

Program Cost-Effectiveness - 2015 ACTUAL

	Total Resource Benefit/Cost Ratio	Present Value		Customer Costs (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings	
		Benefit (\$000)	Utility Costs (\$000)									
Residential Programs												
Home Energy Assistance	1.54	\$ 482.1	\$ 313.0	\$ -	55.9	745.5	14.4	4.6	42	1,010.1	19,296.0	
Home Performance w/Energy Star	1.74	\$ 782.4	\$ 281.6	\$ 168.0	144.0	2,807.2	57.2	15.9	78	1,437.9	29,647.8	
Energy Star Homes	3.13	\$ 507.4	\$ 99.1	\$ 63.0	134.3	3,320.5	41.9	42.4	9	236.2	5,816.7	
Energy Star Products 1	2.90	\$ 1,201.9	\$ 310.9	\$ 104.2	1,018.4	13,368.5	262.8	110.8	32,203	283.5	3,118.5	
FCM Reporting		\$ -	\$ 9.6	\$ -	-	-	-	-	-	0.0	0.0	
Subtotal Residential	2.20	\$ 2,973.773	\$ 1,014.225	\$ 335.200	1,352.6	20,241.7	376.3	173.7	32,332	2,967.7	57,879.0	
Commercial/Industrial Programs												
Large Business Energy Solutions	3.97	\$ 1,743.0	\$ 172.2	\$ 267.3	1,519.0	21,120.0	243.800	225.500	12	\$ -	\$ -	
Small Business Energy Solutions	1.43	\$ 533.1	\$ 175.2	\$ 197.3	550.6	7,511.1	67.800	50.100	27	\$ -	\$ -	
Municipal EE Program (per SB123)2	1.24	\$ 689.6	\$ 217.2	\$ 338.5	452.7	6,039.2	155.000	90.200	26	350.5	5,627.2	
Other (Education)		\$ -	\$ 24.5	\$ -	-	-	-	-	-	-	-	
FCM Reporting		\$ -	\$ 6.4	\$ -	-	-	-	-	-	-	-	
Subtotal C&I	2.12	\$ 2,965.7	\$ 595.5	\$ 803.1	2,522.3	34,670.3	466.6	365.8	65.0	350.5	5,627.2	
Smart Start		\$ -	\$ 1.2	\$ -	-	-	-	-	-	-	-	
Subtotal Other		\$ -	\$ 1.2	\$ -	-	-	-	-	-	-	-	
Total		\$ 5,939.4	\$ 1,610.9	\$ 1,138.3	3,874.9	54,912.0	842.9	539.5	32,397	3,318.2	63,506.1	

Note 1: Actual includes 9,418 members purchasing a total of 31,713 Energy Star lighting products (estimated at 4 per member) and 1,490 Energy Star appliances.

Annual kWh Savings	3,874,900	79.9% kWh > 55%
Annual MMBTU Savings (in kWh)	972,506	20.1%
	4,847,406	100.0%

Lifetime kWh Savings	54,912,000	74.7% kWh > 55%
Lifetime MMBTU Savings (in kWh)	18,612,585	25.3%
	73,524,585	100.0%

