ENBRIDGE

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**Enbridge Gas Inc.**
P.O. Box 2001
50 Keil Drive N.
Chatham, Ontario, N7M 5M1

January 10, 2025

**VIA RESS AND EMAIL**

Nancy Marconi
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Nancy Marconi:

**Re: Enbridge Gas Inc. (Enbridge Gas)**
**Ontario Energy Board File No.: EB-2024-0193**
**2022 Demand Side Management (DSM) Deferral and Variance Account Disposition Application - Updated Cover Letter**

On October 30, 2024, Enbridge Gas filed the application and evidence with the OEB in the above noted proceeding.

In the letter filed with the submission, there was a typo on page 2, that incorrectly indicated that the Union South rate M1 was receiving a refund. Enbridge Gas would like to make the following correction:

> Enbridge Gas proposes that disposition of these deferral and variance account balances be implemented in alignment with other rate changes through the Quarterly Rate Adjustment Mechanism (QRAM), effective as soon as April 1, 2025. For a typical residential customer in the EGD rate zone with annual consumption of 2,400 $m^3$, the estimated one-time billing adjustment charge is $8.69. For a typical residential customer in the Union South rate zone with annual consumption of 2,200 $m^3$, the estimated one-time billing adjustment is a charge of $0.51. For a typical residential customer in the Union North rate zone with annual consumption of 2,200 $m^3$, the estimated one-time billing adjustment is a refund of $6.79.[1]

If you have any questions, please contact the undersigned.

Sincerely,

Justin Egan

Justin Egan
Technical Manager, Regulatory Applications

cc.: D. O'Leary (Aird & Berlis)
EB-2024-0193 Intervenor

[1] Please note that the estimated one-time billing adjustments for the EGI rate zones above are not inclusive of the proposed 2024 interim deferral disposal adjustment related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering.

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P.O. Box 2001
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January 10, 2025

**VIA RESS AND EMAIL**

Nancy Marconi
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Nancy Marconi:

**Re: Enbridge Gas Inc. (Enbridge Gas)**
**Ontario Energy Board File No.: EB-2024-0193**
**2022 Demand Side Management (DSM) Deferral and Variance Account Disposition Application**

Enclosed is Enbridge Gas's application and evidence concerning the final disposition and recovery of certain 2022 DSM program year-end deferral and variance account balances.[1] The accounts subject to this Application and the balances recorded (excluding interest) are as set out in Tables 1 and 2. Table 3 details the proposition to include an additional $60 million as a one-time interim deferral disposition to offset a portion of overspend amounts related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering in 2024.

Table 1
2022 DSM Deferral and Variance Account Balances - EGD Rate Zone

| Account | 2022 |
|---|---|
| DSM Variance Account | $3,157,694 |
| DSM Incentive Deferral Account | $5,236,372 |
| LRAM Variance Account | $34,771 |
| Total Balance | $8,428,837 |

[1]Enbridge Gas was formed by the amalgamation of Enbridge Gas Distribution Inc. (EGD) and Union Gas Limited (Union), on January 1, 2019 pursuant to the Ontario Business Corporations Act, R.S.O. 1990, c. B. 16. Enbridge Gas carries on the business of selling, distributing, transmitting and storing natural gas in Ontario within the meaning of the Ontario Energy Board Act, 1998 (the Act).

Table 2

2022 DSM Deferral and Variance Account Balances - Union Rate Zones

| Account | 2022 |
|---|---|
| DSM Variance Account | ($14,314,891) |
| DSM Incentive Deferral Account | $0 |
| LRAM Variance Account[2] | $722,953 |
| Total Balance | ($13,591,939) |

Table 3

2024 Portion of HER+ Program Overspend - EGI Rate Zones

| Account | 2024 |
|---|---|
| DSM Variance Account[3] | $60,000,000 |
| The $60,000,000 is spend related to the residential customer classes | |

Enbridge Gas proposes that disposition of these deferral and variance account balances be implemented in alignment with other rate changes through the Quarterly Rate Adjustment Mechanism (QRAM), effective as soon as April 1, 2025. For a typical residential customer in the EGD rate zone with annual consumption of 2,400 $m^3$, the estimated one-time billing adjustment charge is $8.69. For a typical residential customer in the Union South rate zone with annual consumption of 2,200 $m^3$, the estimated one-time billing adjustment is a charge of $0.51. For a typical residential customer in the Union North rate zone with annual consumption of 2,200 $m^3$, the estimated one-time billing adjustment is a refund of $6.79[4].

/U

The above noted submission has been filed electronically through the OEB's RESS and will be made available on Enbridge Gas's website at:
https://www.enbridgegas.com/Regulatory-Proceedings

If you have any questions, please contact the undersigned.

[2] The 2022 LRAMVA account balance includes volume variances related to 2020, 2021 and 2022 audited Union rate zones results at 2022 rates. This is discussed in further detail in Exhibit C, Tab 2, Schedule 1.
[3] Please see Exhibit D, Tab 1, Schedule 1 for details of the Additional Recovery Proposed for proposed 2024 Interim Deferral Disposition of HER+.
[4] Please note that the estimated one-time billing adjustments for the EGI rate zones above are not inclusive of the proposed 2024 interim deferral disposal adjustment related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering.

Sincerely,

Justin Egan

Justin Egan
Technical Manager, Regulatory Applications

cc.: D. O'Leary (Aird & Berlis)
EB-2021-0002 (Intervenors)
EB-2023-0062(Intervenors)

A – Administration

| Exhibit | Tab | Schedule | Appendix | Contents of Schedule |
|---|---|---|---|---|
| A | 1 | 1 | | Exhibit List |
| | 2 | 1 | | Application |
| | 3 | 1 | | Background and Overview |
| | 4 | 1 | | 2022 DSM Annual Report |

B – EGD Rate Zone

| Exhibit | Tab | Schedule | Appendix | Contents of Schedule |
|---|---|---|---|---|
| B | 1 | 1 | | EGD Rate Zone: Account Balances and Approvals Sought |
| | 2 | 1 | | EGD Rate Zone: Rate Allocation |
| | | | 1 | EGD Rate Zone: Continuity Schedule for Deferred Incentive Balances |
| | | | 2 | EGD Rate Zone: 2022 LRAMVA Balance |
| | | | 3 | EGD Rate Zone: Unit Rate & Type of Service |
| | | | 4 | EGD Rate Zone: 2022 DSM Deferral & Variance Account Balances to be Cleared including Interest |
| | | | 5 | EGD Rate Zone: 2022 Classification & Allocation of Deferral & Variance Account Balances |
| | | | 6 | EGD Rate Zone: 2022 Allocation & Unit Rate Derivation by Type of Service |
| | 3 | 1 | | EGD Rate Zone: Estimated Annual Bill Impact |

B – EGD Rate Zone

| Exhibit | Tab | Schedule | Appendix | Contents of Schedule |
|---|---|---|---|---|
| B | 3 | 1 | 1 | EGD Rate Zone: 2022 DSM Deferral & Variance Account Clearing Bill Adjustment for Typical Customers |

C – Union Rate Zones

| Exhibit | Tab | Schedule | Appendix | Contents of Schedule |
|---|---|---|---|---|
| C | 1 | 1 | | Union Rate Zones: Account Balances and Approvals Sought |
| | 2 | 1 | | Union Rate Zones: Rate Allocation |
| | | | 1 | Union Rate Zones: Continuity Schedule for Deferred Incentive Balances |
| | | | 2 | Union Rate Zones: 2022 LRAMVA Balance |
| | | | 3 | Union Rate Zones: Combined Unit Rates |
| | | | 4 | Union Rate Zones: 2022 DSM Deferral & Variance Account Balances to be Cleared including Interest |
| | | | 5 | Union Rate Zones: 2022 Allocation of Deferral & Variance Account Balances |
| | | | 6 | Union Rate Zones: Unit Rates for One-Time Adjustment |
| | 3 | 1 | | Union Rate Zones: Estimated Annual Bill Impact |
| | | | 1 | Union Rate Zones: 2022 DSM Deferral & Variance Account Clearing Bill Impacts for Typical Customers |

D - Proposed 2024 Interim Deferral Disposition HER+

| Exhibit | Tab | Schedule | Appendix | Contents of Schedule |
|---|---|---|---|---|
| D | 1 | 1 | | Additional Recovery Proposed for 2025 Rates |
| | 2 | 1 | | EGI Rate Zones: Rate Allocation |
| | | | 1 | Derivation of Uniform Residential DSM Unit Rate - 2024 Interim DSMVA Disposition |
| | | | 2 | Unit Rates for Recovery/(Refund) – Delivery - 2024 Interim DSMVA Disposition |
| | 3 | 1 | | EGI Rate Zones: Estimated Annual Bill Impact |
| | | | 1 | Calculation of One-Time Delivery Adjustments for Typical Customers 2024 Interim DSM Deferral Account Disposition |

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B, as amended;

**AND IN THE MATTER OF** an application by Enbridge Gas Inc. for an Order or Orders approving the balances and clearance of certain non-commodity 2022 Demand Side Management Deferral and Variance Accounts into rates, within the next available QRAM.

APPLICATION

1. Enbridge Gas Inc. (Enbridge Gas or the Company), was formed by the amalgamation of Enbridge Gas Distribution Inc. (EGD) and Union Gas Limited (Union), on January 1, 2019 pursuant to the *Ontario Business Corporations* Act, R.S.O. 1990, c. B. 16. Enbridge Gas carries on the business of selling, distributing, transmitting and storing natural gas in Ontario within the meaning of the *Ontario Energy Board Act*, 1998 (the Act).

2. EGD and Union (collectively, referred to as the Utilities) filed an application dated November 2, 2017 with the Ontario Energy Board (OEB) pursuant to section 43(1) of the Act for an order or orders granting leave to amalgamate into a single company, referred to as "Amalco", effective January 1, 2019.[1] On November 23, 2017, the Utilities applied to the OEB pursuant to section 36 of the Act, for an order approving a rate setting mechanism and associated parameters for the deferred rebasing period, effective January 1, 2019.[2] The OEB issued its Decision and Order approving the amalgamation and rate setting mechanism (the MAADs Decision) on August 30, 2018. The Utilities merged effective January 1, 2019. Notwithstanding the amalgamation, Enbridge Gas continued to operate its DSM portfolio of programs

[1] EB-2017-0306 Enbridge Gas Distribution Inc. and Union Gas Limited – MAAD.
[2] EB-2017-0307 Enbridge Gas Distribution Inc. and Union Gas Limited – Rate Setting Mechanism.

by the legacy rate zones of the two Utilities under the prior OEB approvals for same for subsequent years including 2022.

3. Enbridge Gas hereby applies to the OEB pursuant to Section 36 of the Act and pursuant to the MAADs Decision for such final or interim Orders and Accounting Orders as necessary approving the final balances in the 2022 Demand Side Management (DSM) Deferral and Variance Accounts (set out in Table 1 and Table 2 – excluding interest) and the disposition of these balances within the next available Quarterly Rate Adjustment Mechanism (QRAM) application following the OEB's approval,[3] effective as early as April 1, 2025 for the EGD rate zone and the Union rate zones[4] through a one-time adjustment in rates.

4. The Company further seeks approval to include an additional $60 million (Table 3 – excluding interest) as an interim deferral disposition to offset a portion of overspend amounts related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering in 2024. The purpose of this interim deferral disposition is to smooth the rate impacts over two years of a large balance which would otherwise have had a large rate impact if cleared in the normal course in the clearance applications for the years 2024 and 2025 (which would likely be filed in 2026 and 2027 for disposition in 2027 and 2028 respectively). The Company proposes that this amount be disposed of as part of a one time QRAM recovery.The remaining balance of the overspend in respect of the HER+ offering will be brought forward for approval and disposition in a subsequent application to the OEB.

[3] Please see Exhibit B, Tab 3, Schedule 1 and Exhibit C, Tab 3, Schedule 1, for details of proposed allocation and disposition methodologies, timing of disposition and derivation of unit rates.
[4] Collectively, the Union North and Union South rate zones are referred to as the "Union rate zones".

Table 1

2022 DSM Deferral and Variance Account Balances - EGD Rate Zone

| Account | 2022 |
|---|---|
| DSM Variance Account | $3,157,694 |
| DSM Incentive Deferral Account | $5,236,372 |
| LRAM Variance Account | $34,771 |
| Total Balance | $8,428,837 |

Table 2

2022 DSM Deferral and Variance Account Balances - Union Rate Zones

| Account | 2022 |
|---|---|
| DSM Variance Account | ($14,314,891) |
| DSM Incentive Deferral Account | $0 |
| LRAM Variance Account[5] | $722,953 |
| Total Balance | ($13,591,939) |

Table 3

2024 Portion of HER+ Program Overspend - EGI Rate Zones

| Account | 2024 |
|---|---|
| DSM Variance Account[6] | $60,000,000 |
| The $60,000,000 is spend related to the residential customer classes | |

5. Enbridge Gas further applies to the OEB for all necessary Orders and Directions concerning pre-hearing and hearing procedures necessary for the determination of this application.

6. Enbridge Gas requests that the OEB's review of this application proceed by means of a written hearing in English.

[5]The 2022 LRAMVA account balance includes volume variances related to 2020, 2021 and 2022 audited Union rate zones results at 2022 rates. This is discussed in further detail in Exhibit C, Tab 2,Schedule 1.
[6] Please see Exhibit D, Tab 1, Schedule 1 for details of the Additional Recovery Proposed for proposed 2024 Interim Deferral Disposition of HER+.

7. This application is supported by written evidence. This evidence may be amended, from time to time, as required by the OEB or as circumstances may require.

8. The persons affected by this Application are the customers resident or located in the municipalities, police villages, and Indigenous communities served by Enbridge Gas, together with those to whom Enbridge Gas sells gas, or on whose behalf, Enbridge Gas distributes, transmits or stores gas. It is impractical to set out the names and addresses of all the customers because they are too numerous.

9. Enbridge Gas requests that all documents relating to this application and its supporting evidence, including the responsive comments of any interested party, be served on:

The Applicant:

Regulatory Contact:

Justin Egan
Technical Manager, Regulatory Applications
Enbridge Gas Inc.

| | |
|---|---|
| Address for personal service: | 50 Keil Drive N.<br>Chatham, ON<br>N7M 5M1 |
| Telephone: | 519-350-3398 |
| Email: | justin.egan@enbridge.com<br>EGIRegulatoryProceedings@enbridge.com |

The Applicant's counsel:

Dennis M. O'Leary
Aird & Berlis LLP

| | |
|---|---|
| Address for personal service and mailing address: | Brookfield Place, Box 754<br>Suite 1800, 181 Bay Street<br>Toronto, Ontario<br>M5J 2T9 |
| Telephone | (416) 865-4711 |
| Email: | doleary@airdberlis.com |

DATED: August 30, 2024

Enbridge Gas Inc.

Justin Egan

Justin Egan
Technical Manager, Regulatory Applications

## BACKGROUND AND OVERVIEW

1. The Deferral and Variance Account balances which are the subject of this proceeding relate to DSM activities in 2022 (please see Tables 1 and 2 for a summary of these balances). Enbridge Gas is seeking approval for the balances and clearance through to rates for the 2022 DSM program year for the amounts in DSM-related Deferral and Variance Accounts. Enbridge Gas proposes to dispose of the account balances with the first available QRAM following OEB approval. For the purposes of calculating bill impacts, Enbridge Gas assumes implementation with the April 1, 2025 QRAM.

2. As outlined in the OEB's 2015-2020 DSM Framework for Natural Gas Distributors (EB-2014-0134) (the Framework),[1] the OEB indicated it "…is of the view that it [the OEB] is in the best position to coordinate the evaluation process throughout the DSM framework period".[2] As outlined in the Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134) (the Guidelines):[3]

> Consistent with past practices, recovery and disposition of DSM related amounts (i.e., DSM Variance Account ("DSMVA"), DSM Incentive Deferral Account ("DSMIDA"), and Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA")) will be filed by the natural gas utilities annually, based on the actual amount of natural gas savings resulting from the utilities' DSM programs in relation to the annual plans targets. The DSM amounts include program spending, shareholder incentive amounts and lost revenues in relation to the DSM programs delivered by the natural gas utility.

3. On August 21, 2015, the OEB issued a letter which provided additional details regarding a new OEB-Staff coordinated evaluation governance structure.[4] This letter included the following information:

[1] EB-2014-0134, Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), December 22, 2014.
[2] Framework, p.30.
[3] Guidelines, p.36.
[4] EB-2015-0245, OEB Letter, 2015-2020 DSM Evaluation Process of Program Results, August 21, 2015.

- The OEB would be responsible for coordinating and overseeing the evaluation and audit process, including selecting a third-party Evaluation Contractor (EC).
- The EC would carry out the evaluation and audit processes and would draft an Evaluation, Monitoring and Verification (EM&V) plan for the natural gas utilities' (EGD and Union, collectively referred to as the "Utilities") DSM programs.
- An Evaluation Advisory Committee (EAC) would be formed to provide input and advice to the OEB on the development of the EM&V plan and on the evaluation and audit of the DSM results.

4. Furthermore, the letter noted that the EAC would be comprised of:
    - Experts representing non-utility stakeholders, with demonstrated experience and expertise in the evaluation of DSM technologies and programs, natural gas energy efficiency technologies, multi-year impact assessments, net-to-gross (NTG) studies, free ridership analysis and natural gas energy efficiency persistence analysis;
    - Expert(s) retained by the OEB;
    - Representatives from the Independent Electricity System Operator (IESO);
    - Representatives from each natural gas utility; and
    - Representatives from the Ministry of Energy and the Environmental Commissioner of Ontario, who will participate as observers.

<u>1. 2022 EM&V Process</u>

5. The 2022 DSM program year is an extension of the OEB's Framework and Guidelines and Enbridge Gas's (formerly EGD and Union) OEB-approved 2021[5] extension of the 2015-2020 DSM Plans (EB-2015-0029/0049) (the DSM Plans).[6]

[5] EB-2019-0271, Decision and Order, July 16, 2020.
[6] EB-2015-0029, 2015-2020 DSM Plan, Enbridge Gas Distribution Inc, April 1, 2015; EB-2015-0049, 2015-2020 DSM Plan, Union Gas Limited, April 1, 2015.

6. On May 3, 2021 Enbridge Gas filed an application which consisted of a Proposed DSM Framework, effective 2022, and a six-year DSM Plan for 2022-2027.[7] In August 2021, the OEB directed the continuation of Enbridge Gas's 2021 DSM Plans into 2022 and provided performance scorecards to be used for the duration of 2022.[8]

7. In the 2022 calendar year, the non-utility stakeholders appointed to the EAC were:
    - Chris Neme, Energy Futures Group; and
    - Jay Shepherd, Shepherd Rubenstein Professional Corporation.

    In the 2022 calendar year, the independent experts appointed to the EAC were:
    - Ted Kesik, Knowledge Mapping Inc.; and
    - Robert Wirtshafter, Wirtshafter Associates Inc.

8. The OEB appointed a new EAC on March 1, 2023[9] and, due to the nature of the audit and evaluation cycle, the new members of the EAC were involved in the annual verification of the 2022 program year. The non-utility members of the EAC in 2023 were:
    - Robert Wirtsafter, Wirtsafter Associates, Inc.;
    - Chris Neme, Energy Futures Group;
    - Katherine Johnson, Johnson Consulting Group; and
    - Dan Violette, Apex Analytics LLC.

[7] EB-2021-0002, Multi-Year Demand Side Management Plan (2022-2027), May 3, 2021.
[8] EB-2021-0002, Decision and Order related to 2022 Natural Gas Demand Side Management activities, August 26, 2021.
[9] EB-2022-0295, OEB Letter, Membership Announcement - Natural Gas Demand Side Management Stakeholder Advisory Group and Evaluation Advisory Committee, March 1, 2023.

9. The methodologies used by Enbridge Gas to determine the amounts recorded in the DSMVA,[10] LRAMVA,[11] and DSMIDA[12] for the 2022 DSM program year for each of the EGD rate zone and the Union rate zones, were the subject of the:
    (i) Framework;
    (ii) Guidelines;
    (iii) Decision and Order and Revised Decision and Order of the OEB on Enbridge Gas's 2015-2020 DSM Plans;[13]
    (iv) OEB's Mid-Term Review of the Framework (EB-2017-0127/0128) and related Report of the OEB;[14]
    (v) Decision and Order of the OEB on Enbridge Gas's 2021 DSM Plan (EB-2019-0271);
    (vi) Utilities' 2015 Clearance of DSM Deferral and Variance Accounts proceedings (EB-2017-0323 and EB-2017-0324);
    (vii) Utilities' 2016 Clearance of DSM Deferral and Variance Accounts proceedings (EB-2018-0300/0301);
    (viii) Utilities' 2017 and 2018 Clearance of DSM Deferral and Variance Accounts proceeding (EB-2020-0067);
    (ix) Utilities' 2019 Clearance of DSM Deferral and Variance Accounts proceeding (EB-2021-0072);
    (x) Utilities' 2020 Clearance of DSM Deferral and Variance Accounts proceeding (EB-2022-0007); and
    (xi) Utilities' 2021 Clearance of DSM Deferral and Variance of Accounts proceeding (EB-2023-0062).

[10] EGD rate zone Account No. 179.06 and Union rate zones Account No. 179-111.
[11] EGD rate zone Account No. 623.010 and Union rate zones Account No. 179-75.
[12] EGD rate zone Account No. 179.26 and Union rate zones Account No. 179-126.
[13] EB-2015-0029/0049, Decision and Order, January 20, 2016; EB-2015-0029/0049, Revised Decision and Order, February 24, 2016.
[14] 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.

10. The EC concluded 2022 DSM program year EM&V activities in 2023 with the release and presentation of the following report to OEB Staff and the EAC: 2022 Natural Gas Demand Side Management Annual Verification Report dated March 13, 2024 (the Verification Report).[15]

11. Enbridge Gas is in receipt of the Verification Report for the EGD rate zone and Union rate zones completed by the EC (DNV GL Energy Insights USA, Inc., f/k/a KEMA, Inc.) that was selected by OEB Staff. The Verification Report provides the EC's conclusions regarding the amounts of energy savings, lost revenue, shareholder incentive amounts and cost-effectiveness, for the DSM programs offered by Enbridge Gas in 2022. The Verification Report also includes the EC's findings and recommendations regarding cost reductions, improvement of savings accuracy, and risk reduction related to Enbridge Gas's DSM programs. Enbridge Gas's responses to each finding and recommendation were provided to the EC, and embedded into the Verification Report in Section 10.

12. The 2022 DSM-related Deferral and Variance Account balances, which are the subject of this Application and proposed for disposition as set out in Tables 1 and 2 below,[16] are consistent with the above reports and the EC's opinion on energy savings, lost revenue, shareholder incentive amounts, and cost-effectiveness.

Table 1

2022 DSM Deferral and Variance Account Balances - EGD Rate Zone

| Account | 2022 |
|---|---|
| DSM Variance Account | $3,157,694 |
| DSM Incentive Deferral Account | $5,236,372 |
| LRAM Variance Account | $34,771 |
| Total Balance | $8,428,837 |

[15] 2022 Natural Gas Demand-Side Management Annual Verification Report, Ontario Energy Board March 13, 2024) https://engagewithus.oeb.ca/26884/widgets/108755/documents/132456.
[16] These balances as presented do not include interest. Interest will be accrued up to the disposition date in accordance with the applicable accounting orders and reflected in the draft rate order filed following the OEB's Decision in this proceeding.

Table 2

2022 DSM Deferral and Variance Account Balances - Union Rate Zones[17]

| Account | 2022 |
|---|---|
| DSM Variance Account | ($14,314,891) |
| DSM Incentive Deferral Account | $0 |
| LRAM Variance Account[18] | $722,953 |
| Total Balance | ($13,591,939) |

13. Details of Enbridge Gas's proposed allocation of 2022 DSM-related Deferral and Variance Account balances to rate classes, disposition methodology, and unit rates for disposition are set out at Exhibit B, Tab 3, Schedule 1, for the EGD rate zone and at Exhibit C, Tab 3, Schedule 1, for the Union rate zones.

14. Enbridge Gas's final 2022 DSM Annual Report is included within this submission at Exhibit A, Tab 4, Schedule 1.

15. Finally, the Company further seeks approval to include an additional $60 million (Table 3 – excluding interest) as an interim deferral disposition to offset a portion of overspend amounts related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering in 2024. The purpose of this interim deferral disposition is to smooth the rate impacts over two years of a large balance which would otherwise have had a large rate impact if cleared in the normal course in the clearance applications for the years 2024 and 2025 (which would likely be filed in 2026 and 2027 for disposition in 2027 and 2028 respectively). The Company proposes that this amount be disposed of as part of a one time QRAM recovery. The remaining balance of the overspend in respect of the HER+ offering will be brought forward for approval and disposition in a subsequent application to the OEB. Please see Exhibit D,Tabs 1, 2, and 3.

[17] Collectively, the Union North and Union South rate zones are referred to as the "Union rate zones".
[18] The 2022 LRAMVA account balance includes volume variances related to 2020, 2021, and 2022 audited Union rate zones results at 2022 rates. This is discussed in further detail in Exhibit C, Tab 2, Schedule 1.

Table 3

2024 Portion of HER+ Program Overspend - EGI Rate Zones

| Account | 2024 |
|---|---|
| DSM Variance Account[19] | $60,000,000 |
| The $60,000,000 is spend related to the residential customer classes | |

[19] Please see Exhibit D, Tab 1, Schedule 1 for details of the proposed 2024 Interim Deferral Disposition of HER+.

# 2022 Demand Side Management Annual Report

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**Enbridge Gas Inc.**

August 30th, 2024

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## List of Tables

# Executive Summary

Enbridge Gas Inc. (“Enbridge Gas” or “the Company”) reports 1.39 billion lifetime cubic meters of natural gas saved from its DSM activities in 2022. A summary of the Company’s 2022 DSM results, budgets and spend is provided in Table ES1 below. Furthermore, Tables ES2 and ES3 provide a breakdown of natural gas savings by offering for the EGD rate zone and Union rate zones respectively.[1]

**Table ES1. 2022 DSM Results, Budgets and Spend Summary**

| ITEM | EGD RATE ZONE | UNION RATE ZONES |
|---|---|---|
| Net Cumulative Natural Gas Savings | 819,797,978 $m^3$ | 566,087,308 $m^3$ |
| Budget[1] | $67,757,376 | $64,349,541 |
| Actual Spend | $70,915,070 | $50,034,650 |
| Shareholder Incentive Achievement | $5,236,372 | $0 |
| Lost Distribution Revenue | $58,178 | $118,878 |

*[1] The total budgets shown do not include the Energy Leaders offering for the EGD rate zone nor the Residential Adaptive Thermostat offering for Union rate zones. These offerings were approved through the Mid-Term Review and expenditures for this offering are tracked in the DSMVA.*

[1] Natural gas savings attributable to market transformation programs are not included in these totals, as results for these programs are not measured by cubic meters of natural gas saved.

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## Table ES2. 2022 Natural Gas Savings (EGD Rate Zone)

| PROGRAM | OFFERING | GROSS ANNUAL NATURAL GAS SAVINGS ($M^3$) | NET ANNUAL NATURAL GAS SAVINGS ($M^3$) | GROSS CUMULATIVE NATURAL GAS SAVINGS ($M^3$) | NET CUMULATIVE NATURAL GAS SAVINGS ($M^3$) |
|---|---|---|---|---|---|
| Residential | Home Efficiency Rebate | 8,377,708 | 7,958,822 | 209,442,690 | 198,970,556 |
| | Residential Adaptive Thermostats | 4,235,668 | 4,066,241 | 63,535,017 | 60,993,616 |
| **Residential Total** | | **12,613,375** | **12,025,063** | **272,977,708** | **259,964,172** |
| Commercial/Industrial | Commercial & Industrial Prescriptive | 4,235,822 | 3,617,784 | 53,032,857 | 44,622,254 |
| | Commercial & Industrial Custom | 37,521,630 | 19,714,103 | 710,261,049 | 377,705,721 |
| | Commercial & Industrial Direct Install | 2,006,273 | 1,905,959 | 26,349,615 | 25,032,134 |
| | Run it Right (RA) | 66,677 | 33,379 | 333,385 | 166,893 |
| | Comprehensive Energy Management (RA) | 0 | 0 | 0 | 0 |
| | Energy Leaders | 334,510 | 334,510 | 5,846,554 | 5,846,554 |
| **Commercial/Industrial Total** | | **44,164,911** | **25,605,735** | **795,823,461** | **453,373,555** |
| Low-Income | Home Winterproofing | 1,628,043 | 1,628,043 | 34,647,742 | 34,647,742 |
| | Affordable Multi-Family Housing | 3,591,136 | 3,591,136 | 71,812,509 | 71,812,509 |
| **Low-Income Total** | | **5,219,180** | **5,219,180** | **106,460,251** | **106,460,251** |
| **Portfolio Total** | | **61,997,466** | **42,849,978** | **1,175,261,419** | **819,797,978** |

## Table ES3. 2022 Natural Gas Savings (Union Rate Zones)

| PROGRAM | OFFERING | GROSS ANNUAL NATURAL GAS SAVINGS ($M^3$) | NET ANNUAL NATURAL GAS SAVINGS ($M^3$) | GROSS CUMULATIVE NATURAL GAS SAVINGS ($M^3$) | NET CUMULATIVE NATURAL GAS SAVINGS ($M^3$) |
|---|---|---|---|---|---|
| Residential | Home Efficiency Rebate | 3,838,988 | 3,647,039 | 95,974,707 | 91,175,972 |
| | Residential Adaptive Thermostat | 2,067,966 | 1,985,248 | 31,019,493 | 29,778,714 |
| **Residential Total** | | **5,906,955** | **5,632,286** | **126,994,200** | **120,954,685** |
| Commercial/Industrial | Commercial & Industrial Prescriptive | 3,010,939 | 1,599,218 | 42,279,443 | 22,979,889 |
| | Commercial & Industrial Custom | 39,217,498 | 16,217,267 | 659,170,055 | 266,946,625 |
| | Commercial & Industrial Direct Install | 1,537,731 | 1,460,844 | 20,378,230 | 19,359,319 |
| **Commercial/Industrial Total** | | **43,766,169** | **19,277,330** | **721,827,729** | **309,285,832** |
| Low-Income | Home Winterproofing | 1,280,768 | 1,277,512 | 28,703,129 | 28,654,910 |
| | Affordable Multi-Family Housing | 366,973 | 348,673 | 5,395,754 | 5,126,450 |
| | Indigenous | 7,993 | 7,982 | 183,094 | 182,982 |
| | Furnace End-of-Life Upgrade | 0 | 0 | 0 | 0 |
| **Low-Income Total** | | **1,655,733** | **1,634,167** | **34,281,977** | **33,964,342** |
| Large Volume | Direct Access | 53,714,580 | 8,223,702 | 633,850,088 | 97,042,448 |
| **Large Volume Total** | | **53,714,580** | **8,223,702** | **633,850,088** | **97,042,448** |
| Performance-Based | RunSmart | 0 | 0 | 0 | 0 |
| | Strategic Energy Management | 968,000 | 968,000 | 4,840,000 | 4,840,000 |
| Performance-Based Total | | **968,000** | **968,000** | **4,840,000** | **4,840,000** |
| **Portfolio Total** | | **106,011,436** | **35,735,485** | **1,521,793,993** | **566,087,308** |

# 1. Introduction

Enbridge Gas Inc. (“Enbridge Gas”) has been designing and delivering DSM programs under OEB frameworks for over 25 years. Since 1995, Enbridge Gas has saved its customers 32.6 billion lifetime cubic meters of natural gas and 61.3 million tonnes of greenhouse gas emissions, the equivalent of taking 13.3 million cars off the road for a year.

The 2022 Final Annual Report provides a summary of Enbridge Gas’s DSM activities and results during the 2022 program year, including:

- A summary of the 2015-2020 DSM Framework as it relates to the 2022 program year (Section 2).
- OEB data reporting requirements (Sections 3 and 4).
- Program and offering summaries, including offering results, offering changes, lessons learned and anticipated offering changes for 2023 (Sections 5 and 6).
- Evaluation activities (Section 7).
- Results, including scorecard results, shareholder incentive achievement, lost distribution revenue calculations, cost-effectiveness, budgets and spending (Sections 8 and 9).

The 2022 program year continued to see unique challenges brought on by the COVID-19 pandemic that began in March 2020. Enbridge Gas continued to adapt its program design and program implementation practices to address the evolving situation. Like other organizations, Enbridge Gas adopted online/virtual components to continue initiatives during COVID-19 lockdowns, where possible.

In the 2022 program year, Enbridge Gas did not reach expected targets for DSM, particularly in the Union rate zones. There were many reasons why 2022 was a challenging year, including overarching issues such as: supply chain shortages, staffing shortages (particularly in the more remote communities, which tend to be in the Union rate zones) and inflation. More details are provided in the Program and Offering Sections.

Outcomes achieved are presented in Table ES1 (Executive Summary) and throughout this report.

# 2. DSM Framework

On December 22, 2014, the OEB released its Demand Side Management Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134) ("2015-2020 DSM Framework") and Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134) ("DSM Guidelines"). Given the timing, the OEB instructed that 2015 should be treated as a transition year, and that the natural gas utilities should "roll-forward their 2014 DSM plans, including all programs and parameters (i.e. budget, targets, incentive structure) into 2015."[2] Meanwhile, the natural gas utilities began developing DSM plans with new and expanded offerings in response to the new DSM Framework for 2016-2020.

Throughout 2017 and 2018, the OEB undertook a mid-term review. On November 29, 2018, the OEB released its Mid-Term Review of the Demand Side Management Framework for Natural Gas Distributors (2015-2020) (EB-2017-0127 & EB-2017-0128) ("Mid-Term Report").

In July 2020, the OEB approved a one-year extension into 2021 for all existing components of the OEB-approved 2015-2020 DSM plans.

On May 3, 2021, Enbridge Gas filed an application which consisted of a proposed DSM Framework, effective 2022, and a six-year DSM Plan for 2022-2027.[3] In August 2021, the OEB directed the continuation of Enbridge Gas's 2021 DSM Plans into 2022 and provided performance scorecards to be used for the duration of 2022.[4]

Following this Decision, Enbridge Gas refiled an application on September 29, 2021, seeking approval of the Proposed DSM Framework, effective 2023, and a five-year plan to be in place from 2023 to 2027.[5] The OEB returned a Decision approving a revised Natural Gas DSM Framework ("2023 Framework") as well as a three-year DSM term from January 1, 2023 to December 31, 2025 ("2023-2025 DSM Plan").[6] In its Decision, the OEB noted that the "DSM Policy Framework builds on past guidance and instructions and summarizes the policy guidance from this Decision and Order."[7]

## 2.1 2015-2020 DSM PLANS

On April 1, 2015, Enbridge Gas Distribution Inc. ("EGD") and Union Gas Limited ("Union") filed separate 2015-2020 DSM Plans (EB-2015-0049 & EB-2015-0029, respectively). On January 20, 2016, the OEB released its Decision and Order on EGD's and Union's 2015-2020 DSM Plans (EB-2015-0049/EB-2015-0029) ("Decision") and published an update to the Decision on February 24, 2016. As part of its Decision, the OEB approved many of the proposed programs, scorecards, metrics, targets and budgets but also directed certain revisions.

On January 1, 2019, EGD and Union amalgamated to become Enbridge Gas Inc. Enbridge Gas continues to operate and report on the two DSM portfolios independently (within the EGD rate zone and the Union rate zones) to reflect the manner in which programs, scorecards, metrics, targets and budgets were approved by the OEB. Where customer-facing alignment is possible to provide consistent province-wide program experiences, Enbridge Gas has made all reasonable efforts to do so.

The OEB designed the 2015-2020 DSM Framework to have "the flexibility to allow gas utilities to adapt and change with the market, the stability to ensure programs remain in place so customers can participate, and provides the continuity to manage DSM programs in a

[2] *Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 15.1, p.37.*
[3] *Multi-Year Demand Side Management Plan (2022-2027), EB-2021-0002, May 3, 2021.*
[4] *Decision and Order Related to 2022 Natural Gas Demand Side Management Activities, EB-2021-0002, August 26, 2021.*
[5] *Multi-Year Demand Side Management Plan (2022-2027) Updated Evidence, EB-2021-0002, September 29, 2021.*
[6] *Decision and Order, Application for Multi-Year Demand Side Management Plan (2022 to 2027), EB-2021-0002, November 15, 2022.*
[7] *Decision and Order, Application for Multi-Year Demand Side Management Plan (2022 to 2027), EB-2021-0002, November 15, 2022, Section 4.1, p. 16.*

changing environment."[8] With these goals in mind, Enbridge Gas may introduce, change or discontinue activities in response to changing market conditions and customer needs, within the constraints of the 2015-2020 DSM Framework and DSM Guidelines. Any changes are discussed throughout this report.

The structure of the 2022 DSM portfolios for the EGD rate zone and the Union rate zones are shown in Table 2.0 and Table 2.1 below, respectively. Each scorecard contains one or more programs, and each program provides one or more offerings to customers. Offerings are bundles of energy efficiency measures, initiatives and/or services.

[8] *Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 1.2, p.3.*

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## Table 2.0 2022 DSM Portfolio (EGD Rate Zone)

| DSM SCORECARD | DSM PROGRAM | DSM OFFERING |
|---|---|---|
| Resource Acquisition Scorecard | Resource Acquisition Program | Home Efficiency Rebate Offering |
| | | Residential Adaptive Thermostats Offering |
| | | Commercial & Industrial Prescriptive (Fixed) Incentive Offering |
| | | Commercial & Industrial Direct Install Offering |
| | | Custom Commercial Offering |
| | | Custom Industrial Offering |
| | | Energy Leaders Offering |
| Low-Income Scorecard | Low-Income Program | Home Winterproofing Offering |
| | | Affordable Multi-Family Housing Offering |
| | | Savings by Design Affordable Housing Offering |
| Market Transformation & Energy Management Scorecard | Market Transformation & Energy Management Program | Savings by Design Residential Offering |
| | | Savings by Design Commercial Offering |
| | | School Energy Competition Offering |
| | | Run it Right Offering* |
| | | Comprehensive Energy Management Offering* |

** Run it Right Offering and Comprehensive Energy Management Offering include savings attributed to the Resource Acquisition Scorecard.*

## Table 2.1 2022 DSM Portfolio (Union Rate Zones)

| DSM SCORECARD | DSM PROGRAM | DSM OFFERING |
|---|---|---|
| Resource Acquisition Scorecard | Residential Program | Home Efficiency Rebate Offering |
| | | Residential Adaptive Thermostats Offering |
| | Commercial/Industrial Program | Commercial/Industrial Prescriptive Offering |
| | | Commercial/Industrial Custom Offering |
| | | Commercial/Industrial Direct Install Offering |
| Performance-Based Scorecard | Performance-Based Program | RunSmart Offering |
| | | Strategic Energy Management Offering |
| Low-Income Scorecard | Low-Income Program | Home Winterproofing Offering |
| | | Affordable Multi-Family Housing Offering |
| | | Indigenous Offering |
| | | Furnace End-of-Life Upgrade Offering |
| Large Volume Scorecard | Large Volume Program | Large Volume Direct Access Offering |
| Market Transformation Scorecard | Market Transformation Program | Optimum Home Offering |
| | | Commercial Savings by Design Offering |

## 2.2 SCORECARD TARGET SETTING

For the 2022 program year, scorecard targets have been set based on the methodologies provided by the OEB in its Decision and Order on 2022 DSM Activities.[9] See Appendix B for the 2022 scorecard target setting methodology, and Sections 8.1 and 9.1 for the calculated 2022 scorecard targets and results for the EGD rate zone and the Union rate zones, respectively.

## 2.3 EVALUATION GOVERNANCE

As outlined in the 2015-2020 DSM Framework, the Board indicated it "is of the view that it is in the best position to coordinate the evaluation process throughout the DSM framework period."[10] On August 21, 2015, the Board released a letter which provided additional details regarding the new evaluation governance structure.[11] This letter included the following information:

- The OEB would be responsible for coordinating and overseeing the evaluation and audit process, including selecting a third-party Evaluation Contractor ("EC").
- The EC would carry out the evaluation and audit processes and would draft an EM&V Plan for the natural gas utilities' DSM programs.
- An Evaluation Advisory Committee ("EAC") would be formed to provide input and advice to the OEB on the development of the plan and on the evaluation and audit of the DSM results.

Furthermore, the letter noted that the EAC would be comprised of:

- Experts representing non-utility stakeholders, with demonstrated experience and expertise in the evaluation of DSM technologies and programs, natural gas energy efficiency technologies, multi-year impact assessments, net-to-gross ("NTG") studies, free ridership analysis and natural gas energy efficiency persistence analysis.
- Expert(s) retained by the OEB.
- Representatives from the Independent Electricity System Operator ("IESO").
- Representatives from each natural gas utility.
- Representatives from the Ministry of Energy and the Environmental Commissioner of Ontario, who will participate as observers.

In 2022, the OEB-appointed non-utility stakeholder members of the EAC were:

- Chris Neme, Energy Futures Group.
- Jay Shepherd, Shepherd Rubenstein Professional Corporation.

In 2022, the independent expert members of the EAC were:

- Ted Kesik, Knowledge Mapping Inc.
- Robert Wirtshafter, Wirtshafter Associates Inc.

[9] *Decision and Order Related to 2022 Natural Gas Demand Side Management Activities, EB-2021-0002, August 26, 2021, Appendices A and B.*
[10] *Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 7.2, p.30.*
[11] *OEB letter, 2015-2020 DSM Evaluation Process of Program Results (EB-2015-0245), August 21, 2015.*

Non-utility stakeholders and independent experts are expected to provide input and advice based on their experience and technical expertise, and not to advocate for the position of parties they have represented before the OEB in various proceedings.

## 2.4 COST-EFFECTIVENESS SCREENING

Cost-effectiveness screening for the 2015-2020 DSM Framework uses an enhanced Total Resource Cost test, called the "TRC-Plus" test, which includes a 15% adder to account for the non-energy benefits of DSM, such as improvements to the environment, economy and society.

For programs measured by cumulative natural gas savings, excluding low-income programs, the program is considered cost-effective if the ratio of the present value of the TRC-Plus benefits to the TRC costs exceeds 1.0. To recognize that low-income programs may result in additional benefits not captured by the TRC-Plus test, low-income programs are screened using a TRC-Plus threshold of 0.7. Market transformation programs are assessed based on the objectives of the program and are not tested against a TRC-Plus ratio threshold. A secondary reference tool is the Program Administrator Cost ("PAC") test. For more information on the TRC-Plus test and the PAC test, refer to Section 9 of the DSM Guidelines.

The cost-effectiveness tests are used to screen for cost-effectiveness at the program and portfolio level. See Section 2.1 for the 2022 DSM portfolio structures, and Sections 8.3 and 9.3 for the 2022 TRC-Plus test and PAC test results for EGD rate zone and Union rate zones, respectively.

## 2.5 AVOIDED COST ASSUMPTIONS

Avoided cost assumptions reflect "the benefit of not having to provide an extra unit of supply of natural gas, or other resources… through the delivery of DSM programs."[12] For more information on avoided cost assumptions, please refer to Section 10 of the DSM Guidelines.

The 2022 avoided cost assumptions for the EGD rate zone and the Union rate zones can be found in Appendix A. As per the direction provided in the OEB's Mid-Term Report,[13] Enbridge Gas includes the avoided cost of carbon within its avoided cost assumptions (in addition to the avoided costs of natural gas, electricity and water).

## 2.6 TECHNICAL RESOURCE MANUAL

The Technical Resource Manual ("TRM") provides prescribed assumptions (including energy savings, costs and measure lives) for several energy efficient technologies. Enbridge Gas uses the TRM as the basis for prescriptive and quasi-prescriptive measures offered to customers. For more information on the TRM, please refer to the summary provided at the outset of the TRM.[14]

The TRM is reviewed annually by the Evaluation Contractor to make appropriate updates or revisions to existing measures, add new measures, or retire measures which are no longer relevant.

[12] *Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 10.0, p. 34.*
[13] *Mid-Term Review of the Demand Side Management Framework for Natural Gas Distributors (2015-2020), EB-2017-0127 & EB-2017-0128, November 29, 2018, Section 5.5.1, p. 28.*
[14] https://www.oeb.ca/sites/default/files/OEB-Natural-Gas-DSM-Technical-Resource-Manual-V6.0-20211216.pdf

For the purpose of determining 2022 shareholder incentives for prescriptive and quasi-prescriptive measures, TRM Version 6.0 has been used (dated December 16, 2021). This version was updated by the Evaluation Contractor with input from Enbridge Gas and the rest of the EAC, and reflects the following changes:

- Updated outdated references in Commercial Ozone Laundry and unit of measurement in savings.
- Added a new substantiation document for Commercial ENERGY STAR Combi-Oven.
- Updated Common Assumptions:
    - Food service days per year. This change impacts resource savings for commercial kitchen measures (ENERGY STAR Convection Oven, ENERGY STAR Rack Oven and ENERGY STAR Dishwashers).
    - Average multi-residential household size – impacting resource savings for Multi-Residential Low-Flow Showerheads (New Construction and Retrofit). A previous error in equations and calculations was also corrected to properly state savings on a per showerhead basis.
    - Average single-family residential household size – the source of this data was updated but the value remains the samea.
- Updated incremental cost in Commercial Condensing Unit Heaters and fixed the continuity in the capacity ranges for electric penalties.
- Retired Commercial Infrared Heaters.

For the purpose of determining 2022 lost distribution revenue for prescriptive and quasi-prescriptive measures, TRM Version 7.0 has been used (dated November 30, 2022).

Versions of the TRM up to Version 6.0 can be accessed on the OEB website (https://www.oeb.ca/industry/policy-initiatives-and-consultations/natural-gas-demand-side-management-dsm) under the section “Technical Resource Manual (including Historical Measures and Assumptions Updates)”.

TRM Version 7.0 and all future versions going forward are accessible on the Natural Gas Conservation Evaluation Advisory Committee section of the OEB Engage with Us website (https://engagewithus.oeb.ca/natural-gas-conservation-evaluation-advisory-committee).

# 3. OEB Data Reporting Requirements (EGD Rate Zone)

Section 3 provides the OEB's reporting requirements for the EGD rate zone, as per Section 14.2 of the DSM Guidelines.

### Table 3.0 Annual and Long-Term DSM Budgets ($ million) (EGD Rate Zone)

| PROGRAM | 2015 | 2016 | 2017 | 2018 | 2019[1] | 2020[1] | 2021[1,2] | 2022[1,2,3] | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| Resource Acquisition | $19.175 | $34.337 | $39.489 | $43.162 | $42.056 | $42.909 | $42.909 | $42.909 | $306.945 |
| Low-Income | $7.382 | $11.945 | $12.527 | $13.309 | $13.577 | $13.850 | $13.850 | $13.850 | $155.288 |
| Market Transformation & Energy Management | $6.245 | $6.579 | $6.718 | $6.882 | $7.030 | $7.181 | $7.181 | $7.181 | $54.997 |
| Portfolio Level | $4.920 | $3.500 | $4.200 | $4.200 | $3.758 | $3.818 | $3.818 | $3.818 | $32.032 |
| **Total** | **$37.722** | **$56.361** | **$62.934** | **$67.554** | **$66.422** | **$67.757** | **$67.757** | **$67.757** | **$494.265** |

[1] *The total budget shown for 2019 through 2022 does not include $0.4 million for the Energy Leaders offering approved through the Mid-Term Review. Expenditures for this offering have been tracked in the DSMVA.*
[2] *2021 Program budget is the same as 2020 as per Decision and Order EB-2019-0271 for the Application for approval of natural gas demand side management plans for 2021.*
[3] *2022 Program budget is the same as 2020 as per Decision and Order Related to 2022 Natural Gas Demand Side Management Activities, EB-2021-0002.*

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**Table 3.1 Actual Annual Total DSM Costs* ($ million) (EGD Rate Zone)**

| RATE CLASS | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rate 1 | $11.894 | $12.546 | $14.795 | $12.468 | $14.215 | $17.935 | $13.882 | $23.507 | $26.856 | $42.391 | $44.206 | $50.048 | $54.977 | $47.997 | $52.903 | $57.468 |
| Rate 6 | $2.848 | $7.519 | $7.487 | $10.713 | $15.103 | $17.127 | $15.173 | $13.901 | $15.646 | $17.001 | $17.463 | $17.616 | $21.564 | $17.201 | $18.564 | $16.010 |
| Rate 9 | - | - | - | - | - | $0.001 | $0.001 | $0.002 | $0.002 | $0.002 | $0.002 | $0.003 | $0.003 | $0.002 | $0.003 | $0.002 |
| Rate 100 | $8.950 | $3.202 | $2.667 | $0.086 | $0.018 | - | - | - | - | - | - | - | $0.370 | $0.072 | $0.136 | $0.016 |
| Rate 110 | $3.658 | $1.042 | $1.944 | $1.471 | $1.048 | $0.784 | $0.937 | $1.190 | $1.900 | $1.251 | $1.462 | $0.918 | $0.937 | $1.398 | $1.081 | $1.417 |
| Rate 115 | $0.643 | $1.717 | $1.314 | $0.545 | $0.602 | $1.329 | $1.420 | $0.567 | $0.658 | $0.532 | $0.588 | $0.274 | $0.930 | $0.449 | $0.621 | $0.449 |
| Rate 125 | - | - | - | - | - | $0.053 | $0.053 | $0.064 | $0.069 | $0.076 | $0.086 | $0.110 | $0.099 | $0.087 | $0.095 | $0.093 |
| Rate 135 | $0.002 | $0.080 | $0.012 | $0.059 | $0.122 | $0.441 | $0.320 | $0.124 | $0.059 | $0.086 | $0.384 | $0.407 | $0.301 | $0.583 | $0.501 | $0.267 |
| Rate 145 | $0.855 | $0.902 | $0.677 | $0.730 | $0.655 | $0.496 | $0.369 | $0.254 | $0.152 | $0.084 | $0.090 | $0.551 | $0.084 | $0.073 | $0.106 | $0.180 |
| Rate 170 | $0.295 | $1.861 | $1.844 | $2.041 | $2.195 | $0.536 | $0.149 | $0.458 | $0.403 | $0.574 | $0.176 | $0.176 | $0.285 | $0.267 | $0.163 | $0.268 |
| Rate 200 | - | - | - | - | - | $0.019 | $0.018 | $0.022 | $0.024 | $0.026 | $0.030 | $0.038 | $0.034 | $0.030 | $0.033 | $0.032 |
| Rate 300 | - | - | - | - | - | $0.004 | $0.004 | $0.004 | $0.005 | $0.005 | $0.006 | $0.007 | $0.007 | $0.006 | $0.006 | $0.006 |
| **Total** | **$29.146** | **$28.867** | **$30.739** | **$28.113** | **$33.958** | **$38.726** | **$32.328** | **$40.093** | **$45.773** | **$62.029** | **$64.492** | **$70.148** | **$79.592** | **$68.165** | **$74.211** | **$76.210** |

** Figures include all DSM spend, shareholder incentive and lost distribution revenue.*

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### Table 3.2 Historic Annual Total DSM Spending ($ million) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total DSM Spending | $21.20 | $23.03 | $25.42 | $24.00 | $27.24 | $30.61 | $27.84 | $32.51 | $35.78 | $55.65 | $62.36 | $66.15 | $72.84 | $64.55 | $69.62 | $70.92 |

### Table 3.3 DSM Spending as a Percent of Distribution Revenue (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019[1,2] | 2020[1,2] | 2021[1,2] | 2022[1,2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total DSM Spending ($ million) | $21.2 | $23.0 | $25.4 | $24.0 | $27.2 | $30.6 | $27.8 | $32.5 | $35.8 | $55.6 | $62.4 | $66.2 | $138.4 | $119.0 | $122.6 | $120.9 |
| Total Distribution Revenue ($ million) | $980.9 | $995.9 | $1,012.1 | $960.4 | $978.8 | $972.0 | $1,055.0 | $1,044.0 | $1,055.4 | $1,115.6 | $1,128.3 | $1,231.6 | $2,366.2 | $2,337.5 | $2,370.1 | $2,534.3 |
| DSM Spending as a % of Distribution Revenue | 2.2% | 2.3% | 2.5% | 2.5% | 2.8% | 3.1% | 2.6% | 3.1% | 3.4% | 5.0% | 5.5% | 5.4% | 5.9% | 5.1% | 5.2% | 4.8% |

*[1] Total DSM spending of Enbridge Gas Inc. (both EGD rate zone and Union rate zones); to allow for proper comparison to Distribution Revenue, which is now being presented as a combined figure.*
*[2] As of 2019, the methodology in deriving the values differs from historical practice due to amalgamation and alignment and this is now presented as combined figures for Enbridge Gas Inc. as found in the annual Utility Earnings and Disposition of Deferral & Variance Account Balances Application and Evidence.*

### Table 3.4 Historic Annual DSM Shareholder Incentive Amounts Available and Earned ($ million) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DSM Shareholder Incentive Earned | $8.25 | $5.80 | $5.36 | $4.16 | $6.77 | $8.16 | $4.54 | $7.65 | $10.08 | $6.37 | $2.12 | $3.98 | $6.72 | $3.59 | $4.53 | $5.24 |
| DSM Shareholder Incentive Available | $9.00 | $9.22 | $9.24 | $9.40 | $10.16 | $10.45 | $10.66 | $10.87 | $11.09 | $10.45 | $10.45 | $10.45 | $10.45 | $10.45 | $10.45 | $10.45 |

*[1] 2022 Shareholder Incentive subject to OEB approval.*

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### Table 3.5 DSM Shareholder Incentive Earned as a Percent of DSM Spending (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DSM Shareholder Incentive Earned ($ million) | $8.25 | $5.80 | $5.36 | $4.16 | $6.77 | $8.16 | $4.54 | $7.65 | $10.08 | $6.37 | $2.12 | $3.98 | $6.72 | $3.59 | $4.53 | $5.24 |
| Total DSM Spending ($ million) | $21.20 | $23.03 | $25.42 | $24.00 | $27.24 | $30.61 | $27.84 | $32.51 | $35.78 | $55.65 | $62.36 | $66.15 | $72.84 | $64.55 | $69.62 | $70.92 |
| Shareholder Incentive Earned as a % of DSM Spending | 39% | 25% | 21% | 17% | 25% | 27% | 16% | 24% | 28% | 11% | 3% | 6% | 9% | 6% | 7% | 7% |

[1] *2022 Shareholder Incentive subject to OEB approval.*

### Table 3.6 Annual and Long-Term Natural Gas Savings Targets (million $m^3$) (EGD Rate Zone)

| SCORECARD | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| Resource Acquisition | 1,011.9 | 631.1 | 806.5 | 805.5 | 734.3 | 755.5 | 747.5 | 736.4 |
| Low-Income | 92.8 | 96.7 | 167.1 | 126.1 | 123.2 | 136.4 | 121.6 | 118.0 |

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### Table 3.7 Total Annual and Cumulative Natural Gas Savings for 2022 (Gross and Net) (million $m^3$) (EGD Rate Zone)

| SCORECARD | ANNUAL NATURAL GAS SAVINGS | | CUMULATIVE NATURAL GAS SAVINGS | |
|---|---|---|---|---|
| | GROSS | NET | GROSS | NET |
| Resource Acquisition | 56.78 | 37.63 | 1,068.79 | 713.33 |
| Low-Income | 5.22 | 5.22 | 106.46 | 106.46 |
| **Total** | **62.00** | **42.85** | **1,175.25** | **819.79** |

### Table 3.8 Total Historic Annual Natural Gas Savings (Gross and Net) (million $m^3$) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Net Annual Natural Gas Savings | 85.07 | 77.25 | 69.86 | 64.58 | 76.40 | 60.14 | 47.74 | 43.54 | 48.97 | 50.52 | 44.02 | 42.23 | 52.26 | 39.75 | 43.78 | 42.85 |
| Total Gross Annual Natural Gas Savings | 85.99 | 121.98 | 117.62 | 98.82 | 114.14 | 92.53 | 66.06 | 60.62 | 67.09 | 90.03 | 71.28 | 61.60 | 76.61 | 62.52 | 63.04 | 62.00 |

[1] *2022 DSM results subject to OEB approval.*

### Table 3.9 Total Historic Cumulative Natural Gas Savings (Gross and Net) (million $m^3$) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Net Cumulative Natural Gas Savings | 1,214.10 | 1,118.98 | 1,039.18 | 951.40 | 1,253.82 | 1,068.98 | 826.91 | 719.84 | 826.17 | 837.11 | 787.17 | 807.47 | 988.55 | 771.05 | 817.42 | 819.80 |
| Total Gross Cumulative Natural Gas Savings | 1,233.54 | 1,809.65 | 1,801.77 | 1,455.74 | 1,811.35 | 1,593.05 | 1,148.12 | 993.62 | 1,114.13 | 1,479.09 | 1,215.44 | 1,141.22 | 1,420.39 | 1,182.90 | 1,164.31 | 1,175.26 |

[1] *2022 DSM results subject to OEB approval.*

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## Table 3.10 Total Annual Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Net Annual Natural Gas Savings (million $m^3$) | 85.1 | 77.3 | 69.9 | 64.6 | 76.4 | 60.1 | 47.7 | 43.5 | 49.0 | 50.5 | 44.0 | 42.2 | 52.3 | 39.8 | 43.8 | 42.8 |
| Net Annual Natural Gas Savings as a % of Natural Gas Sales | 0.7% | 0.7% | 0.6% | 0.6% | 0.7% | 0.6% | 0.4% | 0.4% | 0.4% | 0.5% | 0.4% | 0.3% | 0.4% | 0.4% | 0.4% | 0.4% |
| Gross Annual Natural Gas Savings (million $m^3$) | 86.0 | 122.0 | 117.6 | 98.8 | 114.1 | 92.5 | 66.1 | 60.6 | 67.1 | 90.0 | 71.3 | 61.6 | 76.6 | 62.5 | 63.0 | 62.0 |
| Gross Annual Natural Gas Savings as a % of Natural Gas Sales | 0.7% | 1.0% | 1.1% | 0.9% | 1.0% | 0.9% | 0.6% | 0.5% | 0.6% | 0.8% | 0.6% | 0.5% | 0.6% | 0.6% | 0.6% | 0.5% |
| Total Natural Gas Sales (million $m^3$)[2] | 11,862.9 | 11,686.5 | 11,114.9 | 10,742.3 | 11,303.2 | 10,304.4 | 11,338.3 | 12,434.3 | 11,728.3 | 10,736.2 | 11,172.6 | 12,361.6 | 12,370.8 | 11,260.1 | 11,054.3 | 11,899.6 |

[1] *2022 DSM results subject to OEB approval.*
[2] *Total Natural Gas Sales only includes rate classes that are eligible for DSM and subject to DSM costs.*

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## Table 3.11 Total Cumulative Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Net Cumulative Natural Gas Savings (million $m^3$) | 1,214.1 | 1,119.0 | 1,039.2 | 951.4 | 1,253.8 | 1,069.0 | 826.9 | 719.8 | 826.2 | 837.1 | 787.2 | 807.5 | 988.5 | 771.1 | 817.4 | 819.8 |
| Net Cumulative Natural Gas Savings as a % of Natural Gas Sales | 10.2% | 9.6% | 9.3% | 8.9% | 11.1% | 10.4% | 7.3% | 5.8% | 7.0% | 7.8% | 7.0% | 6.5% | 8.0% | 6.8% | 7.4% | 6.9% |
| Gross Cumulative Natural Gas Savings (million $m^3$) | 1,233.5 | 1,809.7 | 1,801.8 | 1,455.7 | 1,811.3 | 1,593.0 | 1,148.1 | 993.6 | 1,114.1 | 1,479.1 | 1,215.4 | 1,141.2 | 1,420.4 | 1,182.9 | 1,164.3 | 1,175.3 |
| Gross Cumulative Natural Gas Savings as a % of Natural Gas Sales | 10.4% | 15.5% | 16.2% | 13.6% | 16.0% | 15.5% | 10.1% | 8.0% | 9.5% | 13.8% | 10.9% | 9.2% | 11.5% | 10.5% | 10.5% | 9.9% |
| Total Natural Gas Sales (million $m^3$)[2] | 11,862.9 | 11,686.5 | 11,114.9 | 10,742.3 | 11,303.2 | 10,304.4 | 11,338.3 | 12,434.3 | 11,728.3 | 10,736.2 | 11,172.6 | 12,361.6 | 12,370.8 | 11,260.1 | 11,054.3 | 11,899.6 |

[1] *2022 DSM results subject to OEB approval.*
[2] *Total Natural Gas Sales only includes rate classes that are eligible for DSM and subject to DSM costs.*

## Table 3.12 Actual Annual Gas Operating Revenue ($ million) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019[1,2] | 2020[1,2] | 2021[1,2] | 2022[1,2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gas Sales and Distribution Revenue | $3,095.0 | $3,233.8 | $2,952.3 | $2,394.1 | $2,393.6 | $2,240.9 | $2,613.4 | $2,861.3 | $2,892.1 | $2,588.7 | $2,788.1 | $2,863.5 | $4,631.5 | $4,118.8 | $4,480.6 | $6,164.5 |
| Less Total Cost of Gas | $2,113.0 | $2,236.1 | $1,938.6 | $1,432.3 | $1,413.3 | $1,267.6 | $1,556.8 | $1,815.5 | $1,834.8 | $1,466.7 | $1,640.8 | $1,612.7 | $2,265.3 | $1,781.3 | $2,110.5 | $3,630.3 |
| **Total Distribution Revenue** | **$982.0** | **$997.7** | **$1,013.7** | **$961.8** | **$980.3** | **$973.3** | **$1,056.6** | **$1,045.8** | **$1,057.3** | **$1,122.0** | **$1,147.3** | **$1,250.8** | **$2,366.2** | **$2,337.5** | **$2,370.1** | **$2,534.3** |

[1] *As of 2019, Distribution Revenue is the gas sales and distribution revenue (excluding transportation, storage and other operating revenue) less the cost of gas.*
[2] *As of 2019, the methodology in deriving the values differs from historical practice due to amalgamation and alignment and this is now presented as combined figures for Enbridge Gas Inc. as found in the annual Utility Earnings and Disposition of Deferral & Variance Account Balances Application and Evidence.*

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## Table 3.13 Total Natural Gas Sales Volumes (million $m^3$) (EGD Rate Zone)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Natural Gas Sales[1] | 11,862.90 | 11,686.50 | 11,114.90 | 10,742.30 | 11,303.20 | 10,304.40 | 11,338.30 | 12,434.30 | 11,728.30 | 10,736.20 | 11,172.60 | 12,361.60 | 12,370.82 | 11,260.13 | 11,054.33 | 11,899.57 |

[1] *Only includes rate classes eligible for DSM and subject to DSM costs.*

## Table 3.14 Number of Customers by Customer Type (EGD Rate Zone)

| CUSTOMER TYPE | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| Residential[1] | 1,930,657 | 1,959,569 | 1,990,032 | 2,017,128 | 2,040,710 | 2,064,531 | 2,087,370 | 2,109,164 |
| Commercial | 157,758 | 158,812 | 160,721 | 162,157 | 162,682 | 163,519 | 164,146 | 164,029 |
| Industrial | 6,266 | 6,308 | 5,916 | 5,881 | 5,813 | 6,019 | 6,240 | 6,188 |
| Wholesale | | | | | | | 1 | 1 |
| **Total** | **2,094,681** | **2,124,689** | **2,156,669** | **2,185,166** | **2,209,205** | **2,234,069** | **2,257,756** | **2,279,381** |

[1] *Residential customers include Low-Income.*

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## Table 3.15 Number of Customers by Rate Class (EGD Rate Zone)

| RATE CLASS | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| **General Service** | | | | | | | | |
| Rate 1 | 1,930,657 | 1,959,569 | 1,990,032 | 2,017,128 | 2,040,710 | 2,064,531 | 2,087,370 | 2,109,164 |
| Rate 6 | 163,634 | 164,698 | 166,224 | 167,626 | 168,093 | 169,084 | 169,867 | 169,732 |
| **General Service Total** | **2,094,291** | **2,124,267** | **2,156,256** | **2,184,754** | **2,208,803** | **2,233,615** | **2,257,237** | **2,278,896** |
| **Contract** | | | | | | | | |
| Rate 100 | 2 | 2 | 3 | 3 | 4 | 9 | 15 | 17 |
| Rate 110 | 227 | 270 | 263 | 273 | 280 | 335 | 392 | 426 |
| Rate 115 | 25 | 27 | 27 | 25 | 22 | 20 | 21 | 20 |
| Rate 135 | 43 | 45 | 45 | 43 | 41 | 40 | 42 | 42 |
| Rate 145 | 52 | 38 | 37 | 32 | 25 | 21 | 19 | 17 |
| Rate 170 | 26 | 25 | 26 | 27 | 23 | 21 | 21 | 22 |
| **Contract Total** | **375** | **407** | **401** | **403** | **395** | **446** | **510** | **542** |
| **Non-DSM Rate Classes** | | | | | | | | |
| Rate 9 | 6 | 6 | 3 | 2 | 0 | 2 | 2 | 0 |
| Rate 125 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 |
| Rate 200 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| Rate 300 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 |
| Rate 315 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| **Total** | **2,094,681** | **2,124,689** | **2,156,669** | **2,185,166** | **2,209,205** | **2,234,069** | **2,257,756** | **2,279,445** |

# 4. OEB Data Reporting Requirements (Union Rate Zones)

Section 4 provides the OEB's reporting requirements for the Union rate zones, as per Section 14.2 of the DSM Guidelines.

