



Second Quarter 2013 Performance

Presentation to the EEAC by the PAs

August 22, 2013



Quantitative Review





Second Quarter Statewide Overview

- Electric and gas annual savings are at 25% and 26% of goal, respectively
- Overall program performance is consistent across fuels
- Performance tracking similar to prior years
- Residential savings levels higher than C&I- consistent with typical “hockey stick”
- Low-income savings very healthy
- Lower annual saving compared to prior years resulting from change in schedule of behavior feedback program (savings should come in for Q3)

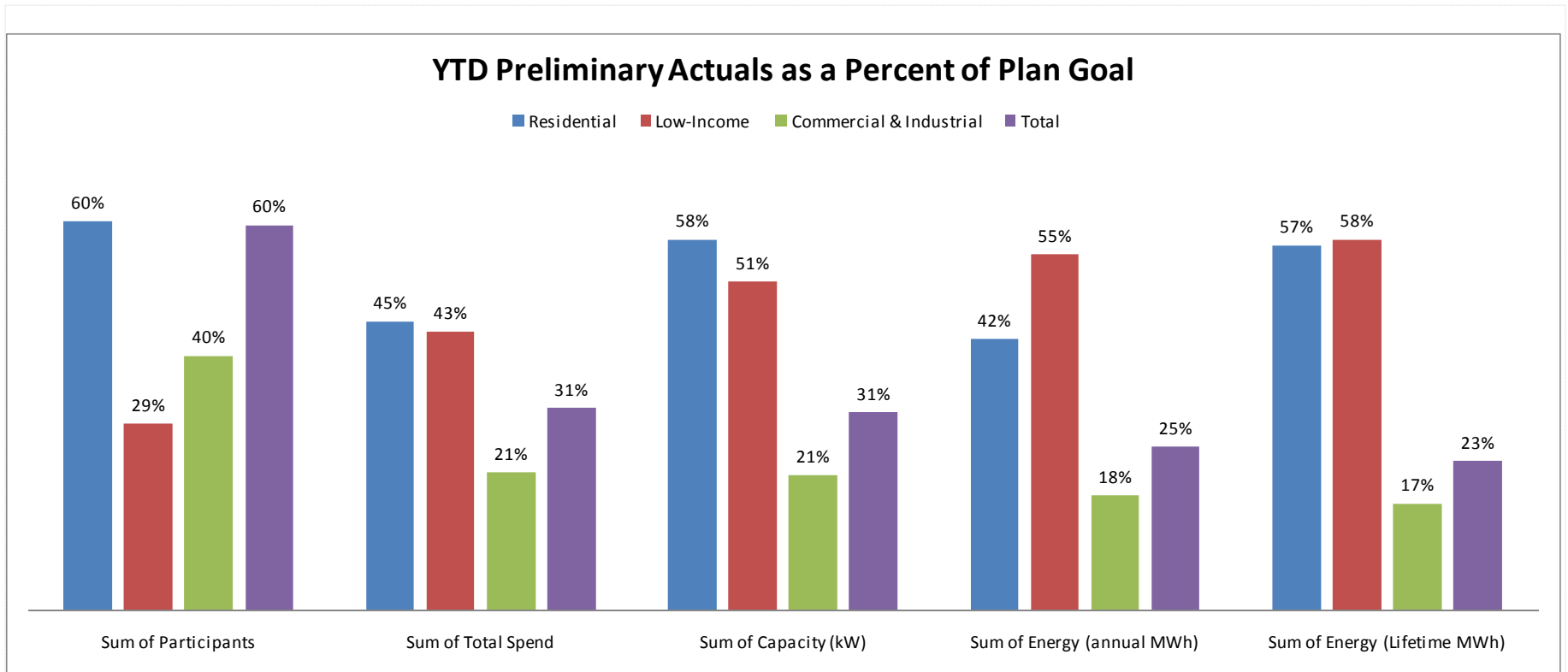


New Data Elements for Q2 Report

- Additional information added for Q2 and Q4 related to oil benefits
- NEIs presented separately from other benefits, consistent with DPU 08-50 tables
- Certain graphs updated to clarify content
- New factors incorporated for NO_x, SO₂ and CO₂, per ongoing discussions with DEP



