

2020 Demand Side Management Annual Report

Enbridge Gas Inc.

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Table of Contents

Table of Contents	1
List of Tables	4
Executive Summary	8
1. Introduction	10
2. DSM Framework	11
2.1 2015-2020 DSM Plans	11
2.2 Scorecard Target Setting	12
2.3 Evaluation Governance	13
2.4 Cost-Effectiveness Screening	13
2.5 Avoided Cost Assumptions	14
2.6 Technical Resource Manual	14
3. OEB Data Reporting Requirements (EGD Rate Zone)	16
4. OEB Data Reporting Requirements (Union Rate Zones)	23
5. Programs and Offerings (EGD Rate Zone)	30
5.1 Resource Acquisition Program	30
5.1.1 Home Efficiency Rebate Offering	30
5.1.2 Residential Adaptive Thermostat Offering	32
5.1.3 Custom Commercial Offering	34
5.1.4 Custom Industrial Offering	35
5.1.5 Commercial & Industrial Prescriptive (Fixed) Incentive Offering	36
5.1.6 Commercial & Industrial Direct Install Offering	37
5.1.7 Energy Leaders Offering	38
5.2 Low-Income Program	39
5.2.1 Home Winterproofing Offering	39
5.2.2 Affordable Multi-Family Housing Offering	40
5.2.3 Savings by Design Affordable Housing Offering	42
5.3 Market Transformation & Energy Management Program	43



5.3.1	Savings by Design Residential Offering	43
5.3.2	Savings by Design Commercial Offering	44
5.3.3	School Energy Competition Offering	45
5.3.4	Run it Right Offering	46
5.3.5	Comprehensive Energy Management Offering	47
6.	Programs and Offerings (Union Rate Zones)	48
6.1	Residential Program	48
6.1.1	Home Efficiency Rebate Offering	48
6.1.2	Residential Adaptive Thermostat Offering	50
6.2	Commercial/Industrial Program	52
6.2.1	Commercial/Industrial Prescriptive Offering	52
6.2.2	Commercial/Industrial Direct Install Offering	53
6.2.3	Commercial/Industrial Custom Offering	54
6.3	Low-Income Program	56
6.3.1	Home Winterproofing Offering	56
6.3.2	Furnace End-of-Life Upgrade Offering	57
6.3.3	Indigenous Offering	58
6.3.4	Affordable Multi-Family Housing Offering	59
6.4	Large Volume Program	60
6.4.1	Large Volume Direct Access Offering	60
6.5	Market Transformation Program	61
6.5.1	Optimum Home Offering	61
6.5.2	Commercial Savings by Design Offering	62
6.6	Performance-Based Program	63
6.6.1	RunSmart Offering	64
6.6.2	Strategic Energy Management Offering	65
7.	Evaluation	66
7.1	Impact Evaluation and Audit	66
7.2	Process Evaluation	66
8.	Results and Spend (EGD Rate Zone)	67



8.1	Scorecard Results and Shareholder Incentive	67
8.2	Lost Revenue Adjustment Mechanism	68
8.3	Cost-Effectiveness results	69
8.4	Budgets and Spending	70
9.	Results and Spend (Union Rate Zones)	74
9.1	Scorecard Results and Shareholder Incentive	74
9.2	Lost Revenue Adjustment Mechanism	76
9.3	Cost-Effectiveness Results	76
9.4	Budgets and Spending	77
	Appendix A: 2020 Avoided Costs	84
	Appendix B: Target Setting Methodology	88
	Appendix C: Offering Details (EGD Rate Zone)	90
	Appendix D: Offering Details (Union Rate Zones)	102
	Appendix E: Abbreviations and Acronyms List	113



List of Tables

Table ES1.	2020 DSM Results, Budgets, and Spend Summary	8
Table ES2.	2020 Gross and Net Natural Gas Savings (EGD Rate Zone)	9
Table ES3.	2020 Gross and Net Natural Gas Savings (Union Rate Zone)	9
Table 2.0	2020 DSM Portfolio (EGD Rate Zone)	12
Table 2.1	2020 DSM Portfolio (Union Rate Zones)	12
Table 3.0	Annual and Long-Term DSM Budgets (\$ million) (EGD Rate Zone)	16
Table 3.1	Actual Annual Total DSM Costs* (\$ million) (EGD Rate Zone)	16
Table 3.2	Historic Annual Total DSM Spending (\$ million) (EGD Rate Zone)	17
Table 3.3	DSM Spending as a Percent of Distribution Revenue (EGD Rate Zone)	17
Table 3.4	Historic Annual DSM Shareholder Incentive Amounts Available and Earned (\$ million) (EGD Rate Zone)	17
Table 3.5	DSM Shareholder Incentive Earned as a Percent of DSM Spending (EGD Rate Zone)	18
Table 3.6	Annual and Long-Term Natural Gas Savings Targets (million m ³) (EGD Rate Zone)	18
Table 3.7	Total Annual and Cumulative Natural Gas Savings for 2020 (Gross and Net) (million m ³) (EGD Rate Zone)	18
Table 3.8	Total Historic Annual Natural Gas Savings (Gross and Net) (million m ³) (EGD Rate Zone)	19
Table 3.9	Total Historic Cumulative Natural Gas Savings (Gross and Net) (million m ³) (EGD Rate Zone)	19
Table 3.10	Total Annual Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (EGD Rate Zone)	20
Table 3.11	Total Cumulative Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (EGD Rate Zone)	20
Table 3.12	Actual Annual Gas Operating Revenue (\$ million) (EGD Rate Zone)	21
Table 3.13	Total Natural Gas Sales Volumes (million m ³) (EGD Rate Zone)	21
Table 3.14	Number of Customers by Customer Type (EGD Rate Zone)	21
Table 3.15	Number of Customers by Rate Class (EGD Rate Zone)	22
Table 4.0	Annual and Long-Term DSM Budgets (\$ million) (Union Rate Zones)	23
Table 4.1	Actual Annual Total DSM Costs* (\$ million) (Union Rate Zones)	23
Table 4.2	Historic Annual Total DSM Spending (\$ million) (Union Rate Zones)	24
Table 4.3	DSM Spending as a Percent of Distribution Revenue (Union Rate Zones)	24



Table 4.4	Historic Annual DSM Shareholder Incentive Amounts Available and Earned (\$million) (Union Rate Zones)	24
Table 4.5	DSM Shareholder Incentive Earned as a Percent of DSM Spending (Union Rate Zones)	25
Table 4.6	Annual and Long-Term Natural Gas Savings Targets (million m³) (Union Rate Zones)	25
Table 4.7	Total Annual and Cumulative Natural Gas Savings for 2020 (Gross and Net) (million m³) (Union Rate Zones)	25
Table 4.8	Total Historic Annual Natural Gas Savings (Gross and Net) (million m³) (Union Rate Zones)	26
Table 4.9	Total Historic Cumulative Natural Gas Savings (Gross and Net) (million m³) (Union Rate Zones)	26
Table 4.10	Total Annual Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (Union Rate Zones)	27
Table 4.11	Total Cumulative Natural Gas Savings as a Percent of Total Annual Natural Gas Sales (Gross and Net) (Union Rate Zones)	27
Table 4.12	Actual Annual Gas Operating Revenue (\$ million) (Union Rate Zones)	28
Table 4.13	Total Natural Gas Sales Volumes (million m³) (Union Rate Zones)	28
Table 4.14	Number of Customers by Customer Type (Union Rate Zones)	28
Table 4.15	Number of Customers by Rate Class (Union Rate Zones)	29
Table 5.0	2020 Home Efficiency Rebate Offering Results (EGD Rate Zone)	31
Table 5.1	2020 Residential Adaptive Thermostat Offering Results (EGD Rate Zone)	32
Table 5.2	2020 Custom Commercial Offering Results (EGD Rate Zone)	34
Table 5.3	2020 Custom Industrial Offering Results (EGD Rate Zone)	35
Table 5.4	2020 Commercial & Industrial Prescriptive (Fixed) Incentive Offering Results (EGD Rate Zone)	36
Table 5.5	2020 Commercial & Industrial Direct Install Offering Results (EGD Rate Zone)	37
Table 5.6	2020 Energy Leaders Offering Results (EGD Rate Zone)	38
Table 5.7	2020 Home Winterproofing Offering Results (EGD Rate Zone)	39
Table 5.8	2020 Affordable Multi-Family Housing Offering Results (EGD Rate Zone)	41
Table 5.9	2020 Savings by Design Affordable Housing Offering Results (EGD Rate Zone)	42
Table 5.10	2020 Savings by Design Residential Offering Results (EGD Rate Zone)	43
Table 5.11	2020 Savings by Design Commercial Offering Results (EGD Rate Zone)	44
Table 5.12	2020 School Energy Competition Offering Results (EGD Rate Zone)	45
Table 5.13	2020 Run it Right Offering Results (EGD Rate Zone)	46
Table 5.14	2020 Comprehensive Energy Management Offering Results (EGD Rate Zone)	47



Table 6.0	2020 Home Efficiency Rebate Offering Results (Union Rate Zones)	49
Table 6.1	2020 Residential Adaptive Thermostat Offering Results (Union Rate Zones)	50
Table 6.2	2020 Commercial/Industrial Prescriptive Offering Results (Union Rate Zones)	52
Table 6.3	2020 Commercial/Industrial Direct Install Offering Results (Union Rate Zones)	53
Table 6.4	2020 Commercial/Industrial Custom Offering Results (Union Rate Zones)	54
Table 6.5	2020 Home Winterproofing Offering Results (Union Rate Zones)	56
Table 6.6	2020 Furnace End-of-Life Upgrade Offering Results (Union Rate Zones)	57
Table 6.7	2020 Indigenous Offering Results (Union Rate Zones)	58
Table 6.8	2020 Affordable Multi-Family Housing Offering Results (Union Rate Zones)	59
Table 6.9	2020 Large Volume Direct Access Offering Results (Union Rate Zones)	61
Table 6.10	2020 Optimum Home Offering Results (Union Rate Zones)	62
Table 6.11	2020 Commercial Savings by Design Offering Results (Union Rate Zones)	63
Table 6.12	2020 RunSmart Offering Results (Union Rate Zones)	64
Table 6.13	2020 Strategic Energy Management Offering Results (Union Rate Zones)	65
Table 8.0	2020 Maximum Shareholder Incentive & Achievement by Scorecard (EGD Rate Zone)	67
Table 8.1	2020 Resource Acquisition Scorecard Results (EGD Rate Zone)	67
Table 8.2	2020 Low-Income Scorecard Results (EGD Rate Zone)	68
Table 8.3	2020 Market Transformation & Energy Management Scorecard Results (EGD Rate Zone)	68
Table 8.4	2020 LRAM Statement (EGD Rate Zone)	69
Table 8.5	2020 TRC-Plus Summary (EGD Rate Zone)	69
Table 8.6	2020 PAC Summary (EGD Rate Zone)	69
Table 8.7	2020 Budget/Spend/Variance (EGD Rate Zone)	70
Table 9.0	2020 Maximum Shareholder Incentive & Achievement by Scorecard (Union Rate Zones)	74
Table 9.1	2020 Resource Acquisition Scorecard Results (Union Rate Zones)	74
Table 9.2	2020 Low-Income Scorecard Results (Union Rate Zones)	75
Table 9.3	2020 Large Volume Scorecard Results (Union Rate Zones)	75
Table 9.4	2020 Market Transformation Scorecard Results (Union Rate Zones)	75
Table 9.5	2020 Performance-Based Scorecard Results (Union Rate Zones)	76
Table 9.6	2020 LRAM Statement (Union Rate Zones)	76
Table 9.7	2020 TRC-Plus Summary (Union Rate Zones)	77



Table 9.8	2020 PAC Summary (Union Rate Zones)	77
Table 9.9	2020 Budget/Spend/Variance (Union Rate Zones)	78



Executive Summary

Enbridge Gas Inc. (“Enbridge Gas” or “the Company”) reports 1.63 billion lifetime cubic meters of natural gas saved from its DSM activities in 2020. A summary of the Company’s 2020 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. 2020 DSM Results, Budgets, and Spend Summary

ITEM	EGD RATE ZONE	UNION RATE ZONES
Net Cumulative Natural Gas Savings	771,050,466 m ³	861,174,025 m ³
Budget ¹	\$67,757,376	\$64,349,541
Actual Spend	\$64,548,153	\$54,488,582
Shareholder Incentive Achievement	\$3,586,470	\$2,726,196
Lost Distribution Revenue	\$30,527	\$153,421

¹The total budget shown for Union rate zones does not include amounts related to Residential Adaptive Thermostat offering approved through the Mid-Term Review. 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.



Table ES2. 2020 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	7,322,920	6,956,774	183,072,994	173,919,345
	Residential Adaptive Thermostats	3,257,994	3,127,674	48,869,904	46,915,108
Residential Total		10,580,913	10,084,448	231,942,899	220,834,453
Commercial/Industrial	Commercial & Industrial Prescriptive	2,785,770	1,559,546	39,134,763	21,048,071
	Commercial & Industrial Custom	42,497,070	21,699,876	793,043,286	412,351,613
	Commercial & Industrial Direct Install	1,797,177	1,707,318	22,846,500	21,704,175
	Run it Right (RA)	303,174	151,769	1,515,870	758,845
	Comprehensive Energy Management (RA)	6,765	3,523	140,216	73,010
	Energy Leaders	0	0	0	0
Commercial/Industrial Total		47,389,956	25,122,032	856,680,635	455,935,714
Low-Income	Home Winterproofing	1,304,632	1,304,632	26,642,997	26,642,997
	Affordable Multi-Family Housing	3,239,584	3,239,584	67,637,303	67,637,303
Low-Income Total		4,544,215	4,544,215	94,280,300	94,280,300
Portfolio Total		62,515,085	39,750,695	1,182,903,834	771,050,466

Table ES3. 2020 Natural Gas Savings (Union 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	5,271,868	5,008,275	131,796,700	125,206,865
	Residential Adaptive Thermostat	1,302,012	1,249,932	19,530,187	18,748,979
Residential Total		6,573,880	6,258,207	151,326,887	143,955,844
Commercial/Industrial	Commercial & Industrial Prescriptive	2,268,222	1,568,749	33,144,548	23,544,978
	Commercial & Industrial Custom	73,835,745	32,027,704	1,183,593,711	497,922,990
	Commercial & Industrial Direct Install	322,504	306,379	4,699,090	4,464,136
Commercial/Industrial Total		76,426,471	33,902,832	1,221,437,348	525,932,104
Low-Income	Home Winterproofing	1,777,289	1,771,414	38,498,544	38,411,013
	Affordable Multi-Family Housing	1,250,566	1,188,037	21,536,208	20,459,397
	Indigenous	0	0	0	0
	Furnace End-of-Life Upgrade	0	0	0	0
Low-Income Total		3,027,855	2,959,452	60,034,752	58,870,411
Large Volume	Direct Access	79,776,989	12,213,857	827,220,550	126,647,466
Large Volume Total		79,776,989	12,213,857	827,220,550	126,647,466
Performance-Based	RunSmart	(52,360)	(52,360)	(261,800)	(261,800)
	Strategic Energy Management	1,206,000	1,206,000	6,030,000	6,030,000
Performance-Based Total		1,153,640	1,153,640	5,768,200	5,768,200
Portfolio Total		166,958,836	56,487,987	2,265,787,737	861,174,025



1. Introduction

Enbridge Gas has been designing and delivering DSM programs under OEB frameworks for over 25 years. Since 1995, Enbridge Gas has saved its customers 29.2 billion lifetime cubic meters of natural gas and 55 million tonnes of greenhouse gas emissions, the equivalent of taking 11.9 million cars off the road for a year.

The 2020 Annual Report provides a summary of Enbridge Gas' DSM activities and results during the 2020 program year, including:

- A summary of the DSM Framework as it relates to the 2020 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 2021 (Sections 5 and 6);
- Evaluation activities (Section 7); and,
- Results, including scorecard results, shareholder incentive achievement, lost distribution revenue calculations, cost-effectiveness, budgets, and spending (Sections 8 and 9).

The 2020 program year saw several unique challenges brought on by the COVID-19 pandemic. Starting in March and lasting throughout the year, Enbridge Gas was required to adapt its program design and program implementation practices to address the evolving situation. This included program shutdowns/re-openings, and the adoption of COVID-19 safety protocols for programs that involved direct customer touchpoints. Like other organizations, Enbridge Gas also altered some of its practices to include online/virtual components where possible. Ultimately, the Company's DSM results were negatively impacted by the pandemic, however significant outcomes were achieved as 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) (“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 28, 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”).

2.1 2015-2020 DSM PLANS

On April 1, 2015, Enbridge Gas Distribution Inc. (“EGD”) and Union Gas Limited (“Union”) filed respective 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”). 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. Alignment activities are discussed throughout this report.

The OEB designed the 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 changing environment.”³ 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 DSM Framework and DSM Guidelines. Any changes are discussed throughout this report.

The structure of the 2020 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.

² Report of the Board, DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, Section 15.1, p.37

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



Table 2.0 2020 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 2020 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 2020 program year, scorecard targets have been set based on the methodologies provided by the OEB in its Mid-Term Report. See Appendix B for the 2020 scorecard target setting methodology, and Sections 8.1 and 9.1 for the calculated 2020 scorecard targets and results for the EGD rate zone and the Union rate zones, respectively.



2.3 EVALUATION GOVERNANCE

As outlined in the 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”⁴. On August 21, 2015, the Board released a letter which provided additional details regarding the new evaluation governance structure⁵. 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; and,
- Representatives from the Ministry of Energy and the Environmental Commissioner of Ontario, who will participate as observers.

In 2020, the OEB-appointed non-utility stakeholder members of the EAC were:

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

In 2020, the independent expert members of the EAC were:

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

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.

⁴ DSM Framework, p. 30

⁵ OEB letter, 2015-2020 DSM Evaluation Process of Program Results (EB-2015-0245), August 21, 2015



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 2020 DSM portfolio structures, and Sections 8.3 and 9.3 for the 2020 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”⁶. For more information on avoided cost assumptions, please refer to Section 10 of the DSM Guidelines.

The 2020 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 Report⁷, 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 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 TRM⁸.