### Table 4.0 Annual and Long-Term DSM Budgets ($ million) (Union Rate Zones)

| PROGRAM | 2015 | 2016 | 2017 | 2018 | 2019[1] | 2020[1] | 2021[1,2] | 2022[1,2,3] | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| Residential | $3.163 | $8.612 | $11.369 | $13.908 | $13.908 | $13.908 | $13.908 | $13.908 | $92.682 |
| Commercial/Industrial | $10.859 | $19.316 | $22.035 | $22.726 | $22.403 | $22.403 | $22.403 | $22.403 | $164.549 |
| Low-Income | $6.839 | $11.407 | $12.343 | $13.571 | $14.145 | $15.005 | $15.005 | $15.005 | $103.321 |
| Large Volume | $4.534 | $4.000 | $4.000 | $4.000 | $4.000 | $4.000 | $4.000 | $4.000 | $32.534 |
| Market Transformation | $1.379 | $1.703 | $2.338 | $2.338 | $2.338 | $2.338 | $2.338 | $2.338 | $17.110 |
| Performance-Based | $0 | $0.548 | $0.843 | $1.088 | $0.833 | $1.053 | $1.053 | $1.053 | $6.471 |
| Portfolio Level | $4.717 | $11.235 | $5.642 | $5.642 | $5.642 | $5.642 | $5.642 | $5.642 | $49.804 |
| Inflation | $2.497 | | | | | | | | $2.497 |
| **Total[1]** | **$33.988** | **$56.821** | **$58.570** | **$63.272** | **$63.269** | **$64.350** | **$64.350** | **$64.350** | **$468.969** |

*[1] The total budget shown for 2019 through 2022 does not include $1.5 million for the Residential Adaptive Thermostat offering approved through the Mid-Term Review. Expenditures for this offering have been tracked in the DSMVA.*
*[2] 2021 Program budget is the same as 2020 year as per Decision and Order EB-2019-0271 for the Application for approval of natural gas demand side management plans for 2021*
*[3] 2022 Program budget is the same as 2020 year as per Decision and Order Related to 2022 Natural Gas Demand Side Management Activities, EB-2021-0002.*

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## Table 4.1 Actual Annual Total DSM Costs* ($ million) (Union Rate Zones)

| RATE CLASS | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016[1] | 2017[2] | 2018[2] | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M1 | N/A | $12.107 | $12.743 | $11.348 | $11.498 | $13.502 | $13.657 | $15.415 | $16.752 | $24.595 | $37.204 | $41.948 | $37.849 | $28.950 | $25.472 | $28.022 |
| M2 | $11.619 | $2.486 | $2.023 | $2.117 | $4.097 | $4.968 | $5.818 | $6.728 | $4.958 | $6.847 | $8.166 | $7.851 | $8.297 | $6.055 | $7.137 | $5.114 |
| M4 | $1.488 | $1.353 | $0.828 | $1.098 | $1.817 | $3.319 | $3.244 | $3.296 | $3.645 | $4.012 | $5.892 | $6.776 | $5.595 | $4.739 | $3.252 | $2.783 |
| M5 | $0.294 | $1.044 | $1.226 | $1.086 | $3.150 | $2.660 | $3.484 | $2.394 | $1.421 | $2.580 | $1.459 | $0.657 | $0.563 | $0.278 | $0.406 | $0.262 |
| M7 | $0.886 | $0.116 | $0.256 | $1.474 | $1.304 | $0.538 | $0.571 | $2.143 | $3.370 | $3.963 | $1.258 | $2.714 | $4.181 | $5.151 | $6.742 | $3.085 |
| T1 | $3.147 | $3.988 | $5.596 | $3.965 | $7.749 | $6.111 | $2.265 | $1.078 | $0.889 | $1.486 | $2.578 | $1.962 | $0.834 | $0.896 | $0.323 | $0.717 |
| T2 | N/A | N/A | N/A | N/A | N/A | N/A | $3.365 | $2.875 | $2.673 | $3.980 | $3.006 | $3.375 | $4.005 | $3.703 | $3.874 | $3.615 |
| Rate 01 | $2.229 | $2.162 | $2.093 | $1.869 | $3.050 | $3.532 | $3.560 | $4.161 | $3.555 | $4.689 | $6.209 | $7.403 | $6.696 | $4.321 | $4.579 | $3.789 |
| Rate 10 | $1.612 | $1.371 | $2.292 | $0.510 | $1.109 | $1.939 | $1.637 | $1.613 | $0.953 | $1.394 | $2.144 | $1.829 | $1.820 | $1.250 | $1.362 | $1.040 |
| Rate 20 | $0.323 | $0.496 | $0.771 | $0.881 | $1.030 | $1.607 | $1.573 | $1.791 | $1.005 | $0.851 | $1.554 | $0.312 | $1.194 | $0.759 | $0.540 | $0.787 |
| Rate 100 | $1.535 | $4.542 | $3.950 | $4.471 | $1.614 | $2.305 | $1.828 | $1.517 | $0.799 | $0.573 | $0.809 | $0.820 | $0.708 | $1.267 | $0.831 | $0.774 |
| **Total** | **$23.133** | **$29.664** | **$31.778** | **$28.818** | **$36.418** | **$40.481** | **$41.001** | **$43.011** | **$40.019** | **$54.968** | **$70.277** | **$75.648** | **$71.741** | **$57.368** | **$54.519** | **$49.987** |

** Figures include all DSM spend, shareholder incentive and lost distribution revenue.*
*[1] Aligns to DSMVA approved in EB-2018-0300 (2016 Disposition of DSM Deferral and Variance Accounts). Actual expenditures from 2017 and 2018 related to the DSM tracking system upgrades have been accounted for through the 2016 DSMVA.*
*[2] Actual expenditures related to the DSM tracking system upgrades in these years are reflected in 2016.*

## Table 4.2 Historic Annual Total DSM Spending ($ million) (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016[1] | 2017[2] | 2018[2] | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total DSM Spending | $16.13 | $20.26 | $22.22 | $21.53 | $27.97 | $31.32 | $32.84 | $33.71 | $32.39 | $50.67 | $64.58 | $69.12 | $65.60 | $54.49 | $52.98 | $50.03 |

*[1] Aligns to DSMVA approved in EB-2018-0300 (2016 Disposition of DSM Deferral and Variance Accounts). Actual expenditures from 2017 and 2018 related to the DSM tracking system upgrades have been accounted for through the 2016 DSMVA.*
*[2] Actual expenditures related to the DSM tracking system upgrades in these years are reflected in 2016.*

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### Table 4.3 DSM Spending as a Percent of Distribution Revenue (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019[1,2] | 2020[1,2] | 2021[1,2] | 2022[1,2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total DSM Spending ($ million) | $16.1 | $20.3 | $22.2 | $21.5 | $28.0 | $31.3 | $32.8 | $33.7 | $32.4 | $50.7 | $64.6 | $69.1 | $138.4 | $119.0 | $122.6 | $120.9 |
| Total Distribution Revenue ($ million) | $655.0 | $675.0 | $658.0 | $699.0 | $713.0 | $727.0 | $772.0 | $778.0 | $800.0 | $812.0 | $834.0 | $893.0 | $2,366.2 | $2,337.5 | $2,370.1 | $2,534.3 |
| DSM Spending as a % of Distribution Revenue | 2.5% | 3.0% | 3.4% | 3.1% | 3.9% | 4.3% | 4.3% | 4.3% | 4.0% | 6.2% | 7.7% | 7.7% | 5.9% | 5.1% | 5.2% | 4.8% |

[1] *Total DSM spending of Enbridge Gas Inc. (both EGD rate zone and Union rate zones); to allow for proper comparison to Distribution Revenue, which is now being presented as a combined figure.*
[2] *As of 2019, the methodology in deriving the values differs from historical practice due to amalgamation and alignment and this is now presented as combined figures for Enbridge Gas Inc. as found in the annual Utility Earnings and Disposition of Deferral & Variance Account Balances Application and Evidence.*

### Table 4.4 Historic Annual DSM Shareholder Incentive Amounts Available and Earned ($million) (Union Rate Zones)

| ITEMS | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DSM Shareholder Incentive Earned | $6.23 | $8.70 | $8.75 | $6.58 | $7.64 | $8.21 | $7.78 | $8.99 | $7.47 | $4.12 | $5.52 | $6.37 | $5.95 | $2.73 | $1.41 | $0.00 |
| DSM Shareholder Incentive Available | $8.50 | $8.70 | $8.92 | $8.94 | $9.24 | $10.45 | $10.68 | $10.82 | $11.00 | $10.45 | $10.45 | $10.45 | $10.45 | $10.45 | $10.45 | $10.45 |

[1] *2022 Shareholder Incentive subject to OEB approval.*

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### Table 4.5 DSM Shareholder Incentive Earned as a Percent of DSM Spending (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DSM Shareholder Incentive Earned ($ million) | $6.23 | $8.70 | $8.75 | $6.58 | $7.64 | $8.21 | $7.78 | $8.99 | $7.47 | $4.12 | $5.52 | $6.37 | $5.95 | $2.73 | $1.41 | $0.00 |
| Total DSM Spending ($ million) | $16.13 | $20.26 | $22.22 | $21.53 | $27.97 | $31.32 | $32.84 | $33.71 | $32.39 | $50.67 | $64.58 | $69.12 | $65.60 | $54.49 | $52.98 | $50.03 |
| Shareholder Incentive Earned as a % of DSM Spending | 39% | 43% | 39% | 31% | 27% | 26% | 24% | 27% | 23% | 8% | 9% | 9% | 9% | 5% | 3% | 0% |

*[1] 2022 Shareholder Incentive subject to OEB approval.*

### Table 4.6 Annual and Long-Term Natural Gas Savings Targets (million $m^3$) (Union Rate Zones)

| SCORECARD | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| Resource Acquisition | 816.6 | 1,120.3 | 976.5 | 818.3 | 798.6 | 724.4 | 768.7 | 766.4 |
| Low-Income | 43.6 | 59.2 | 80.2 | 68.8 | 74.7 | 91.9 | 82.1 | 76.3 |
| Large Volume | 1,236.1 | 890.9 | 463.1 | 195.7 | 137.7 | 133.0 | 116.1 | 140.5 |

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## Table 4.7 Total Annual and Cumulative Natural Gas Savings for 2022 (Gross and Net) (million $m^3$) (Union Rate Zones)

| SCORECARD | ANNUAL NATURALGAS SAVINGS | | CUMULATIVE NATURALGAS SAVINGS | |
|---|---|---|---|---|
| | GROSS | NET | GROSS | NET |
| Resource Acquisition | 49.67 | 24.91 | 848.80 | 430.22 |
| Low-Income | 1.65 | 1.63 | 34.11 | 33.79 |
| Large Volume | 53.71 | 8.22 | 633.85 | 97.04 |
| Performance-Based | 0.97 | 0.97 | 4.84 | 4.84 |
| **Total** | **106.00** | **35.75** | **1,521.60** | **565.89** |

## Table 4.8 Total Historic Annual Natural Gas Savings (Gross and Net) (million $m^3$) (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Net Annual Natural Gas Savings | 55.85 | 61.85 | 92.60 | 121.12 | 139.03 | 137.44 | 179.97 | 131.83 | 125.08 | 55.97 | 70.01 | 66.18 | 63.43 | 56.49 | 48.77 | 35.73 |
| Total Gross Annual Natural Gas Savings | | Not reported for 2007-2011 | | | | 282.18 | 370.47 | 267.47 | 255.17 | 188.74 | 183.24 | 160.87 | 155.14 | 166.96 | 138.57 | 106.00 |

[1] *2022 DSM results subject to OEB approval.*

## Table 4.9 Total Historic Cumulative Natural Gas Savings (Gross and Net) (million $m^3$) (Union Rate Zones)

| ITEM | 2007-2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Net Cumulative Natural Gas Savings | Not reported for 2007-2011 | 2,336.35 | 2,820.83 | 1,889.46 | 1,750.77 | 959.44 | 1,182.74 | 1,124.52 | 1,087.32 | 861.17 | 837.50 | 565.89 |
| Total Gross Cumulative Natural Gas Savings | Not reported for 2007-2011 | 4,777.83 | 5,752.39 | 3,752.37 | 3,482.50 | 2,758.90 | 2,886.61 | 2,451.17 | 2,401.53 | 2,265.79 | 2,255.84 | 1,521.60 |

[1] *2022 DSM results subject to OEB approval.*

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## Table 4.10 Total Annual Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Net Annual Natural Gas Savings (million $m^3$) | 55.9 | 61.9 | 92.6 | 121.1 | 139.0 | 137.4 | 180.0 | 131.8 | 125.1 | 56.0 | 70.0 | 66.2 | 63.4 | 56.5 | 48.8 | 35.7 |
| Net Annual Natural Gas Savings as a % of Natural Gas Sales | 0.42% | 0.47% | 0.75% | 0.95% | 1.02% | 1.03% | 1.29% | 0.93% | 0.93% | 0.43% | 0.56% | 0.50% | 0.47% | 0.43% | 0.36% | 0.25% |
| Gross Annual Natural Gas Savings (million $m^3$) | Not reported for 2007-2011 | | | | | 282.2 | 370.5 | 267.5 | 255.2 | 188.7 | 183.2 | 160.9 | 155.1 | 167.0 | 138.6 | 106.0 |
| Gross Annual Natural Gas Savings as a % of Natural Gas Sales | | | | | | 2.11% | 2.65% | 1.88% | 1.90% | 1.46% | 1.48% | 1.22% | 1.15% | 1.28% | 1.04% | 0.74% |
| Total Natural Gas Sales (million $m^3$)[2] | 13,158.0 | 13,231.2 | 12,327.8 | 12,778.9 | 13,655.0 | 13,396.1 | 13,992.7 | 14,204.1 | 13,405.0 | 12,935.8 | 12,408.7 | 13,210.0 | 13,508.9 | 13,058.5 | 13,363.0 | 14,268.8 |

[1] *2022 DSM results subject to OEB approval.*
[2] *Total Natural Gas Sales only includes rate classes that are eligible for DSM and subject to DSM costs.*

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## Table 4.11 Total Cumulative Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (Union Rate Zones)

| ITEM | 2017-2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Net Cumulative Natural Gas Savings (million $m^3$) | Not reported for 2007-2011 | 2,336.4 | 2,820.8 | 1,889.5 | 1,750.8 | 959.4 | 1,182.4 | 1,124.5 | 1,087.3 | 861.2 | 837.5 | 565.9 |
| Net Cumulative Natural Gas Savings as a % of Natural Gas Sales | | 17.44% | 20.16% | 13.30% | 13.06% | 7.42% | 9.53% | 8.51% | 8.05% | 6.59% | 6.27% | 3.97% |
| Gross Cumulative Natural Gas Savings (million $m^3$) | Not reported for 2007-2011 | 4,777.8 | 5,752.4 | 3,752.4 | 3,482.5 | 2,758.9 | 2,886.6 | 2,451.1 | 2,401.5 | 2,265.8 | 2,255.8 | 1,521.6 |
| Gross Cumulative Natural Gas Savings as a % of Natural Gas Sales | | 35.67% | 41.11% | 26.42% | 25.98% | 21.33% | 23.26% | 18.56% | 17.78% | 17.35% | 16.88% | 10.66% |
| Total Natural Gas Sales (million $m^3$)[2] | | 13,396.1 | 13,992.7 | 14,204.1 | 13,405.0 | 12,935.8 | 12,408.7 | 13,210.0 | 13,508.9 | 13,058.5 | 13,363.0 | 14,268.8 |

[1] *2022 DSM results subject to OEB approval.*
[2] *Total Natural Gas Sales only includes rate classes that are eligible for DSM and subject to DSM costs.*

## Table 4.12 Actual Annual Gas Operating Revenue ($ million) (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019[1,2] | 2020[1,2] | 2021[1,2] | 2022[1,2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gas Sales and Distribution Revenue | $1,811.0 | $1,852.0 | $1,684.0 | $1,493.0 | $1,468.0 | $1,365.0 | $1,621.0 | $1,755.0 | $1,675.0 | $1,529.0 | $1,873.0 | $1,813.0 | $4,631.5 | $4,118.8 | $4,480.6 | $6,164.5 |
| Less Total Cost of Gas | $1,156.0 | $1,177.0 | $1,026.0 | $794.0 | $755.0 | $638.0 | $849.0 | $977.0 | $875.0 | $717.0 | $1,039.0 | $920.0 | $2,265.3 | $1,781.3 | $2,110.5 | $3,630.3 |
| **Total Distribution Revenue** | **$655.0** | **$675.0** | **$658.0** | **$699.0** | **$713.0** | **$727.0** | **$772.0** | **$778.0** | **$800.0** | **$812.0** | **$834.0** | **$893.0** | **$2,366.2** | **$2,337.5** | **$2,370.1** | **$2,534.3** |

[1] *As of 2019, Distribution Revenue is the gas sales and distribution revenue (excluding transportation, storage and other operating revenue) less the cost of gas.*
[2] *As of 2019, the methodology in deriving the values differs from historical practice due to amalgamation and alignment and this is now presented as combined figures for Enbridge Gas Inc. as found in the annual Utility Earnings and Disposition of Deferral & Variance Account Balances Application and Evidence.*

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## Table 4.13 Total Natural Gas Sales Volumes (million $m^3$) (Union Rate Zones)

| ITEM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Natural Gas Sales[1] | 13,158.02 | 13,231.16 | 12,327.85 | 12,778.87 | 13,654.99 | 13,396.12 | 13,992.69 | 14,204.10 | 13,404.98 | 12,935.77 | 12,408.73 | 13,210.01 | 13,508.92 | 13,058.55 | 13,363.03 | 14,268.78 |

[1] *Only includes rate classes eligible for DSM and subject to DSM costs.*

## Table 4.14 Number of Customers by Customer Type (Union Rate Zones)

| CUSTOMER TYPE | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| Residential[1] | 1,306,495 | 1,325,703 | 1,344,513 | 1,364,322 | 1,381,941 | 1,398,861 | 1,413,678 | 1,428,668 |
| Commercial | 119,899 | 120,613 | 121,234 | 121,971 | 122,909 | 123,792 | 119,268 | 119,049 |
| Industrial | 463 | 460 | 470 | 470 | 493 | 509 | 5,748 | 5,949 |
| Wholesale | 5 | 5 | 6 | 7 | 7 | 7 | 7 | 7 |
| **Total** | **1,426,862** | **1,446,781** | **1,466,223** | **1,486,770** | **1,505,350** | **1,523,169** | **1,538,701** | **1,553,673** |

[1] *Residential customers include Low-Income.*

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## Table 4.15 Number of Customers by Rate Class (Union Rate Zones)

| RATE CLASS | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|
| **General Service** | | | | | | | | |
| M1 | 1,083,032 | 1,097,032 | 1,111,544 | 1,127,352 | 1,141,280 | 1,154,986 | 1,167,200 | 1,178,796 |
| M2 | 7,437 | 7,730 | 7,553 | 7,469 | 7,783 | 7,863 | 7,934 | 7,970 |
| 01 | 333,773 | 339,335 | 344,458 | 349,354 | 353,643 | 357,603 | 360,849 | 364,123 |
| 10 | 2,152 | 2,219 | 2,192 | 2,118 | 2,144 | 2,201 | 2,200 | 2,258 |
| **General Service Total** | **1,426,394** | **1,446,316** | **1,465,747** | **1,486,293** | **1,504,850** | **1,522,653** | **1,538,183** | **1,553,148** |
| **Contract** | | | | | | | | |
| M4 | 156 | 165 | 185 | 208 | 232 | 239 | 230 | 223 |
| M5 | 80 | 72 | 59 | 38 | 42 | 38 | 39 | 37 |
| M7 | 28 | 28 | 30 | 30 | 36 | 47 | 56 | 62 |
| T1 | 37 | 37 | 37 | 37 | 37 | 39 | 39 | 39 |
| T2 | 22 | 22 | 23 | 24 | 25 | 25 | 25 | 25 |
| 20 | 50 | 47 | 46 | 44 | 54 | 57 | 58 | 60 |
| 100 | 10 | 11 | 11 | 11 | 12 | 12 | 12 | 13 |
| **Contract Total** | **383** | **382** | **391** | **392** | **438** | **457** | **459** | **459** |
| **Non-DSM Rate Classes** | | | | | | | | |
| M9 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 |
| M10 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 |
| T3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 25 | 80 | 78 | 79 | 78 | 55 | 52 | 52 | 52 |
| **Total** | **1,426,862** | **1,446,781** | **1,466,223** | **1,486,770** | **1,505,350** | **1,523,169** | **1,538,701** | **1,553,666** |

# 5. Programs and Offerings (EGD Rate Zone)

Enbridge Gas's DSM portfolio for the EGD rate zone consists of the following programs:

- Resource Acquisition Program (Section 5.1)
- Low-Income Program (Section 5.2)
- Market Transformation & Energy Management Program (Section 5.3)

## 5.1 RESOURCE ACQUISITION PROGRAM

Enbridge Gas's Resource Acquisition Program for the EGD rate zone consists of the following offerings:

- Home Efficiency Rebate Offering (Section 5.1.1)
- Residential Adaptive Thermostat Offering (Section 5.1.2)
- Custom Commercial Offering (Section 5.1.3)
- Custom Industrial Offering (Section 5.1.4)
- Commercial & Industrial Prescriptive (Fixed) Incentive Offering (Section 5.1.5)
- Commercial & Industrial Direct Install Offering (Section 5.1.6)
- Energy Leaders Offering (Section 5.1.7)

### 5.1.1 Home Efficiency Rebate Offering

Through the Home Efficiency Rebate ("HER") offering, residential customers gain a better understanding of their home's energy usage, and insights into energy improvement opportunities identified through the completion of a home energy audit. By participating in HER, homeowners can increase the energy efficiency of their home, decrease their energy consumption and improve their health through better indoor air quality.

Through the offering, participants work with an approved Service Organization ("SO") to complete a preliminary energy assessment to determine the home's baseline energy use and profile. A Registered Energy Advisor ("REA") models the home using Natural Resources Canada ("NRCan") energy modelling software ("HOT2000") to produce an energy efficiency report for the homeowner that outlines all energy saving opportunities, along with the home's EnerGuide rating and energy saving tips and information. With this information, the homeowner can make informed decisions regarding potential energy efficient improvements. After upgrades to the home are complete, participants complete a post-energy assessment with the REA to quantify the energy savings achieved by the retrofits, as determined by HOT2000. Rebates are available for completing the assessments and eligible measures recommended in the energy efficiency report (incentive structure and measure list can be found in Appendix C).

The target customers for this offering are residential customers within the EGD rate zone, including detached, semi-detached, townhouses, row townhouses, and mobile homes with a permanent foundation. To be eligible for the offering, participants must have a natural gas furnace or a boiler as their primary heating system. Additionally, participants must complete both the pre-energy and post-energy assessments using an Enbridge Gas approved SO and install at least two qualifying measures, or three measures if a furnace is also being upgraded.

The aggregate annual gas savings across all participants in the HER offering must be, on average, at least a 15% reduction in annual natural gas use, when comparing the results of the pre-energy assessment to the results of the post-energy assessment as determined by HOT2000.

**Table 5.0 2022 Home Efficiency Rebate Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 198,970,556 |
| Participants (homes) | 17,225 |

**Offering Changes in 2022:**

In May 2021, the Federal Government introduced a home retrofit offer, the Canada Greener Homes Grant ("CGHG"), offering homeowners rebates up to $5,000 for eligible upgrades. The CGHG was still in market in 2022 and continued to offer customers a second similar option in terms of whole home retrofit incentives. As a result, customers had to choose whether to participate in HER or CGHG for each upgrade. In response, Enbridge Gas launched a limited time incentive, both to drive customers into the HER offering and to encourage uptake of insulation measures.

- Limited Time Offer ("LTO") details:
    - The LTO was developed to encourage EGD rate zone customers to increase their insulation measures (attic and air sealing). The maximum amount of incentive available was $1,600 ($1,000 incentive and $600 for audit). This LTO was successful in encouraging customers to complete their E-audits by June 30th, 2022.

Throughout 2022, Enbridge Gas worked with National Resources Canada to develop a single coordinated offering to be delivered by Enbridge Gas, which will be launched in 2023. The new offering, marketed as HER+, will simplify the incentive landscape for Ontarians and its contractors, energy auditors, and service organizations. Details are provided in Anticipated Offering Changes for 2023, below.

**Table 5.1 Frequency of Individual Measure Uptake (EGD Rate Zone)**

| Individual Measure Uptake | 2021 | 2022 | Change |
|---|---|---|---|
| | % Frequency | % Frequency | |
| Natural Gas Furnace | 37% | 31% | ↓ |
| Natural Gas Boiler | 3% | 2% | ↓ |
| Attic Insulation | 86% | 88% | ↑ |
| Basement Insulation | 10% | 11% | ↑ |
| Wall Insulation | 3% | 3% | No change |
| Water Heating | 24% | 24% | No change |
| Windows/Doors | 14% | 11% | ↓ |

Enbridge Gas has continued to evolve the HER offering from focusing on space heating towards targeting insulation measures. As shown in Table 5.1 above, the percentage of participants installing a furnace or boiler through the offering dropped from 40% in 2021 to 33% in 2022, with a corresponding increase in insulation measure frequency. These changes are a result of Enbridge Gas altering the offering over the past three years. An example of such alterations is the reduction of furnace incentives down to the current $250 while attic insulation incentives have increased. Incentive levels were maintained throughout 2022.

**Lessons Learned:**

Enbridge Gas saw a positive correlation between LTOs and increased business from SOs.

In 2022, Enbridge Gas continued its collaboration with Humber College and local municipalities in offering the Home Energy Retrofit Orientation (HERO). HERO seeks to bridge energy efficiency literacy gaps to increase homeowner awareness, interest, and accelerate deeper energy conservation retrofits. The two-hour HERO sessions are delivered by an experienced Humber Sustainability Professor and NRCan Registered Energy Advisor. The feedback received from attendees and municipalities continued to be positive and customers appreciated learning about building envelopes and opportunities for energy savings in their homes. In 2022, HERO tried a different tactic and offered nine online sessions with over 300 people registered. There is interest from municipalities to continue offering HERO in 2023 to support customer education and drive local GHG reductions.

In 2022, HERO tried a different tactic and offered nine online sessions with over 300 people registered.

In 2022, there was a plan to develop webinars focused on air sealing, specifically how to identify leaky areas in a home, options for homeowners to address these issues, and corresponding savings. However, these webinars were put on hold as the implementation and rollout of the HER+ offering required focus. Enbridge Gas is expecting to leverage this concept in 2023 and to work with Humber on the creation of this initiative. Such an initiative would be promoted by municipalities and will help to increase Enbridge Gas's efforts to educate homeowners to learn more about their building envelope. This is aligned with the OEB's interest in increasing customer awareness in energy efficiency in their homes, specifically as it relates to insulation measures.

**Anticipated Offering Changes for 2023:**

2023 will be a year of significant change for whole home retrofit offerings in Ontario. Commencing January 1, 2023, the former HER offering delivered by Enbridge Gas and the CGHG program offered by Natural Resources Canada will be combining into HER+. This new amalgamated and coordinated offering will be available to all Ontario residences and will lead to enhanced participation, deeper savings, and increased simplicity. While working with NRCan, Enbridge Gas leveraged the lessons learned through years of delivering HER to implement an offering that will meet the needs of the combined stakeholders.

Enbridge Gas will monitor the incentive structure to ensure the Company continues to meet the offering's objectives.

In order to align the two offerings, Enbridge Gas has discontinued the basement bonus rebate and the multiple measure bonus. In its Decision regarding the 2023-2025 DSM Plan, the OEB directed Enbridge Gas to adhere to incentive levels outlined in Schedule B.[15] Changes to the incentive structure include the discontinuation of:

- Furnace/ Boiler & Water Heater (Tank and Instantaneous)

Further changes include the addition of the following measures:

- Heat pumps
    - Domestic hot water heat pump
    - Geothermal ground source heat pump
    - Air source Heat Pump
- Additional Insulation
    - Basement Header
    - Basement Slab
    - Exposed Floor Insulation
- Solar Photovoltaic panels
- Resiliency measures
    - Batteries connected to Photovoltaic systems to provide standby power for home
    - Roofing membrane: self-adhering roofing underlayment applied to entire roof
    - Foundation waterproofing
    - Moisture proofing of 100% of crawlspace floor, walls and headers
- Programmable thermostats
- Adaptive Thermostats

Resiliency measures and solar photovoltaic panels will be paid through NRCan's budget and are only offered to homeowners who own and reside in their primary residence.

In partnership with Natural Resources Canada, Enbridge Gas customers will be able to stack the $75 Instant Rebate from the Smart Home offering with an additional $50 rebate if they participate in the HER+ offering and complete a pre- and post-retrofit EnerGuide assessment. See Section 5.1.2 for details about the upcoming Smart Home Offering.

[15] *Decision and Order, Application for Multi-Year Demand Side Management Plan (2022 to 2027), EB-2021-0002, November 15, 2022, Schedule B.*

### 5.1.2 Residential Adaptive Thermostat Offering

Adaptive thermostats, also known as smart thermostats, are one of the easiest ways for residential customers to save on energy costs. Adaptive thermostats use sensors and Wi-Fi technology to give homeowners greater flexibility in controlling heating and cooling needs while at home or away, which supports a reduced demand on energy consumption. The offering provides customers a rebate for the purchase of a qualifying adaptive thermostat. Incentive details are provided in Appendix C.

To be eligible for the offering, a customer must meet the following requirements:

- Be a residential customer in the EGD rate zone.
- Reside in a single-family home (only detached, semi-detached and row townhouse homes are eligible).
- Their adaptive thermostat controls their natural gas furnace or boiler (i.e., propane, oil and electrically heated homes are not eligible).
- Has not received an adaptive thermostat discount, rebate, or device from Enbridge Gas at this address.

**Table 5.2 2022 Residential Adaptive Thermostat Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 60,982,067 |

**Offering Changes in 2022:**

The following changes were made to the Adaptive Thermostat offering in 2022:

- In January 2022, Enbridge Gas launched a revamped contractor channel integrated into the current online instant rebate portal, providing an easier customer journey as well as a significant reduction in data entry errors for contractors.
- Two new devices were added: ecobee Smart Thermostat Enhanced and ecobee Smart Thermostat Premium.

Adaptive thermostat uptake increased by 15% in 2022 compared to 2021. This was supported through the reopening of in-store shopping after closures related to the COVID-19 pandemic, successful marketing efforts and an increase in redemption rates of issued promotion codes.

**Lessons Learned:**

In 2022, Enbridge Gas made internal processing changes to account for returns, allowing for a more streamlined tracking and reporting process.

While slightly more participants went through the contractor stream than in 2021, the uptake overall is very low with 0.4% of all devices coming from contractors. While three contractors were participating in the offering, only one produced results and those results were significantly below forecast. It is apparent there are barriers in the contractor channel that Enbridge Gas is working to identify.

The Moderate-Income offering in partnership with the IESO Energy Affordability program saw a limited number of Energy Saving Kits issued in 2022, resulting in minimal uptake. Narrow income thresholds were identified as a barrier, limiting uptake in the offering.

Additionally, Enbridge Gas added to the FAQs on the website pertaining to the Moderate-Income discount coupon so those with an Energy Saving Kit would know how to use it.

**Anticipated Offering Changes for 2023:**

In 2023, Enbridge Gas will consider the following changes to the offering:

- In its Decision regarding the 2023-2025 DSM Plan,[16] the OEB approved the Smart Home offering, which is a continuation of the Smart Thermostat offering. It was renamed to allow for the expansion of technologies which provide automated controls to reduce energy consumption.
- As discussed in the HER section above, the new HER+ offering will include programmable and adaptive thermostats, and participants can stack the Smart Home instant rebate with the HER+ rebate. The savings from those thermostats will be associated with the HER+ offering. Moderate-Income participants will be able to stack their $125 Instant Rebate with an additional $50.
- Enbridge Gas will continue to offer the Moderate-Income rebate offer and the new partnership with the IESO, who are planning to increase the income thresholds for qualifying customers. This may lead to increased participation in 2023.
- Enbridge Gas will continue to monitor and explore ways to improve the customer's journey through the self-service instant discount portal based on website clicks, feedback from retailers, and participant surveys.
- Enbridge Gas will explore expanding the number of retailers and contractors that are participating in the offering by engaging the delivery agent, Summerhill, to facilitate meetings with non-participating retail channels and contractors. Additionally, Enbridge Gas will investigate barriers to participation for retailers and contractors that have been previously engaged to find opportunities to remove those barriers. In summary, Enbridge Gas is looking to understand why retailers and contractors have been unable or unwilling to participate in the offering, and what can be done to change that.

### 5.1.3 Custom Commercial Offering

The Custom Commercial Offering addresses energy savings opportunities related to unique building specifications, design concepts, processes and/or new technologies that are outside the scope of prescriptive measures. The offering provides technical assistance and financial incentives to encourage customers to implement energy efficient measures or initiatives. Enbridge Gas provides consultative services to customers and third-party service providers aimed at assessing facility energy consumption and making recommendations for gas-saving measures. See Appendix C for the offering details.

The Custom Commercial offering targets commercial customers, except for low-income qualified multi-family buildings (see Section 5.2.2, the Affordable Multi-Family Housing Offering).

[16] *Decision and Order, Application for Multi-Year Demand Side Management Plan (2022 to 2027), EB-2021-0002, November 15, 2022, Section 4.2.1, p. 22-23.*

**Table 5.3 2022 Custom Commercial Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Large Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 114,432,481 |
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 11,921,064 |

**Offering Changes in 2022:**

To drive early and increased project submissions while encouraging customers to plan ahead of the heating season, Enbridge Gas ran Boiler LTOs again in 2022. These LTOs provided a 50% higher incentive for high-efficiency boiler projects and a 100% higher incentive for Condensing Boiler projects for EGD rate zone commercial customers and Union rate zones commercial general service customers. Similar to 2021, participants had to commit to eligible boiler projects by June 2022 and complete installation by October 2022 to qualify for enhanced Boiler LTO incentives. School boards were granted extensions to LTO deadlines due to the timing of their capital planning cycles.

**Lessons Learned:**

Similar to 2021, the Boiler LTOs increased project submissions for the Commercial Custom offering.

Enbridge Gas held in-person customer events this year, which were both well-attended and well-reviewed. In 2023, Enbridge Gas plans to deliver more in-person technical seminars throughout Ontario.

**Anticipated Offering Changes for 2023:**

The approval of the 2023-2025 DSM Plan allows Enbridge Gas to launch a higher, harmonized incentive, \$0.25/$m^3$ of natural gas saved for all commercial custom retrofit projects within the franchise area. This higher incentive is in consideration of the increased cost of goods since the COVID-19 pandemic induced supply chain challenges. Furthermore, Enbridge Gas will align its commercial sector energy assessment incentives with the industrial sector, adopting a tiered incentive structure based on a participant's prior year's annual gas consumption.

To assist commercial customers with balancing energy and operational costs, Enbridge Gas will continue to promote boiler projects through LTOs as these offers have historically been successful in promoting earlier adoption of high efficiency and condensing boilers. Additionally, Enbridge Gas will launch a new Multi-Residential LTO, which offers an increased incentive of \$0.40/$m^3$ for any non-boiler projects implemented in the multi-residential sector. The intent of this LTO is to examine the extent of market interest in measures apart from boilers to inform future DSM programming when Amendment 15 mandates the replacement boiler efficiency in 2025.

### 5.1.4 Custom Industrial Offering

The Custom Industrial Offering addresses energy savings opportunities related to unique building specifications, design concepts, processes and/or new technologies that are outside the scope of prescriptive measures. The offering provides technical assistance and financial incentives to encourage industrial and agricultural customers to implement energy efficient measures or initiatives. Enbridge

Gas provides consultative services to customers and third-party service providers aimed at assessing facility energy consumption and making recommendations for gas-saving measures. See Appendix C for the offering details.

**Table 5.4 2022 Custom Industrial Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Large Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 248,809,045 |
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 2,543,130 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas introduced several adjustments to the industrial custom offering, its marketing, and its ways of operating:

- The custom project application process was harmonized franchise-wide, and Enbridge Gas implemented a free ridership mitigation strategy that included Energy Solutions Advisor ("ESA") training and increased attention towards consistent customer declarations and free-ridership risk for each project.
- Enbridge Gas began marketing to smaller agricultural customers.
- ESAs held well-attended in-person technical seminars and customer events. These were the first in-person events since they were paused during the COVID-19 pandemic.

**Lessons Learned:**

Enbridge Gas held in-person customer events held this year, which were both well-attended and well-reviewed. In 2023, Enbridge Gas plans to deliver more in-person technical seminars throughout Ontario.

Effective delivery of the industrial custom offering is dependent on customer awareness and engagement in the offering. This engagement is directly supported by a one-to-one relationship between the Enbridge Gas ESA and customer representatives. Many of these relationships fractured through the COVID-19 pandemic as personnel changes and labour shortages at both Enbridge Gas and customer sites have disrupted communication. In addressing this, Enbridge Gas will continue to focus on building strong relationships, and providing experience and knowledge in working with customers to influence their energy efficiency decisions. Enbridge Gas is dedicated to hiring and retaining skilled individuals who can provide this expertise to support our customers.

Enbridge Gas also plans to introduce supplementary marketing strategies to educate the market about the industrial custom offering.

**Anticipated Offering Changes for 2023:**

Enbridge Gas is considering the following changes for the 2023 program year:

- The Custom Industrial offering will launch a harmonized incentive structure for the industrial segment, and a separate harmonized incentive structure for the agricultural sector.
- Recognizing the long lead times for most industrial custom projects, most LTOs will be reduced. However, Enbridge Gas will introduce an LTO to encourage agriculture retrofit projects to be completed early in the year.

- Incentives for opportunity identification projects such as energy assessments and metering installations will also be harmonized franchise-wide.
- Enbridge Gas will continue to explore how to implement an EMIS incentive offer to industrial customers.

### 5.1.5 Commercial & Industrial Prescriptive (Fixed) Incentive Offering

Through the Commercial & Industrial Prescriptive (Fixed) Incentive Offering, fixed financial incentives are available for the installation of eligible high-efficiency technologies. Incentives are provided to customers, service providers, and/or distributors/dealers, depending on the technology.

Within the Commercial & Industrial Prescriptive (Fixed) Incentive Offering, Enbridge Gas delivers a Midstream Prescriptive Commercial initiative branded as the "Distributor Discount Program." This initiative targets Foodservice and HVAC distributors or equipment dealers who sell select high-efficiency equipment, to influence the purchase of the efficient option at the point of sale.

Please see Appendix C for the full list of eligible technologies and their incentives. Energy savings are based on the OEB's Technical Resource Manual (TRM). See Section 2.6 for more details regarding the TRM.

**Table 5.5 2022 Commercial & Industrial Prescriptive (Fixed) Incentive Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Large Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 29,109,668 |
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 15,512,585 |

**Offering Changes in 2022:**

Some of the offering changes in 2022 include:

- The addition of three new measures within the Midstream Foodservice initiative: Energy Star Griddles, High Efficiency Conveyor Ovens, and Broilers.
- Midstream incentives were increased on Energy Star Fryers and Condensing Tankless Water Heaters.
- Enbridge Gas implemented a mandatory 40% incentive passthrough to end-user participants in the Midstream Foodservice initiative.

**Lessons Learned:**

The recovery from the COVID-19 pandemic continued to impact the commercial and industrial sector in 2022. Impacts included high turnover in staffing and supply chain challenges that resulted in product shortages or delays in product shipping.

Enbridge Gas continued to incorporate a digital approach using virtual meetings for one-on-one contact through Enbridge Gas ESAs or contracted Delivery Agents. Enbridge Gas also continues to leverage the utility's longstanding partnerships with industry associations to launch specific targeted communication and digital campaigns.

In 2022, Enbridge Gas completed a process evaluation of its Midstream Prescriptive Commercial initiative, authored by Econoler (see Appendix F). The conclusions and recommendations are presented in Section 7.2 Process Evaluation.

Within the Midstream Foodservice initiative, impacts from the COVID-19 pandemic were experienced in both the supply chain and end-user businesses. Participants experienced product delays from manufacturers, and foodservice businesses were seeing unprecedented staffing shortages and rising food costs. To keep the Midstream initiative top of mind with participants, three new measures were added and incentives were increased on Energy Star Fryers. The higher incentive was implemented to encourage participants to increase ordering, mitigating supply delays. The new measures and higher incentive were also communicated to manufacturers to influence production and shipping of eligible product, and to participating Foodservice retailers. To help increase participant sales, Enbridge Gas increased promotional materials highlighting the mandatory 40% incentive passthrough to the end-user implemented in 2022.

It is evident that recovery from the COVID-19 pandemic is going to take time and there will be lasting impacts on the supply chain as a result. To better understand the impacts on the supply chain, a market characterization study has been recommended as an outcome of the 2022 Midstream Process Evaluation.

For the Midstream HVAC initiative, Condensing Unit Heaters and Condensing Tankless Water Heaters continued to be offered in 2022. Supply chain delays and higher equipment costs were also experienced in the HVAC offer. In response, an incentive increase was applied to Condensing Tankless Water Heaters to help overcome supply chain challenges and higher costs. With fewer measures offered to participating HVAC distributors, Enbridge Gas's Delivery Agent was diligent in ensuring regular contact at all levels of the organization and at different locations (from showrooms to branches) to keep the offer top of mind and part of their day-to-day operations. To help increase participant sales, Enbridge Gas increased promotion to HVAC contractors. The Midstream HVAC initiative continued to have 80% of HVAC distributors (over 230 locations across Ontario) registered and participating in the offer. However, despite efforts to increase engagement, uptake in 2022 was lower than previous years.

**Anticipated Offering Changes for 2023:**

Enbridge Gas will continue to leverage its business partners for outreach to more customers that have not previously participated in the offering. This is predominantly accomplished through the implementation of the business partner webinars and the multi-unit year-end bonus offer. The business partner webinars provide valuable information and relevant training to enable business partners to effectively conduct outreach activities. The multi-unit year-end bonus is an incentive for business partners based on the total number of eligible equipment units installed within the calendar year, thereby encouraging business partners to promote energy-efficient product sales with existing and new customers.

Additionally, Enbridge Gas acknowledges that the cost of goods is increasing and closely monitors the incentive amounts to ensure their relevance to influence energy efficiency upgrade decisions. For 2023, Prescriptive incentive levels are set so that they cover approximately 40% of the incremental cost based on the Technical Resource Manual (TRM). Enbridge Gas plans to launch LTOs for specific measures to overcome customers' financial barriers for those measures. Moreover, Enbridge Gas will continue to support customers and industry associations in planning future energy saving projects through in-person and virtual engagements.

With respect to the Midstream initiative, to better understand the target market and how market actors are reacting to the impacts of the COVID-19 pandemic, Enbridge Gas will focus research efforts for a renewed market characterization study in 2023. This study will help to define future strategies and opportunities across the supply chain. Additionally, in 2023 Enbridge Gas will investigate additional measures for both Foodservice and HVAC.

The Midstream Foodservice initiative will no longer jointly deliver IESO Refrigeration, Freezer, and Ice Maker offers with Enbridge Gas. In 2022, the IESO communicated its intent to exit the Midstream initiative by December 31, 2022. The removal of the IESO offers is not expected to have a significant impact on the Midstream initiative and participants, however Enbridge Gas will not know the full impact until 2023.

### 5.1.6 Commercial & Industrial Direct Install Offering

The Commercial & Industrial Direct Install Offering provides a turnkey solution for customers who are less likely to participate in traditional offerings by providing the installation of energy efficient technologies. The offering also provides increased incentive levels for select technologies. Offering details are provided in Appendix C.

**Table 5.6 2022 Commercial & Industrial Direct Install Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Large Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 5,253,809 |
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 19,778,326 |

**Offering Changes in 2022:**

Enbridge Gas continued to offer a province-wide approach for the Shipping Door equipment installation stream that consists of Air Curtains and Dock Door Seals for new and replacement projects in existing buildings. Increased incentives put in place in 2021 were continued into 2022; these higher incentives covered 85% to 90% of total cost to install. Enbridge Gas branded communications were increased to overcome the barrier of legitimacy for customers concerned about a “too good to be true” offer. The Shipping Door equipment installation stream continued to provide businesses a choice of either in-person visits or virtual assessments through Enbridge Gas Delivery Agents for customers to find out more information.

The Demand Control Kitchen Ventilation (DCKV) installation stream continued to be delivered through a collaboration with the IESO Save on Energy (IESO SOE) Retrofit program. This collaboration allows for joint delivery through one touch point, simplifying the application process for the customer. The temporary bonuses that were offered in 2021 were permanently rolled into the 2022 offer. This increased incentive covers up to 87% of the cost to install the equipment. The high incentive helped address the ongoing economic impacts on the foodservice sector.

**Lessons Learned:**

For both Direct Install streams, DCKV and Shipping Doors, small business customers continued to be impacted by the current economic challenges stemming from the COVID-19 pandemic and affordability of efficient equipment remained low. As a result, Enbridge Gas Delivery Agents experienced low response rates to offer communications. Delivery Agents worked with Enbridge Gas to enhance sales strategies to include more in-person outreach.

Customer concerns regarding legitimacy continued to be a barrier to participation. To improve this reluctance among customers, Enbridge Gas implemented more branded communications directing customers to Enbridge Gas Inc. as opposed to a Delivery Agent.

An Enbridge Gas automatic reply was issued to all customer inquiries to provide instant reinforcement of legitimacy and confirmation of Enbridge Gas Delivery Agents.

A notable challenge in 2022 was staffing constraints. Many organizations, including Enbridge Gas Delivery Agents, experienced staff turnover and shortages. This resulted in additional time and effort needed to identify the decision maker or reintroduce the Direct Install offer to a new contact. From an Enbridge Gas Delivery Agent perspective, this resulted in challenges servicing a broad geographic region. Fuel costs also compounded this challenge for Delivery Agents. To offset this, Enbridge Gas worked with Delivery Agents to focus efforts on specific regions.

Further, in 2022, equipment and installation costs increased. Supply chain increases resulted in higher pricing. Due to the barriers faced by the target market for this Direct Install offer, Enbridge Gas continued to offer small businesses incentives of up to 90%.

**Anticipated Offering Changes for 2023:**

In 2023, both Direct Install streams will be continued at the same or higher incentive level to reach and engage small businesses in energy conservation. Enbridge Gas will explore opportunities to continue joint delivery of the Direct Install offer with the IESO offers, where appropriate.

### 5.1.7 Energy Leaders Offering

The Energy Leaders Offering is intended to appeal to early adopters of new and emerging technologies by providing increased incentives. Offering details are provided in Appendix C.

The main targets for this offering are commercial, agriculture, and industrial customers who Enbridge Gas identifies as a leader in energy efficiency.

**Table 5.7 2022 Energy Leaders Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Large Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 5,372,206 |
| Small Volume Customers Net Cumulative Natural Gas Savings ($m^3$) | 474,348 |

**Offering Changes in 2022:**

Enbridge Gas maintained the same offering as the 2021 program year by promoting Gas Heat Pump (GHP) technology, with the goal of accelerating market adoption of commercialized GHP technologies. Enbridge Gas continued a GHP LTO in 2022, with incentives covering up to 80% of incremental project costs (including energy modelling), up to $60,000. This LTO was delivered internally by GHP technical experts and ESAs, who assisted customers with identifying, quantifying and implementing GHP solutions.

Enbridge Gas also noted an increased uptake for Electric Heat Pumps, either an air source heat pump or a ground source heat pump. Most technologies incented in 2022 were Electric Heat Pumps, with minimal GHP participation.

Incentives for Electric Heat Pump measures were calculated on a case-by-case basis, based on a rate of $0.20/m$^3$ for estimated annual natural gas savings.

**Lessons Learned:**

Because GHPs are not a mainstream technology in Ontario, implementation costs are high, resulting in a reduced cost-effectiveness of energy savings compared to more popular measures incented through the Custom Commercial Offering. Customers also opted for Electric Heat Pump systems to minimize costs while efficiently reducing GHG emissions.

**Anticipated Offering Changes for 2023:**

This offering is discontinued in 2023.

## 5.2 LOW-INCOME PROGRAM

Enbridge Gas's Low-Income Program for the EGD rate zone consists of the following offerings:

- Home Winterproofing Offering (Section 5.2.1)
- Affordable Multi-Family Housing Offering (Section 5.2.2)
- Savings by Design Affordable Housing Offering (Section 5.2.3)

### 5.2.1 Home Winterproofing Offering

The Home Winterproofing Offering, marketed to customers as Home Winterproofing or the Home Winterproofing Program ("HWP"), is designed to reduce energy costs and improve indoor home comfort for low-income customers (homeowners and tenants who pay their natural gas bill). Participants receive a home energy assessment and direct installation of weatherization measures, with no cost to the participant. As a health and safety value add-on, a carbon monoxide monitor is provided to participants where one is not already present in the home. At the time of the home energy assessment, the home is also prequalified for water conservation measures (showerheads and aerators) and a smart thermostat. The offering is available for both privately owned single-family homes, and social and assisted housing. Offering details can be found in Appendix C.

**Table 5.8 2022 Home Winterproofing Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 34,647,742 |

**Offering Changes in 2022:**

In the beginning of 2022, the collaboration between Enbridge Gas and the IESO was launched. This collaboration allowed Delivery Agents (DAs) to offer both the HWP and the IESO's Energy Affordability Program (EAP) to eligible low-income participants. The intent of the collaboration is to streamline the customer's journey in hopes of reducing home visits and decreasing costs. To facilitate effective collaboration, HWP's income eligibility was revised to align with the IESO's EAP.

Enbridge Gas and the IESO started the year with three common Delivery Agents. The DAs were responsible for the following postal code areas:

- EnviroCentre – postal code K
- CLEAResult – postal code L and N
- Ecofitt – postal code M and P

Various new marketing tactics were added in 2022 and some previous tactics were expanded. New tactics included:

- Community Blitz campaigns provided increased marketing in targeted communities with high instances of low-income households and low participation. Tactics for these campaigns included multimedia advertising that ran on local radio, public access screens, newspapers, and transit shelters. Additionally, Enbridge Gas sponsored content articles in local print publications and conducted targeted Direct Mail (DMs) in the identified areas.
- LTO campaigns were initiated to encourage participants to complete the offering. This campaign was directed to eligible participants who chose not to proceed with the offering.
- Mail-in application campaigns were piloted in Q4 of 2022. In 2022 individuals could apply to HWP either online or through the phone, but it was noted that some individuals did not feel comfortable with online applications.
- A Q&A video was created, where a current Delivery Agent answered the top 15 questions customers have about the offering. The intent of this video was to reduce market confusion about HWP.
- Multilingual campaigns were launched on Facebook, Instagram, and Discovery. These social media campaigns were comprised of various written and translated marketing materials.
- Grassroots marketing such as community events like Ribfest and Fairs.
- There are a variety of residential housing offerings (HWP, EAP, HER and Canada Greener Homes Grant) that have created confusion for customers. To reduce confusion and drive participation within the HWP offering, Enbridge Gas increased marketing efforts specifically for HWP through a mix of traditional and digital tactics and initiatives. Within traditional initiatives, radio, community outreach (food banks), bill inserts, targeted direct mail, and E-blasts play a pivotal role in generating awareness and interest in the offering. Digital campaigns include tactics such as social media, YouTube, and Google Search and Display advertising as the key initiatives to help drive customers to the online application.

**Lessons Learned:**

The use of three common Delivery Agents resulted in various challenges, including customer hesitation towards a new Delivery Agent and longer wait times for customers due to Delivery Agent onboarding. To mitigate these challenges, marketing efforts were increased in the beginning of the year to introduce the public to the three new Delivery Agents. Further, to reduce wait times for customers, an additional three Delivery Agents were utilized to process applications and deliver the offering to support the transition.

Costs for insulation, products, and services increased dramatically in 2022, due to inflation and shortages of products since the onset of the COVID-19 pandemic. These increased costs could not be absorbed by Delivery Agents, as such, additional funds were requested from Enbridge Gas. Due to budget constraints, only a portion of these costs could be accommodated by Enbridge Gas.

**Anticipated Offering Changes for 2023:**

Enbridge Gas is considering the following changes for the 2023 program year:

- The income eligibility thresholds were updated to align with the IESO, effective January 1, 2023.
- Regarding the collaboration between Enbridge Gas and the IESO low-income programs, opportunities for co-branded education, awareness and marketing have been identified and will be further explored.
- An additional Delivery Agent, separate from the joint DAs with the IESO, will continue to be required to meet targets.
- The addition of Heat Reflector panels as a new measure for homes heated by water or steam radiators/convectors is expected to be offered.
- The previous overarching marketing method of marketing the three residential offerings at once (HER+, Smart Home, and HWP) will end. This was found to cause confusion amongst customers as different audiences require different messaging about the offering most relevant to them.
- To further reduce market confusion for customers regarding choosing a residential housing offering, Enbridge Gas intends to enhance the customer's journey on these offering webpages with an online questionnaire. This will direct customers to the offering best suited for their needs.
- Bill inserts and direct mail are planned to increase due to successful lead generation.
- 2023 will focus on those areas identified with lower leads and participation, and Enbridge Gas will continue to create grassroots approaches to increase awareness and leads.
- Due to their success, mail-in applications and multi-lingual marketing will continue into 2023.

### 5.2.2 Affordable Multi-Family Housing Offering

The Affordable Multi-Family Housing Offering provides social and assisted housing and low-income market rate multi-family buildings with energy assessments, technical assistance, and incentives for various energy efficiency measures. Participants are eligible for both custom and prescriptive measure incentives, like the Custom Commercial Offering and the Commercial & Industrial Prescriptive (Fixed) Incentives Offering, however incentive levels are higher to reflect the needs of the low-income market. Offering details are provided in Appendix C.

**Table 5.9 2022 Affordable Multi-Family Housing Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 71,812,509 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas harmonized eligibility requirements for private market rate buildings between the legacy utility rate zones.

Eligibility requirements cover privately owned multi-residential buildings that can demonstrate one of the following criteria:

- Privately owned multi-residential building owner or property manager must confirm, based on rent roll review, that at least 30% of the units are rented at less than 80% of the median market rent, as determined by the Canadian Mortgage and Housing Corporation.
  Or
- The building has participated in a federal, provincial, or municipal affordable housing funding program in the last 5 years.

Enbridge Gas ran an LTO campaign on make-up air units to Affordable Multi-Family Housing customers who committed by June 30, 2022, and installed by October 31, 2022, to increase participation in the offering.

The launch of new eligibility requirements provided an opportunity to engage with Enbridge Gas's network to provide an update as well as increase the marketing presence.

The call marketing campaign continued to focus on attracting private market leads to support sales teams.

**Lessons Learned:**

Resourcing issues were the main cause of drastically low results, as leads generated by third-party outreach initiatives waned and remaining resources could only operate reactively.

Enbridge Gas monitored the new eligibility requirements to understand how it affected participation in 2022. Of the 102 participants that went through a rent roll review (in both EGD and Union rate zones), 22 participants were not eligible. Of those ineligible participants, 15 would have been designated affordable housing based on the previous eligibility criteria. In comparison to the previous eligibility criteria, the new criteria have provided more confidence in the designation of an affordable housing participant.

**Anticipated Offering Changes for 2023:**

The following changes are being considered for the 2023 program year:

- Harmonized incentive rates across franchise area including custom and prescriptive.
- The LTO that was for prescriptive make-up air units will be moved to all custom measures.
- Energy assessments will have stricter eligibility requirements that include a minimum annual consumption.
- Third-party sales support for specific areas will be explored to ensure the greatest level of outreach and opportunities to increase specific measures.
- The CMHC Rapid Housing Initiative has a short turnaround time that does not allow those participants to go through the Affordable Housing Savings by Design offering, therefore, a New Construction offering has been created and full launch is planned for 2023.

