

Program Cost-Effectiveness - Plan 2022

	Benefit/Cost Ratios				Benefits (\$000)				Utility Costs (\$000 - 2022\$) ²	Customer Costs (\$000 - 2022\$) ²	Annual Net MWh Savings	Lifetime Net MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual Net MMBtu Savings	Lifetime Net MMBtu Savings
	Total Resource Cost Test	Granite State Test	Utility Cost Test	Secondary Granite State Test	Total Resource Cost Test	Granite State Test	Utility Cost Test	Secondary Granite State Test ¹									
Residential Programs																	
B1 - Home Energy Assistance	1.92	1.92	0.42	2.11	1,322.6	1,322.6	288.7	1,450.5	688.0	-	197.6	3,974.8	52.4	10.9	86	822.2	18,221.3
A1 - Energy Star Homes	11.30	19.92	1.77	11.66	4,459.2	3,599.5	319.3	4,600.2	180.7	214.0	202.9	4,736.8	52.3	5.4	76	3,643.7	89,106.1
A2 - Home Performance with Energy Star	4.08	4.36	0.27	4.14	3,584.7	2,903.4	178.9	3,639.5	665.7	212.9	94.0	1,643.2	18.5	19.2	149	4,683.7	100,797.6
A3 - Energy Star Products	2.36	2.35	1.22	2.84	2,580.9	2,089.4	1,082.4	3,108.8	890.1	205.4	1,065.0	12,613.6	223.3	139.5	6,166	2,767.1	42,211.5
A6b - Res ISO Forward Capacity Market Expenses	-	-	-	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-
A6c - Res Education	-	-	-	-	-	-	-	-	9.7	-	-	-	-	-	-	-	-
Sub-Total Residential	3.89	4.07	0.77	4.17	11,947.4	9,914.9	1,869.3	12,798.9	2,438.3	632.3	1,559.6	22,968.5	346.6	175.0	6,477	11,916.7	250,336.4
Commercial, Industrial & Municipal																	
C1 - Large Business Energy Solutions	0.83	2.50	2.54	1.51	1,465.3	1,331.9	1,351.4	2,666.2	532.0	1,237.4	2,076.8	25,604.7	621.8	28.4	24	(112.8)	(1,128.3)
C2 - Small Business Energy Solutions	1.90	2.90	3.03	3.19	939.9	854.2	892.0	1,581.1	294.4	201.2	1,202.3	13,915.5	38.9	32.2	87	(216.9)	(2,169.4)
C3 - Municipal Energy Solutions	1.42	2.50	0.46	1.55	304.9	279.1	51.8	333.4	111.7	103.3	57.4	603.6	4.4	6.1	5	414.2	10,204.6
C6b - C&I ISO Forward Capacity Market Expenses	-	-	-	-	-	-	-	-	9.4	-	-	-	-	-	-	-	-
C6c - C&I Education	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	1.09	2.59	2.42	1.84	2,710.0	2,465.2	2,295.3	4,580.7	950.0	1,542.0	3,336.5	40,123.8	665.1	66.7	116	84.4	6,906.8
C6e - Smart Start	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.64	3.65	1.23	3.12	14,657.4	12,380.11	4,164.6	17,379.7	3,388.3	2,174.3	4,896.1	63,092.3	1,011.7	241.7	6,593	12,001.1	257,243.2

Notes:

- (1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322, and includes an annual NEI adder of \$405.71 per weatherization project in the Home Energy Assistance
- (2) Utility and Customer Costs and Benefits are expressed in 2022 Dollars.
- (3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated as of June 2021 for program year 2022.

Annual kWh Savings	4,896,058	58.2%	kWh < 65%	Lifetime kWh Savings	63,092,270	45.6%	kWh < 65%
Annual MMBTU Savings (in kWh)	3,517,176	41.8%	Lifetime MMBTU Savings (in kWh)	75,390,554	54.4%		
	8,413,233	100.0%		138,482,824	100.0%		

Annual Net Savings as a % of 2019 Sales	0.64%
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Spending per Customer	Low-Income	\$	283.84
	Residential	\$	25.33
	C&I	\$	23.51