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.

For the purpose of determining 2020 shareholder incentives for prescriptive and quasi-prescriptive measures, TRM Version 4.0 has been used (dated January 10, 2020; issued January 15, 2020). 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 the Commercial Air Curtains Shipping and Receiving Dock-In measures while also adding a new measure size (8’ x 9’);
- Expanded the Commercial Air Curtain measures to include a new substantiation document for Drive-In doors;
- Updated the Commercial Air Curtains Pedestrian Door measures;
- Added a new substantiation document for Dock Door Seals;
- Updated both Residential and Commercial High Efficiency Condensing Furnace measures to reflect a change in baseline and efficient equipment;

⁶ DSM Guidelines, p. 34

⁷ Mid-Term Report, p. 28

⁸ <https://www.oeb.ca/industry/policy-initiatives-and-consultations/natural-gas-demand-side-management-dsm>



- Multiple Common Assumptions input variables were updated as a result of the Air Curtain measure review, which led to minor revisions to Commercial Energy Recovery Ventilators (ERVs) and Commercial Heat Recovery Ventilators (HRVs); and,
- The Commercial Pre-Rinse Spray Nozzle measure was retired from the TRM due to changing standards and market saturation.

For the purpose of determining 2020 lost distribution revenue for prescriptive and quasi-prescriptive measures, TRM Version 5.0 has been used (dated November 12, 2020; issued December 3, 2020).

All versions of the TRM 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)".



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	2020	TOTAL (6YEARS)
Resource Acquisition	\$19.175	\$34.337	\$39.489	\$43.162	\$42.056	\$42.909	\$221.128
Low-Income	\$7.382	\$11.945	\$12.527	\$13.309	\$13.577	\$13.850	\$72.591
Market Transformation & Energy Management	\$6.245	\$6.579	\$6.718	\$6.882	\$7.030	\$7.181	\$40.635
Portfolio Level	\$4.920	\$3.500	\$4.200	\$4.200	\$3.758	\$3.818	\$24.397
Total	\$37.722	\$56.361	\$62.934	\$67.554	\$66.422	\$67.757	\$358.750

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
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
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
Rate 9	-	-	-	-	-	\$0.001	\$0.001	\$0.002	\$0.002	\$0.002	\$0.002	\$0.003	\$0.003	\$0.002
Rate 100	\$8.950	\$3.202	\$2.667	\$0.086	\$0.018	-	-	-	-	-	-	-	\$0.370	\$0.072
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
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
Rate 125	-	-	-	-	-	\$0.053	\$0.053	\$0.064	\$0.069	\$0.076	\$0.086	\$0.110	\$0.099	\$0.087
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
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
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
Rate 200	-	-	-	-	-	\$0.019	\$0.018	\$0.022	\$0.024	\$0.026	\$0.030	\$0.038	\$0.034	\$0.030
Rate 300	-	-	-	-	-	\$0.004	\$0.004	\$0.004	\$0.005	\$0.005	\$0.006	\$0.007	\$0.007	\$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

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



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
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

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}
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
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
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%

¹Total 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.

²As 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 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
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

¹2020 Shareholder Incentive subject to OEB approval



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 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
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
Shareholder Incentive Earned as a % of DSM Spending	39%	25%	21%	17%	25%	27%	16%	24%	28%	11%	3%	6%	9%	6%

¹2020 Shareholder Incentive subject to OEB approval

Table 3.6 Annual and Long-Term Natural Gas Savings Targets (million m³) (EGD Rate Zone)

SCORECARD	2015	2016	2017	2018	2019	2020	2021
Resource Acquisition	1,011.9	631.1	806.5	805.5	734.3	755.5	<i>Targets subject to OEB approval of 2020 performance</i>
Low-Income	92.8	96.7	167.1	126.1	123.2	136.4	

Table 3.7 Total Annual and Cumulative Natural Gas Savings for 2020 (Gross and Net) (million m³) (EGD Rate Zone)

SCORECARD	ANNUAL NATURAL GAS SAVINGS		CUMULATIVE NATURAL GAS SAVINGS	
	GROSS	NET	GROSS	NET
Resource Acquisition	57.97	35.21	1,088.62	676.77
Low-Income	4.54	4.54	94.28	94.28
Total	62.52	39.75	1,182.90	771.05



Table 3.8 Total Historic Annual Natural Gas Savings (Gross and Net) (million m³) (EGD Rate Zone)

ITEM	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ¹
Total <u>Net</u> 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
Total <u>Gross</u> 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

¹2020 DSM results subject to OEB approval

Table 3.9 Total Historic Cumulative Natural Gas Savings (Gross and Net) (million m³) (EGD Rate Zone)

ITEM	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ¹
Total <u>Net</u> 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
Total <u>Gross</u> 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

¹2020 DSM results subject to OEB approval



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 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
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%
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
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%
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

¹2020 DSM results subject to OEB approval

²Total Natural Gas Sales only includes rate classes that are eligible for DSM and subject to DSM costs

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 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
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%
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
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%
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

¹2020 DSM results subject to OEB approval

²Total 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}
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
Less Total Cost of Gas (\$ millions)	\$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
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

¹As of 2019, Distribution Revenue is the gas sales and distribution revenue (excluding transportation, storage, and other operating revenue) less the cost of gas.

²As 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 3.13 Total Natural Gas Sales Volumes (million m³) (EGD Rate Zone)

ITEM	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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

¹Only 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
Residential ¹	1,930,657	1,959,569	1,990,032	2,017,128	2,040,710	2,064,531
Commercial	157,758	158,812	160,721	162,157	162,682	163,519
Industrial	6,266	6,308	5,916	5,881	5,813	6,019
Total	2,094,681	2,124,689	2,156,669	2,185,166	2,209,205	2,234,069

¹Residential customers include Low-Income



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

RATE CLASS	2015	2016	2017	2018	2019	2020
Rate 1	1,930,657	1,959,569	1,990,032	2,017,128	2,040,710	2,064,531
Rate 6	163,634	164,698	166,224	167,626	168,093	169,084
Rate 100	2	2	3	3	4	9
Rate 110	227	270	263	273	280	335
Rate 115	25	27	27	25	22	20
Rate 135	43	45	45	43	41	40
Rate 145	52	38	37	32	25	21
Rate 170	26	25	26	27	23	21
<u>Non-DSM Rate Classes</u>						
Rate 9	6	6	3	2	0	2
Rate 125	5	5	5	4	4	4
Rate 200	1	1	1	1	1	0
Rate 300	2	2	2	1	1	1
Rate 315	1	1	1	1	1	1
Total	2,094,681	2,124,689	2,156,669	2,185,166	2,209,205	2,234,069



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	TOTAL
Residential	\$3.163	\$8.612	\$11.369	\$13.908	\$13.908	\$13.908	\$64.867
Commercial/Industrial	\$10.859	\$19.316	\$22.035	\$22.726	\$22.403	\$22.403	\$119.743
Low-Income	\$6.839	\$11.407	\$12.343	\$13.571	\$14.145	\$15.005	\$73.310
Large Volume	\$4.534	\$4.000	\$4.000	\$4.000	\$4.000	\$4.000	\$24.534
Market Transformation	\$1.379	\$1.703	\$2.338	\$2.338	\$2.338	\$2.338	\$12.434
Performance-Based	-	\$0.548	\$0.843	\$1.088	\$0.833	\$1.053	\$4.365
Portfolio Level	\$4.717	\$11.235	\$5.642	\$5.642	\$5.642	\$5.642	\$38.520
Inflation	\$2.497						\$2.497
Total¹	\$33.988	\$56.821	\$58.570	\$63.272	\$63.269	\$64.350	\$340.270

¹The total budget shown for 2019 and 2020 does not include \$1.5 million for the Residential Adaptive Thermostat offering approved through the Mid-Term Review. Expenditures for this offering will be tracked in the DSMVA.

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
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
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
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
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
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
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
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
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
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
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
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
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

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

¹Aligns 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.

²Actual 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
Total DSM Spending	\$16.13	\$20.26	\$22.04	\$21.53	\$27.97	\$31.32	\$32.84	\$33.71	\$32.39	\$50.67	\$64.58	\$69.12	\$65.60	\$54.49

¹Aligns 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.

²Actual expenditures related to the DSM tracking system upgrades in these years are reflected in 2016.

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}
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
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
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%

¹Total 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.

²As 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 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
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

¹2020 Shareholder Incentive subject to OEB approval



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 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
Total DSM Spending (\$ million)	\$16.13	\$20.26	\$22.04	\$21.53	\$27.97	\$31.32	\$32.84	\$33.71	\$32.39	\$50.67	\$64.58	\$69.12	\$65.60	\$54.49
Shareholder Incentive Earned as a % of DSM Spending	39%	43%	40%	31%	27%	26%	24%	27%	23%	8%	9%	9%	9%	5%

¹2020 Shareholder Incentive subject to OEB approval

Table 4.6 Annual and Long-Term Natural Gas Savings Targets (million m³) (Union Rate Zones)

SCORECARD	2015	2016	2017	2018	2019	2020	2021
Resource Acquisition	816.6	1,120.3	976.5	818.3	798.6	724.4	Targets subject to OEB approval of 2020 performance
Low-Income	43.6	59.2	80.2	68.8	74.7	91.9	
Large Volume	1,236.1	890.9	463.1	195.7	137.7	133.0	

Table 4.7 Total Annual and Cumulative Natural Gas Savings for 2020 (Gross and Net) (million m³) (Union Rate Zones)

SCORECARD	ANNUAL NATURALGAS SAVINGS		CUMULATIVE NATURALGAS SAVINGS	
	GROSS	NET	GROSS	NET
Resource Acquisition	83.00	40.16	1,372.76	669.89
Low-Income	3.03	2.96	60.03	58.87
Large Volume	79.78	12.21	827.22	126.65
Performance-Based	1.15	1.15	5.77	5.77
Total	166.96	56.49	2,265.79	861.17



Table 4.8 Total Historic Annual Natural Gas Savings (Gross and Net) (million m³) (Union Rate Zones)

ITEM	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ¹
Total <u>Net</u> 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
Total <u>Gross</u> 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

¹2020 DSM results subject to OEB approval

Table 4.9 Total Historic Cumulative Natural Gas Savings (Gross and Net) (million m³) (Union Rate Zones)

ITEM	2007-2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ¹
Total <u>Net</u> 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
Total <u>Gross</u> 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

¹2020 DSM results subject to OEB approval



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 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
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%
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
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%
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

¹2020 DSM results subject to OEB approval

²Total Natural Gas Sales only includes rate classes that are eligible for DSM and subject to DSM costs

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 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
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%
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
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%
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

¹2020 DSM results subject to OEB approval

²Total 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}
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
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
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

¹As of 2019, Distribution Revenue is the gas sales and distribution revenue (excluding transportation, storage, and other operating revenue) less the cost of gas.

²As 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 4.13 Total Natural Gas Sales Volumes (million m³) (Union Rate Zones)

ITEM	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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

¹Only 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
Residential ¹	1,306,495	1,325,703	1,344,513	1,364,322	1,381,941	1,398,861
Commercial	119,899	120,613	121,234	121,971	122,909	123,792
Industrial	463	460	470	470	493	509
Wholesale	5	5	6	7	7	7
Total	1,426,862	1,446,781	1,466,223	1,486,770	1,505,350	1,523,169

¹Residential customers include Low-Income



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

RATE CLASS	2015	2016	2017	2018	2019	2020
M1	1,083,032	1,097,032	1,111,544	1,127,352	1,141,280	1,154,986
M2	7,437	7,730	7,553	7,469	7,783	7,863
O1	333,773	339,335	344,458	349,354	353,643	357,603
10	2,152	2,219	2,192	2,118	2,144	2,201
M4	156	165	185	208	232	239
M5	80	72	59	38	42	38
M7	28	28	30	30	36	47
T1	37	37	37	37	37	39
T2	22	22	23	24	25	25
20	50	47	46	44	54	57
100	10	11	11	11	12	12
Non-DSM Rate Classes						
M9	2	2	3	3	4	4
M10	2	2	2	3	2	2
T3	1	1	1	1	1	1
25	80	78	79	78	55	52
Total	1,426,862	1,446,781	1,466,223	1,486,770	1,505,350	1,523,169



5. Programs and Offerings (EGD Rate Zone)

Enbridge Gas' 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' 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 and decrease their energy bills, enhance home comfort, avoid unsightly mould and condensation caused by poor insulation, 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 current 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 is able to make informed decisions regarding potential energy efficient improvements. Rebates are available for completing the assessments and at least two eligible measures recommended in the energy efficiency report (incentive structure and measure list can be found in Appendix C). 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.

The target customer for this offering is residential customers within the EGD rate zone, including detached, semi-detached, townhouses, row townhouses, and mobile homes. 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 assessment 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 (effective January 1st, 2020).

The aggregate annual gas savings across all participants in the HER offering must achieve, 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 2020 Home Efficiency Rebate Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	173,919,345
Participants (homes)	14,013

Offering Changes in 2020:

Enbridge Gas introduced an additional requirement that any home upgrading a furnace had to complete a total of two additional measures in order to qualify. This additional criterion was added to drive deeper savings in homes installing a furnace in response to NRCan’s Regulations Amending the Energy Efficiency Regulations, 2016 (Amendment 15): SOR/2019-164 (“Amendment 15”).

There was also a decrease in furnace rebate amount from \$750 to \$500 in January 2020. Enbridge received comments from intervenors that the rebates given for furnace upgrades were too high given the low amount of savings due to the Amendment 15 impact. As a response, Enbridge Gas committed to further reduce the furnace rebate below \$500 by September 2020. The decrease in furnace incentive required Enbridge to re-design the rebate levels for HER to ensure it meets the required participant metric, portfolio savings, and CCM savings.

Lessons Learned:

Furnace upgrade participation dropped by 30% as a result of the decrease in furnace rebate in 2020. Although the Limited Time Offers (LTOs) drove increased participation for most of 2020, higher than expected uptake put a strain on the offering’s budget. A key learning from this experience was to more closely forecast and monitor uptake for promotional offers.

With the reduction of furnace rebates and a mandated third measure, the offering saw a significant increase in insulation measures – mainly attic insulation. Also, the LTOs had a significant impact in changing the measure mix and measure average to surpass 3.2 measures per home. Furnace and air sealing projects were reduced and replaced by either furnace, attic and air sealing, or attic and air sealing projects, which was that intention of the offering changes.

Some of the impacts from COVID-19 included the following:

- Offering was halted in March 2020, due to the pandemic and local health restrictions which limited the ability for EA’s to enter customer homes.
- The development and deployment of a Risk Management Plan to proactively mitigate the impacts of the pandemic and to develop a plan to help sustain achievement for 2021.



- The development of processes and procedures to help protect Energy Advisors (and associated Service Organizations and Delivery Agents) and homeowners to prevent the spread of COVID-19.
- Shared communications with SOs prior to restarting the program on June 15, 2020. While the restart process was smooth, some homeowners demonstrated hesitation for in-person visits. Enbridge Gas continues to investigate the alternatives to the in-person audit (i.e. remote or virtual) through 2021 and beyond.

Anticipated Offering Changes for 2021:

While there are no changes immediately planned for 2021, Enbridge Gas will monitor the incentive structure changes from Q3 2020 to ensure the Company continues to meet the offering’s objectives. Additionally, Enbridge Gas is monitoring any developments related to federal home retrofit programming that may impact the HER offering.

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 EGD rate zone;
- Resides 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); and
- Has not received an adaptive thermostat discount, rebate, or device from Enbridge Gas at this address.

Table 5.1 2020 Residential Adaptive Thermostat Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	46,915,108

Offering Changes in 2020:

The smart thermostat uptake increased by 43% in 2020 compared to 2019 as a result of the instant discount offer being available for the full 2020 program year, and an increase of program awareness from marketing campaigns.

The following changes were also made to the Adaptive Thermostat offering in 2020:

- Enbridge Gas collaborated with Hydro Ottawa Limited to offer enhanced incentives (up to \$219 total incentive) to shared customers in a grid-constrained area in Kanata North.



- A new delivery agent, Greenbrain, installed over 900 ecobee4 devices for customers that had participated in IESO's AffordAbility Fund program.
- The introduction of new eligible smart thermostat model to the offer.
- The onboarding of Simply Smart Home to allow Enbridge Gas customers purchasing a device through this contractor, to take advantage of the \$75 incentive in the 2021 program year.

Lessons Learned:

A third-party vendor was used in 2020 to facilitate point-of-sale instant discount participation. In Q4 2020, a new vendor was onboarded and throughout the planning and onboarding processes, several enhancements were made to the 2021 instant discount portal based on lessons learned from the existing portal, including:

- Increasing success rate of instant self-service portal validation on customer's first attempt by:
 - Improving integrity and reliability of data connected to portal;
 - Adding address completion functionality to improve accuracy of customer-entered data; and
 - Revising matching methodology to reduce online processing time per application.
- Reducing void coupon requests by clarifying that discount codes are specific to each retailer and emphasizing the distinction between online and in-store retailers.
- Measuring customer satisfaction and home characteristics through post-participation questionnaires.
- Increasing uptake of the offering by re-targeting customers that have reserved, but not redeemed, their instant discount code.
- Sending post-purchase surveys to customers to gain insights on the customer journey and overall satisfaction of the offer.

These improvements aim to streamline the customer's journey for applying for an instant discount, to reduce the percentage of applications that require customer service support, to increase offer uptake, and to ensure natural gas savings claims.

Anticipated Offering Changes for 2021:

In 2021, Enbridge Gas will consider the following changes to the offering:

- Revamp contractor stream where customers can obtain an adaptive thermostat incentive when they have their device professionally installed.
- Expand the number of retailers that are participating in the program.
- Employ more strategic marketing to ensure that messaging and media channels are tailored to specific market segments.
- Add more qualifying devices to the program, including bundles from manufacturers that include existing qualifying devices.
- Continue to monitor and improve customer's journey through the self-service instant discount portal.



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 technologies. Enbridge Gas provides consultative services to customers and third-party service providers aimed at assessing building 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 Program).