### 5.2.3 Savings by Design Affordable Housing Offering

The Savings by Design Affordable Housing ("SDBAH") Offering helps affordable housing builders improve energy performance in new construction projects by providing a variety of support activities from the early design phase through to construction. The offering is designed to influence builders to build affordable housing that exceeds the 2017 Ontario Building Code by at least 15%. Offering details are provided in Appendix C.

**Table 5.10 2022 Savings by Design Affordable Housing Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Project Applications | 7 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas raised the minimum energy performance target to 15% better than 2017 Ontario Building Code ("OBC"); the minimum had previously been 7% better than OBC. For projects subject to the Toronto Green Standard, the energy performance target was raised to 35% better than OBC for Part 3 projects and 25% better than OBC for Part 9 projects and continued the implementation of a stretch target of +5% for projects where the baseline energy model already met the Savings by Design target.

Marketing activities in 2022 focused on digital tactics with Google Search, a LinkedIn campaign, webinars to targeted trade associations, advertising in relevant trade publications and the creation of enhanced case studies showcasing projects by past participants.

**Lessons Learned:**

In 2022, Enbridge Gas continued to notice increased interest from municipalities in adopting green development standards as a way to address their climate change action plans, for example, the City of Ottawa adopted their High Performance Development Standard to take effect in 2023.

The trend of shifting away from natural gas as a primary fuel became a barrier to client participation. Many projects were no longer intending to include natural gas in their design, making them ineligible to participate in the offering.

**Anticipated Offering Changes for 2023:**

Enbridge Gas expects to implement the following changes for the 2023 program year:

- For 2023, the requirement to design using natural gas as a primary fuel has been eliminated.
- The energy performance target will increase to at least 20% better than OBC.
- In the case where a project will be constructed in a municipality that imposes a Green Development Standard (GDS) requiring the achievement equal to or above the offering target of 20% better than OBC, an incremental performance target of 5 percent above the respective GDS target would be applied.

- If the baseline energy model for the project shows that the initial project design already meets or exceeds the applicable Savings by Design energy performance requirement, the project will then be required to achieve an energy performance target of an additional 5%.
- Feedback from participants focused on overcoming financial barriers have been addressed by enabling access to performance incentives earlier in the construction process. The incentive payout structure has been adjusted to provide 50% of the energy performance incentive at permit stage, with the remaining 50% upon completion of construction. The building commissioning incentive has been eliminated.
- This offering will be available across the Enbridge Gas franchise, including the Union rate zones.
- Marketing in 2023 will continue to feature case studies highlighting the successes of past participants. Alternative messaging will be tested via digital channels to improve audience engagement.

## 5.3 MARKET TRANSFORMATION & ENERGY MANAGEMENT PROGRAM

Enbridge Gas's Market Transformation & Energy Management Program for the EGD rate zone consists of the following offerings:

- Savings by Design Residential Offering (Section 5.3.1)
- Savings by Design Commercial Offering (Section 5.3.2)
- School Energy Competition Offering (Section 5.3.3)
- Run it Right Offering (Section 5.3.4)
- Comprehensive Energy Management Offering (Section 5.3.5)

### 5.3.1 Savings by Design Residential Offering

The Savings by Design Residential Offering helps residential builders improve energy performance in new construction projects, by providing a variety of support activities from the early design phase through to construction. The offering is designed to transform builders, over a multi-year period, to build more homes that exceed the 2017 Ontario Building Code ("OBC") by at least 20%. Offering details are provided in Appendix C.

**Table 5.11 2022 Savings by Design Residential Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Builders | 24 |
| Homes Built | 2,831 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas changed the energy performance targets for the Savings by Design Residential Offering, as follows:

- In 2022, Enbridge Gas raised the energy performance target to 20% better than OBC.
- An energy performance stretch target of an additional 5% was applied to projects with a baseline design that already achieved 20% better energy efficiency than OBC.

- Projects located in the City of Toronto and therefore subject to the Toronto Green Development Standard are required to meet a minimum energy performance target of 25% better than OBC.

**Lessons Learned:**

Builder participants continued to experience construction delays in 2022, due to supply chain challenges resulting from the COVID-19 pandemic. This impacted their ability to complete construction and submit the energy performance results of their completed homes for an incentive. As a goodwill gesture, Enbridge Gas offered an extension to 2019 builders who were in their final year of incentive eligibility. The extension provided was up to 60 days from their expiry date, or November 21, 2022, whichever was sooner.

In 2022, Enbridge Gas continued to work with multiple delivery agents to provide more capacity and flexibility in offering IDP workshops to builders across the delivery area.

**Anticipated Offering Changes for 2023:**

For 2023, the Residential Savings by Design offering that was previously delivered will no longer be available in the marketplace. In its place will be two new initiatives:

1. Net Zero Energy Ready (NZER) will focus on engaging forward-thinking builders interested in learning and taking on the challenge of designing and building a NZER discovery home. The NZER discovery home path will offer one-to-one customized advice for participants as well as training for their tradespeople, sales, and marketing advice for their sales team to understand how to sell a NZER home, and financial incentives of $15,000.
2. Energy Star for New Homes (ESNH) will focus on helping builders design and build more homes to ENERGY STAR for New Homes Standard Version 17 or equivalent (at least 20% better than OBC) in municipalities that have demonstrated low levels of penetration to these efficiency standards or have Green Development Standards that require Energy Star or equivalent as the minimum building standard. Builders can participate in regional workshops that provide technical and sales guidance on building to the ESNH standard. Participants within eligible municipalities that choose to participate in the ESNH path will be eligible for an incentive of up to $1,650 per home for up to 50 homes.

Builders will not be required to include natural gas in the design of their homes.

### 5.3.2 Savings by Design Commercial Offering

The Savings by Design Commercial Offering encourages commercial developers and builders to design and build new developments to a level above the current OBC. The offering provides participants an integrated design process (“IDP”) and financial incentives. Through detailed analysis and modelling of various building elements, the goal is for participants to build at least 15% above the 2017 OBC Part 3 requirements. Offering details are provided in Appendix C.

**Table 5.12 2022 Savings by Design Commercial Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| New Developments | 12 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas changed the energy performance target to 20% above OBC. If participants enter the offering with a baseline above 20% greater than OBC, and for regions that have a Green Development Standard in place, Enbridge Gas has implemented a stretch target to further drive and influence the market. For example, the City of Toronto has implemented updates to their Green Development Standards. As a result, Enbridge Gas has implemented further stretch targets to participants who came into the offering in Toronto or whose baseline was greater than 20%.

**Lessons Learned:**

While Enbridge Gas continues to see success with online IDP workshops that were implemented due to the COVID-19 pandemic, in-person events have been reintroduced. Webinars continue to allow Enbridge Gas to have greater geographical outreach and focus on different market segments.

**Anticipated Offering Changes for 2023:**

In keeping a close relationship with municipalities, Enbridge Gas will continue to monitor regions that have implemented a Green Development Standard or have made changes to their current one and will make changes where necessary.

It is anticipated for 2023 that stretch targets will be implemented for participants within the City of Ottawa, as a result of their Green Development Standard, known as the High Performance Development Standard.

### 5.3.3 School Energy Competition Offering

The School Energy Competition Offering educates and empowers students to take action on energy use within their schools, homes and communities. Marketed as the Energy School Challenge (the “Challenge”), the offering engages schools in a friendly competition and has five main elements: education, behavioural change, implementation of activities, monitoring, and performance. Through the competition, each school is awarded points and is scored on the completion of activities. The three elementary and high schools that have scored the most points are awarded a financial prize. See Appendix C for offering details.

**Table 5.13 2022 School Energy Competition Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Schools | 0 |

**Offering Changes in 2022:**

Due to circumstances surrounding the ongoing COVID-19 pandemic, the School Energy Competition Offering was not operational in 2022, resulting in no uptake.

**Lessons Learned:**

This offering was not operational in 2022, see “Offering changes in 2022” above for further details.

**Anticipated Offering Changes for 2023:**

This offering is discontinued in 2023.

### 5.3.4 Run it Right Offering

The Run it Right Offering is designed to motivate commercial customers to optimize the operation of their buildings through low-cost/no-cost operational measures. Through analysis of the building’s energy performance and on-site audit, building operators and managers are empowered to make strategic data-driven decisions regarding energy use in their facility.

Technical support is provided to participants in identifying opportunities to use existing heating equipment and systems more efficiently. Customers implement the recommended actions, and a 12-month monitoring period commences. Offering details including eligibility and financial incentives available to participants are provided in Appendix C.

**Table 5.14 2022 Run it Right Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Participants | 0 |
| Large Net Cumulative Gas Savings ($m^3$) (RA) | 166,893 |
| Small Net Cumulative Gas Savings ($m^3$) (RA) | 0 |

**Offering Changes in 2022:**

With the anticipation of the new 2023 DSM Framework and 2023-2025 DSM Plan and given that Run it Right is a multi-year offering, Enbridge Gas began phasing out this offering in 2021 and no offering changes were introduced. Enbridge Gas continued to work with customers who had already enrolled to support the customer in completing the remaining offer elements.

**Lessons Learned:**

Metering requirements impacted Run it Right participation in 2022. While some of the remaining participants were able to complete both the investigation and implementation of measures and obtain an incentive, Enbridge Gas faced several challenges with regards to the metering setup, including internal resource limitations and supply chain issues for the metering equipment. As a result, Enbridge Gas was unable to meet the daily interval metering offering requirements to qualify these participants under the Market Transformation program, therefore no participants were claimed in 2022.

These key learnings from the Run it Right offering have been integrated into the development of the new Whole Building Pay for Performance offering beginning in 2023, which includes a holistic approach to energy management that encompasses operational, behavioural, and capital measures and aims to bridge the gap between enabling activities and follow through on implementation.

Specifically, learnings from the metering requirement challenges experienced in 2022 have been incorporated into the Whole Building Pay for Performance offering timelines and metering criteria. The inclusion of a Delivery Agent who will work closely with the participant to assist them throughout the 3-year term of the offer will ensure greater achievement of results, awareness of energy usage and offering timelines.

**Anticipated Offering Changes for 2023:**

This offering will no longer exist in 2023. Operational improvement measures will be captured under the Whole Building Pay for Performance offering.

### 5.3.5 Comprehensive Energy Management Offering

Through the Comprehensive Energy Management (“CEM”) Offering, Enbridge Gas influences industrial and large commercial customers to adopt and nurture a culture of conservation and continuous energy improvement. Enbridge Gas works with participants in the offer by examining their unique energy usage, creating an energy model, and guiding customers to undertake recommended actions suitable to their operation.

Incentives are structured to support initial start-up costs and energy plan development, and for energy efficiency improvements. Appendix C outlines the offering details.

**Table 5.15 2022 Comprehensive Energy Management Offering Results (EGD Rate Zone)**

| METRIC | ACHIEVEMENT |
|---|---|
| Participants | 1 |

**Offering Changes in 2022:**

There were no changes to the offering in 2022.

**Lessons Learned:**

Enbridge Gas has found that significant effort is required to strengthen the educational element of the offering among potential participants, which is critical to the success of the offering. To better promote the offering and enhance Enbridge Gas's technical expertise in energy management, Enbridge Gas continued to engage customers through various webinars and speaking engagements.

**Anticipated Offering Changes for 2023:**

The offering has concluded and is not part of the 2023 portfolio.

# 6. Programs and Offerings (Union Rate Zones)

Enbridge Gas's DSM portfolio for the Union rate zones consists of the following programs:

- Residential Program (Section 6.1)
- Commercial/Industrial Program (Section 6.2)
- Low-Income Program (Section 6.3)
- Large Volume Program (Section 6.4)
- Market Transformation Program (Section 6.5)
- Performance-Based Program (Section 6.6)

## 6.1 RESIDENTIAL PROGRAM

Enbridge Gas's Residential Program for the Union rate zones consists of the following offerings:

- Home Efficiency Rebate Offering (Section 6.1.1)
- Residential Adaptive Thermostat Offering (Section 6.1.2)

### 6.1.1 Home Efficiency Rebate Offering

Through the Home Efficiency Rebate ("HER") offering, residential customers gain a better understanding of their home's energy usage, and insights into energy improvement opportunities identified through the completion of a home energy audit. By participating in HER, homeowners can increase the energy efficiency of their home, decrease their energy consumption and improve their health through better indoor air quality.

Through the offering, participants work with an approved Service Organization ("SO") to complete a preliminary energy assessment to determine the home's baseline energy use and profile. A Registered Energy Advisor ("REA") models the home using Natural Resources Canada ("NRCan") energy modelling software ("HOT2000") to produce an energy efficiency report for the homeowner that outlines all energy saving opportunities, along with the home's EnerGuide rating and energy saving tips and information. With this information, the homeowner can make informed decisions regarding potential energy efficient improvements. After upgrades to the home are complete, participants complete a post-energy assessment with the REA to quantify the energy savings achieved by the retrofits, as determined by HOT2000. Rebates are available for completing the assessments and eligible measures recommended in the energy efficiency report (incentive structure and measure list can be found in Appendix D).

The target customers for this offering are residential customers within Union rate zones, including detached, semi-detached, townhouses, row townhouses, and mobile homes with a permanent foundation. To be eligible for the offering, participants must have a natural gas furnace or a boiler as a primary heating system. Additionally, participants must complete both the pre-energy and post-energy assessments using an Enbridge Gas approved SO and install at least two qualifying measures, or three measures if a furnace is also being upgraded.

The aggregate annual gas savings across all participants in the HER offering must be, on average, at least a 15% reduction in annual natural gas use, when comparing the results of the pre-energy assessment to the results of the post-energy assessment as determined by HOT2000.

**Table 6.0 2022 Home Efficiency Rebate Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 91,175,972 |
| Participants (homes) | 6,568 |

**Offering Changes in 2022:**

In May 2021, the Federal Government introduced a home retrofit offer, the Canada Greener Homes Grant ("CGHG"), offering homeowners rebates up to $5,000 for eligible upgrades. The CGHG was still in market in 2022 and continued to offer customers a second similar option in terms of whole home retrofit incentives. As a result, customers had to choose whether to participate in HER or CGHG for each upgrade. In response, Enbridge Gas launched a limited time incentive, both to drive additional customers into the HER offering and to encourage uptake of insulation measures.

- SPIFF (Sales Program Incentive Funds) details
  - Similar to 2021, in July 2022, Enbridge Gas launched a SPIFF initiative targeting Union rate zone contractors and REAs. A SPIFF incentive of $100 per file was offered to contractors and REAs for referrals bringing participants to the HER offering.
- Limited time Offer ("LTO") details:
  - The LTO was developed to encourage Union rate zone customers to increase their insulation measures (attic and air sealing). The maximum amount of incentive available was $1,750 ($1,150 incentive and $600 for audit). The LTO offered in 2022 originally aligned with the Enbridge rate zone, but was enhanced to offer a maximum incentive of $1,750 in order to increase participation within the Union rate zone. This LTO was successful in encouraging customers to complete their E-audits by November 30th, 2022.
- Big Bonus Promo (BBP)
  - To support increased participation in the Union rate zone, Enbridge Gas launched a new Big Bonus Promo starting October 1st, 2022. The BBP offered homeowners an additional $500 if they completed their E-audit by November 30th, 2022 and submitted to Enbridge Gas by Dec 6th, 2022.

Throughout 2022, Enbridge Gas worked with National Resources Canada to develop a single coordinated offering to be delivered by Enbridge Gas, which will be launched in 2023. The new offering, marketed as HER+, will simplify the incentive landscape for Ontarians and its contractors, energy auditors, and service organizations. Details are provided in Anticipated Offering Changes for 2023, below.

**Table 6.1 Frequency of Individual Measure Uptake (Union Rate Zones)**

| Individual Measure Uptake | 2021 | 2022 | Change |
|---|---|---|---|
| | % Frequency | % Frequency | |
| Natural Gas Furnace | 28% | 24% | ↓ |
| Natural Gas Boiler | 2% | 2% | No change |
| Attic Insulation | 79% | 83% | ↑ |
| Basement Insulation | 29% | 19% | ↓ |
| Wall Insulation | 15% | 9% | ↓ |
| Water Heating | 20% | 21% | ↑ |
| Windows/Doors | 36% | 23% | ↓ |

Enbridge Gas has continued to evolve the HER offering from focusing on space heating towards targeting insulation measures. As shown in Table 6.1 above, the percentage of participants installing a furnace or boiler through the offering dropped from 30% in 2021 to 26% in 2022. These changes are a result of Enbridge Gas altering the offering over the past three years. An example of such alterations is the reduction of furnace incentives down to the current $250 while attic insulation incentives have increased. Incentive levels were maintained throughout 2022.

**Lessons Learned:**

Enbridge Gas saw success with the Big Bonus Promo, though the SPIFF was not as popular due to the logistics and tracking required.

In 2022, Enbridge Gas continued its collaboration with Humber College and local municipalities in offering the Home Energy Retrofit Orientation (HERO). HERO seeks to bridge energy efficiency literacy gaps to increase homeowner awareness, interest, and accelerate deeper energy conservation retrofits. The two-hour HERO sessions are delivered by an experienced Humber Sustainability Professor and NRCan Registered Energy Advisor. The feedback received from attendees and municipalities continued to be positive and customers appreciated learning about building envelopes and opportunities for energy savings in their homes. In 2022, HERO tried a different tactic and offered nine online sessions with over 300 people registered. There is interest from municipalities to continue offering HERO in 2023 to support customer education and drive local GHG reductions.

In 2022, there was a plan to develop webinars focused on air sealing, specifically how to identify leaky areas in a home, options for homeowners to address these issues, and corresponding savings. However, these webinars were put on hold as the implementation and rollout of the HER+ offering required focus. Enbridge Gas is expecting to leverage this concept in 2023 and to work with Humber on the creation of this initiative. Such an initiative would be promoted by municipalities and will help to increase Enbridge Gas's efforts to educate homeowners to learn more about their building envelope. This is aligned with the OEB's interest in increasing customer awareness in energy efficiency in their homes, specifically as it relates to insulation measures.

**Anticipated Offering Changes for 2023:**

2023 will be a year of significant change for whole home retrofit offerings in Ontario. Commencing January 1, 2023, the former HER offering delivered by Enbridge Gas and the CGHG program offered by Natural Resources Canada will be combining into HER+. This new amalgamated and coordinated offering will be available to all Ontario residences and will lead to enhanced participation, deeper savings, and increased simplicity. While working with NRCan, Enbridge Gas leveraged the lessons learned through years of delivering HER to implement an offering that will meet the needs of the combined stakeholders.

Enbridge Gas will monitor the incentive structure to ensure the Company continues to meet the offering's objectives.

In order to align the two offerings, Enbridge Gas has discontinued the basement bonus rebate and the multiple measure bonus. In its Decision regarding the 2023-2025 DSM Plan, the OEB directed Enbridge Gas to adhere to incentive levels outlined in Schedule B.[17] Changes to the incentive structure include the discontinuation of:

- Furnace/ Boiler & Water Heater (Tanked and Instantaneous)

Further changes include the addition of the following measures:

- Heat pumps
    - Domestic hot water heat pump
    - Geothermal ground source heat pump
    - Air source Heat Pump
- Additional Insulation
    - Basement Header
    - Basement Slab
    - Exposed Floor Insulation
- Solar Photovoltaic panels
- Resiliency measures
    - Batteries connected to Photovoltaic systems to provide standby power for home
    - Roofing membrane: self-adhering roofing underlayment applied to entire roof
    - Foundation waterproofing
    - Moisture proofing of 100% of crawlspace floor, walls and headers
- Programmable Thermostats
- Adaptive Thermostats

Resiliency measures and solar photovoltaic panels will be paid through NRCan's budget and are only offered to homeowners who own and reside in their primary residence.

In partnership with Natural Resources Canada, Enbridge Gas customers will be able to stack the $75 Instant Rebate from the Smart Home offering with an additional $50 rebate if they participate in the HER+ offering and complete a pre- and post-retrofit EnerGuide assessment. See section 6.1.2 for details about the upcoming Smart Home Offering.

[17] *Decision and Order, Application for Multi-Year Demand Side Management Plan (2022 to 2027), EB-2021-0002, November 15, 2022, Schedule B.*

### 6.1.2 Residential Adaptive Thermostat Offering

Adaptive thermostats, also known as smart thermostats, are one of the easiest ways for residential customers to save on energy costs. Adaptive thermostats use sensors and Wi-Fi technology to give homeowners greater flexibility in controlling heating and cooling needs while at home or away, which supports a reduced demand on energy consumption. The offering provides customers a rebate for the purchase of a qualifying adaptive thermostat. Incentive details are provided in Appendix D.

To be eligible for the offering, a customer must meet the following requirements:

- Be a residential customer in the Union rate zones.
- Reside in a single-family home (only detached, semi-detached and row townhouse homes are eligible).
- Their adaptive thermostat controls their natural gas furnace or boiler (i.e., propane, oil and electrically heated homes are not eligible).
- Has not received an adaptive thermostat discount, rebate, or device from Enbridge Gas at this address.

**Table 6.2 2022 Residential Adaptive Thermostat Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 29,778,714 |

**Offering Changes in 2022:**

The following changes were made to the Adaptive Thermostat offering in 2022:

- In January 2022, Enbridge Gas launched a revamped contractor channel integrated into the current online instant rebate portal, providing an easier customer journey as well as a significant reduction in data entry errors for contractors.
- Two new devices were added: ecobee Smart Thermostat Enhanced and ecobee Smart Thermostat Premium.

Adaptive thermostat uptake increased by 28% in 2022 compared to 2021. This was supported through the reopening of in-store shopping after closures related to the COVID-19 pandemic, successful marketing efforts and an increase in redemption rates of issued promotion codes

**Lessons Learned:**

In 2022, Enbridge Gas made internal processing changes to account for returns, allowing for a more streamlined tracking and reporting process.

While slightly more participants went through the contractor stream than in 2021, the uptake overall is very low with 0.1% of all devices coming from contractors. While three contractors were participating in the offering, only one produced results and those results were significantly below forecast. It is apparent there are barriers in the contractor channel that Enbridge Gas is working to identify.

The Moderate-Income offering in partnership with the IESO Energy Affordability program saw a limited number of Energy Saving Kits issued in 2022, resulting in minimal uptake. Narrow income thresholds were identified as a barrier, limiting uptake in the offering. Additionally, Enbridge Gas added to the FAQs on the website pertaining to the Moderate-Income discount coupon so those with an Energy Saving Kit would know how to use it.

**Anticipated Offering Changes for 2023:**

In 2023, Enbridge Gas will consider the following changes to the offering:

- In its Decision regarding the 2023-2025 DSM Plan,[18] the OEB approved the Smart Home offering, which is a continuation of the Smart Thermostat offering. It was renamed to allow for the expansion of technologies which provide automated controls to reduce energy consumption
- As discussed in the HER section above, the new HER+ offering will include programmable and adaptive thermostats, and participants can stack the Smart Home instant rebate with the HER+ rebate. The savings from those thermostats will be associated with the HER+ offering. Moderate-Income participants will be able to stack their $125 Instant Rebate with an additional $50.
- Enbridge Gas will continue to offer the Moderate-Income rebate offer and the new partnership with the IESO, who are planning to increase the income thresholds for qualifying customers. This may lead to increased participation in 2023.
- Enbridge Gas will continue to monitor and explore ways to improve the customer's journey through the self-service instant discount portal based on website clicks, feedback from retailers, and participant surveys.
- Enbridge Gas will explore expanding the number of retailers and contractors that are participating in the offering by engaging the delivery agent, Summerhill, to facilitate meetings with non-participating retail channels and contractors. Additionally, Enbridge Gas will investigate barriers to participation for retailers and contractors that have been previously engaged to find opportunities to remove those barriers. In summary, Enbridge Gas is looking to understand why retailers and contractors have been unable or unwilling to participate in the offering, and what can be done to change that.

## 6.2 COMMERCIAL/INDUSTRIAL PROGRAM

Enbridge Gas's Commercial/Industrial Program for the Union rate zones consists of the following offerings:

- Commercial/Industrial Prescriptive Offering (Section 6.2.1)
- Commercial/Industrial Direct Install Offering (Section 6.2.2)
- Commercial/Industrial Custom Offering (Section 6.2.3)

[18] *Decision and Order, Application for Multi-Year Demand Side Management Plan (2022 to 2027), EB-2021-0002, November 15, 2022, Section 4.2.1, p. 22-23.*

### 6.2.1 Commercial/Industrial Prescriptive Offering

Through the Commercial/Industrial Prescriptive ("C/I Prescriptive") Offering, fixed financial incentives are available for the installation of eligible high-efficiency technologies. Incentives are provided to customers, service providers, and/or distributors/dealers, depending on the technology.

Within the Commercial/Industrial Prescriptive Offering, Enbridge Gas delivers a Midstream Prescriptive Commercial initiative branded as the "Distributor Discount Program." This initiative targets Foodservice and HVAC distributors or equipment dealers who sell select high-efficiency equipment, to influence the purchase of the efficient option at the point of sale.

Please see Appendix D for the full list of eligible technologies and their incentives. Energy savings are based on the OEB's Technical Resource Manual (TRM). See Section 2.6 for more details regarding the TRM.

**Table 6.3 2022 Commercial/Industrial Prescriptive Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 22,979,889 |

**Offering Changes in 2022:**

Some of the offering changes in 2022 include:

- The addition of three new measures within the Midstream Foodservice initiative: Energy Star Griddles, High Efficiency Conveyor Ovens, and Broilers.
- Midstream incentives were increased on Energy Star Fryers and Condensing Tankless Water Heaters.
- Enbridge Gas implemented a mandatory 40% incentive passthrough to end-user participants in the Midstream Foodservice initiative.

**Lessons Learned:**

The recovery from the COVID-19 pandemic continued to impact the commercial and industrial sector in 2022. Impacts included high turnover in staffing and supply chain challenges that resulted in product shortages or delays in product shipping. Additionally, the low population density within Union rate zones and the increase in fuel pricing added more economic barriers on the existing COVID-19 pandemic recovery processes and supply chain issues.

Enbridge Gas continued to incorporate a digital approach using virtual meetings for one-on-one contact through Enbridge Gas ESAs or contracted Delivery Agents. Enbridge Gas also continues to leverage the utility's longstanding partnerships with industry associations to launch specific targeted communication and digital campaigns.

In 2022, Enbridge Gas completed a process evaluation of its Midstream Prescriptive Commercial initiative, authored by Econoler (see Appendix F). The conclusions and recommendations are presented in Section 7.2 Process Evaluation.

Within the Midstream Foodservice initiative, impacts from the COVID-19 pandemic were experienced in both the supply chain and end-user businesses. Participants experienced product delays from manufacturers, and foodservice businesses were seeing unprecedented

staffing shortages and rising food costs. To keep the Midstream initiative top of mind with participants, three new measures were added and incentives were increased on Energy Star Fryers. The higher incentive was implemented to encourage participants to increase ordering, mitigating supply delays. The new measures and higher incentive were also communicated to manufacturers to influence production and shipping of eligible product, and to participating Foodservice retailers. To help increase participant sales, Enbridge Gas increased promotional materials highlighting the mandatory 40% incentive passthrough to the end-user implemented in 2022.

It is evident that recovery from the COVID-19 pandemic is going to take time and there will be lasting impacts on the supply chain as a result. To better understand the impacts on the supply chain, a market characterization study has been recommended as an outcome of the 2022 Midstream Process Evaluation.

For the Midstream HVAC initiative, Condensing Unit Heaters and Condensing Tankless Water Heaters continued to be offered in 2022. Supply chain delays and higher equipment costs were also experienced in the HVAC offer. In response, an incentive increase was applied to Condensing Tankless Water Heaters to help overcome supply chain challenges and higher costs. With fewer measures offered to participating HVAC distributors, Enbridge Gas's Delivery Agent was diligent in ensuring regular contact at all levels of the organization and at different locations (from showrooms to branches) to keep the offer top of mind and part of their day-to-day operations. To help increase participant sales, Enbridge Gas increased promotion to HVAC contractors. The Midstream HVAC initiative continued to have 80% of HVAC distributors (over 230 locations across Ontario) registered and participating in the offer. However, despite efforts to increase engagement, uptake in 2022 was lower than previous years.

**Anticipated Offering Changes for 2023:**

Enbridge Gas will continue to leverage its business partners for outreach to more customers that have not previously participated in the offering. This is predominantly accomplished through the implementation of the business partners webinars and the multi-unit year-end bonus offer. The business partner webinars provide valuable information and relevant training to enable business partners to effectively conduct outreach activities. The multi-unit year-end bonus is an incentive for business partners based on the total number of eligible equipment units installed within the calendar year, thereby encouraging business partners to promote energy-efficient product sales with existing and new customers.

Additionally, Enbridge Gas acknowledges that the cost of goods is increasing and closely monitors the incentive amounts to ensure their relevance to influence energy efficiency upgrade decisions. For 2023, Prescriptive incentive levels are set so that they cover approximately 40% of the incremental cost based on the Technical Resource Manual (TRM). Enbridge Gas plans to launch LTOs for specific measures to overcome customers' financial barriers for those measures. Moreover, Enbridge Gas will continue to support customers and industry associations in planning future energy saving projects through in-person and virtual engagements.

With respect to the Midstream initiative, to better understand the target market and how market actors are reacting to the impacts of the COVID-19 pandemic, Enbridge Gas will focus research efforts for a renewed market characterization study in 2023. This study will help to define future strategies and opportunities across the supply chain. Additionally, in 2023 Enbridge Gas will investigate additional measures for both Foodservice and HVAC.

The Midstream Foodservice initiative will no longer jointly deliver IESO Refrigeration, Freezer, and Ice Maker offers with Enbridge Gas. In 2022, the IESO communicated its intent to exit the Midstream initiative by December 31, 2022. The removal of the IESO offers is not expected to have a significant impact on the Midstream initiative and participants, however Enbridge Gas will not know the full impact until 2023.

### 6.2.2 Commercial/Industrial Direct Install Offering

The Commercial/Industrial Direct Install Offering provides a turnkey solution for customers who are less likely to participate in traditional offerings by providing the installation of energy efficient technologies. The offering also provides increased incentive levels for select technologies. Offering details are provided in Appendix D.

**Table 6.4 2022 Commercial/Industrial Direct Install Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 19,359,319 |

**Offering Changes in 2022:**

Enbridge Gas continued to offer a province-wide approach for the Shipping Door equipment installation stream that consists of Air Curtains and Dock Door Seals for new and replacement projects in existing buildings. Increased incentives put in place in 2021 were continued into 2022; these higher incentives covered 85% to 90% of total cost to install. Enbridge Gas branded communications were increased to overcome the barrier of legitimacy for customers concerned about a “too good to be true” offer. The Shipping Door equipment installation stream continued to provide businesses a choice of either in-person visits or virtual assessments through Enbridge Gas Delivery Agents for customers to find out more information.

The Demand Control Kitchen Ventilation (DCKV) installation stream continued to be delivered through a collaboration with the IESO Save on Energy (IESO SOE) Retrofit program. This collaboration allows for joint delivery through one touch point, simplifying the application process for the customer. The temporary bonuses that were offered in 2021 were permanently rolled into the 2022 offer. This increased incentive covers up to 87% of the cost to install the equipment. The high incentive helped address the ongoing economic impacts on the foodservice sector.

**Lessons Learned:**

For both Direct Install streams, DCKV and Shipping Doors, small business customers continued to be impacted by the current economic challenges stemming from the COVID-19 pandemic and affordability of efficient equipment remained low. As a result, Enbridge Gas Delivery Agents experienced low response rates to offer communications. Delivery Agents worked with Enbridge Gas to enhance sales strategies to include more in-person outreach.

Customer concerns regarding legitimacy continued to be a barrier to participation. To improve this reluctance among customers, Enbridge Gas implemented more branded communications directing customers to Enbridge Gas Inc. as opposed to a Delivery Agent. An Enbridge Gas automatic reply was issued to all customer inquiries to provide instant reinforcement of legitimacy and confirmation of Enbridge Gas Delivery Agents.

A notable challenge in 2022 was staffing constraints. Many organizations, including Enbridge Gas Delivery Agents, experienced staff turnover and shortages. This resulted in additional time and effort needed to identify the decision maker or reintroduce the Direct Install offer to a new contact. From an Enbridge Gas Delivery Agent perspective, this resulted in challenges servicing a broad geographic region. Fuel costs also compounded this challenge for Delivery Agents. To offset this, Enbridge Gas worked with Delivery Agents to

focus efforts on specific regions. This impact was most notable in the Union rate zones where lower than usual traction was experienced.

Further, in 2022, equipment and installation costs increased. Supply chain increases resulted in higher pricing. Due to the barriers faced by the target market for this Direct Install offer, Enbridge Gas continued to offer small businesses incentives of up to 90%.

**Anticipated Offering Changes for 2023:**

In 2023, both Direct Install streams will be continued at the same or higher incentive level to reach and engage small businesses in energy conservation. Enbridge Gas will explore opportunities to continue joint delivery of the Direct Install offer with the IESO offers, where appropriate.

### 6.2.3 Commercial/Industrial Custom Offering

The Commercial/Industrial Custom ("C/I Custom") Offering addresses energy savings opportunities related to unique building specifications, design concepts, processes and/or new technologies that are outside the scope of prescriptive measures. The offering provides technical assistance and financial incentives to encourage customers to implement energy efficient measures or initiatives. Enbridge Gas provides consultative services to customers and third-party service providers aimed at assessing facility energy consumption and making recommendations for gas-saving measures. See Appendix D for the offering details.

The C/I Custom Offering targets commercial, agricultural, and industrial customers, with the exception of large volume customers (see Section 6.4.1, the Large Volume Direct Access Offering) and low-income qualified multi-family buildings (see Section 6.3.4, the Affordable Multi-Family Housing Offering).

**Table 6.5 2022 Commercial/Industrial Custom Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 266,946,625 |

**Offering Changes in 2022:**

*Commercial Sector*

To drive early and increased project submissions while encouraging customers to plan ahead of the heating season, Enbridge Gas ran Boiler LTOs again in 2022. These LTOs provided a 50% higher incentive for high-efficiency boiler projects and a 100% higher incentive for Condensing Boiler projects for EGD rate zone commercial customers and Union rate zones commercial general service customers. To drive more results, the Boiler LTOs were extended in 2022 to allow the installations by November 30 and commissioning by

December 31 for all eligible boilers. School boards were granted extensions to LTO deadlines due to the timing of their capital planning cycles.

*Industrial Sector*

In 2022 Enbridge Gas introduced several adjustments to the industrial custom offering, its marketing, and its ways of operating:

- Increased the maximum incentive amount for greenhouse new build project to $200,000 to reflect the deeper savings achievable for projects that use multiple energy efficiency measures in their construction.
- The custom project application process was harmonized franchise-wide, and Enbridge Gas implemented a free ridership mitigation strategy that included Energy Solutions Advisor ("ESA") training and increased attention towards consistent customer declarations and free-ridership risk for each project.
- Enbridge Gas began marketing to smaller agricultural customers.
- ESAs held well-attended in-person technical seminars and customer events. These were the first in-person events since they were paused during the COVID-19 pandemic.

**Lessons Learned:**

Commercial and industrial customers and service providers were all susceptible to labour shortages, a common challenge appearing in all markets since the COVID-19 pandemic began. This resulted in longer communication cycles to drive energy efficiency projects, due to personnel changes and subsequent re-orientation. The Union rate zones tend to have lower population densities and encountered more difficulty to backfill vacancies, increasing the challenge for offering delivery in these rate zones.

In 2022, commercial offering implementation teams adjusted the territory and sector coverage of the ESAs as an effort to optimize the offering delivery strategy across EGD and Union rate zones for the integration of business practices. The territory and sector coverage optimization required more time for customer engagement in order re-establish the relationships between customers who were assigned different ESAs than before.

Enbridge Gas continued to accommodate virtual discussions as a result of the remote working policy for some commercial and industrial customers. The reduced opportunity of site walkthroughs continued to be a hindrance in helping both commercial and industrial customers identify potential project opportunities.

Enbridge Gas held in-person customer events this year, which were both well-attended and well-reviewed. In 2023, Enbridge Gas plans to deliver more in-person technical seminars throughout Ontario.

Effective delivery of the industrial custom offering is dependent on customer awareness and engagement in the offering. This engagement is directly supported by a one-to-one relationship between the Enbridge Gas ESA and customer representatives. Many of these relationships fractured through the COVID-19 pandemic as personnel changes and labour shortages at both Enbridge Gas and customer sites have disrupted communication. In addressing this, Enbridge Gas will continue to focus on building strong relationships, and providing experience and knowledge in working with customers to influence their energy efficiency decisions. Enbridge Gas is dedicated to hiring and retaining skilled individuals who can provide this expertise to support our customers.

Enbridge Gas also plans to introduce supplementary marketing strategies to educate the market about the industrial custom offering.

**Anticipated Offering Changes for 2023:**

The approval of the 2023-2025 DSM Plan allows Enbridge Gas to launch a higher, harmonized incentive, $0.25/m$^3$ of natural gas saved for all commercial custom retrofit projects within the franchise area. This higher incentive is in consideration of the increased cost of goods since the COVID-19 pandemic induced supply chain challenges. Furthermore, Enbridge Gas will align its commercial sector energy assessment incentives with the industrial sector, adopting a tiered incentive structure based on a participant's prior year's annual gas consumption.

To assist commercial customers with balancing energy and operational costs, Enbridge Gas will continue to promote boiler projects through LTOs as these offers have historically been successful in promoting earlier adoption of high efficiency and condensing boilers. Additionally, Enbridge Gas will launch a new Multi-Residential LTO, which offers an increased incentive of $0.40/m$^3$ for any non-boiler projects implemented in the multi-residential sector. The intent of this LTO is to examine the extent of market interest in measures apart from boilers to inform future DSM programming when Amendment 15 mandates the replacement boiler efficiency in 2025.

Enbridge Gas is considering the following changes for the Custom Industrial offering for the 2023 program year:

- The Custom Industrial offering will launch a harmonized incentive structure for the industrial segment, and a separate harmonized incentive structure for the agricultural sector.
- Recognizing the long lead times for most industrial custom projects, most LTOs will be reduced. However, Enbridge Gas will introduce an LTO to encourage agriculture retrofit projects to be completed early in the year.
- Incentives for opportunity identification projects such as energy assessments and metering installations will also be harmonized franchise-wide.
- Enbridge Gas will continue to explore how to implement an EMIS incentive offer to industrial customers.

## 6.3 LOW-INCOME PROGRAM

Enbridge Gas's Low-Income Program for the Union rate zones consists of the following offerings:

- Home Winterproofing Offering (Section 6.3.1)
- Furnace End-of-Life Upgrade Offering (Section 6.3.2)
- Indigenous Offering (Section 6.3.3)
- Affordable Multi-Family Housing Offering (Section 6.3.4)

### 6.3.1 Home Winterproofing Offering

The Home Winterproofing Offering, marketed to customers as Home Winterproofing or the Home Winterproofing Program ("HWP"), is designed to reduce energy costs and improve indoor home comfort for low-income customers (homeowners and tenants who pay their natural gas bill). Participants receive a home energy assessment and direct installation of weatherization services, with no cost to the participant. As a health and safety value add-on, a carbon monoxide monitor is provided to participants where one is not already present in the home. At the time of the home energy assessment, the home is also prequalified for water conservation measures

(showerheads and aerators) and a smart thermostat. The offering is available for both privately owned single-family homes, and social and assisted housing. Offering details can be found in Appendix D.

**Table 6.6 2022 Home Winterproofing Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 28,654,910 |

**Offering Changes in 2022:**

In the beginning of 2022, the collaboration between Enbridge Gas and the IESO was launched. This collaboration allowed Delivery Agents (DAs) to offer both the HWP and the IESO's Energy Affordability Program (EAP) to eligible low-income participants. The intent of the collaboration is to streamline the customer's journey in hopes of reducing home visits and decreasing costs. To facilitate effective collaboration, HWP's income eligibility was revised to align with the IESO's EAP.

Enbridge Gas and the IESO started the year with three common Delivery Agents. The DAs were responsible for the following postal code areas:

- EnviroCentre – postal code K
- CLEAResult – postal codes L and N
- Ecofitt – postal codes M and P

Various new marketing tactics were added in 2022 and some previous tactics were expanded. New tactics included:

- Community Blitz campaigns provided increased marketing in targeted communities with high instances of low-income households and low participation. Tactics for these campaigns included multimedia advertising that ran on local radio, public access screens, newspapers, and transit shelters. Additionally, Enbridge Gas sponsored content articles in local print publications and conducted targeted Direct Mail (DMs) in the identified areas.
- LTO campaigns were initiated to encourage participants to complete the offering. This campaign was directed to eligible participants who chose not to proceed with the offering.
- Mail-in application campaigns were piloted in Q4 of 2022. In 2022 individuals could apply to HWP either online or through the phone, but it was noted that some individuals did not feel comfortable with online applications.
- A Q&A video was created, where a current Delivery Agent answered the top 15 questions customers have about the offering. The intent of this video was to reduce market confusion about HWP.
- Multilingual campaigns were launched on Facebook, Instagram, and Discovery. These social media campaigns were comprised of various written and translated marketing materials.
- Grassroots marketing such as community events like Ribfest and Fairs.
- There are a variety of residential housing offerings (HWP, EAP, HER and Canada Greener Homes Grant) that have created confusion for customers. To reduce confusion and drive participation within the HWP offering, Enbridge Gas increased marketing efforts specifically for HWP through a mix of traditional and digital tactics and initiatives. Within traditional initiatives, radio, community outreach (food banks), bill inserts, targeted direct mail, and E-blasts play a pivotal role in generating

awareness and interest in the offering. Digital campaigns include tactics such as social media, YouTube and Google Search and Display advertising as the key initiatives to help drive customers to the online application.

**Lessons Learned:**

The use of three common Delivery Agents resulted in various challenges, including customer hesitation towards a new Delivery Agent and longer wait times for customers due to Delivery Agent onboarding. To mitigate these challenges, marketing efforts were increased in the beginning of the year to introduce the public to the three new Delivery Agents. Further, to reduce wait times for customers, an additional three Delivery Agents were utilized to process applications and deliver the offering to support the transition.

Despite the marketing efforts and new initiatives put in place to increase leads and participation, results were drastically lower than in previous program years, particularly in K postal codes. Enbridge Gas is investigating to identify factors causing the decrease in leads and results.

Costs for insulation, products, and services increased dramatically in 2022, due to inflation and shortages of products since the onset of the COVID-19 pandemic. These increased costs could not be absorbed by Delivery Agents, as such, additional funds were requested from Enbridge Gas. Due to budget constraints, only a portion of these costs could be accommodated by Enbridge Gas.

**Anticipated Offering Changes for 2023:**

Enbridge Gas is considering the following changes for the 2023 program year:

- The income eligibility thresholds were updated to align with the IESO, effective January 1, 2023.
- Regarding the collaboration between Enbridge Gas and the IESO low-income programs, opportunities for co-branded education, awareness and marketing have been identified and will be further explored.
- An additional Delivery Agent, separate from the joint DAs with the IESO, will continue to be required to meet targets.
- The addition of Heat Reflector panels as a new measure for homes heated by water or steam radiators/convectors is expected to be offered.
- The previous overarching marketing method of marketing the three residential offerings at once (HER+, Smart Home and HWP) will end. This was found to cause confusion amongst customers as different audiences require different messaging about the offering most relevant to them.
- To further reduce market confusion for customers regarding choosing a residential housing offering, Enbridge Gas intends to enhance the customer’s journey on these offering webpages with an online questionnaire. This will direct customers to the offering best suited for their needs.
- Bill inserts and direct mail are planned to increase due to successful lead generation.
- 2023 will focus on those areas identified with lower leads and participation, and Enbridge Gas will continue to create grassroots approaches to increase awareness and leads.
- Due to their success, mail-in applications and multi-lingual marketing will continue into 2023.

### 6.3.2 Furnace End-of-Life Upgrade Offering

The Furnace End-of-Life Upgrade Offering provides an incentive to low-income customers to upgrade to a high-efficiency furnace upon failure of their existing furnace.

**Table 6.7 2022 Furnace End-of-Life Upgrade Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 0 |

**Offering Changes in 2022:**

This offering has experienced little to no uptake in recent years and has not been actively marketed since 2019, resulting in no uptake in 2022. While the Union rate zones' Low-Income Program remains above the OEB's low-income TRC-Plus threshold, this offering specifically is not cost-effective. As such, Enbridge Gas shifted its focus to other offerings within the Low-Income Program.

**Lessons Learned:**

Uptake in this offering has been low in recent years and was not actively marketed in 2022 resulting in no uptake. See "Offering Changes in 2022" above for more details.

**Anticipated Offering Changes for 2023:**

This offering is discontinued in 2023.

### 6.3.3 Indigenous Offering

The Indigenous Offering follows the Home Winterproofing Offering and is delivered directly to Indigenous communities within the Union rate zones. Participants receive a home energy assessment and direct installation of weatherization services by an Indigenous Delivery Agent with no cost to the participant. As a health and safety value add-on, carbon monoxide and smoke alarms are provided to participants if not already present in the home. At the time of the home energy assessment, the home is also prequalified for water conservation measures (showerheads and aerators) and a smart thermostat. Offering details are provided in Appendix D. As an economic development component, this offering provides local employment opportunities for members of participating communities.

**Table 6.8 2022 Indigenous Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 182,982 |

**Offering Changes in 2022:**

Enbridge Gas provided weatherization services to 15 homes in a community that was originally paused in 2021 due to the COVID-19 pandemic and local health restrictions.

At the end of 2022, Enbridge Gas approached another community that recently switched to natural gas heating about participating in the offering and is awaiting approval from the community to proceed.

**Lessons Learned:**

The number of communities targeted each year is dependent on the Band Council's endorsement to operate in their communities. Since there was only one reserve community remaining and traditionally minimal savings opportunities within the communities, Enbridge Gas has reached a point where the on-reserve residential market is saturated. Enbridge Gas began to approach on-reserve communities that recently switched to natural gas heating and will continue to review remaining DSM opportunities on-reserve.

In the 2022-2027 DSM Plan application, Enbridge Gas identified engaging with off-reserve Indigenous customers as a priority.

**Anticipated Offering Changes for 2023:**

The Indigenous Offering will not be delivered in 2023. However, all residential low-income customers, including Indigenous customers, can participate through the Low-Income Program.

Enbridge Gas will continue discussions with communities that recently switched to natural gas heating to obtain permission to offer HWP services.

At the end of 2022, Enbridge Gas began exploring programming for band-owned commercial buildings with the IESO to identify alignment opportunities.

Enbridge Gas plans to engage Indigenous stakeholders in 2023 to explore how best to structure an off-reserve Indigenous customer engagement strategy and other opportunities.

### 6.3.4 Affordable Multi-Family Housing Offering

The Affordable Multi-Family Housing Offering provides social and assisted housing and low-income market rate multi-family buildings with energy assessments, technical assistance, and incentives for various energy efficiency measures. Participants are eligible for both custom and prescriptive measure incentives, like the Commercial/Industrial Custom Offering and Commercial/Industrial Prescriptive Offering, however incentive levels are higher to reflect the needs of the low-income market. Offering details are provided in Appendix D.

**Table 6.9 2022 Affordable Multi-Family Housing Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Social and Assisted Multi-Family Net Cumulative Natural Gas Savings ($m^3$) | 552,935 |
| Market Rate Multi-Family Net Cumulative Natural Gas Savings ($m^3$) | 4,573,515 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas harmonized eligibility requirements for private market rate buildings between the legacy utility rate zones.

Eligibility requirements cover privately owned multi-residential buildings that can demonstrate one of the following criteria:

- Privately owned multi-residential building owner or property manager must confirm, based on rent roll review, that at least 30% of the units are rented at less than 80% of the median market rent, as determined by the Canadian Mortgage and Housing Corporation.
  Or
- The building has participated in a federal, provincial, or municipal affordable housing funding program in the last 5 years.

Enbridge Gas ran an LTO campaign on make-up air units to Affordable Multi-Family Housing customers who committed by June 30, 2022, and installed by October 31, 2022, to increase participation in the offering.

The launch of new eligibility requirements provided an opportunity to engage with Enbridge Gas's network to provide an update as well as increase the marketing presence.

The call marketing campaign continued to focus on attracting private market leads to support sales teams.

**Lessons Learned:**

Resourcing issues were the main cause of drastically low results, as leads generated by third-party outreach initiatives waned and remaining resources could only operate reactively.

Enbridge Gas monitored the new eligibility requirements to understand how it affected participation in 2022. Of the 102 participants that went through a rent roll review (in both EGD and Union rate zones), 22 participants were not eligible. Of those ineligible participants, 15 would have been designated affordable housing based on the previous eligibility criteria. In comparison to the previous eligibility criteria, the new criteria have provided more confidence in the designation of an affordable housing participant.

**Anticipated Offering Changes for 2023:**

The following changes are being considered for the 2023 program year:

- Harmonized incentive rates across franchise area including custom and prescriptive.
- The LTO that was for prescriptive make-up air units will be moved to all custom measures.
- Energy assessments will have stricter eligibility requirements that include a minimum annual consumption.
- Third-party sales support for specific areas will be explored to ensure the greatest level of outreach and opportunities to increase specific measures.
- The CMHC Rapid Housing Initiative has a short turnaround time that does not allow those participants to go through the Affordable Housing Savings by Design offering, therefore, a New Construction offering has been created and full launch is planned for 2023.

## 6.4 LARGE VOLUME PROGRAM

Enbridge Gas's Large Volume Program for the Union rate zones consists of the following offering:

- Large Volume Direct Access Offering (Section 6.4.1)

### 6.4.1 Large Volume Direct Access Offering

The Large Volume Direct Access Offering is exclusive to large volume contract customers within Rate T2 or Rate 100 in the Union rate zones. All customers in these rate classes are eligible to participate in the offering. Customers in these rate classes have significant natural gas consumption and include large volume industrial operations, power generators, chemical plants, and petroleum refineries.

The offering uses a self-directed funding model, whereby each customer has direct access to the incentive budget they pay in rates. Under this model, customers know exactly how much funding they have available each program year and can appropriately plan their expenditures to reduce energy usage in their facility. Working with an Enbridge Gas Technical Account Manager, customers submit an annual Energy Efficiency Plan ("EEP") outlining planned gas saving projects or studies driving future energy efficiency projects. If a customer elects not to participate, the funds are dispersed via an aggregated pool approach. The aggregated pool is then used to fund additional energy efficiency projects for all Rate T2 and Rate 100 customers, on a first-come first-serve basis. Offering details are provided in Appendix D.

**Table 6.10 2022 Large Volume Direct Access Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Net Cumulative Natural Gas Savings ($m^3$) | 97,042,448 |

**Offering Changes in 2022:**

There were no significant changes to the offering or delivery model in 2022. Approximately 70% of eligible customers participated in the offering.

In 2022, Enbridge Gas incented customers to repair steam leaks that otherwise would not be repaired by the customer in their normal course of maintenance activities.

Enbridge Gas continued to investigate the use of wireless steam trap monitoring systems (STMS). Monitoring systems have been installed at three customer sites. Preliminary results indicated a 30-day reduction in trap repair time compared to a manual steam trap survey.

In addition, Enbridge Gas continued with a pilot to investigate venturi steam traps at several sites. Preliminary reporting was provided in 2022, but incomplete data resulted in inconclusive findings of steam savings and qualitative benefits.

Enbridge Gas anticipates receiving more complete reporting of venturi steam trap performance and STMS benefits in 2023.

**Lessons Learned:**

Effective delivery of the Large Volume Direct Access offering is dependent on customer awareness and engagement in the offering. This engagement is directly supported by a one-to-one relationship between the Enbridge Gas ESA and customer decision makers. Many of those relationships have fractured through the COVID-19 pandemic as personnel changes and labour shortages at both Enbridge Gas and customer sites have disrupted communication. In addressing this, Enbridge Gas will continue to focus on building strong relationships, providing experience and knowledge in working with customers to influence their energy efficiency decisions. Enbridge Gas is dedicated to hiring and retaining skilled individuals who can provide this expertise to support our customers.

**Anticipated Offering Changes for 2023:**

The approval of the 2023-2025 DSM Plan has provided clarity on program budgets, targets, and which customers will remain in the Large Volume Program in 2023. With the decision to exclude gas fired power generators from the program, Direct Access budgets have been adjusted accordingly.

The Large Volume offering incentive rate will remain unchanged, but the structure will now permit project incentives up to $200,000. Aggregate pool funds will not exceed $50,000 per project.

The incentive structure for opportunity identification projects such as energy assessments and metering installations will be simplified.

## 6.5 MARKET TRANSFORMATION PROGRAM

Enbridge Gas's Market Transformation Program for the Union rate zones consists of the following offerings:

- Optimum Home Offering (Section 6.5.1)
- Commercial Savings by Design Offering (Section 6.5.2)

### 6.5.1 Optimum Home Offering

The Optimum Home (OH) Offering helps residential builders improve energy performance in new construction projects, by providing a variety of support activities from the early design phase through to construction. The offering is designed to transform builders, over a multi-year period, to build more homes that exceed the 2017 Ontario Building Code ("OBC") by at least 15%. Offering details are provided in Appendix D.

**Table 6.11 2022 Optimum Home Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Percentage of Homes Built (>15% above OBC 2017) by Participating Builder | 54.2% |

**Offering Changes in 2022:**

There were no changes to the Optimum Home offering in 2022. All builders who were participating in the Optimum Home offering and Optimum Home Lite pilot have completed their free building science consulting activities and are now incorporating the lessons learned from the offering into their new home designs.

Enbridge Gas continued to sponsor a series of advanced building science webinars aimed to more widely disseminate the learnings that were provided to participants of the Optimum Home offering.

All Optimum Home participants who were going to complete their Discovery Homes did so in 2020, resulting in no 2022 spend on building science consulting activities or Discovery Home incentives.

In addition, because the remaining participants in the Optimum Home Lite Pilot completed their Discovery Homes in 2020, the Optimum Home Lite Pilot was not run in 2022.

**Lessons Learned:**

No additional activities occurred for Optimum Home in 2022.

**Anticipated Offering Changes for 2023:**

The Optimum Home offering will not be delivered in 2023. However, Enbridge Gas will be delivering the Residential Savings by Design offering to residential new construction customers, which includes the following initiatives:

1. Net Zero Energy Ready (NZER) will focus on engaging forward-thinking builders interested in learning and taking on the challenge of designing and building a NZER discovery home. The NZER discovery home path will offer one-to-one customized advice for participants as well as training for their tradespeople, sales, and marketing advice for their sales team to understand how to sell a NZER home, and financial incentives of $15,000.
2. Energy Star for New Homes (ESNH) will focus on helping builders design and build more homes to ENERGY STAR for New Homes Standard Version 17 or equivalent (at least 20% better than OBC) in municipalities that have demonstrated low levels

of penetration to these efficiency standards or have Green Development Standards that require Energy Star or equivalent as the minimum building standard. Builders can participate in regional workshops that provide technical and sales guidance on building to the ESNH standard. Participants within eligible municipalities that choose to participate in the ESNH path will be eligible for an incentive of up to $1,650 per home for up to 50 homes.

Builders will not be required to include natural gas in the design of their homes.

### 6.5.2 Commercial Savings by Design Offering

The Commercial Savings by Design ("CSBD") Offering encourages commercial developers and builders to design and build new developments to a level above the current OBC. The offering provides participants an integrated design process ("IDP") and financial incentives. Through detailed analysis and modelling of various building elements, the goal is for participants to build at least 15% above the 2017 OBC Part 3 requirements. Offering details are provided in Appendix D.

**Table 6.12 2022 Commercial Savings by Design Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| New Developments Enrolled by Participating Builders | 11 |

**Offering Changes in 2022:**

In 2022, Enbridge Gas changed the energy performance target to 20% above OBC. If participants enter the offering with a baseline above 20% greater than OBC, and for regions that have a Green Development Standard in place, Enbridge Gas has implemented a stretch target to further drive and influence the market. For example, the City of Toronto has implemented updates to their Green Development Standards. As a result, Enbridge Gas has implemented further stretch targets to participants who came into the offering in Toronto or whose baseline was greater than 20%.

**Lessons Learned:**

While Enbridge Gas continues to see success with online IDP workshops that were implemented due to the COVID-19 pandemic, in-person events have been reintroduced. Webinars continue to allow Enbridge Gas to have greater geographical outreach and focus on different market segments.

**Anticipated Offering Changes for 2023:**

In keeping a close relationship with municipalities, Enbridge Gas will continue to monitor regions that have implemented a Green Development Standard or have made changes to their current one and will make changes where necessary.

It is anticipated for 2023 that stretch targets will be implemented for participants within the City of Ottawa, as a result of their Green Development Standard, known as the High Performance Development Standard.

## 6.6 PERFORMANCE-BASED PROGRAM

Enbridge Gas's Performance-Based Program for the Union rate zones consists of the following offerings:

- RunSmart Offering (Section 6.6.1)
- Strategic Energy Management Offering (Section 6.6.2)

### 6.6.1 RunSmart Offering

The RunSmart Offering is designed to motivate commercial customers to optimize the operation of their buildings through low-cost/no-cost operational measures. Through analysis of detailed energy data and on-site audit, building operators and managers are empowered to make strategic data-driven decisions regarding energy use in their facility.

Technical support is provided to participants in identifying opportunities to use existing heating equipment and systems more efficiently. Customers complete the recommended actions, then monitor and maintain these actions over a 12-month period. Offering details including eligibility and financial incentives available to participants are provided in Appendix D.

**Table 6.13 2022 RunSmart Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Participants | 0 |
| Savings (%) | 0% |

**Offering Changes in 2022:**

With the anticipation of the new 2023 DSM Framework and 2023-2025 DSM Plan and given that RunSmart is a multi-year offering, Enbridge Gas began phasing out this offering in 2021 and no offering changes were introduced. Enrollment of new participants was limited to those that have participated in the previous benchmarking pilots. However, no participant uptake was realized in 2022.

**Lessons Learned:**

Key learnings from the RunSmart offering, such as the need for continuous customer engagement to help spur measure implementation, have been integrated into the development of the new Whole Building Pay for Performance offering in the 2023-2025 DSM Plan. This offering includes a holistic approach to energy management that encompasses operational and capital measures and aims to bridge the gap between enabling activities and follow through on implementation. The inclusion of a Delivery Agent who will work closely with the participant to assist them throughout the 3-year term of the offer will ensure greater achievement of results, awareness of energy usage and offering timelines.

**Anticipated Offering Changes for 2023:**

This offering will no longer exist in 2023. Operational improvement measures will be captured under the Whole Building Pay for Performance offering.

### 6.6.2 Strategic Energy Management Offering

Through the Strategic Energy Management ("SEM") Offering, Enbridge Gas influences industrial customers to adopt and nurture a culture of conservation and continuous energy improvement. Enbridge Gas works with participants in the offer by examining their unique energy usage, creating an energy model, and guiding customers to undertake recommended actions suitable to their operation.

Incentives are structured to support initial start-up costs and energy plan development, and for measured energy efficiency improvements over a 5-year participation period. Appendix D outlines the offering details.

**Table 6.14 2022 Strategic Energy Management Offering Results (Union Rate Zones)**

| METRIC | ACHIEVEMENT |
|---|---|
| Savings (%) | 3.5% |

**Offering Changes in 2022:**

No offering changes were made in 2022. Consistent with the 2015-2020 DSM Plan, 2018 was the last year new participants were enrolled in the offering.

**Lessons Learned:**

One of the 3 customers that were eligible for incentives in 2022 achieved their natural gas savings target and received incentives.

Enbridge Gas continues to try different approaches to influence customers to implement the suggested improvements provided by the offering. Even with enhanced business cases to justify expenditures, customers face other barriers that prevent implementation, such as a focus on the customer's long-term viability or competing internal corporate priorities.

**Anticipated Offering Changes for 2023:**

Consistent with the 2015-2020 DSM Plan, 2018 was the last year new participants were enrolled in the offering. As such Enbridge Gas continued to work with the participants already enrolled in the offering. The offering has concluded and is not part of the 2023 program.

# 7. Evaluation

As per the DSM Guidelines, "There are two broad categories of evaluation activity: impact evaluation and process evaluation. Impact evaluation focuses on the specific impacts of the program – for example, savings and costs. Process evaluation focuses on the effectiveness of the program design – for example, the delivery channel."

