation that when able, Enbridge will endeavor to do so.
- Increase in Customer Incentives: Non-utility members supported the directional increases in customer incentives presented by Enbridge in its draft program documentation.
- 4. **Impact of Electrification:** The group agreed that additional policy direction is required to determine the level of electrification reasonable to pursue through

ratepayer funded natural gas DSM programming, noting that consideration should be given to if/how funding is collected through electricity rates and or subsidized by taxpayer funding.

From a programming perspective, the group agreed that there is a high level of uncertainty and variability in the uptake and adoption of heat pump technology in the commercial sector. The group agreed that Enbridge will be best positioned if it diversifies the range of heat pumps (e.g., variable refrigerant flow, split, centrally ducted, ductless, etc.) as well as other efficiency measures (e.g., large selection of varied measures across offers to help with balance). Incorporating these elements and expanding the range of opportunities should help mitigate uncertainty of heat pump adoption. The group suggested that Enbridge monitor market feedback regarding heat pump technology so that it has the ability to dedicate the right amount of resources, both staffing and budget, to support customer demand throughout the next plan term. Additionally, members suggested that additional flexibility may be appropriate to build into an innovation or contingency budget so that Enbridge is not constrained from effectively responding to increased participation rates and market adoption.

5. Emphasis on Training and Knowledge Building – members also largely agreed that training contractors, trade allies, commercial building managers and operators will be critical to ensuring efficiency opportunities are identified, pursued, completed and maintained. Members largely agreed that training is one of the most crucial aspects of Enbridge's next DSM plan, both in the commercial sector, but also more broadly. Some members noted that there is not a viable contractor industry to provide energy efficiency services to small commercial customers due to the limited size of projects.

Members identified the need for Enbridge to be very deliberate in its approach to incorporating training proposals as part of its DSM plan and recommended focusing the benefits of these efforts and use of ratepayer funding on the expected outcomes (i.e., enhanced levels of efficiency improvements and reductions in natural gas volumes) and suggested considering approaches used in other jurisdictions (California was provided as an example where training is an embedded component of energy efficiency portfolio administration with a certain level of savings directly attributed to these actions) to support any proposals for training-based programs and the required funding. Additionally, members recommended that, consistent with its Industrial Program recommendations, Enbridge build out its trade ally network. Members also highlighted the need to expand on general knowledge and awareness building with commercial customers, noting that helping customers understand the benefits and opportunities of energy efficiency will play a critical role in achieving higher natural gas savings reductions. Members stressed the increased delivery capacity, development of new technology knowledge, increased equity through expanded economic development as major benefits of a material focus in this area.

It was also suggested by a non-utility member that a significant part of Enbridge's efforts in this area focus on assisting in helping to develop and enhance existing energy efficiency service industries. As part of this, the recommendation was that Enbridge should support the development of trusted partners who can advise, specify, help source funding/grant opportunities, installation, and monitor the ongoing services commercial customers require. Enbridge was encouraged to review other partner development programs, including that which was part of NYSERDA's Multi-family Performance Program that had the objective of helping developers, building owners and their representatives to plan and implement energy efficiency improvements.

Need to Overcome Barriers related to Multi-Family Buildings – non-utility members agreed that Enbridge should consider how to best address the barrier to advancing projects in multi-family buildings often brought on due to "split incentives" which arise when the benefits and costs of energy efficiency improvements are split between different parties – typically landlords (or building owners) and tenants. Due to the nature of multi-family buildings, it is often the case where landlords or building owners are responsible for making decisions on building upgrades, including energy efficiency improvements like insulation, HVAC systems, or air sealing. However, often times, tenants are responsible for paying the utility bills, which does not provide the direct benefits to the landlord or building owner who paid for the capital improvements. Several recommendations were provided, including considering minimum building savings requirements (e.g., 15%), offer larger incentives for measures that lower tenant bills, leverage incentives for measures that are beneficial for landlords by requiring projects to include benefits for tenants and potentially a labelling program (in collaboration with the IESO) that provides information to potential tenants regarding the average dollars spent on energy costs per square foot in a certain building.

5.3.5 Non-Utility Members – Additional Considerations

Non-utility members offered several additional considerations to the program recommendations above. The list that follows did not have consensus support, but each was strongly supported by the majority of the group.

a) **Operational improvements, Retro-commissioning and Behavioural (ORB)** – the group acknowledged that some of the elements discussed in this offer are those which Enbridge has proposed in the past but have either not been approved (behavioural) or has seen limited response (operational improvement through past strategic energy management programs). However, the group largely agreed that this is a high priority area to pursue as part of Enbridge's future DSM plan. Members noted opportunities for both direct natural gas savings and emphasized the ability to engage with customers, develop relationship and impact other aspects of their building must all be done in order meet increasing levels of expected natural gas reductions.

- b) Evolution Through Next Plan Term non-utility members largely agreed that Enbridge be given the flexibility to incorporate new program design, delivery and measures throughout the next DSM plan term, particularly should the OEB approve a 5-year term, which members acknowledged as a longer than ideal term - and longer than is customary in other jurisdictions. Throughout the next term period, members identified the likelihood of new technologies (e.g., heat pumps, building envelope cladding) and advancements in existing technologies (e.g., demand-controlled ventilation). Members noted that there will likely need to be a certain level of acceptance that offering new and evolving technologies and providing the right level of support for deep energy retrofits will require significantly increased costs, particularly on a per project basis.
- c) Pay for Performance Program non-utility members agreed that a specific pay-for-performance program does not need to be emphasized as a high priority program, particularly if it is a natural gas-only program. Non-utility members noted that other programs, such as custom incentives, can provide similar benefits. Prior to proceeding with a future pay-for-performance program, non-utility members generally suggested that Enbridge conduct more research on the effectiveness of such programs. If a program is considered, members recommended that the program be integrated with the IESO to provide opportunities for reductions in all fuels. Additionally, non-utility members suggested that Enbridge develop a list of trusted partners and use a network of energy consulting firms as delivery partners to expand the reach of the program and increase awareness across the commercial sector.

5.4 Industrial Program

5.4.1 Enbridge Sector Overview

Enbridge Gas engaged in discussions on its future industrial program with the SAG over several meetings through March and May 2024. As a first step, Enbridge provided an industrial market overview, discussed historical results and its general sector strategy. This was done to provide the SAG with a foundation of the Ontario industrial sector before considering Enbridge's program proposal.

Enbridge highlighted that the Ontario industrial sector is generally made up of customers in the manufacturing (spanning many industries, including automotive, chemical, asphalt, cement, mining, food and beverage, etc.) and agriculture (including facilities that cultivate plants or livestock: greenhouses, vineyards, farms, grain facilities) sectors. In total, there are approximately 45,000 industrial premises that account for greater than 5.9 billion m3 of annual natural gas consumption. Of these, manufacturing accounts for approximately 85% of premises and 82% of consumption.

Enbridge summarized the unique characteristics of each sector which are shown in the table below.