Table 5.2 2020 Custom Commercial Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Large Volume Customers Net Cumulative Natural Gas Savings (m ³)	166,088,979
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	14,556,869

Offering Changes in 2020:

In 2020, Enbridge Gas adjusted the incentive structure from two tiers to one, to align with the Union rate zones offering for Commercial General Services customers. Additionally, to drive early and increased project submissions, a double-incentive Boiler Limited Time Offer (LTO) ran until the end of July 2020.

In response to market needs, Enbridge Gas began providing support and financial incentives for custom new construction projects that are not applicable to the Savings by Design Commercial Offering (i.e. for warehouses and other buildings under 50,000 ft²). Pre- and post-built energy simulation models are required, and incentives are available for energy simulation modeling and the implementation of energy efficient measures. However, no results occurred in 2020 due to the longer timeframe required to influence new construction projects.

Lessons Learned:

The boiler LTO and the increase in incentives for larger gas saving projects also successfully increased the results, despite fewer number of projects completed by smaller customers in 2020.

Anticipated Offering Changes for 2021:

Enbridge Gas will continue to push LTOs for boiler projects and introduce new LTOs for measures related to building controls to assist commercial customers, such as multi-family buildings, businesses and schools, in balancing the energy and operational costs.



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

Table 5.3 2020 Custom Industrial Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Large Volume Customers Net Cumulative Natural Gas Savings (m ³)	224,946,348
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	6,759,416

Offering Changes in 2020:

Enbridge Gas adapted the offering’s promotion and delivery models as a response to the COVID-19 pandemic. This offering leverages in-person technical workshop throughout the year to reach potential participants, to introduce energy savings approaches, and to provide information about the details of the incentive. To comply with the pandemic’s restrictions, these workshops were successfully moved to an online webinar in Summer 2020.

Enbridge Gas also extended the LTO to double the regular incentive rate for heat recovery projects, to September 30, to help customers who faced challenges with project implementation due to the pandemic.

Lessons Learned:

Enbridge Gas also completed a preliminary analysis to examine the feasibility of aligning incentive rates in the industrial custom programs to create a province-wide offering. However, while aligning incentive rates is feasible, it will have a consequential impact on some customers more than others, depending on the incentive model used. Implementation of an aligned incentive rate requires sufficient advance notice for both Energy Solutions Advisors and participating customers.

Anticipated Offering Changes for 2021:

Enbridge Gas will continue to review the opportunities to align the incentive structure in 2021 to create a province-wide offering.



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. 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 5.4 2020 Commercial & Industrial Prescriptive (Fixed) Incentive Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Large Volume Customers Net Cumulative Natural Gas Savings (m ³)	10,795,278
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	10,252,793

Offering Changes in 2020:

Some of the offering changes in 2020 include:

- The addition of a new Prescriptive offer for Dock Door Seals
- The expansion of Air Curtain (Shipping Door) offer to include drive thru doors and larger door sizes.
- The addition of two new offers within the midstream initiative; Energy Star Rack Ovens and Convection Ovens

Lessons Learned:

Within the midstream initiative, uptake progressed in 2020 as participant registration and program education continued. Registered participants represent, on average, 85% of the market across the two midstream offers; food service and HVAC equipment. Enbridge Gas recognized that time is needed to develop relationships, train and educate program participants as well as ensure participants establish internal procedures to support the program with their day-to-day activities. Furthermore, additional effort is also required to support participants in the initial months for the application process, online portal training, and sales staff training.

Within the end-user initiative, as smaller customers require support to engage in DSM, Enbridge Gas focused on improving the engagement with Trade Allies, who are critical in delivering the offering. A more formalized approach with Trade Allies is being considered to support multiple offers and initiatives across all sectors, as well as to engage smaller customer’s down market.

Anticipated Offering Changes for 2021:

With respect to the midstream initiative, Enbridge Gas will seek to add new measures to the offering. Expanding measures offered in midstream adds more value to the program resulting in increased participation. Some of the anticipated offering changes in the midstream initiative include:

- Additional measures, for both food service and potentially HVAC equipment
- Collaboration with the IESO to include electric measures for customers (refrigerators, freezers & ice makers)



Furthermore, for both end-user prescriptive and midstream, Enbridge Gas anticipates there will be opportunities to increase customer incentive levels for certain technologies within the offerings, to optimize natural gas savings results.

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 5.5 2020 Commercial & Industrial Direct Install Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Large Volume Customers Net Cumulative Natural Gas Savings (m ³)	5,935,557
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	15,768,618

Offering Changes in 2020:

In 2020, the two legacy utility offers were aligned to a province-wide approach with the addition of two new measures: Drive Through Door Air Curtains and Dock Door Seals for new and replacement project opportunities. Furthermore, an increased incentive was implemented for Air Curtains from 85% to 90%, as this technology is more expensive and requires a greater investment from the customer. The offering also formalized a virtual assessment component that enabled delivery agents to get customers to a quoted stage in the project, supported application growth, and enabled continued customer dialogue during times where site visits were suspended due to COVID-19 safety protocols.

To align the offering between the EGD rate zone and Union rate zones, as of January 2020, Demand Control Kitchen Ventilation (DCKV) was added as a new measure for customers in legacy Union Gas franchise. In early 2020, Enbridge Gas launched collaboration with IESO's Save on Energy (IESO SOE) retrofit program which allowed for a joint offer to be delivered in market by one delivery agent and made it easier for customers to participate from an application process perspective.

Enbridge Gas launched a bonus offer in Q2 2020 where customers installing DCKV received \$1,000-\$1,500 on top of the standard incentive amount, based on the CFM tier of the system installed. The bonus offer and increased incentive were made to financially support customers in targeted segments that were heavily impacted by the COVID-19 pandemic.

Lessons Learned:

Enbridge Gas continues to find that a barrier in initial participation is a lack of clarity in the legitimacy of the offering due to the high incentive and turnkey installation. To mitigate the issue, vendors were provided with Enbridge branded marketing materials during touchpoints with customers. Furthermore, promoting the offering more frequently and using multiple marketing channels can help improve legitimacy of the offering to potential participants.



For the shipping door offer, Enbridge Gas found that converting quotes into projects was a challenge given COVID-19 impacts. Getting financial commitment and sales closures was a challenge given customers' hesitancy to spend capital budget in times of uncertainty. Enbridge attempted to address this by increasing the incentive level in the spring of 2020 for the remainder of the year and emphasized the financial benefits of the offer in all program related communications.

Specific to the Demand Control Kitchen Ventilation ("DCKV") offer, Enbridge Gas found that customer awareness of efficient ventilation technology is low and there is limited understanding of how their commercial kitchen ventilation could be updated to save energy. To mitigate this problem, Enbridge engaged previous customers that installed DCKV technology to build case studies that explain how the technology works, the ease of installation and participation in the Commercial/Industrial Direct Install Offering, as well as the ongoing energy savings that former participants continue to experience. In addition, the food service sector was significantly impacted from COVID-19 and customers were hesitant to spend capital budget. Consistent with the Shipping Door Offer, Enbridge also increased the incentive level in the spring for the remainder of the year.

Anticipated Offering Changes for 2021:

There are few changes being implemented in 2021, as most were made early in 2020. The focus is on continuing to keep the bonus offers, as the pandemic continues, as these two measures were impacted significantly in 2020.

5.1.7 Energy Leaders Offering

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

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

Table 5.6 2020 Energy Leaders Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Large Volume Customers Net Cumulative Natural Gas Savings (m ³)	0
Small Volume Customers Net Cumulative Natural Gas Savings (m ³)	0

Offering Changes in 2020:

There were no changes made to the offering in 2020.

Lessons Learned:

Projects approved through the offering are required to be new technologies (i.e. not widely adopted or widely available) implemented by early adopters. While opportunities were explored in 2020, due to impacts from the COVID-19 pandemic Enbridge Gas was not able to implement projects for the offering.



Anticipated Offering Changes for 2021:

Enbridge Gas expects that some of the opportunities explored in previous years may be implemented in the 2021 program year, however the ongoing COVID-19 pandemic will have an impact on the offering’s success. While this is a smaller offering, Enbridge Gas believes it is important to maintain the status of the offering to support new energy-efficient technologies.

5.2 LOW-INCOME PROGRAM

Enbridge Gas’ 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 the social and assisted housing. Offering details can be found in Appendix C.

Table 5.7 2020 Home Winterproofing Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	26,642,997

Offering Changes in 2020:

In March 2020, the program was paused due to the COVID-19 pandemic and local health restrictions, which limited the ability of HWP Delivery Agents (DAs) to enter customer homes to perform energy assessments or retrofit work. During this time, Enbridge Gas developed strategies that included safety protocols for the eventual return of the offering, while managing ongoing communications with DAs. Customers were also able to continue applying to the offering as DAs took in applications and performed prescreening requirements. Customers were waitlisted until COVID-19 restrictions were lifted in June 2020. As the offering restarted, marketing initiatives were revamped to reflect COVID-19 safety protocols.



From an internal systems standpoint, Enbridge Gas continued with EnergyX testing and training, before launching the tool in December 2020. This tool serves as a standardized reporting platform and will reduce the administrative burden for DAs and internal departments. Additionally, Enbridge Gas initiated a review of internal tracking and reporting procedures to further identify efficiencies that can be leveraged by utilizing EnergyX.

Despite the decrease in outreach efforts due to COVID-19, the HWP Mobile Truck continued to attend events across Ontario to promote the offering, while complying with local COVID-19 restrictions.

Enbridge Gas also collaborated with the Government of Ontario's electricity AffordAbility Fund Trust's Pilot (AFT) program to promote the HWP offering, by engaging the AFT delivery agents to refer potential participants to Enbridge Gas' offering.

Lessons Learned:

While most customers and auditors/retrofiters were allowed to complete program activities once COVID-19 restrictions were relaxed, some demonstrated hesitation for in-person visits. As a result, workloads were adjusted among sub-contractors to allow those comfortable with resuming activities to do so.

The marketing suspension due to COVID-19 created some confusion for customers. In the future, Enbridge Gas plans to continue with marketing initiatives and maintain ongoing communications with customers related to program strategy, despite lockdowns, to avoid a drop in leads and to reduce ramp-up time.

Anticipated Offering Changes for 2021:

Enbridge Gas will add pipe wrap as part of the basic measures to further align with the HWP program offered in Union Rate Zones.

Enbridge Gas anticipates some alignments with IESO CDM programs which includes:

- A change in income eligibility criteria to align with IESO's CDM Low-Income program eligibility criteria.
- The possibility to enter the moderate-income segment, following the direction from OEB and Ministry of Environment, and to collaborate with CDM programs.
- Collaboration on potential joint delivery models.

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 a variety of energy efficiency measures. Participants are eligible for both custom and prescriptive measure incentives, similar to the Commercial & Industrial Prescriptive (Fixed) Incentives Offering and the Custom Commercial Offering, however incentive levels are higher to reflect the needs of the low-income market. Offering details are provided in Appendix C.



Table 5.8 2020 Affordable Multi-Family Housing Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	67,637,303

Offering Changes in 2020:

In 2020, Enbridge Gas aligned the list of measures offered in both the EGD rate zone and Union rate zones and re-branded the offering as Affordable Multi-Family Housing Program (“AMHP”).

Additionally, incentive levels for some prescriptive measures were adjusted to give greater consideration of incremental costs.

Between March and June 2020, direct install measures were suspended due to the COVID-19 pandemic and local health restrictions. During this time, Enbridge Gas developed strategies that included safety protocols for the eventual return of the offering, while managing ongoing communications with 3rd party vendors and customers.

In November 2020, Enbridge Gas commenced a marketing campaign to increase program awareness among targeted customers, along with further follow up by the offering’s Energy Solutions Advisors. The campaign is still ongoing until February 2021.

Lessons Learned:

The COVID-19 pandemic restrictions in Ontario introduced a significant challenge in program delivery. As a result, there were fewer onsite visits and technical walkthroughs conducted in 2020. Furthermore, many social and private building operators deferred or cancelled capital improvements during the pandemic.

Being aware of customer and delivery agent hesitations for in-person visits, Enbridge Gas supported delivery agents with tenant interaction best practices and PPE standards guidance.

Enbridge Gas learned that there have been energy assessments completed in the past by Social Housing Providers that did not translate into energy efficiency projects. To mitigate this issue, a more rigorous pre-screening process will be developed for Social Housing providers to ensure they take actions on the capital upgrade opportunities identified during the energy assessment, and create a more energy efficient building.



Anticipated Offering Changes for 2021:

Enbridge Gas will review the incentive structure and approach for energy assessments to more effectively influence housing providers to complete energy-efficiency upgrades.

Enbridge Gas will be looking to improve collaboration and communication between the offering’s showerhead and heat reflector delivery agents to share leads on projects, that will eventually increase offering awareness and participation.

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 exceed the 2017 Ontario Building Code by at least 7% for multi-residential projects, and at least 15% for single family homes. Offering details are provided in Appendix C.

Table 5.9 2020 Savings by Design Affordable Housing Offering Results (EGD Rate Zone)

METRIC	ACHIEVEMENT
Project Applications	15

Offering Changes in 2020:

In 2020, Enbridge Gas implemented a common Integrated Design Process (“IDP”) report template that includes a non-technical executive summary for decision-makers. Enbridge Gas required all delivery agents to use this common IDP report template.

Enbridge Gas also offered affordable housing providers additional energy modelling to show their level of energy efficiency achievement relative to the National Energy Code of Canada for Buildings (“NECB”), in addition to the Ontario Building Code. This is because several federal programs that provide funding for new affordable housing require funding recipients to disclose the energy efficiency of their building design relative to the NECB.

Lessons Learned:

The offer of supplementary energy modelling relative to NECB was taken up by some participants at the time of the IDP workshop, and by others at the time of the post-construction energy modelling.

In 2020, Enbridge Gas noticed increased interest from municipalities in setting locally-defined green development standards; however, the only municipality currently able to enforce mandatory energy efficiency requirements that exceed the requirements set by the Ontario Building Code is the City of Toronto.

In 2020, Enbridge Gas noticed increased interest from the program participants in Passive House and Net Zero standards, although they generally lacked both the knowledge and the funds to achieve such standards.



Anticipated Offering Changes for 2021:

For 2021, the common templates for both the IDP Workshop Report and the Verification Report will include space for showing the results of energy modelling relative to NECB.

Enbridge Gas will consider implementing stretch targets for projects located in areas that are subject to green development standards. Enbridge Gas will also consider implementing stretch targets for projects whose initial baseline design already meets or exceeds the minimum energy performance requirements of the offering.

5.3 MARKET TRANSFORMATION & ENERGY MANAGEMENT PROGRAM

Enbridge Gas’ 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 2017”) by at least 15%. Offering details are provided in Appendix C.

Table 5.10 2020 Savings by Design Residential Offering Results (EGD Rate Zone)

METRICS	ACHIEVEMENT
Builders	35
Homes Built	2,768

Offering Changes in 2020:

Starting in Q2 2020, Enbridge Gas required all delivery agents to use a common template for IDP reports, which includes a non-technical executive summary for decision-makers.

Repeat participation in the Residential Savings by Design offer is limited to 3 times. In 2020, Enbridge Gas adopted Tarion’s Umbrella Group⁹ designation as an internal tool for determining how many times a particular builder may participate in the Savings by Design

⁹ Tarion is a not-for-profit consumer protection organization established by the Ontario’ government to administer the province’s new home warranty program. (<https://www.tarion.com/about>)



program. If two builders fall under the same Tarion Umbrella Group, they will be considered the same builder for the purposes of counting how many times they have participated in the SBD Residential program in the past and determining how many opportunities remain to them to participate in the future.

In 2020, Enbridge Gas also implemented an internal checklist to verify that all required information was present in each application form and each IDP workshop report.

Lessons Learned:

Enbridge Gas has found that municipalities are adopting and modifying sustainability checklists for new homes, and that builders are looking to Enbridge Gas to assist them in fulfilling the requirements of these sustainability checklists. Enbridge Gas will continue to support builders with improving the energy performance of their developments in the pursuit of sustainability goals.

Anticipated Offering Changes for 2021:

In 2021, Enbridge Gas will consider implementing stretch targets for projects that are located in areas where green development standards apply, or in cases where a project’s initial baseline design already meets or exceeds the 15% above OBC threshold required by the offering.

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 Ontario Building Code (“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 5.11 2020 Savings by Design Commercial Offering Results (EGD Rate Zone)

METRICS	ACHIEVEMENT
New Developments	36

Offering Changes in 2020:

In 2020, Enbridge Gas continued to enhance its marketing efforts by revamping and revitalizing case study booklets that highlight participant success in the offering, and how the offering influenced their decisions. Enbridge Gas also developed 1-page case studies

*Tarion’s definition of Umbrella Group is as follows:
 “An **Umbrella Group** is a group of builders/vendors sharing at least one common officer, director, principal or partner. The Umbrella Group itself is not a legal entity and does not have its own registration number, but each member company of the Umbrella Group is a separate legal entity and has its own registration number.
 The list of member companies comprising an Umbrella Group is based upon information provided by the builder/vendor with its application for registration or renewal. Tarion does not independently verify this information and is not responsible for ensuring the accuracy of this information.”*



that focus on more in-depth areas and have specific target markets which do not have high offering uptake, such as municipalities and long-term care.

Despite the barriers of the COVID-19 pandemic, Enbridge Gas continued to involve different organizations to expand the reach and influence of the offering.

Lessons Learned:

In response to COVID-19, Enbridge Gas transitioned from an in-person IDP workshop to an online platform which allowed for the offering to continue with its delivery. Leveraging the cost savings of moving the IDP to online workshop, Enbridge took the opportunity to develop and execute IDP webinar workshops that focus on various educational topics, and featured subject matter experts from different industries, such as architects, developers, and engineering modelers.

Anticipated Offering Changes for 2021:

In keeping a close relationship with municipalities, Enbridge will adjust the program requirements for regions that have Green Development Standards, and participants who come into the program with a baseline above 15% greater than OBC, via an implementation of a stretch target to further drive and influence the market.

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 5.12 2020 School Energy Competition Offering Results (EGD Rate Zone)

METRICS	ACHIEVEMENT
Schools	7

Offering Changes in 2020:

In 2020, Enbridge Gas planned to launch a new initiative for the program to involve interactive virtual workshop field trips facilitated by the Ontario Science Centre that focuses on providing students with knowledge of natural gas and energy conservation. The workshops intended to provide schools with new opportunities to participate in the offering, while allowing Enbridge Gas to increase offering awareness through various initiatives under the Ontario Science Centre teacher newsletter.