Program Cost-Effectiveness - 2015 PLAN

	Total Resource Benefit/Cost Ratio	Present Value				Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
		Benefit (\$000)	Utility Costs (\$000)	Customer Costs (\$000)								
Residential Programs												
Home Energy Assistance	1.71	\$ 436.6	\$ 254.9	\$ -	35.1	559.7	8.9	2.1	29.0	803.7	16,641.0	
Home Performance w/Energy Star	1.70	\$ 791.5	\$ 272.2	\$ 193.1	38.3	725.8	38.7	19.4	64.0	#####	32,879.9	
Energy Star Homes	2.63	\$ 669.5	\$ 186.0	\$ 68.4	165.2	4,055.2	42.2	1.0	21.0	737.6	18,272.5	
Energy Star Products ¹	2.34	\$ 1,001.0	\$ 362.3	\$ 65.6	999.3	9,886.2	415.3	170.5	29,743.0	364.1	4,005.5	
FCM Reporting			\$ 4.5									
Subtotal Residential	2.06	\$ 2,898.5	\$ 1,079.9	\$ 327.0	1,237.9	15,226.9	505.0	193.1	29,857.0	#####	71,798.9	
Commercial/Industrial Programs												
Large Business Energy Solutions	1.55	\$ 678.1	\$ 189.0	\$ 249.3	639.6	8,330.6	101.6	94.1	28.0	-	-	
Small Business Energy Solutions	1.94	\$ 526.5	\$ 170.5	\$ 101.0	459.7	5,973.2	51.0	85.1	73.0	-	-	
Municipal EE Program (per SB123) ²	1.15	\$ 444.0	\$ 198.8	\$ 186.0	413.1	5,365.7	64.1	44.8	45.0	84.6	2,115.0	
Other (Education)		\$ -	\$ 30.5	\$ -	-	-	-	-	-	-	-	
FCM Reporting			\$ 10.5									
Subtotal C&I	1.45	\$ 1,648.5	\$ 599.3	\$ 536.3	1,512.4	19,669.5	216.7	223.9	146.0	84.6	2,115.0	
Smart Start		\$ -	\$ 5.0	\$ -	-	-	-	-	-	-	-	
Other		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	
Subtotal Other		\$ -	\$ 5.0	\$ -	-	-	-	-	-	-	-	
Total	1.78	\$ 4,547.1	\$ 1,684.2	\$ 863.3	2,750.3	34,896.4	721.7	417.0	30,003.0	#####	73,913.9	

Note 1: Plan includes 878 members purchasing a total of 27,513 Energy Star lighting products (estimated at 4 per member) and 2,230 Energy Star appliances.

Note 2: Municipal Program Plan rebate budget and associated goals updated to include \$40,453 carried over from 2014 and spent in 2015.

Annual kWh Savings	2,750,323	72.1%	kWh > 55%
Annual MMBTU Savings (in kWh)	<u>1,062,012</u>	<u>27.9%</u>	
Total Annual Energy Savings	3,812,335	100.0%	

Lifetime kWh Savings	34,896,385	61.7%	kWh > 55%
Lifetime MMBTU Savings (in kWh)	<u>21,662,932</u>	<u>38.3%</u>	
Total Lifetime Energy Savings	56,559,316	100.0%	

Present Value Benefits - 2015 ACTUAL

	Total Benefits	CAPACITY				DRIPE	ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution		Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs											
Home Energy Assistance	\$ 482,063	\$ 5,820	\$ -	\$ 1,048	\$ 4,234	\$ -	\$ 12,252	\$ 18,428	\$ 4,663	\$ 5,978	\$ 429,641
Home Performance w/Energy Star	\$ 782,379	\$ 9,981	\$ -	\$ 2,133	\$ 8,619	\$ -	\$ 50,767	\$ 98,168	\$ 5,886	\$ 7,159	\$ 599,665
Energy Star Homes	\$ 507,419	\$ 97,036	\$ -	\$ 15,442	\$ 62,394	\$ -	\$ 56,623	\$ 75,495	\$ 28,050	\$ 35,288	\$ 137,090
Energy Star Products 1	\$ 1,201,912	\$ 126,067	\$ -	\$ 23,329	\$ 94,263	\$ -	\$ 215,515	\$ 289,137	\$ 105,111	\$ 133,291	\$ 215,199
FCM Reporting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Residential	\$ 2,973,773	\$ 238,904	\$ -	\$ 41,952	\$ 169,510		\$ 335,158	\$ 481,229	\$ 143,710	\$ 181,716	\$ 1,381,595
Commercial/Industrial Programs											
Large Business Energy Solutions	\$ 1,742,993	\$ 300,829	\$ -	\$ 53,522	\$ 216,264	\$ -	\$ 318,163	\$ 418,416	\$ 245,962	\$ 189,837	\$ -
Small Business Energy Solutions	\$ 533,052	\$ 60,074	\$ -	\$ 10,992	\$ 44,413	\$ -	\$ 146,468	\$ 178,784	\$ 48,534	\$ 43,788	\$ -
Municipal EE Program (per SB123)2	\$ 689,621	\$ 117,019	\$ -	\$ 20,966	\$ 84,716	\$ -	\$ 118,315	\$ 93,445	\$ 70,112	\$ 54,113	\$ 130,934
Other (Education)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FCM Reporting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal C&I	\$ 2,965,666	\$ 477,923	\$ -	\$ 85,480	\$ 345,393		\$ 582,946	\$ 690,644	\$ 364,608	\$ 287,738	\$ 130,934
Smart Start	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 5,939,439	\$ 716,826	\$ -	\$ 127,432	\$ 514,903		\$ 918,104	\$ 1,171,873	\$ 508,318	\$ 469,454	\$ 1,512,529