Electric Summary % of Goal

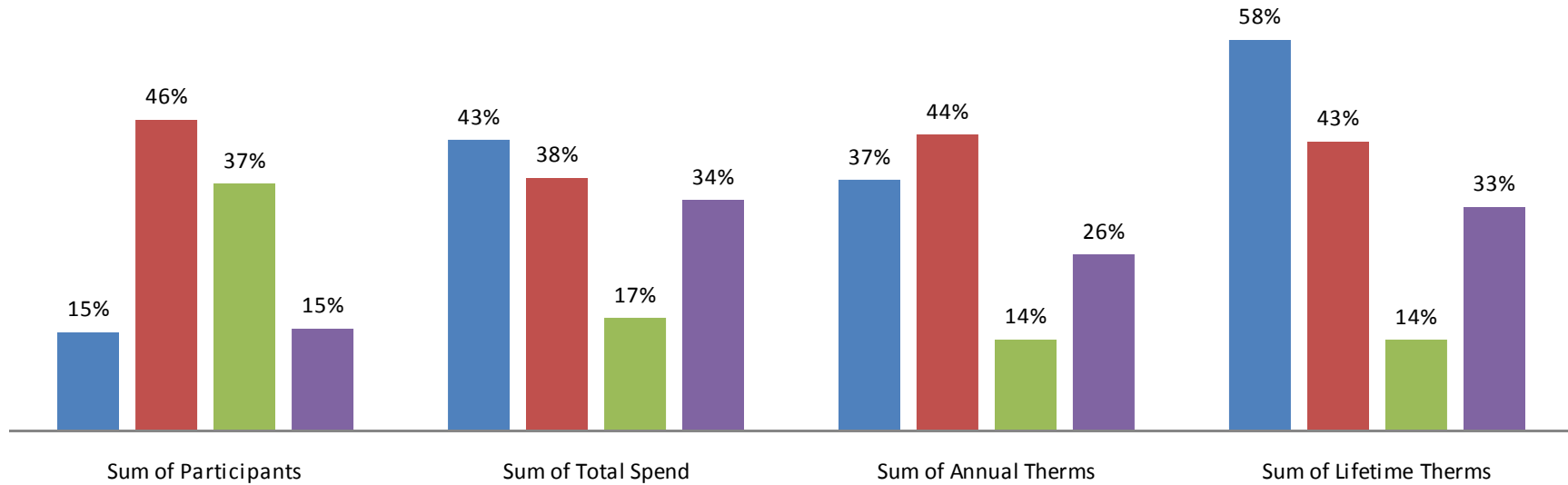




Gas Summary % of Goal

YTD Preliminary Actuals as a Percent of Plan Goal

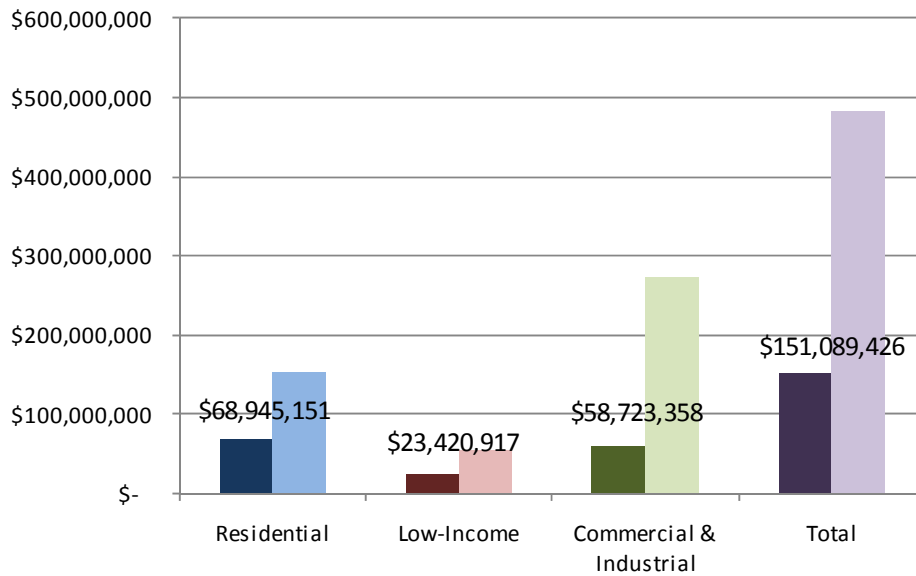
■ Residential ■ Low-Income ■ Commercial & Industrial ■ Total