Program Cost-Effectiveness - Actual 2022

	Benefit/Cost Ratios		Benefits (\$000)		Utility Costs (\$000 - 2022\$) ²	Customer Costs (\$000 - 2022\$) ²	Annual Net MWh Savings	Lifetime Net MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual Net MMBtu Savings	Lifetime Net MMBtu Savings
	Total Resource Cost Test	Granite State Test	Total Resource Cost Test	Granite State Test									
Residential Programs													
B1 - Home Energy Assistance	1.92	1.92	1,322.6	1,322.6	688.0	-	197.6	3,974.8	52.4	10.9	86	822.2	18,221.3
A1 - Energy Star Homes	11.30	19.92	4,459.2	3,599.5	180.7	214.0	202.9	4,736.8	52.3	5.4	76	3,643.7	89,106.1
A2 - Home Performance with Energy Star	4.40	4.73	3,885.9	3,146.8	665.7	218.2	115.5	2,128.5	19.6	29.0	149	4,976.9	107,681.2
A3 - Energy Star Products	2.36	2.35	2,585.2	2,092.8	890.1	205.4	1,063.7	12,589.8	221.1	141.2	6,169	2,767.1	42,211.5
A5 - Residential Active Demand Response	-	-	-	-	-	-	-	-	-	-	-	-	-
A6b - Res ISO Forward Capacity Market Expenses	-	-	-	-	4.0	-	-	-	-	-	-	-	-
Sub-Total Residential	3.98	4.17	12,252.8	10,161.6	2,438.3	637.6	1,579.7	23,429.9	345.5	186.5	6,480	12,209.9	257,220.1
Commercial, Industrial & Municipal													
C1 - Large Business Energy Solutions	1.00	2.50	1,465.3	1,332.0	532.0	926.4	2,076.8	25,604.7	621.8	28.5	24	(112.8)	(1,128.3)
C2 - Small Business Energy Solutions	2.32	3.55	1,151.1	1,046.2	294.4	201.2	1,202.3	13,915.5	128.6	104.6	87	(216.9)	(2,169.4)
C3 - Municipal Energy Solutions	1.42	2.50	304.9	279.1	111.7	103.3	57.4	603.6	4.4	6.1	5	414.2	10,204.6
C5 - C&I Active Demand Response	-	-	-	-	-	-	-	-	-	-	-	-	-
C6b - C&I ISO Forward Capacity Market Expenses	-	-	-	-	9.4	-	-	-	-	-	-	-	-
C6c - C&I Education	-	-	-	-	2.5	-	-	-	-	-	-	-	-
C6d - C&I Customer Partnerships	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	1.34	2.80	2,921.3	2,657.3	950.0	1,230.9	3,336.5	40,123.8	754.9	139.2	116	84.4	6,906.8
C6e - Smart Start	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.89	3.78	15,174.1	12,818.92	3,388.3	1,868.5	4,916.2	63,553.7	1,100.4	325.6	6,596	12,294.3	264,126.9

Notes:

(1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322, and includes an annual NEI adder of \$405.71 per weatherization project in the Home Energy Assistance program. For the illustrative Total Resource Cost Test, NEI adders of 25% for Residential and 10% for C&I are applied

(2) Utility and Customer Costs and Benefits are expressed in 2022 Dollars.

(3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated as of June 2021 for program year 2022.

Annual kWh Savings	4,916,180	57.7%	kWh < 65%	Lifetime kWh Savings	63,553,714	45.1%	kWh < 65%
Annual MMBTU Savings (in kWh)	<u>3,603,109</u>	42.3%		Lifetime MMBTU Savings (in kWh)	<u>77,407,958</u>	54.9%	
	8,519,289	100.0%			140,961,672	100.0%	

Annual Net Savings as a % of 2019 Sales	0.64%
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Spending per Customer	Low-Income	\$	283.84
	Residential	\$	25.33
	C&I	\$	23.51

Present Value Benefits - 2022 Actual

	Total Benefits (\$000) ¹	Resource Benefits (\$000)											Non-Resource Benefits (\$000)			Environmental Benefits (\$000) ³			
		Electric						Non-Electric					Fossil Emissions	Other Non-Resource Benefits ²	Total Non-Resource Benefits				
		CAPACITY			ENERGY			Electric DRIPE	Total Electric Benefit	Other Fuels	Water Benefit	Total Resource Benefits							
Granite State Test	Summer Generation	Winter Generation	Transmission	Distribution	Reliability	Winter Peak	Winter Off Peak						Summer Peak	Summer Off Peak					
Residential Programs																			
B1 - Home Energy Assistance	\$ 1,323	\$ 9	\$ -	\$ 14	\$ 15	\$ -	\$ 98	\$ 124	\$ 9	\$ 7	\$ 13	\$ 289	\$ 468	\$ 0	\$ 757	\$ 35	\$ 530	\$ 566	\$ 128
A1 - Energy Star Homes	\$ 3,599	\$ 5	\$ -	\$ 8	\$ 8	\$ -	\$ 122	\$ 153	\$ 5	\$ 4	\$ 14	\$ 319	\$ 3,120	\$ 2	\$ 3,441	\$ 159	\$ 860	\$ 1,018	\$ 141
A2 - Home Performance with Energy Star	\$ 3,147	\$ 31	\$ -	\$ 50	\$ 51	\$ -	\$ 30	\$ 35	\$ 27	\$ 22	\$ 6	\$ 251	\$ 2,706	\$ -	\$ 2,957	\$ 190	\$ 739	\$ 929	\$ 70
A3 - Energy Star Products	\$ 2,093	\$ 65	\$ -	\$ 117	\$ 121	\$ -	\$ 263	\$ 299	\$ 88	\$ 78	\$ 55	\$ 1,086	\$ 884	\$ 63	\$ 2,032	\$ 60	\$ 492	\$ 553	\$ 527
Sub-Total Residential	\$ 10,162	\$ 109	\$ -	\$ 189	\$ 195	\$ -	\$ 513	\$ 612	\$ 128	\$ 112	\$ 87	\$ 1,944	\$ 7,177	\$ 66	\$ 9,187	\$ 444	\$ 2,622	\$ 3,066	\$ 866
Commercial/Industrial Programs																			
C1 - Large Business Energy Solutions	\$ 1,332	\$ 11	\$ -	\$ 21	\$ 22	\$ -	\$ 75	\$ 80	\$ 477	\$ 573	\$ 92	\$ 1,351	\$ (18)	\$ 0	\$ 1,333	\$ (1)	\$ 133	\$ 132	\$ 1,201
C2 - Small Business Energy Solutions	\$ 1,046	\$ 55	\$ -	\$ 100	\$ 103	\$ -	\$ 221	\$ 220	\$ 167	\$ 151	\$ 66	\$ 1,084	\$ (35)	\$ -	\$ 1,049	\$ (3)	\$ 105	\$ 102	\$ 641
C3 - Municipal Energy Solutions	\$ 279	\$ 3	\$ -	\$ 6	\$ 6	\$ -	\$ 11	\$ 7	\$ 10	\$ 5	\$ 3	\$ 52	\$ 206	\$ -	\$ 258	\$ 21	\$ 26	\$ 47	\$ 28
Sub-Total Commercial & Industrial	\$ 2,657	\$ 70	\$ -	\$ 127	\$ 132	\$ -	\$ 307	\$ 306	\$ 654	\$ 729	\$ 162	\$ 2,487	\$ 152	\$ 0	\$ 2,640	\$ 17	\$ 264	\$ 281	\$ 1,871
Total	\$ 12,819	\$ 179	\$ -	\$ 316	\$ 326	\$ -	\$ 820	\$ 918	\$ 782	\$ 842	\$ 249	\$ 4,432	\$ 7,329	\$ 66	\$ 11,827	\$ 462	\$ 2,885	\$ 3,347	\$ 2,737

