

**BUILDING OWNERS AND MANAGERS ASSOCIATION (ENERLIFE CONSULTING)  
RESPONSES TO INTERROGATORIES ON EXPERT EVIDENCE**

**2022-2027 DEMAND SIDE MANAGEMENT FRAMEWORK AND PLAN  
APPLICATION**

**ENBRIDGE GAS INC.**

**EB-2021-0002**

**BOMA\_IRR\_EVD\_OEB Staff-1\_20211217**

**BUILDING OWNERS AND MANAGERS ASSOCIATION (ENERLIFE CONSULTING  
INC.) RESPONDS TO THE INTERROGATORIES OF ONTARIO ENERGY BOARD  
STAFF**

**Issue 10(f) – Are Enbridge Gas’s proposed energy performance program offerings  
appropriate?**

**10f.OEB Staff.1.BOMA**

**Reference: Exhibit L.BOMA, p.5**

A reference to the potential risk of continuing to rely on traditional cost-effectiveness results notes the possible inconsistency with the achievement of broader climate and energy objectives that take account broader societal costs and benefits.

- a) Please discuss the approach to assessing cost-effectiveness from the leading P4P programs reviewed in the development of this report
- b) Please discuss is you are aware of any exemptions to traditional cost-effectiveness thresholds for P4P programs.
- c) Please discuss alternative methods for ensuing value for money from P4P programs if traditional cost-effectiveness tests are not used.

**Response:**

- a) The P4P programs reviewed used traditional cost-effectiveness tests, primarily TRC and PAC, to evaluate the programs.
- b) We did not find any alternative approaches or exemptions. The questioning of whether this approach might limit broader societal goals came from the research paper undertaken by Smart Energy Services to Improve the Energy Efficiency of the European Building Stock to contemplating similar programming in Europe.
- c) Enerlife’s opinion is that Ontario’s TRC+ approach to adjusted thresholds and societal adders is appropriate for P4P programs.

**10f.OEB Staff.2.BOMA**

**Reference: Exhibit L.BOMA, p. 4-6**

**Exhibit I.10f.EGL.STAFF.61**

Various program designs and ideal characteristics were discussed, including buildings with consistent schedules (grocery, big box and commercial offices), buildings with regular unoccupied hours or downtime, and buildings that are managed by a single individual that can make energy and operation decisions for multiple sites. Recommissioning is also discussed. Your report also notes Enbridge Gas's support or recent involvement in various similar programs, including Race to Reduce, Greening Health Care and Sustainable Towers Engaging People.

In an interrogatory response, Enbridge Gas explained how the program can scale in the future, indicating that consideration of customer enrollment, participant engagement levels and feedback from participants would be important considerations.

a) Please discuss if Enbridge Gas's approach of initially offering the program on a pilot basis and only targeting schools is reasonable. In your response, please comment on the level of uncertainty related to potential participation in the pilot program by schools, if any, and the level of natural gas savings that can reasonably be expected from the pilot.

b) Based on your experience and understanding of the evolution and current status of similar P4P programs, please comment on the likelihood of success of launching the program as a full standalone offering, rather than on a pilot basis. In your response, please comment on what reasonable participation and natural gas savings assumptions could be expected for a full P4P offering that was available to a broader group of potential participants that had access through various streams to allow as many customers to participate as possible.

c) Enbridge Gas noted that, depending on the size and complexity of building archetypes, costs associated with key elements such as modeling and financial incentives could vary widely. Please discuss any cost differences you have experienced when delivering a P4P program to different market segments other than schools.