Characteristic	Manufacturing	Agriculture
Use of Natural Gas	Process, ventilation, space heating and feedstock	Climate, humidity control and CO2
Energy Efficiency Motivators	Productivity, reduce operating costs, ESG	Productivity, reduce natural gas costs
Typical Acceptable Payback Period	Less than 2 years	3-5 years
Facility/Equipment Investments	As determined by business requirements	As determined by business requirements
Appetite for New Technologies	Generally resistant to new technologies	Some early adopters

Table 10 – Industrial Market Overview: Segments

Enbridge emphasized the multi-layered challenges with the industrial sector. An overarching challenge being the unique characteristics across the various customers. Additionally, there are also challenges within each customer/facility. Examples of these are certain staff that will lead and inform decision-making, including Energy Champions and Plant Managers, will have differing views as to what are priority considerations and what criteria needs to be met for a project to be advanced. As a result, Enbridge stressed the importance of developing relationships with its customers, using dedicated Energy Solutions Advisors (ESAs), to increase its ability to help overcome barriers to investing in energy efficiency, such as knowledge, resources and competing priorities.

Enbridge provided an overview of historical results as shown in the figure below.



Figure 13: Industrial Program Results 2020-2023

Enbridge highlighted several key market challenges that have contributed to the decline in overall results in recent years. These include a few current challenges such as capacity and supply chain constraints, skilled labour shortages and price increases. The latter two are likely to persist into the future. In addition, Enbridge also noted that high interest rates, poor economic conditions, advancements in technologies, and carbon pricing policy uncertainty present future market challenges.

Enbridge noted that industrial projects often require longer timelines from project initiation to completion. Shortages in skilled labour and supply chain issues have had detrimental impacts in the industrial sector, which has impacted the ability for Enbridge to influence key decisions.

Enbridge reminded the group that the time for a customer to consider energy efficiency and conservation opportunities is often during the scoping of larger projects, such as plant retooling and automation or when production expansion or procurement of new equipment occurs. If there are no large projects being considered, Enbridge noted that it works to influence customer decisions to use existing equipment in better, smarter ways.

To address the barriers identified, Enbridge discussed its sector strategy and highlighted the following key areas of opportunity:

 Knowledge – empower customers with the knowledge to make informed decisions through enhanced audits, assessments and submetering, workshops and training sessions, and access to energy management information systems (EMIS)

- Resources providing technical and financial resources necessary through enhanced incentives to reduce upfront project costs and make information gathering more affordable; and, enhanced resource support from ESAs and Trade Allies
- 3. Competing Priorities strengthening relationships through increased ESA engagement to support customers in overcoming any project obstacle.

5.4.2 Industrial Program Proposal

Custom (Site specific Inputs)	Prescriptive (TRM based measures)	Energy Innovation (Next Gen efficiency solutions)		
Enabling initiatives to support customers with the identification, quantification, prioritization and justification of efficiency opportunities. Beyond technical support from ESAs, other enabling initiatives likely to include: studies, metering, EMIS and strategic energy management (SEM) opportunities. Goal to help more customers access funds.				
 Supports measures that require site specific inputs to calculate savings Most applicable to Industrial customers with unique process loads Will continue to account for bulk of savings results 	 Provides prescribed savings and incentive amounts at a measure level. Measure assumptions such as estimated savings, incremental costs and NTG rates are pre- approved within the Technical Reference Manual (TRM). 	 Measures that support low carbon energy efficiency solutions Examples of types of measures include: waste heat pumps, and other innovative technologies that come on the market 		
Incentive: \$0.55/m3 saved to cover up to 100% of incremental project cost up to \$0.5M/project. Anticipated to achieve one-year payback for most manufacturing projects and two-year payback for agriculture projects.	Incentives to support these measures will be increased to target a payback period of less than one year of incremental cost. Some measures may be offered as direct install.	Enhanced incentives and enabling support to offset perceived risk of pursuing new technological solutions.		
Uses customized approach as the basis for natural gas savings, including engineering calculations and energy modelling.	Effort on expanding trade ally network of technology distributors and contractors to promote the offer to customers.	Additional incentives to support energy modelling, feasibility studies and optimization studies to support business case development and overcome risk related concerns.		

Delivery models include:

1) ESAs to work directly with customers and identify opportunities, quantify savings, aid in planning, secure incentives and share best practice.

2) Trade Ally Network – work directly with customers, act as primary delivery channel for Prescriptive and Direct Install measures

3) Third-Party Implementers – Leveraged to support specific offers and initiatives, such as SEM.

Industrial Program - Forecast Budget and Target

Enbridge provided an overview of forecast budgets and targets between 2026 to 2030 as shown in the figure below. In addition to the significant increase to customer incentives, Enbridge also proposes the addition of 10 incremental ESAs to support the expanded delivery of the future Industrial Program.



Figure 14 – Industrial Program Forecast Budgets and Targets 2026-2030

5.4.3 Non-Utility Member General Feedback

Non-utility members indicated that the proposed program addressed the large majority of opportunities they expect Enbridge to pursue. Non-utility members agreed that overall, the custom offer should maximize net natural gas savings per dollar spent, while having opportunities for all industrial customers to participate. Non-utility members noted the need to reduce free-ridership and increase depth of savings as areas of improvement. Some non-utility members suggested that the proposed increase to incentives should help free ridership, but that other program delivery approaches can also likely provide improvements, including strategies to attract new customers and getting existing customers to do new/different measures.

Non-utility members identified a number of recommendations, enhancements and considerations, which are discussed in more detail below. However, non-utility members acknowledged that although they may have proposed alternative solutions, or have indicated their support for certain proposals suggested by Enbridge, that much of this has happened in isolation and without the benefit of seeing Enbridge's entire DSM

portfolio assembled. Due to these restrictions, non-utility members agreed that as part of all DSM portfolios, trade-offs are required when considering the entire package of offerings and proposals, particularly when considering budget allocation and other key factors.

5.4.4 Non-Utility Member Consensus Recommendations

Enabling Initiatives

Non-utility members agreed that the proposed enabling initiatives, including studies, metering, EMIS, and SEM should be included. Non-utility members recommended that these enabling items be part of the program and not specifically included on their own as an individual offer as they all contribute to a successful industrial program. It was suggested that as part of the program proposal, Enbridge documents why the program is needed (what barriers are being addressed), the current state of the energy efficiency market, key market barriers and opportunities for growing the markets, how the program is designed, the intended objectives and expected outcomes, why the proposed activities/interventions are being included, how they can enhance the program and overall outcomes.

Custom Offer

Non-utility members reached consensus that Enbridge should continue with the industrial custom offer. Enbridge noted that the custom offer will account for approximately 80-90% of the industrial incentive budget. Non-utility members supported this level of focus to support the complex projects undertaken by industrial customers.

Enbridge's presented a proposal to increase incentives for the custom offer to \$0.55/m3 saved to cover up to 100% of incremental project costs up to a maximum of \$0.5M per project for most of the industrial sector. Non-utility members supported Enbridge's proposals to significantly increase incentives and maximize project incentive levels, but not necessarily the specific amounts proposed by Enbridge. Enbridge noted that its incentive proposal was set based on buying down project payback period to overcome significant financial barriers associated with implementing these types of projects.