(1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322. Benefits are calculated based on net savings.

(2) Non-resource benefits include NEIs, which are only applied to the Home Energy Assistance program in the GST primary cost test.

(3) Non-embedded environmental benefits are not included in the GST primary cost test.

Portfolio Planned Versus Actual Performance - 2022										
Portfolio	Planned	Threshold	Actual	% of Plan	Design	Actual	Planned PI	125% of	Actual PI	Source
					Coefficient	Coefficient		Planned PI		
1 Lifetime kWh Savings	91,340,304	68,505,228	63,553,714	70%	1.575%	0.000%	\$ 85,282	\$ 106,602	\$ -	Planned and Actual from Cost Eff Tab
2 Annual kWh Savings	8,036,153	6,027,115	4,916,180	61%	0.450%	0.000%	\$ 24,366	\$ 30,458	\$ -	Planned and Actual from Cost Eff Tab
3 Summer Peak Demand kW	675	439	326	48%	0.540%	0.000%	\$ 29,240	\$ 36,549	\$ -	Planned and Actual from Cost Eff Tab
4 Winter Peak Demand kW	1,450	942	1,100	76%	0.360%	0.273%	\$ 19,493	\$ 24,366	\$ 21,624	Planned and Actual from Cost Eff Tab
6 Total Resource Benefits	\$ 15,966,347		12,818,923	80%						Planned and Actual from Benefits Tab
7 Total Utility Costs ^{1,2}	\$ 5,414,728		3,388,279	63%						Planned and Actual from Cost Eff Tab
8 Net Benefits	\$ 10,551,619	\$ 7,913,714	\$ 9,430,644	89%	1.575%	1.408%	\$ 85,282	\$ 106,602	\$ 111,399	Line 5 minus line 6
9 Total					4.500%	1.681%	\$ 243,663	\$ 304,578	\$ 133,024	

	Granite State Test		Source
	Planned	Actual	
10 Total Benefits	\$ 15,966,347	\$ 12,818,923	Planned and Actual from Cost Eff Tab
11 Performance Incentive	\$ 243,663	\$ 133,024	from row 9 above
12 Total Utility Costs	\$ 5,414,728	\$ 3,388,279	from row 7 above
13 Portfolio GST BCR	2.82	3.64	row 10 divided by rows 11+12

Costs, Benefits, and PI Expressed in 2022 Dollars.

¹ Note that in order to avoid a circular reference in the calculation of performance incentive, "Total Utility Costs" does not include the value of PI.

² Net of Smart Start

2022

Carry Forward Balance \$ 1,728,845

Funding:

System Benefit Charge \$ 3,944,242

RGGI Funding \$ 215,045

FCM Payments \$ 111,556

Interest \$ 141,091

Total Funding for Energy Efficiency Programs **\$ 4,411,934**

Expenses:

Energy Efficiency Expenditures \$ 3,388,279

Prior year adjustment \$ (13,554)

Performance Incentive¹ - 2021 206,546

Performance Incentive² - 2022 133,024

Total Program Expenses **\$ 3,714,295**

Carry Forward Balance **\$ 2,426,484**

Notes

1. 2021 Performance Incentive accrued in 2021 and booked in 2022

2. 2022 Performance Incentive accrued in 2022 and booked in 2023