**Response:**

a) We appreciate the relative newness of the P4P program model and that there will be lessons learned as experience grows. We are also conscious that experience to date indicates that P4P can substantially increase cost effective savings by uncovering opportunities, particularly operational savings, not addressed by traditional programming. Given the urgency of increasing natural gas and greenhouse gas emissions savings in accordance with OEB direction and government policy, and the recent downward trend in DSM effectiveness, our opinion is that the pace can be

accelerated at which P4P programming is rolled out across most commercial and multi-residential market segments. Like all programming, levels of participation by public- and private-sector organizations can be expected to vary by market segment and be influenced by program design. However, in our experience, the level of interest in utility cost and emissions reductions across the MUSH and large commercial building segments is very high and the value proposition of P4P can be expected to be well received. The 20% targeted level of gas savings for the pilot reflects Enbridge's experience with the Sustainable Schools program, which reports annually on the energy savings potential of Ontario's 5,000 schools, and their recent pilot project experience with high savings potential schools. We consider this level of savings to be attainable.

b) The general experience to date from the research showed scaling up of P4P programs following initial introduction. Both Alison Erlenbach from PG&E and Todd Amundson from Bonneville Power Administration indicated they had developed P4P programs due to customer demand. With the growing awareness of the nature and magnitude of savings potential in Ontario buildings made possible by the province's BPS and EWRB public reporting, and what we understand to have been the positive market response to the launch of the IESO's Energy Performance Program (EPP), we consider the likelihood of success of launching the program as a full standalone offering to be at least as high as traditional custom programs. We consider the P4P model to be best suited to address buildings identified with high (>20%) savings potential in each market segment. We note that the 2021 Sustainable Schools report found that 65% of Ontario schools have over 20% and 25% have greater than 50% potential natural gas savings through reaching provincial top-quartile (good practice) targets and that similar benchmarking results are found across other building segments.

c) We have direct experience with implementing IESO's Energy Performance Program along with gas saving measures in office buildings and hospitals as well as schools, and hands-on experience with energy conservation projects in post-secondary, government and multi-residential buildings which involve similar levels of data analytics to identify measures, set baselines and accurately monitor savings at the meter. Administration costs for these programs have come down as experience has grown over the past few years. Since a large part of the resulting savings comes from low-cost operational measures, the overall cost effectiveness of these projects is relatively high.

**10f.OEB Staff.3.BOMA**

**Reference: Exhibit L.BOMA, pp. 9-11**

**Exhibit I.10f.EGLSTAFF.63**

There were a number of programs and key program components and considerations discussed throughout the report and summarized in Table 1 beginning on page 9.

a) Please discuss specific changes/additions that you believe should be made to Enbridge Gas's proposed program to ensure it is as successful as possible based on your experience with P4P programs and the review of other leading programs throughout North America.

b) Please comment on the effectiveness of the incentives proposed by Enbridge Gas in engaging customers and providing motivation to participate (\$0.30/m<sup>3</sup> based on incremental savings relative to baseline and \$0.20/m<sup>3</sup> based on total gas savings at the end of the project term if customer achieved 20% reduction target).

c) Enbridge Gas noted in its interrogatory responses that it is exploring a collaborative program with the IESO's Energy Performance Program. Please discuss the ideal structure of a program between Enbridge Gas and the IESO – should it be collaborative in nature (alignment on program eligibility, incentives and other program specifics, but still offered by each program administrator separately) or should it instead be a fully integrated offering (one where the customer is able to consider and address all efficiency opportunities and is not aware that there are two separate entities responsible or that program funding and performance is measured separately). In your response, please highlight any benefits or drawbacks to either approach.

**Response:**

a) We find that Enbridge's proposed program elements bring together best practices tested and implemented in P4P programs in other jurisdictions. Key elements are:

- Savings measured at the meter
- High savings potential buildings
- Multi-year (3) to allow time for uncovering improvements and putting modified practices in place
- Continuing utility engagement through workshops and technical support
- Measure (capital, operational, behavioural) agnostic, encouraging innovation

We have no recommended changes or additions at this time.

b) We find that the proposed incentive structure, with amounts generally greater than other programs and the bonus at the end for meeting the target, to be well aligned with the motivations and actions required to drive deep reductions and sustain gas savings over time.

c) We consider the proposal for collaboration with the IESO's EPP to be desirable in terms of customer experience and the likelihood of deeper savings and lower program administration/delivery costs. The two previous Sustainable Schools pilot projects, where Enbridge and the IESO worked together on recruitment, project design, workshops and evaluation, lead us to favour a fully integrated offering (one where the customer is able to consider and address

all efficiency opportunities and may not be aware that there are two separate entities responsible or that program funding and performance is measured separately). The benefits of the integrated approach are seen to be shared marketing, administrative and delivery costs, more comprehensive solutions and a seamless customer experience. The challenges are likely to arise in coordination between two different organizations and program delivery models.