Non-utility members also reached consensus on the following:

1. Enbridge should provide incentives up to 100% of incremental project costs. Non-utility members agreed that establishing the correct baseline is important as there may be projects with efficiency and other benefits that wouldn't proceed without support from Enbridge's DSM program. Non-utility members agreed that in these instances, it is reasonable for Enbridge to establish the maximum project incentive based on the total cost of the capital project being considered, and not just the costs of components of the project nominally associated with energy efficiency improvements, as the baseline would be no project proceeding. The group discussed the need for this clarification as projects are often competing internally at a customer site.

- 2. Enbridge should consider the overall project incentive cap of \$0.5M to be a soft cap and that flexibility be maintained so it could raise or even remove the cap to be responsive to unique projects that could result in significant benefits if program incentives could help a project proceed where it wouldn't otherwise. Additionally, Enbridge should consider ways in which it could implement a plan cycle cap as opposed to an annual cap to provide greater flexibility and be responsive to customer investment cycles.
- 3. Enbridge should consider including a first-time participant incentive to help drive broader participation across the sector and reach new customers.

Regarding program design, the non-utility members agreed that Enbridge should consider alternative approaches to only relying on direct-to-customer delivery through its Energy Solutions Advisors (ESAs). The group agreed that the conceptual approach to using dedicated account managers to work with larger customers on an on-going basis to drive efficiency projects is best practice allows for detailed one-on-one interactions that are required in the industrial sector. However, it was acknowledged that process evaluation results of Enbridge's approach have not been shared so it is difficult to assess the true effectiveness of Enbridge's ESAs. The group encouraged Enbridge to incorporate alternative approaches to expand participation, broaden savings opportunities, generate new ideas, and use program funds more effectively, acknowledging that the ultimate program design will require a certain level of simplicity so that it can be delivered effectively and understood by potential participants. Non-utility members also recommended that Enbridge group internal accounts/ESAs by market segment to better share developments and opportunities to leverage potential natural gas savings across multiple, similar customers.

Prescriptive Offer

Non-utility members support the continuation of the industrial prescriptive offer. The group was of the view that Enbridge should consider how it can expand the measure list so that the offer is more attractive to smaller industrial customers.

Energy Innovation Offer

Non-utility members reached consensus that Enbridge should proceed with including an energy innovation offer as part of its next DSM plan. The energy innovation offer should expand collaborative partnerships with municipalities, to generate greater level of savings and potentially engage new customers, as well as include industrial heat pumps to electrify relatively low-heat industrial processes.

5.4.5 Non-Utility Member Additional Considerations

The following recommendations related to the industrial custom incentive design received general support, however, consensus was not reached. They are provided for Enbridge to consider:

- 1. A tiered incentive structure, where two levels of incentives are offered based on the amount of natural gas savings, with the second tier having the higher incentive as a way to drive deeper savings per customer/project.
- 2. As part of a tiered incentive design, Enbridge should consider providing additional incentives after an initial threshold is achieved. Defining the threshold will be the most challenging aspect, but ideally, it should be tied to the portion of an individual customer's annual consumption that is saved, since the objective is to encourage comprehensiveness and depth of savings. Non-utility members noted historic programs that have been delivered successfully that Enbridge could use as a reference.
- Public solicitation through request for proposals non-utility members recommended that Enbridge use a portion of its program funding (e.g. 5-10%) to hold open calls for proposal from a variety of entrants, including individual customers (similar to the IESOs model), but also to ESCOs, contractors and energy efficiency firms, where both unique project concepts and program design/delivery approaches could be proposed to fill gaps, address underserved industries or delivery certain levels of natural gas savings for a prescribed dollar amount could be considered. Non-utility members suggested that through this model, both industrial and medium-to-large commercial customers be considered (while also indicating that this can have beneficial impacts across the portfolio if implemented more broadly). Non-utility members suggested that the timing for when new proposals would be accepted be clearly communicated, with varying suggestions regarding timing (including annually or once per plan cycle). In years where there are insufficient viable or attractive proposals to spend all of the funds set aside for this purpose, non-utility members recommended that dollars can be reallocated to the other program offerings.
- 4. Negotiated incentives for projects with Enbridge's largest customers to allow greater level of discretion for Enbridge to alter incentive amount, but also offer more technical assistance and business case support.
- 5. The levels of tiered incentives could also be provided based on a change in per unit of production past a certain threshold (i.e., an indicator of depth of savings).
- Incentives should also be considered for a project that includes multiple measures, with specific program rules on what would qualify to ensure incremental value and avoid ratepayer dollars not paying for easy savings.

- 7. Inclusion of a first-time participant (or trade ally) bonus to encourage new entrants and expand the reach of the program
- 8. Annual energy innovation fair, potentially held in collaboration with postsecondary institutions in Ontario. This would enable ideas to be solicited from various stakeholders, and in particular, students across educational institutions. Awarding prizes for innovative conservation ideas could be a low cost means of shaking things up and giving a wider constituency an opportunity to propose innovative solutions.
5.5 Large Volume Program

As part of the OEB's DSM Decision it stated:

"With respect to an opt-out framework, the OEB is of the view that more evidence is required before an opt-out provision can be implemented. Enbridge Gas is expected to work with relevant stakeholders, such as IGUA, to develop opt-out protocols and share with the SAG for input. The resulting opt-out framework, if supported by large volume customers, should be included as part of Enbridge Gas's next DSM plan application."²⁰

Enbridge worked with IGUA on developing an opt-out framework and presented a general overview of its considerations to the SAG for information purposes, consistent with the DSM Decision. Non-utility members were appreciative of Enbridge's efforts but were not in a position to provide any formal feedback due to the limited nature of the discussions. Enbridge indicated it will include all relevant details and supporting material in its application for review and consideration by the OEB and interested parties, acknowledging that the proposal will be fully considered in response to Enbridge's application.

²⁰ EB-2021-0002, Decision and Order, p. 44

5.6 Market Transformation Programs

5.6.1 Market Transformation Proposal

Enbridge outlined its proposal to address the need for an increase in deep energy retrofits in the future. This is proposed to happen through two offers targeted at enhancing current market practices, both in the new construction and retrofit markets.

Building Beyond Code

This program's objective is to ensure new homes are energy efficient. The program has been revised with the Net Zero Energy Ready (NZER) Development Stream to support and encourage builders who have constructed demonstrations to this standard to scale up. Offers include Discovery Home/New NZER Builder Incentives and Continuous NZER labelling for participants. Details of the proposed offer are outlined below:

Discovery Home/New NZER Builder Incentives

- Cover cost of mandatory Advanced Building Science and Net Zero Builder courses (up to 2 people: ~\$1,600)
- Provide incentive to cover ~50% of incremental cost of upgrades
- Cover cost of labelling and evaluation (\$2,100) offered after proof of label provided
- Technical and trades workshops (No cost to builder)

Continuous NZER labelling participants

- Provide incentives to cover ~25% of incremental cost of upgrades (with a limit on # of homes/builder)
- Cover cost of labelling/evaluation (\$2,100) after proof of label provided (with limit on # of homes/builder)
- Ability to attend ongoing technical and trades workshops offered

Enbridge forecasts a budget of approximately \$3.5 million in 2026, ramping up to approximately \$6.5 million in 2030 with 100 new net-zero energy ready builders and 1,675 new net-zero energy ready homes by 2030.