As discussed in Section 2.3, impact evaluation is coordinated and executed by the OEB. Since program design and implementation are program administrator activities, process evaluation is coordinated and executed by Enbridge Gas.

## 7.1 IMPACT EVALUATION AND AUDIT

As discussed in Section 2.3, the OEB coordinates the impact evaluation and annual audit process, including selecting a third-party Evaluation Contractor ("EC"). The intention of the audit is for the EC to provide an opinion on whether the claimed DSM shareholder incentive amount, amount to be added to the Lost Revenue Adjustment Mechanism Variance Account, and Demand Side Management Variance Account have been correctly calculated using reasonable assumptions. The EAC, as described in Section 2.3, provides input and advice to the EC to support the achievement of the audit objectives.

Details on the impact evaluation activities and other audit activities for the 2022 program year will be outlined in the EC's 2022 audit report available on the OEB's Natural Gas Conservation Evaluation Advisory Committee webpage.[19]

## 7.2 PROCESS EVALUATION

Enbridge Gas regularly evaluates its programs and offerings to assess the effectiveness of its program design. Sometimes these assessments consist of many smaller, topic-focused, informal reviews conducted by Enbridge Gas's Program Design staff. The most common examples of these reviews include assessing incentive levels, customer communication tactics and implementation logistics and systems. Additionally, broad-based, formal process evaluations can be and are undertaken with support from external consultants, focusing on entire offerings or initiatives.

In 2022, Enbridge Gas completed a process evaluation of its Midstream Prescriptive Commercial offering (see Appendix F) authored by Econoler. The Midstream offering was first explored by Union Gas in 2018 in response to feedback from the Midterm Review during the 2015-2020 DSM Plan. The pilot project initially targeted the foodservice segment to gain experience in the Ontario marketplace and understand barriers to applying a midstream approach. Following utility integration, in Q3 of 2019, Enbridge Gas developed and launched a province-wide midstream offering targeting a selection of commercial foodservice and HVAC measures.

Econoler found that the initiative's administration and delivery approach is sound and effective. The delivery agent engaged to provide design support and to deliver the initiative was seen as highly qualified and experienced in delivering midstream initiatives, and in working in the Ontario commercial sector. Additionally, Econoler noted that the COVID-19 pandemic has had significant impacts on market conditions. The market assumption and influence pathway challenges were exacerbated by the arrival and timing of the COVID-19 pandemic during the second year of the initiative. Its effects are ongoing and likely to continue in varying degrees into the foreseeable future.

Econoler recommended a renewed market characterization study to better understand the target market and how market actors are reacting to market changes. Enbridge Gas is committed to better understanding markets within Ontario and will be focusing on research

[19] https://engagewithus.oeb.ca/natural-gas-conservation-evaluation-advisory-committee

in this area in 2023. Other recommendations from Econoler included improving documentation as a means to better monitor and track design initiatives and changes over time. Econoler recommended a review of the Qualified Product Lists (QPL) to add cost-effective products within the constraints of the 2015-2020 DSM Framework. Enbridge Gas had already begun this activity, prompted in part by the IESO's decision to exit the program by the end of 2022. Additionally, the report recommended that Enbridge Gas, working with the Program Delivery Service Provider (PDSP), undertake a wholistic review of the materials used to support participant sales and to develop an updated marketing and communications strategy and plan. Implementation of these recommendations is in process.

Enbridge Gas is committed to ongoing program improvement, and in 2022 three more process evaluations were launched; one for the Affordable Housing Multi-Residential offering, one for the Single-Family Low-Income offer (the Home Winterproofing offering), and one investigating utility influence in Industrial Custom projects. The final reports for these evaluations are expected in 2023.

# 8. Results and Spend (EGD Rate Zone)

## 8.1 SCORECARD RESULTS AND SHAREHOLDER INCENTIVE

Enbridge Gas is eligible to earn a shareholder incentive of up to $10.45M for the EGD rate zone, for DSM results measured against the EGD rate zone's Resource Acquisition, Low-Income, and Market Transformation & Energy Management scorecards. The DSM shareholder incentive is established by the OEB to "effectively motivate the gas utilities to both actively and efficiently pursue DSM savings and to recognize exemplary performance."[20] The maximum incentive available is allocated to each scorecard based on the allocation of budget to each scorecard. For more information on the DSM shareholder incentive, refer to Section 5.0 of the 2015-2020 DSM Framework and Section 5.0 of the DSM Guidelines.

In 2022, Enbridge Gas earned $5.24M in DSM incentive for the EGD rate zone, as outlined in Table 8.0 below.

**Table 8.0 2022 Maximum Shareholder Incentive & Achievement by Scorecard (EGD Rate Zone)**

| SCORECARD | MAXIMUM DSM INCENTIVE | DSM SHAREHOLDER INCENTIVE ACHIEVED |
|---|---|---|
| Resource Acquisition | $7,012,787 | $4,341,500 |
| Low-Income | $2,263,561 | $894,872 |
| Market Transformation & Energy Management | $1,173,652 | $0 |
| **Total** | **$10,450,000** | **$5,236,372** |

Detailed scorecard results for the EGD rate zone are provided in Table 8.1 to Table 8.3 below.

**Table 8.1 2022 Resource Acquisition Scorecard Results (EGD Rate Zone)**

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Large Volume Customers – Cumulative Natural Gas Savings ($m^3$) | 368,523,240 | 491,364,320 | 737,046,480 | 40% | 403,144,102 | 33% |
| Small Volume Customers – Cumulative Natural Gas Savings ($m^3$) | 183,761,746 | 245,015,662 | 367,523,493 | 40% | 310,193,626 | 51% |
| Deep Residential Savings Participants | 7,425 | 9,900 | 14,850 | 20% | 17,225 | 35% |
| | | | | ***Total Scorecard Target Achieved*** | | ***118%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$4,341,500*** |

[20] *Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 5.0, p. 20.*

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**Table 8.2 2022 Low-Income Scorecard Results (EGD Rate Zone)**

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Single Family (Part 9) – Cumulative Natural Gas Savings ($m^3$) | 19,987,782 | 26,650,377 | 39,975,565 | 45% | 34,647,742 | 59% |
| Multi-Residential (Part 3) – Cumulative Natural Gas Savings ($m^3$) | 68,520,482 | 91,360,231 | 137,040,963 | 45% | 71,812,509 | 35% |
| New Construction Participants | 9 | 13 | 19 | 10% | 7 | 6% |
| | | | | ***Total Scorecard Target Achieved*** | | ***100%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$894,872*** |

**Table 8.3 2022 Market Transformation & Energy Management Scorecard Results (EGD Rate Zone)**

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Residential Savings by Design – Builders | 18 | 24 | 35 | 10% | 24 | 10% |
| Residential Savings by Design – Homes Built | 1,847 | 2,462 | 3,694 | 15% | 2,831 | 17% |
| Commercial Savings by Design – New Developments | 26 | 35 | 52 | 25% | 12 | 9% |
| School Energy Competition – Schools | 44 | 58 | 87 | 10% | 0 | 0% |
| Run it Right – Participants | 40 | 53 | 80 | 20% | 0 | 0% |
| Comprehensive Energy Management – Participants | 15 | 21 | 31 | 20% | 1 | 1% |
| | | | | ***Total Scorecard Target Achieved*** | | ***37%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$0*** |

## 8.2 LOST REVENUE ADJUSTMENT MECHANISM

The Lost Revenue Adjustment Mechanism ("LRAM") allows Enbridge Gas to recover the lost distribution revenue associated with DSM activity in the EGD rate zone. For more information on the LRAM, refer to Section 11.3 of the DSM Guidelines.

In 2022, lost distribution revenues associated with DSM activity for the EGD rate zone was $0.058M, as outlined in Table 8.4 below.

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**Table 8.4 2022 LRAM Statement (EGD Rate Zone)**

| RATE CLASS | LRAM VOLUMES ($10^3$ $M^3$) | DISTRIBUTION MARGIN RATES ($/$10^3$ $M^3$) | REVENUE IMPACT |
|---|---|---|---|
| | (A) | (B) | (A) X (B) |
| Rate 110 | 4,813 | $6.63 | $31,912.49 |
| Rate 115 | 1,858 | $3.13 | $5,816.11 |
| Rate 135 | 594 | $18.79 | $11,163.02 |
| Rate 145 | 179 | $46.36 | $8,290.41 |
| Rate 170 | 223 | $4.47 | $995.52 |
| **TOTAL*** | **7,667** | | **$58,177.55** |

** Rate 1 and Rate 6 are not included in the LRAM amount for clearance above as these rate classes are covered under the Average Use True-Up Variance Account (AUTUVA)*

## 8.3 COST-EFFECTIVENESS RESULTS

As described in Section 2.4, cost-effectiveness screening for the 2015-2020 DSM Framework uses the "TRC-Plus" test. A secondary reference tool is the Program Administrator Cost ("PAC") test. The cost-effectiveness tests are performed at the program and portfolio level.

Table 8.5 and Table 8.6 provide the program and portfolio TRC-Plus and PAC results, respectively, for the EGD rate zone.

**Table 8.5 2022 TRC-Plus Summary (EGD Rate Zone)**

| PROGRAM | NPV TRC-PLUS BENEFITS | TRC-PLUS PROGRAM COSTS | INCREMENTAL COSTS | TOTAL TRC COSTS | NET TRC-PLUS | TRC-PLUS RATIO |
|---|---|---|---|---|---|---|
| Resource Acquisition Program | $210,397,519 | $8,102,391 | $72,141,651 | $80,244,042 | $130,153,477 | 2.62 |
| Low-Income Program | $33,477,085 | $4,605,501 | $16,225,035 | $20,830,536 | $12,646,549 | 1.61 |
| **Total DSM Portfolio** | **$243,874,604** | **$12,707,891** | **$88,366,686** | **$101,074,578** | **$142,800,026** | **2.41** |

**Table 8.6 2022 PAC Summary (EGD Rate Zone)**

| PROGRAM | NPV PAC BENEFITS | TOTAL PAC COSTS | NET PAC | PAC RATIO |
|---|---|---|---|---|
| Resource Acquisition Program | $181,849,811 | $51,987,696 | $129,862,115 | 3.50 |
| Low-Income Program | $29,690,274 | $12,237,061 | $17,453,214 | 2.43 |
| **Total DSM Portfolio** | **$211,540,085** | **$64,224,757** | **$147,315,329** | **3.29** |

## 8.4 BUDGETS AND SPENDING

Total 2022 DSM spend for the EGD rate zone was $70.9M, compared to an OEB-approved budget of $67.8M. See Table 8.7 for more details. As per the OEB's Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020), Enbridge Gas can be eligible to overspend by up to 15% of the total OEB-approved budget. The ability to overspend "is meant to allow the natural gas utilities to aggressively pursue programs which prove to be very successful."[21] For more details refer to Section 11.2 of the DSM Guidelines.

DSM spending for the EGD rate zone is categorized as:

- Incentive costs, promotion costs, evaluation costs, and overhead costs related to the design and delivery of DSM programming (see Section 5 for details on EGD rate zone DSM offerings).
- Collaboration and Innovation (see Section 8.4.1 for details).

**Table 8.7 2022 Budget/Spend/Variance (EGD Rate Zone)**

| ITEM | OEB-APPROVED BUDGET | ACTUAL SPEND | VARIANCE |
|---|---|---|---|
| **Resource Acquisition Program Costs** | | | |
| Home Efficiency Rebate Offering - Incentives | $18,727,200 | $32,182,582 | $14,608,267 |
| Home Efficiency Rebate Offering - Promotion | | $1,152,885 | |
| Residential Adaptive Thermostat Offering - Incentives | $2,262,870 | $2,042,205 | $485,013 |
| Residential Adaptive Thermostat Offering - Promotion | | $705,678 | |
| Commercial & Industrial Prescriptive (Fixed) Incentive Offering - Incentives | $2,323,114 | $1,549,105 | ($65,982) |
| Commercial & Industrial Prescriptive (Fixed) Incentive Offering - Promotion | | $708,027 | |
| Commercial & Industrial Direct Install Offering - Incentives | $4,950,581 | $2,359,287 | ($2,457,274) |
| Commercial & Industrial Direct Install Offering - Promotion | | $134,020 | |
| Custom Commercial Offering - Incentives | $7,658,968 | $3,854,098 | ($1,648,079) |
| Custom Commercial Offering - Promotion | | $474,222 | |
| Custom Industrial Offering - Incentives | | $1,538,599 | |
| Custom Industrial Offering - Promotion | | $143,970 | |
| Energy Leaders Offering - Incentives | $0 | $147,326 | $149,251 |
| Energy Leaders Offering - Promotion | | $1,925 | |
| Run It Right Offering (RA) - Incentives | $1,653,979 | $177,285 | ($1,476,694) |
| Run It Right Offering (RA) - Promotion | | $0 | |
| Comprehensive Energy Management Offering (RA) - Incentives | $98,838 | $0 | ($98,838) |
| Comprehensive Energy Management Offering (RA) - Promotion | | $0 | |
| *Resource Acquisition Program - Overheads* | $5,232,967 | $4,795,917 | ($437,050) |
| **Resource Acquisition Program Total** | **$42,908,517** | **$51,967,130** | **$9,058,613** |
| **Low-Income Program Costs** | | | |
| Home Winterproofing Offering - Incentives | $6,736,859 | $5,428,212 | $1,120,718 |
| Home Winterproofing Offering - Promotion | | $2,429,366 | |
| Affordable Multi-Family Housing Offering - Incentives | $3,967,353 | $2,203,348 | ($1,135,878) |
| Affordable Multi-Family Housing Offering - Promotion | | $628,127 | |
| Savings by Design Affordable Housing Offering - Incentives | $1,456,560 | $695,014 | ($625,042) |
| Savings by Design Affordable Housing Offering - Promotion | | $136,504 | |

[21] *Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 11.2, p. 38.*

| ITEM | OEB-APPROVED BUDGET | ACTUAL SPEND | VARIANCE |
|---|---|---|---|
| *Low-Income Program - Overheads* | $1,689,078 | $1,548,008 | ($141,070) |
| **Low-Income Program Total** | **$13,849,850** | **$13,068,578** | **($781,272)** |
| **Market Transformation & Energy Management Program Costs** | | | |
| Savings by Design Residential Offering - Incentives | $3,392,296 | $2,434,100 | ($640,135) |
| Savings by Design Residential Offering - Promotion | | $318,061 | |
| Savings by Design Commercial Offering - Incentives | $1,122,068 | $433,090 | ($574,859) |
| Savings by Design Commercial Offering - Promotion | | $114,119 | |
| School Energy Competition Offering - Incentives | $520,200 | $0 | ($520,200) |
| School Energy Competition Offering - Promotion | | $0 | |
| Run It Right Offering (MT) - Incentives | $329,209 | $11,000 | ($332,461) |
| Run It Right Offering (MT) - Promotion | | ($14,252) | |
| Comprehensive Energy Management Offering (MT) - Incentives | $941,562 | $23,818 | ($917,744) |
| Comprehensive Energy Management Offering (MT) - Promotion | | $0 | |
| *Market Transformation & Energy Management Program - Overheads* | $875,783 | $802,639 | ($73,144) |
| **Market Transformation & Energy Management Program Total** | **$7,181,118** | **$4,122,575** | **($3,058,543)** |
| **Total Program Costs** | **$63,939,485** | **$69,158,283** | **$5,218,798** |
| **Portfolio Costs** | | | |
| Evaluation | $1,774,228 | $443,279 | ($1,330,949) |
| **Portfolio Total** | **$1,774,228** | **$443,279** | **($1,330,949)** |
| **Total Program and Portfolio Costs** | **$65,713,713** | **$69,601,562** | **$3,887,849** |
| **Other Costs** | | | |
| DSM IT | $1,000,000 | $0 | ($1,000,000) |
| Collaboration and Innovation | $1,043,663 | $1,313,509 | $269,846 |
| **Other Costs Total** | **$2,043,663** | **$1,313,509** | **($730,154)** |
| **Total DSM Costs** | **$67,757,376** | **$70,915,070** | **$3,157,694** |

Included in the spend amounts above are customer incentives deferred to future years, for offerings where incentives are paid when future milestones/activities are reached. The deferred amounts will be used when the customer incentive commitment is due. For more information on customer incentive deferrals, please refer to Section 5.3.2 of the OEB's Mid-Term Report.

Specifically, the amounts are:

- Savings by Design Affordable Housing Offering: $556,000
- Savings by Design Residential Offering: $1,396,600
- Savings by Design Commercial Offering: $45,000

### 8.4.1 Collaboration and Innovation

The collaboration and innovation budget is used to explore and implement collaborative and innovative partnerships, technologies and market approaches. The budget provides the flexibility needed to commit to pilot funding opportunities from electric Local Distribution Companies (LDCs) and other innovative initiatives and research.

Given the importance and potential reach of these partnerships, there is a need for collaborative programs to be thoroughly tested and strengthened before being adopted for province-wide rollout. These efforts are expected to yield results and build strong collaborative relationships over time.

Memberships consisted of the following:

- **Gas Technology Institute ("GTI") Utilization Technology Development ("UTD") Membership**
    - UTD and its 20 members serve over 37+ million natural gas customers across United States and Canada. These companies work together to support the technology research and developments that meet their end-use customer energy efficiency and environmental needs.
- **The Centre for Energy Advancement through Technological Innovation ("CEATI") Membership**
    - CEATI is a user-driven organization committed to providing impactful solutions to their over 150 utility members, leveraging the benefits of their powerful network and technical expertise, harnessing innovation and collaboration to advance the industry via specialized interest groups covering all areas of power generation, transmission and distribution.

Projects Included the following:

- **iFLOW Combination Heating System Assessment Project**
    - The iFLOW Combination Heating System is an innovative, high-efficiency smart air handler/heat exchanger with intelligent boiler demand control and pump modulation control. The project would see an in-field demonstration and performance assessment of five iFLOW units in model homes and new construction developments. Results would be compared with base case natural gas consumption of the model homes to quantify gas savings achieved by the iFLOW Combination Heating System in new construction residential homes. The second phase of this project is to test 10 iFLOW and 2 Gradient Combination Heating Systems in residential retrofit homes to quantify gas savings of the iFLOW system in retrofit houses. Results of this project could be used to support enhanced DSM programming.
- **Power House Hybrid ("PHH") Net Zero Energy Emissions ("NZEE")**
    - Alectra Utilities, NRCan, City of Markham and Enbridge Gas have formed a partnership to validate how comprehensive, deep energy efficiency retrofits can be optimized with HVAC solutions that combine electrical and natural gas technologies to create a hybrid (dual fuel) heating system. The project will also validate how micro-CHP solutions are integrated with solar photovoltaic and battery storage to reduce peak loads, GHG emissions and energy costs for customers.

- **Vicot 20 kW Gas Heat Pump Field Trial**
    - The project includes installing and monitoring the performance of four residential (20kW) gas absorption heat pumps (GHP) from Vicot. The units will be used for both space and Domestic Hot Water (DHW) heating. The units will be installed in various locations and set ups. Two of the units will be integrated with a customized Air Handling Unit (AHU) and two will be tested alone.
- **Vicot 140 kW Gas Heat Pump Testing and Field Trial**
    - The project includes testing 140 kW GHP in a MURB supporting Heritage Gas NS. This is a gas absorption heat pump combined with condensing boiler for space heating and DHW. A pilot report will be developed by a local engineering company that will evaluate the economic and emissions performance of the system as installed.
- **SMTI Gas Heat Pump Performance Evaluation for Kitchen DHW Heating Application**
    - One 80k Btu/hr SMTI pre-production gas fired absorption heat pump (GHP) unit is being installed to heat DHW for a kitchen in a Long-Term Care facility to simulate restaurant DHW application. The purpose of the project is to learn about the installation and operational experiences, evaluate system performance, gather field performance data to evaluate energy savings and GHG reduction as compared to the existing gas hot water heater.
- **Residential Prescriptive Research**
    - Diversify single-family residential DSM portfolio through the development of prescriptive incentive programs for building envelope measures for customers. Technology research to develop substantiation documents for inclusion in Ontario TRM.
- **FlowMix Pilot**
    - This project proposes a performance evaluation of FlowMix devices implementing temperature setbacks for DHW distribution systems at condos or apartments that were originally equipped with Thermostatic Mixing Valves (TMV) that were set to fixed temperature setpoints for their DHW distribution systems.
- **Yanmar VRF 2-pipe Roof Top Unit (RTU) Retrofit**
    - The objective of this project would be evaluating and substantiating the energy and GHG savings of this system as compared to existing conventional RTU (Gas furnace and Electric AC) as the base case.
- **Field Trial of SMTI Pre-production Residential GHP**
    - The objective of this project is to evaluate and substantiate the energy efficiency and gas saving of a GHP residential system used for space heating and DHW system in retrofit case.
- **Field Trial of a unique Vicot V140 Combo GHP**
    - To evaluate the performance and substantiate the energy and emission saving for the combo system which comprises of an absorption gas heat pump (85 kW) and a condensing boiler.
- **Commercial Air Tightness Testing**
    - To advance the adoption of air tightness testing in commercial and multi-family new construction buildings by providing technical and financial support mechanisms to assist customers in commissioning air tightness tests, addressing performance deficiencies and improved performance levels.

# 9. Results and Spend (Union Rate Zones)

## 9.1 SCORECARD RESULTS AND SHAREHOLDER INCENTIVE

Enbridge Gas is eligible to earn a shareholder incentive of up to $10.45M for the Union rate zones, for DSM results measured against the Union rate zones' Resource Acquisition, Low-Income, Performance-Based, Large Volume, and Market Transformation Scorecards. The DSM shareholder incentive is established by the OEB to "effectively motivate the gas utilities to both actively and efficiently pursue DSM savings and to recognize exemplary performance."[22] The maximum incentive available is allocated to each scorecard based on the allocation of budget to each scorecard. For more information on the DSM shareholder incentive, refer to Section 5.0 of the 2015-2020 DSM Framework and Section 5.0 of the DSM Guidelines.

In 2022, Enbridge Gas earned $0.00M in DSM incentive for the Union rate zones, as outlined in Table 9.0 below.

**Table 9.0 2022 Maximum Shareholder Incentive & Achievement by Scorecard (Union Rate Zones)**

| SCORECARD | MAXIMUM DSM INCENTIVE | DSM SHAREHOLDER INCENTIVE ACHIEVED |
|---|---|---|
| Resource Acquisition | $6,562,712 | $0 |
| Low-Income | $2,604,447 | $0 |
| Large Volume | $694,265 | $0 |
| Market Transformation | $405,810 | $0 |
| Performance-Based | $182,765 | $0 |
| **Total** | **$10,450,000** | **$0** |

Detailed scorecard results for the Union rate zones are provided in Table 9.1 to Table 9.5 below.

**Table 9.1 2022 Resource Acquisition Scorecard Results (Union Rate Zones)**

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Cumulative Natural Gas Savings ($m^3$) | 574,789,855 | 766,386,474 | 1,149,579,711 | 75% | 430,240,517 | 42% |
| Home Reno Rebate Participants (Homes) | 4,082 | 5,443 | 8,165 | 25% | 6,568 | 30% |
| | | | | ***Total Scorecard Target Achieved*** | | ***72%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$0*** |

[22] *Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 5.0, p. 20.*

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## Table 9.2 2022 Low-Income Scorecard Results (Union Rate Zones)

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Single Family Cumulative Natural Gas Savings ($m^3$) | 40,377,532 | 53,836,709 | 80,755,064 | 60% | 28,837,892 | 32% |
| Social and Assisted Multi-Family Cumulative Natural Gas Savings ($m^3$) | 9,407,514 | 12,543,352 | 18,815,028 | 35% | 552,935 | 2% |
| Market Rate Multi-Family Cumulative Natural Gas Savings ($m^3$) | 7,430,573 | 9,907,431 | 14,861,146 | 5% | 4,573,515 | 2% |
| | | | | ***Total Scorecard Target Achieved*** | | ***36%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$0*** |

## Table 9.3 2022 Large Volume Scorecard Results (Union Rate Zones)

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Cumulative Natural Gas Savings ($m^3$) | 105,338,685 | 140,451,580 | 210,677,370 | 100% | 97,042,448 | 69% |
| | | | | ***Total Scorecard Target Achieved*** | | ***69%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$0*** |

## Table 9.4 2022 Market Transformation Scorecard Results (Union Rate Zones)

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| Optimum Home: Percentage of Homes Built (>15% above OBC 2017) by Participating Builders | 100% | 100% | 100% | 50% | 54.2% | 20% |
| Commercial Savings by Design: New Developments Enrolled by Participating Builders | 24 | 32 | 49 | 50% | 11 | 17% |
| | | | | ***Total Scorecard Target Achieved*** | | ***38%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$0*** |

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**Table 9.5 2022 Performance-Based Scorecard Results (Union Rate Zones)**

| METRICS | METRIC TARGET LEVELS | | | WEIGHT | ACHIEVEMENT | WEIGHTED % OF SCORECARD ACHIEVED |
|---|---|---|---|---|---|---|
| | LOWER BAND | TARGET | UPPER BAND | | | |
| RunSmart Participants | 52 | 69 | 104 | 10% | 0 | 0% |
| RunSmart Savings (%) | 0.3% | 0.4% | 0.7% | 40% | 0.0% | 0% |
| Strategic Energy Management (SEM) Savings (%) | 21.7% | 28.9% | 43.3% | 50% | 3.5% | 6% |
| | | | | ***Total Scorecard Target Achieved*** | | ***6%*** |
| | | | | ***Scorecard Company Incentive Achieved*** | | ***$0*** |

## 9.2 LOST REVENUE ADJUSTMENT MECHANISM

The Lost Revenue Adjustment Mechanism ("LRAM") allows Enbridge Gas to recover the lost distribution revenue associated with DSM activity in the Union rate zones. For more information on the LRAM, refer to Section 11.3 of the DSM Guidelines.

In 2022, lost distribution revenues associated with DSM activity for the Union rate zones was $0.119M, as outlined in Table 9.6 below.

**Table 9.6 2022 LRAM Statement (Union Rate Zones)**

| | LRAM VOLUMES ($10^3$ $M^3$) | DELIVERY RATES ($/$10^3$ $M^3$) | REVENUE IMPACT |
|---|---|---|---|
| | (A) | (B) | (A) X (B) |
| South - M4 | 4,266 | $19.91 | $84,960.31 |
| South - M5 | 70 | $31.24 | $2,177.60 |
| South - M7 | 5,105 | $4.88 | $24,929.82 |
| South - T1 | 539 | $1.31 | $705.68 |
| South - T2 | 4,446 | $0.25 | $1,124.82 |
| **South Total** | **14,425** | | **$113,898.23** |
| North - 20 | 418 | 7.81 | $3,266.50 |
| North - 100 | 619 | 2.77 | $1,712.86 |
| **North Total** | **1,037** | | **$4,979.36** |
| **TOTAL** | **15,462** | | **$118,877.59** |

## 9.3 COST-EFFECTIVENESS RESULTS

As described in Section 2.4, cost-effectiveness screening for the 2015-2020 DSM Framework uses the "TRC-Plus" test. A secondary reference tool is the Program Administrator Cost ("PAC") test. The cost-effectiveness tests are performed at the program and portfolio level.

Table 9.7 and Table 9.8 provide the program and portfolio TRC-Plus and PAC results, respectively, for the Union rate zones.

**Table 9.7 2022 TRC-Plus Summary (Union Rate Zones)**

| PROGRAM | NPV TRC-PLUS BENEFITS | TRC-PLUS PROGRAM COSTS | INCREMENTAL COSTS | TOTAL TRC COSTS | NET TRC-PLUS | TRC-PLUS RATIO |
|---|---|---|---|---|---|---|
| Residential Program | $42,251,944 | $3,844,250 | $25,018,737 | $28,862,987 | $13,388,957 | 1.46 |
| Commercial/Industrial Program | $70,465,551 | $4,381,222 | $32,287,531 | $36,668,753 | $33,796,798 | 1.92 |
| Low-Income Program | $11,261,674 | $4,888,173 | $4,142,173 | $9,030,346 | $2,231,328 | 1.25 |
| Large Volume Program | $12,621,209 | $364,925 | $3,241,529 | $3,606,455 | $9,014,755 | 3.50 |
| Performance-Based Program | $1,077,150 | $121,845 | $0 | $121,845 | $955,305 | 8.84 |
| **Total DSM Portfolio** | **$137,677,529** | **$13,600,416** | **$64,689,970** | **$78,290,386** | **$59,387,143** | **1.76** |

**Table 9.8 2022 PAC Summary (Union Rate Zones)**

| PROGRAM | NPV PAC BENEFITS | PAC PROGRAM COSTS | NET PAC | PAC RATIO |
|---|---|---|---|---|
| Residential Program | $34,994,430 | $17,940,968 | $17,053,461 | 1.95 |
| Commercial/Industrial Program | $59,821,861 | $13,872,110 | $45,949,751 | 4.31 |
| Low-Income Program | $9,712,319 | $9,473,940 | $238,379 | 1.03 |
| Large Volume Program | $10,974,965 | $3,079,272 | $7,895,693 | 3.56 |
| Performance-Based Program | $988,349 | $121,845 | $866,503 | 8.11 |
| **Total DSM Portfolio** | **$116,491,923** | **$44,488,136** | **$72,003,787** | **2.62** |

## 9.4 BUDGETS AND SPENDING

Total 2022 DSM spend for the Union rate zones was $50.0M, compared to an OEB-approved budget of $64.3M. See Table 9.9 for more details. As per the OEB's Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020), Enbridge Gas can be eligible to overspend by up to 15% of the total OEB-approved budget. The ability to overspend "is meant to allow the natural gas utilities to aggressively pursue programs which prove to be very successful."[23] For more details refer to Section 11.2 of the DSM Guidelines.

DSM spending for the Union rate zones is categorized as:

- Incentive costs, promotion costs, evaluation costs, and administration costs related to the design and delivery of DSM programming (see Section 6 for details on Union rate zones DSM offerings).
- Research (See Section 9.4.1 for more details).
- Pilots (See Section 9.4.2 for more details).

[23] *Filing Guidelines to the DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, December 22, 2014, Section 11.2, p. 38.*

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## Table 9.9 2022 Budget/Spend/Variance (Union Rate Zones)

| ITEM | OEB-APPROVED BUDGET[1] | ACTUAL SPEND | VARIANCE |
|---|---|---|---|
| **Residential Program Costs** | | | |
| Home Efficiency Rebate Offering - Incentives | $12,226,000 | $13,172,728 | $2,362,625 |
| Home Efficiency Rebate Offering - Promotion | | $1,415,897 | |
| Residential Adaptive Thermostat Offering - Incentives | $0 | $923,990 | $1,386,356 |
| Residential Adaptive Thermostat Offering - Promotion | | $462,366 | |
| *Residential Program - Evaluation* | $859,000 | $1,275,300 | $416,300 |
| *Residential Program - Administration* | $822,697 | $690,687 | ($132,010) |
| **Residential Program Total** | **$13,907,697** | **$17,940,968** | **$4,033,271** |
| **Commercial/Industrial Program Costs** | | | |
| Commercial/Industrial Prescriptive Offering - Incentives | $7,149,000 | $1,577,817 | ($5,201,858) |
| Commercial/Industrial Prescriptive Offering - Promotion | | $369,325 | |
| Commercial/Industrial Direct Install Offering - Incentives | $2,500,000 | $2,133,837 | ($280,686) |
| Commercial/Industrial Direct Install Offering - Promotion | | $85,478 | |
| Commercial/Industrial Custom Offering - Incentives | $7,808,000 | $5,779,234 | ($1,585,312) |
| Commercial/Industrial Custom Offering - Promotion | | $443,454 | |
| *Commercial/Industrial Program - Evaluation* | $189,000 | $29,126 | ($159,874) |
| *Commercial/Industrial Program - Administration* | $4,757,286 | $3,453,840 | ($1,303,446) |
| **Commercial/Industrial Program Total** | **$22,403,286** | **$13,872,110** | **($8,531,176)** |
| **Low-Income Program Costs** | | | |
| Home Weatherization Offering - Incentives | $8,374,000 | $3,941,278 | ($1,204,104) |
| Home Weatherization Offering - Promotion | | $3,228,618 | |
| Multi-Residential Affordable Housing Offering - Incentives | $3,573,000 | $548,687 | ($2,308,815) |
| Multi-Residential Affordable Housing Offering - Promotion | | $715,498 | |
| Indigenous Offering - Incentives | $448,000 | $95,802 | ($296,817) |
| Indigenous Offering - Promotion | | $55,381 | |
| Furnace End-of-Life Upgrade Offering - Incentives | $917,000 | $0 | ($917,000) |
| Furnace End-of-Life Upgrade Offering - Promotion | | $0 | |
| *Low-Income Program - Evaluation* | $263,008 | $190,450 | ($72,558) |
| *Low-Income Program - Administration* | $1,430,480 | $698,225 | ($732,255) |
| **Low-Income Program Total** | **$15,005,488** | **$9,473,940** | **($5,531,548)** |
| **Large Volume Program Costs** | | | |
| Large Volume Direct Access Offering - Incentives | $3,150,000 | $2,714,347 | ($393,534) |
| Large Volume Direct Access Offering - Promotion | | $42,120 | |
| *Large Volume Program - Evaluation* | $63,000 | $0 | ($63,000) |
| *Large Volume Program - Administration* | $787,000 | $322,805 | ($464,195) |
| **Large Volume Program Total** | **$4,000,000** | **$3,079,272** | **($920,728)** |
| **Performance-Based Program Costs** | | | |
| RunSmart Offering - Incentives | $802,000 | $0 | ($762,154) |
| RunSmart Offering - Promotion | | $0 | |
| Strategic Energy Management Offering - Incentives | | $0 | |
| Strategic Energy Management Offering - Promotion | | $39,846 | |
| *Performance-Based Program - Evaluation* | $35,000 | $0 | ($35,000) |
| *Performance-Based Program - Administration* | $216,000 | $81,999 | ($134,001) |
| **Performance-Based Program Total** | **$1,053,000** | **$121,845** | **($931,155)** |
| **Market Transformation Program Costs** | | | |

| ITEM | OEB-APPROVED BUDGET[1] | ACTUAL SPEND | VARIANCE |
|---|---|---|---|
| Optimum Home Offering - Incentives | $841,000 | $0 | ($817,000) |
| Optimum Home Offering - Promotion | | $24,000 | |
| Commercial Savings by Design Offering - Incentives | $1,000,000 | $369,580 | ($525,730) |
| Commercial Savings by Design Offering - Promotion | | $104,690 | |
| *Market Transformation Program - Evaluation* | $36,820 | $0 | ($36,820) |
| *Market Transformation Program - Administration* | $460,250 | $526,483 | $66,233 |
| **Market Transformation Program Total** | **$2,338,070** | **$1,024,753** | **($1,313,317)** |
| **Total Program Costs** | **$58,707,541** | **$45,512,888** | **($13,194,653)** |
| **Portfolio Costs** | | | |
| Research | $1,000,000 | $493,447 | ($506,553) |
| Evaluation | $1,300,000 | $244,393 | ($1,055,607) |
| Administration | $2,842,000 | $3,539,067 | $697,067 |
| **Portfolio Total** | **$5,142,000** | **$4,276,907** | **($865,093)** |
| **Total Program and Portfolio Costs** | **$63,849,541** | **$49,789,795** | **($14,059,746)** |
| **Other Costs** | | | |
| Pilots | $500,000 | $245,439 | ($254,561) |
| Open Bill Project | $0 | ($585) | ($585) |
| **Other Costs Total** | **$500,000** | **$244,854** | **($255,146)** |
| **Total DSM Costs** | **$64,349,541** | **$50,034,650** | **($14,314,891)** |

[1]*The total budget shown does not include amounts related to the Residential Adaptive Thermostat offering approved through the Mid-Term Review. Expenditures for this offering will be tracked in the DSMVA.*

Included in the spend amounts above are customer incentives deferred to future years, for offerings where incentives are paid when future milestones/activities are reached. The deferred amounts will be used when the customer incentive commitment is due. For more information on customer incentive deferrals, please refer to Section 5.3.2 of the OEB's Mid-Term Report.

Specifically, the amounts are:

- Commercial Savings by Design Offering: $64,350

### 9.4.1 Research Fund

The research budget is used to investigate emerging energy efficiency technologies to provide an increased understanding of new opportunities. As an outcome of this budget, the Company is able to offer customers a modern, more comprehensive suite of measures in an ever-evolving industry.

Research projects investigate critical input assumptions for new technologies, including natural gas savings, electricity savings, water savings, equipment costs and equipment useful life, across a variety of market segments. Market information, such as market barriers, product market share and how supply chains operate, is also examined to assist in designing programs that are well informed. Research projects can also enable the Company to convert common custom DSM technologies into prescriptive measures.

Memberships consisted of the following:

- **Consortium for Energy Efficiency (“CEE”) Emerging Technologies Collaborative Fees**
    - The goals of the Emerging Technologies Collaborative are to provide greater support to CEE member program administrators and the energy efficiency program industry in identifying and assessing new opportunities. Pursuit of these objectives will not only assist sponsors in their immediate emerging technologies work, but also achieve the shared broader objectives of accelerating adoption of emerging technologies across the efficiency program industry at CEE.
- **Consortium for Energy Efficiency (“CEE”) Membership**
    - CEE is the US and Canadian consortium of gas and electric efficiency program administrators. The goal of the consortium is to work together to accelerate the development of energy efficient products and services for lasting public benefit.
- **Energy Solution Center (ESC) Membership**
    - Energy Solutions Center, Inc. (ESC) is a non-profit organization of energy utilities and equipment manufacturers that promotes the use of energy efficient and low carbon technology solutions for the residential, commercial and industrial energy users. The Center creates educational and marketing materials, case studies, training manuals, decision analysis software and other tools and resources, plus offers Technology and Market Assessment Forums (TMAFs) and virtual energy efficient technology webinars designed to enhance the success of those utility customer service professionals responsible for enhancing customer productivity, efficiency, reliability and comfort.

Projects included the following:

- **Net Zero Low-Rise Multi-Unit Residential Buildings (“MURBs”)**
    - The results of this project will help identify the barriers and opportunities for the natural gas industry in Net Zero low-rise MURBs market in Ontario. The main focus is to study different technologies for space heating, space cooling, domestic hot water, ventilation and power generation. The project will compare a hybrid heating system and an all-electric heating system in terms of energy, cost savings and GHG reductions in two MURBs.

- **Natural Gas Technology Centre (NGTC) BoostHEAT Gas Heat Pump Performance Lab Test**
    - NGTC Lab Testing of the BoostHEAT Gas Heat Pump unit. This testing is to evaluate performance and efficiency.

- **Hybrid Heating Pilot Incentive Program**
    - This project intends to support the introduction of residential hybrid heating with smart controls into the Ontario marketplace through a pilot program targeting the residential retrofit sector. The objective of this project is to demonstrate how Hybrid Heating Systems with Smart Controls installed in approximately 100 homes can achieve a reduction in energy consumption and GHG emissions. In addition, the project is intended to:
        - Create awareness with homeowners/HVAC contractors/manufacturers to better understand key benefits and future market potential of Hybrid Heating with smart controls.
        - Identify barriers and potential solutions (e.g. training, economics, performance, acceptance, supply chain).
        - Measure homeowner acceptance such as their experience and learning.
        - Understand how homeowners prefer to operate the system (e.g. GHG reduction, cost reduction).
        - Share program pilot results with NRCan, HRAI and other stakeholders to support a collaborative industry effort to accelerate adoption of Hybrid Heating Systems that exceed 100% energy efficiency as per NRCan's Roadmap goals.

- **Midstream – New Measures**
    - Expansion of Midstream offering to incorporate suite of multiple foodservice technologies. Technology research to develop substantiation documents for inclusion in Ontario TRM, such as: Energy Star Griddles, Energy Star Combi Ovens and High-Efficiency Conveyor Ovens. In addition, to support the update of common assumption "Food Service hours" and three foodservice technologies (Energy Star Fryers, Energy Star Steam cooker, Underfired broilers) already in the TRM and selected by the EAC for review/update in the 2021-year cycle and was completed in 2022.

- **Commercial Pre-feasibility Prescriptive Measure Study**
    - The study will identify potential new measures to be supported in future DSM offerings, by defining the measure (product or service), its technical energy savings characteristics and mechanisms, including any relevant Codes or Standards that drive or impact savings. The study will also determine the various market opportunities in Enbridge Gas's jurisdiction, identifying installation, delivery and distribution characteristics for each relevant application including barriers to customer acceptance. Lastly it will estimate projected energy savings of the Measure installed in relevant market segments in the Commercial sector in Enbridge's service territory.

- **Hybrid Heating RTU**
    - The study will focus on dual fuel packaged (often rooftop) units that are suitable for use in the commercial sector and can easily replace existing packaged units. The objective of this project is to provide Enbridge Gas with the information needed to determine whether it would be cost-effective to offer custom incentives for these units

after taking into consideration new energy saving features such as controls, shell insulation, low-leak dampers and updated regulation and standards.

- **Commercial Smart Thermostat**
    - This study will determine gas savings of adaptive thermostats for small commercial applications and developing substantiation documentation material for consideration in TRM to support adaptive thermostats prescriptive offers for small businesses.

- **Yanmar 2-Pipe Roof Top Unit Retrofit (RTU) Research Study**
    - Yanmar 2-Pipe is an engine driven heat pump. The study is designed to connect this unit to an existing rooftop for heating and cooling. The objective is to measure its performance against existing RTU and associated savings

### 9.4.2 Pilot Fund

The pilot budget aims to explore innovative DSM programs and market approaches. In addition to providing offers to customers, the pilots can help to better understand new program designs and delivery concepts, ultimately leading to greater natural gas savings and market penetration of programs.

Pilots involve the testing of energy efficient technologies, alternative financing mechanisms and/or detailed customer-specific natural gas usage information that may serve as a model for future DSM program development.

Projects included the following:

- **Hybrid Heating, Program Consulting Services**
    - Development of a program pilot concept for hybrid heating with smart controls to address specific barriers preventing commercialization of this technology. Accountabilities include the management of strategic relationships with HVAC equipment and control manufacturers to provide an opportunity for integration of smart controls into manufacturers existing platforms.
    - Project management of the “Hybrid Heating Pilot Incentive Program” in London, Ontario to demonstrate how Hybrid Heating System with Smart Controls installed in approximately 110 homes can achieve a reduction in energy consumption and GHG emissions.

- **IESO Collaboration - Energy Manager Pilot**
    - This pilot involves collaboration with the IESO on their Energy Manger Program to co-fund the employment of a full time Energy Manager within the institutional sector. This is an opportunity to integrate gas and electric programming to benefit customers, providing a holistic approach to energy management. The co-funding and gas performance incentives aims to influence Energy Managers to pursue further gas savings measure in addition to electric savings measures. Energy Managers in the joint program will receive a minimum annual gas savings target, above which they can access the performance incentives, which is on top of standard Enbridge Energy Efficiency program incentives. Enbridge Gas’s Energy Solution Advisors will continue to engage the Energy Managers throughout the year to provide technical guidance and help develop projects towards that

target. There were 10 Institutional Energy Managers that opted into the Energy Manager collaboration initiative. Each Energy Manager was provided a gas savings target in addition to their existing electric savings target.

- **Residential Air Sealing Pilot**
    - Pilot to test professional air sealing as a stand-alone offering. The idea of a stand-alone air sealing pilot is driven by recognition that professional air sealing is currently an underdeveloped market, and that a professional air sealing offering for homeowners has market potential within the residential existing homes sector. It is expected that the stand-alone air sealing pilot will target approximately 200 customers for participation. A total of 60 projects were completed before the program was paused due to Covid-19, to explore heath and safety issues related to professional air sealing.
- **Vicot Gas Absorption Heat Pump for DHW Heating for Commercial Buildings**
    - Demonstrate energy saving and GHG reduction benefits of a 65 kW (221,780 Btu/hr) gas absorption heat pump for DHW heating application in multi-unit residential buildings (MURBs) by conducting a field trial that includes installation, monitoring and verification of a gas heat unit in a multi-unit building in the Greater Toronto Area.
- **Advanced BAS**
    - Advanced BAS claims incremental and sustainable savings compared to conventional systems by implementing a more sophisticated data processing system and an increased number of sensors and system inputs. This pilot project proposes to evaluate the potentials of advanced BAS in generating incremental energy savings from multi-unit residential buildings with existing BAS. Once Enbridge Gas is able to validate meter-based natural gas savings for a variety of ABAS vendors, it can create an offer to influence customers to install this technology.
- **Yanmar VRF 2-Pipe Roof Top Unit (RTU) Retrofit Pilot**
    - The objective of this pilot would be to evaluate and substantiate the energy and GHG savings as compared to existing RTU as the base case. The site utilized was the City of London Aquatic Centre.
- **Commercial Air Tightness Testing**
    - To advance the adoption of air tightness testing in commercial and multi-family new construction buildings by providing technical and financial support mechanisms to assist customers in commissioning air tightness tests, addressing performance deficiencies and improved performance levels.
- **Great Lakes Artificial Intelligence Pilot**
    - This Greenhouse pilot project is to test a climate control system to use machine learning to optimize energy input streams (natural gas and electricity) while reducing irrigation demand and optimize overall yield and profit.
- **Residential Hybrid Heating Controls Pilot**
    - This pilot is to support the development of 3 additional controllers by Eden Energy, LES and iFlow that could work with various system types and brands. Approximately 15 homes will be retrofitted with these controllers, to test its potential inclusion in future Enbridge Gas DSM efforts.

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# Appendix A: 2022 Avoided Costs

## A1. EGD RATE ZONE 2022 AVOIDED COSTS

The inflation factor used is 2.93%. The discount rate is 7.05%. Avoided costs are presented in nominal dollars.

| GAS AVOIDED COSTS | | | | |
|---|---|---|---|---|
| | BASELOAD ($/M$^3$) | | WEATHER SENSITIVE ($/M$^3$) | |
| YEAR | RATE | NPV | RATE | NPV |
| 2022 | 0.169 | 0.169 | 0.189 | 0.189 |
| 2023 | 0.154 | 0.313 | 0.178 | 0.355 |
| 2024 | 0.150 | 0.444 | 0.167 | 0.501 |
| 2025 | 0.170 | 0.582 | 0.188 | 0.654 |
| 2026 | 0.160 | 0.704 | 0.178 | 0.790 |
| 2027 | 0.157 | 0.815 | 0.176 | 0.915 |
| 2028 | 0.175 | 0.932 | 0.195 | 1.045 |
| 2029 | 0.196 | 1.054 | 0.216 | 1.179 |
| 2030 | 0.206 | 1.173 | 0.227 | 1.311 |
| 2031 | 0.224 | 1.295 | 0.245 | 1.444 |
| 2032 | 0.239 | 1.416 | 0.262 | 1.576 |
| 2033 | 0.253 | 1.535 | 0.275 | 1.706 |
| 2034 | 0.271 | 1.655 | 0.294 | 1.836 |
| 2035 | 0.286 | 1.773 | 0.310 | 1.965 |
| 2036 | 0.290 | 1.885 | 0.315 | 2.086 |
| 2037 | 0.305 | 1.995 | 0.331 | 2.205 |
| 2038 | 0.333 | 2.107 | 0.359 | 2.326 |
| 2039 | 0.359 | 2.220 | 0.386 | 2.447 |
| 2040 | 0.373 | 2.329 | 0.401 | 2.565 |
| 2041 | 0.377 | 2.432 | 0.406 | 2.676 |
| 2042 | 0.376 | 2.529 | 0.406 | 2.780 |
| 2043 | 0.396 | 2.623 | 0.426 | 2.882 |
| 2044 | 0.436 | 2.721 | 0.468 | 2.986 |
| 2045 | 0.488 | 2.823 | 0.520 | 3.095 |
| 2046 | 0.482 | 2.917 | 0.515 | 3.196 |
| 2047 | 0.505 | 3.009 | 0.539 | 3.294 |
| 2048 | 0.530 | 3.099 | 0.565 | 3.390 |
| 2049 | 0.555 | 3.187 | 0.591 | 3.484 |
| 2050 | 0.581 | 3.274 | 0.618 | 3.576 |
| 2051 | 0.609 | 3.358 | 0.647 | 3.666 |

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| WATER AND ELECTRICITY AVOIDED COSTS | | | | |
|---|---|---|---|---|
| | RESIDENTIAL/COMMERCIAL/INDUSTRIAL | | | |
| | WATER ($/1000 LITRE) | | ELECTRICITY ($/KWH) | |
| YEAR | RATE | NPV | RATE | NPV |
| 2022 | 1.020 | 1.020 | 0.123 | 0.123 |
| 2023 | 1.050 | 2.001 | 0.127 | 0.242 |
| 2024 | 1.081 | 2.944 | 0.131 | 0.356 |
| 2025 | 1.112 | 3.851 | 0.134 | 0.465 |
| 2026 | 1.145 | 4.723 | 0.138 | 0.571 |
| 2027 | 1.179 | 5.562 | 0.142 | 0.672 |
| 2028 | 1.213 | 6.368 | 0.147 | 0.769 |
| 2029 | 1.249 | 7.143 | 0.151 | 0.863 |
| 2030 | 1.285 | 7.888 | 0.155 | 0.953 |
| 2031 | 1.323 | 8.605 | 0.160 | 1.039 |
| 2032 | 1.362 | 9.294 | 0.164 | 1.123 |
| 2033 | 1.402 | 9.957 | 0.169 | 1.203 |
| 2034 | 1.443 | 10.594 | 0.174 | 1.280 |
| 2035 | 1.485 | 11.207 | 0.179 | 1.354 |
| 2036 | 1.528 | 11.796 | 0.185 | 1.425 |
| 2037 | 1.573 | 12.362 | 0.190 | 1.493 |
| 2038 | 1.619 | 12.907 | 0.196 | 1.559 |
| 2039 | 1.667 | 13.431 | 0.201 | 1.622 |
| 2040 | 1.716 | 13.934 | 0.207 | 1.683 |
| 2041 | 1.766 | 14.419 | 0.213 | 1.742 |
| 2042 | 1.818 | 14.884 | 0.220 | 1.798 |
| 2043 | 1.871 | 15.332 | 0.226 | 1.852 |
| 2044 | 1.926 | 15.762 | 0.233 | 1.904 |
| 2045 | 1.982 | 16.176 | 0.239 | 1.954 |
| 2046 | 2.040 | 16.574 | 0.246 | 2.002 |
| 2047 | 2.100 | 16.957 | 0.254 | 2.048 |
| 2048 | 2.161 | 17.325 | 0.261 | 2.093 |
| 2049 | 2.225 | 17.679 | 0.269 | 2.135 |
| 2050 | 2.290 | 18.019 | 0.277 | 2.177 |
| 2051 | 2.357 | 18.346 | 0.285 | 2.216 |

| AVOIDED CARBON COSTS | | |
|---|---|---|
| | RESIDENTIAL/COMMERCIAL/INDUSTRIAL | |
| | ($/M³) | |
| YEAR | RATE | NPV |
| 2022 | 0.098 | 0.098 |
| 2023 | 0.127 | 0.217 |
| 2024 | 0.157 | 0.353 |
| 2025 | 0.186 | 0.505 |
| 2026 | 0.215 | 0.669 |
| 2027 | 0.245 | 0.843 |
| 2028 | 0.274 | 1.025 |
| 2029 | 0.303 | 1.214 |
| 2030 | 0.333 | 1.407 |
| 2031 | 0.343 | 1.593 |
| 2032 | 0.353 | 1.771 |
| 2033 | 0.363 | 1.943 |
| 2034 | 0.374 | 2.108 |
| 2035 | 0.385 | 2.266 |
| 2036 | 0.396 | 2.419 |
| 2037 | 0.407 | 2.566 |
| 2038 | 0.419 | 2.707 |
| 2039 | 0.432 | 2.842 |
| 2040 | 0.444 | 2.973 |
| 2041 | 0.457 | 3.098 |
| 2042 | 0.471 | 3.219 |
| 2043 | 0.485 | 3.335 |
| 2044 | 0.499 | 3.446 |
| 2045 | 0.513 | 3.553 |
| 2046 | 0.528 | 3.656 |
| 2047 | 0.544 | 3.755 |
| 2048 | 0.560 | 3.851 |
| 2049 | 0.576 | 3.942 |
| 2050 | 0.593 | 4.030 |
| 2051 | 0.610 | 4.115 |

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## A2. UNION RATE ZONES 2022 AVOIDED COSTS

The inflation factor used is 2.93%. The discount rate is 7.05%. Avoided costs are presented in nominal dollars.

| GAS AVOIDED COSTS | | | | |
|---|---|---|---|---|
| | BASELOAD ($/M$^3$) | | WEATHER SENSITIVE ($/M$^3$) | |
| YEAR | RATE | NPV | RATE | NPV |
| 2022 | 0.141 | 0.141 | 0.198 | 0.198 |
| 2023 | 0.133 | 0.266 | 0.185 | 0.370 |
| 2024 | 0.129 | 0.378 | 0.177 | 0.524 |
| 2025 | 0.152 | 0.502 | 0.202 | 0.689 |
| 2026 | 0.143 | 0.612 | 0.194 | 0.837 |
| 2027 | 0.139 | 0.710 | 0.191 | 0.973 |
| 2028 | 0.157 | 0.815 | 0.211 | 1.113 |
| 2029 | 0.179 | 0.926 | 0.234 | 1.258 |
| 2030 | 0.188 | 1.035 | 0.245 | 1.401 |
| 2031 | 0.205 | 1.146 | 0.263 | 1.543 |
| 2032 | 0.221 | 1.258 | 0.281 | 1.686 |
| 2033 | 0.233 | 1.368 | 0.295 | 1.825 |
| 2034 | 0.250 | 1.479 | 0.314 | 1.964 |
| 2035 | 0.265 | 1.588 | 0.331 | 2.100 |
| 2036 | 0.269 | 1.691 | 0.337 | 2.230 |
| 2037 | 0.282 | 1.793 | 0.352 | 2.357 |
| 2038 | 0.312 | 1.898 | 0.384 | 2.486 |
| 2039 | 0.339 | 2.005 | 0.413 | 2.616 |
| 2040 | 0.354 | 2.108 | 0.430 | 2.742 |
| 2041 | 0.356 | 2.206 | 0.434 | 2.861 |
| 2042 | 0.353 | 2.297 | 0.434 | 2.972 |
| 2043 | 0.370 | 2.385 | 0.453 | 3.080 |
| 2044 | 0.410 | 2.477 | 0.495 | 3.191 |
| 2045 | 0.461 | 2.573 | 0.549 | 3.306 |
| 2046 | 0.459 | 2.662 | 0.549 | 3.413 |
| 2047 | 0.482 | 2.750 | 0.575 | 3.518 |
| 2048 | 0.506 | 2.836 | 0.602 | 3.620 |
| 2049 | 0.531 | 2.921 | 0.630 | 3.720 |
| 2050 | 0.557 | 3.004 | 0.659 | 3.818 |
| 2051 | 0.585 | 3.085 | 0.689 | 3.914 |

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| WATER AND ELECTRICITY AVOIDED COSTS | | | | |
|---|---|---|---|---|
| | RESIDENTIAL/COMMERCIAL/INDUSTRIAL | | | |
| | WATER ($/1000 LITRE) | | ELECTRICITY ($/KWH) | |
| YEAR | RATE | NPV | RATE | NPV |
| 2022 | 0.928 | 0.928 | 0.123 | 0.123 |
| 2023 | 0.955 | 1.820 | 0.127 | 0.242 |
| 2024 | 0.983 | 2.678 | 0.131 | 0.356 |
| 2025 | 1.012 | 3.502 | 0.134 | 0.465 |
| 2026 | 1.041 | 4.295 | 0.138 | 0.571 |
| 2027 | 1.072 | 5.058 | 0.142 | 0.672 |
| 2028 | 1.103 | 5.791 | 0.147 | 0.769 |
| 2029 | 1.136 | 6.496 | 0.151 | 0.863 |
| 2030 | 1.169 | 7.174 | 0.155 | 0.953 |
| 2031 | 1.203 | 7.826 | 0.160 | 1.039 |
| 2032 | 1.238 | 8.453 | 0.164 | 1.123 |
| 2033 | 1.275 | 9.055 | 0.169 | 1.203 |
| 2034 | 1.312 | 9.635 | 0.174 | 1.280 |
| 2035 | 1.350 | 10.192 | 0.179 | 1.354 |
| 2036 | 1.390 | 10.728 | 0.185 | 1.425 |
| 2037 | 1.431 | 11.243 | 0.190 | 1.493 |
| 2038 | 1.473 | 11.738 | 0.196 | 1.559 |
| 2039 | 1.516 | 12.215 | 0.201 | 1.622 |
| 2040 | 1.560 | 12.673 | 0.207 | 1.683 |
| 2041 | 1.606 | 13.113 | 0.213 | 1.742 |
| 2042 | 1.653 | 13.536 | 0.220 | 1.798 |
| 2043 | 1.701 | 13.944 | 0.226 | 1.852 |
| 2044 | 1.751 | 14.335 | 0.233 | 1.904 |
| 2045 | 1.803 | 14.711 | 0.239 | 1.954 |
| 2046 | 1.855 | 15.073 | 0.246 | 2.002 |
| 2047 | 1.910 | 15.421 | 0.254 | 2.048 |
| 2048 | 1.966 | 15.756 | 0.261 | 2.093 |
| 2049 | 2.023 | 16.078 | 0.269 | 2.135 |
| 2050 | 2.083 | 16.387 | 0.277 | 2.177 |
| 2051 | 2.144 | 16.685 | 0.285 | 2.216 |

| AVOIDED CARBON COSTS | | |
|---|---|---|
| | RESIDENTIAL/COMMERCIAL/INDUSTRIAL | |
| | ($/M³) | |
| YEAR | RATE | NPV |
| 2022 | 0.098 | 0.098 |
| 2023 | 0.127 | 0.217 |
| 2024 | 0.157 | 0.353 |
| 2025 | 0.186 | 0.505 |
| 2026 | 0.215 | 0.669 |
| 2027 | 0.245 | 0.843 |
| 2028 | 0.274 | 1.025 |
| 2029 | 0.303 | 1.214 |
| 2030 | 0.333 | 1.407 |
| 2031 | 0.343 | 1.593 |
| 2032 | 0.353 | 1.771 |
| 2033 | 0.363 | 1.943 |
| 2034 | 0.374 | 2.108 |
| 2035 | 0.385 | 2.266 |
| 2036 | 0.396 | 2.419 |
| 2037 | 0.407 | 2.566 |
| 2038 | 0.419 | 2.707 |
| 2039 | 0.432 | 2.842 |
| 2040 | 0.444 | 2.973 |
| 2041 | 0.457 | 3.098 |
| 2042 | 0.471 | 3.219 |
| 2043 | 0.485 | 3.335 |
| 2044 | 0.499 | 3.446 |
| 2045 | 0.513 | 3.553 |
| 2046 | 0.528 | 3.656 |
| 2047 | 0.544 | 3.755 |
| 2048 | 0.560 | 3.851 |
| 2049 | 0.576 | 3.942 |
| 2050 | 0.593 | 4.030 |
| 2051 | 0.610 | 4.115 |

# Appendix B: Target Setting Methodology

## B1. EGD RATE ZONE

| EGD Rate Zone - 2022 Resource Acquisition Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| Home Energy Conservation<br>Residential Adaptive Thermostats<br>Commercial & Industrial Custom<br>Commercial & Industrial Prescriptive<br>Commercial & Industrial Direct Install<br>Run-it-Right<br>Comprehensive Energy Management (CEM) | Large Volume Customers Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 Large Volume Customers Resource Acquisition actual spend without overheads x 2022 Large Volume Customers Resource Acquisition budget without overheads x 1.02 | 150% of Target | 40% |
| | Small Volume Customers Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 Small Volume Customers Resource Acquisition actual spend without overheads x 2022 Small Volume Customers Resource Acquisition budget without overheads x 1.02 | 150% of Target | 40% |
| Home Energy Conservation (HEC) | Residential Deep Savings Participants (Homes) | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 20% |

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

| EGD Rate Zone - 2022 Low Income Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| Home Winterproofing | Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 45% |
| Low-Income Multi-Residential | Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 45% |
| Low-Income New Construction | Number of Project Applications | 75% of Target | 2021 metric achievement / 2021 accrued program cost without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 10% |

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

| EGD Rate Zone - 2022 Market Transformation Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| School Energy Competition | Schools | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 10% |
| Run-it-Right | Participants | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 20% |
| Comprehensive Energy Management (CEM) | Participants | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 20% |
| Residential Savings by Design | Builders | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 10% |
| | Homes Built | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 15% |
| Commercial Savings by Design | New Developments | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 25% |

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## B2. UNION RATE ZONES

| Union Rate Zones - 2022 Resource Acquisition Scorecard | | Metric Targets | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| Home Reno Rebate<br>Residential Adaptive Thermostat<br>Commercial & Industrial Custom<br>Commercial & Industrial Prescriptive<br>Commercial & Industrial Direct Install | Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 Resource Acquisition actual spend without overheads x 2022 Resource Acquisition budget without overheads x 1.02 | 150% of Target | 75% |
| Home Reno Rebate | Home Reno Rebate Participants (Homes) | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 25% |

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

| Union Rate Zones - 2022 Low Income Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| Home Weatherization<br>Furnace End-of-Life<br>Aboriginal | Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 60% |
| Multi-family | Social and Assisted Multi-Family Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 35% |
| | Market Rate Multi-Family Cumulative Natural Gas Savings (m3) | 75% of Target | 2021 metric achievement (LRAM natural gas savings) / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.02 | 150% of Target | 5% |

| Union Rate Zones - 2022 Large Volume Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| Large Volume Program for T2/R100 Customers | Cumulative Natural Gas Savings (m3) | 75% of Target | Three-year rolling average (2019-2021) Rate T2/Rate 100 cost effectiveness x 2022 budget without overheads x 1.02 | 150% of Target | 100% |

*Cost effectiveness = Final verified metric achievement used for LRAMVA purposes divided by final actual program spend for that year

| Union Rate Zones - 2022 Market Transformation Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| Optimum Home | Homes Built (>15% above OBC 2017) by Participating Builders | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 50% |
| Commercial New Construction | New Developments Enrolled by Participating Builders | 75% of Target | 2021 metric achievement / 2021 actual program spend without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 50% |

| Union Rate Zones - 2022 Performance-Based Scorecard | | Metric Target | | | |
|---|---|---|---|---|---|
| Programs | Metrics | Lower Band | Target | Upper Band | Weight |
| RunSmart | Participants | 75% of Target | 2021 metric achievement / 2021 accrued program cost without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 10% |
| | Savings (%) | 75% of Target | 2021 metric achievement / 2021 accrued program cost without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 40% |
| Strategic Energy Management (SEM) | Savings (%) | 75% of Target | 2021 metric achievement / 2021 accrued program cost without overheads x 2022 program budget without overheads x 1.1 | 150% of Target | 50% |

# Appendix C: Offering Details (EGD Rate Zone)

## C1. HOME EFFICIENCY REBATE OFFERING

The maximum rebate payment for the Home Efficiency Rebate ("HER") Offering remains at $5,000 per home up until the end of 2022 before the HER+ offering comes into effect, which includes rebates for the home energy assessments, measure upgrades and any applicable bonuses. The measure rebates are displayed in the table below based on the date of the pre-retrofit energy assessment.