Lessons Learned:

The program was faced with many external barriers surrounding the Ontario teachers strike in Q1 of 2020 followed by the COVID-19 pandemic. Furthermore, competing priorities amongst schools with various programs targeted towards them make participation in Enbridge Gas’ offering increasingly difficult to achieve. Obtaining the services of the Ontario Science Centre to help facilitate the offering enabled Enbridge Gas to provide schools more opportunities and options to participate in the offering. Due to the circumstances surrounding the ongoing COVID-19 pandemic into 2021, the initiative was put on hold.

Anticipated Offering Changes for 2021:

Due to circumstances surrounding the ongoing COVID-19 pandemic into 2021, the offering will not be operational in 2021.

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 5.13 2020 Run it Right Offering Results (EGD Rate Zone)

METRICS	ACHIEVEMENT
Participants	65
Small Net Cumulative Gas Savings (m3) (RA)	134,649
Large Net Cumulative Gas Savings (m ³) (RA)	624,196

Offering Changes in 2020:

In 2020, a benchmarking pilot was initiated to test a new approach in an effort to improve program results. It utilizes a targeted approach based on data analysis to identify customers who have greater savings opportunities and would benefit most from operational improvements. The pilot focused on a single homogenous sector, such as school boards. The engagement efforts will continue into 2021.



Lessons Learned:

Challenges were experienced with savings analysis due to limited access to actual meter reads and potential changes to building use/occupancy as a result of the COVID-19 pandemic and subsequent lockdown restrictions.

Anticipated Offering Changes for 2021:

Enbridge Gas continues to review the design of the Run It Right Offering in an effort to improve cost-effectiveness results. The benchmarking pilot will continue into 2021; results and lessons learned will be monitored and captured. Enbridge is exploring the development of a questionnaire for customers as a high-level means to determine a customer's anticipated benefit of pursuing operational improvement measures, which could then be applied as a pre-screening tool.

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 5.14 2020 Comprehensive Energy Management Offering Results (EGD Rate Zone)

METRICS	ACHIEVEMENT
Participants	7

Offering Changes in 2020:

There were no changes to the offering in 2020.

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' technical expertise in energy management, Enbridge Gas continued to engage customers through various webinars and speaking engagement.

Anticipated Offering Changes for 2021:

Enbridge Gas will continue to monitor the efficacy of the CEM Offering in order to identify improvement opportunities for 2021.



6. Programs and Offerings (Union Rate Zones)

Enbridge Gas' 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' 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 and decrease their energy bills each year, enhance home comfort, avoid unsightly mould and condensation caused by poor insulation, 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 current 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. Rebates are available for completing the assessments and at least two eligible measures recommended in the energy efficiency report (incentive structure and measure list can be found in Appendix D). 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.

The target customer for this offering is residential customers within Union rate zones, including detached, semi-detached, townhouses, row townhouses, and mobile homes. 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 (effective January 1st, 2020).



The aggregate annual gas savings across all participants in the HER offering must achieve, 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 2020 Home Efficiency Rebate Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	125,206,865
Participants (homes)	7,619

Offering Changes in 2020:

Enbridge Gas introduced an additional requirement that any home upgrading a furnace had to complete a total of two additional measures in order to qualify. This additional criterion was added to drive deeper savings in homes installing a furnace as a response to NRCan’s Regulations Amending the Energy Efficiency Regulations, 2016 (Amendment 15): SOR/2019-164 (“Amendment 15”).

There was also a decrease in furnace rebate amount from \$750 to \$500 in January 2020. Enbridge received comments from intervenors that the rebates given for furnace upgrades were too high given the low amount of savings due to the Amendment 15 impact. As a response, Enbridge Gas committed to further reduce the furnace rebate below \$500 by September 2020. The decrease in furnace incentive required Enbridge to re-design the rebate levels for all other offers in order to ensure it meets the required participant metric, portfolio savings, and CCM savings.

Lessons Learned:

Furnace upgrade participation dropped by 30% as a result of the decrease in furnace rebate in 2020. Although the Limited Time Offers (LTOs) drove increased participation for most of 2020, higher than expected uptake put a strain on the offering’s budget. A key learning from this experience was to more closely forecast and monitor uptake for promotional offers.

With the reduction of furnace rebates and a mandated third measure, the offering saw a significant increase in insulation measures – mainly attic insulation. Also, the LTOs had a significant impact in changing the measure mix and measure average to surpass 3.2 measures per home. Furnace and air sealing projects were reduced and replaced by either furnace, attic and air sealing, or attic and air sealing projects, which was that intention of the offering changes.

Some of the impacts from COVID-19 included the following:

- Offering was halted in March 2020 due to the pandemic and local health restrictions which limited the ability for EA’s to enter customer homes.
- The development and deployment of a Risk Management Plan to proactively mitigate the impacts of the pandemic and to develop a plan to help sustain targets for 2021
- The development of processes and procedures to help protect Energy Advisors (and associated Service Organizations and Delivery Agents) and homeowners to prevent the spread of COVID-19.



- Shared communications with SOs prior to restarting the program on June 15, 2020. While the restart process was smooth, some homeowners demonstrated hesitation for in-person visits. Enbridge Gas continues to investigate alternatives to the in-person audit (i.e. remote or virtual) through 2021 and beyond.

Anticipated Offering Changes for 2021:

While there are no changes immediately planned for 2021, Enbridge Gas will monitor the incentive structure changes from Q3 2020 to ensure the Company continues to meet the offering’s objectives. Additionally, Enbridge Gas is monitoring any developments related to federal home retrofit programming that may impact the HER offering.

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.

Within its Decision and Order on the 2015-2020 DSM Plans, the OEB directed the Company to consider the adaptive thermostat technology as part of its residential programming for the Union rate zones at the mid-term review (the EGD rate zone has provided an incentive for the technology to residential customers since 2016). In its January 15, 2018 mid-term review submission for Union rate zones, the Company proposed the development of a new adaptive thermostat offering within its Residential Program and began delivering the offering in 2019. The offering provides customers an instant discount towards 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;
- Resides 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); and
- Has not received an adaptive thermostat discount, rebate, or device from Enbridge Gas at this address.

Table 6.1 2020 Residential Adaptive Thermostat Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	18,748,979

Offering Changes in 2020:

The smart thermostat uptake more than doubled in 2020, compared to 2019 as a result of the instant discount offer being available for the full 2020 program year and an increase in program awareness from marketing campaigns. Enbridge Gas also added a new



eligible smart thermostat model to the offer in October 2020. Additionally, a new contractor Simply Smart Home was onboarded in December 2020 to allow Enbridge Gas customers purchasing a device through this contractor to take advantage of the \$75 incentive in the 2021 program year.

Lessons Learned:

A third-party vendor was used in 2020 to facilitate point-of-sale instant discount participation. In Q4 2020, a new vendor was onboarded and throughout the planning and onboarding processes, several enhancements were made to the instant discount portal based on lessons learned from the existing portal, including:

- Increasing success rate of instant self-service portal validation on customer's first attempt by:
 - Improving integrity and reliability of data connected to portal;
 - Adding address completion functionality to improve accuracy of customer-entered data; and
 - Revising matching methodology to reduce online processing time per application.
- Reducing void coupon requests by clarifying that discount codes are specific to each retailer and emphasizing the distinction between online and in-store retailers.
- Measuring customer satisfaction and home characteristics through post-participation questionnaires.
- Increasing uptake of the offering by re-targeting customers that have reserved, but not redeemed, their instant discount code.
- Sending post-purchase surveys to customers to gain insights on the customer journey and overall satisfaction of the offer

These improvements aim to streamline the customer's journey for applying for an instant discount, to reduce the percentage of applications that require customer service support, to increase offer uptake, and to ensure natural gas savings claims.

Anticipated Offering Changes for 2021:

In 2021, Enbridge Gas will consider the following changes to the offering:

- Revamp contractor stream where customers can obtain an adaptive thermostat incentive when they have their device professionally installed.
- Expand the number of retailers that are participating in the program.
- Employ more strategic marketing to ensure that messaging and media channels are tailored to specific market segments.
- Add more qualifying devices to the program, as well as including bundles from manufacturers that include existing qualifying devices.
- Continue to monitor and improve customer's journey through the self-service instant discount portal.



6.2 COMMERCIAL/INDUSTRIAL PROGRAM

Enbridge Gas' 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)

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. 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 6.2 2020 Commercial/Industrial Prescriptive Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	23,544,978

Offering Changes in 2020:

Some of the offering changes in 2020 include:

- The addition of a new prescriptive offer for Dock Door Seals
- The expansion of Air Curtain (Shipping Door) offer to include drive through doors and larger door sizes
- The addition of two new offers within the midstream initiative; Energy Star Rack Ovens and Convection Ovens

Lessons Learned:

Within the midstream initiative, uptake progressed in 2020 as participant registration and program education continued. Registered participants represent, on average, 85% of the market across the two midstream offers; food service and HVAC equipment. Enbridge Gas recognized that time is needed to develop relationships, train and educate program participants as well as ensure participants establish internal procedures to support the program with their day-to-day activities. Furthermore, additional effort is also required to support participants in the initial months for the application process, online portal training, and sales staff training.

Within the end-user initiative, as smaller customers require support to engage in DSM, Enbridge Gas focused on improving the engagement with Trade Allies, who are critical in delivering the offering. A more formalized approach with Trade Allies is being considered to support multiple offers and initiatives across all sectors, as well as to engage smaller customer's down market.



Anticipated Offering Changes for 2021:

With respect to the midstream initiative, Enbridge Gas will seek to add new measures to the offering. Expanding measures offered in midstream adds more value to the program resulting in increased participation. Some of the anticipated offering changes in the midstream initiative include:

- Additional measures, both food service and potentially HVAC equipment
- Collaboration with the IESO to include electric measures for customers (refrigerators, freezers & ice makers)

Further, for both end-user prescriptive and midstream, Enbridge Gas anticipates that there will be opportunities to increase customer incentive levels for certain technologies within the offerings, to optimize natural gas savings results.

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 6.3 2020 Commercial/Industrial Direct Install Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	4,464,136

Offering Changes in 2020:

In 2020, the two legacy utility offers were aligned to a province-wide approach with the addition of two new measures: Drive Through Door Air Curtains and Dock Door Seals for new and replacement project opportunities. Furthermore, an increased incentive was implemented for Air Curtains from 85% to 90%, as this technology is more expensive and requires a greater investment from the customer. The offering also formalized a virtual assessment component that enabled delivery agents to get customers to a quoted stage in the project, supported application growth, and enabled continued customer dialogue during times where site visits were suspended due to COVID-19 safety protocols.

To align the offering between the EGD rate zone and Union rate zones, as of January 2020, Demand Control Kitchen Ventilation (DCKV) was added as a new measure for customers in the Union rate zones. In early 2020, Enbridge Gas launched a collaboration with IESO’s Save on Energy (IESO SOE) retrofit program which allowed for a joint offer to be delivered in market by one delivery agent, and made it easier for customers to participate from an application process perspective.

Enbridge Gas launched a bonus offer in Q2 2020 where customers installing DCKV received \$1,000-\$1,500 on top of the standard incentive amount, based on the CFM tier of the system installed. The bonus offer and increased incentive were made to financially support customers in targeted segments that were heavily impacted by the COVID-19 pandemic.



Lessons Learned:

Enbridge Gas continues to find that a barrier in initial participation is a lack of clarity in the legitimacy of the offering due to the high incentive and turnkey installation. To mitigate the issue, vendors were provided with Enbridge branded marketing materials during touchpoints with customers. Furthermore, promoting the offering more frequently and using multiple marketing channels can help improve legitimacy of the offering to potential participants.

For the shipping door offer, Enbridge Gas found that converting quotes into projects was a challenge given COVID-19 impacts. Getting financial commitment and sales closures was a challenge given customers' hesitancy to spend capital budget in times of uncertainty. Enbridge attempted to address this by increasing the incentive level in the spring of 2020 for the remainder of the year and emphasized the financial benefits of the offer in all program related communications.

Specific to the Demand Control Kitchen Ventilation ("DCKV") offer, Enbridge Gas found that customer awareness of efficient ventilation technology is low and there is limited understanding of how their commercial kitchen ventilation could be updated to save energy. To mitigate this problem, Enbridge engaged previous customers that installed DCKV technology to build case studies that explain how the technology works, the ease of installation and participation in the Commercial/Industrial Direct Install Offering, as well as the ongoing energy savings that former participants continue to experience. In addition, the food service sector was significantly impacted from COVID-19 and customers were hesitant to spend capital budget. Consistent with the Shipping Door Offer, Enbridge also increased the incentive level in the spring for the remainder of the year.

Anticipated Offering Changes for 2021:

There are few changes being implemented in 2021, as most were made early in 2020. The focus is on continuing to keep the bonus offers, as the pandemic continues, as these two measures were impacted significantly in 2020.

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 technologies. Enbridge Gas provides consultative services to customers and third-party service providers aimed at assessing building 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 Program).

Table 6.4 2020 Commercial/Industrial Custom Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	497,922,990



Offering Changes in 2020:

Some of the changes introduced to the offering in 2020 included:

- Increase in the project cap for Commercial General Service accounts, from \$50k to \$100k, to match the Commercial Custom project cap in the EGD rate zone.
- Addition of High-Efficiency Boilers to the Union rate zones, to provide more savings opportunities for customers and to align with the EGD rate zone offering.
- Shifted boiler projects from the Commercial/Industrial Prescriptive Offering to the Commercial/Industrial Custom Offering within Union rate zones, to ensure better substantiation of savings and to align with the EGD rate zone offerings.
- The launch of the double-incentive Limited Time Offer (LTO) for boiler projects for commercial customers, until the end of July 2020, to drive early and increased project submissions.
- Re-introduction of steam trap replacement study incentives at 50% of study cost, to a maximum of \$6,000, for industrial customers. Additionally, incentives for the replacement of failed steam traps that were identified in a recent third-party survey were provided.

Enbridge Gas also adapted the offering's promotion and delivery models as a response to the COVID-19 pandemic. This offering leverages in-person technical workshops throughout the year to reach potential participants, to introduce energy savings approaches, and to provide information about the details of incentives. To comply with the pandemic's restrictions, these workshops were successfully moved to an online webinar in Summer 2020.

Lessons Learned:

Providing customers with access to technical experts continues to be critical for the success of the offering. Enbridge Gas' Energy Service Advisors provide full account management support, from initial assessment of energy efficiency opportunities, to completing the custom project application including confirming the appropriate base case, high efficiency option and measure life for the project. The boiler LTO also successfully increased the results despite a fewer number of projects completed by smaller customers in 2020.

Enbridge Gas also completed a preliminary analysis to examine the feasibility of aligning incentive rates in the industrial custom programs to create a province-wide offering. However, while aligning incentive rates is feasible, it will have a consequential impact on some customers more than others, depending on the incentive model used. Implementation of an aligned incentive rate requires sufficient advance notice for both Energy Solutions Advisors and participating customers.

Anticipated Offering Changes for 2021:

Enbridge Gas will continue to review the opportunities to align the incentive structure in 2021 to create a province-wide offering. Also, to assist the commercial customer in balancing energy and operational costs, Enbridge Gas continues to push LTOs for boiler projects and introduce new LTO for measures related to building controls.



6.3 LOW-INCOME PROGRAM

Enbridge Gas' 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 (“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 the social and assisted housing. Offering details can be found in Appendix D.

Table 6.5 2020 Home Winterproofing Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	38,411,013

Offering Changes in 2020:

In March 2020, the program was paused due to the COVID-19 pandemic and local health restrictions, which limited the ability of HWP Delivery Agents (DAs) to enter customer homes to perform energy assessments or retrofit work. During this time, Enbridge Gas developed strategies that included safety protocols for the eventual return of the offering, while managing ongoing communications with DAs. Customers were also able to continue applying to the offering as DAs took in applications and performed prescreening requirements. Customers were waitlisted until COVID-19 restrictions were lifted in June 2020. As the offering restarted, marketing initiatives were revamped to reflect COVID-19 safety protocols.

From an internal systems standpoint, Enbridge Gas continued with EnergyX testing and training, before launching the tool in December 2020. This tool serves as a standardized reporting platform and will reduce the administrative burden for DAs and various internal departments. Additionally, Enbridge Gas initiated a review of internal tracking and reporting procedures to further identify efficiencies that can be leveraged by utilizing EnergyX.

Despite the decrease in outreach efforts due to COVID-19, the HWP Mobile Truck continued to attend events across Ontario to promote the offering, while complying with local COVID-19 restrictions.



In 2020, smart thermostats were offered to past HWP participants within Union rate zones, and to those who did not qualify for HWP but were income-eligible.

Lessons Learned:

While most customers and auditors/retrofiters were allowed to complete program activities once COVID-19 restrictions were relaxed, some demonstrated hesitation for in-person visits. As a result, workloads were adjusted among sub-contractors to allow those comfortable with resuming activities to do so.

The marketing suspension due to COVID-19 created some confusion for customers. In the future, Enbridge Gas plans to continue with marketing initiatives and maintain ongoing communications with customers related to program strategy, despite lockdowns, to avoid a drop in leads and to reduce ramp-up time.

Anticipated Offering Changes for 2021:

Enbridge Gas anticipates some alignments with IESO CDM programs which includes:

- A change in income eligibility criteria to align with IESO’s CDM Low-Income program eligibility criteria.
- The possibility to enter the moderate-income segment, following the direction from OEB and Ministry of Environment, and to collaborate with CDM programs.
- Collaboration on potential joint delivery models

Enbridge Gas will also explore diversification of delivery agents with Union rate zones, as current contracts are expiring.

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 6.6 2020 Furnace End-of-Life Upgrade Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	0

Offering Changes in 2020:

Uptake in this offering has been low in recent years and was not actively marketed in 2020 resulting in no uptake. 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 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 2020 resulting in no uptake. See “Offering Changes in 2020” above for more details.

Anticipated Offering Changes for 2021:

There are no changes anticipated in the offering for 2021. See “Offering Changes in 2020” above for more details.