HER-O

Pilot program to test three levels of support to help drive best practices to have a greater level of homes achieve net-zero status. Focus will include increasing levels of support to develop a comprehensive approach to high quality deep energy retrofits. This includes working with stakeholders to develop a standard for service organizations and energy advisors, pre- and post-program customer surveys, customer interviews, focus groups, optimized training and public website with information on home-as-system focus. The level of support would increase to address enhanced improvements which

are often lost opportunities between the current state of deep retrofits that largely address only two or three measures and net zero. The middle level of support would including an integrated design process for energy advisors, template for customers to access home energy reports, customer training tools, and incentives to energy advisors for delivering additional support for customers. Final stage in the pilot would be net zero support strategies, including increased collaboration, trades and contractors, incentives for energy advisors and incentives for customers that complete and have a net zero labelled home. Overall goal

Enbridge forecasts a budget of approximately \$0.6 million in 2026 with a gradual rampup to approximately \$1.0 million by 2030.

5.6.2 Non-Utility Member Recommendations

HER-O

Non-utility members provided consensus support of Enbridge's proposed HER-O pilot adding that Enbridge should also develop a roadmap for a multi-year process where incremental improvements can be phased-in and enable contractors and energy advisors to work together to meet HER-O targets.

Building Beyond Code

Non-utility members agreed that the new construction market is one of the most critical segments due to the ability to influence critical decisions that have significant impacts, including decisions to fully electrify residential homes and that material lost opportunities will be realized if not addressed correctly.

Non-utility members agreed that sufficient incentives to motivate builders to test new building practices, familiarize and become informed of new technologies is critical.

Some non-utility members questioned Enbridge's continued involvement in new construction programs and indicated, that at a minimum, the ability for builders who participate to choose not to connect to the gas system must be maintained. In addition, it was noted by some members that, as new construction is the most logical market to encourage builders and customers to go all electric, parties other than Enbridge are better positioned to provide that advice and be relied on to support fully electrifying the new construction market.

It was also suggested by some members that Enbridge facilitate the development of a playbook/guide that outlines the options and various pathways for gas customers to reach net-zero for varying home configurations. Members agreed that this playbook should be developed by industry participants to ensure objective, expert opinions on best practices are available for customers and builders to refer to when considering options for fuel agnostic, high-performance retrofits.

6.0 SAG Member Comments

Member	Comments
Erika Lontoc	Significant strides have been made toward an energy efficient economy in Ontario, largely due to the successful delivery of natural gas DSM over the past two decades in the province. Through the years, natural gas DSM in Ontario has been following the traditional DSM model that focuses mainly on encouraging reduced natural gas consumption and energy conservation through financial rebates for energy-efficient appliances or building upgrades. In today's post-covid era where the economy was upended, and with the climate change crisis at the forefront, it is more imperative to hasten the pace and path of DSM to achieve the scale needed to meet climate change goals and create positive economic impacts, while ensuring equity outcomes are being met.
	The DSM infrastructure that EGI and Ontario built sets a solid foundation to meet the gas reduction targets set by the Board in its 2022-2025 decision. To help achieve these targets, additional focus and resources can be made on <u>data investments</u> as these are critically important in developing transformative programs that will help the understanding of, and further improve the efficiency of buildings, appliances and industrial processes. Doubling down on <u>innovation</u> particularly in technology development, utilization of smart tools and technology adoption strategies are strong suits of EGI and can be leveraged with <u>fair and appropriate utility incentives</u> to enable it to make the market changes that will take us to the clean energy future we envision for Ontario.
	Electrification especially in homes and buildings - allowing for fuel switching from natural gas heating equipment to electric heat pumps - is a major leap in natural gas DSM programming, particularly for a gas-only utility like EGI. With the fast-gaining momentum of heat pumps and inclusion of this technology in the next DSM plan, it remains unclear as to the future cost burden that will be born by natural gas ratepayers to pursue a meaningful scale of DSM funded electrification. The benefit of electrification is meant to be enjoyed by society as a whole thus it is reasonable to expect that costs towards this effort be a shared societal responsibility. As a multi-faceted concern, this will require an intentional strategic alignment amongst natural gas, electricity and energy transition proponents so that the full costs and benefits of electrification are shared equitably.
	Broadly speaking, customers seek holistic solutions to their energy needs. Customers are looking to energy experts, especially their utilities, to assist them in making informed choices and decisions when it comes to their energy requirements. A focused effort in breaking silos between gas and electricity programs across most, if not all program offerings, is likely to yield a more positive customer experience and far better outcomes for the energy ratepayers of Ontario.
	Finally, the Board's creation of the Stakeholder Advisory Group as part of the 2026-2030 DSM planning efforts is a positive step towards a transparent and collaborative engagement between the Board, EGI and an

Individual feedback from members is provided below.

independent group of cross functional DSM experts. This process
highlighted the potential opportunities for a <u>continuing dialogue between</u> <u>EGI and stakeholders in a neutral space</u> whereby ideas can be advanced and deliberated, and potential issues identified/addressed/resolved before the formal annual evaluation process sets in.
I am comfortable with the final report and am of the view that the areas important to me and my feedback throughout have been reasonably captured.
I would like to start by saying that I have found the SAG process to generally have been a net positive for the evolution of gas DSM in Ontario. Most importantly, it created a venue in which Enbridge was required to regularly engage and discuss DSM issues with a number of experts representing a range of different viewpoints and bringing significant expertise regarding successes and challenges in other jurisdictions. Of course, I and other independent experts and stakeholders also got to hear directly from Enbridge about their perspective on the same DSM issues. I think all parties learned from each other, at least to some degree, in ways that I think will help make Enbridge's next DSM a better one than it otherwise would have been. I would also like to say that I think Board Staff have done an excellent job managing the SAG discussions. There has been an awful lot of ground to cover and they have done an admirable job of keeping us moving through it all while still ensuring all voices are heard. To be clear, I still have some significant concerns about some key aspects of Enbridge's DSM draft plan (as it currently stands). I've been particularly concerned about how Enbridge has presented it to stakeholders (not just
the SAG, but the broader stakeholder group), emphasizing the costs and rate impacts with much less emphasis – and in some presentations, no emphasis at all – on the significant benefits and/or the much higher costs that will have to be incurred in the future to decarbonize its system if lower levels of DSM ambition are pursued.
For me, the biggest drawback of the SAG process was the inordinate amount of time spent reviewing and providing input on the Achievable Potential Study (APS). The "time sink" that the APS became had a deleterious impact on the SAG's ability to dive more deeply into DSM planning and policy issues of much greater import and value. I understand that the time spent on the APS was driven by direction from the Board in Enbridge's last DSM planning case. However, for all its detail, the study is fraught with uncertainty over numerous important assumptions, includes numerous conservatisms because of lack of data, and is constructed in a way that is fundamentally different from how utilities need to design DSM programs. Moreover, because of the literally thousands of assumptions embedded in in the study, it was impossible for me or anyone else (probably even Enbridge, even though they could devote many more hours to it than I could) to adequately review and critique it. For all of these reasons and others, it is of only limited value. That is not a criticism specific to just this study. In my view, it is inherent in all studies of this kind. Put simply, the resources and time spent on potential studies would be