Present Value Benefits - 2015 PLAN

	Total Benefits	CAPACITY				ENERGY					
		Summer Generation	Winter Generation	Transmission	Distribution	DRIPE	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	Non Electric Resource
Residential Programs											
Home Energy Assistance	\$ 436,581	\$ 2,260	\$ -	\$ 429	\$ 1,734	\$ -	\$ 9,754	\$ 17,939	\$ 1,767	\$ 2,154	\$ 400,544
Home Performance w/Energy Star	\$ 791,494	\$ 5,999	\$ -	\$ 1,732	\$ 6,998	\$ -	\$ 12,830	\$ 24,064	\$ 2,216	\$ 2,534	\$ 735,122
Energy Star Homes	\$ 669,465	\$ 1,573	\$ -	\$ 269	\$ 1,089	\$ -	\$ 75,870	\$ 152,766	\$ 4,376	\$ 5,378	\$ 428,144
Energy Star Products 1	\$ 1,000,990	\$ 92,768	\$ -	\$ 19,626	\$ 79,303	\$ -	\$ 154,281	\$ 207,326	\$ 75,966	\$ 95,311	\$ 276,409
FCM Reporting											
Subtotal Residential	\$ 2,898,530	\$ 102,599	\$ -	\$ 22,057	\$ 89,123	\$ -	\$ 252,735	\$ 402,095	\$ 84,325	\$ 105,376	\$ 1,840,219
Commercial/Industrial Programs											
Large Business Energy Solutions	\$ 678,084	\$ 112,033	\$ -	\$ 20,540	\$ 82,993	\$ -	\$ 166,309	\$ 183,988	\$ 66,665	\$ 45,556	\$ -
Small Business Energy Solutions	\$ 526,451	\$ 100,913	\$ -	\$ 18,518	\$ 74,826	\$ -	\$ 126,398	\$ 99,939	\$ 61,279	\$ 44,579	\$ -
Municipal EE Program (per SB123)2	\$ 443,997	\$ 52,747	\$ -	\$ 9,698	\$ 39,185	\$ -	\$ 108,552	\$ 97,166	\$ 49,471	\$ 42,103	\$ 45,076
Other (Education)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FCM Reporting											
Subtotal C&I	\$ 1,648,532	\$ 265,692	\$ -	\$ 48,756	\$ 197,004	\$ -	\$ 401,259	\$ 381,093	\$ 177,415	\$ 132,238	\$ 45,076
Smart Start	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 4,547,062	\$ 368,291	\$ -	\$ 70,813	\$ 286,127	\$ -	\$ 653,994	\$ 783,188	\$ 261,740	\$ 237,614	\$ 1,885,295