**BOMA\_IRR\_EVD\_PP\_20211217**

**BUILDING OWNERS AND MANAGERS ASSOCIATION (ENERLIFE CONSULTING INC.) RESPONDS TO THE INTERROGATORIES OF POLLUTION PROBE**

**2-PP-BOMA-1**

- a) Please explain what impact decarbonization goals and Net Zero commitments are having on the demand for DSM programs.
- b) Would P4P programs that reduce natural gas use also reduce GHG emissions in alignment with the OEB's 2021 Mandate letter and Ontario's Environment Plan?

**Response:**

- a) Our market knowledge indicates growing awareness, concern and action, particularly in large commercial, post-secondary, government and school board segments. Enbridge and IESO are better able to comment on if/how this translates into demand for DSM programs.
- b) Yes. We consider the P4P program model to be suited to delivering deep natural gas and associated emissions reductions in high savings potential buildings, particularly through relatively low-cost operations and maintenance improvements.

**2-PP-BOMA-2**

**Reference: PollutionProbe\_IR\_SBUA\_AppendixB\_AbacusData\_20211217**

The referenced attachment indicates that Canadians consider climate change issues a high priority. In Enerlife Consulting Inc.'s opinion, is there benefit to leverage the synergies between DSM and climate change mitigation benefits when engaging stakeholders and developing DSM programs? Please elaborate on any best practices in leveraging these synergies that should be considered for Ontario's DSM Framework and the 2023-2027 DSM portfolio.

**Response:**

In our experience, attention to climate change mitigation varies between commercial market segments, with governments, large commercial landlords, post-secondary institutions and school boards being the most active. DSM programs designed to maximize natural gas savings will, by extension, maximize emissions reductions. While concerned organizations have generally made the connection between natural gas and emissions reductions, DSM program marketing should, of course, leverage that messaging.

### **5-PP-BOMA-3**

**Reference: “many P4P programs are administratively simpler than traditional energy efficiency programs” [Page 1]**

- a) Please explain why P4P programs are administratively simpler than Enbridge’s traditional energy efficiency programs.
- b) Is there a significant amount of incremental DSM results that could be achieved by leveraging P4P programs in Ontario?
- c) What would need to be in the DSM Framework and/or OEB DSM decision to ensure that those benefits were achieved?

**Response:**

- a) This conclusion came from the literature review and interviews with other utilities running P4P programs. For example, at PG&E, the P4P programs were developed because customers found custom programs too onerous. IESO’s EPP program began as a means of reduce the administrative burden on organizations that span multiple LDCs. Having one program to administer rather than multiple offerings for the same building and/or organization is intuitively simpler.
- b) Yes. See response to 10f.OEB Staff.2.BOMA.
- c) In our opinion, a DSM Framework and Scorecards which require and reward maximized cost effective natural gas reductions across building portfolios, not just individual buildings, measured at the meter rather than by assumption and calculation, will lead inexorably to those benefits.

### **9-PP-BOMA-4**

Please provide what would be effective scorecard metrics per year from 2022-2027 for Enbridge related to P4P programs.

**Response:**

In our opinion, the promise of P4P is delivering on the considerable untapped gas savings potential from operations, maintenance and control improvements in high savings potential buildings. While some level of participation metrics in the early going of implementation of this new type of programming may be appropriate, the primary metric should be actual gas savings measured at the meter.

**10-PP-BOMA-5**

a) What is the most appropriate P4P program(s) design for use in Ontario?

**Response:**

a) See response to 10f.OEB Staff.3.BOMA.