Member	Comments
	opportunities in residential homes, commercial buildings and/or industrial facilities.
	I'll close my remarks by suggesting that I think it would be a mistake to end the SAG just because the APS has been finalized and because input to the Enbridge DSM plan has largely been provided. In my experience in numerous other jurisdictions, the kind of stakeholder engagement process represented by the SAG is most valuable if it is institutionalized and continues through multiple DSM planning and implementation cycles. Continuing to have Enbridge meet with other stakeholders and experts after its plan has been approved and is being implemented requires the utility to keep others informed of on-going challenges, to address questions about those challenges, and to get feedback on ways to improve program delivery. Again, such on-going stakeholder engagement is quite common in lead jurisdictions. I encourage the Board to consider doing the same in Ontario.
Francis Wyatt	I think the SAG process has been a good and worthwhile endeavour. It was great hearing the many perspectives and creative ideas. It was also encouraging to see Enbridge learning from and adopting many of those ideas.
	There is some value from an Achievable Potential Study (APS), but too much time was expended on it, which would have been better spent on discussing more specific program design. In the future it would be better to complete the APS well in advance of discussing DSM program details and have the period of the APS correspond with the DSM planning period.
	While there seems to be universal agreement on the need for coordination between Enbridge and IESO, it is hampered by the difference in planning periods. It may facilitate better coordination if the planning periods were harmonized. This is all the more important with the need to decrease greenhouse gas emissions, which will require simultaneous changes to many energy sources.
Ted Kesik	Stakeholder engagement is critical to the success of all kinds of initiatives, especially DSM programs in an era of climate change and a transition to a low carbon economy. Electricity demand in Ontario is expected to grow by 75 per cent by 2050, according to a recent report by the province's Independent Electricity System Operator. ^[11] It may be reasonably expected that natural gas will remain part of Ontario's energy mix as it strives to meet carbon reduction targets. The efficiency of natural gas utilization will therefore continue to be an important strategy supporting sustainable economic growth.
	As a member of the Stakeholder Advisory Group providing feedback on the 2026-2030 DSM planning efforts, several critical issues emerged that in my view need to be addressed going forward.
	First, there has to be consilience between all the DSM programs in Ontario and a vision of the future of energy. The ongoing expansion of Ontario's natural gas service network runs counter to the larger goal of

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decarbonization since the committed carbon associated with hooking up new customers will adversely offset DSM savings.
Second, a realistic sunset for the expansion of natural gas infrastructure coupled to a clarity of absolute saving targets needs to be established. Important questions about the role of natural gas within a hybrid energy mix framework during the transition to a low carbon economy can no longer be ignored.
Third, a comprehensive inventory of Ontario's building stock that captures its demographics, energy and water consumption, is essential to triage among the low hanging fruit, and the medium and long-term energy transition measures. A 2021 report examined the potential for improving the efficiency and electrifying the entire stock of some 10 million buildings in Canada - the total estimated reserves of retrofit potential. ^[2] Ontario accounts for approximately 30% of that potential retrofit building stock. <i>One scenario reflected an emergency response that retrofitted the entire Canadian building stock by 2035. A second scenario reflected a slower implementation rate with retrofits completed by 2050. In the national scenarios, nominal program costs could range from \$580 billion to \$972 billion, breaking down to \$39 to \$62 billion annually over 15 years, or \$20 to \$32 billion annually over 30 years. These are significant capital expenditures, but they are of the same order of magnitude as the \$80 billion Canadians spend annually on building renovation or the \$57 billion spent on fuel and electricity. For Ontario, expenditures of roughly \$12-\$18 billion annually over 15 years, or \$6-\$9 billion annually over 30 years, respectively. This goes far beyond the grasp of currently envisioned DSM planning and program initiatives in Ontario, and there is no way forward in the absence of building data needed to allocate societal resources effectively.</i>
Conventional DSM planning and programs are on the cusp of a major shift in focus across North America and around the developed world. This shift and transition will be necessary to better align initiatives across all sectors toward a secure energy future and a low carbon economy. Under the emerging paradigm, instruments like achievable potential studies are no longer capable of helping navigate future pathways. New ideas need new planning tools, new policies, new programs.
The Stakeholder Advisory Group has proven to be a helpful start to a process that should be expanded to encourage broader societal input. The Ontario Energy Board is urged to promote the broadest and most inclusive discussions possible about the future challenges of climate change, an expanding population, growing electrification within an aging electrical grid, and a potential increase in reliance on fossil fuels to sustain economic growth in Ontario. In response to these challenges, DSM programs have to reinvent themselves to become better harmonized with the larger polices and programs needed to achieve and then sustain a low carbon economy in Ontario.

Member	Comments
	^[1] https://www.ieso.ca/Corporate-IESO/Media/News-
	Releases/2024/10/Electricity-Demand-in-Ontario-to-Grow-by-75-per-cent-
	<u>by-2050</u>
	^[2] Haley, Brendan & Ralph Torrie. 2021. <i>Canada's Climate Retrofit Mission</i> . Ottawa: Efficiency Canada.
OFB Staff	Natural gas demand side management (DSM) in Ontario has been, and
	should continue to be, a valuable tool available to ratepayers to achieve meaningful reductions in annual natural gas consumption and corresponding bill savings. The material that follows outlines the view of OEB Staff as it relates to the discussions and activities of the OEB's Stakeholder Advisory Group (SAG).
	Interpretation and use of the SAG Report
	The content of the SAG Report largely consists of views shared by non- utility SAG members based on draft materials provided by Enbridge Gas at the time of the discussion. As a result, the SAG Report should be viewed as documenting discussion and input provided by the SAG for Enbridge Gas to consider when developing its DSM plan application.
	The SAG report includes the opinions and a collection of recommendations from experts in energy efficiency programming, with a specific focus on ensuring that Enbridge Gas has considered industry best practices with respect to its programs and offers. Non-utility SAG members were not provided with a final version of Enbridge Gas's DSM application in advance of filing, so the contents of this report should not be construed as SAG opinions or recommendations on the specifics of the application. The proposals put forward by Enbridge Gas will be adjudicated based on the evidence filed in the application.
	Value of the SAG and general stakeholder engagement
	One of the primary objectives of the SAG was to provide feedback in response to Enbridge Gas's DSM program proposals with the goal that this feedback result in regulatory efficiencies in Enbridge Gas's next DSM plan proceeding. The SAG's program-related feedback was highly constructive and resulted in many recommendations for Enbridge Gas to consider. If implemented, the SAG's recommendations should result in meaningful positive program improvements that will strengthen the DSM offerings available to ratepayers in Ontario and hopefully reduce the necessary level of scrutiny of specific programs and offerings during the upcoming DSM plan proceeding. For example, the SAG recommended Enbridge Gas use updated estimated net-to-gross values as part of plan development when developing natural gas savings targets and budget forecasts. SAG members then helped develop updated estimated net-to-gross values. This should result in more refined targets and budgets for novel future programs.
	Provisioning DSM and energy efficiency experts to provide Enbridge Gas feedback on its proposed plan was valuable and, should the OEB decide to