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, installed 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. The offering also has an economic development component, in an effort to provide local employment opportunities for members of participating communities.

Table 6.7 2020 Indigenous Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	0

Offering Changes in 2020:

In 2020, due to COVID-19, the remaining 2 Indigenous communities identified for participation were closed to outside visitors and as such, Enbridge Gas was unable to reach any homes in the communities in this program year. The number of communities targeted each year is dependent on the Band Council’s endorsement to operate in their communities and capacity of the delivery agent. Enbridge will resume program participation when COVID-19 restrictions are lifted.

Lessons Learned:

Enbridge Gas continued with the Indigenous pilot project which was launched in late 2019 and carried over into 2020, however the pilot was on hold for most of the year due to the closures of Indigenous communities due to COVID-19. This pilot will help inform needs unique to Indigenous communities. Based on initial findings from the Indigenous pilot and to align with IESO’s focus, Enbridge will be exploring programming for commercial buildings. Since savings opportunities within the communities the Company has reached is becoming saturated, the Company will look to introduce new measures to continue to provide prescriptive opportunities for Indigenous residential homes.



Anticipated Offering Changes for 2021:

Enbridge Gas is looking to complete the current offering for the remaining communities that are currently restricted due to COVID-19.

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 technical assistance and incentives for a variety of energy efficiency measures. Participants are eligible for both custom and prescriptive measure incentives, similar to the Commercial/Industrial Prescriptive Offering and Commercial/Industrial Custom Offering, however incentive levels are higher to reflect the needs of the low-income market. Offering details are provided in Appendix D.

Table 6.8 2020 Affordable Multi-Family Housing Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Social and Assisted Multi-Family Net Cumulative Natural Gas Savings (m ³)	12,142,699
Market Rate Multi-Family Net Cumulative Natural Gas Savings (m ³)	8,316,698

Offering Changes in 2020:

In 2020, Enbridge Gas aligned the list of measures offered in both the EGD rate zone and Union rate zones and re-branded the offering as Affordable Multi-Family Housing Program (“AMHP”).

Additionally, incentive levels for some prescriptive measures were adjusted to give greater consideration of incremental costs.

Between March and June 2020, direct install measures were suspended due to the COVID-19 pandemic and local health restrictions. During this time, Enbridge Gas developed strategies that included safety protocols for the eventual return of the offering, while managing ongoing communications with 3rd party vendors and customers.

Lessons Learned:

Enbridge Gas recognized that the participation of this offering was mainly from large social housing providers. In an effort to diversify the reach of program delivery to mid-size and smaller housing providers, as well as private market rate buildings, significant analysis and preparation needs to be completed. This will be accomplished by working with internal teams to gather a robust list of mid-size and smaller buildings and increasing outreach opportunities.

The COVID-19 pandemic restrictions in Ontario introduced a significant challenge in program delivery. As a result, there were fewer onsite visits and technical walkthroughs conducted in 2020. Furthermore, many social and private building operators deferred or cancelled capital improvements during the pandemic.



Being aware of customer and delivery agent hesitations for in-person visits, Enbridge Gas supported delivery agents with tenant interaction best practices and PPE standards guidance.

Enbridge Gas also learned that there have been energy assessments completed in the past by Social Housing Providers that did not translate to energy efficiency projects. To mitigate this issue, a more rigorous pre-screening process will be developed for Social Housing providers to ensure they take actions on the capital upgrade opportunities identified during the energy assessment and create a more energy efficient building.

Anticipated Offering Changes for 2021:

Enbridge Gas will review the incentive structure and approach for energy assessments to more effectively influence housing providers to complete energy-efficiency upgrades.

Enbridge Gas will be looking to improve collaboration and communication between the offering's showerhead and heat reflector delivery agents to share leads on projects, that will eventually increase offering awareness and participation.

6.4 LARGE VOLUME PROGRAM

Enbridge Gas' 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. 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 6.9 2020 Large Volume Direct Access Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Net Cumulative Natural Gas Savings (m ³)	126,647,466

Offering Changes in 2020:

In 2020, Enbridge Gas investigated the use of wireless steam trap monitoring systems with a plan to install systems from one or several different vendors at up to 4 customer sites, however the inability to conduct customer site visits due to COVID-19 restrictions delayed execution until at least 2021. In addition, Enbridge Gas began a pilot to investigate venturi steam traps at several sites, with planned equipment installation in 2021.

Lessons Learned:

Due to COVID-19 restrictions, there were delays in equipment installations for the pilot projects that had been planned for 2020. As a result of preparation for 2021, one of the projects for the venturi steam traps initiative is progressing well and the work is included in the customer’s schedule for early 2021.

Anticipated Offering Changes for 2021:

Enbridge Gas anticipates equipment installations for the projects that were initiated in 2020 to occur in 2021. Furthermore, the pilot initiatives will continue in 2021 with up to 8 customer sites involved in the projects.

6.5 MARKET TRANSFORMATION PROGRAM

Enbridge Gas’ 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 2017”) by at least 15%. Offering details are provided in Appendix D.



Table 6.10 2020 Optimum Home Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
Percentage of Homes Built (>15% above OBC 2017) by Participating Builder	39.2%

Offering Changes in 2020:

In 2020, in order to more widely disseminate the learnings of the builders who participated in the Optimum Home offering, Enbridge Gas sponsored a series of high-performance new construction workshops, entitled “Better Built Homes”. Enbridge also sponsored building science Spring Camp workshops attended by builders who were unable to participate in the Optimum Home offering due to its limited enrollment, and further sponsored a series of advanced building science webinars.

Lessons Learned:

Both large and small builders benefitted from the building science consulting they accessed through the Optimum Home offering and Optimum Home Lite pilot program. A consistent pattern that emerged over the course of delivering both the core Optimum Home offering and the pilot was that participating builders would enter the program believing they already build more energy efficient homes than their competitors; however, they would often learn how much better their Discovery Home performed compared to their typical home.

Through the Optimum Home core offering and the Optimum Home Lite pilot program, Enbridge Gas found there is a lack of qualified Energy Star evaluators in some regions within the Union rate zones. This resulted in smaller builders operating in less populous areas (e.g. Windsor, Chatham, Sarnia) having less access to the Energy Advisors and Energy Auditors needed to complete both the building science consulting and the blower door testing to improve and verify energy performance. This lack of workforce capacity impacts Enbridge Gas’ ability to influence the energy performance of new homes built in those markets.

Anticipated Offering Changes for 2021:

All builders who were participating in the Optimum Home offering and Optimum Home Lite pilot program have completed their free building science consulting activities and are now incorporating the lessons learned from the program into their new home designs.

Enbridge Gas will continue 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.

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 Ontario Building Code (“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 6.11 2020 Commercial Savings by Design Offering Results (Union Rate Zones)

METRIC	ACHIEVEMENT
New Developments Enrolled by Participating Builders	24

Offering Changes in 2020:

In 2020, Enbridge Gas continued to enhance its marketing efforts by revamping and revitalizing case study booklets that highlight participant success in the offering, and how the offering influenced their decisions. Enbridge Gas also developed 1-page case studies that focus on more in-depth areas and have specific target markets which do not have high offering uptake, such as municipalities and long-term care.

Despite the barriers of the COVID-19 pandemic, Enbridge Gas continued to involve different organizations to expand the reach and influence of the offering.

Lessons Learned:

In response to COVID-19, Enbridge Gas transitioned from an in-person IDP workshop to an online platform which allowed for the offering to continue with its delivery. Leveraging the cost savings of moving the IDP to online workshops, Enbridge took the opportunity to develop and execute IDP webinar workshops that focus on various educational topics, and feature subject matter experts from different industries, such as architects, developers, and engineering modelers.

Enbridge Gas also continues to strengthen the geographical outreach within the Union rate zones by providing regional workshops that involve key stakeholders comprised of architects, engineers, municipal partners, and local home builders. These events also focus on local economic impacts as well as green initiatives that Enbridge Gas can support.

Anticipated Offering Changes for 2021:

In keeping a close relationship with municipalities, Enbridge Gas will adjust the program requirements for regions that have Green Development standards and participants who come into the program with a baseline above 15% greater than OBC, via an implementation of a stretch target to further drive and influence the market.

6.6 PERFORMANCE-BASED PROGRAM

Enbridge Gas' 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 time period. Offering details including eligibility and financial incentives available to participants are provided in Appendix D.

Table 6.12 2020 RunSmart Offering Results (Union Rate Zones)

METRICS	ACHIEVEMENT
Participants	0
Savings (%)	-1.5%

Offering Changes in 2020:

In 2020, a benchmarking pilot was initiated to test a new approach in an effort to improve program results. It utilizes a targeted approach based on data analysis to identify customers who have greater savings opportunities and would benefit most from operational improvements. The pilot focused on a single homogenous sector, such as school boards. The engagement efforts will continue into 2021.

Lessons Learned:

Challenges were experienced with savings analysis due to limited access to actual meter reads and potential changes to building use/occupancy as a result of the COVID-19 pandemic and subsequent lockdown restrictions. This and other factors resulted in unexpected savings results for the offering.

Anticipated Offering Changes for 2021:

Enbridge Gas continues to review the design of the RunSmart Offering in an effort to improve cost-effectiveness results. The benchmarking pilot will continue into 2021; results and lessons learned will be monitored and captured. Enbridge is exploring the development of a questionnaire for customers as a high-level means to determine a customer's anticipated benefit of pursuing operational improvement measures, which could then be applied as a pre-screening tool.



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 6.13 2020 Strategic Energy Management Offering Results (Union Rate Zones)

METRICS	ACHIEVEMENT
Savings (%)	2.6%

Offering Changes in 2020:

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

Lessons Learned:

Only 1 of the 5 customers that were eligible for incentives in 2020 received incentives. This was a result of various internal priorities on the customers’ side. Enbridge Gas will continue to engage with the remaining participants in 2021 to achieve natural gas savings.

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.

Anticipated Offering Changes for 2021:

Consistent with the 2015-2020 DSM Plan, 2018 was the last year new participants were enrolled in the offering. As such Enbridge Gas will continue to work with the participants already enrolled in the offering.



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.

The audit for the 2020 program year was initiated by the OEB and the EC in February 2021. Details on the impact evaluation activities and other audit activities are outlined in the EC’s 2020 audit report available on the OEB’s DSM EM&V webpage.¹⁰

7.2 PROCESS EVALUATION

Enbridge Gas continuously evaluates its programs and offerings to assess the effectiveness of its program design. Most of the time, these assessments consist of many smaller, topic-focused, informal process evaluations conducted by Enbridge Gas’ program design staff. The most common examples of these process evaluations include assessing incentive levels, customer communication tactics, and implementation logistics and systems. In some instances, broad-based, formal process evaluations can be undertaken with support from external consultants, focusing on entire offerings or initiatives, rather than an individual topic. In 2020 Enbridge Gas began a process evaluation of the commercial custom and prescriptive offerings, however the evaluation was not completed within the 2020 year. The evaluation period coincides with the beginning of program delivery integration between the EGD rate zone and Union rate zones, while still operating two separate OEB-approved DSM Plans.

¹⁰ <https://www.oeb.ca/consultations-and-projects/policy-initiatives-and-consultations/natural-gas-demand-side-management>



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.”¹¹ 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 DSM Framework and Section 5.0 of the DSM Guidelines.

In 2020, Enbridge Gas earned \$3.6M in DSM incentive for the EGD rate zone, as outlined in Table 8.0 below.

Table 8.0 2020 Maximum Shareholder Incentive & Achievement by Scorecard (EGD Rate Zone)

SCORECARD	MAXIMUM DSM INCENTIVE	DSM SHAREHOLDER INCENTIVE ACHIEVED
Resource Acquisition	\$7,012,787	\$2,904,033
Low-Income	\$2,263,561	\$501,162
Market Transformation & Energy Management	\$1,173,652	\$181,276
Total	\$10,450,000	\$3,586,470

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

Table 8.1 2020 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)	377,258,906	503,011,875	754,517,813	40%	408,463,368	32%
Small Volume Customers – Cumulative Natural Gas Savings (m ³)	189,386,289	252,515,052	378,772,578	40%	268,306,798	43%
Deep Residential Savings Participants	8,025	10,700	16,050	20%	14,013	26%
Total Scorecard Target Achieved						101%
Scorecard Company Incentive Achieved						\$2,904,033

¹¹ Report of the Board: DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, p. 20.



Table 8.2 2020 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)	19,930,077	26,573,437	39,860,155	45%	26,642,997	45%
Multi-Residential (Part 3) – Cumulative Natural Gas Savings (m ³)	82,350,715	109,800,953	164,701,430	45%	67,637,303	28%
New Construction Participants	7	9	14	10%	15	16%
Total Scorecard Target Achieved						89%
Scorecard Company Incentive Achieved						\$501,162

Table 8.3 2020 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	26	35	52	10%	35	10%
Residential Savings by Design – Homes Built	2,002	2,669	4,004	15%	2,768	16%
Commercial Savings by Design – New Developments	22	29	43	25%	36	31%
School Energy Competition – Schools	54	72	108	10%	7	1%
Run it Right – Participants	43	58	86	20%	65	23%
Comprehensive Energy Management – Participants	24	32	49	20%	7	4%
Total Scorecard Target Achieved						85%
Scorecard Company Incentive Achieved						\$181,276

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 2020, lost distribution revenues associated with DSM activity for the EGD rate zone was \$0.031M, as outlined in Table 8.4 below.



Table 8.4 2020 LRAM Statement (EGD Rate Zone)

RATE CLASS	LRAM VOLUMES (M ³)	DISTRIBUTION MARGIN (\$/M ³)	REVENUE IMPACT
	(A)	(B)	(A) X (B)
Rate 110	1,916,004	0.5983	\$11,463
Rate 115	801,297	0.2286	\$1,832
Rate 135	883,448	1.8626	\$16,455
Rate 145	0	1.6942	\$0
Rate 170	271,556	0.2862	\$777
TOTAL	3,872,305		\$30,527

*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 2020 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	\$164,791,238	\$8,001,382	\$59,205,401	\$67,206,783	\$97,584,456	2.45
Low-Income Program	\$22,510,520	\$4,102,485	\$9,201,088	\$13,303,573	\$9,206,947	1.69
Total DSM Portfolio	\$187,301,758	\$12,103,867	\$68,406,489	\$80,510,356	\$106,791,403	2.33

Table 8.6 2020 PAC Summary (EGD Rate Zone)

PROGRAM	NPV PAC BENEFITS	TOTAL PAC COSTS	NET PAC	PAC RATIO
Resource Acquisition Program	\$132,050,678	\$45,154,428	\$86,896,250	2.92
Low-Income Program	\$18,439,540	\$10,866,336	\$7,573,204	1.70
Total DSM Portfolio	\$150,490,219	\$56,020,765	\$94,469,454	2.69



8.4 BUDGETS AND SPENDING

Total 2020 DSM spend for the EGD rate zone was \$64.6M, 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”.¹² 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); and
- Collaboration and Innovation (see Section 8.4.1 for details).

Table 8.7 2020 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	\$25,546,688	\$7,896,213
Home Efficiency Rebate Offering - Promotion		\$1,076,726	
Residential Adaptive Thermostat Offering - Incentives	\$2,262,870	\$1,680,550	(\$146,678)
Residential Adaptive Thermostat Offering - Promotion		\$435,642	
Commercial & Industrial Prescriptive (Fixed) Incentive Offering - Incentives	\$2,323,114	\$1,120,952	(\$806,797)
Commercial & Industrial Prescriptive (Fixed) Incentive Offering - Promotion		\$395,366	
Commercial & Industrial Direct Install Offering - Incentives	\$4,950,581	\$1,815,123	(\$2,945,770)
Commercial & Industrial Direct Install Offering - Promotion		\$189,688	
Custom Commercial Offering - Incentives	\$7,658,968	\$4,872,011	(\$334,117)
Custom Commercial Offering - Promotion		\$245,676	
Custom Industrial Offering - Incentives		\$1,822,050	
Custom Industrial Offering - Promotion		\$385,115	
Energy Leaders Offering - Incentives	\$0	\$0	\$4,475
Energy Leaders Offering - Promotion		\$4,475	
Run It Right Offering (RA) - Incentives	\$1,653,979	\$223,102	(\$1,356,493)
Run It Right Offering (RA) - Promotion		\$74,384	
Comprehensive Energy Management Offering (RA) - Incentives	\$98,838	\$5,141	(\$93,697)
Comprehensive Energy Management Offering (RA) - Promotion		\$0	
<i>Resource Acquisition Program - Overheads</i>	\$5,232,967	\$4,817,538	(\$415,429)
Resource Acquisition Program Total	\$42,908,517	\$44,710,224	\$1,801,707
Low-Income Program Costs			
Home Winterproofing Offering - Incentives	\$6,736,859	\$3,840,519	(\$373,198)
Home Winterproofing Offering - Promotion		\$2,523,142	
Affordable Multi-Family Housing Offering - Incentives	\$3,967,353	\$2,923,332	(\$1,019,665)
Affordable Multi-Family Housing Offering - Promotion		\$24,356	
Savings by Design Affordable Housing Offering - Incentives	\$1,456,560	\$1,148,508	\$262,424
Savings by Design Affordable Housing Offering - Promotion		\$570,476	

¹² DSM Guidelines, pp. 38



ITEM	OEB-APPROVED BUDGET	ACTUAL SPEND	VARIANCE
<i>Low-Income Program - Overheads</i>	\$1,689,078	\$1,554,987	(\$134,091)
Low-Income Program Total	\$13,849,850	\$12,585,321	(\$1,264,529)
Market Transformation & Energy Management Program Costs			
Savings by Design Residential Offering - Incentives	\$3,392,296	\$2,811,727	(\$65,862)
Savings by Design Residential Offering - Promotion		\$514,707	
Savings by Design Commercial Offering - Incentives	\$1,122,068	\$1,045,304	\$70,029
Savings by Design Commercial Offering - Promotion		\$146,793	
School Energy Competition Offering - Incentives	\$520,200	\$12,000	(\$451,452)
School Energy Competition Offering - Promotion		\$56,748	
Run It Right Offering (MT) - Incentives	\$329,209	\$67,431	(\$127,103)
Run It Right Offering (MT) - Promotion		\$134,675	
Comprehensive Energy Management Offering (MT) - Incentives	\$941,562	\$0	(\$694,989)
Comprehensive Energy Management Offering (MT) - Promotion		\$246,573	
<i>Market Transformation & Energy Management Program - Overheads</i>	\$875,783	\$806,257	(\$69,526)
Market Transformation & Energy Management Program Total	\$7,181,118	\$5,842,215	(\$1,338,903)
TOTAL Program Costs	\$63,939,485	\$63,137,760	(\$801,725)
Portfolio Costs			
Evaluation	\$1,774,228	\$415,840	(\$1,358,388)
Portfolio Total	\$1,774,228	\$415,840	(\$1,358,388)
TOTAL Program and Portfolio Costs	\$65,713,713	\$63,553,599	-\$2,160,114
Other Costs			
DSM IT	\$1,000,000	\$0	(\$1,000,000)
Collaboration and Innovation	\$1,043,663	\$994,554	(\$49,109)
Other Costs Total	\$2,043,663	\$994,554	(\$1,049,109)
TOTAL DSM Costs	\$67,757,376	\$64,548,153	(\$3,209,223)

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: \$1,022,800
- Savings by Design Residential Offering: \$2,003,000
- Savings by Design Commercial Offering: \$105,000



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 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.