**16-PP-BOMA-6**

a) BOMA and other large stakeholder groups have a significant opportunity to deliver incremental DSM in Ontario. Why has Enbridge not yet funded BOMA to put in place a third party P4P or other related program?

b) Since IESO already delivers P4P auctions, would it benefit Ontario gas customers if IESO added natural gas as well if gas Ratepayer funding was provided?

c) Are there other incremental delivery or partnership models for P4P programs in Ontario that should be implemented (e.g. municipal programs)?

**Response:**

a) This question is better addressed to Enbridge.

b) This question is beyond the scope of our research.

c) While the research did not find any partnership or community-based program delivery models in other jurisdictions, we believe the remarkable, internationally recognized success of the Race to Reduce program should be considered in the new Framework.

**17-PP-BOMA-7**

a) Please confirm that BOMA represents some of the largest building owners and operators in the Enbridge franchise area and represents significant DSM opportunity.

b) Please provide a summary of the consultation Enbridge conducted with BOMA for the proposed 2023-2027 DSM Plan and related DSM Framework.

c) Please provide a summary of all BOMA input that was ultimately included in the proposed Enbridge 2023-2027 DSM Plan and related Framework.A-4

**Response:**

a) Correct.



b) This question is better addressed to Enbridge.

c) This question is better addressed to Enbridge.

**BOMA\_IRR\_EVD\_EGI\_20211217**

**BUILDING OWNERS AND MANAGERS ASSOCIATION (ENERLIFE CONSULTING INC.) RESPONDS TO THE INTERROGATORIES OF ENBRIDGE GAS INC.**

**Issue – 10f**

**10f-EGI-1-BOMA.1**

**Reference:**

**Exhibit L.BOMA.1 page 5**

Preamble:

Ontario has pioneered internationally recognized collaborative sectoral energy efficiency programs including the Race to Reduce (commercial office buildings), Greening Health Care (hospitals) and the City of Toronto's STEP Program (multi-residential buildings) which have achieved remarkable, wide-scale energy reductions. These initiatives have been supported to varying degrees by both gas and electric utilities. No comparable initiatives were found in other jurisdictions.

Question:

a) A series of community-led initiatives to drive emissions reductions across Ontario, such as Race to Reduce, Greening Health Care and City of Toronto's STEP program, were referenced in the evidence submitted by Enerlife. How does Enerlife envision the Whole Building P4P offering fitting in with community-led initiatives such as these in the future?

**Response:**

a) We envision the primary P4P program elements aligning well with such initiatives, allowing collaboration between Enbridge (and the IESO) and third-party program managers to take advantage of synergies of function and resources including:

- Program marketing and customer recruitment
- Benchmarking and identification of high savings potential buildings
- Workshops and technical support
- Monitoring and reporting savings

**10f-EGI-2-BOMA.1**

**Reference:**

**Exhibit L.GEC.ED.1, page 26**

**Preamble:**

“Though the program is being targeted (at least initially) to schools, those customers can also be served by other programs. In other words, the Energy Performance Program is simply a different delivery path for achieving energy savings. Given that it is difficult to understand why it merits its own performance metrics. The savings generated should instead just be part of the Commercial sector savings goals.”

**Question:**

a) Does Enerlife agree with the statement above, that the Pay for Performance Program which involves a three-year commitment on behalf of customers and the utility, along with upfront effort to benchmark, set up meter reader measurement capabilities, establish baselines and monitor and track savings performance year over year in order to drive a 20% reduction in participant gas consumption, should be measured and evaluated in the same manner as other Resource Acquisition offerings? Please explain.

**Response:**

a) See response to 10-PP-BOMA-5. In our opinion, the P4P program model is sufficiently different from conventional programming in terms of customer relationships, process and analytics that it merits some degree of nurturing to ensure it receives appropriate attention until it becomes established. For this reason, we support separate early year performance metrics with the emphasis remaining on actual gas savings measured at the meter.