Member	Comments
	initiate a similar group in the future, additional guidance on the scope of the SAG's review and feedback on DSM program elements and the associated evaluation, measurement and verification would be beneficial.
	Stakeholder sessions with intervenors from Enbridge Gas's last DSM plan proceeding were hosted by OEB Staff and Enbridge Gas during the tenure of the SAG (SAG members also attended these sessions). These sessions provided Enbridge Gas the opportunity to receive additional feedback to inform DSM plan and program development. OEB Staff supports Enbridge Gas continuing to host similar sessions at regular intervals during the 2026- 2030 DSM plan term to allow Enbridge Gas to hear directly from stakeholders on how DSM programs can be improved.
	Interpretation of the APS
	The OEB's other primary objective for the DSM SAG was to provide feedback on the OEB's Achievable Potential Study (APS). This required material effort from all involved to review numerous inputs necessary to estimate achievable potential. OEB Staff notes that the APS will be directionally informative when considering Enbridge Gas's next DSM Plan. However, due to limitations in the availability of input data (e.g., related to technical suitability and costs of electrification in the commercial and industrial sectors, and the varied, site-specific nature of industrial processes), the applicability of the APS to specific programming decisions has limitations.
	The intention to complete an APS with input from the SAG was well placed. However, during the process the noted data availability challenges become apparent, particularly due to the important role commercial and industrial electrification will play in contributing to future natural gas reductions. Furthermore, it is important to note that the OEB's last APS, jointly completed with the IESO in 2019, did not have the same stakeholder engagement process to that in this study. As a result, there was limited provision for parties to identify, discuss, and plan to address the various challenges in completing natural gas energy efficiency potential studies.
	In general, the APS should be viewed as a general exercise that mainly provides broad understanding and context, while also identifying areas for further analysis that could be pursued prior to developing future DSM plans. Going forward, OEB Staff recommends that, until the availability of input data improves, consideration be given to prioritizing targeted, industry-specific studies and primary data collection over broad, all-encompassing potential studies.
	SAG input on DSM policy
	Many discussions with the SAG touched on various DSM policy elements (e.g., general objectives of DSM, the role of electrification, DSM program budgets) included in the OEB's existing DSM Framework. SAG members' views on these topics were varied and rarely completely aligned. SAG members acknowledged the complexity of these issues amidst a rapidly changing energy landscape. OEB Staff appreciates non-utility SAG

Member	Comments
	members identifying several broad policy topics for future consideration by the OEB to guide DSM programming beyond 2030.
	Additionally, OEB Staff agrees with non-utility members' recommended updates to more discrete, DSM plan-specific policy guidance, including how to incorporate updated net-to-gross values and revisions to the shareholder incentive mechanism, which should be considered as part of the upcoming DSM plan term from 2026 to 2030.

Appendix A – Non-utility Member Consensus Recommendations

A list of consensus recommendations and items of full agreement from the non-utility members can be found in the table below with references to the page numbers in the report where additional information can be found. There are no material concerns regarding program concepts that remain outstanding.

#	Pg.	Non-Utility Member Consensus Recommendation
1	5-6	SAG members agreed that the sequence and schedule of events was not ideal. The SAG recommended that if a similar process is undertaken in the future, consideration be given to a standalone process at the outset to address any potential policy concerns and considerations. The SAG acknowledged that the OEB had recently released an updated DSM policy framework in conjunction with the approval of Enbridge's 2023-2025 DSM plan, but agreed that ideally, there would have been an opportunity for stakeholder consultation regarding potential policy updates required in consideration of future DSM programming. The SAG noted that in a changing environment and increasing levels of expectations of energy efficiency programs, having an open policy consultation at the outset would enable the OEB to understand the perspectives of various stakeholders and clearly establish the baseline for any future work to be completed, including direction on acceptable budget levels.
2	6	[T]he SAG agreed that future analysis of available potential energy efficiency opportunities should focus on more detailed analysis of specific sectors and segments of customers and rely on empirical field data as opposed to academic theoretical assumption-based modelling exercises such as the APS. In any event, the SAG recommended that future potential analysis be afforded sufficient time to be completed and without the expectation that Enbridge be actively working on DSM plan development and program design simultaneously.
3	6	The SAG recommended that ongoing stakeholder consultation be directed by the OEB. However, SAG members agreed that the level of rigor undertaken through the SAG process is not needed on an annual basis. Rather, during an approved plan term, Enbridge should hold open meetings periodically with interested parties to provide plan and program updates, solicit stakeholder feedback, and ensure a process of continual improvement.
4	6	SAG members agreed that it is important to periodically undertake a detailed, comprehensive review of plan details. SAG members agreed that the composition of the group likely limited the overall impact of the group's recommendations due to the lack of formal ratepayer and environmental representation on the SAG.
5	8	SAG members agreed that the APS should not be relied upon as a prescriptive input to Enbridge's next DSM plan as the methods of analysis included within an APS greatly differ from those required by Enbridge when developing its DSM plan. SAG members acknowledged some inherent realities of an APS, including the need to make numerous assumptions based on limited data that are assumed to apply equally to all customers (i.e., potential studies are based on average savings, average costs, etc.), resulting in numerous limitations to the direct application of APS results on Enbridge's DSM plan.
6	8	Non-utility members agreed that an APS should be viewed as directionally informative and not as a prescriptive source to determine the measures that should be included in a utility DSM plan. Non-utility members suggested that at best the APS should be used to provide context to the scale and magnitude of Enbridge's proposed DSM budgets over the 2026-2030 term. Even then, it is important to recognize that the study estimated only the total costs of acquiring savings and does not address whether portions of those costs might be borne by the IESO and electric LDCs (for measures affecting both gas and