Actual collaboration and innovation spend was approximately \$1.0M in 2020, and included the following major items:

- **AeroBarrier**
 - Enbridge Gas and AeroBarrier are partnering to demonstrate, measure, and analyze the energy savings that can be driven by the AeroBarrier air sealing technology in the Ontario new home residential market. The goal will be to test feasibility and measure reduction in air leakage through the application of AeroBarrier across a proposed 150-200 homes of varied size & type (stacked, detached, towns). In conjunction with Building Knowledge Inc. and through blower door testing and the use of energy modelling software, Enbridge Gas will generate a data set that measures the energy savings that the technology can drive in the new home building industry.
- **AffordAbility Fund Trust Pilot**
 - This pilot is designed to offer home insulation and air sealing to 20 moderate income customers in the Peterborough area. The pilot would target gas-heated homes participating in the AffordAbility Fund Trust's ("AFT") existing electricity conservation program, which AFT is delivering to customers without access to modern energy services, in collaboration with the local electricity utilities. Learnings from the pilot would be applied to a potential future collaborative gas/electric program targeting moderate-income customers who do not qualify to participate in Enbridge Gas' Low-Income Home Winterproofing Offering and the IESO's Home Assistance Program, but are unlikely to participate in mass market residential home retrofit programs due to lack of funds available to pay for retrofits out-of-pocket.
- **Gas Technology Institute ("GTI") Utilization Technology Development ("UTD") Membership**
 - UTD and its 20 members serve over 47 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.
- **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 a 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 5 iFLOW Combination Heating Systems in residential retrofit homes to quantify gas savings of the iFLOW system in retrofit houses. Results 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
- **Sustainable Buildings Canada (“SBC”) Combined Heat and Power (“CHP”) Study**
 - The purpose of this project was to model a combined-heat and power system for a Part 3 Multi-Unit Residential Building (MURB) that was designed to meet the energy efficiency requirements of Supplementary Standard SB-10.
- **Rinnai Gas Heat Pump Water Heaters (“GHPWH”)**
 - The purpose of the project is to join a multi-million dollar North American field demonstration project to demonstrate energy saving and GHG reduction benefits of residential GHPWHs and to support Rinnai in their business decision to start manufacturing GHPWH at commercial production levels and to address a diverse set of policy, technology, market and efficiency program considerations driving stakeholders focus on gas heat pumps.



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."¹³ 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 DSM Framework and Section 5.0 of the DSM Guidelines.

In 2020, Enbridge Gas earned \$2.7M in DSM incentive for the Union rate zones, as outlined in Table 9.0 below.

Table 9.0 2020 Maximum Shareholder Incentive & Achievement by Scorecard (Union Rate Zones)

SCORECARD	MAXIMUM DSM INCENTIVE	DSM SHAREHOLDER INCENTIVE ACHIEVED
Resource Acquisition	\$ 6,562,712	\$ 2,307,872
Low-Income	\$ 2,604,447	\$ 0
Large Volume	\$ 694,265	\$ 224,513
Market Transformation	\$ 405,810	\$ 193,812
Performance-Based	\$ 182,765	\$ 0
Total	\$ 10,450,000	\$ 2,726,196

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

Table 9.1 2020 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)	543,286,032	724,381,376	1,086,572,065	75%	669,887,948	69%
Home Reno Rebate Participants (Homes)	5,172	6,896	10,344	25%	7,619	28%
Total Scorecard Target Achieved						97%
Scorecard Company Incentive Achieved						\$ 2,307,872

¹³ Report of the Board: DSM Framework for Natural Gas Distributors (2015-2020), EB-2014-0134, p. 20.



Table 9.2 2020 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)	40,022,417	53,363,223	80,044,835	60%	38,411,013	43%
Social and Assisted Multi-Family Cumulative Natural Gas Savings (m ³)	23,896,992	31,862,656	47,793,986	35%	12,142,699	13%
Market Rate Multi-Family Cumulative Natural Gas Savings (m ³)	5,021,527	6,695,369	10,043,054	5%	8,316,698	6%
Total Scorecard Target Achieved						63%
Scorecard Company Incentive Achieved						\$0

Table 9.3 2020 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)	99,762,897	133,017,196	199,525,794	100%	126,647,466	95%
Total Scorecard Target Achieved						95%
Scorecard Company Incentive Achieved						\$224,513

Table 9.4 2020 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	24.24%	32.32%	48.48%	50%	39.2%	61%
Commercial Savings by Design: New Developments Enrolled by Participating Builders	20	26	39	50%	24	46%
Total Scorecard Target Achieved						106%
Scorecard Company Incentive Achieved						\$193,812



Table 9.5 2020 Performance-Based Scorecard Results (Union Rate Zones)

METRICS	METRIC TARGET LEVELS			WEIGHTED % OF SCORECARD ACHIEVED		
	LOWER BAND	TARGET	UPPER BAND	WEIGHT	ACHIEVEMENT	ACHIEVED
RunSmart Participants	52	69	104	10%	0	0%
RunSmart Savings (%)	0.33%	0.44%	0.67%	40%	-1.5%	0%
Strategic Energy Management (SEM) Savings (%)	4%	5%	7%	50%	2.6%	27%
Total Scorecard Target Achieved						27%
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 2020, lost distribution revenues associated with DSM activity for the Union rate zones was \$0.153M, as outlined in Table 9.6 below.

Table 9.6 2020 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 Industrial	7,898	\$14.42	\$113,870.85
South - M5 Industrial	58	\$26.21	\$1,508.49
South - M7 Industrial	10,029	\$2.29	\$22,918.98
South - T1 Industrial	581	\$1.05	\$612.54
South - T2 Industrial	4,224	\$0.20	\$840.55
South Total	22,790		\$139,751.41
North - 20 Industrial	238	\$7.00	\$1,665.34
North - 100 Industrial	4,477	\$2.68	\$12,004.74
North Total	4,715		\$13,670.08
TOTAL	27,505		\$153,421.49

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 2020 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	\$40,370,182	\$3,136,510	\$26,712,069	\$29,848,579	\$10,521,604	1.35
Commercial/Industrial Program	\$119,841,822	\$4,484,041	\$54,723,232	\$59,207,273	\$60,634,549	2.02
Low-Income Program	\$14,977,531	\$4,225,330	\$8,409,554	\$12,634,884	\$2,342,647	1.19
Large Volume Program	\$28,425,235	\$451,483	\$4,601,075	\$5,052,559	\$23,372,676	5.63
Performance-Based Program	\$1,313,694	\$347,073	\$0	\$347,073	\$966,621	3.79
Total DSM Portfolio	\$204,928,465	\$12,644,438	\$94,445,930	\$107,090,368	\$97,838,097	1.91

Table 9.8 2020 PAC Summary (Union Rate Zones)

PROGRAM	NPV PAC BENEFITS	PAC PROGRAM COSTS	NET PAC	PAC RATIO
Residential Program	\$29,973,685	\$18,310,853	\$11,662,832	1.64
Commercial/Industrial Program	\$106,181,516	\$14,878,637	\$91,302,879	7.14
Low-Income Program	\$12,434,629	\$10,645,192	\$1,789,437	1.17
Large Volume Program	\$25,207,566	\$3,338,499	\$21,869,067	7.55
Performance-Based Program	\$1,200,398	\$383,244	\$817,154	3.13
Total DSM Portfolio	\$174,997,793	\$47,556,425	\$127,441,369	3.68

9.4 BUDGETS AND SPENDING

Total 2020 DSM spend for the Union rate zones was \$54.5M, 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”.¹⁴ 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, 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); and,
- Pilots (See Section 9.4.2 for more details).

Furthermore, spending also included the Open Bill project.

¹⁴ DSM Guidelines, pp. 38



Table 9.9 2020 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	\$14,532,121	\$3,426,806
Home Efficiency Rebate Offering - Promotion		\$1,120,685	
Residential Adaptive Thermostat Offering - Incentives	\$0	\$642,222	\$893,916
Residential Adaptive Thermostat Offering - Promotion		\$251,694	
<i>Residential Program - Evaluation</i>	\$859,000	\$1,177,873	\$318,873
<i>Residential Program - Administration</i>	\$822,697	\$586,258	(\$236,439)
Residential Program Total	\$13,907,697	\$18,310,853	\$4,403,156
Commercial/Industrial Program Costs			
Commercial/Industrial Prescriptive Offering - Incentives	\$7,149,000	\$1,119,178	(\$5,558,052)
Commercial/Industrial Prescriptive Offering - Promotion		\$471,770	
Commercial/Industrial Direct Install Offering - Incentives	\$2,500,000	\$475,433	(\$1,962,520)
Commercial/Industrial Direct Install Offering - Promotion		\$62,047	
Commercial/Industrial Custom Offering - Incentives	\$7,808,000	\$8,799,985	\$1,234,149
Commercial/Industrial Custom Offering - Promotion		\$242,164	
<i>Commercial/Industrial Program - Evaluation</i>	\$189,000	\$29,235	(\$159,765)
<i>Commercial/Industrial Program - Administration</i>	\$4,757,286	\$3,678,824	(\$1,078,462)
Commercial/Industrial Program Total	\$22,403,286	\$14,878,637	(\$7,524,649)
Low-Income Program Costs			
Home Weatherization Offering - Incentives	\$8,374,000	\$4,306,784	(\$1,207,611)
Home Weatherization Offering - Promotion		\$2,859,605	
Multi-Residential Affordable Housing Offering - Incentives	\$3,573,000	\$2,113,078	(\$1,036,616)
Multi-Residential Affordable Housing Offering - Promotion		\$423,306	
Indigenous Offering - Incentives	\$448,000	\$0	(\$381,100)
Indigenous Offering - Promotion		\$66,900	
Furnace End-of-Life Upgrade Offering - Incentives	\$917,000	\$0	(\$917,000)
Furnace End-of-Life Upgrade Offering - Promotion		\$0	
<i>Low-Income Program - Evaluation</i>	\$263,008	\$191,250	(\$71,758)
<i>Low-Income Program - Administration</i>	\$1,430,480	\$684,269	(\$746,211)
Low-Income Program Total	\$15,005,488	\$10,645,192	(\$4,360,296)
Large Volume Program Costs			
Large Volume Direct Access Offering - Incentives	\$3,150,000	\$2,887,016	(\$228,352)
Large Volume Direct Access Offering - Promotion		\$34,632	
<i>Large Volume Program - Evaluation</i>	\$63,000	\$0	(\$63,000)
<i>Large Volume Program - Administration</i>	\$787,000	\$416,851	(\$370,149)
Large Volume Program Total	\$4,000,000	\$3,338,499	(\$661,501)
Performance-Based Program Costs			
RunSmart Offering - Incentives	\$802,000	\$26,171	(\$511,002)
RunSmart Offering - Promotion		\$32,300	
Strategic Energy Management Offering - Incentives		\$10,000	
Strategic Energy Management Offering - Promotion		\$222,526	
<i>Performance-Based Program - Evaluation</i>	\$35,000	\$0	(\$35,000)
<i>Performance-Based Program - Administration</i>	\$216,000	\$92,247	(\$123,753)
Performance-Based Program Total	\$1,053,000	\$383,244	(\$669,756)
Market Transformation Program Costs			



ITEM	OEB-APPROVED BUDGET ¹	ACTUAL SPEND	VARIANCE
Optimum Home Offering - Incentives	\$841,000	\$428,000	(\$245,478)
Optimum Home Offering - Promotion		\$167,522	
Commercial Savings by Design Offering - Incentives	\$1,000,000	\$942,178	\$41,572
Commercial Savings by Design Offering - Promotion		\$99,395	
<i>Market Transformation Program - Evaluation</i>	\$36,820	\$0	(\$36,820)
<i>Market Transformation Program - Administration</i>	\$460,250	\$531,121	\$70,871
Market Transformation Program Total	\$2,338,070	\$2,168,215	(\$169,855)
TOTAL Program Costs	\$58,707,541	\$49,724,640	(\$8,982,901)
Portfolio Costs			
Research	\$1,000,000	\$809,705	(\$190,295)
Evaluation	\$1,300,000	\$206,201	(\$1,093,799)
Administration	\$2,842,000	\$3,374,634	\$532,634
Portfolio Total	\$5,142,000	\$4,390,540	(\$751,461)
TOTAL Program and Portfolio Costs	\$63,849,541	\$54,115,180	(\$9,734,362)
Other Costs			
Pilots	\$500,000	\$367,178	(\$132,822)
Open Bill Project	\$0	\$6,225	\$6,225
Other Costs Total	\$500,000	\$373,403	(\$126,597)
TOTAL DSM Costs	\$64,349,541	\$54,488,582	(\$9,860,959)

¹The total budget shown for 2020 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: \$187,200

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.

Actual research spend was approximately \$0.8M in 2020, and included the following major items:



- **BKR Hybrid Heating**
 - The objective of this retrofit project is to evaluate the smart fuel switching controller on a hybrid heating system's performance in terms of energy demand/cost savings and GHG reduction at Chatham and Vaughan pilot homes. The results of this hybrid heating project may enhance the utilities' energy conservation strategy-planning programs.
- **Centre for Energy Advancement through Technological Innovation ("CEATI")**
 - This project will focus on low carbon residential and commercial space and water heating through documentation of case studies, identifying associated utility program practices, and the impacts of long-term utility projections and outcomes.
- **Cold Climate Air Source Heat Pump ("ccASHP")**
 - Support NRCan's project for 7 pilot homes in Ontario, assessing the performance of the various cold climate heat pump products. This study will further the research done in phase 1 of the NRCan project to validate performance curves, and better understand potential GHG emissions reductions of CC-ASHP.
- **Consortium for Energy Efficiency ("CEE") Emerging Technologies Collaborative Fees**
 - The goals of the Emerging Technologies Collaborative is 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 Dues**
 - 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.
- **Endotherm**
 - The demo project is presented with the objective of carrying out a single residential pilot test in a hydronic space heating system to verify that the introduction of a prescribed amount of EndoTherm additive to the water of a typical hydronic heating system provides energy saving and reduces natural gas consumption. The result of energy saving concept could be used to proceed with this product as measure in Enbridge Gas' energy DSM programs.
- **Energy Solution Center (ESC)**
 - Energy Solutions Center, Inc. (ESC) is a non-profit organization of energy utilities and equipment manufacturers that promotes energy efficient natural gas solutions and systems for use by 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, and 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.
- **Greenhouse Artificial Intelligence**
 - To evaluate the effectiveness of artificial intelligence for the growing of vegetables in a controlled climate. The artificial intelligence is aimed at reducing energy inputs while boosting greenhouse productivity and profits. The study is using two identical sections of a greenhouse, one for the control and one for collecting data.



- **iFLOW Phase 1, Hybrid System Hydronic Installation & Monitoring**
 - To evaluate the iFLOW hydronic system’s performance as part of a hybrid heating system, in terms of energy, cost savings and GHG reductions in two residential retrofit homes. The study will also evaluate energy saving from the smart zoning control technology of the iFLOW air handling unit.
- **iFLOW Phase 2 - ASHP & iFLOW Fuel Switching**
 - As an expansion of iFLOW phase 1, an ASHP has been installed in each of Port Hope and Orillia site to evaluate the effectiveness of iFLOW fuel switching technology by calculating the energy consumption and related utility cost savings (i.e. natural Gas and Electricity) and GHG emission reduction rates.
- **Indigenous Home Weatherization New Measures Test**
 - To conduct a two-phased approach to look at alternatives for next generation DSM planning for on-reserve housing stock. The first phase will encompass a thorough study of housing stock on-reserve to determine what the true needs are with respect to energy-savings and to conduct energy modelling on a whole-home basis to determine where opportunities lie.
- **Design Guidelines for Commercial Natural Gas Absorption Heat Pumps (“GAHP”)**
 - Development of a design guideline to provide customers and design teams a reference for integrating GAHP into an existing domestic hot water system. The purpose of the guideline is to make the design of a GAHP system simpler for design teams not familiar with the technology and easier to implement correctly.
- **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.
- **On Demand Controls for Domestic Hot Water (“DHW”) Recirculation Systems**
 - Research to assess the energy savings associated with on demand control of DHW recirculation operations, develop engineering tools to estimate savings, compile sub-docs, and explore development of DSM offerings for the technology.
- **Stone Mountain Technologies (“SMTI”) Gas Heat Pump Furnace and Water Heater Research and Field Trial**
 - Field installation, monitoring, and laboratory testing of the SMTI/Trane combi thermal gas heat pumps to evaluate performance and energy saving and GHG reduction potential of GHPs for the residential sector.
- **Vent Seals**
 - Project with Enertech Engineering & Mechanical to develop a calculator to estimate natural gas savings for the installation of roof vent seals in a greenhouse.
- **Virtual Audit Pilot**
 - To assess the accuracy and potential energy savings identified by a virtual energy assessment as compared to the potential energy savings identified from traditional in person audits. Additionally, the pilot will look to identify the savings potential at a measure level for homes that have not completed an on-site audit.