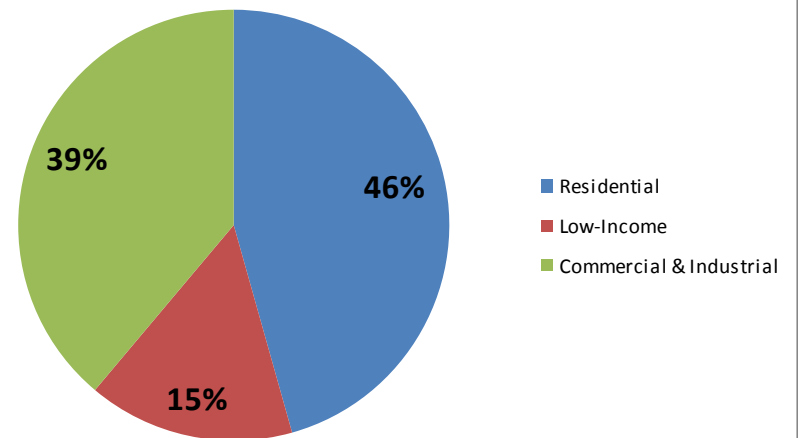


Electric Statewide Budgets

Electric Statewide Spend Compared to Goal

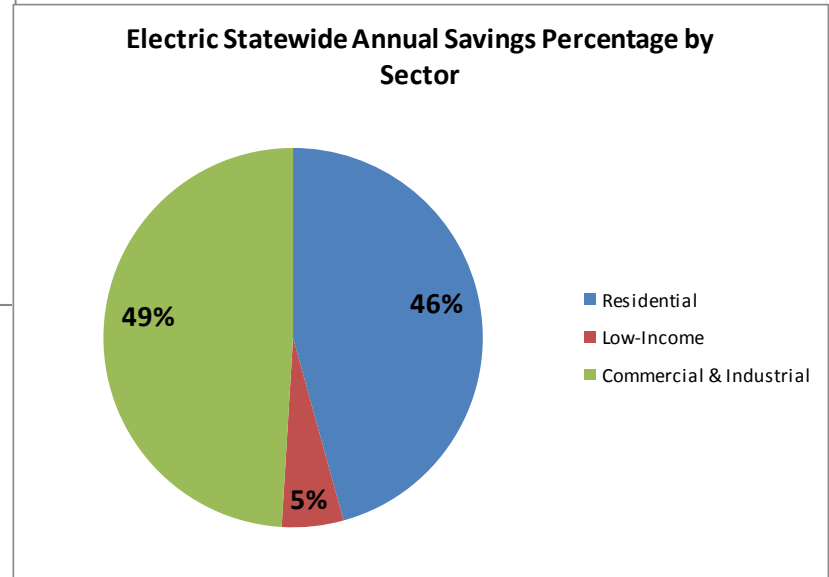
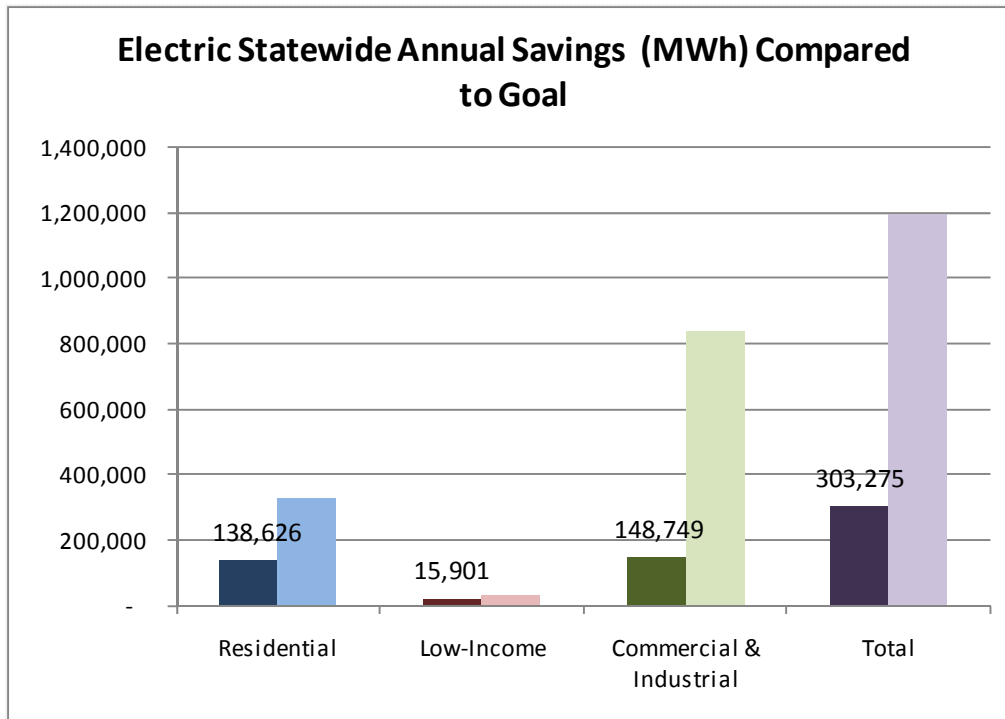