#	Pg.	Non-Utility Member Consensus Recommendation
		electricity consumption) or by federal, provincial and/or local governments. Further, it is important to note that all program costs estimated by the APS are associated with net achievement and do not account for any rebates paid to free riders. Consideration needs to be made to scaling up program budgets output by the APS to account for any effects of free ridership on program spending.
7	9	Non-utility members indicated that although positive improvements (e.g., development of different scenarios for heat pump sizing and selection for the residential sector) were made generally in this area of the APS, the lack of empirical data and cost-effectiveness of electrification and fuel switching measures both limited the overall potential natural gas savings reported. As a result, non-utility members agreed that there are likely significantly greater opportunities for natural gas savings from electrification than identified in the APS, particularly from the commercial and industrial sectors.
8	12	SAG members agreed that the APS is directionally informative, in that it can be used to provide a directional understanding of high-level opportunities and their costs. The APS brings value as a tool to support the spending magnitude required of a DSM program that includes electrification. Further, it can be used to provide a flavour of where savings opportunities lie (e.g., proportion of energy efficiency versus electrification opportunities). However, SAG members agree that the APS should not be viewed as a definitive plan of what can be realistically achieved by a DSM plan. In particular, the ranking of measures output by the APS should not be blindly transferred over to a DSM plan without consideration of data and information through other sources, for example historical DSM program experience.
9	12	SAG members agreed that the APS is not and should not be used as a primary input to Enbridge Gas' next DSM plan or to the development of future natural gas savings targets, as specified by the OEB in its EB-2021-0002 Decision and Order.7 The APS is an analysis of discrete scenarios and cannot by its nature be reflective of every market dynamic that a DSM plan would need to respond to. For this reason, the APS should be considered as a secondary input or as part of a broader suite of inputs to DSM plan development.
10	13	SAG members recommended that the OEB should not commission or produce an all- encompassing natural gas potential study. APSs are too broad and as a result, the outputs are of limited value to be applied to a practical effort, such as the development of a DSM plan. In lieu, the OEB should consider leveraging primary research or data collection that focuses on specific subsectors, such as audits conducted by individuals with specialized expertise in select industry or market sectors, to gain an understanding of market participants potential for energy conservation.
11	14	Non-utility members agreed that should participants in Enbridge's next multi-year DSM plan proceeding raise policy concerns (for example, regarding the primary objective of DSM, reasonableness of guiding principles, or other structural items), that these be addressed separately, either simultaneous to the DSM plan application proceeding (but not directly applicable) or immediately following the OEB's decision. This way, updated policy direction will be available to inform Enbridge's DSM planning efforts for its next multi-year plan.
12	14	Non-utility members agree that, generally, the proposals presented by Enbridge throughout this engagement include positive improvements which should lead to an increase in cost-effective natural gas savings. Non-utility members agreed that the evolution and ramp-up of DSM efforts should not be impeded or slowed due to requests for the OEB to reconsider its recently issued policy direction. Rather, considerations of clarified or updated policy direction should happen separately and be applied to the future DSM plan.

#	Pg.	Non-Utility Member Consensus Recommendation
13	16	Non-utility members agreed that Enbridge's DSM plan should primarily focus on natural gas savings. Further, non-utility members recommended that Enbridge not develop sector specific scorecards. Rather, Enbridge should develop one annual performance scorecard that is made up of metrics that focus on total natural gas savings with specific focus in those areas that require specific attention to ensure equitable results and access to programming.
14	17	 Non-utility members agreed to the following metric categories and the general weighting of metrics as shown in the table below. Total Annual Natural Gas Savings (excluding Large Volume) - 50% Income Qualified Annual Natural Gas Savings - 20% Residential Annual Natural Gas Savings - 15-20% Small Business Annual Natural Gas Savings - 10-15% Large Volume Annual Natural Gas Savings - 1%
15	17	Non-utility members agreed that a utility shareholder incentive is not intended, nor should be used, to attach a metric to all utility activity. The group engaged in discussion related to the need for Enbridge to incorporate various enabling, capacity building, and market support activities. Non-utility members agreed that discrete performance metrics for each of these items are not needed, nor are they appropriate.
16	17	Non-utility members also agreed that it is reasonable to continue with first-year annual natural gas savings as the primary metric (as opposed to annual lifetime savings), but only if the OEB include a requirement that in order for Enbridge to be eligible for any shareholder incentive amounts, it must, on an annual basis, continue to meet the weighted average measure life threshold established in the 2022 DSM Decision (i.e., 14.3 years) to ensure focus on deeper measures that will continue to provide savings, unless the makeup of the new plan requires reconsideration of the specific average measure life value, which should be requested by Enbridge as part of its application to the OEB.
17	18	Non-utility members acknowledged that the general level of savings relative to spending was directionally consistent with their expectations, however, non-utility members were not in a position to provide detailed feedback on the specific savings levels and budgets presented. Non-utility members provided feedback on the sectoral based programs so that Enbridge could consider additional opportunities to maximize natural gas savings and use its future budgets as effectively as possible. Non-utility members agreed that in order to provide the level of feedback that would be useful to Enbridge, they would require detailed information, which could not be provided in the limited amount of time available following the completion of the APS and Enbridge needing to file its DSM plan application. This additional information would ideally include the detailed build-up of the budget and savings underpinning Enbridge's proposed goals and budgets.
18	19	Non-utility members agreed that Enbridge's future targets should not be adjusted to account for prior year results as had been done in the past through the current target adjustment mechanism.
19	19	Non-utility members agreed that Enbridge should make best efforts to identify any program areas that it deems highly sensitive to external forces (for example, heat pumps), so that the OEB and intervenors can consider if any additional flexibility is required.
20	20	Non-utility members agreed that it would be reasonable to consider a one-time target amendment to recognize NTG values determined through evaluations, appreciating that the updated NTG values recommended by the non-utility members are only educated estimates, and empirical results will be available, which have the potential to impact savings in either a positive or negative manner. Non-utility members agreed that this would provide for reasonable flexibility early in the next plan period and recognize the

#	Pg.	Non-Utility Member Consensus Recommendation
		variability in actual versus estimated results in response to a number of program changes, some material in nature.
21	20- 21	Instead of basing the maximum available shareholder incentive on a fixed dollar figure, non-utility members recommended that the future shareholder incentive structure revise the amount available at 100% to an amount equal to 5.0% of Enbridge's total annual budget. Non-utility members agreed that the shareholder incentive available at 100% target achievement should remain at 5.0% of budget for the next DSM plan term and be reviewed and considered relative to the OEB's expectations and natural gas savings targets approved. Based on Enbridge's estimated budget figures for 2026 of \$240 million, this would result
		in an eligible shareholder incentive of \$12 million should Enbridge meet 100% of all its performance scorecard targets.
22	21-22	 Non-utility members also agreed to the following recommendations to other aspects of the shareholder incentive structure: a) Consensus that three earnings thresholds should continue to be established b) Consensus that lower and upper bands should be revised slightly to acknowledge increased levels of uncertainty in the new plan term due to changing energy landscape. i. Lower band: 70% ii. Target: 100% iii. Upper band:130% c) Consensus that the current requirement to meet lower band is maintained before any incentive is available (therefore, no incentive dollars can be accessed below 70% target achievement) d) Consensus that a change in pace of earning between bands be revised from current 40/60 split between lower and upper thresholds results in a more reasonable balance in available rewards, acknowledges that it has been challenging for Enbridge to meet 100% of targets in the past, and appreciates that budgets approved do not allow for significant expansion of efforts beyond 100% target, particularly to achieve 30% greater savings. i. 0-100% of available annual shareholder incentive (i.e., 5% of annual budget) for achievement from 70% to 100% ii. 100-200% of available annual shareholder incentive for achievement above 100% to 130%.
23	22	Non-utility members agreed that [the End-of-Term] incentive is important given the pending provincial climate goals in 2030. Non-utility members also agreed that DSM is not the only Enbridge activity that affects the magnitude of gas sales. Thus, while such an incentive included as part of a future DSM plan would provide helpful direction to Enbridge, it might be even more effective if adopted as a broader incentive across all Enbridge activities such as through a rates case.
24	24- 25	 Non-utility members agreed that when choosing what measures to include as part of its DSM programs, Enbridge should follow the prioritized list below: 1. Measures that decrease energy usage, regardless of the fuel source (e.g., weatherization that would still provide savings if the heating system were later switched from gas to electric) 2. Electrification measures (switching from gas to electric) 3. Measures that make gas equipment more efficient in existing buildings.
25	23	While not all agreed that the [home energy benchmarking reports] offering should contribute towards savings goals, all agreed that, at a minimum Enbridge should be allowed to use home energy benchmarking reports to drive customers to available offers, and act as a form of marketing. All members also supported the benefit of benchmarking towards a multi-year goal targeting reduction in gas sales volumes.