**Measure Rebates for 2022**

| MEASURE | CRITERIA | REBATE |
|---|---|---|
| Attic Insulation | Increase insulation from R35 or less to at least R60 | $750 |
| | Increase cathedral/flat roof insulation by at least R14 | $650 |
| Air Sealing | Achieve 10% or more above base target | $150 |
| | Achieving base target | $100 |
| Basement Insulation<br>Must upgrade a minimum of 20 per cent of the total wall area | Add at least R23 insulation to 100% of basement | $1,250 |
| | Add at least R12 insulation to 100% of basement | $750 |
| | Add at least R23 insulation to 100% of crawl space wall | $1,000 |
| | Add at least R12 insulation to 100% of crawl space wall | $500 |
| | Add at least R23 insulation to 100% of floor above crawl space | $1,000 |
| Exterior Wall Insulation<br>Must upgrade a minimum of 20 per cent of the total wall area | Add at least R20 to 100% of building | $3,000 |
| | Add at least R9 insulation to 100% of building to achieve a minimum of R12 | $1,750 |
| | Add at least R3.8 to 100% of building to achieve a minimum of R12 | $1,000 |
| Furnace/Boiler | For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace.<br>Or<br>For replacing a less than 90% AFUE natural gas boiler with a 90% AFUE or higher condensing natural gas boiler. | $250 for furnace or $1,000 for boiler |
| Water Heater | Replace existing natural gas water heater with an EF 0.77 or higher, or UEF 0.80 or higher tank type ENERGY STAR® certified natural gas water heater.<br>Or<br>Replace existing natural gas water heater with UEF 0.87 or higher tankless ENERGY STAR® certified natural gas water heater. | $400 |
| Window/Door/Skylight | For each window, door or skylight replaced with an ENERGY STAR®-qualified model. | $40 |

**Assessment Rebate**

Since pre-retrofit and post-retrofit home energy assessments are participation requirements, eligible customers received a rebate of $600 to match the assessment rebate of the CGHG for completing the assessments. The amount is intended to cover the typical cost of the assessments.

**Bonus Rebate**

Bonus rebates were offered for participants who completed more than two measures:

- $150 for three measures
- $500 for four measures

- $750 for five measures or more

**Basement Bonus Rebate**

A bonus of $500 is offered to participants who insulate 100% of their basement.

## C2. RESIDENTIAL ADAPTIVE THERMOSTAT OFFERING

Eligible residential Enbridge Gas customers can get a $75 instant discount on qualifying ecobee, Google Nest, Emerson and Honeywell smart thermostats at the time of purchase. Additionally, through the Moderate-Income rebate in collaboration with the IESO Energy Affordability program, customers who fall within certain income brackets (see table below) can apply for an Energy Saving Kit that includes a $125 discount code off one of the qualifying smart thermostats.

Customers who qualify for Moderate-Income must be above the Low-Income cut-off, but at or below the Moderate-Income cut-off.

| Number of People in the Household | Before-Tax Household Income | |
|---|---|---|
| | Low-Income Cut-Off | Moderate-Income Cut-Off |
| 1 | $36,578 | $46,748 |
| 2 | $51,729 | $58,453 |
| 3 | $63,354 | $70,158 |
| 4 | $73,157 | $81,863 |
| 5 | $81,791 | $93,568 |
| 6 | $89,598 | $105,273 |
| 7+ | $96,775 | $116,978 |

Customers must apply for the discount code before they buy using the offering's instant rebate tool. The discount can be redeemed in the following ways:

- In-store at The Home Depot.
- Online at select retailers and manufacturer web stores: BestBuy.ca, ecobee.com, Store.Google.com and emersoncanada.ca/store.
- Apply with a participating contractor via the contractor stream.

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**List of Qualifying Thermostats and Participating Retailers (EGD Rate Zone)**

| MANUFACTURER | PRODUCT NAME | MODEL NUMBER | PARTICIPATING RETAILERS | | | | |
|---|---|---|---|---|---|---|---|
| | | | ECOBEE *Online* | GOOGLE STORE *Online* | BEST BUY *Online* | EMERSON *Online* | HOME DEPOT *(In-store)* |
| ecobee | ecobee3 lite | EB-STATE3LTC-02 | ✓ | | | | ✓ |
| ecobee | ecobee SmartThermostat with voice control | EB-STATE5C-01 | ✓ | | ✓ | | ✓ |
| ecobee | Smart Thermostat Enhanced | EB-STATE6LC-01 / EB-STATE6LPC-01 / EB-STATE6L-01 | ✓ | | ✓ | | ✓ |
| ecobee | Smart Thermostat Premium | EB-STATE6C-01 / EB-STATE6-01 | ✓ | | ✓ | | ✓ |
| Google Nest | Google Nest Learning Thermostat: Polished Steel | T3019CA | | ✓ | | | |
| Google Nest | Google Nest Learning Thermostat: Stainless Steel | T3007EF | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Learning Thermostat: White | T3017CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Learning Thermostat: Black | T3016CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Thermostat: Charcoal[24] | GA02081-CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Thermostat: Snow[24] | GA01334-CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Thermostat: Fog[24] | GA02083-CA | | ✓ | | | |
| Google Nest | Google Nest Thermostat: Sand[24] | GA02082-CA | | ✓ | | | |
| Google Nest | Google Nest Thermostat E[25] | T4000EF | | | | | ✓ |
| Emerson Sensi | Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: Black | ST75C | | | | ✓ | ✓ |
| Emerson Sensi | Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: Silver | ST75SC | | | | ✓ | |
| Emerson Sensi | Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: White[26] | ST75WC | | | | ✓ | ✓ |
| Emerson Sensi | Emerson Sensi Wi-Fi Thermostat | ST55C | | | | ✓ | ✓ |
| Honeywell | Honeywell T9 Smart Thermostat with Built-In Wi-Fi | RCHT9510WFW2017/W | | | ✓ | | ✓ |

*[24] The Google Nest Thermostat (in charcoal, snow, fog and sand) model was added to the offering in October 2020, at the time of Google's product launch.*
*[25] The Google Nest Thermostat E (Model # T4000EF) was discontinued at the Google Store in October 2020, following the announcement of the new Google Nest Thermostat. This model remained available at The Home Depot throughout 2020.*
*[26] The Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: White (Model # ST75WC) was added to the offering in July 2020 through the Emerson web store.*

**List of Qualifying Thermostats for Contractors (EGD Rate Zone)**

| BRAND | PRODUCT NAME | MODEL NUMBER | CONTRACTOR ONLY |
|---|---|---|---|
| Lennox | iComfort S30 Smart Thermostat | 12U67 | ✓ |
| Emerson | White Rodgers 1F95U-42WFC Sensi Touch Wi-Fi Thermostat | 1F95U-42WFC | ✓ |
| Emerson | Emerson Sensi Wi-Fi Thermostat 1F87U-42WFC | 1F87U-42WFC | ✓ |
| Emerson | White Rodgers - 1F95U-42WFB Sensi™ Touch Wi-Fi Smart Thermostat | 1F95U-42WFBC | ✓ |

- Contractors can install any of the above devices in both tables.

## C3. CUSTOM COMMERCIAL OFFERING

In addition to technical expertise, the following financial incentives are available to participants:

| Item | Commercial Customers |
|---|---|
| New Equipment Installation, Equipment Retrofit and Process Optimization Projects | $0.20/m$^3$ for estimated annual natural gas savings, up to 50% of the project cost, to a maximum of $100,000 per project. |
| Energy Audits (HVAC audits, controls audits, thermal surveys, facility air balances, benchmarking activities, equipment upgrade analyses) | 50% of eligible audit costs*, to a maximum of $4,000. |
| Steam Trap Audit | 50% of the eligible audit costs*, to a maximum of $5,000. |
| Boiler Limited Time Offers | $0.40/m$^3$ for estimated annual natural gas savings for Condensing Boiler Projects where customers commit with an ESA by June 30, 2022, to install a boiler by Oct 31, 2022.<br><br>0.30/m$^3$ for estimated annual natural gas savings for High-Efficiency Boiler Projects where customers commit with an ESA by June 30, 2022, to install a boiler by Oct 31, 2022. |

** The Eligible Audit Costs are the costs invoiced by the applicant's contractor and, exclusive of applicable taxes, incurred solely for the purpose of conducting the Audit and preparing the Audit Report, that are paid by the applicant.*

### C4. CUSTOM INDUSTRIAL OFFERING

In addition to technical expertise, customers are eligible to receive up to 50% of their incremental project costs, to a maximum of $100,000 per project based on the following incentive structure:

- $0.20/$m^3$ for first 50,000 $m^3$ gas saved
- $0.05/$m^3$ for gas savings above 50,000 $m^3$

In addition, customers are also eligible for energy assessment rebates of up to 50% of the cost up to a maximum of:

| ANNUAL NATURAL GAS CONSUMPTION | MAXIMUM INCENTIVE |
|---|---|
| 2,500,000 $m^3$ or greater | $10,000 |
| 1,000,000 $m^3$ to 2,499,999 $m^3$ | $6,000 |
| 340,000 $m^3$ to 999,999 $m^3$ | $2,000 |
| Up to 339,999 $m^3$ | $1,000 |

**Limited Time Offer**

Enbridge Gas provided double the regular incentive amount for industrial and institutional customers in the EGD rate zone, with incentives up to 75% of the incremental project cost, to a maximum of $50,000 per industrial heat recovery project. To qualify for the LTO, the project must be pre-approved, measure must be installed and paperwork submitted to Enbridge Gas by June 30, 2022.

Enbridge Gas provided double the regular incentive amount to agricultural customers, with incentives up to 50% of the incremental project cost, to a maximum of $100,000 for greenhouse custom retrofit projects. To qualify for the LTO, the project must be pre-approved, measure must be installed and paperwork submitted to Enbridge Gas by June 30, 2022.

## C5. COMMERCIAL & INDUSTRIAL PRESCRIPTIVE (FIXED) INCENTIVE OFFERING

| TECHNOLOGY | CUSTOMER INCENTIVE AMOUNT | SERVICE PROVIDER INCENTIVE AMOUNT | DISTRIBUTOR/DEALER INCENTIVE |
|---|---|---|---|
| **Space Heating** | | | |
| Air Curtain (pedestrian doors, no vestibule, 3'x7') * | $300 | $100 | N/A |
| Air Curtain (pedestrian doors, no vestibule, 6'x7') * | $400 | $100 | N/A |
| Air Curtain (pedestrian doors, no vestibule, 6'x8') * | $500 | $100 | N/A |
| Air Curtain (pedestrian doors, with vestibule, 3'x7') * | $200 | $100 | N/A |
| Air Curtain (pedestrian doors, with vestibule, 6'x7') * | $300 | $100 | N/A |
| Air Curtain (pedestrian doors, with vestibule, 6'x8') * | $400 | $100 | N/A |
| Air Curtain (shipping doors, dock-in, 8'x8', 8'x9', 8'x10') | $3,250 | $100 | N/A |
| Air Curtain (shipping doors, dock-in and drive-in, 10'x10') | $4,000 | $100 | N/A |
| Air Curtain (shipping doors, drive-in, 12'x12') | $6,750 | $100 | N/A |

| TECHNOLOGY | CUSTOMER INCENTIVE AMOUNT | SERVICE PROVIDER INCENTIVE AMOUNT | DISTRIBUTOR/DEALER INCENTIVE |
|---|---|---|---|
| Air Curtain (shipping doors, drive-in, 14'x14', 16'x16', 18'x18', 20'x20') | $8,750 | $100 | N/A |
| Condensing Make-up Air (Constant speed, Minimum 1,500 CFM to maximum 14,000 CFM per unit) | $0.50/CFM | $100 | N/A |
| Condensing Make-up Air (2- Speed or VFD, Minimum 1,500 CFM to maximum 14,000 CFM per unit) | $1.00/CFM | $100 | N/A |
| Demand Control Kitchen Ventilation (Retrofit, up to 5,000 CFM) | $2,700 | $100 | N/A |
| Demand Control Kitchen Ventilation (Retrofit, 5,001 to 10,000 CFM) | $6,000 | $100 | N/A |
| Demand Control Kitchen Ventilation (Retrofit, 10,001 to 15,000 CFM) | $8,800 | $100 | N/A |
| Demand Control Kitchen Ventilation (New construction, up to 5,000 CFM) | $1,200 | $100 | N/A |
| Demand Control Kitchen Ventilation (New construction, 5,001 to 10,000 CFM) | $3,000 | $100 | N/A |
| Demand Control Kitchen Ventilation (New construction, 10,001 to 15,000 CFM) | $4,400 | $100 | N/A |
| Demand Control Ventilation (with CO2 sensor) | $500 | $50 | N/A |
| Destratification Fan (20ft. or greater) | $1,000 | $100 | N/A |
| Dock Door Seal (compression seal, 8'x8', 8'x9', 8'x10') | $950, up to a maximum of 50% total project cost | $100 | N/A |
| Dock Door Seal (shelter seal, 10'x10') | $1,650, up to a maximum of 50% total project cost | $100 | N/A |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 55% to 64% sensible heat recovery effectiveness) | $1.00/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 65% to 74% sensible heat recovery effectiveness) | $1.25/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 75% to 84% sensible heat recovery effectiveness) | $1.50/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 85% or greater sensible heat recovery effectiveness) | $1.75/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $0.50/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $0.75/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $1.15/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 55% to 64% sensible heat recovery effectiveness) | $0.50/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 65% to 74% sensible heat recovery effectiveness) | $0.75/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 75% to 84% sensible heat recovery effectiveness) | $1.00/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 85% or greater sensible heat recovery effectiveness) | $1.25/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $0.25/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $0.50/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $0.75/CFM | $100 | $50 |
| Ozone Laundry (based on weight of laundry processed annually. Maximum $15,000/system) | $0.04/lb. | $100 | N/A |

** Enbridge Gas provided double incentive amount for all double-doors pedestrian doors*

**Distributor Discount Program Incentives (Midstream Initiative)***

| TECHNOLOGY | DISTRIBUTOR/DEALER INCENTIVE ($/UNIT) |
|---|---|
| **HVAC** | |
| Condensing Tankless Water Heaters | $700 |
| Condensing Unit Heaters | $750 |
| **Foodservice** | |
| ENERGY STAR Fryers | $1,000 |
| ENERGY STAR Steam Cookers | $1,000 |
| High-Efficiency Under-Fired Broilers | $750 |
| ENERGY STAR Convection Oven | $750 |
| ENERGY STAR Rack Ovens single | $750 |
| ENERGY STAR Rack Ovens double | $900 |
| ENERGY STAR Combination Oven | $1,250 |
| ENERGY STAR Griddles | $1,250 |
| High-Efficiency Conveyor Broiler <22“ | $1,250 |
| High-Efficiency Conveyor Broiler 22-26“ | $1,500 |
| High-Efficiency Conveyor Broiler >26” | $1,750 |
| High-Efficiency Conveyor Oven <1,520 | $250 |
| High-Efficiency Conveyor Oven >1,520 | $600 |

** There is a 40% mandatory passthrough to the end-user for the incentives listed.*

## C6. COMMERCIAL & INDUSTRIAL DIRECT INSTALL OFFERING

**Shipping Door Offer**

Eligible customers are provided with a shipping door assessment, project recommendation and the installation of shipping and receiving door equipment including Air Curtains and Dock Door Seals, with approximately 90% of total project covered for Air Curtains and 85% of the total project cost covered for Dock Door Seals.

**Demand Control Kitchen Ventilation (DCKV) Offer**

Eligible customers are provided with the installation of a demand control kitchen ventilation system that has both temperature and optic sensors. Between the Enbridge Gas and Save on Energy incentive, approximately 87% of the total project cost is covered on standard installations

## C7. ENERGY LEADERS OFFERING

Technical assistance and financial incentives determined on a case-by-case basis.

## C8. HOME WINTERPROOFING OFFERING

There is no financial cost to the participant for this offering. In addition to home energy assessments, the offering included the following measures:

- Insulation (attic, wall, basement)
- Draftproofing
- Smart thermostats
- Showerheads
- Kitchen and bathroom aerators
- CO detectors
- Pipe Wrap Installation

To be eligible for the offering, the participant must meet the following criteria:

- Occupant of single/semi-detached, town/row house or low-rise multi-family housing (three stories or less, as defined by Part 9 of the Ontario Building Code).
  And
- Income is at or below 135% of Statistics Canada's Low-Income Measure before tax (LIM BT) thresholds (see table below) or participate in government assistance programs (private homeowner or tenant must heat their home with natural gas and pay their own gas bills)
  Or
- Tenant resides in social and assisted housing, regardless of gas bill payment responsibility.

**Statistics Canada's Low-Income Measure Before Tax Thresholds**

| Number of People in the Household | Before-Tax Household Income |
|---|---|
| 1 | $36,578 |
| 2 | $51,729 |
| 3 | $63,354 |
| 4 | $73,157 |
| 5 | $81,791 |
| 6 | $89,598 |
| 7+ | $96,775 |

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## C9. AFFORDABLE MULTI-FAMILY HOUSING OFFERING

| TECHNOLOGY | CUSTOMER INCENTIVE | SERVICE PROVIDER INCENTIVE ($/UNIT) |
|---|---|---|
| **Direct-Install** | | |
| Low-Flow Showerheads | Free | N/A |
| Heat Reflector Panels | Free | N/A |
| **Energy Assessments** (for multi-family buildings 4 stories and higher, or, 6,400sqft and over) | Up to $8,000 per building, an annual maximum limit of $40,000 per housing providers | N/A |
| **Custom Incentives** | | |
| Boilers (include high-efficiency and condensing for seasonal heating and domestic hot water) | $1.00/annual $m^3$ of natural gas saved, up to a maximum of $200,000 or 50% of the fully installed project cost | N/A |
| Other custom solutions | $0.04 per lifetime $m^3$ of natural gas saved, up to a maximum of $200,000 or 50% of the fully installed project cost | N/A |
| **Fixed Incentives** | | |
| Condensing Make-Up Air Units (constant speed, minimum 1,500 CFM to a maximum of 14,000 CFM per unit) | $0.60/CFM | $100 |
| Condensing Make-Up Air Units (two speed, minimum 1,500 CFM to a maximum of 14,000 CFM per unit) | $1.05/CFM | $100 |
| Condensing Make-Up Air Units (variable frequency drive (VFD), minimum 1,500 CFM to a maximum of 14,000 CFM per unit) | $1.05/CFM | $100 |
| Condensing Storage Water Heaters (greater than 75 kBtu/hr) | $0.60/annual $m^3$ of natural gas saved | $100 |
| Condensing Instantaneous (Tankless) Water Heaters (75kBtu/hr or greater) | $0.80/annual $m^3$ of natural gas saved | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $2.50/CFM | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $3.00/CFM | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $3.50/CFM | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $4.00/CFM | $100 |
| Energy Recovery Ventilators (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $0.50/CFM | $100 |
| Energy Recovery Ventilators (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $1.00/CFM | $100 |
| Energy Recovery Ventilators (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $1.50/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $2.15/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $2.50/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $2.90/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $3.30/CFM | $100 |
| Heat Recovery Ventilators (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $0.40/CFM | $100 |
| Heat Recovery Ventilators (Improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $0.80/CFM | $100 |

| TECHNOLOGY | CUSTOMER INCENTIVE | SERVICE PROVIDER INCENTIVE ($/UNIT) |
|---|---|---|
| Heat Recovery Ventilators (Improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $1.20/CFM | $100 |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $175/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $200/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $225/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $250/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Energy Recovery Ventilators (improved effectiveness 65% to 74% sensible heat recovery effectiveness) | $60/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Energy Recovery Ventilators (improved effectiveness 75% to 84% sensible heat recovery effectiveness) | $120/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Energy Recovery Ventilators (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $190/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $150/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $175/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $200/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $225/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $40/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (Improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $100/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (Improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $150/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |

## C10. SAVINGS BY DESIGN AFFORDABLE HOUSING OFFERING

Offering incentives are as follows:

- Enbridge Gas covers the cost of the IDP workshop. In addition, Enbridge Gas provides a Technical Assistance Incentive of $7,500 to offset the cost of professional consulting fees incurred by the housing provider to bring their design team to the workshop.
- For Part 3 developments:
- Participants are eligible for a tiered incentive, up to a maximum of $120,000, depending on the number of units classified as affordable housing as defined by CMHC in the development and achieved energy performance of the multi-residential building once constructed, as follows:

| AMOUNT EXCEEDING 2017 ONTARIO BUILDING CODE | INCENTIVE PER UNIT |
|---|---|
| 15% < X ≥ 17% | $850 |
| X > 17% | $1,000 |

- For Part 9 developments:
    - Following the housing project's construction to at least 15% above the 2017 Ontario Building Code efficiency requirements, participants receive a one-time incentive payment of $5,000.
    - Participants are also eligible to receive $1,500 for each residential housing unit designed at least 15% more energy efficient than the 2017 Ontario Building Code, up to a maximum of $120,000 per project.

Eligibility criteria consists of the following:

- New construction project must be located within the EGD rate zone.
- The project proponent must have been recognized as a builder or provider of affordable housing by a municipal, provincial and/or federal body, by virtue of receiving financial assistance, in the present or at any time in the past, from a government program aimed at affordable housing.
- Must be planning to complete construction within five years of signing the application form for multi-family projects, or within three years or signing the application form for single-family projects.
- The applicant must confirm that natural gas is intended to be used as a primary fuel source to participate in the offering and to access the incentives.

## C11. SAVINGS BY DESIGN RESIDENTIAL OFFERING

Builders are provided with in-kind services of up to $25,000 for design assistance and energy modeling. Performance incentives are as follows:

- Builders that complete the Integrated Design Process (IDP) portion of the offer for the first time are eligible to receive $2,000 per home for up to 50 homes completed to the SBD standard.
- Builders that complete the IDP portion of the offer for the second time are eligible to receive $1,000 per home for up to 100 homes completed to the SBD standard.
- Builders that complete the IDP portion of the offer for the third time are eligible to receive $500 per home for up to 200 homes completed to the SBD standard.

Builder participants have up to three years from the date of their IDP to submit their homes for incentive.

The applicant must confirm that natural gas is intended to be used as a primary fuel to participate in the IDP and to access incentives.

## C12. SAVINGS BY DESIGN COMMERCIAL OFFERING

| PROJECT PHASE | INCENTIVE | DETAILS |
|---|---|---|
| Planning/Design | Services (up to $30,000 value) | Includes IDP session and final IDP report |
| Pre-Construction | $15,000 financial incentive | Provided upon completion of a pre-construction energy model that meets the energy performance target |
| Commissioning | $15,000 financial incentive | Provided upon completion of a final (as-constructed) energy model that demonstrates the building meets the energy performance target |

To be eligible for an incentive, the submitted projects must fulfill the following criteria:

- Construction projects must have a minimum threshold of 50,000 square feet per project (including aggregate multi-location projects).
- Building(s) must be in the design phase or earlier.
- Building construction must be completed within 5 years of completion of the IDP, and building must be commissioned within 1 year of construction completion.
- Builders are eligible to participate in the offering multiple times for different projects.

## C13. SCHOOL ENERGY COMPETITION OFFERING

In addition to prizes awarded throughout the year (such as school/library supplies and computing assets), six financial prizes awarded are as follows:

- The top elementary and secondary school with the most points will receive $3,000 each.
- The second place elementary and secondary schools will receive $2,000.
- The third place elementary and secondary schools will receive $2,000 each.

Schools must register, implement activities and have access to an Energy Management Information System (“EMIS”) to track natural gas consumption. Participating schools must be part of a public school board within the EGD rate zone.

## C14. RUN IT RIGHT OFFERING

In addition to technical support provided by Enbridge Gas, participants are provided the following incentives:

- Enbridge Gas will fund $1,000 towards a facility investigation.
- Enbridge Gas provides up to $8,000 towards implementation costs.
- Enbridge Gas will fund the cost of using the Enbridge Gas Energy Management Information System (“EMIS”) for a period of 12 months or customers may opt to purchase and install a third-party EMIS and receive a $1,000 incentive to cover the cost.

In addition, a $250 incentive is available for energy efficiency partners, for each participant that completes the offering.

Eligibility criteria for the Run it Right offering includes:

- The building consumes natural gas on an annual basis. The building has been occupied with the present use for at least one year prior to participation in Run it Right.
- The building has a compatible Enbridge Gas meter for interval data or has a 3rd party Automatic Meter Reader (AMR) that allows direct access to the building's interval data during the monitoring term.
- No major capital upgrades that impact natural gas consumption are planned for the monitoring term.
- Buildings/accounts that have participated in Run it Right within the past five years must undergo a qualification review.

## C15. COMPREHENSIVE ENERGY MANAGEMENT OFFERING

CEM offers financial incentives as follows:

- Up to 80% of the cost of installation or updates to EMIS, to a maximum of $50,000 per participant
- Up to $10,000 in funding to promote energy awareness and encourage energy efficiency training within the organization
- Participant can apply for up to $2,500 financial assistance for their energy team members to cover the costs of energy management related training (such as CEM certification).

Participants are then eligible to receive financial incentives for their projects, as per the Custom Industrial Offering.

# Appendix D: Offering Details (Union Rate Zones)

## D1. HOME EFFICIENCY REBATE OFFERING

The maximum rebate payment for the Home Efficiency Rebate ("HER") Offering remains at $5,000 per home up until the end of 2022 before the HER+ offering comes into effect, which includes rebates for the home energy assessments, measure upgrades and any applicable bonuses. The measure rebates are displayed in the table below based on the date of the pre-retrofit energy assessment.

### Measure Rebates for 2022

| MEASURE | CRITERIA | REBATE |
|---|---|---|
| Attic Insulation | Increase insulation from R35 or less to at least R60 | $750 |
| | Increase cathedral/flat roof insulation by at least R14 | $650 |
| Air Sealing | Achieve 10% or more above base target | $150 |
| | Achieving base target | $100 |
| Basement Insulation<br>Must upgrade a minimum of 20 per cent of the total wall area | Add at least R23 insulation to 100% of basement | $1,250 |
| | Add at least R12 insulation to 100% of basement | $750 |
| | Add at least R23 insulation to 100% of crawl space wall | $1,000 |
| | Add at least R12 insulation to 100% of crawl space wall | $500 |
| | Add at least R23 insulation to 100% of floor above crawl space | $1,000 |
| Exterior Wall Insulation<br>Must upgrade a minimum of 20 per cent of the total wall area | Add at least R20 to 100% of building | $3,000 |
| | Add at least R9 insulation to 100% of building to achieve a minimum of R12 | $1,750 |
| | Add at least R3.8 to 100% of building to achieve a minimum of R12 | $1,000 |
| Furnace/Boiler | For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace.<br>Or<br>For replacing a less than 90% AFUE natural gas boiler with a 90% AFUE or higher condensing natural gas boiler. | $250 for furnace or $1,000 for boiler |
| Water Heater | Replace existing natural gas water heater with an EF 0.77 or higher, or UEF 0.80 or higher tank type ENERGY STAR® certified natural gas water heater<br>Or<br>Replace existing natural gas water heater with UEF 0.87 or higher tankless ENERGY STAR® certified natural gas water heater | $400 |
| Window/Door/Skylight | For each window, door or skylight replaced with an ENERGY STAR®-qualified model. | $40 |

### Assessment Rebate

Since pre-retrofit and post-retrofit home energy assessments are participation requirements, eligible customers received a rebate of $600 to match the assessment rebate of the CGHG for completing the assessments. The amount is intended to cover the typical cost of the assessments.

### Bonus Rebate

Bonus rebates were offered for participants who completed more than two measures:

- $150 for three measures
- $500 for four measures
- $750 for five measures or more

**Basement Bonus Rebate**

A bonus of $500 is offered to participants who insulate 100% of their basement.

## D2. RESIDENTIAL ADAPTIVE THERMOSTAT OFFERING

Eligible residential Enbridge Gas customers can get a $75 instant discount on qualifying ecobee, Google Nest, Emerson and Honeywell smart thermostats at the time of purchase. Additionally, through the Moderate-Income rebate in collaboration with the IESO Energy Affordability program, customers who fall within certain income brackets (see table below) can apply for an Energy Saving Kit that includes a $125 discount code off one of the qualifying smart thermostats.

Customers who qualify for Moderate-Income must be above the Low-Income cut-off, but at or below the Moderate-Income cut-off.

| Number of People in the Household | Before-Tax Household Income | |
|---|---|---|
| | Low-Income Cut-Off | Moderate-Income Cut-Off |
| 1 | $36,578 | $46,748 |
| 2 | $51,729 | $58,453 |
| 3 | $63,354 | $70,158 |
| 4 | $73,157 | $81,863 |
| 5 | $81,791 | $93,568 |
| 6 | $89,598 | $105,273 |
| 7+ | $96,775 | $116,978 |

Customers must apply for the discount code before purchase, using the offering's instant rebate tool. The discount can be redeemed in the following ways:

- In-store at Home Depot.
- Online at select retailers and manufacturer web stores: BestBuy.ca, ecobee.com, Store.Google.com and emersoncanada.ca/store.
- Apply with a participating contractor via the contractor stream.

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**List of Qualifying Thermostats and Participating Retailers (Union Rate Zones)**

| MANUFACTURER | PRODUCT NAME | MODEL NUMBER | PARTICIPATING RETAILERS | | | | |
|---|---|---|---|---|---|---|---|
| | | | ECOBEE *Online* | GOOGLE STORE *Online* | BEST BUY *Online* | EMERSON *Online* | HOME DEPOT *(In-store)* |
| ecobee | ecobee3 lite | EB-STATE3LTC-02 | ✓ | | | | ✓ |
| ecobee | ecobee SmartThermostat with voice control | EB-STATE5C-01 | ✓ | | ✓ | | ✓ |
| ecobee | Smart Thermostat Enhanced | EB-STATE6LC-01 / EB-STATE6LPC-01 / EB-STATE6L-01 | ✓ | | ✓ | | ✓ |
| ecobee | Smart Thermostat Premium | EB-STATE6C-01 / EB-STATE6-01 | ✓ | | ✓ | | ✓ |
| Google Nest | Google Nest Learning Thermostat: Polished Steel | T3019CA | | ✓ | | | |
| Google Nest | Google Nest Learning Thermostat: Stainless Steel | T3007EF | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Learning Thermostat: White | T3017CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Learning Thermostat: Black | T3016CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Thermostat: Charcoal[27] | GA02081-CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Thermostat: Snow[27] | GA01334-CA | | ✓ | ✓ | | ✓ |
| Google Nest | Google Nest Thermostat: Fog[27] | GA02083-CA | | ✓ | | | |
| Google Nest | Google Nest Thermostat: Sand[27] | GA02082-CA | | ✓ | | | |
| Google Nest | Google Nest Thermostat E[28] | T4000EF | | | | | ✓ |
| Emerson Sensi | Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: Black | ST75C | | | | ✓ | ✓ |
| Emerson Sensi | Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: Silver | ST75SC | | | | ✓ | |
| Emerson Sensi | Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: White[29] | ST75WC | | | | ✓ | ✓ |
| Emerson Sensi | Emerson Sensi Wi-Fi Thermostat | ST55C | | | | ✓ | ✓ |
| Honeywell | Honeywell T9 Smart Thermostat with Built-In Wi-Fi | RCHT9510WFW2017/W | | | ✓ | | ✓ |

*[27] The Google Nest Thermostat (in charcoal, snow, fog and sand) model was added to the offering in October 2020, at the time of Google's product launch.*
*[28] The Google Nest Thermostat E (Model # T4000EF) was discontinued at the Google Store in October 2020, following the announcement of the new Google Nest Thermostat. This model remained available at The Home Depot throughout 2020.*
*[29] The Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: White (Model # ST75WC) was added to the offering in July 2020 through the Emerson web store.*

**List of Qualifying Thermostats for Contractors (Union Rate Zones)**

| BRAND | PRODUCT NAME | MODEL NUMBER | CONTRACTOR ONLY |
|---|---|---|---|
| Lennox | iComfort S30 Smart Thermostat | 12U67 | ✓ |
| Emerson | White Rodgers 1F95U-42WFC Sensi Touch Wi-Fi Thermostat | 1F95U-42WFC | ✓ |
| Emerson | Emerson Sensi Wi-Fi Thermostat 1F87U-42WFC | 1F87U-42WFC | ✓ |
| Emerson | White Rodgers - 1F95U-42WFB Sensi™ Touch Wi-Fi Smart Thermostat | 1F95U-42WFBC | ✓ |

- Contractors can install any of the above devices in both tables.

## D3. COMMERCIAL/INDUSTRIAL PRESCRIPTIVE OFFERING

| TECHNOLOGY | CUSTOMER INCENTIVE AMOUNT | SERVICE PROVIDER INCENTIVE AMOUNT | DISTRIBUTOR/DEALER INCENTIVE |
|---|---|---|---|
| **Space Heating** | | | |
| Air Curtain (pedestrian doors, no vestibule, 3'x7') * | $300 | $100 | N/A |
| Air Curtain (pedestrian doors, no vestibule, 6'x7') * | $400 | $100 | N/A |
| Air Curtain (pedestrian doors, no vestibule, 6'x8') * | $500 | $100 | N/A |
| Air Curtain (pedestrian doors, with vestibule, 3'x7') * | $200 | $100 | N/A |
| Air Curtain (pedestrian doors, with vestibule, 6'x7') * | $300 | $100 | N/A |
| Air Curtain (pedestrian doors, with vestibule, 6'x8') * | $400 | $100 | N/A |
| Air Curtain (shipping doors, dock-in, 8'x8', 8'x9', 8'x10') | $3,250 | $100 | N/A |
| Air Curtain (shipping doors, dock- in and drive-in, 10'x10') | $4,000 | $100 | N/A |
| Air Curtain (shipping doors, drive-in, 12'x12') | $6,750 | $100 | N/A |
| Air Curtain (shipping doors, drive-in, 14'x14', 16'x16', 18'x18', 20'x20') | $8,750 | $100 | N/A |
| Condensing Make-up Air (Constant speed, Minimum 1,500 CFM to maximum 14,000 CFM per unit) | $0.50/CFM | $100 | N/A |
| Condensing Make-up Air (2- Speed or VFD, Minimum 1,500 CFM to maximum 14,000 CFM per unit) | $1.00/CFM | $100 | N/A |
| Demand Control Kitchen Ventilation (Retrofit, up to 5,000 CFM) | $2,700 | $100 | N/A |
| Demand Control Kitchen Ventilation (Retrofit, 5,001 to 10,000 CFM) | $6,000 | $100 | N/A |
| Demand Control Kitchen Ventilation (Retrofit, 10,001 to 15,000 CFM) | $8,800 | $100 | N/A |
| Demand Control Kitchen Ventilation (New construction, up to 5,000 CFM) | $1,200 | $100 | N/A |
| Demand Control Kitchen Ventilation (New construction, 5,001 to 10,000 CFM) | $3,000 | $100 | N/A |
| Demand Control Kitchen Ventilation (New construction, 10,001 to 15,000 CFM) | $4,400 | $100 | N/A |
| Demand Control Ventilation (with CO2 sensor) | $500 | $50 | N/A |

| TECHNOLOGY | CUSTOMER INCENTIVE AMOUNT | SERVICE PROVIDER INCENTIVE AMOUNT | DISTRIBUTOR/DEALER INCENTIVE |
|---|---|---|---|
| Destratification Fan (20ft. or greater) | $1,000 | $100 | N/A |
| Dock Door Seal (compression seal, 8'x8', 8'x9', 8'x10') | $950, up to a maximum of 50% total project cost | $100 | N/A |
| Dock Door Seal (shelter seal, 10'x10') | $1,650, up to a maximum of 50% total project cost | $100 | N/A |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 55% to 64% sensible heat recovery effectiveness) | $1.00/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 65% to 74% sensible heat recovery effectiveness) | $1.25/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 75% to 84% sensible heat recovery effectiveness) | $1.50/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (no existing ERV and not required by code, 85% or greater sensible heat recovery effectiveness) | $1.75/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $0.50/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $0.75/CFM | $100 | $50 |
| Energy Recovery Ventilator (ERV) (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $1.15/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 55% to 64% sensible heat recovery effectiveness) | $0.50/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 65% to 74% sensible heat recovery effectiveness) | $0.75/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 75% to 84% sensible heat recovery effectiveness) | $1.00/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (no existing HRV and not required by code, 85% or greater sensible heat recovery effectiveness) | $1.25/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $0.25/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $0.50/CFM | $100 | $50 |
| Heat Recovery Ventilator (HRV) (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $0.75/CFM | $100 | $50 |
| Ozone Laundry (based on weight of laundry processed annually. Maximum $15,000/system) | $0.04/lb. | $100 | N/A |

** Enbridge Gas provided double incentive amount for all double-door pedestrian doors*

### Distributor Discount Program Incentives (Midstream Initiative)*

| TECHNOLOGY | DISTRIBUTOR/DEALER INCENTIVE ($/UNIT) |
|---|---|
| **HVAC** | |
| Condensing Tankless Water Heaters | $700 |
| Condensing Unit Heaters | $750 |
| **Foodservice** | |
| ENERGY STAR Fryers | $1,000 |
| ENERGY STAR Steam Cookers | $1,000 |
| High-Efficiency Under-Fired Broilers | $750 |
| ENERGY STAR Convection Oven | $750 |
| ENERGY STAR Rack Ovens single | $750 |
| ENERGY STAR Rack Ovens double | $900 |
| ENERGY STAR Combination Oven | $1,250 |

| TECHNOLOGY | DISTRIBUTOR/DEALER INCENTIVE ($/UNIT) |
|---|---|
| ENERGY STAR Griddles | $1,250 |
| High-Efficiency Conveyor Broiler <22“ | $1,250 |
| High-Efficiency Conveyor Broiler 22-26“ | $1,500 |
| High-Efficiency Conveyor Broiler >26” | $1,750 |
| High-Efficiency Conveyor Oven <1,520 | $250 |
| High-Efficiency Conveyor Oven >1,520 | $600 |

** There is a 40% mandatory passthrough to the end-user for the incentives listed.*

## D4. COMMERCIAL/INDUSTRIAL DIRECT INSTALL OFFERING

**Shipping Door Offer**

Eligible customers are provided with a shipping door assessment, project recommendation and the installation of shipping and receiving door equipment including Air Curtains and Dock Door Seals, with approximately 90% of total project covered for Air Curtains and 85% of the total project cost covered for Dock Door Seals.

**Demand Control Kitchen Ventilation (DCKV) Offer**

Eligible customers are provided with the installation of a demand control kitchen ventilation system that has both temperature and optic sensors. Between the Enbridge Gas and Save on Energy incentive, approximately 87% of the total project cost is covered on standard installations

## D5. COMMERCIAL/INDUSTRIAL CUSTOM OFFERING

In addition to technical expertise, the following financial incentives are available to participants:

| ITEM | COMMERCIAL CUSTOMERS INDUSTRIAL CUSTOMERS |
|---|---|
| New Equipment Installation, Equipment Retrofit and Process Optimization Projects | General Service customers (rates M1, M2, R1 and R10): $0.20/$m^3$ for estimated annual natural gas savings, up to 50% of the project cost for Commercial customers and 50% of incremental cost for Industrial customers, to a maximum of $100,000 ($200,000 for greenhouse new build projects).<br><br>Contract customers (M4, M5, M7, T1 and R20): $0.10/$m^3$ for estimated annual natural gas savings, up to 50% of the project cost for Commercial customers and 50% of incremental cost for Industrial customers, to a maximum of $100,000. |
| Engineering Feasibility Studies | 50% of study cost, up to $10,000. |
| Energy Audits (HVAC audits, controls audits, thermal surveys, facility air balances, benchmarking activities, equipment upgrade analyses) | 50% of eligible audit costs*, to a maximum of $4,000. |

| ITEM | COMMERCIAL CUSTOMERS | INDUSTRIAL CUSTOMERS |
|---|---|---|
| Steam Trap Audit | 50% of the eligible audit costs*, to a maximum of $5,000. | 50% of the eligible audit costs*, to a maximum of $6,000. |
| Study Top-Up | Feasibility Study: 50% to a maximum of $4,000. | Engineering Feasibility Study: 50% to a maximum of $10,000.<br><br>Process Improvement Study: 34% to a maximum of $20,000. |
| Process Improvement Studies | -- | 66% of study cost, up to $20,000. |
| Meter Installations | -- | 50% of installed cost, up to $5,000 limit of 5 meters per year per site. |
| Limited Time Offers | $0.40/$m^3$ for estimated annual natural gas savings for Condensing Boiler Projects where Commercial General Service customers commit with an ESA by June 30, 2022, to install a boiler by Oct 31, 2022.<br><br>$0.30/$m^3$ for estimated annual natural gas savings for High-Efficiency Boiler Projects where Commercial General Service customers commit with an ESA by June 30, 2022, to install a boiler by Oct 31, 2022. | 20% Bonus Incentive for Early Projects, for both contract and general service industrial customers; Must be pre-approved by Enbridge Gas to be eligible. Measure must be commissioned and paperwork submitted to Enbridge Gas by June 30, 2022.<br><br>2X incentive for Greenhouse Retrofit projects for all agricultural customers, up to 50% of the incremental project cost, to a maximum of $100k; Must be pre-approved by Enbridge Gas to be eligible. Projects must be installed, and paperwork submitted to Enbridge Gas by June 30, 2022.<br><br>Steam Trap Survey Top-Up: 50 percent of the cost of the survey, to a maximum of $6,000 once the failed traps identified in the steam trap survey have been replaced. |

** The Eligible Audit Costs are the costs invoiced by the applicant's contractor and, exclusive of applicable taxes, incurred solely for the purpose of conducting the Audit and preparing the Audit Report, that are paid by the applicant.*

## D6. HOME WINTERPROOFING OFFERING

There is no financial cost to the participant for this offering. In addition to home energy assessments, the offering included the following measures:

- Insulation (attic, wall, basement)
- Draftproofing
- Smart thermostats
- Showerheads
- Kitchen and bathroom aerators
- CO detectors
- Pipe Wrap Installation

To be eligible for the offering, the participant must meet the following criteria:

- Occupant of single/semi-detached, town/row house or low-rise multi-family housing (three stories or less, as defined by Part 9 of the Ontario Building Code).
  And
- Income is at or below 135% of Statistics Canada's Low-Income Measure before tax (LIM BT) thresholds (see table below) or participation in government assistance programs (private homeowner or tenant must heat their home with natural gas and pay their own gas bills).
  Or
- Tenant resides in social and assisted housing, regardless of gas bill payment responsibility.

**Statistics Canada's Low-Income Measure Before Tax Thresholds**

| Number of People in the Household | Before-Tax Household Income |
|---|---|
| 1 | $36,578 |
| 2 | $51,729 |
| 3 | $63,354 |
| 4 | $73,157 |
| 5 | $81,791 |
| 6 | $89,598 |
| 7+ | $96,775 |

## D7. INDIGENOUS OFFERING

There is no financial cost to the participant for this offering. In addition to home energy assessments, the offering included the following measures:

- Insulation (attic, wall, basement)
- Draftproofing
- Smart thermostats
- Showerheads
- Kitchen and bathroom aerators
- CO and smoke alarms
- Smart Thermostat
- Pipe Wrap Installation

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## D8. AFFORDABLE MULTI-FAMILY HOUSING OFFERING

| TECHNOLOGY | CUSTOMER INCENTIVE | SERVICE PROVIDER INCENTIVE ($/UNIT) |
|---|---|---|
| **Direct-Install** | | |
| Low-Flow Showerheads | Free | N/A |
| Heat Reflector Panels | Free | N/A |
| **Energy Assessments** (for multi-family buildings 4 stories and higher, or, 6,400 $ft^2$ and over) | Up to $8,000 per building, an annual maximum limit of $40,000 per housing providers | N/A |
| **Custom Incentives** | | |
| Boilers (include high-efficiency and condensing for seasonal heating and domestic hot water) | $2.40/annual $m^3$ of natural gas saved, up to a maximum of $200,000 or 50% of the fully installed project cost | N/A |
| Other custom solutions | $0.10 per lifetime $m^3$ of natural gas saved, up to a maximum of $200,000 or 50% of the fully installed project cost | N/A |
| **Fixed Incentives** | | |
| Condensing Make-Up Air Units (constant speed, minimum 1,500 CFM to a maximum of 14,000 CFM per unit) | $0.60/CFM | $100 |
| Condensing Make-Up Air Units (two speed, minimum 1,500 CFM to a maximum of 14,000 CFM per unit) | $1.05/CFM | $100 |
| Condensing Make-Up Air Units (variable frequency drive (VFD), minimum 1,500CFM to a maximum of 14,000CFM per unit) | $1.05/CFM | $100 |
| Condensing Storage Water Heaters (greater than 75 kBtu/hr) | $1.40/annual $m^3$ of natural gas saved | $100 |
| Condensing Instantaneous (Tankless) Water Heaters (75kBtu/hr or greater) | $1.90/annual $m^3$ of natural gas saved | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $6.30/CFM | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $7.30/CFM | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $8.30/CFM | $100 |
| Energy Recovery Ventilators (no existing ERV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $9.30/CFM | $100 |
| Energy Recovery Ventilators (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $1.00/CFM | $100 |
| Energy Recovery Ventilators (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $2.00/CFM | $100 |
| Energy Recovery Ventilators (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $3.00/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $5.35/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $6.25/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $7.25/CFM | $100 |
| Heat Recovery Ventilators (no existing HRV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $8.25/CFM | $100 |

| TECHNOLOGY | CUSTOMER INCENTIVE | SERVICE PROVIDER INCENTIVE ($/UNIT) |
|---|---|---|
| Heat Recovery Ventilators (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $1.00/CFM | $100 |
| Heat Recovery Ventilators (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $2.00/CFM | $100 |
| Heat Recovery Ventilators (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $3.00/CFM | $100 |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $175/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $200/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $225/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Energy Recovery Ventilator (no existing HRV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $250/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Energy Recovery Ventilators (improved effectiveness 65% to 74% sensible heat recovery effectiveness) | $60/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Energy Recovery Ventilators (improved effectiveness 75% to 84% sensible heat recovery effectiveness) | $120/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Energy Recovery Ventilators (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $190/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 55% to 64% sensible heat recovery effectiveness) | $150/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 65% to 74% sensible heat recovery effectiveness) | $175/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 75% to 84% sensible heat recovery effectiveness) | $200/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (no existing HRV or not required by Code, 85% or greater sensible heat recovery effectiveness) | $225/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (improved effectiveness, 65% to 74% sensible heat recovery effectiveness) | $40/unit | 5% of the total customer incentive per building. One service provider incentive |
| In-suite Heat Recovery Ventilators (improved effectiveness, 75% to 84% sensible heat recovery effectiveness) | $100/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |
| In-suite Heat Recovery Ventilators (improved effectiveness, 85% or greater sensible heat recovery effectiveness) | $150/unit | 5% of the total customer incentive per building. One service provider incentive payment per building. |

## D9. LARGE VOLUME DIRECT ACCESS OFFERING

Incentive Guidelines:

| ITEM | INCENTIVE |
|---|---|
| Engineering Feasibility Study | 50% of the cost, up to $10,000 |
| Process Improvement Study | 66% of the cost, up to $20,000 |
| Steam Trap Survey | 50% of the cost, up to $6,000 |
| Meters | 50% of the cost, up to $5,000 per meter |
| Customer Education | Provided by or funded by Enbridge Gas |
| New Equipment Installation, Equipment Retrofit, Process Optimization Projects and Operational Improvement | Direct Access Funded: $0.10 per annual $m^3$ saved, up to $100,000*<br>Aggregate Pool Funded: $0.05 per annual $m^3$ saved, up to $40,000* |

** Incentive cannot exceed 50% of project cost.*

## D10. OPTIMUM HOME OFFERING

Incentives include:

| PHASE | INCENTIVE |
|---|---|
| Phase One: Design | In-kind services up to $30,000 value per builder<br>$3,000 cash incentive per builder towards the prototype Discovery Home |
| Phase Two: Build | In-kind services up to $25,000 value per builder |
| Post Phase: Retain | In-kind services up to $15,000 value per builder |

## D11. COMMERCIAL SAVINGS BY DESIGN OFFERING

| PROJECT PHASE | INCENTIVE | DETAILS |
|---|---|---|
| Planning/Design | Services (up to $30,000 value) | Includes IDP session and final IDP report |
| Pre-Construction | $15,000 financial incentive | Provided upon completion of a pre-construction energy model that meets the energy performance target |
| Commissioning | $15,000 financial incentive | Provided upon completion of a final (as-constructed) energy model that demonstrates the building meets the energy performance target |

To be eligible for an incentive, the submitted projects must fulfill the following criteria:

- Construction projects must have a minimum threshold of 50,000 square feet per project (including aggregate multi-location projects).
- Building(s) must be in the design phase or earlier.

- Building construction must be completed within 5 years of completion of the IDP, and building must be commissioned within 1 year of construction completion.
- Builders are eligible to participate in the offering multiple times for different projects.

## D12. RUNSMART OFFERING

In addition to technical support provided by Enbridge Gas to identify energy savings opportunities, participants are provided the following financial incentives:

| DEMONSTRATED SAVINGS | FINANCIAL INCENTIVE |
|---|---|
| 5% to below 10% | $0.20 per annual $m^3$ saved |
| 10% to below 15% | $0.25 per annual $m^3$ saved |
| 15% or more | $0.30 per annual $m^3$ saved |

To be eligible for the offering, participants must consume more than 50,000 $m^3$ of natural gas annually and must not have recently implemented energy conservation measures at their site (e.g. non-DSM participants and/or customers who have not participated in the last two years). Participants must confirm there are no major capital upgrades planned for the duration of the monitoring period.

## D13. STRATEGIC ENERGY MANAGEMENT OFFERING

| PARTICIPATION PERIOD | INCENTIVES |
|---|---|
| Year One:<br>Start-up incentives | Up to $25,000 to support the purchase and installation of sub-metering and data management equipment |
| | In-kind technical support from Enbridge Gas and a third-party expert |
| Year Two:<br>Baseline incentive | Continuation of in-kind technical support, as baseline data is being collected and analyzed |
| Years Three to Five:<br>Fixed performance incentives* | Year Three: $10,000 for energy savings of 5% or more over baseline |
| | Year Four: $15,000 for energy savings of 10% or more over baseline |
| | Year Five: $20,000 for energy savings of 15% or more over baseline |

** A minimum of 5% savings compared to baseline is required to qualify for any performance incentive.*

To be eligible, a participant must be a contract industrial-manufacturing customer who has not participated in Enbridge Gas's previous integrated energy management system offering, with a minimum annual natural gas usage of 1,000,000 $m^3$, and does not have an existing energy management system (i.e. an integrated system to track, report, and plan continuous improvement energy efficiency activities). Customers also need to enter into a participation agreement with Enbridge Gas and commit to establishing an energy performance baseline.

ENBRIDGE

# Appendix E: Abbreviations and Acronyms List

| | ABBREVIATION/ACRONYM | FULL NAME |
|---|---|---|
| A | AFUE | Annual Fuel Utilization Efficiency |
| | Amendment 15 | NRCan's Regulations Amending the Energy Efficiency Regulations, 2016 (Amendment 15): SOR.2019-164 |
| C | CEE | Consortium for Energy Efficiency |
| | CEM | Comprehensive Energy Management |
| | CFM | Cubic feet per minute |
| | C/I | Commercial/Industrial |
| | CSBD | Commercial Savings by Design |
| D | DCKV | Demand Control Kitchen Ventilation |
| | DCP | Design Phase Charette |
| | DCV | Demand Control Ventilation |
| | DSM | Demand Side Management |
| | DSMVA | Demand Side Management Variance Account |
| E | EAC | Evaluation Advisory Committee |
| | EC | Evaluation Contractor |
| | EEP | Energy Efficiency Plan |
| | EMIS | Energy Management Information System |
| | EM&V | Evaluation, Measurement and Verification |
| | ERV | Energy Recovery Ventilation |
| | ESA | Energy Solutions Advisors |
| H | HER | Home Efficiency Rebate |
| | HRV | Heat Recovery Ventilation |
| | HVAC | Heating, Ventilation and Air Conditioning |
| | HVLS | High Volume Low Speed |
| I | IDP | Integrated Design Process |
| | IESO | Independent Electricity System Operator |
| L | LICO | Low-Income Cut-Offs |
| | LRAM | Lost Revenue Adjustment Mechanism |
| | LTO | Limited Time Offer |
| N | NECB | National Energy Code of Canada for Buildings |
| | NRCan | Natural Resources Canada |
| | NTG | Net-to-Gross |
| O | OBC | Ontario Building Code |
| | OEB | Ontario Energy Board |
| P | PAC | Program Administrator Cost |
| R | REA | Registered Energy Advisor |
| S | SBC | Sustainable Building Canada |
| | SEM | Strategic Energy Management |
| | SO | Service Organization |
| T | TRC-Plus | Total Resource Cost Plus |
| | TRM | Technical Resource Manual |

# Appendix F: Prescriptive Midstream Commercial Offering Process Evaluation

# PRESCRIPTIVE MIDSTREAM COMMERCIAL OFFERING PROCESS EVALUATION

## ENBRIDGE GAS INC.

Provisional Final Report

June 23, 2022

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# EXECUTIVE SUMMARY

This report presents the results of the process evaluation of the Enbridge Gas Inc. (Enbridge or Enbridge Gas) Prescriptive Midstream Commercial Offering (the Program).

The objectives for this project were to provide information and qualitative insights to Enbridge Gas on several key process aspects of the Program that respond to the following questions:

› Which program elements are the most effective and least effective in influencing marketing, sales and stocking practices.

› Which program elements are perceived to be useful to participants?

› Why are some distributors electing not to participate in the program?

The research approach and evaluation plan developed to respond to these questions centred primarily on a series of interviews to allow for probing of the questions with program staff, the Program delivery Service Provider (PDSP), and with participating and non-participating distributors. For clarity, this evaluation did not aim to evaluate or verify the quantitative performance, impact, or market effects of the program, as these are the purview of the Ontario Energy Board's (OEB) Evaluation Contractor (EC) under the current Demand Side Management (DSM) framework.

The following is a narrative summary of the most important findings of the process evaluation of the Program.

**Program administration and delivery is very good:** The PDSP engaged to provide design support and to deliver the program is highly qualified and experienced in delivering midstream programs, and in working in the Ontario commercial sector. This is evidenced in the present evaluation from various perspectives. The Evaluator found comprehensive plans and reports for operations, communications, marketing, and for quality assurance. The Evaluator found a deep understanding of the participants' perspectives and strong relationships, as evidenced by staff and participant interviews. Finally, the Evaluator found a program tracking system that is generally well received by participants, and for which participants acknowledged the excellent support provided by the PDSP.

The Evaluator makes several minor recommendations relating to potential improvements in this area, but by-and-large, the administration and delivery of the program should not be an area of focus or concern for Enbridge going forward as it improves the program.

**The COVID pandemic has had significant impacts on market conditions:** The market assumption and influence pathway challenges described further below were exacerbated by the arrival and timing of the pandemic during the second year of the program. Its effects are on-going and likely to continue to varying degrees into the foreseeable future. While this evaluation scope is limited and unable to fully characterize the effects of the pandemic on the Ontario market for products on the Qualified Product List QPL, the Evaluator is nevertheless comfortable providing qualitative observations as to the impacts

these effects have had on the program's design assumptions. The most influential factors at play include:

- the pandemic's impact on market actor staffing, operations and general business priority setting,
- the rapidly changing buying practices of end-users and contractors during the pandemic as they responded to their own restrictions and opportunities,
- supply chain issues for shipping and availability of products for all product categories, availability of parts for product support and maintenance,
- and finally, significant price inflation for products, materials and labour.

These factors serve to create an overall environment in which participating distributors may not perceive the value to prioritize investment of time and energy into the program over other important business priorities and challenges. For instance, as a result of supply chain issues, distributors may be more focussed on selling products that are available and that meet the needs of their customers, rather than risk the pushback they may encounter from customers on trying to promote greater efficiency equipment that would come with a higher first-cost price and may have issues with availability. These observations are all evidenced to varying degrees in the results of the field research and in interviews with the PDSP. These observations suggest that the program's assumptions about the influence of distributors on sales of products on the QPL has likely been further reduced by the effects of the pandemic over-and-above the basic character of the market as detailed further in the point below.

Considering this, the Evaluator's recommendations to characterize the market and consider alternate marketing and incentive delivery approaches as stated in the point below raise to a higher level of importance.

**Initial program design market assumptions and influence pathways are being challenged:** As evidenced by the significant time and effort required to recruit and onboard distributors, the program's market characterization assumptions and consequent design appears to have underestimated the capacity and readiness of the distributors to deliver midstream programming. This is due to two elements, the first is the inertia of the longstanding supply chain dynamics between manufacturers and distributors. The results of the evaluation suggest that while the program is causing some participants to adjust their product lines, by and large the products carried and promoted by distributors are influenced by the historic quality of the relationships with manufacturers and the resulting assurances of product support provided by the manufacturers for the product lines carried by distributors. These dynamics influence the distributors' motivation to carry, purchase, and sell products to support program goals. The second element is distributor's perception of their own role relative to the end-users and contractors to whom they sell. In this regard, the Evaluator found that most program participants are generally inclined to state that their customers (end-users and contractors) are buying based on price and availability, and that for about half of them, sales practices have only moderately, or not at all been influenced by the program in terms of upselling customers to the energy efficient products on the QPL. The participants generally view the program as an added sales tool to facilitate existing sales practices, and recognize some benefits in this regard, but most do not yet appear to have achieved a level of

participation in the program where the program's incentive is actively and intentionally altering their sales practices.

As a result of these dynamics, much of the program delivery efforts up to the date of this evaluation have focused on understanding and developing manufacturer and distributor relationships, recruiting them into the program, and building their motivation and capacity to sell the qualified products and transact in the program in the first instance. The program's objectives of providing support, training, and resources to create an environment in which distributors actively upsell end-users and contractors to higher efficiency products from the QPL have become secondary. This is understandably by necessity based on the lack of participant capacity and readiness to receive such interventions due to the pandemic and market drivers presented above.