Electric Statewide Percentage Spent by Sector



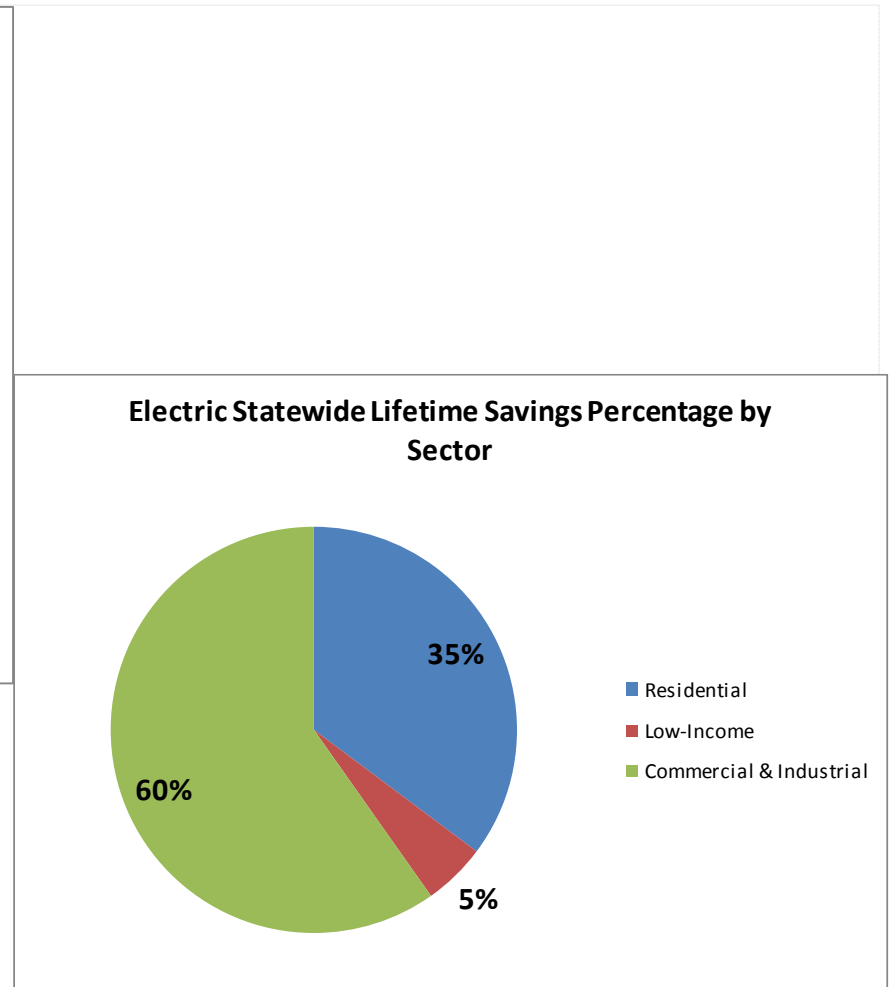
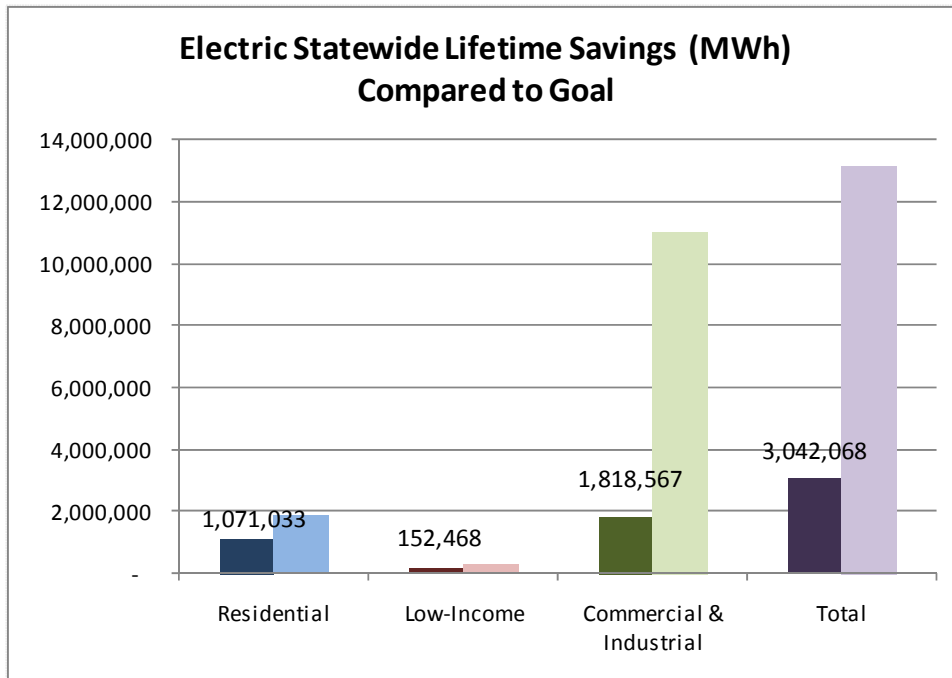