**BOMA\_IRR\_EVD\_FRPO\_20211217**

**BUILDING OWNERS AND MANAGERS ASSOCIATION (ENERLIFE CONSULTING INC.) RESPONDS TO THE INTERROGATORIES OF FEDERATION OF RENTAL-HOUSING PROVIDERS OF ONTARIO**

**3-FRPO-BOMA-1**

**Ref: Exhibit L.BOMA.1, pg. 4-5**

Preamble: BOMA's evidence emphasizes the importance of close coordination of DSM/CDM and carbon reducing programming. We are interested in understanding the pros and cons of have an independent third-party contracted to administrate and deliver the programs on a P4P basis.

1) In the jurisdictional scan or the experience of BOMA's evidence authors, please provide any examples of a jurisdiction that has a third-party contracted to administrate and deliver the programs.

a) Based on that/those examples, what are the pros and cons of such a model?

b) Notwithstanding if examples are provided, in the opinion of the evidence authors, please comment on the pros and cons of a third-party administrator/delivery model.

**Response:**

1) The NRDC Pay for Performance Energy Efficiency Report identifies a number of third-party delivery models scaling up P4P energy efficiency savings through aggregation and innovation. At PG&E, they are targeting 60% of the P4P programs to be administered and delivered by a third party.

a) The benefits of a third-party administration model are primarily to reduce risk to the utility, promote aggregation and leverage technical expertise. Identified risks include market access and fairness and ensuring comprehensive solutions and societal benefits.

b) Our opinion favours initiating the P4P model through Enbridge (and the IESO) with a view to future engagement of third parties.

**BOMA\_IRR\_EVD\_ED\_20211217**

**BUILDING OWNERS AND MANAGERS ASSOCIATION (ENERLIFE CONSULTING INC.) RESPONDS TO THE INTERROGATORIES OF ENVIRONMENTAL DEFENCE**

**Issue 10 – Program design**

**Interrogatory # 10-ED-1-BOMA.1**

**Reference: BOMA.1**

**Questions:**

- (a) If Enbridge were to develop a new program based on Enerlife's recommendations, please provide an estimate of: (i) the potential lifetime savings (m3) attributable to the program net of free riders, (ii) the necessary incremental DSM budget, and (iii) if possible, the TRC costs, benefits, and ratio. Please provide full details and calculations in support of the response. If beneficial and not onerous, please provide a number of illustrative program options with the above details for each. When counting savings and costs, please explicitly show that they are incremental and net of free riders (e.g. that the costs and benefits of equipment incentives available from other DSM programming are not double counted).
- (b) Please propose program design details regarding issues such as: (i) the method and timing of determining program results for the purposes of determining shareholder incentives, (ii) the method of attributing measured gas savings to those arising from the program and those arising from external factors, and (iii) the appropriate duration of customer engagement and results measurement.
- (c) If Enbridge were to adopt Enerlife's recommendation beginning in 2023, please discuss a reasonable program ramp-up by way of budget envelopes for each year from 2023 to 2027.

**Response:**

- a) The requested level of analysis is beyond the scope of this research. Allow us instead to comment on some principles and expectations:
- The evidence in Ontario indicates that the potential due to P4P programming represents one of, and perhaps the largest untapped sources of natural gas savings;
  - The deeper multi-year nature of the P4P customer relationship minimizes free ridership – customers would not have found and delivered the savings without the program;

- Verifying savings at the meter over multiple years (even beyond the proposed 3-year term) can provide confidence in higher lifetime savings for the resulting, largely operational measures; and
- The impact on the DSM budget will entail higher program administrator and incentive costs, lower (customer) implementation costs and higher TRCs than traditional programs.

We did not have time to provide full details and calculations in support of a more fulsome response or illustrative program options.

b) Our proposed program design considerations are:

- Annual absolute incremental gas savings measured at the meter (and, in the early years, participation) to determine shareholder incentive;
- Normal savings adjustments due to weather difference and any changes in use and occupancy (no other adjustments should be required); and
- Possible extended engagement (beyond the proposed 3-year term) to verify and account for longer-term savings as measured at the meter.

c) We have not modeled a recommended ramp-up period but, as articulated in responses to other interrogatories, believe that an accelerated implementation is both practical and necessary to meet OEB directives and provincial goals.