- **Yanmar Three-Pipe System Research and Field Trial**

- Research and evaluate field performance including energy and GHG savings of this innovative Gas Engine Driven Heat Pump system that provides heating and cooling for commercial buildings with increased resiliency and energy efficiency.

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.

Actual pilot spend was approximately \$0.4M in 2020, and included the following items:

- **Hybrid Heating, NRCan**

- Development of a modelling tool for Hybrid Heating Systems with Smart Fuel Switching to estimate energy, operating cost and GHG savings versus other conventional HVAC systems in single-family residential buildings

- **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.

- **IESO Collaboration - Energy Manager Pilot**

- This pilot involves collaboration with 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's Energy Solution Advisors will continue to engage the EMs throughout the year to provide technical guidance and help develop projects towards that target.

- **Optimum Home Lite**

- This pilot involves 3 components. The first component is the outreach. Enbridge Gas will utilize workshops to attract small to mid-size builders to learn about future building code changes, and then position building to an Energy Star level as the best way to future proof their business. The second component is the offer. As demonstrated through success in the Optimum Home Offering, Enbridge Gas will utilize building science consultants to provide 1-to-1 consultation to participating builders on how to build to Energy Star levels most efficiently for their business. The consultation will comprise of 3 consulting days, the first to assess current building practices, the second to allow the consultant to identify and draft recommendations, and



the third to present recommendations. The third component is tracking results. This is through demonstrating builder learnings and commitments, by building an Energy Star certified discovery home and tracking future progress towards building to that standard.

- **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 underserved market, and recognition that a stand-alone air sealing offering for homeowners has significant market potential within the residential existing homes sector. Enbridge Gas believes that there is opportunity to drive higher and more comprehensive savings from professional well-executed air sealing efforts, compared to the more typical do-it-yourself. Additionally, there is the potential to reach a greater number of participants with air sealing as a stand-alone measure, compared the current model which bundles it with other (more costly) retrofit measures. It is expected that the stand-alone air sealing pilot will target ~200 customers for participation.

- **Waterloo Community Energy Investment Strategy**

- Enbridge Gas is partnering with the Region of Waterloo to support their implementation of a Community Energy Investment Strategy ("CEIS"). Waterloo's CEIS is a community-based action plan to achieve significant GHG reductions, and stakeholders have the opportunity to influence it. A significant portion of the plan ties back to energy efficiency opportunities for homes, businesses and new construction. With the local electric LDCs, Enbridge Gas is partially funding an energy manager to support the implementation of the CEIS.

- **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.



Appendix A: 2020 Avoided Costs

A1. EGD RATE ZONE 2020 AVOIDED COSTS

The inflation factor used is 1.61%. The discount rate is 5.67%. Avoided costs are presented in nominal dollars.

GAS AVOIDED COSTS							
		RESIDENTIAL/COMMERCIAL				INDUSTRIAL	
		WATER HEATING (\$/M ³)		SPACE HEATING (\$/M ³)		BASELOAD (\$/M ³)	
YEAR	EUL	RATE	NPV	RATE	NPV	RATE	NPV
2020	1	0.124	0.124	0.146	0.146	0.125	0.125
2021	2	0.134	0.250	0.165	0.302	0.141	0.258
2022	3	0.134	0.370	0.163	0.448	0.143	0.387
2023	4	0.144	0.492	0.174	0.596	0.153	0.517
2024	5	0.150	0.613	0.181	0.741	0.160	0.645
2025	6	0.159	0.733	0.190	0.885	0.169	0.773
2026	7	0.168	0.854	0.200	1.029	0.178	0.901
2027	8	0.174	0.973	0.206	1.169	0.184	1.026
2028	9	0.183	1.090	0.216	1.308	0.194	1.151
2029	10	0.202	1.213	0.235	1.451	0.212	1.280
2030	11	0.220	1.340	0.254	1.597	0.231	1.413
2031	12	0.234	1.467	0.268	1.743	0.245	1.546
2032	13	0.242	1.592	0.277	1.886	0.253	1.677
2033	14	0.254	1.716	0.290	2.027	0.265	1.806
2034	15	0.268	1.840	0.304	2.168	0.279	1.935
2035	16	0.264	1.955	0.301	2.299	0.275	2.055
2036	17	0.261	2.063	0.299	2.423	0.273	2.168
2037	18	0.267	2.168	0.306	2.542	0.279	2.277
2038	19	0.273	2.269	0.312	2.658	0.285	2.383
2039	20	0.279	2.367	0.319	2.770	0.292	2.485
2040	21	0.286	2.461	0.326	2.878	0.298	2.584
2041	22	0.292	2.553	0.333	2.982	0.305	2.680
2042	23	0.299	2.642	0.340	3.084	0.312	2.772
2043	24	0.305	2.727	0.348	3.181	0.318	2.862
2044	25	0.312	2.810	0.356	3.276	0.326	2.948
2045	26	0.319	2.891	0.363	3.367	0.333	3.032
2046	27	0.326	2.969	0.371	3.456	0.340	3.113
2047	28	0.334	3.044	0.379	3.541	0.348	3.192
2048	29	0.341	3.116	0.388	3.624	0.355	3.267
2049	30	0.349	3.187	0.396	3.704	0.363	3.341



WATER AND ELECTRICITY AVOIDED COSTS				
RESIDENTIAL/COMMERCIAL/INDUSTRIAL				
	WATER (\$/1000 LITRE)		ELECTRICITY (¢/KWH)	
EUL	RATE	NPV	RATE	NPV
1	0.967	0.967	0.144	0.144
2	0.982	1.896	0.146	0.282
3	0.998	2.789	0.148	0.415
4	1.014	3.649	0.151	0.542
5	1.030	4.475	0.153	0.665
6	1.047	5.269	0.156	0.783
7	1.064	6.033	0.158	0.897
8	1.081	6.768	0.161	1.006
9	1.098	7.474	0.163	1.111
10	1.116	8.153	0.166	1.212
11	1.134	8.806	0.168	1.309
12	1.152	9.434	0.171	1.402
13	1.171	10.037	0.174	1.492
14	1.190	10.618	0.177	1.578
15	1.209	11.176	0.180	1.661
16	1.228	11.713	0.183	1.741
17	1.248	12.229	0.185	1.817
18	1.268	12.725	0.188	1.891
19	1.288	13.202	0.191	1.962
20	1.309	13.661	0.195	2.030
21	1.330	14.102	0.198	2.096
22	1.352	14.526	0.201	2.159
23	1.373	14.934	0.204	2.219
24	1.396	15.326	0.207	2.277
25	1.418	15.703	0.211	2.333
26	1.441	16.066	0.214	2.387
27	1.464	16.414	0.218	2.439
28	1.488	16.749	0.221	2.489
29	1.512	17.072	0.225	2.537
30	1.536	17.382	0.228	2.583

AVOIDED CARBON COSTS		
RESIDENTIAL/COMMERCIAL/INDUSTRIAL		
	(\$/M ³)	
EUL	RATE	NPV
1	0.059	0.059
2	0.078	0.133
3	0.098	0.220
4	0.099	0.305
5	0.101	0.386
6	0.103	0.464
7	0.104	0.539
8	0.106	0.611
9	0.108	0.680
10	0.109	0.747
11	0.111	0.811
12	0.113	0.872
13	0.115	0.932
14	0.117	0.988
15	0.119	1.043
16	0.120	1.096
17	0.122	1.147
18	0.124	1.195
19	0.126	1.242
20	0.128	1.287
21	0.131	1.330
22	0.133	1.372
23	0.135	1.412
24	0.137	1.450
25	0.139	1.487
26	0.141	1.523
27	0.144	1.557
28	0.146	1.590
29	0.148	1.622
30	0.151	1.652



A2. UNION RATE ZONES 2020 AVOIDED COSTS

The inflation factor used is 1.61%. The discount rate is 5.67%. Avoided costs are presented in nominal dollars.

GAS AVOIDED COSTS							
		RESIDENTIAL/COMMERCIAL				INDUSTRIAL	
		BASELOAD (\$/M ³)		WEATHER SENSITIVE (\$/M ³)		BASELOAD (\$/M ³)	
YEAR	EUL	RATE	NPV	RATE	NPV	RATE	NPV
2020	1	0.146	0.146	0.177	0.177	0.143	0.143
2021	2	0.140	0.278	0.163	0.331	0.137	0.273
2022	3	0.140	0.403	0.177	0.489	0.142	0.400
2023	4	0.151	0.532	0.189	0.649	0.154	0.531
2024	5	0.160	0.660	0.198	0.808	0.163	0.661
2025	6	0.171	0.790	0.210	0.968	0.174	0.793
2026	7	0.181	0.920	0.221	1.126	0.184	0.925
2027	8	0.188	1.048	0.228	1.282	0.191	1.055
2028	9	0.200	1.177	0.242	1.437	0.203	1.185
2029	10	0.219	1.310	0.261	1.596	0.222	1.321
2030	11	0.238	1.447	0.281	1.758	0.241	1.459
2031	12	0.255	1.586	0.298	1.920	0.257	1.599
2032	13	0.266	1.723	0.311	2.081	0.269	1.738
2033	14	0.277	1.858	0.323	2.238	0.280	1.875
2034	15	0.290	1.992	0.336	2.394	0.293	2.010
2035	16	0.289	2.118	0.337	2.541	0.292	2.138
2036	17	0.286	2.237	0.335	2.679	0.289	2.258
2037	18	0.293	2.351	0.343	2.813	0.296	2.374
2038	19	0.300	2.462	0.351	2.943	0.303	2.486
2039	20	0.307	2.570	0.359	3.069	0.311	2.595
2040	21	0.315	2.674	0.367	3.190	0.318	2.700
2041	22	0.322	2.775	0.376	3.308	0.325	2.802
2042	23	0.330	2.873	0.384	3.422	0.333	2.901
2043	24	0.337	2.968	0.393	3.533	0.341	2.997
2044	25	0.346	3.060	0.402	3.640	0.349	3.090
2045	26	0.354	3.149	0.412	3.743	0.357	3.180
2046	27	0.362	3.235	0.421	3.844	0.366	3.267
2047	28	0.371	3.319	0.431	3.941	0.375	3.351
2048	29	0.380	3.400	0.441	4.035	0.383	3.433
2049	30	0.389	3.478	0.451	4.126	0.393	3.512



WATER AND ELECTRICITY AVOIDED COSTS				
RESIDENTIAL/COMMERCIAL/INDUSTRIAL				
EUL	WATER (\$/1000 LITRE)		ELECTRICITY (\$/KWH)	
	RATE	NPV	RATE	NPV
1	0.858	0.858	0.144	0.144
2	0.872	1.683	0.146	0.282
3	0.886	2.476	0.148	0.415
4	0.900	3.239	0.151	0.542
5	0.915	3.972	0.153	0.665
6	0.929	4.677	0.156	0.783
7	0.944	5.355	0.158	0.897
8	0.959	6.007	0.161	1.006
9	0.975	6.634	0.163	1.111
10	0.991	7.237	0.166	1.212
11	1.007	7.817	0.168	1.309
12	1.023	8.374	0.171	1.402
13	1.039	8.910	0.174	1.492
14	1.056	9.425	0.177	1.578
15	1.073	9.920	0.180	1.661
16	1.090	10.397	0.183	1.741
17	1.108	10.855	0.185	1.817
18	1.126	11.295	0.188	1.891
19	1.144	11.719	0.191	1.962
20	1.162	12.126	0.195	2.030
21	1.181	12.518	0.198	2.096
22	1.200	12.894	0.201	2.159
23	1.219	13.256	0.204	2.219
24	1.239	13.604	0.207	2.277
25	1.259	13.939	0.211	2.333
26	1.279	14.261	0.214	2.387
27	1.300	14.570	0.218	2.439
28	1.320	14.868	0.221	2.489
29	1.342	15.154	0.225	2.537
30	1.363	15.429	0.228	2.583

AVOIDED CARBON COSTS		
RESIDENTIAL/COMMERCIAL/INDUSTRIAL		
EUL	(\$/M³)	
	RATE	NPV
1	0.059	0.059
2	0.078	0.133
3	0.098	0.220
4	0.099	0.305
5	0.101	0.386
6	0.103	0.464
7	0.104	0.539
8	0.106	0.611
9	0.108	0.680
10	0.109	0.747
11	0.111	0.811
12	0.113	0.872
13	0.115	0.932
14	0.117	0.988
15	0.119	1.043
16	0.120	1.096
17	0.122	1.147
18	0.124	1.195
19	0.126	1.242
20	0.128	1.287
21	0.131	1.330
22	0.133	1.372
23	0.135	1.412
24	0.137	1.450
25	0.139	1.487
26	0.141	1.523
27	0.144	1.557
28	0.146	1.590
29	0.148	1.622
30	0.151	1.652



Appendix B: Target Setting Methodology

B1. EGD RATE ZONE

Enbridge Gas Distribution Inc. - 2020 Resource Acquisition Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
Home Energy Conservation Residential Adaptive Thermostats Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install Run-it-Right Comprehensive Energy Management (CEM)	Large Volume Customers Cumulative Natural Gas Savings (m3)	75% of Target	2019 metric achievement (LRAM natural gas savings) / 2019 Large Volume Customers Resource Acquisition actual spend without overheads x 2020 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	2019 metric achievement (LRAM natural gas savings) / 2019 Small Volume Customers Resource Acquisition actual spend without overheads x 2020 Small Volume Customers Resource Acquisition budget without overheads x 1.02	150% of Target	40%
Home Energy Conservation	Residential Deep Savings Participants (Homes)	75% of Target	2019 metric achievement / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.02	150% of Target	20%

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

Enbridge Gas Distribution Inc. - 2020 Low Income Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
Home Winterproofing	Cumulative Natural Gas Savings (m3)	75% of Target	2019 metric achievement (LRAM natural gas savings) / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.02	150% of Target	45%
Low-Income Multi-Residential	Cumulative Natural Gas Savings (m3)	75% of Target	2019 metric achievement (LRAM natural gas savings) / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.02	150% of Target	45%
Low-Income New Construction	Number of Project Applications	75% of Target	2019 metric achievement / 2019 accrued program cost without overheads x 2020 program budget without overheads x 1.02	150% of Target	10%

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

Enbridge Gas Distribution Inc. - 2020 Market Transformation Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
School Energy Competition	Schools	75% of Target	2019 metric achievement / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.1	150% of Target	10%
Run-it-Right	Participants	75% of Target	2019 metric achievement / 2019 accrued program costs without overheads x 2020 program budget without overheads x 1.1	150% of Target	20%
Comprehensive Energy Management (CEM)	Participants	75% of Target	2019 metric achievement / 2019 accrued program costs without overheads x 2020 program budget without overheads x 1.1	150% of Target	20%
Residential Savings by Design	Builders	75% of Target	2019 metric achievement / 2019 accrued program costs without overheads x 2020 program budget without overheads x 1.1	150% of Target	10%
	Homes Built	75% of Target	2019 metric achievement / 2019 accrued program costs without overheads x 2020 program budget without overheads x 1.1	150% of Target	15%
Commercial Savings by Design	New Developments	75% of Target	2019 metric achievement / 2019 accrued program costs without overheads x 2020 program budget without overheads x 1.1	150% of Target	25%



B2. UNION RATE ZONES

Union Gas Limited - 2020 Resource Acquisition Scorecard		Metric Targets			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
Home Reno Rebate Residential Adaptive Thermostat Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install	Cumulative Natural Gas Savings (m3)	75% of Target	2019 metric achievement (LRAM natural gas savings) / 2019 Resource Acquisition actual spend without overheads x 2020 Resource Acquisition budget without overheads x 1.02	150% of Target	75%
Home Reno Rebate	Home Reno Rebate Participants (Homes)	75% of Target	2019 metric achievement / 2019 actual program spend without overheads x 2020 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 Gas Limited - 2020 Low Income Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
Home Weatherization Furnace End-of-Life Aboriginal	Cumulative Natural Gas Savings (m3)	75% of Target	2019 metric achievement (LRAM natural gas savings) / 2019 actual program spend without overheads x 2020 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	2019 metric achievement (LRAM natural gas savings) / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.02	150% of Target	35%
	Market Rate Multi-Family Cumulative Natural Gas Savings (m3)	75% of Target	2019 metric achievement (LRAM natural gas savings) / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.02	150% of Target	5%

Union Gas Limited - 2020 Large Volume Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
Large Volume Program for T2/R100 Customers	Cumulative Natural Gas Savings (m3)	75% of Target	Three-year rolling average (2017-2019) Rate T2/Rate 100 cost effectiveness x 2020 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 Gas Limited - 2020 Market Transformation Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
Optimum Home	Homes Built (>15% above OBC 2017) by Participating Builders	75% of Target	2019 metric achievement / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.1	150% of Target	50%
Commercial New Construction	New Developments Enrolled by Participating Builders	75% of Target	2019 metric achievement / 2019 actual program spend without overheads x 2020 program budget without overheads x 1.1	150% of Target	50%

Union Gas Limited - 2020 Performance-Based Scorecard		Metric Target			Weight
Programs	Metrics	Lower Band	Target	Upper Band	
RunSmart	Participants	75% of Target	2019 metric achievement / 2019 accrued program cost without overheads x 2020 program budget without overheads x 1.1	150% of Target	10%
	Savings (%)	75% of Target	2019 metric achievement / 2019 accrued program cost without overheads x 2020 program budget without overheads x 1.1	150% of Target	40%
Strategic Energy Management (SEM)	Savings (%)	75% of Target	2019 metric achievement / 2019 accrued program cost without overheads x 2020 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, which includes rebates for the home energy assessments, measure upgrades, and any applicable bonuses.