Member Incentive Calculation
 2015

	<u>Planned</u>	<u>Actual</u>
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	1.40	2.03
2. Threshold Benefit / Cost Ratio ¹	1.00	
3. Lifetime kWh Savings	19,669,476	34,670,300
4. Threshold Lifetime kWh Savings (65%) ²	12,785,160	
5. Budget	\$599,344	\$595,476
6. Benefit / Cost Percentage of Budget	3.75%	
7. Lifetime kWh Percentage of Budget	3.75%	
8. C/I Shareholder Incentive	\$44,951	\$59,548
9. Cap (10%)	\$59,548	
Residential Incentive		
10. Benefit / Cost Ratio	1.95	2.06
11. Threshold Benefit / Cost Ratio ¹	1.00	
12. Lifetime kWh Savings	15,226,908	20,241,700
13. Threshold Lifetime kWh Savings (65%) ²	9,897,490	
14. Budget	\$1,079,882	\$1,014,225
15. Benefit / Cost Percentage of Budget	3.75%	
16. Lifetime kWh Percentage of Budget	3.75%	
17. Residential Incentive	\$80,991	\$90,870
18. Cap (10%)	\$101,423	
19. TOTAL INCENTIVE EARNED	\$125,942	\$150,418

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.

Planned Versus Actual Benefit / Cost Ratio by Sector
 2015

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	\$ 1,648,532	\$ 2,965,666
2. Implementation Expenses	\$ 599,344	\$ 595,476
3. Customer Contribution	\$ 536,300	\$ 803,100
4. Estimated Member Incentive	\$ 44,951	\$ 59,548
5. Total Costs (including member incentive)	\$ 1,180,595	\$ 1,458,124
6. Benefit/Cost Ratio - C&I Sector	1.40	2.03
Residential:		
7. Benefits (Value) From Eligible Programs	\$ 2,898,530	\$ 2,973,773
8. Implementation Expenses	\$ 1,079,882	\$ 1,014,225
9. Customer Contribution	\$ 327,042	\$ 335,200
10. Estimated Member Incentive	\$ 80,991	\$ 90,870
11. Total Costs (including member incentive)	\$ 1,487,915	\$ 1,440,295
12. Benefit/Cost Ratio - Residential Sector	1.95	2.06

**Actual Lifetime Energy Savings by Sector and Program
 2015**

	Lifetime kWh Savings	
	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
Large Business Energy Solutions	8,330,598	21,120,000
Small Business Energy Solutions	5,973,166	7,511,100
Municipal EE Program (per SB123)2	5,365,713	6,039,200
Other (Education)	0	0
FCM Reporting	<u>0</u>	<u>0</u>
 Total Commercial & Industrial Included for Incentive Calculation	 19,669,476	 34,670,300
Residential:		
Home Energy Assistance	559,659	745,500
Home Performance w/Energy Star	725,839	2,807,200
Energy Star Homes	4,055,244	3,320,500
Energy Star Products 1	9,886,166	13,368,500
FCM Reporting	<u>0</u>	<u>0</u>
 Total Residential Included for Incentive Calculation	 15,226,908	 20,241,700

2015 End of Year Reconciliation

	<u>2015</u>
Carry Forward Balance	\$ 192,520
Funding:	
System Benefit Charge	\$ 1,369,339
RGGI Funding	\$ 227,017
FCM Payments ¹	56,511
2014 Incentive Correction	69,854
Interest	10,902
Total Funding for Energy Efficiency Programs	<u>\$ 1,733,623</u>
Expenses:	
Energy Efficiency Expenditures	\$ 1,610,944
Member Incentive ¹ - 2014	159,125
Member Incentive ² - 2015	150,418
Total Program Expenses	<u>\$ 1,920,487</u>
 Carry Forward Balance	 <u><u>\$ 5,656</u></u>

Notes

1. 2014 Member Incentive accrued in 2014 and booked in 2015
2. 2015 Member Incentive accrued in 2015 and booked in 2016