An additional complicating factor is that the Evaluator found evidence that many participants view the current value-proposition of the program to be moderate. As such, the Evaluator believes that they may, in a general sense, be reluctant to invest significantly more time and energy into further training to try to improve their engagement in program objectives without more value added in the program, such as with an expanded QPL. That said, the Evaluator is of the view that the program now has a strong footing in terms of transaction systems and participant-PDSP relationships from which it may refocus efforts on this important program aspect going forward.

In conjunction with the observations related to the pandemic above, the Evaluator makes recommendations to undertake additional market characterization research with end-users and contractors and consider adjusting the program marketing and incentive approach to moderate these effects. The Evaluator also makes recommendations that aim to increase the value proposition to participating distributors to ensure their continued engagement in the program as it moves into its next phase.

**Program information and tracking systems can be improved to better demonstrate program influence**: While program administration and delivery is excellent, the program's take-to-market approach, the program's participation agreement requirements and the performance-based way that delivery has been procured could make quantitative demonstration of program influence and incremental savings over naturally occurring sales challenging. It should be noted that this process Evaluation did not aim in its scope to quantify market effects or free ridership, rather, the Evaluator's aim was to identify program elements that may contribute to reducing or increasing free ridership. In this light, the Evaluator observed some potential challenges on three fronts: sales information, tracking program activities that demonstrate influence, and end-user and contractor buying decisions and trends, each of which are further elaborated below.

*Baseline and performance-period sales information*

Obtaining reliable product sales information of products in the relevant program QPL categories as a share of all products sold in Ontario from those categories has historically represented and continues to represent a challenge to the Program. When asked, participating distributors were clear that they would

not be willing to share more information that is currently required and under the current program value proposition. This is a common problem in midstream programs and, is in alignment with PDSP comments and observations collected during staff interviews. While the Evaluator recognizes that efforts and inquiries were made to obtain sales information from manufacturers and participating distributors, we also note that these efforts took place in an environment that prioritized enrolment and participation over an obligation to share data. The program's current participation agreements do not require reporting this type of information.

In the initial stages of a program, this is understandable, but it may not be sustainable in the long term given the critical role such information plays in assessing a program's net impacts. As a result, while the program effectively tracks and reports all units incented under the program, it currently does not have access to broader product sales information required to quantitatively determine the share of energy efficient products sold, the lift of the program in any program period, nor the increase in percentage sales of the QPL products relative to baseline market conditions before the program launched.

*Tracking and reporting program activities that demonstrate program influence*

Additionally, the program's performance targets emphasize the number of participating distributors enrolled, the quantity of units sold, and the cubic meters of gas saved (via the PDSP's contract and the delivery of the program on a pay-for-performance basis for these metrics). This indicator set may not adequately support the program's stated logic pathways of overcoming capacity barriers in the marketplace and transforming business practices among participating distributors to upsell energy efficient products. While the PDSP provides good qualitative reporting on program engagement, training and marketing and communication activities, the Evaluator did not find systematic tracking and reporting systems implemented with the specific aim to capture and quantify program activities nor to quantify potential program influences and impacts in these areas. These could include for example, participant sales training delivered and attendance, participant milestones achieved in terms of sales practices implemented, or the number of participating distributors expanding product lines to include more of the QPL.

*End-user and contractor contact information and purchasing decision-making practices*

Contact information which traces product sales to end-users via contractors is not available to the PDSP, nor to Enbridge or its process evaluation consultant. This is due largely to participant's stated privacy concerns and to the additional effort required to collect and transmit this information. These concerns we stated both during initial program engagement and restated in some instances during this process evaluation. This lack of reliable contact information further complicates market research and evaluation activities that might otherwise help to demonstrate program influence. This could be particularly important for large end-users who may have outsized influence on product sales through the program. The operating and purchasing practices of the larger food-services end-users is not fully understood, and as such, how the program may or may not be influencing these practices is also not known. On one hand, these important market actors may themselves be driving market transformation via their

purchasing power and progressive corporate policies; or on the other hand, the existence of rebate programs may be directly influencing these the adoption of these corporate policies in the first instance.

Considering the above findings, the Evaluator makes a series of recommendations to redouble efforts to collect sales and contract information as a condition of participation, and to make further investments in market research to attempt to better understand the Ontario market for sales of qualified products in these product categories, as well as research to understand the trends and influences among end-users and contractors. Additionally, the Evaluator makes recommendations to review program tracking and metrics that better support demonstration of the program's logic in matters relating to training, capacity building, upselling, and stocking practices.

# INTRODUCTION

This report presents the results of the process evaluation of the Enbridge Gas Distribution (Enbridge) Prescriptive Midstream Commercial Offering (the Program). This Program was undertaken as a pilot in 2018 under the extended 2015-2020 DSM framework (now into the 2022 transition year), and Enbridge has offered it as an official program under the "Commercial & Industrial Prescriptive (Fixed) Incentive Offering" since 2019[1]. Under a unique arrangement with the IESO and the Program Delivery Service Provider, CLEAResult (the PDSP), this program has been delivered in collaboration with the IESO since the IESO introduced their "Foodservice Distributor Discount Program" in 2020.

Given the relatively novel (to Ontario) midstream nature of the program, it is important to place this process evaluation into some context. In their 2020 DSM Annual report[2], and the 2022-27 DSM Plan application[3], Enbridge highlighted several challenges associated with delivering a mid-stream offering that are relevant. These include:

- The time and effort required to develop relationships with, to onboard and to train participating distributors, which adds to the program administration costs and to the time required for the program to gain traction in the market.
- The Technical Reference Manual (TRM) for prescriptive measures used in the program must be simple and avoid (site-specific) quasi-prescriptive input requirements that complicate the sales process for participating distributors.
- Distributors face barriers in having to meet program requirements which require them to update systems and payment processes and to provide training to sales staff regarding program requirements.
- It can be difficult to maintain participating distributor/retailer focus without significant offerings in terms of the number and type of measures on the Qualified Product List (QPL).

In addition to the above stated challenges, there are several additional factors that are also important in developing the context for the present process evaluation. These include a degree of uncertainty about how a new midstream program would eventually be evaluated, the choice to use a PDSP to provide design support and to deliver the program, and the impacts of the COVID pandemic on the Ontario food services and HVAC industry, which cannot be overstated. These challenges are relevant to the present work in the following ways:

- **OEB Evaluation Activities:** At the time of the program's planning and launch, there was uncertainty at Enbridge and with the PDSP regarding how the program would eventually be

[1] Enbridge Gas Inc. (Enbridge Gas) Ontario Energy Board (OEB) File No.: EB-2021-0002 Multi-Year Demand Side Management Plan (2022 to 2027) Exhibit E, Tab 1 Schedule 4 Page 31 of 36.
[2] DRAFT 2020 Demand Side Management Annual Report, April, 2021, p35 and p36
[3] Enbridge Gas Inc. (Enbridge Gas) Ontario Energy Board (OEB) File No.: EB-2021-0002 Multi-Year Demand Side Management Plan (2022 to 2027) Exhibit E, Tab 1 Schedule 4 Page 31 of 36.

Evaluated by the OEB's Evaluation Consultant. The savings verifications undertaken to date had considered commercial prescriptive offerings together, but none were offered in the midstream channels. Further, although the OEB's Evaluation Consultant had undertaken NTGR studies, these have to date focused on custom incentives, and not on the prescriptive offerings. As such, the lack of history or precedent for evaluation of midstream programs in Ontario came to represent something of a concern to Enbridge. Enbridge acknowledge these concerns in the 2022-27 DSM Application filing[4]:

*"While the details of a NTG study for this offering requires attention and discussion with the EC and EAC, Enbridge Gas submits that the focus of a study for this type of mid-market offering must be based on vendors, rather than customers/end-users. This offering is designed to interact with and influence vendors, and as such, a traditional NTG study focused on customers/end-users would not be supported by Enbridge Gas."*

The uncertainty of the evaluation approach for the program was relevant in the initial program design and launch stages of the program. This is because the choices for how and when to collect information, be it sales information or contact information, is ideally informed by a fully developed program evaluation plan, which was not yet elaborated for this program at the time of design and launch.

› **Program Delivery via 3rd Party PDSP**: The design support and delivery of the program was procured via a competitive process and resulted in a highly qualified PDSP (CLEAResult) being selected and retained. Under the resulting performance-based[5] program delivery arrangement, the PDSP was to provide input into initial engagement and recruitment strategies based on their existing knowledge of the Ontario Food Services and HVAC markets, as well as their experience delivering similar programs in other jurisdictions. They would deliver the program in a so-called turnkey approach in which the PDSP provides program administration staff, as well as providing and managing the transaction information systems required for the program.

At a high-level, the resulting program delivery agreement placed the responsibility of promoting, recruiting, training, transaction administration, settlement, and quality assurance with the PDSP, while Enbridge retained overall program design and oversight, PDSP contract management and all production and administration of marketing materials and associated digital content management and social media presence, as well as all liaison with the OEB and its Evaluation Advisory Committee, as required.

› **COVID Pandemic:** The scope of this process evaluation did not allow an in-depth treatment or analysis of COVID impacts relative to their overall scope and scale, which are in the Evaluators opinion far reaching. That said, over the course of this study, numerous types of impacts became evident, and it became clear that they represent fundamental shifts in market conditions which

[4] Enbridge Gas Inc. (Enbridge Gas) Ontario Energy Board (OEB) File No.: EB-2021-0002 Multi-Year Demand Side Management Plan (2022 to 2027) Exhibit E, Tab 1 Schedule 4 Page 36 of 36.
[5] In this type of arrangement, the PDSP's remuneration is based on the performance of the program defined in large part on gross gas savings achieved.

may be lasting for the immediately foreseeable future. These include impacts to participating distributor staffing and general priority setting, issues with product and parts availabilities and the potential for associating shipping delays, as well as significant price inflation affecting both the product categories in the program, but which are also broad-based and are affecting distributor's client needs and purchasing behaviours, and decision-making generally.

These impacts and the uncertainties and responses that they engendered in the market were taking place during the second year of program operations and continue to the present time. In the Evaluators opinion, the turbulence and complex dynamics of the market due to the pandemic challenges the set of program design assumptions and program operating assumptions made pre-pandemic.

With that context established, the balance of this report is presented in the following sections:

- **Methodology and Evaluation Plan**, which describes the parameters of the study.
- **Document Review and Staff Interviews,** which presents the results of our exploratory research of the program documents and staff input on issues pertinent to the study.
- **Field Interview Results,** which presents the findings of our qualitative research with program participants and non-participants.
- **Findings and Recommendation**, which presents our findings and associated recommendations.

# 1 METHODOLOGY AND EVALUATION PLAN

### *Objectives*

The objectives for this project were to provide information and qualitative insights to Enbridge Gas on several key process aspects of the Program that respond to the following questions:

- Which program elements are the most effective and least effective in influencing marketing, sales and stocking practices? Which program elements are perceived to be useful to participants[6]? Which improvements could be made?
- Why are some distributors electing not to participate in the program?

In addition to these objectives, Enbridge also wanted to gain an understanding of the potential free ridership risks associated with midstream programs and how to mitigate them, leading to the following areas of research:

- Which program elements are lower value from a program administration cost perspective?
- Which program elements and factors might inadvertently increase the potential for free ridership? Can these be reduced? Which factors or processes might reduce free ridership? Can Enbridge build on these?
- Are there measures that might be easier to transact and that could improve participant value as well as enhance the performance of the program? Are there measures that are problematic for one reason or another?

### *Approach*

The research approach and evaluation plan developed to respond to these questions centred primarily on a series of interviews to allow for probing of the issue with program staff, the PDSP, and with participating and non-participating distributors. For clarity, this evaluation did not aim to evaluate or verify the quantitative performance, impact, or market effects of the program, as these are the purview of the OEB's Evaluator under the current DSM framework.

The Evaluator also notes here that the initial evaluation plan also presented options for collecting data from HVAC contractors, as well as from Food Services end-users (those purchasing the qualified products). These options were later not exercised due to the lack of availability of contact information in the case of end-users, and lack of participation in data collection activities by HVAC contractors.

### *Treatment of Evaluation Period and IESO Electric Midstream Program Offerings*

The evaluation period of this study is January 1 – March 30, 2020. However, unlike in an impact evaluation in which a specific time period is required to establish boundaries for quantitative analysis and compilation of performance data, in a qualitative process evaluation, these boundaries can present

[6] In midstream programs, the participants are product distributers and retailers, and not the product end-users as is typical in many DSM programs.

some challenges. This is because both program staff, and participants and non-participants alike are often unable to distinguish between program elements that were present specifically in the evaluation period, and they can sometimes base their feedback on elements present at the time of the data collection interviews (in this case a year later than the evaluation period). Throughout this report, the Evaluator highlights when such feedback is included in the present study, and a footnote calls the reader's attention to the fact the information is related to an issue that falls outside the evaluation period.

This same issue is present respecting the participant and non-participant perceptions of both the Enbridge midstream gas offerings and the jointly delivered IESO electric offerings, which are easily conflated, not withstanding interviewer data collection instruments and instructions calling attention to, and distinguishing between, the two. Again, throughout this report, the Evaluator highlights when feedback included in the present study appears to be related to the IESO offering, and not the Enbridge offering, and a footnote calls the reader's attention to the fact the information is related to an issue that falls outside the evaluation scope.

### *Evaluation Plan*

The Evaluation Plan, including research questions and evaluation activities are presented below.

**Table 1: Research Questions and Methodology**

| Evaluation Objectives | Research Questions | Evaluation Activities |
|---|---|---|
| Gain insights on standard practices | › What are the influence pathways for purchasing the products in question?<br>› What are current sales practices respecting energy-efficient measures?<br>› What is the role of ENERGY STAR or energy efficiency generally in sales/buying/stocking decisions? | › Participant Interviews<br>› Non-Participant Interviews |
| Understand which program elements are most effective | › Which program elements are the most and least effective at influencing the sale of the energy-efficient products?<br>› To what degree is the program influencing stocking practices, engagement with customers and sales systems?<br>› Are the qualified products the right ones? | › Staff Interviews<br>› Participant Interviews |
| Gather insights on barriers to participation | › What is preventing identified distributors from participating? | › Non-Participant Interviews |
| Review effectiveness of program processes | › Are the program processes effective at supporting the delivery of the program?<br>› Is the on-line portal effective?<br>› Can additional sales data and contact information be reasonably collected? | › Staff Interviews<br>› Participant Interviews |

| Evaluation Objectives | Research Questions | Evaluation Activities |
|---|---|---|
| Assess effectiveness of marketing and communication activities | › Is the program's intended messaging and communication effective?<br>› What are the most effective communication vehicles? | › Staff Interviews<br>› Participant Interviews |

**Table 2: Preliminary Evaluation Activity Summary**

| Activities | Outputs | Methodology and Sample Details[7] |
|---|---|---|
| Document Review | › Document review summary informing subsequent evaluation activities | › Document request<br>› On-line portal and database review |
| Enbridge Program Staff Interviews | › Program staff perspectives on program processes, successes, challenges, opportunities, and areas for improvement. | › n=up to 2 interview meetings with applicable program staff |
| Program Delivery Agent Staff Interviews | › Delivery service provider staff perspectives on program processes, successes, challenges, opportunities, and areas for improvement | › n=2 interview meetings with applicable service delivery provider staff |
| Participant Interviews | › Business practices<br>› Participant perspectives on program elements, potential barriers to program participation, communication effectiveness | › n=6 of 21 HVAC Distributors<br>› n=8 of 34 Food Service Distributors |
| Non-Participant Interviews | › Business practices<br>› Non-Participant perspectives on barriers to program participation | › n= 3 of 5 HVAC Distributors<br>› n=0 of 18 Food Service Distributors |

[7] The values shown are the final sample sizes of completed interviews. The initial evaluation plan called for higher sample sizes, but final participation was lower than expected.

# 2 DOCUMENT REVIEW AND STAFF INTERVIEWS

The initial phases of the process evaluation included a review of relevant background, design, and operational documentation for the program, as well as interviews with staff from Enbridge's program delivery team and the PDSP's team.

## 2.1 Document Review

The objective of the document review task was to ensure that the Evaluator understood the history of the program, its regulatory context and concerns, and to subsequently inform the development of staff interview data collection instruments in accordance with the overall research questions. Table 1 presents the Evaluator's observations from the document review.

**Table 3: Program Document Review Observations**

| Document Types | Information Reviewed or Requested | Observations |
|---|---|---|
| Regulatory | › Filing Documents and OEB Decisions and Orders pertaining to:<br>– 2015-2020 DSM Plan, Mid-term, and Annual Reports<br>– 2021 and 2022 extension of the 2015-2020 DSM plan<br>– 2022-2027 DSM Plan Application<br>– OEB 2021-2022 DSM EM&V Plan<br>– OEB DSM Annual Verification Reports and Recommendations | › This program has not yet been the subject of any formal stand-alone savings verification or NTGR study through the OEB's Evaluation Consultant's process. The methodology and evaluation plan of the eventual evaluation is yet unknown to Enbridge and to the PDSP.<br>› Several OEB decisions and orders over the past planning and evaluation cycles have encouraged Enbridge to improve program free ridership rates in their commercial sector programs and to demonstrate efforts to ensure that programs improve cost-effectiveness.<br>› The Program consists of prescriptive measures which had been previously delivered through resource acquisition programing, and the Program was positioned under the same scorecards. |

| Document Types | Information Reviewed or Requested | Observations |
|---|---|---|
| Market Information | › 2019 Natural Gas APS (for Commercial HVAC and Food Service specifically)<br>› Natural Gas and Electricity Prescriptive Measure TRM<br>› Other market studies for sector or technologies undertaken by Enbridge | › The small commercial market segment continues to represent significant potential for natural gas savings, but this market is likely in the most challenging position with respect to COVID (especially food service).<br>› Enbridge has been actively engaged in assessing the potential for upstream/midstream programming since at least 2016 when they commissioned two studies on the potential for Condensing Water Heater and HRV/ERV programming respectively to be delivered in an upstream/midstream, approach.<br>› Enbridge provided the Evaluator with a list of various ongoing research (benchmarking studies, jurisdictional scans, literature reviews) and committee activity that supports their understanding of the midstream and upstream program delivery mechanisms, and which ultimately informed and supported the design of the Program, and the decision to implement it.<br>› That said, there were no specific market baseline studies nor market characterization reports associated with the Food Services and HVAC market segments that were provided to the Evaluator by Enbridge or the PDSP. Enbridge referred the Evaluator to the terms of reference for the program design and delivery request for proposal, and proposal response from the PDSP to support a choice to rely on the PDSPs expertise for supporting market information in lieu of a formal study. |
| Program Design Documents | › Program Objectives and Logic Model<br>› Qualified Product List (QPL)<br>› Program uptake and cost-effectiveness modeling<br>› Stakeholder Consultation Feedback | › The program design documentation from the early program development which was initially provided to the Evaluator for the Distributor Discount program was characterized by Enbridge as being “high-level” owing to the speed with which the program was put into market and owing to the decision to deploy the program through a third-party service provider experienced in mid-stream program design and delivery. The Evaluator agrees with this characterization as this initial program logic model lacked detail relative to program activities, and the coherence of the stated linkages between barriers, program activities, outputs and outcomes to their associated indicators was lacking.<br>› The Evaluator was subsequently provided with a more detailed logic model which was later developed as part of a subsequent DSM plan filing, as well as PDSP Statements of Work for design support activities that superseded these earlier design documents. These all reflected a more coherent set of program design intentions however, the overall set of program design documents remain |

| Document Types | Information Reviewed or Requested | Observations |
|---|---|---|
| | | unconsolidated, and lack a degree organization and cohesiveness expected of contemporary program implementations.[8]<br>› The QPL is developed and managed on an ongoing basis by the PDSP in close collaboration with manufacturers and program participants and is based on the performance requirements as established in the Enbridge TRM.<br>› The Evaluator noted an absence of documentation to indicate that stakeholder consultations regarding the development of the program had taken place. |
| Program Administrator Plans and Budgets | › Annual plans and budgets by activity<br>› Program outreach metrics and targets by activity | › The Evaluator received and reviewed the PDSP's contracted annual budgets and program targets, as well as annual program performance reports and plans. These were detailed and of high quality.<br>› The Evaluator noted that formal commercial performance targets primarily consist of gas savings and units of product sold, with no stated targets associated with program activities and outputs. |
| Marketing and Communication | › Marketing and communication plan and objectives<br>› Website and Traffic/Engagement Reports<br>› Social Media Feed and Follower/Engagement Reports<br>› Promotions & Campaign plans, materials, and results<br>› Updates and communications to stakeholders | › The program has detailed and very coherent plans for marketing material production and activities, which feature key messages, annual and quarterly timetables for events and promotional/engagement activities.<br>› The Evaluator observed high-quality marketing materials developed for the program (banner ads, print advertisements, brochures, web pages).<br>› The Evaluator noted that web-based campaigns appear to have limited reach based on the web-analytics reports made available. It is notable that the Distributor Discount program websites are not accessible via navigation from the Enbridge website, rather they require a specific link and/or specific search terms to be found.<br>› The Evaluator noted that most promotional materials and outreach communications are in the service of recruitment and onboarding into the program |

[8] For context, the Evaluator contends that best practice for a comprehensive set of design documents is that they should be consolidated and easily referenced and versioned. They should comprise the full collection of market baseline studies, market characterization reports, program logic models and activity/output/outcome descriptions, performance indicators for activities and outcomes, program uptake projections and assumption, cost performance modeling scenario development and results, program eligibility requirements, and delivery options. Further, a comprehensive design document collection would also ideally include preliminary program implementation strategies and plans including draft communications and operations plans with substantiation for decision making on how relevant design elements are translated into these initial operation plans.

| Document Types | Information Reviewed or Requested | Observations |
|---|---|---|
| | | – few materials created to date are in support of the energy efficiency upselling aspects of the program and benefits of doing so to the distributor. |
| Externally Facing Program Documents | › Program Rules and Guidance Documents<br>› Participation Agreements | › The Evaluator noted clear externally facing documentation on program requirements, Qualified Product Lists and participation agreements.<br>› The Evaluator noted only limited requirements for transmission of sales data and contact information contained as clauses in the distributor participation agreements. The question of whether distributor could be compelled to provide more data is an area of inquiry of the present evaluation. |
| Internally Facing Program Documents | › Internal Program Procedures<br>› Process workflow diagrams and responsibility matrices<br>› Internal Quality Assurance/Audit Plans and Results | › The Evaluator received only a simplified swim-lane diagram in support of program operations processes and procedures. It received no additional consolidated documentation on internal program transaction workflows and authorities, application and payment approval procedures, or quality assurance plans/requirements.<br>› In response to this, the PDSP indicated that many of its workflows are embedded in their program management software platform, and that quality controls and accountability procedures spanned multiple programs and were included in their broader management, finance and corporate accountability documentation which could not be easily shared with the Evaluator.<br>› The Evaluator accepts this explanation considering the evidence of excellence in program administration; the program operations and quality controls procedures appear to be effective based on high-quality and detailed monthly, quarterly and annual reporting, which include results of quality assurance activities which the evaluator was able to review in detail. |

| Document Types | Information Reviewed or Requested | Observations |
|---|---|---|
| Program Performance and Transactions | › Program manager reports/dashboards on participant and measure performance<br>› Program Transaction Database Report<br>› Contact information (Participant, Contractor, Non-Participant, End-User)<br>› Monthly Sales report/database for the Evaluation period specifically (Jan, Feb, March 2021)<br>› Enbridge cost effectiveness inputs/results from DSM plan (Calculator/spreadsheet model if available) | › The Evaluator received and reviewed a wide range of reports and dashboards as produced by the PDSP. The monthly and annual reports show excellent qualitative understanding of issues arising in the reporting periods, and excellent quantitative reporting of participation, unit sales, and gas savings.<br>› The Evaluator noted a lack of quantitative reporting on some relevant program activities (e.g., training delivery and participation) and other potentially important key performance indicators such as participant satisfaction, on-line portal support, and issue resolution.<br>› The Evaluator received program transaction database reports including monthly sales reports and databases for the evaluation period specifically (Jan, Feb, March 2021). |

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## 2.2 Staff Interviews

Staff interviews were undertaken to help the Evaluator understand and prioritize the research issues associated with internal program processes and to inform subsequent data collection activities with participants and non-participants. These included:

- Confirming and clarifying the Evaluator's understanding of the documentation received during the document review step and inquiring about the availability of further documentation as required.
- Understanding which aspects of the program are working well and less well from the staff's perspective.
- Collecting the staff's perspective on how participants, non-participant and other stakeholders may perceive the program and the issues that might be influencing these perceptions.

The Evaluator interviewed staff from the Enbridge Gas program delivery team, from the Enbridge Gas process evaluation project team, and from the PDSP's program delivery team. The interviews took place in November 2021 over four separate meetings using the MS Teams platform. Interview questions were captured in two guides, one for Enbridge Gas staff and one for the PDSP. The questions were organized into categories: overview; design; performance; marketing and communications; operations; and, tracking and reporting. The interview guides were shared with participants in advance of the meetings, and they are included in Appendix II.

### 2.2.1 Program Design

Enbridge staff noted that the program was launched into market on a priority basis and that some compromises were therefore made relative to establishing the baseline market conditions and to characterizing market actor influence and barriers in support of the final program design. They cited three key factors that supported an expedient launch.

› The first was on-going research undertaken by Enbridge of midstream evaluations and practices in other jurisdictions which demonstrated important increases in market penetration of products.

› The second was the challenge of developing internal consensus, and the time required to understand the eventual evaluation approach with the OEB's evaluator via the Evaluation Advisory Committee and the consequent uncertainty about how market studies could be appropriately scoped in the first instance given this uncertainty.

› Finally, they cited the procurement of a PDSP with both previous experience in delivering Midstream programs in North America coupled with direct experience in the Ontario market to support program design and to undertake turnkey delivery based on that experience and knowledge.

They noted that attempts were made by the PDSP to require and obtain pre-intervention (baseline) sales data from potential participants and new participants, but the prospective distributors were very resistant, and these requirements were not pursued further during the initial program launch phase so that program engagement relationships could be further developed.

Enbridge staff felt that the program design elements associated with overcoming the administrative barriers cited in the design (quick payment, reduced admin burden) appear to be functioning well. To prepare the market and develop capacity, the program has had to primarily focus on enrolment and onboarding to date—even more so with the apparent effects of the COVID pandemic—and they acknowledged that the distributor training for energy efficiency and upselling component of the initial design has been delayed.

The PDSP staff stated that they believe that some basic program design assumptions about market conditions prior to the launch of the program were overestimated, such as the level of knowledge and sophistication of potential participants in matters relating to energy efficiency or transacting in the program. From the PDSP's perspective, a big part of the early program engagement was spent overcoming a type of stigma regarding past rebate programs expressed by prospective participants. According to the PDSP, this stigma includes the perception that energy efficiency programs can represent unnecessary red tape, as well as the outdated perception that a utility's ultimate goal is to sell more of the resource, and therefore that these interventions must have "a catch" since it is not in its best interest to reduce energy sales.

From the PDSP's perspective, overall, there has been a major success in engaging with largest equipment manufacturers and enrolling largest distributors into the program. They believe that there are large buyers of equipment that have changed their procurement practices based on the program. They believe that the program processes, auditing, and QA are working well and are appropriately supporting participation and sales reporting.

Overall, the PDSP believes that the right products are in place, and where some subproducts are missing they are working toward adding them.

The PDSP queried product manufacturers about providing baseline sales data but found that sales data was considered confidential and would not be provided. Further, distributors noted numerous perceived format and content challenges with how information systems handle product inventory and sales information, and they expressed doubt that they would be willing to try to overcome these issues within the parameters of the current program.

### 2.2.2 Program Administration and Delivery

In terms of program administration and delivery, Enbridge staff noted both the pros and cons associated with an outsourced delivery approach. On the one hand, they appreciated having one point of contact for delivery, and felt that they had a knowledgeable delivery partner that brought with it a very solid IT platform with which to administer the program. On the other hand, they noted a sense of disconnection

in having to rely on another party for collecting and transmitting market intelligence and participant feedback and program performance reporting.

For program delivery, relative to the process evaluation scope, Enbridge expressed the priority of understanding how program activities potentially contribute to or limit free ridership. They expanded that understanding how participant (distributor) behaviour has been affected, and whether participant capacity to sell energy efficient equipment has increased is also important to understand. Enbridge has also learned through program relationships that there are specific products that are in market under exclusive manufacturer agreements for certain large food-services companies who are in turn required to buy these products due to their own purchasing policies. Since these products would increase free ridership if allowed to continue in the program, they are proactively identified and removed from the program.

The PDSP's expressed some concerns regarding a few aspects of the program. They stated that having some high-volume HVAC measures removed from the program, such as storage water heaters, has caused some frustrations among participants, which may have an impact in the perceived value of participation in the HVAC market. While directionally, more products available through the program would be positive, the PDSP acknowledges and understands that there are some products that the program will not be able to support due to their total resource costs. For example, market actors would like to receive incentives for high-sales-volume natural gas equipment such as boilers, however, due to recent regulations[9] affecting baseline conditions, there are no longer boiler measures that are cost-effective from a total resource cost perspective. The PDSP believes that program participants understand these constraints and realities, and that the participants are open to working with Enbridge to expand the QPL within them.

There was some concern noted regarding the annual renewal cycle for program participation, as the PDSP felt it creates uncertainty in the market in terms of longer-term procurement and may hamper full "buy-in" among participants. The long-term impact of the mandatory (in fiscal 2021/22) 40% incentive pass-through is also stated as an unknown in terms of impact on participant satisfaction and value, and therefore creates some concern. Finally, the PDSP while recognizing the need to manage free ridership, has noted the increasing scrutiny on large end-users who may have equipment purchasing standards in place, which could have obvious negative implications in terms of reaching the contracted CCM targets. They noted the complex dynamics between the program, the market and influence pathways, and suggested a belief that a full impact evaluation may find that market interventions such as the Mid-stream program may in themselves influence the purchasing practices of these large-end users, and therefore eliminating products may in some cases represent an over-simplified response to managing free-ridership risk.

Further, the PDSP noted that COVID has had a tremendous impact on the engagement plan, citing staffing issues at manufacturers and participant locations. They felt that progress had been lost in terms

[9] This is in reference to the Regulations Amending the Energy Efficiency Regulations, 2016 (Amendment 15) : SOR/2019-164 of the Energy Efficiency Act (Canada).

of engagement, even though participant sales in Food Service seemed to not have been adversely affected as much as would have been expected[10].

### 2.2.3 Program Marketing and Communications

For clarity, program marketing and communications activities take place for two distinct purposes. The first is to raise awareness and to promote the benefits of participating in the program to potential participants (distributors). The second is to help the participating distributors to promote the sale of the products on the QPL. Some marketing materials such as the program website may be in service of both purposes, but most materials serve one or the other.

Enbridge staff indicated some limitations in their visibility into what aspects of marketing the programs are most effective. However, they acknowledged that a corporate freeze of the web platform (due to Union Gas/Enbridge Merger at the beginning of the program) likely had an impact on early website traction.

As noted in the Section 2.2.2 Program Design above, the PDSP acknowledges that much of the marketing and communication efforts to date have been focused on recruiting participants and building their capacity to transact in the program. The PDSP believes that the program is now achieving a level of engagement and participant relationships where it can turn its attention to promoting and communicating the benefits of the products themselves; why distributors should use the program as an upselling tool; demonstrating the potential for higher profit margins for participating distributors when upselling to higher efficiency products, etc.

The PDSP noted a concern that the program landing pages/website are hidden and inaccessible to the general public; they are of the opinion that public websites would lend legitimacy to the program. They note that digital ads created for the program for use in distributor promotions have not been used by the distributors; and add generally that web/social media communication campaigns have not been effective for food service providers. For HVAC participants, advertisements in print and digital Mechanical Business Magazine were said to have been very effective; the HVAC Exchanger publication much less so.

### 2.2.4 Program Performance

In terms of the program's overall performance, Enbridge staff expressed a belief that moving the incentives to the midstream market actors has increased the level of total gas savings for the same measures. They believe that the midstream strategy seems to work better than the previous end-user based prescriptive program in terms of units of sales incented.

The PDSP staff noted that the program could reasonably be characterised as having transitioned into area of diminishing returns with respect to enrolling the remaining program non-participants. This is

[10] The underlying reasons for this are not determined in this study, but the Evaluator's hypothesis is that Food Service business owners likely used the pandemic shutdowns to undertake needed kitchen renovations.

because in in both HVAC and Food Service sectors, the participating distributors represent some 90% of the sales of the qualified products in Ontario according to the PDSP's estimates.

They also noted their view that good progress has been made in terms of participants carrying energy efficient products. They stated that some distributors for Food Service had never purposefully sold ENERGY STAR products, and so upselling on energy efficiency was foreign to them prior to their participation in the program. Some did not sell any products from the QPL prior to participation, and had changed their stocking strategies, which is one important objective of the program).

The PDSP highlighted other areas of significant progress: many of the participants did not have any knowledge of the energy efficient attributes of certain products, and due to the program, these participants now have display banners and marketing pieces on the showroom floor for these products. Some are even putting the energy efficient model itself on display in their showrooms.

# 3 FIELD INTERVIEW RESULTS

In the following section, the Evaluator provides an analysis of the results of a series of telephone interviews with participants and non-participants of the Distributor Discount program.

The objectives of this evaluation activity included the following:

- To uncover insights into business practices, including purchasing, stocking and selling decisions.
- To pinpoint factors that influence a contractor's or customer's purchase decision.
- To understand the impact of the program on business practices, customer engagement (or upselling), and sales.
- To evaluate satisfaction with the program, and its marketing and communications.
- To hear suggestions for program improvements.
- To understand barriers to program participation.

It should be noted that within the scope of this evaluation the Evaluator attempted to reach contractors involved in the program as well as end users. Despite valiant efforts to obtain contact information (for end users) and to talk to contractors, the Evaluator was unable to complete any interviews with these stakeholders. This shows that non-participants are unlikely to respond to survey requests.

## 3.1 Methodology

Two separate questionnaires were used for the distributor telephone interviews: one for participants and one for non-participants.

- The participant survey was approximately 45 minutes in duration; the non-participant survey, approximately 20 minutes.
- Enbridge Gas Distribution provided two sample files, which included the names and contact information of HVAC and Food Service (FS) participating and non-participating distributors. The sample file contained records for n=45 participants and n=13 non-participants.
- Fieldwork took place from March 1st to 31st, 2022.

Overall, the Evaluator spoke to n=14 (n=6 HVAC, n=8 FS) participants and n=3 (n=3 HVAC) non-participants. It should be noted that the results of this study are qualitative in nature and reflect the opinions of a limited group of people. They do, however, come from a representative sample of the population being studied, and it is possible, therefore, to identify trends when opinions converge. It should also be noted that participants' comments may sometimes fall outside of the timeframe of the evaluation window and between the Gas and Electric programs. In these cases, explanatory footnotes are added to the text.

## 3.2 COVID-19 Impact

Participants and non-participants were unanimous in their observation that COVID-19 has had the greatest impact on their businesses in terms of the supply chain. The availability of equipment and parts has become a top priority for them and tends to be central to decision-making (see Section 3.3.1).

> *"Just everyone is dealing with these massive delays when they order parts. They are expecting 50 of these parts to show up on Friday. They open the container and only 10 [are] there. Stuff like that" (HVAC)*

Due to significant uncertainty at the beginning of the pandemic, distributors experienced a few bumps related to staffing, but these issues appear to have been sorted out fairly quickly. Solutions included a combination of temporary layoffs, working from home and instituting safety measures in the office.

COVID-19 also caused some business practices to shift in line with those observed across many industries, including more online ordering and curbside pickup.

From the standpoint of the pandemic's impact on sales, many different stories were recounted, although none of the businesses interviewed experienced actual closures. On the whole, HVAC distributors appear to have fared better than FS distributors, with three out of six HVAC businesses benefitting from infrastructure upgrades, construction projects that continued throughout the pandemic and demand for improved ventilation systems triggered by COVID-19.

> *"Sales have increased significantly…I think in these challenging times, people need service and, unfortunately, it's a lot of scrambling around." (HVAC)*

While FS distributors were hit harder than HVAC, restaurant driven losses were partially offset by healthcare, long-term care and other institutions being fully operational. Sales increases via the takeout channel also helped, and two FS distributors pivoted to carrying PPE.

> *""Yes, our sales suffered through COVID. Sales are getting there now as long as we can get stuff to sell." (FS)*

Three HVAC and 2 FS distributors also reported price increases. The HVAC distributors say they have seen prices rise significantly across the board, including for raw materials (1 distributor), transportation (1 distributor), and manufacturing costs (1 distributor), as a direct result of COVID-19. Both FS distributors mention that the price of equipment has increased, by 20-30% in one case; more than doubling in the other case. As these price increases are being passed on to the customer, some push-back from the latter has been seen by both HVAC and FS distributors.

> *"Our inflation is extraordinary. Actually, in all my years, I've never experienced the type of inflation that we're getting" (FS)*

Distributors' comments about the significant impact that COVID has had in terms of staffing and sales mirror those provided by the PDSP during staff interviews. As mentioned in Section 2.2.1, the pandemic also played a role in delaying distributor training for energy efficiency and upselling.

## 3.3 Business Practices

The Evaluator questioned participating and non-participating distributors to gain insights into standard business practices, with a particular emphasis on energy efficiency. They were asked about their purchasing, stocking, and selling decision-making, and the role of energy efficiency in these decisions, as well as about their company energy efficiency policies, if any.

### 3.3.1 Purchasing, Stocking, Selling Decisions

*"In gas equipment, a lot of the products are hard to get items, so we don't typically stock most of them. We order them on demand and there's multiple products available on the list. So, we typically go with what the client is looking for." (FS)*

*We'll look at the demands of the customer. So, if we're getting asked for product lines, we'll start to investigate it. And then what we do is we go through on an approval and vetting process with our product management team, our sales team, and our branch networks within the region to determine whether or not we're going to add a product line, subtract a product line, make a change within a certain segment to support a different vendor over a different manufacturer over another." (HVAC)*

It is worth noting that a few of the distributors (1 HVAC, 2 FS) interviewed keep minimal, if any, inventory. Whether inventories are held or not, customer demand is key in driving purchasing, stocking, and selling decisions; this is true whether the customer is a contractor or an end user.

*"Our first thing is - is the damn thing available" (FS).*

As mentioned in Section 3.2, availability is top of mind in decision making and is currently driven by supply chain challenges due to the pandemic. Price is always a critical factor.

*"I need to be able to know that the manufacturers support me if equipment breaks down. … The manufacturers that we support, support us in turn, and that to me is priority one" (FS)*

*"You know, if we're talking about which vendors we choose, it's relationship based." (HVAC)*

While not universal, there were multiple mentions (4 HVAC, 2 FS) of the importance of the long-standing relationships and resulting trust that distributors have with manufacturers, as well as the service and support they provide. This can have a strong influence on the products distributors are stocking and selling. In a number of cases (3 HVAC, 2 FS), distributors work with manufacturers to increase the volume of eligible equipment.

Three HVAC and four FS distributors suggest that it is a given that energy efficient products are the way forward. These distributors would like to sell more energy efficient items, but the customer is the ultimate decision maker. Often it goes back to what the customer wants, and sometimes they just want what they are used to.

*"I don't think it's factored into the way our customers think. I think it should be" (FS)*

### 3.3.2 Company Energy Efficiency Policies

There were no instances reported of company policies related to energy efficient products. Having said that, the majority of distributors clearly have a desire to sell more and to try to do so where possible, using energy efficiency as a sales technique where the opportunity arises. A couple say that they are trying to promote energy efficient products more since they have been involved in the program.

*"I know we want as many of our products to be energy efficient because that makes the product itself more reliable in the end and is in the better interest of our clients." (FS)*

### 3.3.3 Additional Sales Information

As mentioned during the interview with the PDSP, there is limited willingness among distributors to provide more detailed sales information about eligible or non-eligible products either to the former or to Enbridge. The only real barrier is the assumption that the work involved would be excessive (in the context that many already feel stretched by the administration of the program in terms of time, effort and resources):

- Three FS and three HVAC distributors mentioned that they do not have the time it would take to provide extra information from invoices (currently already a lot of work involved in getting the details from the invoices).
- One HVAC and two FS distributors mention a lack of time to train people on how to use the system.
- Two FS distributors say they could not provide more information than they are doing currently.
- Finally, three FS distributors mentioned concerns with respect to confidentiality.

One HVAC and two FS distributors are more open-minded but would need a more detailed understanding of the ask, why it is needed and in what format it would be submitted.

- One FS distributor mentioned that they would be willing to provide unit sales, but not spend time going back through invoices.
- A couple of distributors (1 HVAC, 1 FS) did not have the confidence to answer the question; it would need to go to someone more senior in the organization.

### 3.3.4 Factors Influencing Customers Purchasing Decision

The key factors influencing contractors/customers when they purchase from both participating and non-participating distributors are availability (4 participating, 2 non-participating HVAC; 4 FS) and price (4 participating, 3 non-participating HVAC; 4 FS). Product availability has always been important, but the current supply chain situation makes it even more so at this time.

Other frequently mentioned factors include durability/reliability (2 participating, 1 non-participating HVAC; one FS) and ongoing service/support (for parts and maintenance). Lower on the list (but still with repeated mentions) are brand loyalty and manufacturer history/relationships (3 participating, 1 non-participating HVAC, 2 FS).

Energy efficiency is on the consideration list for some (2 participating, 1 non-participating HVAC; 1 FS), but never at the top.

> *"So, in today's world availability, number one. Yeah, I would say prices number two. Durability, quality… And energy efficiency." (HVAC)*

## 3.4 Program Impact and Influence Pathways

In this subsection, the Evaluator seeks to understand distributors' motivations for participating in the program, and their opinions on the program's impact on business practices and on customer engagement.

### 3.4.1 Main Motivations for Participating

Main motivations for participating in the Enbridge program can be grouped into three categories: the incentives (1 HVAC, 3 FS), the concept of adding value to the customer through a discount (1 HVAC, 3 FS), and the perception that the program can be a sales driver (2 HVAC, 3 FS).

The incentive gives money back to the distributor that they otherwise would not have. This is further supported by the response to the direct question about the influence of the program incentive: the average was approximately 7 (out of 10), with over half of the respondents giving an 8-9-10.

The program provides a value add for the customer. Purchase of an eligible product gets the customer using energy efficient products (at a discount), and they further benefit from the ongoing savings that implies.

> *"Everything that we read in the literature is telling us that customers are looking at the bottom line, are looking at energy consumption, but we weren't necessarily seeing the demand for it. So, when the program came along, that was just enough of a tweak to say, "Hey, this could be enough to get it going" (FS)*
>
> *"It makes sense to take part in the program, helps us move a bit more equipment and give back to the customer at the same time." (FS)*

The program can be a sales driver. It provides the distributor with a reason to promote a "best" tier (along a continuum of "good, better, best"), and potentially enables an upsell to this highest tier. The existence of the rebate enables customers who want to be more energy efficient to close the price gap with a cheaper, but less efficient model. The distributor therefore uses the rebate to upsell to the more

> *"Beta is nice, a good middle tier, but the best is what we strive to sell. And that, most of the time, is the energy efficient models. So, to promote that it also benefits the company by being able to get the rebate. Good fit with the brand image." (FS)*
>
> *"I mean, if you can help alleviate the financial burden of going with something more efficient, it makes a decision so much easier because I think at this point, everyone wants to be less energy consumptive, but when it's coming at a massive pricing increase, they care more about their bottom line than how much they're using." (HVAC)*
>
> *"Unfortunately, the price of that energy efficient option is usually higher, significantly higher than the base models. So, it does take a special selling technique in order to get somebody there." (FS)*

Some sporadic mentions about motivations for participating include the altruistic desire to sell more energy efficient products and the ability to control the use of the incentive.

### 3.4.2 Impact on Business Practices and Influence Pathways

As mentioned in Section 2.2.2, the PDSP reported that potential participants had a low degree of knowledge about energy efficiency and, more broadly, why a gas utility would offer rebates to reduce gas consumption. This required the PDSP to invest a significant amount of time in convincing distributors to participate in the program.

In terms of training and onboarding, distributor responses were divided. Some felt that staff turnover made training difficult, or training was an on-going process where the focus constantly shifted to specific products (3 HVAC, 4 FS). For others, there had already been a high level of training on transacting in the program, underscoring the PDSP's involvement (3 HVAC, 4 FS).

> *"We've had large meetings, special meetings just to identify this program that's been created, how it should be processed, how it should be put through our system and how it should be paid out to the customer." (HVAC)*

Overall, the program has not, as yet, had a significant impact on business practices according to participating distributors. However, the Evaluator believes that it is difficult to quantify the extent to which the pandemic and its consequences (supply chain disruptions, price increases, staff turnover) may have impeded the program's progress.

> *"At first it was a little bit more complicated, but I mean, we've been through the program since 2019 now. We're getting very streamlined at this point in offering the rebate." (HVAC)*

In terms of impact on point-of-sale, invoicing and purchasing systems, in all cases, participating distributors made the necessary adjustments when they signed on to the program. Distributors acknowledged the expected "growing pains", and then they simply carried on.

When it comes to interactions with contractors and service technicians, once again, participating distributors' responses were divided. About half of distributors perceived the program as having a positive impact (3 HVAC distributors, 3 FS distributors). The program enables the distributor to open a conversation about a value-added opportunity and to maintain good relationships with contractors. For the remaining distributors, it was business as usual.

> *"Our sales reps will happen to mention it if it happens to be relevant, but it really hasn't changed the way we've communicated to our contractors." (HVAC)*

Roughly half of the distributors interviewed indicated that the program has had had little or no impact on their purchasing, stocking and selling decisions (5 HVAC distributors, 3 FS distributors). However, some distributors (2 HVAC, 2 FS) are now stocking items previously only ordered on demand, building inventory or carrying a new product eligible to the program, which is something that the PDSP had observed as a direct result of the program.

> *"I think we've made decisions to carry products that are supportive of this program." (FS)*

There was a wide range of responses when questioned about the trend in sales of natural gas energy efficient products since joining the program. A few reported an increase related to the program (2 HVAC, 1 FS); a few others reported an increase but not necessarily related to the program (2 HVAC, 1 FS). About half (2 HVAC, 5 FS) said there was no change.

Most distributors (4 HVAC, 6 FS) interviewed did not state any material, nor consistent barriers to selling more natural gas energy efficient products. When probed, some potential barriers were volunteered, including price (2 HVAC, 2 FS), availability, technology/does not fit in the particular application (i.e. condensing unit heaters being difficult to retrofit into existing buildings) (1 HVAC), preference for electric oven over gas (1 FS), and is not part of the engineer's specifications (1 HVAC).

> *"I think they just have a pretty decent understanding already. We sell products, this is our industry. We have people that are trained with that information" (HVAC)*

Overall, the program is said to have had minimal to some impact on staff knowledge about energy efficiency and energy efficient products (3 HVAC, 2 FS), this by opening up opportunities for discussions, being an extra tool in the toolbox, improving knowledge of certain heating applications. The prevailing sentiment, however, is that staff were already well informed on the benefits of energy efficiency (3 HVAC, 6 FS), notably, this is counter to the PDSP's observations and view that more the participants were not sophisticated in their understanding of energy efficiency issues (see Section 2.2.2).

Similarly, these distributors said the program has had limited impact on sales practices (3 HVAC, 4 FS) in respect to the products on the QPL supported by the program. This was not positioned as a criticism of the program; rather, the program is considered to be another sales tool at their disposal.

> *"I wouldn't say it's really changed. I mean, just in the odd cases where this equipment is on the program and in discussion, it would come up in discussion when negotiating saying, hey, I can actually give you this money back for a rebate." (HVAC)*

For the most part, the funds received from the discount program are returned to the distributor's business, either in full (5 HVAC, 1 FS) or divided evenly between the distributor and the customer (1 HVAC, 2 FS). In the case of two FS distributors, the funds go straight back to the customer. A couple of FS distributors did not know the specifics of how the funds are divided.

In terms of managing the customer refund, three approaches were described: an immediate, off-invoice discount, a credit note for future purchase, credit issued.

Funds held back by the six distributors noted above mostly go back into the company's general purse. Some examples were given where the monies were earmarked for something specific including managing and growing the Enbridge program (2 HVAC), increasing inventory (1 HVAC), and supporting CSR initiatives (1 FS).

### 3.4.3 Impact on Customer Engagement/Upselling

For the period evaluated, the program is said by participating distributors to have had a neutral to positive impact on customer engagement. That said, the incentives open the door to a discussion, give the distributor's team something new to talk about, and are seen as a value add.

A few ddistributors (2 HVAC, 1 FS) say that the program can have a positive influence on upselling. At a minimum, the program can shed a light on energy efficient products, demonstrate savings, and help create a "good, better, best" product ladder. In the best-case scenario, the program incentive enables the distributor to close the deal.

*"I'll say, you know, good, better, best. This is a good piece of equipment. This is a better one, and this is a best one, but it also provides energy efficiency and costs you less to operate that sort of thing." (FS)*

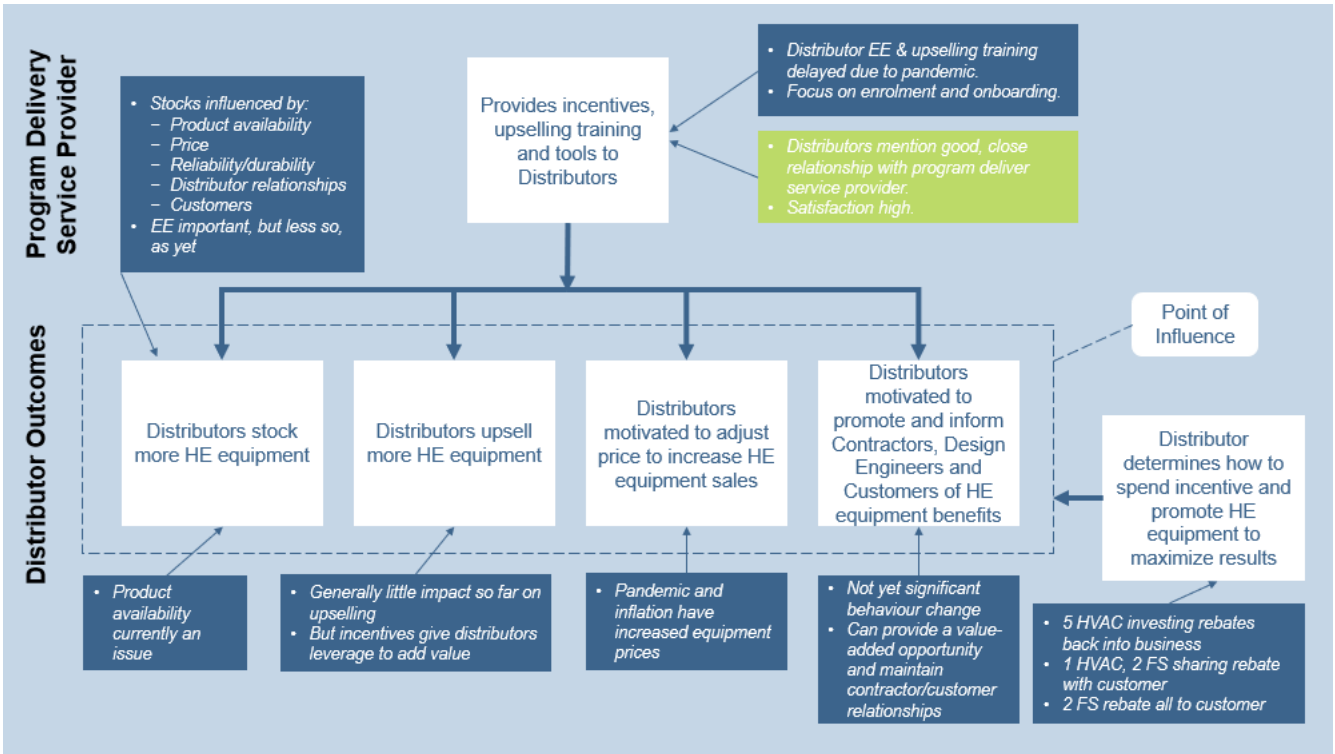
*"Well to be clear about it, our sales just happen. I don't think that the program has a big impact on when and why sales get done. We're going to get the sales regardless." (FS) "I think to make it more effective again, it needs to be targeted to the contractor." (HVAC)*

However, several distributors do not believe that the program has had a significant impact on sales as yet (3 HVAC, 4 FS).

It should be noted that training on upselling was delayed due to a greater focus on enrolment and onboarding activities at the outset of the program, as well as COVID challenges (Section 2.2.1.). That said, the PDSP believes that participants are now more actively engaged in the program, enabling the former to move on to demonstrate the benefits of the program as an upselling tool, among other things.

Figure below provides a snapshot of the desired PDSP and distributor influence pathways coupled with high-level findings from the distributor field interviews.

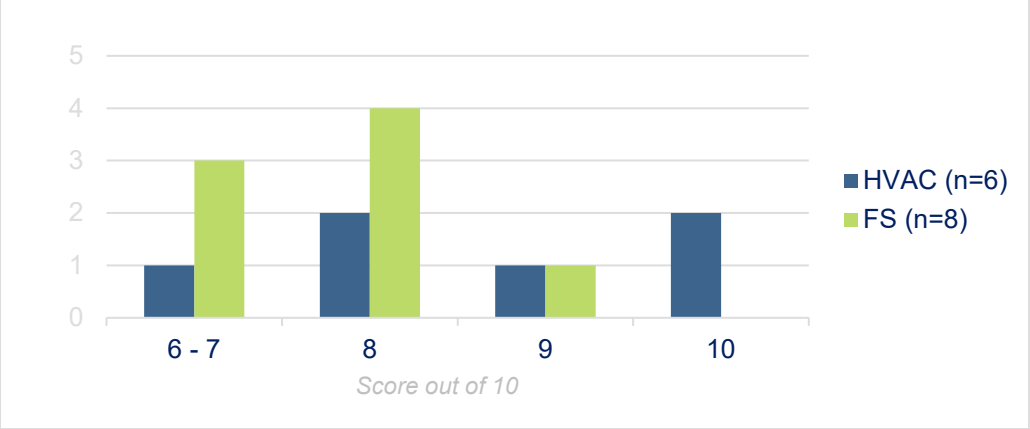
**Figure 1: Overview of Influence Pathways and High-Level Findings**



## 3.5 Program Satisfaction

Despite some criticisms and/or expressed indifference to the program, distributors rated their overall satisfaction[11] highly. Specifically, most respondents gave a rating of 8 or higher (no ratings less than 6).

**Figure 2: Overall Program Satisfaction**




The most common reasons for being satisfied are threefold: it's good to get money back, it's not too onerous, and strong support is provided by the PDSP. A handful of high scores (8 – 10) came from distributors who took a broader view (3 HVAC, 1 FS).

*"Any time we can save some money on our end adds to the bottom line, and if we can give back to our customers, that's great too" (HVAC)*

*"It goes back to that we're a solution provider to our customers and that this program allows us to bring solutions to our customers." (FS)*

*"I think that the people that were employed to help initiate it and run it, did a really good job." (HVAC)*

*"We need to keep ourselves relevant. We need to keep ourselves at the table with utility partners and show how we're helping evolve the industry." (HVAC)*

When overall program satisfaction scores were below 8, the reasons given were too much time required to do the submission, more product models should be included, the incentive should be higher on some items, and identifying specific products on the website can be hard.

*"There's different variations of so many different things that it's harder for us to relay that to our sales reps to know quickly which ones are a part of the program and what ones aren't. … not every single code is on the list that we're given, so, it's hard to know if it actually qualifies or not." (FS)*

*"Just the time spent … having to get the information in and taking away from the selling time." (FS)*

In terms of the individual aspects of the program, satisfaction is highest for the (short) length of time for incentive applications to be approved as well as for the payment processes and the renewal cycle. (Note that the PDSP, like participants, had perceived the quick payment to be functioning well,

*When it comes to gas equipment companies, I would say 10. When it comes to refrigeration equipment, probably 2 or 3. (FS)*

[11] Measured on a 1-to-10 scale, where 1 is "not at all satisfied" and 10 is "highly satisfied".

but the former also felt that the renewal cycle could be problematic, and that the 40% incentive pass-through could be a concern.[12] Participants do not seem to echo these feelings, however.) In general, distributors appear content with the gas incentive amounts, much less so for the electric ones[13].

Although satisfaction with sales volume is said to be relatively high on average, opinions were largely divided into those who were generally satisfied and those who were not. Among the latter, several distributors suggested that the impact was not that significant, and that they believe sales could be better.

Satisfaction is lowest for the list of qualifying products, an issue that surfaced repeatedly throughout the interviews. Moreover, the PDSP noted that the high-volume HVAC measures removed from the program caused dissatisfaction among many distributors.[14]

The effort required to align the distributor's sales system with the program requirements were also an element causing a relatively high degree of discontent among both HVAC and FS distributors.

**Table 4: Satisfaction with Various Aspects of the Program**

| Aspect | Average Score | Reasons for Satisfaction Scores Lower Than 8 |
|---|---|---|
| Length for incentive application to be approved | 9.5 | |
| Payment processes | 8.5 | |
| Renewal cycle | 8.2 | • Amendments come through after signing |
| Incentive amounts | 7.9 | • Dragged down by refrigeration[15] |
| Sales volume | 7.0 | • Not much of an impact (1 HVAC, 2 FS)<br>• I think we could do more/better (1 HVAC,2 FS)<br>• Volume not as good as we would expect<br>• Savings not large enough to really change a behaviour<br>• Sales reps busy so not focusing on it |
| Electric vs. gas incentives | 6.9 | • A lot of admin work to get small rebate back<br>• NOTE: many unable to answer for electric |
| Changes to your sales system | 6.8 | • Effort/challenge at setup to capture required info (3 HVAC, 4FS)<br>• Bit of manual back and forth to confirm model numbers<br>• Continued difficulties integrating into internal sales system |
| List of qualifying products | 6.6 | • Relatively short list for what they sell<br>• Doesn't include some items (e.g. gas fired rooftop unit)<br>• Think they *(i.e. Enbridge)* could do more<br>• Not all sizes within a brand are included |

[12] Comment made refers to an initiative outside the evaluation time period.
[13] Comment made refers to an initiative outside the evaluation scope.
[14] Comment made refers to an initiative outside the evaluation time period.
[15] Comment made refers to an initiative outside the evaluation scope.

| Aspect | Average Score | Reasons for Satisfaction Scores Lower Than 8 |
|---|---|---|
| | | • Make criteria for inclusion clearer<br>• Need items geared to residential customer<br>• More electric items |

When asked to consider the value of the program to their business relative to the time/cost involved, many distributors were "on the fence" giving scores between 4 and 7 (out of 10). Their thinking is that the program does not have an obvious impact on sales, and it does take some time to administer, **but** it is nice to pocket a few dollars, and it is nice to give something back to customers.

*"The amount of time it takes for me to go through a month's worth of invoices, pick out every piece of equipment that we've sold, check it against your list, document everything … I have to confirm the address. I have to confirm the product. I have to enter it into the spreadsheet. And for that I get 40 bucks." (FS)*

(Evaluator's note: participants do not appear to be distinguishing between the gas and electric programs.)

*"It's not a complete waste of my time to do the transaction and put the remittance through the portal, but it's not blowing our pants off and saying, wow, I'm so glad we did this ." (HVAC)*

*"I would give it, a 4 because it does take a lot of my time, but it could have a higher value on the side of revenue for sure" (FS)*

### 3.5.1 Program Partner Central

All participating distributors, except for one, use the online portal, Program Partner Central. Satisfaction is high, scoring an average of 8.1. The predominant beliefs are that the system is relatively easy to use, and information can be found rapidly. At the same time, some distributors had specific issues related (more often) to difficulty finding items, and (less often) to uploading. It was mentioned that the PDSP is helpful whenever challenges occur.

## 3.6 Marketing and Communication Activities

In this subsection, the Evaluator assesses marketing and communication activities and highlights participating distributors' opinions on training and other services, information or support that may be helpful to them for promoting energy-efficient products.

Some participating distributors (2 HVAC distributors, 4 FS distributors) appear generally disengaged from marketing and communication activities, although overall, distributors seem fairly satisfied (score 7.4 on a 1-10 scale) with the effectiveness of the materials/tools they have received to promote the program. Observations and commentary were tangential to the question.