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26	23	[N]on-utility members also agreed that other program areas, including market transformation, education, research and development, workforce development, capacity building and innovation should all be considered as they will all be critical in helping develop key aspects of the industry that will be required if future DSM plans will be able to achieve absolute reductions in natural gas sales volumes
27	24	Non-utility members agreed that it is in the best interest of ratepayers to encourage Enbridge to seek all possible collaboration opportunities, including funding, program support, opportunities in various markets, marketing, etc. Non-utility members agreed that new partnership and collaboration opportunities will likely continue to grow, both in the number of engagements and size of each engagement – the recent partnership between Natural Resources Canada and Enbridge being one example.
28	25	Members also agreed that it was reasonable to continue the practice of calculating savings from mass market programs based on assumptions in the OEB's Technical Resource Manual (TRM). If changes to TRM values were made during an evaluation cycle, those changes would apply to savings for the next DSM program year.
29	26	Non-utility members agreed that updated, estimated NTG values should be developed for all of Enbridge future programs, noting that greater consideration should be given to the most influential programs and/or measures.
30	27	Through the course of several meetings with the SAG and members of the OEB's Evaluation Advisory Committee, the group reached a consensus recommendation that Enbridge should use 75% as the updated NTG estimated value for its future custom commercial program and 70% for its future custom industrial program. As noted below, these values are inclusive of both free-ridership and spillover.
31	28	Based on all of this information, the group agreed on the consensus recommendation that Enbridge use updated estimate NTG values as part of plan development.
32	28	Non-utility members agreed that the updated NTG estimate values should assume modest spillover contribution and agreed that it would be reasonable to apply a 3% spillover estimate to the total NTG estimate (as a reminder NTG = 1 – FR + SO. Therefore, custom commercial NTG = 75% and custom industrial NTG = 70% for industrial).
33	29	Non-utility members agreed that [commercial] prescriptive NTG values should be reviewed on the basis of prioritizing those measures that are forecast to provide the greatest level of impact on future portfolio level natural gas savings.
34	29	Non-utility members agreed that the OEB's current policy of using a NTG value of 1.0 for income qualified programs remains reasonable and should be continued. Non-utility members confirmed that this is consistent with the approach in other jurisdictions.
35	29	Based on this review and expert opinion, non-utility members agreed that Enbridge should incorporate the following updated NTG estimated values for its residential offers: - Residential whole home: 90% (made up of 20% free ridership and 10% spillover) - Smart thermostat: 86% (made up of 21% free ridership and 7% spillover) - Single Measure – Heat Pumps: 91% (made up of 31% free ridership and 22% spillover)
36	30	Non-utility members agreed that the OEB should consider the following guiding principles as the foundation for how it values and includes NTG as part of its consideration of Enbridge's DSM portfolio and programs. [Note: the recommended guiding principles can be found on page 30]

#	Pg.	Non-Utility Member Consensus Recommendation
37	31	Non-utility members agreed that the OEB should apply updated NTG values on a prospective basis for all programs/offers. Non-utility members acknowledged that Enbridge has a greater level of influence and control over participants in its custom commercial and industrial offers, but that applying the updated NTG values prospectively strikes a reasonable balance of risk between ratepayers and the utility – as long as NTG assumptions are updated regularly (e.g., annually).
38	32	OEB staff noted that it was considering the merits of a standalone natural gas NEB study. Non-utility members agreed that the 15% value is likely understated, and although supported additional research to produce an updated figure, cautioned the value of a detailed study due to the imprecise nature of customer feedback, particularly considering the inability to discretely and accurately develop empirical data to quantify the benefits considered as part of the NEB adder.
39	34	Non-utility members agreed that at a minimum, the social cost of carbon be considered by the OEB as the baseline carbon value applied for DSM going forward.
40	34	Non-utility members agreed that the discount rate applied to cost-effectiveness screening be included as a policy item to be updated for use in the future.
41	34- 35	Non-utility members indicated the importance of using as up-to-date electricity avoided costs as possible and agreed that Enbridge should use the best available information regarding electricity avoided costs as provided by the IESO.
42	35	Non-utility members agreed that ideally, a party other than Enbridge develop the natural gas avoided cost estimates due to Enbridge having particular viewpoint or vested interests. Non-utility members agreed that OEB staff should lead a collaborative study, similar to the approach used by the New England states, and hire an independent consultant team that develops avoided cost estimates through an engaged stakeholder process in a transparent manner.
43	36	Non-utility members reached consensus that as part of Enbridge's next DSM plan, greater emphasis on research and development will be needed. Research and development should not be isolated to any specific customer group/sector but done in a more comprehensive manner which includes market research and market intelligence actions. Non-utility members also recommended that a material amount of budget should be directed to research and development efforts with priority placed on understanding new technologies that can lead to material natural gas savings and/or have broad applicability, responsive to the needs of customers and opportunities across each sector (e.g., customer-specific, segment applicability, large vs small, etc.) and consideration of developing an Ontario-specific building demographic database to better direct energy efficiency efforts.
		Additionally, non-utility members recommended that energy innovation should be considered more broadly, across all programs/sectors, in concert with any approved research and development budget/work. Non-utility members noted that it will be critical to have a material portion (e.g., approximately 5%) of its future DSM budget dedicated for the development and deployment of new ideas.
44	37	Non-utility members also recommended that, in addition to the proposed level of natural gas savings and program budgets Enbridge includes in its application, Enbridge should also prepare information and analysis on isolated scenario(s) of program variability to be responsive to the OEB's direction for various levels of reductions in natural gas volumes throughout the 2026 to 2030 term, including a 1.0% reduction in annual gas sales by 2028. The group agreed that this should be done on a net natural gas savings basis and, at a minimum, be done at the sector level.

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#	Pg.	Non-Utility Member Consensus Recommendation
45	42- 43	Please refer to the report for a complete list of non-utility member consensus recommendations related to Enbridge's Residential Program
46	48- 50	Please refer to the report for a complete list of non-utility member consensus recommendations related to Enbridge's Income-Qualified Program
47	57- 60	Please refer to the report for a complete list of non-utility member consensus recommendations related to Enbridge's Commercial Program
48	66- 67	Please refer to the report for a complete list of non-utility member consensus recommendations related to Enbridge's Industrial Program
49	72	Non-utility members provided consensus support of Enbridge's proposed [Residential Home Energy Retrofit Net Zero] HER-O pilot adding that Enbridge should also develop a roadmap for a multi-year process where incremental improvements can be phased-in and enable contractors and energy advisors to work together to meet HER-O targets.