Measure Rebates from January 1 – September 19, 2020

MEASURE	CRITERIA	REBATE
Attic Insulation	Increase insulation from R35 or less to at least R60	\$500
	Increase cathedral/flat roof insulation by at least R14	\$500
Air Sealing	Achieve 10% or more above base target	\$150
	Achieving base target	\$100
Basement Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R23 insulation to 100% of basement	\$1,000
	Add at least R12 insulation to 100% of basement	\$500
	Add at least R23 insulation to 100% of crawl space wall	\$800
	Add at least R10 insulation to 100% of crawl space wall	\$400
Exterior Wall Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R24 insulation to 100% of floor above crawl space	\$450
	Add at least R20 to 100% of building	\$2,000
	Add at least R9 insulation to 100% of building to achieve a minimum of R12	\$1,500
Furnace/Boiler	Add at least R3.8 to 100% of building to achieve a minimum of R12	\$1,000
	For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace; OR, For replacing a less than 90% AFUE natural gas boiler with a 90% AFUE or higher condensing natural gas boiler	\$500 or \$1000 for Boiler
Water Heater	<ul style="list-style-type: none"> • Replace existing natural gas water heater with 0.80 EF or higher tanked ENERGY STAR® qualified natural gas water heater. or • Replace existing natural gas water heater with 0.90 EF or higher tankless ENERGY STAR® qualified natural gas water heater. 	\$200
Window/Door/Skylight	For each window, door or skylight replaced with an ENERGY STAR®-qualified model.	\$40

Measure Rebates from September 20 to Dec 31, 2020

MEASURE	CRITERIA	REBATE
Attic Insulation	Increase insulation from R35 or less to at least R60	\$650
	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 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
Exterior Wall Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R23 insulation to 100% of floor above crawl space	\$1,000
	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



MEASURE	CRITERIA	REBATE
Furnace/Boiler	For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace; OR, 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	or <ul style="list-style-type: none"> • Replace existing natural gas water heater with 0.80 EF or higher tanked ENERGY STAR® qualified natural gas water heater. • Replace existing natural gas water heater with 0.90 EF or higher tankless ENERGY STAR® qualified 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-energy and post-energy assessments are participation requirements, eligible customers receive a rebate of \$550 for completing the assessments. The amount is intended to cover almost the full cost of the assessments, excluding HST.

Bonus Rebate

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

Jan 1st – Sept 19th, 2020:

- \$250 for 3 measures
- \$500 for 4 Measures
- \$750 for 5 measures
- \$1,000 for 6 measures

Sept 20th, 2020 – Dec 31st, 2020:

- \$150 for three measures,
- \$500 for four measures and \$750 for five measures or more.

Basement Bonus Rebate

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

Limited Time Offers

In Q4 2019, Enbridge Gas introduced Limited Time Offers (LTOs), whereby homeowners were encouraged to participate in one of two customized packages that provided greater savings and aimed at driving greater participation in insulation and building envelope measures. The LTO packages were available to qualifying participants who completed their initial assessment on/after September 1, 2019 and their final assessment on/before December 31, 2019. These LTOs were extended to September 20th, the day before the updated rebates were available on September 21st, 2020. After which, the LTOs were no longer available.

- Package 1: Receive \$1,750 Rebate + \$550 rebate for audit cost (Total \$2,300) when the homeowner completes the following measures:
 - Replace furnace/boiler
 - Attic Insulation
 - Achieve Air Sealing target or target + 10%



- Package 2: Receive \$750 Rebate + \$550 rebate for audit cost (Total \$1,300) when the homeowner completes the following measures:
 - Attic Insulation
 - Achieve Air Sealing target or target + 10%

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.

Customers must apply for the \$75 discount code **before they buy**. The discount can be redeemed in the following ways:

- In-store at The Home Depot; or
- Online at select manufacturer web stores: ecobee.com, the Google Store and emersoncanada.ca/store.

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

MANUFACTURER	PRODUCT NAME	MODEL NUMBER	PARTICIPATING RETAILERS			
			ECOBEE	GOOGLE STORE	EMERSON	HOME DEPOT
ecobee	ecobee3 lite	EB-STATE3LTC-02	✓			✓
ecobee	ecobee SmartThermostat with voice control	EB-STATE5C-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 ¹⁵	GA02081-CA		✓		✓
Google Nest	Google Nest Thermostat: Snow ¹	GA01334-CA		✓		✓
Google Nest	Google Nest Thermostat: Fog ¹	GA02083-CA		✓		
Google Nest	Google Nest Thermostat: Sand ¹	GA02082-CA		✓		
Google Nest	Google Nest Thermostat E ¹⁶	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: White ¹⁷	ST75WC			✓	
Emerson Sensi	Emerson Sensi Wi-Fi Thermostat	ST55C			✓	✓
Honeywell	Honeywell T9 Smart Thermostat with Built-In Wi-Fi	RCHT9510WFW2017/W				✓

¹⁵ 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.

¹⁶ 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.

¹⁷ 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.



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 , up to 50% of the project cost, to a maximum of \$100,000 per project.
HVAC Audit	The lesser of \$0.01/m ³ of estimated natural gas saved based on consumption in the most recently completed calendar year or 50% of the eligible audit costs*, to a maximum of \$5,000 per facility.
Steam Trap Audit	The lesser of \$10 per trap audited or 50% of the eligible audit costs*, to a maximum of \$5,000.
Limited Time Offer	\$0.40/m ³ for Commercial General Service on all Boiler Projects who commit with an ESA by July 31, 2020 to install a boiler by Oct 31, 2020.

** The Eligible Audit Costs consist of 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/m³ for first 50,000 m³ gas saved
- \$0.05/m³ for gas savings above 50,000 m³

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 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, 2020.



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
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)	55% of the total cost to a maximum of \$4,000	\$100	N/A
Demand Control Kitchen Ventilation (Retrofit, 5,001 to 10,000 CFM)	55% of the total cost to a maximum of \$7,000	\$100	N/A
Demand Control Kitchen Ventilation (Retrofit, 10,001 to 15,000 CFM)	55% of the total cost to a maximum of \$11,000	\$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



TECHNOLOGY	CUSTOMER INCENTIVE AMOUNT	SERVICE PROVIDER INCENTIVE AMOUNT	DISTRIBUTOR/DEALER INCENTIVE
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 Water Heaters	\$450
Condensing Tankless Water Heaters	\$450
Condensing Unit Heaters	\$750
Food Service	
ENERGY STAR Fryers	\$750
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

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 LICO 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.

C9. AFFORDABLE MULTI-FAMILY HOUSING OFFERING

TECHNOLOGY	CUSTOMER INCENTIVE	SERVICE PROVIDER INCENTIVE (\$/UNIT)
<u>Direct-Install</u>		
Low-Flow Showerheads	free	N/A
Heat Reflector Panels	free	N/A
<u>Energy Assessments</u> (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
<u>Custom Incentives</u>		
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



TECHNOLOGY	CUSTOMER INCENTIVE	SERVICE PROVIDER INCENTIVE (\$/UNIT)
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)	\$1.60/CFM	\$100
Condensing Make-Up Air Units (variable frequency drive (VFD), minimum 1,500 CFM to a maximum of 14,000 CFM per unit)	\$1.90/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
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.



TECHNOLOGY	CUSTOMER INCENTIVE	SERVICE PROVIDER INCENTIVE (\$/UNIT)
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.

To be eligible, Part 3 buildings must be:

- Social and assisted housing, or non-profit housing; or Low-income market rate multi-family (based on census data, and municipal data where available)

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 in order 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 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
$7\% \leq x \leq 12\%$	\$750
$12\% \leq x \leq 17\%$	\$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; and,
- 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.

C11. SAVINGS BY DESIGN RESIDENTIAL OFFERING

Builders are provided in-kind services up to \$25,000 for design and modelling. Performance incentives are as follows:

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

Residential builders are eligible if they intend to construct at least 50 homes through the duration of the commitment, within three years of completing the IDP.

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



- 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; and,
- 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 Program 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 is \$5,000 per home, which includes rebates for the home energy assessments, measure upgrades, and bonuses.

Measure Rebates from January 1 – September 19, 2020

MEASURE	CRITERIA	REBATE
Attic Insulation	Increase insulation from R35 or less to at least R60	\$500
	Increase cathedral/flat roof insulation by at least R14	\$500
Air Sealing	Achieve 10% or more above base target	\$150
	Achieving base target	\$100
Basement Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R23 insulation to 100% of basement	\$1,000
	Add at least R12 insulation to 100% of basement	\$500
	Add at least R23 insulation to 100% of crawl space wall	\$800
	Add at least R10 insulation to 100% of crawl space wall	\$400
Exterior Wall Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R24 insulation to 100% of floor above crawl space	\$450
	Add at least R20 to 100% of building	\$2,000
	Add at least R9 insulation to 100% of building to achieve a minimum of R12	\$1,500
Furnace/Boiler	Add at least R3.8 to 100% of building to achieve a minimum of R12	\$1,000
	For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace; OR, For replacing a less than 90% AFUE natural gas boiler with a 90% AFUE or higher condensing natural gas boiler	\$500 or \$1000 for Boiler
Water Heater	<ul style="list-style-type: none"> Replace existing natural gas water heater with 0.80 EF or higher tanked ENERGY STAR® qualified natural gas water heater. or <ul style="list-style-type: none"> Replace existing natural gas water heater with 0.90 EF or higher tankless ENERGY STAR® qualified natural gas water heater. 	\$200
Window/Door/Skylight	For each window, door or skylight replaced with an ENERGY STAR®-qualified model.	\$40

Measure Rebates from September 20 to December 31, 2020

MEASURE	CRITERIA	REBATE
Attic Insulation	Increase insulation from R35 or less to at least R60	\$650
	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 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
Exterior Wall Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R32 insulation to 100% of floor above crawl space	\$1,000
	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



MEASURE	CRITERIA	REBATE
Furnace/Boiler	For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace; OR, 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	or <ul style="list-style-type: none"> • Replace existing natural gas water heater with 0.80 EF or higher tanked ENERGY STAR® qualified natural gas water heater. • Replace existing natural gas water heater with 0.90 EF or higher tankless ENERGY STAR® qualified 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-energy and post-energy assessments are participation requirements, eligible customers receive a rebate of \$550 for completing the assessments. The amount is intended to cover almost the full cost of the assessments, excluding HST.

Bonus Rebate

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

Jan 1st – Sept 19th, 2020:

- \$250 for 3 measures
- \$500 for 4 Measures
- \$750 for 5 measures
- \$1,000 for 6 measures

Sept 20th,2020 – Dec 31st, 2020:

- \$100 for three measures,
- \$500 for four measures and\$750 for five measures or more.

Basement Bonus Rebate

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

Limited Time Offers

In Q4 2019, Enbridge Gas introduced limited time offers, whereby homeowners were encouraged to participate in one of two customized packages that provided greater savings and aimed at driving greater participation in insulation and building envelope measures. The LTO packages were available to qualifying participants who completed their initial assessment on/after September 1, 2019 and their final assessment on/before December 31, 2019. These LTOs were extended to September 20th, the day before the updated rebates were available on September 21st, 2020. After which, the LTOs were no longer available.

- Package 1: Receive \$1,750 Rebate + \$550 rebate for audit cost (Total \$2,300) when the homeowner completes the following measures:
 - Replace furnace/boiler
 - Attic Insulation
 - Achieve Air Sealing target or target + 10%



- Package 2: Receive \$750 Rebate + \$550 rebate for audit cost (Total \$1,300) when the homeowner completes the following measures:
 - Attic Insulation
 - Achieve Air Sealing target or target + 10%

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.

Customers must apply for the \$75 discount code **before they buy**. The discount can be redeemed in the following ways:

- In-store at The Home Depot; or
- Online at select manufacturer web stores: ecobee.com, the Google Store and emersoncanada.ca/store.

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

MANUFACTURER	PRODUCT NAME	MODEL NUMBER	PARTICIPATING RETAILERS			
			ECOBEE	GOOGLE STORE	EMERSON	HOME DEPOT
ecobee	ecobee3 lite	EB-STATE3LTC-02	✓			✓
ecobee	ecobee SmartThermostat with voice control	EB-STATE5C-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 ¹⁸	GA02081-CA		✓		✓
Google Nest	Google Nest Thermostat: Snow ¹	GA01334-CA		✓		✓
Google Nest	Google Nest Thermostat: Fog ¹	GA02083-CA		✓		
Google Nest	Google Nest Thermostat: Sand ¹	GA02082-CA		✓		
Google Nest	Google Nest Thermostat E ¹⁹	T4000EF		✓		✓
Emerson Sensi	Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: Black	ST75C			✓	✓

¹⁸ 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.

¹⁹ 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.



MANUFACTURER	PRODUCT NAME	MODEL NUMBER	PARTICIPATING RETAILERS			
			ECOBEE	GOOGLE STORE	EMERSON	HOME DEPOT
Emerson Sensi	Emerson Sensi Touch Wi-Fi Thermostat with Colour Display: White ²⁰	ST75WC			✓	
Emerson Sensi	Emerson Sensi Wi-Fi Thermostat	ST55C			✓	✓
Honeywell	Honeywell T9 Smart Thermostat with Built-In Wi-Fi	RCHT9510WFW2017/W				✓

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)	55% of the total cost to a maximum of \$4,000	\$100	N/A
Demand Control Kitchen Ventilation (Retrofit, 5,001 to 10,000 CFM)	55% of the total cost to a maximum of \$7,000	\$100	N/A
Demand Control Kitchen Ventilation (Retrofit, 10,001 to 15,000 CFM)	55% of the total cost to a maximum of \$11,000	\$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

²⁰ 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.



TECHNOLOGY	CUSTOMER INCENTIVE AMOUNT	SERVICE PROVIDER INCENTIVE AMOUNT	DISTRIBUTOR/DEALER INCENTIVE
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 Water Heaters	\$450
Condensing Tankless Water Heaters	\$450
Condensing Unit Heaters	\$750
Food Service	
ENERGY STAR Fryers	\$750
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



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 , up to \$100,000 or 50% of incremental cost Contract customers (M4, M5, M7, T1, and R20): \$0.10/m ³ , up to \$100,000 or 50% of incremental cost	
Engineering Feasibility Studies	50% of study cost, up to \$4,000	50% of study cost, up to \$10,000
Steam Trap Audit	50% of the eligible audit costs, to a maximum of \$6,000.	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 Process Improvement Study: 34% to a maximum of \$20,000
Process Improvement Studies	--	66% of study cost, up to \$20,000
Meters Installations	--	50% of installed cost, up to \$5,000 limit of 5 meters per year per site
Limited Time Offer	\$0.40/m ³ for Commercial General Service on all Boiler Projects who commit with an ESA by July 31, 2020 to install a boiler by Oct 31, 2020	20% Bonus Incentive for Early Projects, for both contract and general service industrial customers; original deadline was June 30 but was extended to September 30, 2020. 2X incentive for Greenhouse Retrofit projects for all agricultural customers, up to 50% of the project cost; completed by Oct 31, 2020

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 Cut-Off (“LICO”) 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.

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

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, 6,400sqft 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)	\$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



TECHNOLOGY	CUSTOMER INCENTIVE	SERVICE PROVIDER INCENTIVE (\$/UNIT)
Other custom solutions	\$0.01 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)	\$0.80/CFM	\$100
Condensing Make-Up Air Units (two speed, minimum 1,500 CFM to a maximum of 14,000 CFM per unit)	\$2.00/CFM	\$100
Condensing Make-Up Air Units (variable frequency drive (VFD), minimum 1,500CFM to a maximum of 14,000CFM per unit)	\$2.40/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
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 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.



TECHNOLOGY	CUSTOMER INCENTIVE	SERVICE PROVIDER INCENTIVE (\$/UNIT)
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.

To be eligible, Part 3 buildings must be:

- Social and assisted housing, or non-profit housing; or,
- Low-income market rate multi-family (building owner or property manager confirmation that at least 50% of the properties' tenants pay less than the average market rent in that region, as determined by the Canadian Mortgage and Housing Corporation).

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
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* 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 \$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

Residential builders are eligible if they are among the top 10 regional builders in each regional territory based on the previous year's housing statistics.

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



Participants must consume more than 50,000 m³ 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: 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: Baseline incentive	Continuation of in-kind technical support, as baseline data is being collected and analyzed
Years Three to Five: 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' previous integrated energy management system offering, with a minimum annual natural gas usage of 1,000,000 m³, 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.



Appendix E: Abbreviations and Acronyms List

	ABBREVIATION/ACRONYM	FULL NAME
A	AFUE Amendment 15	Annual Fuel Utilization Efficiency NRCan's Regulations Amending the Energy Efficiency Regulations, 2016 (Amendment 15): SOR.2019-164
C	CEE CEM CFM C/I CSBD	Consortium for Energy Efficiency Comprehensive Energy Management Cubic feet per minute Commercial/Industrial Commercial Savings by Design
D	DCKV DCP DCV Decision DSM DSM Framework DSM Guidelines DSMVA	Demand Control Kitchen Ventilation Design Phase Charette Demand Control Ventilation Decision and Order on EGD's and Union's 2015-2020 DSM Plans (EB-2015-0049/EB-2015-0029) Demand Side Management Demand Side Management Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134) Filing Guidelines to the Demand Side Management Framework for Natural Gas Distributors (2015-2020) (EB-2014-0134) Demand Side Management Variance Account
E	EAC EC EEP EMIS EM&V ERV ESA	Evaluation Advisory Committee Evaluation Contractor Energy Efficiency Plan Energy Management Information System Evaluation, Measurement, and Verification Energy Recovery Ventilation Energy Solutions Advisors
H	HER HRR HRV HVAC HVLS	Home Efficiency Rebate Home Reno Rebate offering Heat Recovery Ventilation Heating, Ventilation and Air Conditioning High Volume Low Speed
I	IDP IESO	Integrated Design Process Independent Electricity System Operator
L	LICO LRAM LTO	Low-Income Cut-Offs Lost Revenue Adjustment Mechanism Limited Time Offers
M	Mid-Term Report	Mid-Term Review of the Demand Side Management Framework for Natural Gas Distributors (2015-2020) (EB-2017-0127 & EB-2017-0128)
N	NECB NRCan NTG	National Energy Code of Canada for Buildings Natural Resources Canada Net-to-Gross study
O	OBC OEB	Ontario Building Code Ontario Energy Board
P	PAC	Program Administrator Cost
R	REA	Registered Energy Advisor



	ABBREVIATION/ACRONYM	FULL NAME
S	SBC	Sustainable Building Canada
	SEM	Strategic Energy Management
	SO	Service Organization
T	TRC-Plus	Total Resource Cost Plus
	TRM	Technical Resource Manual