> *"It's kind of just something that is there and is available, but not widely known, I would say. It's not heavily advertised." (FS)*
>
> *"I think that it's hard to judge. We do have some banners on the floor that been provided for us. So, we are utilizing them." (FS)*
>
> *"We put up the POS material that Enbridge has provided. ... We have flyers and pamphlets and things but it's not an official strategy." (FS)*
>
> *"We don't really have the capacity to devote much marketing time to advertising it and promoting it. I think we could do a little bit internally, but not so much externally." (FS)*
>
> *"I'd say it was great, honestly. It's very clear. I mean, we've really already got all the tools we need because we're trying to promote that equipment. So, we just pull from that and say, hey, there's a rebate that goes along with this." (HVAC)*
>
> *"They are fine. As I said, everything from Clear Result has been good." (HVAC)*

Note that most of the promotional materials pertaining to the program reviewed by the Evaluator during the initial document review were in the service of recruitment and onboarding, with few supporting the energy efficiency upselling aspects at this stage in the program.

A few specific negatives emerged from participants relating to a lack of external advertising (1 FS), slow turnaround times for approving (changes to) marketing materials for social media or distributor websites (1 FS), and the communications not targeting the contractor specifically (1 HVAC).

There is mixed interest in receiving further training. Some feel their sales team's knowledge to promote energy efficient products is good already (1 HVAC, 3 FS); two HVAC distributors are unsure. That said, the Evaluator is of the opinion that distributors may be open to more training if suggested by the PDSP, with whom distributors enjoy a good relationship.

> *"All of our team is aware of the program. [The PDSP] has given us what we need." (HVAC)*

When asked what other services, information, support or training would be helpful for promoting energy efficient products, wide-ranging suggestions were heard.

None were suggested by more than a couple of distributors. Details and verbatim are shown in Table 5 below.

## Table 5: Suggestions for Other Services/Information/Support

| Suggestions for Other Services/Information/Support |
| --- |
| - A way to demonstrate energy savings or ROI/yields (energy calculator) (1 HVAC, 2 FS)<br>*"The only thing I can think of is … studies on gas usage for the equivalent that doesn't meet the higher efficiency. … So, what's the end user's gas bill over a year compared to the less efficient. Stuff like that would be great." (HVAC)*<br>- *"There's a lot of material that's kind of subjective. If there was material that was more refined. In other words, … if you use these friers, you save this much in energy, and if you use these types of convection ovens, you save this much in energy. … maybe it's out there and maybe I just haven't seen it, but if you brought it down into the categories and said you can save up to this much, again, being generic, which I think you need to be". (FS)* |
| - Better understanding of eligible new products (2 HVAC, 1 FS); improving program awareness and knowledge (1 HVAC). |
| - Easy-to-grab flyers (2 FS)<br>*"Perhaps some flyer or something like that that could be available. … Nobody looks at it (the in-store advertising), they just trip over it. But if we had individual flyers that people could grab, it might help… just pointing out that … here's what you can expect and here's what you can look at." (FS)*<br>*"They could put together like slide decks or flyers that we can hand out. Things that don't take our time away from our sales team." (FS)* |
| - Target people who are closer to end customers such as building designers or contractors (2 HVAC)<br>*"It's advertising geared towards the contractor and sort of leaving (Distributor name) out of the mix of being responsible for that communication, because you're just missing far too many contractors that way." (HVAC)*<br>*"I think that's more of something we'd want to push … with the … people designing the building, if we can give that information to them okay. Then they can design the building on the equipment and really sell the owner on it." (HVAC)* |
| - Better access to generic advertising assets/materials/photos through portal (1 FS)<br>*"If there was … maybe a resource section on their portal (where) we can download appropriate materials, cause generally social media, Instagram, LinkedIn, Facebook, all have their own templates. You know what I mean? In terms of pixel size and stuff like that. Same way, you know, website banners and all that stuff. If they had that stuff readily available where we could just download it, it would make things simple." (FS)* |
| - An app that sales reps could use to look up an eligible product when they're out in the field (1 FS) |
| - Training in field offices (not HQ) (1 FS) |
| - Advertising information directly on the product (1 FS) |

The three Non-participating HVAC distributors were asked how they promote energy efficient products. In two cases, the HVAC distributor sells only energy efficient products, so there is no special focus. In the other case, the HVAC distributor says that they rely on their vendors and go to trade shows.

## 3.7 Suggested Program Improvements

Approximately half of participating distributors (4 HVAC, 2 FS) had no further recommendations for improving the program. For those who had, suggested improvements can be grouped into one of three categories: products, communications, and execution.

### Products

Participating distributors (2 HVAC, 3 FS) say that they would like more products to be added to the QPL (specifically mentioned were gas-fired rooftop units) since they consider the list to be small or to have been reduced[16], or not including all models under one brand.

> *"It just seems that recently Enbridge has eliminated a lot of the products that they used to have." (HVAC)*

> *"Do a bit more research on … the rebate amount with respect to the equipment cost because it has to be a significant enough amount to make it worth the time" (HVAC)*

During the interview with the PDSP (Section 2.2.2), it was mentioned that market actors appear to understand the reality of not being able to support certain products through the program, although the above-mentioned findings may suggest that this is not always the case.

### Communications

More external advertising was suggested by distributors (2 FS), as well as partnering with associations such as Restaurants Canada to grow awareness/interest and help drive the program. One FS distributor suggested messaging to demonstrate the full picture when it comes to savings and providing customers with more information to help them in their decision making

> *"Getting the information out to public, that energy efficiency is something to consider when you're purchasing a product." (FS)*

> *"Even if I think about Restaurants Canada…there are relationships with these entities that can help drive the program" (FS)*

Note that the PDSP is of the opinion that the websites, which are currently hidden and inaccessible to the general public, would lend legitimacy to the program. This idea was not mentioned spontaneously by distributors.

### Execution

Overall simplification of the administration processes would be appreciated by a couple of distributors (2 FS), which they say could even result in spending more time upselling and promoting the program. For one

> *"And I think we would be more willing to provide, to put more energy towards promoting the program if it had less admin time." (FS)*

[16] Comment made refers to an initiative outside the evaluation time period.

distributor (1 FS), a more user-friendly portal and added features are also on the wish list.

## 3.8 Barriers to Program Participation

All three non-participating HVAC distributors were aware of the program and its incentives.

Barriers and concerns to program participation cover three main areas of perceptions, a couple of which suggest challenges in establishing rules and processes for pass through when products are sold through another intermediary (in this case, a contractor):

- Too much administration required
- Too much flexibility in the use of funds
- Lack of engagement from their team.

> *"We found that the administration involved just to get this program out was a lot of work" (HVAC)*

> *"It would just take too much effort and the incentive wasn't there" (HVAC)*

> *"It was up to the distributor to either give back some money or all the money or a portion of the money. And I just don't like that. It's because every distributor will do something different. I wanted something that was more consistent from Enbridge" (HVAC)*

> *"It was a hard sell to get my teammates to participate in passing on the information" (HVAC)*

When asked what would encourage participation, the only thought to emerge was the inclusion of more products/brands in the QPL.

> *"Just to have our products that we sell as part of it. So, if they considered more water heating products rather than only airside products. That they were inclusive to all brands and products." (HVAC)*

# 4 FINDINGS AND RECOMMENDATIONS

The findings and recommendations from this study are presented below in three sections; a summary overview of the most important findings in the Findings Summary sub-section, a tubulation of findings and recommendations in the Findings and Recommendations sub-section, and Answers to Research Question presented in its respective Sub-Section.

## 4.1 Findings Summary

The following is a narrative summary of the most important findings of the process evaluation of the Program. A detailed and numbered tabular presentation of findings and their associated recommendations follows in Section 4.2.

**Program administration and delivery is very good:** The PDSP engaged to provide design support and to deliver the program is highly qualified and experienced in delivering midstream programs, and in working in the Ontario commercial sector. This is in evidence in the present evaluation from various perspectives. The Evaluator found comprehensive plans and reports for operations, communications, and marketing, and for quality assurance. The Evaluator found a deep understanding of the participants' perspectives and strong relationships, as evidenced by staff and participant interviews. Finally, the Evaluator found a program tracking system that is generally well received by participants, and for which participants acknowledged the excellent support provided by the PDSP.

The Evaluator makes several minor recommendations relating to potential improvements in this area, but by-and-large, the administration and delivery of the program should not be an area of focus or concern for Enbridge going forward as it improves the program.

**The COVID pandemic has had significant impacts on market conditions:** The market assumption and influence pathway challenges above are exacerbated by the arrival and timing of the pandemic during the second year of the program. Its effects are on-going and likely to continue in to varying degrees into the foreseeable future. While this evaluation scope is limited and unable to fully characterize the impacts of the pandemic on the Ontario market for products on the QPL, the Evaluator is nevertheless comfortable providing qualitative observations of how these have directionally impacted the program's design assumptions. The most influential factors at play include the pandemic's impact on market actor staffing and operations and general business priority setting, the rapidly changing buying practices of end-users and contractors during the pandemic as they responded to their own restrictions and opportunities, supply chain issues for shipping and availability of products for all product categories, availability of parts for product support and maintenance, and finally, significant price inflation for products, materials and labour.

All these factors serve to create an overall environment in which participating distributors may not prioritize investment of time and energy into the program due to other important business priorities and challenges, in which they would be focussed on selling products that are available, and in which they

would encounter pushback from customers on the first-cost price and on the availability of products. These observations are all in evidence to varying degrees in the results of the field research and in interviews with the PDSP. These observations suggest that the program's assumptions about the influence of distributors on sales of products on the QPL is likely further reduced by the effects of the pandemic over-and-above the basic character of the market as stated in the point above.

Considering this, the Evaluator's recommendations to characterize the market and consider alternate marketing and incentive delivery approaches as stated in the point below raise to a higher level of importance.

**Initial program design market assumptions and influence pathways are being challenged:** As evidenced by the significant time and effort required to recruit and onboard distributors, the program's market characterization assumptions and consequent design appears to have underestimated the capacity and readiness of the market to deliver midstream programming. This is partly due to the inertia of the supply chain dynamics between manufacturers and distributors and their respective relationships with the end-users and contractors to whom they sell. The results of the evaluation suggest that the products carried and promoted by distributors are influenced by historic relationships with manufacturers and the assurance of product support provided by the manufacturers for the product lines carried by distributors. These dynamics influence the distributors' motivation to carry, purchase, and sell products to support program goals. Further, the Evaluator found that program participants are generally inclined to sell what their customers (end-users and contractors) are asking for based on price and availability, and that their sales practices have not yet been significantly influenced by the program in terms of upselling customers to the energy efficient products on the QPL. The participants generally view the program as an added sales tool to facilitate existing sales practices, but they do not yet appear to have achieved a level of participation in the program where the program's incentive is actively altering their sales practices.

As a result of these dynamics, much of the program delivery efforts up to the date of this evaluation have focused on understanding and developing manufacturer and distributor relationships, recruiting them into the program, and building their motivation and capacity to sell the qualified products and transact in the program in the first instance. The program's objectives of providing support, training, and resources to create an environment in which distributors actively upsell end-users and contractors to higher efficiency products from the QPL have become secondary by necessity based on the lack of participant capacity and readiness to receive such interventions. An additional complicating factor is that the Evaluator found evidence that participants view the current value-proposition of the program to be moderate. As such, the Evaluator believes that they may, in a general sense, be reluctant to invest significantly more time and energy into further training to try to improve their engagement in program objectives without more value added in the program, such as with an expanded QPL. That said, the Evaluator is of the view that the program now has a footing in terms of transaction systems and participant-PDSP relationships from which it may refocus efforts on this important program aspect going forward.

In conjunction with the observations related to the pandemic above, the Evaluator makes recommendations to undertake additional market characterization research with end-users and contractors and consider adjusting the program marketing and incentive approach to moderate these effects. The Evaluator also makes recommendations that aim to increase the value proposition to participating distributors to ensure their continued engagement in the program as it moves into its next phase.

**Program information and tracking systems can be improved to better demonstrate program influence**: While program administration and delivery is excellent, the program's take-to-market approach, the program's participation agreement requirements and the performance-based way that delivery has been procured could make quantitative demonstration of program influence and incremental savings over naturally occurring sales challenging. It should be noted that this process Evaluation did not aim in its scope to quantify market effects or free ridership, rather, the Evaluator's aim was to identify program elements that may contribute to reducing or increasing free ridership. In this light, the Evaluator observed some potential challenges on three fronts, sales information, tracking program activities that demonstrate influence, and end-user and contractor buying decisions and trends, each of which are further elaborated below.

*Baseline and performance-period sales information*

Obtaining reliable product sales information of products in the relevant program QPL categories as a share of all products sold in Ontario from those categories has historically represented and continues to represent a challenge to the Program. While the Evaluator notes that some efforts and inquiries have been made to obtain this information from manufacturers and participating distributors, we also note that these efforts have taken place in an environment that prioritizes enrolment and participation over an obligation to share data. The program's current participation agreements do not require reporting this type of information. As a result, while the program effectively tracks and reports all units incented under the program, it currently does not have any access to broader product sales information required to quantitatively determine the share of energy efficient products sold, the lift of the program in any program period, nor the increase in percentage sales of the QPL products relative to baseline market conditions before the program launched.

*Tracking and reporting program activities that demonstrate program influence*

Additionally, the program's performance targets emphasize the number of participating distributors enrolled, the quantity of units sold, and the cubic meters of gas saved (via the PDSP's contract and the delivery of the program on a pay-for-performance basis for these metrics). This indicator set may not adequately support the program's stated logic pathways of overcoming capacity barriers in the marketplace and transforming business practices among participating distributors to upsell energy efficient products. While the PDSP provides good qualitative reporting on program engagement, training and marketing and communication activities, the Evaluator did not find systematic tracking and reporting systems implemented with the specific aim to capture and quantify program activities nor to quantify

potential program influences and impacts in these areas. These could include for example, participant sales training delivered and attendance, participant milestones achieved in terms of sales practices implemented, or the number of participating distributors expanding product lines to include more of the QPL.

*End-user and contractor contact information and purchasing decision-making practices*

Contact information which traces product sales to end-users via contractors is not available to the PDSP, nor to Enbridge or its process evaluation consultant. This is due largely to participant's stated privacy concerns and to the additional effort required to collect and transmit this information. These concerns we stated both during initial program engagement and restated in some instances during this process evaluation. This lack of reliable contact information further complicates market research and evaluation activities that might otherwise help to demonstrate program influence. This could be particularly important for large end-users who may have outsized influence on product sales through the program. The operating and purchasing practices of the larger food-services end-users is not fully understood, and as such, how the program may or may not be influencing these practices is also not known. On one hand, these important market actors may themselves be driving market transformation via their purchasing power and progressive corporate policies; or on the other hand, the existence of rebate programs may be directly influencing these the adoption of these corporate policies in the first instance.

Considering the above findings, the Evaluator makes a series of recommendations to redouble efforts to collect sales and contract information as a condition of participation, and to make further investments in market research to attempt to better understand the Ontario market for sales of qualified products in these product categories, as well as research to understand the trends and influences among end-users and contractors. Additionally, the Evaluator makes recommendations to review program tracking and metrics that better support demonstration of the program's logic in matters relating to training, capacity building, upselling, and stocking practices.

In light of the above findings, the Evaluator makes a series of recommendations to redouble efforts to collect sales and contract information as a condition of participation, and to make further investments in market research to attempt to better understand the Ontario market for qualified products and sales in these product categories, as well as research to understand the trends and influences among end-users and contractors. Additionally, the Evaluator makes recommendations to review program tracking and reporting metrics that better support the demonstration of the program's logic in matters relating to training, capacity building, upselling, and stocking practices.

## 4.2 Findings and Recommendations

The main findings and recommendations from this process evaluation are presented in the following tables. They are presented in various categories and numbered as Finding 1, 2 (F1, F2), Recommendation 1, 2 (R1, R2), and so on to facilitate reference and tracking.

| Overarching (O) | |
|---|---|
| **O F1:** | **The Evaluator believes that the program is at an important potential inflection point in its lifecycle.** The first phase of the program (2019/2021) has been largely successful in recruiting and onboarding participants in the program through very challenging market conditions. It has demonstrated that participants can smoothly transact in the program and has proven the capabilities of the PDSP in delivering the program services. Participants are generally satisfied with the program, while also expressing some reservations regarding its value proposition, and have provided suggestions for improvements.<br><br>That said, the findings in O F2 – O F4 below suggest that some initial program assumptions are being challenged, that market dynamics have shifted due to the pandemic, and that the program may not be fully equipped to effectively demonstrate its influence in the market in the long term. All of this indicates that important process evaluation feedback and recommendations are very timely, and that the program is well positioned to leverage its early enrolment successes and relationships with participants to roll out improvements to the program. |
| **O F2:** | **The COVID pandemic has had a significant impact on the program and will likely continue to do so.** The Evaluator has found evidence that the effects of the pandemic on the program have been significant, are on-going, and are likely to continue in some degree into the foreseeable future. The most influential factors at play in the Evaluator's opinion include the pandemic's impact on market actor staffing and operations and general business priority setting, rapidly changing buying practices of end-users and contractors during the pandemic as they responded to their own restrictions and opportunities, supply chain issues for shipping and availability of products for all product categories, availability of parts for product support and maintenance, and finally, significant price inflation for products, material and labour, and associated customer focus on first-cost.<br><br>This finding exacerbates the findings in O-F3 below. |
| **O F3:** | **The influence of the distributor and changes to sales/business practices envisioned in the program design are a work in progress:** While there is some evidence of changes to distributor behaviour, overall, the program has not, as yet, had a only limited impact on distributor sales and business practices according to the participating distributors. The PSDP and Enbridge both acknowledge that the program's initial phases focussed mostly on participant recruitment and onboarding. The pandemic also delayed the program fully implementing training for participant upselling.<br><br>Additionally, the Evaluator has found evidence that some participants do not necessarily see their role as the main influencer in the sales process and they suggest that while upselling can happen, their role is ultimately to serve their customers; they have even suggested that the program increase marketing to other channels to help increase sales. The Evaluator found that many program participants are generally inclined to sell what their customers (end-users and contractors) are asking for based on price and availability, and that their sales practices have not yet been significantly influenced by the program to date in terms of upselling customers to the energy efficient products on the QPL. |

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| | The Evaluator has found evidence that participants may be reluctant to receive more training unless the value proposition in the program improves with an expanded QPL.<br><br>This collection of findings represents some risk for the eventual assessment of free ridership in addition to challenging some of the fundamental program design's logic. It is notable that recommendations associated with these findings to prioritize additional training and materials may be difficult to implement due to the value proposition of the program which may be at its limits in terms of participant attention. |
| **O F4:** | **Program information and tracking systems are good but could be improved to demonstrate program influence more fully and more efficiently.** While program administration and delivery are excellent, the program's early take-to-market approach (which relied largely on the PDSP experience in lieu of formal market characterization), the program's participation agreement requirements, (which limit obligations for sales data), and the performance-based way that delivery has been procured all conspire to make demonstrating program influence and incremental savings over naturally occurring sales challenging. This is observed on three fronts where information is insufficient, baseline and performance period sales information to demonstrate market lift, systematic tracking and reporting of program activities that demonstrate program influence, and market information on end-user and contractor buying decisions and trends to demonstrate lift beyond naturally occurring sales. |
| **O R1:** | **The Evaluator recommends that Enbridge undertake a review of the midstream program strategy with a wide lens and considering the longer term.** This evaluation suggests that some influence pathways (end-users and contractors) may not be effectively reached with the current program and may overestimate the influence of the distributor in the sales of energy efficient equipment. In its review, Enbridge may determine that a full market incentive approach could be more effective at overcoming some of the challenges and findings of this process evaluation based on the current program model. |
| **O R2:** | **The Evaluator recommends that Enbridge invest in additional efforts to research and/or otherwise obtain important sales and contact information in collaboration with participants, manufacturers, and industry associations.** In this work, Enbridge will need to carefully balance the value proposition to participants when asking for more information, against the potential risk of free ridership affecting program impacts under as status quo approach. (See PAD R2 for recommendations on program tracking and reporting systems) |
| **O R3:** | **The Evaluator recommends that Enbridge invest resources to characterize the Ontario market for food services and HVAC equipment,** to better understand the influence pathways and barriers to the purchase and sale of energy efficient equipment, this considering the important changes brought on by the pandemic and its ongoing impacts. This research should include a specific (and possibly separate) aspect relating to the large food-services companies to understand their policies for specifying and purchasing kitchen and HVAC equipment for their locations. (See PAD R4 for recommendations on large food-services end-users specifically) |

| Program Design | |
|---|---|
| **PD F1:** | **The Evaluator found that program design documents could be improved in detail, consolidation, and availability.** |
| **PD R1:** | **Review internal program design documentation requirements to ensure that they more closely align with best practice, review file-handling practices with respect to classifying and storing the various documents that collectively comprise the program's design.**<br><br>The Evaluator contends that best practice for a comprehensive set of design documents is that they should be consolidated and easily referenced and versioned. They should comprise the full collection of market baseline studies, market characterization reports, program logic models and activity/output/outcome descriptions, performance indicators for activities and outcomes, program uptake projections and assumption, cost performance modeling scenario development and results, program eligibility requirements, and delivery options and recommendations. Further, a comprehensive design document collection would also ideally include preliminary program implementation strategies and plans including draft communications and operations plans with substantiation for decision making on how relevant design elements are translated into these initial operation plans. |
| **PD F2:** | **The Evaluator found evidence that the early program design and market characterization efforts were hampered by uncertainty at Enbridge and the PDSP about how the program would eventually be evaluated by the OEB's Evaluation Contractor.**<br><br>This affected early decision-making regarding data requirements and market characterization efforts and priority-setting. |
| **PD R2:** | Under the current DSM framework, the OEB EAC develops evaluations plans and ultimately determines how to evaluate DSM offers. This process is not connected in any formal way to program designs or DSM plan submissions or approvals. For these reasons, the Evaluator recommend that Enbridge develop a rigorous suite of program design documents including a robust logic model and program objectives documentation ahead of any program launch to adequately support design decisions and to serve as the basis of eventual evaluation activities. |
| **PD F3:** | **The Evaluator found evidence that participants are not wholly satisfied with the current Qualified Product Lists.**<br><br>Participants, while generally satisfied with the program did cite dissatisfaction with some high-volume measures being removed (storage water heaters) and expressed a general view that the lists should contain more products (such as gas-fired roof-top units). The Evaluator contends that this aspect of the program is a central component to the program's perceived value proposition, particularly in the context of increasing participant training for sales influence, and in the context of seeking more data from them. |

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| **PD R3:** | **The Evaluator recommends that Enbridge undertake a review of the QPL to add cost-effective products to it within the constraints of the current DSM framework.** The Evaluator believes that an update to the QPL is necessary to created higher value proposition to participating distributors, which is in turn required to increase their participation in further engagement and capacity building activities. The roll-out of the updated QPL should be considered in the context of other recommendations for additional data obligations on the part of participants and considering results of recommended market characterization work. |
| **PD F4:** | **The removal of large food services retailer-specific products from the QPL is prudent, but such program changes could be informed by more research.**<br><br>Enbridge has noted that it has been proactively removing some measures that may be part of the purchasing policies of large food services end-users, and therefore may represent a risk for free ridership. While this is very prudent from a free ridership perspective, the Evaluator contends that such actions would ideally be supported by specific market research that aims to understand if the programming had any influence on the policies in question in the first instance. If this can be demonstrated, then the utility may be able to work with these end-users to adopt deeper incremental savings over time by keeping the products within the program without the risk of free ridership. |
| **PD R4:** | **The Evaluator recommends that Enbridge undertake specific market research of this important food-services market segment** to fully understand processes for specifying and purchasing energy efficient products (both kitchen and HVAC equipment). This research should have the specific aim of understanding the role of incentive programs and the potential role the utility can play in causing incremental/additional improvements. |

| **Program Administration and Delivery** | |
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| **PAD F1:** | **The Evaluator found that the overall administration and delivery of the program is very good**.<br><br>The Evaluator found sound activity plans, detailed operations reporting, detailed qualitative assessment of market developments and issues, and excellent feedback on the support provided by, and relationship with the PDSP from participants. |
| **PAD R1:** | **The Evaluator recommends that Enbridge continue to consider this program delivery approach successful despite some market challenges as described throughout the report.** |
| **PAD F2:** | **The Evaluator noted that formal commercial performance targets of the PDSP for the program focus on the number of participating distributors, the units of product incented and the associated gas savings and observes that additional quantitative reporting should be included.** The PDSPs service agreement does not include stated targets for program activities and outputs such |

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| | as training delivered, participants achieving certain program delivery milestones such as carrying or stocking new products.<br><br>As stated in the overarching findings, this arrangement may inadvertently have the effect of reducing the Program's ability to demonstrate program influence in creating outcomes in accordance with the program's logic model. |
| **PAD R2:** | **The Evaluator recommends that Enbridge discuss this issue with the PDSP with a view to improving quantitative tracking and reporting on program activities** within the context of the current agreement, and as required, amend the current agreement to implement better tracking and reporting.<br><br>Further, Enbridge should consider this aspect of pay-for-performance contracting in future procurements to ensure that the ability to track and report on activity-based information is incorporated among performance variables over and above more focussed performance objectives. |
| **PAD F4:** | **Participants are generally satisfied with Program Partner Central and appreciate the support of the PDSP.**<br><br>Outside of some acknowledgement of early "growing pains" by participants and noting some technical issues that the PSDP is aware of (some product lookup problems and some issues uploading certain files), the on-line transaction system appears to be function as well as can reasonably be expected from the participants' perspective**.** |
| **PAD R4:** | **The Evaluator recommends that Enbridge and the PDSP continue the level of service currently provided as this is an area of success.** The on-line platform should not need to be an area of focus for program changes. |

| **Program Marketing and Communications** | |
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| **PMC F1:** | **The current responsibility split between Enbridge and the PDSP for production and hosting of marketing materials and digital content management could be reviewed.**<br><br>Both the PDSP and Enbridge staff acknowledged challenges with the responsibility split for marketing and communications, including delays in producing materials and re-work of some products, as well as with the design and visibility of the program web pages. This was particularly relevant in the early stages of the program, but elements (such as the program website) are on-going. |
| **PMC R1:** | **The Evaluator recommends that Enbridge review its role in the program with respect to marketing and communication material production and digital content management** and consider options to |

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| | make this more effective, possibly including transferring additional responsibility to the PDSP or to another 3rd party. |
| **PMC F2:** | **The program's current suite of physical and digital promotional products to assist with distributor sales could be refined to better meet participant's stated needs.**<br><br>Both the PDSP and the participants noted that some of the digital materials made available through the program are not particularly effective, and the Evaluator also observed low engagement in digital campaigns based on some limited reports made available to it.<br><br>Participants noted that in-store materials are neutral to their sales efforts. They indicated a desire to have more marketing products that would reach their perceived influence pathways, which were stated as end-users, contractors, and trade associations.<br><br>Finally, participants stated that the program could produce additional tools and materials to facilitate sales. These include calculators to help demonstrate the business case for energy efficient products, and factsheets or brochures to clearly enunciate the total cost of ownership of energy efficient product to help overcome initial cost concerns. |
| **PMC R2:** | **The Evaluator would encourage Enbridge and the PDSP to undertake a wholistic review of the materials used to promote the program in light of the evaluation,** and to develop an updated marketing and communications plan to meet the needs of the program going forward. |
| **PMC R3:** | **The Evaluator would encourage Enbridge and the PDSP to undertake a wholistic review of the materials used to support participant sales in light of the evaluation**, and to develop an updated marketing, communications and support strategy and plan to meet the needs of the program going forward, and to better support the participant value proposition for the program. |
| **PMC R4:** | **In conjunction with O R3, the Evaluator recommends that Enbridge develop an updated marketing and communications strategy and plan to reach food services and HVAC end-users, contractors, and trade associations in support of the updated program.** |

## 4.3 Answers to Research Questions

Which program elements are the most effective and least effective in influencing marketing, sales and stocking practices?

While there is some evidence of changes in distributor behaviour for marketing, sales and stocking practices, overall, the program has not, as yet, had a significant impact on distributor business practices according to the participating distributors.

Roughly half of the distributors interviewed indicated that the program has had had little or no impact on their purchasing, stocking, and selling decisions. However, for the other half, there is some evidence of

changes as some distributors are now stocking items previously only ordered on demand, building inventory, or carrying a new product eligible to the program. These observations are in line with what the PDSP had observed as a direct result of the program.

While a few distributors say that the program can have a positive influence on upselling, several distributors do not believe that the program has had a significant impact on sales, as yet.

Given these observations, it is difficult for the Evaluator to assess the effectiveness of specific program components on changes to distributor behaviour. That said, the incentive itself was stated as instrumental by participants, as was the relationship and support of the PDSP. The participants were neutral on the in-store marketing elements and suggested that improvements could be made to end-user and contractor marketing of products on the QPL as described in the section below.

The Evaluator should add that it believes that it is difficult to quantify the extent to which the pandemic and its consequences (supply chain disruptions, price increases, staff turnover) may have impeded the program's progress in influencing participant behaviour. In terms of impact on point-of-sale, invoicing and purchasing systems, in all cases, participating distributors made the necessary adjustments when they signed on to the program, and that aspect has been successful.

The Evaluator is of the view that the first years of the program have necessarily been invested in overcoming unforeseen capacity barriers in the market, and in overcoming the impacts of the pandemic at the apparent cost of focussing on transforming sales practices and distributor behaviour. The Program now has a footing in terms of transaction systems and participant-PDSP relationships from which it may begin to focus on this important program aspect going forward.

*Which program elements are perceived to be useful to participants? Which improvements could be made?*

The participants in general are satisfied with the program. This is owing primarily to the incentive itself, and to the fast payment and settlement of the same. They believe that the program renewal cycle and process is effective.

Participants stated their appreciation for the Program Partner Central system, which is relatively easy to use, and which is functioning well beyond initial challenges and some ongoing issues in finding certain (unspecified) types of information or uploading certain (unspecified) files. Participants stated the helpfulness and quality of the services provided by the PDSP in this regard, both in terms of technical support for transacting the program, and in the effective support and resolution of technical or user issues arising with the system

Participants suggested that the program could improve marketing support to end-users, contractors and trade associations to help increase sales of energy efficient products. They would want to add sales-support tools such as calculators, and information specific to the cost-benefits of energy efficient products that can be easily transmitted and taken away, such as in the formal of fact sheets.

The current QPL was stated as a source of dissatisfaction, with several participating distributors saying that they would like more products to be added, and specifically mentioning gas-fired rooftop units. They indicated that they consider the list to be small or to have been reduced, or not including all models under one brand.

*Why are some distributors electing not to participate in the program?*

The barriers and concerns to program participation among non-participants interviewed covered three main areas of perceptions, a couple of which suggest challenges in establishing rules and processes for pass through when products are sold through another intermediary (in this case, a contractor):

- Too much administration required
- Too much flexibility in the use of funds
- Lack of engagement from their team.

*Which program elements are lower value from a program administration cost perspective?*

The marketing support provided by the program received mixed results, and a few specific negatives emerged from participants relating to a lack of external advertising, slow turnaround times for approving (changes to) marketing materials for social media or distributor websites, and communications not targeting the contractor specifically. More external advertising was suggested by distributors, as well as partnering with associations such as Restaurants Canada to grow awareness/interest and help drive the program sales. One FS distributor suggested messaging to demonstrate the full picture when it comes to savings and providing customers with more information to help them in their decision making, such as fact sheets regarding potential long-term cost of ownership.

There is mixed interest in receiving further training. Some feel their sales team's knowledge to promote energy efficient products is good already. That said, the Evaluator is of the opinion that distributors may be open to more training if suggested by the PDSP, with whom distributors enjoy a good relationship.

*Which program elements and factors might inadvertently increase the potential for free ridership? Can these be reduced? Which factors or processes might reduce free ridership? Can Enbridge build on these?*

While program administration and delivery are excellent, the program's take-to-market approach, the program's participation agreement requirements and the performance-based way delivery has been procured make demonstrating program influence and incremental savings over naturally occurring sales particularly challenging. These factors combine to increase the risk of free ridership in the program. These risks are observed on three fronts, lack of baseline and performance period sales information, lack of systematic tracking of program activities that demonstrate influence, and the programs challenges in understanding end-user and contractor buying decisions and trends due to lack of a line-of-sight to them in the absence of contact information.

Further, the Evaluator is concerned by an apparent acknowledgement by some participants that they do not necessarily see their role as the main influencer in the sales process, they suggest that their role is to serve their customers, and that in this current environment, price and availability is a more powerful decision-making factor than energy efficiency. Participants suggest actively marketing and communicating to other market actors (end-users, contractors and trade associations) to help increase sales of energy efficient products.

Enbridge has noted that it has been proactively removing some measures that may be part of the purchasing policies of large food services end-users. While this is very prudent from a free ridership perspective, the Evaluator contends that such actions may ideally be supported by specific market research that aims to understand if the programming had any influence on the policy in question in the first instance. If this can be demonstrated, then the utility may be able to work with these end-users to adopt deeper incremental savings over time by keeping the products within the program without the risk of free ridership.

The Evaluator has made several recommendations on how Enbridge might work to close these gaps and further reduce the risk of free ridership.

*Are there measures that might be easier to transact and that could improve participant value as well as enhance the performance of the program? Are there measures that are problematic for one reason or another?*

Within the scope of the evaluation, the Evaluator was not able to research technical details of the qualified products list to suggest specific additions or improvements based on independent research.

That said, the number of measures available on the QPL and the perceived value add of the program based on this list are potentially problematic in the long term, and more measures should be added to maintain participant engagement.  Gas-fired rooftop units were the only measures explicitly mentioned as a technology to add.

The removal of high-volume measures such as storage hot-water heaters from the program was noted by the PDSP as a source of dissatisfaction among participating distributors.

# APPENDIX I
# BIBLIOGRAPHY OF DOCUMENTS REVIEWED

# APPENDIX II
# STAFF INTERVIEW GUIDES

Date: November 18, 2021

Attendees:

| Econoler | Enbridge Gas / ClearResult |
|---|---|
| Bryan Flannigan | |
| Alexandra Hopley | |

Econoler is conducting a process evaluation of the Enbridge Distributor Discount program. The evaluation will be used to understand areas of strength and weakness in the program and will include data collection activities to gather insights on elements such as program delivery effectiveness and perceived value and barriers among participants.

The interview questions were informed by a review of a wide range of program and program-related documents including regulatory submissions and rulings, program design, marketing plans and materials, training materials, delivery service provider documents, participant-facing agreements and documents, and program performance reports.

This interview will cover the following topics:

- Roles and responsibilities
- Program overview
- Program design
- Program delivery
- Program performance
- Marketing and communications
- Program operations, tracking and reporting
- Closing

Roles and Responsibilities

Q1. Can you please briefly describe each of your roles at Enbridge Gas or ClearResult and your specific responsibilities in this role relative to the Distributor Discount program?

Program Overview

Econoler will briefly describe a few of the key program and evaluation considerations and research questions [e.g. effectiveness of the offer for participants, attention on the regulatory OEB Evaluation context, potential free ridership, Distributor Discount programs being new in Ontario, the collaborative aspect with IESO, how costs and incentives are presented in terms of the budget, etc.] and ask the group to respond by framing the interview with the following.

Q2. Of the evaluation areas described, which is ones to you believe require the most attention for this process evaluation and why?
Q3. What aspect of the program do you believe is working exceptionally well in the program and why?
Q4. What is currently your biggest concern with the program and why?

Program Design

Econoler will briefly describe a few of the key program design observations [e.g. barriers to participation, delivery issues, importance of training, QPL] and will ask the group to respond by framing the interview with the following questions.

Q5. We noted in the design documents and in the service procurement process that there were inferences to the importance of market studies and collecting equipment sales data to establish baseline behaviours and conditions for mid-stream programs.
   a) Was any market characterization work done for the HVAC and Food Services markets?
   b) Was any pre-program sales information collected?
   c) Why/why not?

Q6. The program's logic suggests that a high degree of training would be required on EE benefits and best sales practices among participants. The ClearResult Service Proposal lists a number of training and upselling intervention possibilities (updating calculators, modifying existing sales brochures etc.). However, it appears that much of the training material provided suggests that the training is focused on educating about the features of the program itself, and on onboarding and using the PPL.
   d) Is this characterization accurate?
   e) Has specific training on energy efficiency and measure benefits been provided?
   f) How and when is this provided?

Q7. The program logic model suggests many barriers associated with the need for close participant support and ensuring high satisfaction.
   a) Is the program demonstrably succeeding in overcoming these barriers?
   b) How so?
   c) If not, what ideas, if any, do you have about overcome the barriers?"

Q8. Can you describe at a high level how the Qualified Product List is developed and updated?
   a) Is the QPL update process appropriately supporting the program?
   b) Does the program currently provide incentives for the right measures?
   c) Which measures should be dropped, or added?

Q9. We noted from the website and from the participant agreements that incentives are offered on used equipment, how does this feature influence the program?

Q10. [EGD ONLY] We noted that for planning and reporting purposes, the program budget and the allocation of incentives is in the administration budget. We were advised from Enbridge staff that they believed that this is required because the end-user does not technically receive the incentive (this is also why going forward 40% of the incentive is required to be passed on to the end user):
   a) Can you expand on (or provide more insight into) the cost-effectiveness calculation methodologies specific to the Distributor Discount program?
   b) Do you have research or specific guidance that the program must account this way?

Program Delivery [ClearResult Only]

In this segment, we'd like to better understand some of the day-to-day program delivery challenges and observations.

Q11. In your opinion, are the planned program delivery strategies effective? Why/why not?
   a) What is working well?
   b) What is not working well?

Q12. What are some of the main barriers to recruiting participants?

Q13. What feedback, if any, have you heard about the program from:
   a) Participants?
   b) Non-participants?

Q14. If we were to ask participants, and/or non-participants how the program delivery and offerings should be improved, what do you think they would say?

Q15. Do the incentives seem to be set at the right levels to encourage participation and affect sales?

Q16. Do you believe that there is additional technical assistance/training needed, help to promote the program?

Q17. As a third-party delivery agency, what challenges, if any, have you experienced in delivering the program?

Program Performance

Econoler will briefly describe a few of the key program participation and performance observations and will ask the group to respond by framing the interview with the following questions.

Q18. We understand the current participation levels in the program in terms of accounts and service locations from the Service Provider monthly progress reports (which are excellent!). How would you characterize participation relative to plan/expectations?
   a) What is preventing higher participation in food service?
   b) In HVAC?

Q19. We understand the current gas savings in the program from the monthly progress reports. We also noted suggestions in the annual report that initial targets were optimistic, and that these were revised down significantly for 2020 and 2021. How would you now characterize the savings relative to plan/expectations?
   a) Why did the savings targets need to be revised down?
   b) What is preventing higher savings in food service?
   c) In HVAC?

Q20. We understand the current equipment mix from the monthly progress reports and note that there are significant variances between products. How would you characterize the product mix relative to plan/expectations?
   a) What are the biggest equipment issues in food service?
   b) In HVAC?

Q21. The program performance reports contain limited qualitative information and little quantitative information about the change over time in sales practices (addition of banners on the floor, sales staff training, updated phone procedures) or the change over time in the percentage of sales of the units on the QPL.
   a) Have there been changes in these areas, if so, what are they?
   b) How can this changes be demonstrated with data or documentation?
   c) Is there a process for logging and tracking these?

Q22. How has COVID impacted the performance of the program?
   a) Are these impacts demonstrable with data and documentation, or are they anecdotal?

Marketing and Communications

Econoler will briefly describe a few of the key observations relating to program marketing and communications and will ask the group to respond by framing the interview with the following questions.

Q23. What strategies do you think have been most effective in marketing the program to date, and why?
   a) Which specific elements are working well?
   b) Which ones are not working as well?

Q24. The web/social media communication campaigns appear to have limited reach based on analytics report made available.
   a) Is this a fair characterization?
   b) Are web and social media analytics closely monitored to understand effectiveness of web campaigns?
   c) What is your assessment of the issues?

Q25. The promotional materials that we reviewed are primarily geared to raise awareness of the program and to solicit participation, or to encourage purchase of the equipment for end-users, (and less to promote how the distributors can change their practices and improve their own performance).
   a) Is this a fair characterization?
   b) Should other messages be apparent?
   c) Is there additional marketing and communication documentation that describes the campaign plans and goals?

Q26. Larger end-user accounts have an important place in the program as high-volume buyers of products through the program.
   a) Can you tell us about if and how these accounts are engaged?
   b) Does the program have knowledge about the buying practices of these large end-users and how they may be influenced by or are having an influence on the program?
   c) Is there any quantitative or qualitative tracking of information about the program engagements or strategies with these larger accounts, and how their buying might influence the program?
   d) If so, are there any plans to transpose these learnings to smaller end-user accounts?

Program Operations, Tracking and Reporting

There was limited documentation provided about how the program is administered, how quality is assured, and how accountability controls are maintained.

Q27. Do program procedures exist outlining program responsibilities, customer journeys, new staff training, QA/QC requirements, approval authorities and accountability controls procedures?

Q28. We understand from the program documentation that up to 10% of sales units will be randomly selected for a documentation review, and up to 5% of sales will be randomly selected for site inspections.
   a) Could you describe these processes?
   b) Have these processes uncovered any issues?
   c) If yes, which ones?

Q29. The program performance reports contain limited qualitative information and little quantitative information about participant satisfaction, or PPL system support issues and issue resolution.
   a) What are the main issues affecting participant satisfaction?
   b) Is there a process for logging and these tracking these?

Q30. How do you track the delivery and success of training interventions (for example are there logs of training participation and/or satisfaction with the training among participants)?

Q31. We noted that the program participation agreements contain specific requirements for reporting sales data.
   a) Is it your interpretation of the agreements that ALL sales data is required to be submitted, or sales data only for the eligible products, or eligible product categories?
   b) Do you believe that you would be able to request and receive sales data from some/all distributors on these product categories?
   c) What issues might arise?

Q32. We noted that contact information (buyer company names, buyer contact name, emails etc.) is listed as a non-mandatory field in the sales data requirement.
   a) Why is that?
   b) Do you believe that this could be requested?

Q33. We noted some challenges in obtaining contact information for end-user and contractor data collection for this evaluation (“suggest that Econoler work collaboratively with the program Delivery Agent (CLEAResult) and if necessary the Foodservice Dealers to connect with these contacts as this would help preserve the integrity of existing relationships and that Econoler works collaboratively with CLEAResult and the HVAC Distributors who can help facilitate interviews”).
   a) How might this collaborative working process unfold for the purposes of reaching a broad range of end-users and contractors?

Closing

Thinking about your experiences and the discussion so far, please consider and respond to the following questions.

Q34. What would you most like to learn from the program evaluation exercise?

Q35. Are there any topics or issues that you would have expected or liked to discuss that were not covered today?

# APPENDIX III
# PARTICIPANT INTERVIEW GUIDES

# APPENDIX IV
# NON-PARTICIPANT INTERVIEW GUIDES

# APPENDIX V
# CONTRACTOR SURVEY INSTRUMENT

# APPENDIX VI
# END-USER SURVEY INSTRUMENT

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# EGD RATE ZONE: ACCOUNT BALANCES AND APPROVALS SOUGHT

## 1. Account Balances for Disposition

1. The EGD rate zone account balances set out in Table 1 are consistent with the EC's Verification Report and the EC's opinion on energy savings, lost revenue, shareholder incentive amounts, and cost-effectiveness.

Table 1

2022 DSM Deferral and Variance Account Balances – EGD Rate Zone

| Account | 2022 |
|---|---|
| DSM Variance Account | $3,157,694 |
| DSM Incentive Deferral Account | $5,236,372 |
| LRAM Variance Account | $34,771 |
| Interest | $557,506 |
| Total | $8,986,343 |

2. The final 2022 DSM Annual Report is set out at Exhibit A, Tab 4, Schedule 1.

## 2. Approvals Sought

3. Enbridge Gas is seeking the following approvals:
    - Approval of the EGD rate zone's DSMVA, DSMIDA, and LRAMVA balances as set out in Table 1.
    - An Order providing for the clearance through to rates of the amounts set out in Table 1 as a one-time adjustment to be cleared within Enbridge Gas's next available QRAM application following the OEB's approval, effective as early as April 1, 2025.

# EGD RATE ZONE: RATE ALLOCATION

1. The following evidence describes the three DSM-related deferral and variance accounts specific to the EGD rate zone for which Enbridge Gas requests clearance of balances recorded relating to 2022 DSM activities. This evidence also describes the basis on which these amounts will be allocated to rate classes within the EGD rate zone, as well as the methodology for incorporation into rates.

## 1. Demand Side Management Variance Account (DSMVA)

2. The EGD rate zone DSMVA balance for 2022 is a debit of $3.158 million before interest. The DSMVA is used to track the variance between actual DSM spending by rate class versus the budgeted amount included in rates by rate class. The actual DSMVA spending variance amount relative to the amount budgeted for each rate class is allocated to that rate class for disposition purposes.[1]

3. Enbridge Gas followed the OEB-approved methodology for the EGD rate zone to calculate the 2022 DSMVA balances. All DSM costs are allocated to rate classes based on the allocation of customer incentive costs between rate classes, with the exception of Low Income Program Costs, which are allocated based on OEB approved Low-income Energy Assitance Program (LEAP) revenues.[2]

### *1.1 DSMVA 15% Overspend*

4. As per the Guidelines, Enbridge Gas is eligible to recover up to an additional 15% overspend above its annual OEB-approved DSM budget through the DSMVA as long as its overall weighted scorecard target on a pre-audited basis for one or more of its scorecards has been achieved, provided the overspend was on program expenses.[3] Enbridge Gas utilized this DSMVA mechanism to overspend on the

[1] Guidelines, pp. 36-38.
[2] Guidelines, pp. 36-38; EB-2015-0049, EGD 2015-2020 DSM Plan, Exhibit B, Tab 2, Schedule 4, p.14.
[3] Guidelines, pp. 36-38.

Resource Acquisition scorecard in the EGD rate zone in the 2022 DSM program year**.** The scorecard achieved a pre-audit result of 113%, which is above the weighted scorecard target required for the 15% overspend to be accessed.

*1.2 Energy Leaders*

5. Enbridge Gas proposed the Energy Leaders offering as part of its EGD rate zone 2015-2020 DSM Plan. The OEB approved the offering and an annual budget of $0.4 million for 2016 to 2018, but noted the offering will be evaluated at the mid-term to determine if it should continue for the remainder of the Multi-Year Plan.[4] As part of its Mid-Term Review submissions, Enbridge Gas demonstrated the successes of the offering, and proposed that the approved annual Energy Leaders budget of $0.4 million remain appropriate for the remainder of the Multi-Year Plan.[5]

6. In its Mid-Term Review Report, the OEB supported this budget request. The OEB further indicated that Enbridge Gas is to track the costs of this offering within the DSMVA and seek approval of recovery of the amounts as part of the annual DSM deferral and variance account application.[6] Consistent with this request, Enbridge Gas has included program expenditures of $0.149 million for this offering in the DSMVA for the Enbridge rate zone, and is seeking recovery of these costs through this proceeding.

*1.3 Budget Transfers Between Programs*

7. Section 6.6 of the Guidelines states that Enbridge Gas should inform the OEB and stakeholders in the event that cumulative fund transfers among OEB-approved DSM programs exceed 30% of the approved annual DSM budget for an individual DSM program. Enbridge Gas did not transfer more than 30% of program budget funds

[4] EB-2015-0029/0049, Decision and Order, January 20, 2016.
[5] EB-2017-0127 / EB-2017-0128, DSM Mid-Term Review Submissions of Enbridge Gas Distribution Inc., October 2, 2017.
[6] 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.

between programs in the 2022 DSM program years for the EGD rate zone.

*1.4 Deferred Incentives*

8. Consistent with section 5.3.2 of the OEB's Mid-Term Review Report and the OEB-approved DSMVA Accounting Orders as set out in the OEB's Decision and Order on Enbridge Gas's (EGD rate zone) 2016 DSM Deferral and Variance Account Disposition Proceeding (EB-2018-0301),[7] Table 8.7 of the final 2022 DSM Annual Report for the EGD rate zone includes amounts for customer incentive spend deferred to future years for offerings where incentives are paid when future milestones/activities are reached.

9. Table 1, at Appendix 1, provides a continuity schedule of the deferred incentive balances for the Residential Savings by Design (RSBD), the Commercial Savings by Design (CSBD), and the Affordable Housing New Construction (AHNC) offerings for the 2022 DSM program year in the EGD rate zone being tracked within the DSMVA.

2. Demand Side Management Incentive Deferral Account (DSMIDA)

10. The EGD rate zone DSMIDA balance for 2022 is $5.236 million before interest. The purpose of the DSMIDA is to record the shareholder incentive amount earned by a natural gas utility as a result of its DSM programs.[8] DSM shareholder incentive amounts are allocated to the rate classes in proportion to the actual DSM spending by rate class in 2022.

11. Table 8.0 to Table 8.3 of the final 2022 DSM Annual Report for the EGD rate zone provide details of the DSM incentive achieved by scorecard.

[7] EB-2018-0301, OEB Decision and Order, April 11, 2019.
[8] Guidelines, p. 39.

3. Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)

12. The EGD rate zone LRAMVA balance for 2022 is $0.035 million before interest. The LRAMVA is used to track, at the rate class level, the variance between the actual impact of DSM activities (volume savings) undertaken by the natural gas utility and the forecasted impact included in distribution rates.[9] The LRAMVA balance is allocated to rate classes on the same basis as lost revenues were experienced such that the LRAMVA provides a true-up by rate class.

13. Consistent with historical practice, the annual rate setting process in the EGD rate zone includes a DSM volumetric adjustment for the expected natural gas savings that are partially effective for the current year, and the balance of DSM volumes not captured in the previous years' base rate volumes. Therefore, the 2022 LRAMVA balance contains a variance related to the 2022 DSM program year only. See Exhibit B, Tab 2, Schedule 1, Appendix 2 for a detailed presentation of the 2022 LRAMVA balance of $0.035 million for the EGD Rate Zone, before interest. Additionally, see Table 8.4 of the final 2022 DSM Annual Report for further information on LRAM for the 2022 DSM program year.

4. Rate Allocation

14. Table 2 summarizes the allocation of Enbridge Gas's EGD rate zone-related DSM deferral and variance account balances, prior to interest, for the 2022 DSM program years to rate classes.

[9] Guidelines, p. 39.

Table 2

2022 DSM Deferral and Variance Account Balances by Rate Class – EGD Rate Zone

| Rate Class | DSMVA | DSMIDA | LRAMVA [1] [2] [3] | Total Deferral/ Variance Balance |
|---|---|---|---|---|
| RATE 1 | $14,110,537 | $3,951,654 | N/A | $18,062,191 |
| RATE 6 | ($6,165,017) | $1,100,884 | N/A | ($5,064,133) |
| RATE 9 | ($631) | $170 | $0 | ($461) |
| RATE 100 | $14,770 | $1,091 | $0 | $15,861 |
| RATE 110 | ($461,843) | $95,268 | $22,209 | ($344,366) |
| RATE 115 | ($906,196) | $30,483 | $79 | ($875,634) |
| RATE 125 | ($23,672) | $6,380 | $0 | ($17,292) |
| RATE 135 | ($16,571) | $17,624 | $3,966 | $5,019 |
| RATE 145 | ($1,437,527) | $11,804 | $8,291 | ($1,417,432) |
| RATE 170 | ($1,946,370) | $18,377 | $226 | ($1,927,767) |
| RATE 200 | ($8,206) | $2,212 | $0 | ($5,994) |
| RATE 300 | ($1,578) | $425 | $0 | ($1,153) |
| TOTAL | $3,157,694 | $5,236,372 | $34,771 | $8,428,837 |

Notes:
1. Rate 1 and Rate 6 are not included in the LRAM amount as these rate classes are covered under the Average Use True-Up Variance Account (AUTUVA).
2. Rates 9, 125, 200 & 300 do not have any LRAM component in the rate allocation since customers in these rate classes are not eligible for DSM programs. These rate classes will, however, be subject to rate allocations for DSMVA and applicable DSMIDA related to Low Income Programs.
3. Rate 100 does not have any LRAM component in the rate allocation since the distribution margin for these customers is recovered through fixed charges.

## 5. Disposition Methodology

15. Enbridge Gas proposes to dispose of the 2022 DSM-related deferral and variance account balances as a one-time billing adjustment. For all customers in the EGD rate zone, the one-time billing adjustment will be derived for each customer individually by applying the disposition unit rates to each customer's actual consumption volume for the period January 1, 2022 to December 31, 2022.

16. Enbridge Gas proposes to dispose of the approved 2022 DSM deferral and variance account balances with the first available QRAM application following the OEB's approval, as early as April 1, 2025.

17. The allocation of 2022 DSM Deferral and Variance account balances and the derivation of clearance unit rates for the EGD rate zone are consistent with the treatment in prior years. The 2022 disposition unit rate for each rate class and type of service is set out at Exhibit B, Tab 2, Schedule 1, Appendix 3.

18. Exhibit B, Tab 2, Schedule 1, Appendices 4 to 6 provide details of the derivation of proposed unit rates:
    - Appendix 4 determines the balances (principal and interest) to be cleared for each DSM deferral and variance account for the 2022 DSM program year;
    - Appendix 5 shows the account balance allocations by rate class and type of account based on cost drivers for each type of account for the 2022 DSM program year; and
    - Appendix 6 illustrates the derivation of unit rates for the 2022 DSM program year, based on the balances and actual 2022 consumption volumes for each rate class and service type.

Table 1
Continuity Schedule for Deferred Incentive Balances

| Offering ($MM) | TOTAL | 2017 | | | | 2018 | | | | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | TOTAL | 2022 Deposit Expiration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Beginning of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Deposits | End of Year Balance | |
| | | | Utilized | Expired | | | Utilized | Expired | | | Utilized | Expired | | | Utilized | Expired | | | Utilized | Expired | | | | |
| | *a* | *b* | *c* | *d* | *e = b - c - d* | *f* | *g* | *h* | *i = f - g - h* | *j* | *k* | *l* | *m = j - k - l* | *n* | *o* | *p* | *q = n - o - p* | *n* | *o* | *p* | *q = n - o - p* | *r* | *s = e + i + m + q + r* | |
| RSBD | $3.76 | $0.00 | $0.00 | $0.00 | $0.00 | $0.13 | $0.13 | $0.00 | $0.00 | $1.01 | $1.01 | $0.00 | $0.00 | $1.93 | $0.79 | $0.00 | $1.14 | $1.40 | $0.14 | $0.00 | $1.26 | $1.40 | $3.79 | 31-Dec-25 |
| CSBD | $0.27 | $0.00 | $0.00 | $0.00 | $0.00 | $0.03 | $0.03 | $0.00 | $0.00 | $0.06 | $0.06 | $0.00 | $0.00 | $0.09 | $0.00 | $0.00 | $0.09 | $0.05 | $0.00 | $0.00 | $0.05 | $0.05 | $0.18 | 31-Dec-27 |
| AHNC | $2.97 | $0.34 | $0.25 | $0.08 | $0.00 | $0.71 | $0.58 | $0.00 | $0.12 | $0.81 | $0.16 | $0.00 | $0.66 | $1.02 | $0.15 | $0.00 | $0.87 | $1.03 | $0.00 | $0.00 | $1.03 | $0.56 | $3.24 | 31-Dec-27 |
| TOTAL | $7.00 | $0.34 | $0.25 | $0.08 | $0.00 | $0.86 | $0.74 | $0.00 | $0.12 | $1.88 | $1.22 | $0.00 | $0.66 | $3.04 | $0.94 | $0.00 | $2.10 | $2.48 | $0.14 | $0.00 | $2.33 | $2.00 | $7.21 | |

ENBRIDGE GAS INC.
EGD RATE ZONE
2022 LRAMVA Balance

| Line No. | Particulars | 2022 Audited Volumes [1] $10^3$ m$^3$ | 2022 LRAM Volumes in 2022 Rates $10^3$ m$^3$ | 2022 Volume Variance $10^3$ m$^3$ | 2022 Distribution Margin \$/$10^3$ m$^3$ | 2022 LRAMVA (\$) |
|---|---|---|---|---|---|---|
| | | (a) | (b) | (c) = (a) - (b) | (d) | (e) = (c) x (d) |
| 1 | Rate 110 | 4,813 | 1,464 | 3,350 | 6.630 | 22,209 |
| 2 | Rate 115 | 1,858 | 1,833 | 25 | 3.130 | 79 |
| 3 | Rate 135 | 594 | 383 | 211 | 18.789 | 3,966 |
| 4 | Rate 145 | 179 | - | 179 | 46.355 | 8,290 |
| 5 | Rate 170 | 223 | 172 | 51 | 4.471 | 226 |
| 6 | Total | 7,667 | 3,852 | 3,816 | | 34,771 |

Notes:
[1] Volumes reflect 2022 audited volumes, adjusted for month of install.

Enbridge Gas Inc.
EGD Rate Zone
Unit Rates and Type of Service

| | | COL.1 |
|---|---|---|
| | | Unit Rate (¢/m³) |
| **Bundled Services:** | | |
| **RATE 1** | - SYSTEM SALES | 0.3623 |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | 0.3623 |
| | - DAWN T-SERVICE | 0.3623 |
| | - WESTERN T-SERVICE | 0.3623 |
| **RATE 6** | - SYSTEM SALES | (0.1036) |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | (0.1036) |
| | - DAWN T-SERVICE | (0.1036) |
| | - WESTERN T-SERVICE | (0.1036) |
| **RATE 9** | - SYSTEM SALES | 43.3216 |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | 0.0000 |
| | - DAWN T-SERVICE | 0.0000 |
| | - WESTERN T-SERVICE | 0.0000 |
| **RATE 100** | - SYSTEM SALES | 0.0435 |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | 0.0435 |
| | - DAWN T-SERVICE | 0.0435 |
| | - WESTERN T-SERVICE | 0.0000 |
| **RATE 110** | - SYSTEM SALES | (0.0278) |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | (0.0278) |
| | - DAWN T-SERVICE | (0.0278) |
| | - WESTERN T-SERVICE | (0.0278) |
| **RATE 115** | - SYSTEM SALES | (0.2179) |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | (0.2179) |
| | - DAWN T-SERVICE | (0.2179) |
| | - WESTERN T-SERVICE | 0.0000 |
| **RATE 135** | - SYSTEM SALES | 0.0123 |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | 0.0000 |
| | - DAWN T-SERVICE | 0.0123 |
| | - WESTERN T-SERVICE | 0.0000 |
| **RATE 145** | - SYSTEM SALES | (7.4973) |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | 0.0000 |
| | - DAWN T-SERVICE | (7.4973) |
| | - WESTERN T-SERVICE | 0.0000 |
| **RATE 170** | - SYSTEM SALES | (0.6607) |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | (0.6607) |
| | - DAWN T-SERVICE | (0.6607) |
| | - WESTERN T-SERVICE | 0.0000 |
| **RATE 200** | - SYSTEM SALES | (0.0031) |
| | - BUY/SELL | 0.0000 |
| | - ONTARIO T-SERVICE | (0.0031) |
| | - DAWN T-SERVICE | (0.0031) |
| | - WESTERN T-SERVICE | 0.0000 |
| | | |
| **Unbundled Services (Billing based on CD):** | | |
| **RATE 125** | - All | (0.1799) |
| **RATE 300** | - All | (7.1231) |
| **RATE 332** | - All | 0.0000 |

Enbridge Gas Inc.
EGD Rate Zone
Determination of Balances to be Cleared
2022 DSM Deferral and Variance Accounts

| ITEM NO. | | COL.1 PRINCIPAL FOR CLEARING ($000) | COL.2 INTEREST ($000) | COL.3 (COL.1 + COL.2) TOTAL FOR CLEARING ($000) |
|---|---|---|---|---|
| 1. | DEMAND SIDE MANAGEMENT (DSMVA) | 3,157.7 | 5.2 | 3,162.9 |
| 2. | LOST REVENUE ADJ MECHANISM (LRAMVA) | 34.8 | 3.8 | 38.6 |
| 3. | DEMAND SIDE MANAGEMENT INCENTIVE (DSMIDA) | 5,236.4 | 548.5 | 5,784.9 |
| 4. | TOTAL | 8,428.8 | 557.5 | 8,986.3 |

Enbridge Gas Inc.
EGD Rate Zone
2022 Classification and Allocation of Deferral and Variance Account Balances

| ITEM NO. | CLASSIFICATION | COL.1 TOTAL ($000) |
|---|---|---|
| 1. | DEMAND SIDE MANAGEMENT (DSMVA) | 3,162.9 |
| 2. | LOST REVENUE ADJ MECHANISM (LRAMVA) | 38.6 |
| 3. | DEMAND SIDE MANAGEMENT INCENTIVE (DSMIDA) | 5,784.9 |
| 4. | TOTAL | 8,986.3 |

| | ALLOCATION | COL.A DSMVA ($000) | COL.B LRAMVA ($000) | COL.C DSMIDA ($000) | COL.D = A +B + C TOTAL ($000) |
|---|---|---|---|---|---|
| 1.1 | RATE 1 | 14,133.7 | 0.0 | 4,365.6 | 18,499.3 |
| 1.2 | RATE 6 | (6,175.1) | 0.0 | 1,216.2 | (4,958.9) |
| 1.3 | RATE 9 | (0.6) | 0.0 | 0.2 | (0.4) |
| 1.4 | RATE 100 | 14.8 | 0.0 | 1.2 | 16.0 |
| 1.5 | RATE 110 | (462.6) | 24.6 | 105.2 | (332.7) |
| 1.6 | RATE 115 | (907.7) | 0.1 | 33.7 | (873.9) |
| 1.7 | RATE 125 | (23.7) | 0.0 | 7.0 | (16.7) |
| 1.8 | RATE 135 | (16.6) | 4.4 | 19.5 | 7.3 |
| 1.9 | RATE 145 | (1,439.9) | 9.2 | 13.0 | (1,417.6) |
| 1.10 | RATE 170 | (1,949.6) | 0.3 | 20.3 | (1,929.0) |
| 1.11 | RATE 200 | (8.2) | 0.0 | 2.4 | (5.8) |
| 1.12 | RATE 300 | (1.6) | 0.0 | 0.5 | (1.1) |
| 1.13 | RATE 332 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1.14 | TOTAL | 3,162.9 | 38.6 | 5,784.9 | 8,986.3 |

Enbridge Gas Inc.
EGD Rate Zone
2022 Allocation and Unit Rate Derivation by Type of Service

| | | COL.1 | COL.2 | COL.3 (COL.1 / COL.2) |
|---|---|---|---|---|
| | | TOTAL BALANCE ($000) | 2022 VOLUME ($m^3$) | UNIT RATE (¢/$m^3$) |
| **Bundled Services:** | | | | |
| **RATE 1** | - SYSTEM SALES | 18,220.6 | 5,029,401,048 | 0.3623 |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | 0.0 | 9,886 | 0.3623 |
| | - DAWN T-SERVICE | 236.9 | 65,393,376 | 0.3623 |
| | - WBT | 41.7 | 11,510,141 | 0.3623 |
| **RATE 6** | - SYSTEM SALES | (3,140.4) | 3,031,974,004 | (0.1036) |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | (52.3) | 50,462,237 | (0.1036) |
| | - DAWN T-SERVICE | (1,644.4) | 1,587,656,929 | (0.1036) |
| | - WBT | (121.8) | 117,584,284 | (0.1036) |
| **RATE 9** | - SYSTEM SALES | (0.4) | 0 | 0.0000 |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | 0.0 | 0 | 0.0000 |
| | - DAWN T-SERVICE | 0.0 | 0 | 0.0000 |
| | - WBT | 0.0 | 0 | 0.0000 |
| **RATE 100** | - SYSTEM SALES | 5.6 | 12,929,008 | 0.0435 |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | 0.9 | 1,970,347 | 0.0435 |
| | - DAWN T-SERVICE | 9.5 | 21,915,879 | 0.0435 |
| | - WBT | 0.0 | 0 | 0.0000 |
| **RATE 110** | - SYSTEM SALES | (31.7) | 114,059,014 | (0.0278) |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | (10.2) | 36,745,684 | (0.0278) |
| | - DAWN T-SERVICE | (288.6) | 1,038,973,709 | (0.0278) |
| | - WBT | (2.2) | 8,098,557 | (0.0278) |
| **RATE 115** | - SYSTEM SALES | (2.3) | 1,039,526 | (0.2179) |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | (323.9) | 148,606,925 | (0.2179) |
| | - DAWN T-SERVICE | (547.8) | 251,348,334 | (0.2179) |
| | - WBT | 0.0 | 0 | 0.0000 |
| **RATE 135** | - SYSTEM SALES | 0.3 | 2,577,922 | 0.0123 |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | 0.0 | 0 | 0.0000 |
| | - DAWN T-SERVICE | 7.0 | 56,442,492 | 0.0123 |
| | - WBT | 0.0 | 0 | 0.0000 |
| **RATE 145** | - SYSTEM SALES | (97.6) | 1,301,579 | (7.4973) |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | 0.0 | 0 | 0.0000 |
| | - DAWN T-SERVICE | (1,320.1) | 17,607,249 | (7.4973) |
| | - WBT | 0.0 | 0 | 0.0000 |
| **RATE 170** | - SYSTEM SALES | (50.8) | 7,684,947 | (0.6607) |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | (949.9) | 143,778,329 | (0.6607) |
| | - DAWN T-SERVICE | (928.3) | 140,500,986 | (0.6607) |
| | - WBT | 0.0 | 0 | 0.0000 |
| **RATE 200** | - SYSTEM SALES | (4.2) | 136,663,249 | (0.0031) |
| | - BUY/SELL | 0.0 | 0 | 0.0000 |
| | - T-SERVICE EXCL WBT | (0.0) | 1,229,126 | (0.0031) |
| | - DAWN T-SERVICE | (1.5) | 49,468,313 | (0.0031) |
| | - WBT | 0.0 | 0 | 0.0000 |
| **Unbundled Services: (Billing based on CD)** | | | | |
| **RATE 125** | - All | (16.7) | 9,260,357 | (0.1799) |
| **RATE 300** | - All | (1.1) | 15,600 | (7.1231) |
| **RATE 332** | - All | 0.0 | 31,144,563 | 0.0000 |
| **TOTAL** | | 8,986.3 | | |

# EGD RATE ZONE: ESTIMATED ANNUAL BILL IMPACT

1. For a Rate 1 customer in the EGD rate zone with annual consumption of 2,400 $m^3$, the one-time billing adjustment is a charge of approximately $8.69. Note this is not inclusive of the proposed 2024 interim deferral disposal adjustment related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering. Please see Exhibit D, Tab 3, Schedule 1 for the bill impacts of the proposed 2024 interim disposal adjustment.

2. Bill impacts of the proposed disposition for the EGD rate zone are set out at Exhibit B, Tab 3, Schedule 1, Appendix 1.

Enbridge Gas Inc.
EGD Rate Zone
2022 DSM Deferral and Variance Account Clearing
Bill Adjustment for Typical Customers

| ITEM NO. | COL.1 | COL.2 | COL.3 | COL.4 | COL.5 | COL.6 | COL.7 (COL.2 x COL.3) | COL.8 (COL.2 x COL.4) | COL.9 (COL.2 x COL.5) | COL.10 (COL.2 x COL.6) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | UNIT RATE | | | | BILL ADJUSTMENT | | | |
| | **GENERAL SERVICE** | **ANNUAL VOLUME $m^3$** | **Sales ¢/$m^3$** | **Ontario TS ¢/$m^3$** | **Dawn TS ¢/$m^3$** | **Western TS ¢/$m^3$** | **Sales Customers $** | **Ontario TS Customers $** | **Dawn TS Customers $** | **Western TS Customers $** |
| 1.1 | **RATE 1 RESIDENTIAL** | | | | | | | | | |
| 1.2 | Heating & Water Heating | 2,400 | 0.3623 | 0.3623 | 0.3623 | 0.3623 | 8.69 | 8.69 | 8.69 | 8.69 |
| 2.1 | **RATE 6 COMMERCIAL** | | | | | | | | | |
| 2.2 | Commercial - Heating & Other Uses | 22,606 | (0.1036) | (0.1036) | (0.1036) | (0.1036) | (23.41) | (23.41) | (23.41) | (23.41) |
| 2.3 | General Use | 43,285 | (0.1036) | (0.1036) | (0.1036) | (0.1036) | (44.83) | (44.83) | (44.83) | (44.83) |
| | **CONTRACT SERVICE** | | | | | | | | | |
| 3.1 | **RATE 100** | | | | | | | | | |
| 3.2 | Industrial - small size | 339,188 | 0.0435 | 0.0435 | 0.0435 | 0.0000 | 147 | 147 | 147 | - |
| 4.1 | **RATE 110** | | | | | | | | | |
| 4.2 | Industrial - small size, 50% LF | 598,568 | (0.0278) | (0.0278) | (0.0278) | (0.0278) | (166) | (166) | (166) | (166) |
| 4.3 | Industrial - avg. size, 75% LF | 9,976,121 | (0.0278) | (0.0278) | (0.0278) | (0.0278) | (2,771) | (2,771) | (2,771) | (2,771) |
| 5.1 | **RATE 115** | | | | | | | | | |
| 5.2 | Industrial - small size, 80% LF | 4,471,609 | (0.2179) | (0.2179) | (0.2179) | 0.0000 | (9,745) | (9,745) | (9,745) | - |
| 5.3 | Industrial - large size, 80% LF | 69,832,850 | (0.2179) | (0.2179) | (0.2179) | 0.0000 | (152,192) | (152,192) | (152,192) | - |
| 6.1 | **RATE 135** | | | | | | | | | |
| 6.2 | Industrial - Seasonal Firm | 598,567 | 0.0123 | 0.0000 | 0.0123 | 0.0000 | 74 | - | 74 | - |
| 7.1 | **RATE 145** | | | | | | | | | |
| 7.2 | Commercial - avg. size | 598,568 | (7.4973) | 0.0000 | (7.4973) | 0.0000 | (44,876) | - | (44,876) | - |
| 8.1 | **RATE 170** | | | | | | | | | |
| 8.2 | Industrial - avg. size, 75% LF | 9,976,121 | (0.6607) | (0.6607) | (0.6607) | 0.0000 | (65,912) | (65,912) | (65,912) | - |

# UNION RATE ZONES: ACCOUNT BALANCES AND APPROVALS SOUGHT

## 1. Account Balances for Disposition

1. The Union rate zones account balances set out in Table 1 are consistent with the EC's Verification Report and the EC's opinion on energy savings, lost revenue, shareholder incentive amounts and cost-effectiveness.

Table 1

2022 DSM Deferral and Variance Account Balances - Union Rate Zones

| Account | Total |
|---|---|
| DSM Variance Account | ($14,314,891) |
| DSM Incentive Deferral Account | $0 |
| LRAM Variance Account | $722,953 |
| Interest | ($1,558,887) |
| Total | ($15,150,825) |

2. The final 2022 DSM Annual Report is set out at Exhibit A, Tab 4, Schedule 1.

## 2. Approvals Sought

3. Enbridge Gas is seeking the following approvals:
    - Approval of the Union rate zones' DSMVA, DSMIDA, and LRAMVA balances, as set out in Table 1.
    - An Order providing for the clearance through to rates of the amounts set out in Table 1 as a one-time adjustment for all rate classes in the Union rate zones, to be cleared within Enbridge Gas's next available QRAM application following the OEB's approval, effective as soon as April 1, 2025.

# UNION RATE ZONES: RATE ALLOCATION

1. The following evidence describes the three DSM-related deferral and variance accounts specific to the Union rate zones for which Enbridge Gas requests clearance of balances recorded relating to 2022 DSM activities. This evidence also describes the basis on which these amounts will be allocated to rate classes within the Union rate zones, as well as the methodology for their incorporation into rates.

## 1. Demand Side Management Variance Account

2. The Union rate zones DSMVA balance for 2022 is a credit of $14.315 million before interest. The DSMVA is used to track the variance between actual DSM spending by rate class versus the budgeted amount included in rates by rate class. The actual DSMVA spending variance amount relative to the amount budgeted for each rate class is allocated to that rate class for disposition purposes.[1]

3. Enbridge Gas followed the OEB-approved methodology for the Union rate zones to calculate the 2022 DSMVA balances.[2] The customer incentive was allocated based on the amount spent within each rate class. All other program costs were allocated by customer class (e.g. Residential, Commercial/Industrial) and assigned by rate class based on the percentage allocation of the customer incentive costs. All portfolio-level costs that cannot be attributed to an individual program were allocated to a rate class based on the percentage allocation of the program costs by rate class. The variance between the Low-Income DSM budget included in rates and the actual amount spent on Low-Income DSM programs is recovered in proportion to the OEB-approved distribution revenue by rate class for the respective year.

[1] Guidelines, pp.36-38.
[2] Guidelines, pp. 36-38; EB-2015-0029, Union 2015-2020 DSM Plan, Exhibit A, Tab 2, Schedule 1, pp. 22-23.

4. Consistent with the pooled DSM budget costs included in rates for 2022, Enbridge Gas has pooled Rate M4 and Rate M5 DSMVA balances for the purposes of disposition. Variances between the DSM budget included in rates and actual DSM spending in these rate classes has been allocated based on volumes for Rate M4 and Rate M5. Accordingly, there is a single common unit rate calculated to determine the disposition of the DSMVA balance to individual customers in these rate classes. This approach is consistent with Union's OEB-approved 2020 DSM Deferral Disposition Application (EB-2022-0007).

*1.1 DSMVA 15% Overspend*

5. As per the Guidelines and OEB-approved 2015-2020 DSM Plan for the Union rate zones, Enbridge Gas is eligible to recover up to an additional 15% overspend above its annual OEB-approved DSM budget through the DSMVA as long as its overall weighted scorecard target on a pre-audited basis for one or more of its scorecards has been achieved, provided the overspend was on program expenses.[3] Enbridge Gas did not utilize this DSMVA mechanism in the Union rate zones in the 2022 DSM program year.

*1.2 Residential Adaptive Thermostat Offering*

6. As part of the Mid-Term Review of the Demand Side Management (DSM) Framework for Natural Gas Distributors (2015-2020), Enbridge Gas proposed the development and implementation of a new adaptive thermostat offering within its Residential program called the Residential Adaptive Thermostat offering for the Union rate zones.[4] As part of this proposal, Enbridge Gas requested OEB approval of an incremental $1.5M per year to facilitate this new offering for the Union rate zones.

[3] Guidelines, pages 36-38; EB-2015-0029, Union Gas Limited 2015-2020 DSM Plan, Exhibit A, Tab 2, Schedule 1, pp. 22-23.
[4] EB-2017-0127, DSM Mid-Term Review Part Two Requirement Two: Submission of Union Gas Limited, p.4.

7. In the Report of the OEB on the Mid-Term Review of the Demand Side Management (DSM) Framework for Natural Gas Distributors (2015-2020), the OEB indicated that it supported this request. While incremental budget funds were not included in rates, the OEB directed Enbridge Gas to track program expenditures in the DSMVA for the Union rate zones.[5] Consistent with this request, Enbridge Gas has included program expenditures of $1.386 million for this offering in the DSMVA for the Union rate zones and is seeking recovery of these costs through this proceeding.

*1.3 Budget Transfers Between Programs*

8. Section 6.6 of the Guidelines states that Enbridge Gas should inform the OEB and stakeholders in the event that cumulative fund transfers among OEB-approved DSM programs exceed 30% of the approved annual DSM budget for an individual DSM program. Enbridge Gas did not transfer more than 30% of program budget funds between programs in the 2022 DSM program year for the Union rate zones.

*1.4 Large Volume Program Budget Transfers – Rate T2 & Rate 100 Customers*

9. In accordance with the OEB-approved 2015-2020 DSM Plan for the Union rate zones and the OEB-approved 2021[6] and 2022[7] extension of the DSM Plan, Enbridge Gas (Union rate zones) continued to offer its Large Volume direct access program and adhered to the OEB-approved maximum program budget transfer rules between Rate T2 and Rate 100 in 2022.[8] The overall program underspend of $0.921 million for the Large Volume Program is credited in the DSMVA. The Company confirms that it did not transfer budget dollars from any other part of the overall DSM budget

[5] EB-2017-0127, 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.24.
[6] EB-2019-0271, Decision and Order, July 16, 2020.
[7] EB-2021-0002, Decision and Order Related to 2022 Natural Gas Demand Side Management Activities, August 26, 2021.
[8] EB-2015-0029, OEB Decision and Order, January 20, 2016, pp.50–52; EB-2012-0337, 2013-2014 DSM Plan for Large Volume Customers, Exhibit A, Tab 1, Schedule 1, p.14.

into Rate T2 or Rate 100 rate classes.

*1.5 Deferred Incentives*

10. Consistent with section 5.3.2 of the OEB's Mid-Term Review Report and the OEB-approved DSMVA Accounting Orders as set out in the OEB's Decision and Order on Enbridge Gas's (Union rate zone) 2016 DSM Deferral and Variance Account Disposition Proceeding (EB-2018-0300),[9] Table 9.9 of the final 2022 DSM Annual Report for the Union rate zones also includes amounts for customer incentive spend deferred to future years, for offerings where incentives are paid when future milestones/activities are reached.

11. See Table 1 for a continuity schedule of the deferred incentive balances for the Commercial Savings by Design (CSBD) offering for the 2022 DSM program year in the Union rate zones being tracked within the DSMVA.

2. Demand Side Management Incentive Deferral Account

12. There is no DSMIDA balance for the Union rate zones in 2022. The purpose of the DSMIDA is to record the shareholder incentive amount earned by a natural gas utility as a result of its DSM programs.[10] DSM shareholder incentive amounts are allocated to the rate classes in proportion to the actual DSM spending by rate class in 2022.

13. Tables 9.0 – 9.5 of the final 2022 DSM Annual Report for the Union rate zones provide details of the DSM incentive achieved by scorecard.

[9] EB-2018-0300, OEB Decision and Order, April 11, 2019.
[10] Guidelines, p.39.

3. Lost Revenue Adjustment Mechanism Variance Account

14. The Union rate zones LRAMVA balance for 2022 is $0.723 million before interest. The LRAMVA is used to track, at the rate class level, the variance between the actual impact of DSM activities (volume savings) undertaken by the natural gas utility and the forecasted impact included in distribution rates.[11] The LRAMVA balance is allocated to rate classes on the same basis as lost revenues were experienced such that the LRAMVA provides a true-up by rate class.

15. There is an inherent time lag between the date that Enbridge Gas receives the audit of volume savings from the EC and the date that these audited volume savings are reflected in the Union rate zones' distribution rates. Depending on the timing of audited volume savings and Enbridge Gas's annual rate filings, the impacts captured in the LRAM variance account can span multiple DSM program years, and can include:
    - **Full-Year Impacts** - for prior DSM program years if no volume savings were reflected in rates;
    - **Partial-Year Impacts** - for the monthly impact of volume savings resulting from the current DSM program year, if no forecast volume savings were reflected in rates; and
    - **True-Ups** - to true-up pre-audit volume savings reflected in rates with audited actual volume savings for prior DSM program years.

16. LRAM amounts are only recorded in the variance account until such time as the OEB approves new distribution rates for the utility that reflect the actual audited impact of a DSM program year's activities (volume savings). Please see Tables 2 and 3 for a summary of LRAM volume savings adjustments for each of the 2019 to

[11] Guidelines, p.39; The LRAMVA does not include volume variances for general service rate classes as these are captured in the Normalized Average Consumption (NAC) deferral account.

2024 DSM program years included or expected in each of Enbridge Gas's (Union rate zone) annual rates applications (2019-2024), and DSM deferral and variance account clearance applications (2019-2024).

Table 2
DSM Program Year LRAM Volume Adjustment Included in Rates

| Line No. | Rates Application | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|
| | | (a) | (b) | (c) | (d) | (e) | (f) |
| 1 | 2019 (EB-2018-0305) | Not Included | N/A | N/A | N/A | N/A | N/A |
| 2 | 2020 (EB-2019-0194) | Not Included | Not Included | N/A | N/A | N/A | N/A |
| 3 | 2021 (EB-2020-0095) | Not Included | Not Included | Not Included | N/A | N/A | N/A |
| 4 | 2022 (EB-2021-0147) | Audited | Not Included | Not Included | Not Included | N/A | N/A |
| 5 | 2023 (EB-2022-0133) | Audited | Audited | Not Included | Not Included | Not Included | N/A |
| 6 | 2024 (EB-2022-0200) | Audited | Audited | Audited | Not Included | Not Included | Not Included |

Table 3
DSM Program Year LRAM Volume Adjustment Included in LRAM Variance Account

| Line No. | DSM Deferral Application | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|
| | | (a) | (b) | (c) | (d) | (e) | (f) |
| 1 | 2019 (EB-2021-0072) | Partial-Year | N/A | N/A | N/A | N/A | N/A |
| 2 | 2020 (EB-2022-0007) | Full-Year | Partial-Year | N/A | N/A | N/A | N/A |
| 3 | 2021 (EB-2023-0062) | Full-Year | Full-Year | Partial-Year | N/A | N/A | N/A |
| 4 | 2022 (EB-2024-0193) | None | Full-Year | Full-Year | Partial-Year | N/A | N/A |
| 5 | 2023 (Expected) | None | None | Full-Year | Full-Year | Partial-Year | N/A |
| 6 | 2024 (Expected) | None | None | None | Full-Year | Full-Year | Partial-Year |

17. The 2022 LRAMVA balance for the Union rate zones is comprised of:

- Full-year audited volume savings for contract rate classes related to the 2020 and 2021 DSM program years (2020/2021 Annual Volumes) calculated using 2022 Rates for the Union rate zones (see Table 3, line 4, columns b and c).

- Partial-year monthly volume savings for contract rate classes related to the 2022 DSM program year (2022 Monthly Volumes), beginning the month that audited volume savings were realized and for the remaining months of the 2022 DSM program year, per the Guidelines, calculated using 2022 Rates for the Union rate zones (see Table 3, line 4, column d).[12]

18. The 2022 LRAMVA balance reflects the full-year impact of 2020 and 2021 audited LRAM volumes, and the partial-year (depending upon the month the DSM measure was installed) impact of 2022 audited LRAM volumes. Accordingly, the Union rate zones' 2022 LRAMVA debit balance of $0.723 million (as detailed at Exhibit C, Tab 2, Schedule 1, Appendix 2, pages 1-4) is comprised of:
    i) $0.354 million related to 2020 Annual Volumes of 42,686 $10^3m^3$ calculated using 2022 Rates for the Union rate zones; and
    ii) $0.250 million related to 2021 Annual Volumes of 34,693 $10^3m^3$ calculated using 2022 Rates for the Union rate zones.
    iii) $0.119 million related to 2022 Monthly Volumes of 15,462 $10^3m^3$ calculated using 2022 Rates for the Union rate zones.

*3.1 Future Recovery of 2021 and 2022 LRAM Volume Savings*

19. The 2021 DSM audit process was not complete when Enbridge Gas filed its 2023 Rates Application (EB-2022-0133), and the 2022 DSM audit process was not complete when Enbridge Gas filed its 2024 Rates Application (EB-2022-0200). Consequently, audited LRAM volume savings have not yet been reflected in distribution rates for the Union rate zones for these respective years and will, therefore, be recovered through the LRAMVA as illustrated in Tables 2 and 3.

[12] Guidelines, p.39.

## 4. Rate Allocation

20. Table 4 summarizes the allocation of Enbridge Gas's Union rate zones DSM-related deferral and variance account balances, prior to interest, for the 2022 DSM program year rate classes.

Table 4

2022 DSM Deferral and Variance Account Balances by Rate Class – Union Rate Zones

| Rate Class | DSMVA [1] | DSMIDA | LRAMVA | Total Deferral/ Variance Balance |
|---|---|---|---|---|
| M1 | $659,974 | $0 | N/A | $659,974 |
| M2 | ($5,532,221) | $0 | N/A | ($5,532,221) |
| M4 | ($392,044) | $0 | $485,051 | $93,007 |
| M5 | ($1,909,301) | $0 | $13,625 | ($1,895,677) |
| M7 | $1,026,816 | $0 | $185,868 | $1,212,684 |
| T1 | ($850,437) | $0 | $2,575 | ($847,862) |
| T2 | ($1,099,374) | $0 | $4,723 | ($1,094,651) |
| Rate 01 | ($2,798,475) | $0 | N/A | ($2,798,475) |
| Rate 10 | ($2,081,755) | $0 | N/A | ($2,081,755) |
| Rate 20 | ($966,073) | $0 | $8,072 | ($958,001) |
| Rate 100 | ($372,002) | $0 | $23,040 | ($348,962) |
| Total | ($14,314,891) | $0 | $722,953 | ($13,591,939) |

1. Allocation to Rate M4, M5 and M7 prior to rate pooling adjustment.

## 5. Disposition Methodology

21. Enbridge Gas proposes to dispose of the 2022 DSM-related deferral and variance account balances as a one-time billing adjustment. The billing adjustment will be derived for each customer individually by applying the disposition unit rates to each customer's actual consumption volume for the period January 1, 2022 to December 31, 2022.

22. The Company proposes to dispose of the approved 2022 DSM-related deferral and variance account balances with the first available QRAM application following the OEB's approval, as early as April 1, 2025.

23. The allocation of 2022 DSM-related deferral and variance account balances is consistent with the treatment in prior years. The unit rates for each rate class are set out at Exhibit C, Tab 2, Schedule 1, Appendix 2. Exhibit C, Tab 2, Schedule 1, Appendices 3 to 5 provide details of the derivation of proposed unit rates:
    - Appendix 3 determines the balances (principal and interest) to be cleared for each DSM deferral and variance account for the 2022 DSM program year;
    - Appendix 4 details account balance allocations by rate class for the 2022 DSM program year; and
    - Appendix 5 illustrates the derivation of unit rates for the 2022 DSM program year, based on the balances and actual 2022 consumption volumes for each rate class.

Table 1
Continuity Schedule for Deferred Incentive Balances

| Offering ($MM) | TOTAL | 2017 | | | | 2018 | | | | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | TOTAL | *2022 Deposit Expiration* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Beginning of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Beginning of Year Balance | Withdrawals | | End of Year Balance | Deposits | End of Year Balance | |
| | | | Utilized | Expired | | | Utilized | Expired | | | Utilized | Expired | | | Utilized | Expired | | | Utilized | Expired | | | | |
| | *a* | *b* | *c* | *d* | *e = b - c - d* | *f* | *g* | *h* | *i = f - g - h* | *j* | *k* | *l* | *m = j - k - l* | *n* | *o* | *p* | *q = n - o - p* | *n* | *o* | *p* | *q = n - o - p* | *r* | *s = e + i + m + q + r* | |
| CSBD | $0.58 | $0.00 | $0.00 | $0.00 | $0.00 | $0.12 | $0.02 | $0.00 | $0.10 | $0.14 | $0.02 | $0.00 | $0.12 | $0.19 | $0.02 | $0.00 | $0.17 | $0.14 | $0.00 | $0.00 | $0.14 | $0.06 | $0.60 | 31-Dec-27 |
| TOTAL | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.12 | $0.02 | $0.00 | $0.10 | $0.14 | $0.02 | $0.00 | $0.12 | $0.19 | $0.02 | $0.00 | $0.17 | $0.14 | $0.00 | $0.00 | $0.14 | $0.06 | $0.60 | |

ENBRIDGE GAS INC - Union Rate Zones
Lost Revenue Adjustment Mechanism
2022 LRAM Deferral Account Balance

| Line No. | Particulars ($) | Amounts by DSM Plan Year 2020 [1] | 2021 [2] | 2022 [3] | Total |
|---|---|---|---|---|---|
| | | (c) | (d) | (d) | (e) |
| | South | | | | |
| 1 | M4 | 252,986 | 147,105 | 84,960 | 485,051 |
| 2 | M5 | 2,752 | 8,695 | 2,178 | 13,625 |
| 3 | M7 | 78,534 | 82,404 | 24,930 | 185,868 |
| 4 | T1 | 1,609 | 260 | 706 | 2,575 |
| 5 | T2 | 1,832 | 1,766 | 1,125 | 4,723 |
| 6 | | 337,712 | 240,230 | 113,898 | 691,841 |
| | North | | | | |
| 7 | Rate 20 | 2,901 | 1,904 | 3,266 | 8,072 |
| 8 | Rate 100 | 13,769 | 7,558 | 1,713 | 23,040 |
| 9 | | 16,670 | 9,462 | 4,979 | 31,112 |
| 10 | Total | 354,383 | 249,693 | 118,878 | 722,953 |

Notes:

[1] EB-2024-0193, Exhibit C, Tab 2, Schedule 1, Appendix 2, page 2, column ( e )

[2] EB-2024-0193, Exhibit C, Tab 2, Schedule 1, Appendix 2, page 3, column ( e )

[3] EB-2024-0193, Exhibit C, Tab 2, Schedule 1, Appendix 2, page 4, column ( e )

UNION GAS LIMITED
Lost Revenue Adjustment Mechanism
2022 LRAM Audited Revenue Impacts

| Line No. | Particulars | 2020 Audited Volumes [1] $10^3$ $m^3$ | 2020 LRAM Volumes in 2021 Rates $10^3$ $m^3$ | 2020 Net LRAM Volumes $10^3$ $m^3$ | 2022 Delivery Rates $/10^3$ $m^3$ | Revenue Impact ($) |
|---|---|---|---|---|---|---|
| | | (a) | (b) | (c) = (a) - (b) | (d) | (e) = (c) x (d) |
| | Realization Rate | 0.90 | | | | |
| | South | | | | | |
| 1 | M4 | 12,704 | - | 12,704 | 19.914 | 252,986 |
| 2 | M5 | 88 | - | 88 | 31.235 | 2,752 |
| 3 | M7 | 16,081 | - | 16,081 | 4.884 | 78,534 |
| 4 | T1 | 1,228 | - | 1,228 | 1.310 | 1,609 |
| 5 | T2 | 7,239 | - | 7,239 | 0.253 | 1,832 |
| 6 | | 37,340 | - | 37,340 | | 337,712 |
| | North | | | | | |
| 7 | Rate 20 | 371 | - | 371 | 7.815 | 2,901 |
| 8 | Rate 100 | 4,974 | - | 4,974 | 2.768 | 13,769 |
| 9 | | 5,346 | - | 5,346 | | 16,670 |
| 10 | Total | 42,686 | - | 42,686 | | 354,383 |

Notes:
(1) Volumes reflect 2020 audited volumes, not adjusted for month of install

UNION GAS LIMITED
Lost Revenue Adjustment Mechanism
2022 LRAM Audited Revenue Impacts

| Line No. | Particulars | 2021 Audited Volumes [1] $10^3$ $m^3$ | 2021 LRAM Volumes in 2021 Rates $10^3$ $m^3$ | 2021 Net LRAM Volumes $10^3$ $m^3$ | 2022 Delivery Rates $/$10^3$ $m^3$ | Revenue Impact ($) |
|---|---|---|---|---|---|---|
| | | (a) | (b) | (c) = (a) - (b) | (d) | (e) = (c) x (d) |
| | South | | | | | |
| 1 | M4 | 7,387 | - | 7,387 | 19.914 | 147,105 |
| 2 | M5 | 278 | - | 278 | 31.235 | 8,695 |
| 3 | M7 | 16,873 | - | 16,873 | 4.884 | 82,404 |
| 4 | T1 | 199 | - | 199 | 1.310 | 260 |
| 5 | T2 | 6,982 | - | 6,982 | 0.253 | 1,766 |
| 6 | | 31,719 | - | 31,719 | | 240,230 |
| | North | | | | | |
| 7 | Rate 20 | 244 | - | 244 | 7.815 | 1,904 |
| 8 | Rate 100 | 2,730 | - | 2,730 | 2.768 | 7,558 |
| 9 | | 2,974 | - | 2,974 | | 9,462 |
| 10 | Total | 34,693 | - | 34,693 | | 249,693 |

Notes:
(1) Volumes reflect 2021 audited volumes, not adjusted for month of install

ENBRIDGE GAS INC.
UNION RATE ZONES
2022 LRAM Audited Revenue Impacts

| Line No. | Particulars | 2022 Audited Volumes [1] $10^3$ $m^3$ | 2022 LRAM Volumes in 2021 Rates $10^3$ $m^3$ | 2022 Net LRAM Volumes $10^3$ $m^3$ | 2022 Delivery Rates $/$10^3$ $m^3$ | Revenue Impact ($) |
|---|---|---|---|---|---|---|
| | | (a) | (b) | (c) = (a) - (b) | (d) | (e) = (c) x (d) |
| | South | | | | | |
| 1 | M4 | 4,266 | - | 4,266 | 19.914 | 84,960 |
| 2 | M5 | 70 | - | 70 | 31.235 | 2,178 |
| 3 | M7 | 5,105 | - | 5,105 | 4.884 | 24,930 |
| 4 | T1 | 539 | - | 539 | 1.310 | 706 |
| 5 | T2 | 4,446 | - | 4,446 | 0.253 | 1,125 |
| 6 | | 14,425 | - | 14,425 | | 113,898 |
| | North | | | | | |
| 7 | Rate 20 | 418 | - | 418 | 7.815 | 3,266 |
| 8 | Rate 100 | 619 | - | 619 | 2.768 | 1,713 |
| 9 | | 1,037 | - | 1,037 | | 4,979 |
| 10 | Total | 15,462 | - | 15,462 | | 118,878 |

Notes:
[1] Volumes reflect 2022 audited volumes, adjusted for month of install

Enbridge Gas Inc.
Union Rate Zones
Unit Rates for Recovery/(Refund) - Delivery
2022 DSM Deferral Account Disposition

| Line No. | Particulars | Rate Class | Unit Rate (cents/$m^3$) (a) |
|---|---|---|---|
| | Union North | | |
| 1 | Small Volume General Service | 01 | (0.3086) |
| 2 | Large Volume General Service | 10 | (0.7241) |
| 3 | Medium Volume Firm Service | 20 | (0.1214) |
| 4 | Large Volume High Load Factor | 100 | (0.0412) |
| 5 | Large Volume Interruptible | 25 | - |
| | Union South | | |
| 6 | Small Volume General Service | M1 | 0.0231 |
| 7 | Large Volume General Service | M2 | (0.5029) |
| 8 | Firm Com/Ind Contract | M4 | (0.2973) |
| 9 | Interruptible Com/Ind Contract | M5A | (0.3621) |
| 10 | Special Large Volume Contract | M7 | 0.1802 |
| 11 | Large Wholesale | M9 | - |
| 12 | Small Wholesale | M10 | - |
| 13 | Contract Carriage Service | T1 | (0.2143) |
| 14 | Contract Carriage Service | T2 | (0.0252) |
| 15 | Contract Carriage- Wholesale | T3 | - |

Enbridge Gas Inc.
Union Rate Zones
2022 DSM Deferral & Variance Account Balances

| Line No. | Account Number | Account Name ($000's) | Balance (a) | Interest (b) | Total (c) |
|---|---|---|---|---|---|
| 1 | 179-111 | Demand Side Management (DSMVA) | (14,315) | (1,642) | (15,957) |
| 2 | 179-126 | Demand Side Management Incentive (DSMIDA) | - | - | - |
| 3 | 179-75 | Lost Revenue Adjustment Mechanism (LRAMVA) | 723 | 83 | 806 |
| 4 | **Total Union Rate Zones** | | (13,592) | (1,559) | (15,151) |

Enbridge Gas Inc.
Union Rate Zones
Allocation of 2022 DSM Deferral and Variance Account Balances

| Line No. | Particulars ($000's) | Acct No. | Union North | | | | | Union South | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rate 01 | Rate 10 | Rate 20 | Rate 100 | Rate 25 | M1 | M2 | M4 | M5 | M7 | M9 | M10 | T1 | T2 | T3 | Total |
| | | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) |
| | 2022 DSM Deferral Account Balances | | | | | | | | | | | | | | | | | |
| | Delivery-Related Deferrals | | | | | | | | | | | | | | | | | |
| 1 | Demand Side Management VA (1) | 179-111 | (3,119) | (2,321) | (1,077) | (415) | - | 736 | (6,167) | (2,330) | (235) | 1,145 | - | - | (948) | (1,225) | - | (15,957) |
| 2 | Demand Side Management Incentive DA | 179-126 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | Lost Revenue Adjustment Mechanism VA | 179-75 | - | - | 9 | 26 | - | - | - | 541 | 15 | 207 | - | - | 3 | 5 | - | 806 |
| 4 | Total Delivery-Related Deferrals | | (3,119) | (2,321) | (1,068) | (389) | - | 736 | (6,167) | (1,789) | (220) | 1,352 | - | - | (945) | (1,220) | - | (15,151) |

Notes:
(1) Demand Side Management Variance Account balances for Rate M4 and M5 are allocated based on 2022 actual volumes to derive a common unit rate for disposition for both rate classes, as illustrated below.

| Rate Class | 2022 Account Balances (i) ($000s) | 2022 Interest ($000s) | Total Account Balances ($000s) | 2022 Actual Volume ($10^3m^3$) | Pooled Account Balances (ii) ($000s) | Unit Rate (cents/$m^3$) |
|---|---|---|---|---|---|---|
| | (a) | (b) | (c) = (a + b) | (d) | (e) | (f)=(e/d) x 100 |
| M4 | (392) | (45) | (437) | 601,877 | (2,330) | (0.3871) |
| M5 | (1,909) | (219) | (2,128) | 60,809 | (235) | (0.3871) |
| Total | (2,301) | (264) | (2,565) | 662,686 | (2,565) | |

(i) - Exhibit C, Tab 2, Schedule 1, Table 4.
(ii) - Allocated in proportion to column (d).

Enbridge Gas Inc.
Union Rate Zones
Unit Rates for One-Time Adjustment - Delivery
2022 DSM Deferral and Variance Account Disposition

| Line No. | Particulars | Rate Class | Deferral Balance for Disposition ($000's) | 2022 Actual Volume ($10^3m^3$) | Unit Rate (cents/$m^3$) |
|---|---|---|---|---|---|
| | | | (a) | (b) | (c) = (a / b) * 100 |
| | Union North | | | | |
| 1 | Small Volume General Service | 01 | (3,119) | 1,010,936 | (0.3086) |
| 2 | Large Volume General Service | 10 | (2,321) | 320,456 | (0.7241) |
| 3 | Medium Volume Firm Service | 20 | (1,068) | 879,345 | (0.1214) |
| 4 | Large Volume High Load Factor | 100 | (389) | 943,946 | (0.0412) |
| 5 | Large Volume Interruptible | 25 | - | 151,281 | - |
| | Union South | | | | |
| 6 | Small Volume General Service | M1 | 736 | 3,183,662 | 0.0231 |
| 7 | Large Volume General Service | M2 | (6,167) | 1,226,228 | (0.5029) |
| 8 | Firm Com/Ind Contract | M4 | (1,789) | 601,877 | (0.2973) |
| 9 | Interruptible Com/Ind Contract | M5 | (220) | 60,809 | (0.3621) |
| 10 | Special Large Volume Contract | M7 | 1,352 | 750,067 | 0.1802 |
| 11 | Large Wholesale | M9 | - | 96,890 | - |
| 12 | Small Wholesale | M10 | - | 331 | - |
| 13 | Contract Carriage | T1 | (945) | 440,944 | (0.2143) |
| 14 | Contract Carriage | T2 | (1,220) | 4,850,508 | (0.0252) |
| 15 | Contract Carriage | T3 | - | - | - |
| 16 | Total | | (15,151) | | |

# UNION RATE ZONES: ESTIMATED ANNUAL BILL IMPACT

1. For a Rate M1 residential customer in the Union South rate zone with annual consumption of 2,200 $m^3$, the one-time billing adjustment is a charge of$0.51.

2. For a Rate 01 residential customer in the Union North rate zone with annual consumption of 2,200 $m^3$, the one-time billing adjustment is a refund of $6.79.

3. Note the bill impacts for Rate M1 and Rate 01 are not inclusive of the proposed 2024 interim deferral disposal adjustment related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering in 2024. Please see Exhibit D, Tab 3, Schedule 1 for the bill impacts of the proposed 2024 interim disposal adjustment.

4. Bill impacts of the proposed disposition for the Union rate zones are set out at Exhibit C, Tab 3, Schedule 1, Appendix 1.

Enbridge Gas Inc.
Union Rate Zones
Calculation of One-Time Delivery Adjustments for Typical Customers
2022 DSM Deferral Account Disposition

| Line No. | Particulars | Unit Rate (cents/$m^3$) (a) | Annual Volume ($m^3$) (b) | Bill Impact ($) (1) (c) = (a x b) / 100 |
|---|---|---|---|---|
| | **GENERAL SERVICE** | | | |
| | Union North | | | |
| 1 | Rate 01 | (0.3086) | 2,200 | (6.79) |
| 2 | Rate 10 | (0.7241) | 93,000 | (673.41) |
| | Union South | | | |
| 3 | Rate M1 | 0.0231 | 2,200 | 0.51 |
| 4 | Rate M2 | (0.5029) | 73,000 | (367.12) |
| | **CONTRACT SERVICE** | | | |
| | Union North | | | |
| 5 | Small Rate 20 | (0.1214) | 3,000,000 | (3,642) |
| 6 | Large Rate 20 | (0.1214) | 15,000,000 | (18,210) |
| 7 | Average Rate 25 | - | 2,275,000 | - |
| 8 | Small Rate 100 | (0.0412) | 27,000,000 | (11,124) |
| 9 | Large Rate 100 | (0.0412) | 240,000,000 | (98,880) |
| | Union South | | | |
| 10 | Small Rate M4 | (0.2973) | 875,000 | (2,601) |
| 11 | Large Rate M4 | (0.2973) | 12,000,000 | (35,676) |
| 12 | Small Rate M5 Interruptible | (0.3621) | 825,000 | (2,987) |
| 13 | Large Rate M5 Interruptible | (0.3621) | 6,500,000 | (23,537) |
| 14 | Small Rate M7 | 0.1802 | 36,000,000 | 64,872 |
| 15 | Large Rate M7 | 0.1802 | 52,000,000 | 93,704 |
| 16 | Small Rate M9 | - | 6,950,000 | - |
| 17 | Large Rate M9 | - | 20,178,000 | - |
| 18 | Rate M10 | - | 94,500 | - |
| 19 | Small Rate T1 | (0.2143) | 7,537,000 | (16,152) |
| 20 | Average Rate T1 | (0.2143) | 11,565,938 | (24,786) |
| 21 | Large Rate T1 | (0.2143) | 25,624,080 | (54,912) |
| 22 | Small Rate T2 | (0.0252) | 59,256,000 | (14,933) |
| 23 | Average Rate T2 | (0.0252) | 197,789,850 | (49,843) |
| 24 | Large Rate T2 | (0.0252) | 370,089,000 | (93,262) |
| 25 | Large Rate T3 | - | 272,712,000 | - |

Notes:
(1) One-time adjustment for sales service and direct purchase customers.

# PROPOSED 2024 INTERIM DEFERRAL DISPOSITION HER+

1. In addition to the amounts Enbridge Gas is seeking approval for in the previous Exhibits and Schedules, the Company proposes to include an additional $60 million as a one-time interim deferral disposition to offset a portion of overspend amounts related to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering in 2024. The purpose of this interim deferral disposition is to smooth the rate impacts over two years of a large balance which would otherwise have had a large rate impact if cleared in the normal course in the clearance applications for the years 2024 and 2025 (which would likely be filed in 2026 and 2027 for disposition in 2027 and 2028 respectively). The forecast for 2024 Residential DSM program spend is expected to be approximately $120 million over the OEB approved budget in 2024. Having the $120 million amount included in rates in one year would have a large impact on Residential ratepayers, and this amount would be in addition to any proposed DSM budget increases for the yet to be filed 2026-2030 DSM Plan.[1] The proposed rate allocation and bill impacts for the 2024 interim deferral disposal related to the HER+ offering can be found at Exhibit D, Tab 2, Schedule 1 and Exhibit D, Tab 3, Schedule 1 respectively.

## 1. Background and Overview

2. Within Enbridge Gas's 2022-2027 DSM Plan Application (EB-2021-0200) (DSM Plan), Enbridge Gas executed and filed a contribution agreement between NRCan and the Company which set out the parameters of a jointly-funded NRCan/DSM residential whole-home offering. The OEB Decision in respect of the DSM Plan dated November 15, 2022 (the DSM Plan Decision) approved residential whole-

[1] Enbridge Gas has not finalized the proposal for the 2026-2030 DSM Plan, but has stakeholdered with Intervenors, including OEB Staff, on the issue of budget increases for the 2026-2030 period. At this time, an approximate doubling of the Residential Program budget plus inflation is being contemplated by 2030, with a significant increase in budget to be proposed in 2026. This application is still under development and stakeholdering efforts continue, with an expected filing date in Q4, 2024.

home DSM programming and the jointly-funded NRCan/DSM residential offering (i.e., the HER+ offering).

3. The HER+ offering has been extremely successful and experienced unanticipated high levels of participation in the first year of the program. As a result, as of February 2024, funding for the Canada Greener Homes Grant (CGHG) has been fully committed and the CGHG and HER+ offering are now closed to new applicants. The CGHG will continue providing incentives committed to existing HER+ offering participants, subject to the completion of program eligibility requirements.

4. As of August 29, 2024, Enbridge Gas forecasts that the HER+ program offering spend in 2024 will be approximately $120 million more than the OEB approved amount of $67,771,524 in the DSM Plan Decision. The large overspend is due to the successful uptake of the jointly funded program offering, that experience both much larger participation rates, and higher than expected rebate amounts from participants installing higher cost/rebated measures and/or more measures than the original program forecasted. The combination of much faster uptake/participation and higher rebate per participant has driven a much larger incentive payment forecast for 2024 than the approved HER+ budget.

5. The OEB anticipated that such a situation could arise and gave explicit instruction to Enbridge Gas in the EB-2021-0002 DSM Plan Decision related to the HER+ program, approving amounts greater than the DSM framework allowance of a 15% maximum on overspend amounts. The DSM Plan Decision states:

> However, should participation be greater than anticipated, either due to more overall participants or average participant incentives being greater than forecast, Enbridge Gas is approved to access funding in excess of the DSM variance account overspend provision that allows for an incremental 15% of a program budget to be spent during the year should Enbridge Gas have met 100% of its performance scorecard metric on an unverified basis.[2]

[2] EB-2021-0002, Decision and Order, November 16, 2022, p.31.

And:

> All spending above the approved budget will still require sufficient supporting evidence to be filed as part of future DSM deferral and variance account clearance applications.[3]

6. Enbridge Gas is proposing to clear $60 million to customers on an interim basis as a rate smoothing mechanism. The final disposition would be completed as part of the 2024 DSM variance account clearance proceeding.

7. Table 1 demonstrates the current forecast for 2024 in terms of the participation and participant rebate spend for the HER+ program:

Table 1

HER+ 2024 Forecast Participation and Rebate Spend

| Line No. | Category | Participants | Forecast Dollars | Cumulative Rebate spend |
|---|---|---|---|---|
| 1 | Rebates Paid in 2024 | 46,100 | $ 84,500,000 | $ 84,500,000 |
| 2 | Projects submitted to Enbridge, pending processing | 39,700 | $ 86,700,000 | $ 171,200,000 |
| 3 | Project audit scheduled or completed | 7,200 | $ 15,700,000 | $ 186,900,000 |
| 4 | Pre-audit completed | 13,000 | | |
| 5 | Pre-audit pending (40% 2024 estimated completion) | 5,200 | $ 11,400,000 | $ 198,300,000 |

Notes:

- All figures are estimates as of August 29, 2024.
- Items are listed in decreasing forecast certainty for 2024.
- Participants that have only completed the pre-audit are shown at an assumed 40% 2024 completion rate. Actual completions will be based on participant behaviour.
- Estimated rebates amounts are based on actuals paid in previous period or the amounts requested based on the submission and will vary based on actual participant measures installed after verification of the applications.
- Table 1 shows the forecast for participant rebates only. No other program costs are included.

[3] EB-2021-0002, Decision and Order, November 16, 2022, p.31.

8. Table 1 shows the current forecast for participant rebates for the HER+ program offering and does include any other cost elements for HER+ such as Program Delivery, Marketing/promotions or program administration. These amounts also do not include other approved Residential program offers, such as Residential Smart Home. These other Residential program costs were approved and total just over $10 million and are not expected to exceed the approved budget in aggregate. Given the OEB program budget for the entire Residential program is $78,855,831, it is clear that the budget is on track to be exceeded by a current estimate of approximately $120 million in overspend.

9. Enbridge Gas recognizes that a large portion of this estimate has not been physically spent at the time of writing this application, in that the rebates have not been issued to consumers. However, this is due to a lag effect of processing times for the applications. A lag in processing times has occurred as the HER+ program was intended to run 2023 through 2027, whereas the substantial success of the offers has resulted in much higher volumes of rebates in 2024 than anticipated. Enbridge is continually working to ensure adequate staffing levels in order to process the rebates as efficiently as possible. The funds have been committed to participants and Enbridge Gas fully expects that the vast majority of the forecast funds will be issued to customers in 2024.

10. Table 2 shows the forecasted Enhanced CHGH Participants as outlined as part of the Contribution Agreement between NRCan and Enbridge Gas.

Table 2

Forecasted Enhanced CHGH Participants

| Line No. | Date | Enhanced CGHG Participants |
|---|---|---|
| 1 | January 1, 2023 – March 31, 2023 | 5,000 |
| 2 | April 1, 2023 – March 31, 2024 | 35,000 |
| 3 | April 1, 2024 – March 31, 2025 | 50,000 |
| 4 | April 1, 2025 – March 31, 2026 | 60,000 |
| 5 | April 1, 2026 – March 31, 2027 | 0* |
| 6 | Total | 150,000 |
| | | |

* Participation may extend into the 2026-2027 fiscal period however for the purposes of this proposal the participation, and associated budget, has been forecasted to seek to ensure adequate budget in the 2023 – March 31, 2026 fiscal periods. Re-allocation of budget between fiscal periods would be assessed by NRCan and Enbridge Gas over the term of the Contribution Agreement, with associated amendment(s) if/when required.

11. Enbridge Gas notes that given currently OEB approved interest rates on variance accounts that are approximately 5% (and will vary over time), the cost to carry the proposed $60 million for another year will be approximately $3 million. Given the certainty of the forecast, it is beneficial to ratepayers to include this value in rates as soon as is reasonable to avoid unnecessary carrying costs.

12. Enbridge Gas held a stakeholder session on March 26, 2024, hosted by OEB Staff, where the HER+ 2024 overspend issue was brought to the attention of DSM Stakeholders. Subsequently, on an OEB hosted Stakeholder session in June, Enbridge Gas again presented on the 2024 HER+ overspend issue and requested feedback on the idea of rate smoothing the forecasted $120 million 2024 overspend by inclusion of $60 million as an interim deferral disposition, with the remainder to be cleared in the 2024 DSM deferral and variance account clearance applications. Stakeholder feedback was supportive of Enbridge Gas's proposal in this regard. Given the support of stakeholders, Enbridge Gas is proposing the inclusion of $60 million as an interim deferral disposition as a means to smooth the rate impacts over 2025 and 2026, which reduces the carrying costs for rate payers, making the

most prudent use of ratepayer funds. The Company will file a detailed summary in respect of the HER+ program offering for final approval and disposition of the balance in a subsequent application to the OEB.

# EGI RATE ZONES: RATE ALLOCATION

1. The following evidence describes the 2024 Demand Side Management Variance Account for which Enbridge Gas requests interim clearance of balances recorded relating to Enbridge Gas's Home Efficiency Rebate Plus (HER+) offering in 2024. This evidence also describes the basis on which these amounts will be allocated to rate classes within the EGI rate zones, as well as the methodology for incorporation into rates.

## 1. Demand Side Management Variance Account (DSMVA)

2. The DSMVA balance for 2024 interim clearance is a debit of $60 million before interest. The DSMVA is used to track the variance between actual DSM spending versus the budgeted amount included in rates.

3. Enbridge Gas followed the OEB-approved methodology to calculate the interim 2024 DSMVA balance, and the full balance will be examined as part of the 2024 clearance proceeding of DSM-related deferral and variance accounts. The proposed interim clearance in this application is related to DSM residential programs and will be allocated to residential rate classes, please see Exhibit D, Tab 1, Schedule 1 for background on HER+ offering and proposed interim clearance.

## 2. Rate Allocation

4. The allocation to rate zones and rate classes for the interim clearance of the 2024 DSMVA balance was determined by allocating the proposed $60 million to residential rate classes utilizing the uniform residential DSM unit rate design that was approved in EB-2022-0200[1]. The proposed uniform residential DSM unit rates for disposition can be found at Exhibit D, Tab 2, Schedule 1, Appendix 1. Enbridge

[1] EB-2022-0200, Settlement Agreement, Exhibit O1, Tab 1, Schedule 1, August 17, 2023, pp 12 -13.

Gas has calculated the unit rates for disposition based on 2024 OEB Approved billing units as 2024 actual billing units are not available at the time of filing and proposes to update the calculation for 2024 actual billing units as part of the final rate order for this proceeding.

3. Disposition Methodology

5. Enbridge Gas proposes to dispose the interim clearance of the 2024 DSMVA deferral balance as a one-time billing adjustment. For all customers in Rate 1, Rate 01 and Rate M1, the one-time billing adjustment will be derived for each customer individually by applying the disposition unit rates to each customer's actual consumption volume and billing units for the period January 1, 2024 to December 31, 2024.

6. Enbridge Gas proposes to dispose of the approved balance with the first available QRAM application following the OEB's approval, as early as April 1, 2025.

7. The allocation of the interim clearance of the 2024 DSMVA deferral balance and the derivation of clearance unit rates is consistent with the uniform residential DSM unit rate design approved in EB-2022-0200. The 2024 disposition unit rate for each rate class and type of service is set out at Exhibit D, Tab 2, Schedule 1, Appendix 2.

Enbridge Gas Inc.
Derivation of Uniform Residential DSM Unit Rate - 2024 Interim DSMVA Disposition

| Line No. | Particulars | Billing Units | 2024 Board Approved Usage Total (1) | Residential | Non-Residential | Proposed Unit Rates (cents / m³) | Residential Allocation ($000s) | Non-Residential Allocation ($000s) |
|---|---|---|---|---|---|---|---|---|
| | | | (a) | (b) | (c) | (d) | (e) = (b*d)/100 | (f) = (c*d)/100 |
| | Rate 1 - EGD Rate Zone | | | | | | | |
| 1 | Monthly Customer Charge | bills | 25,957,058 | 25,957,058 | - | $1.85 | 48,058 | - |
| | Delivery Commodity Charge | | | | | | | |
| 2 | First 30 m³ | 10³m³ | 712,505 | 712,505 | - | (0.2495) | (1,778) | - |
| 3 | Next 55 m³ | 10³m³ | 1,022,924 | 1,022,924 | - | (0.2495) | (2,552) | - |
| 4 | Next 85 m³ | 10³m³ | 1,109,756 | 1,109,756 | - | (0.2495) | (2,769) | - |
| 5 | Over 170 m³ | 10³m³ | 2,166,403 | 2,166,403 | - | (0.2495) | (5,405) | - |
| 6 | Delivery Commodity Charge | | 5,011,588 | 5,011,588 | - | | (12,504) | - |
| 7 | Total Rate 1 | | | | | | 35,554 | - |
| | Rate 01 - Union North Rate Zone | | | | | | | |
| 8 | Monthly Customer Charge | bills | 4,435,128 | 4,083,428 | 351,700 | $1.85 | 7,560 | 651 |
| | Delivery Commodity Charge | | | | | | | |
| 9 | First 100 m³ | 10³m³ | 299,290 | 275,149 | 24,142 | (0.2495) | (687) | (60) |
| 10 | Next 200 m³ | 10³m³ | 342,667 | 305,391 | 37,277 | (0.2495) | (762) | (93) |
| 11 | Next 200 m³ | 10³m³ | 128,560 | 99,846 | 28,714 | (0.2495) | (249) | (72) |
| 12 | Next 500 m³ | 10³m³ | 86,234 | 36,991 | 49,242 | (0.2495) | (92) | (123) |
| 13 | Over 1,000 m³ | 10³m³ | 120,128 | 6,971 | 113,157 | (0.2495) | (17) | (282) |
| 14 | Delivery Commodity Charge | | 976,880 | 724,348 | 252,532 | | (1,807) | (630) |
| 15 | Total Rate 01 | | | | | | 5,753 | 21 |
| | Rate M1 - Union South Rate Zone | | | | | | | |
| 16 | Monthly Customer Charge | bills | 14,450,119 | 13,408,892 | 1,041,227 | $1.85 | 24,826 | 1,928 |
| | Delivery Commodity Charge | | | | | | | |
| 17 | First 100 m³ | 10³m³ | 1,046,590 | 971,540 | 75,050 | (0.2495) | (2,424) | (187) |
| 18 | Next 150 m³ | 10³m³ | 935,575 | 849,017 | 86,558 | (0.2495) | (2,118) | (216) |
| 19 | All over 250 m³ | 10³m³ | 1,256,700 | 637,236 | 619,464 | (0.2495) | (1,590) | (1,546) |
| 20 | Delivery Commodity Charge | | 3,238,864 | 2,457,792 | 781,072 | | (6,132) | (1,949) |
| 21 | Total Rate M1 | | | | | | 18,693 | (21) |
| 22 | Total | | | | | | 60,000 | (0) |

Note:
(1) EB-2022-0200, Rate Order, Working Papers, Schedule 22, Column (a).

Enbridge Gas Inc.
Unit Rates for Recovery/(Refund) - Delivery
2024 Interim DSMVA Disposition

| Line No. | Particulars | Billing Units | Unit Rate (1) (2) (a) |
|---|---|---|---|
| | EGD | | |
| | Rate 1 | | |
| 1 | Monthly Customer Charge ($) | bills | $1.85 |
| 2 | Delivery Commodity Charge (cents/$m^3$) | $m^3$ | (0.2495) |
| | Union North | | |
| | Rate 01 | | |
| 3 | Monthly Customer Charge ($) | bills | $1.85 |
| 4 | Delivery Commodity Charge (cents/$m^3$) | $m^3$ | (0.2495) |
| | Union South | | |
| | Rate M1 | | |
| 5 | Monthly Customer Charge ($) | bills | $1.85 |
| 6 | Delivery Commodity Charge (cents/$m^3$) | $m^3$ | (0.2495) |

Notes:
(1) Exhibit D, Tab 2, Schedule 1, Appendix 1, Column (d).
(2) Unit rates for disposition are applicable to sales service and bundled direct purchase within the rate class.

# EGI RATE ZONES: ESTIMATED ANNUAL BILL IMPACT

1. For a Rate 1 customer in the EGD rate zone with annual consumption of 2,400 $m^3$, the one-time billing adjustment is a charge of $16.21.

2. For a Rate 01 residential customer in the Union North rate zone with annual consumption of 2,200 $m^3$, the one-time billing adjustment is a charge of $16.71.

3. For a Rate M1 residential customer in the Union South rate zone with annual consumption of 2,200 $m^3$, the one-time billing adjustment is a charge of $16.71.

4. Bill impacts of the proposed disposition for the EGI rate zones are set out at Exhibit D, Tab 3, Schedule 1, Appendix 1. Bill impacts are presented for Rate 1, Rate 01, Rate M1 as they are the only rate classes with a proposed allocation of the 2024 interim clearance.

Enbridge Gas Inc.
Calculation of One-Time Delivery Adjustments for Typical Customers
2024 Interim DSM Deferral Account Disposition

| Line No. | Particulars | Billing Units | Unit Rate (1) (a) | Annual Billing Units (b) | Bill Impact ($) (2) (c) = (a x b) / 100 |
|---|---|---|---|---|---|
| | **GENERAL SERVICE** | | | | |
| | EGD | | | | |
| | Rate 1 | | | | |
| 1 | Monthly Customer Charge ($) | bills | $1.85 | 12 | $ 22.20 |
| 2 | Delivery Commodity Charge (cents/$m^3$) | $m^3$ | (0.2495) | 2,400 | $ (5.99) |
| 3 | Total Rate 1 | | | | $ 16.21 |
| | Union North | | | | |
| | Rate 01 | | | | |
| 4 | Monthly Customer Charge ($) | bills | $1.85 | 12 | $ 22.20 |
| 5 | Delivery Commodity Charge (cents/$m^3$) | $m^3$ | (0.2495) | 2,200 | $ (5.49) |
| 6 | Total Rate 01 | | | | $ 16.71 |
| | Union South | | | | |
| | Rate M1 | | | | |
| 7 | Monthly Customer Charge ($) | bills | $1.85 | 12 | $ 22.20 |
| 8 | Delivery Commodity Charge (cents/$m^3$) | $m^3$ | (0.2495) | 2,200 | $ (5.49) |
| 9 | Total Rate M1 | | | | $ 16.71 |

Notes:
(1) Exhibit D, Tab 2, Schedule 1, Appendix 2, Column (a).
(2) One-time adjustment for sales service and direct purchase customers.