Electric Statewide Annual Savings





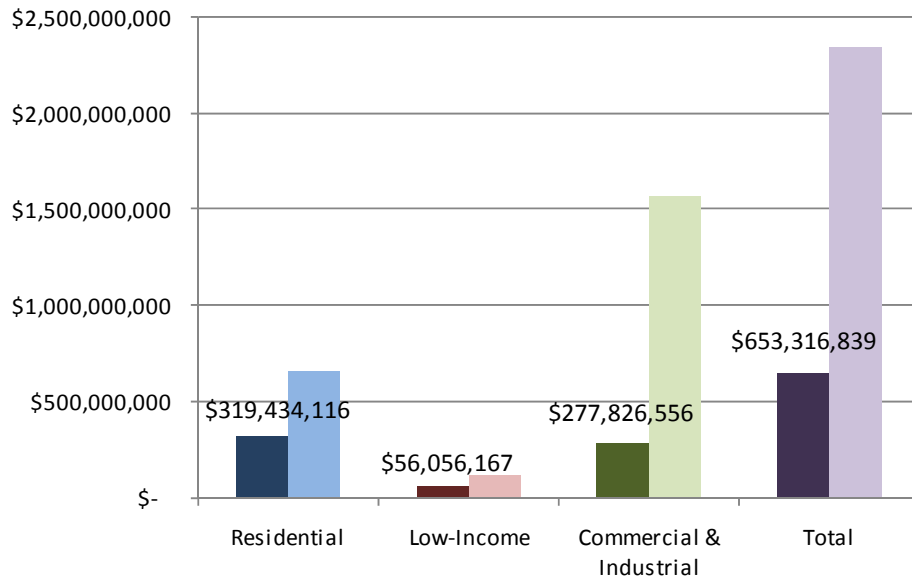
Electric Statewide Lifetime Savings



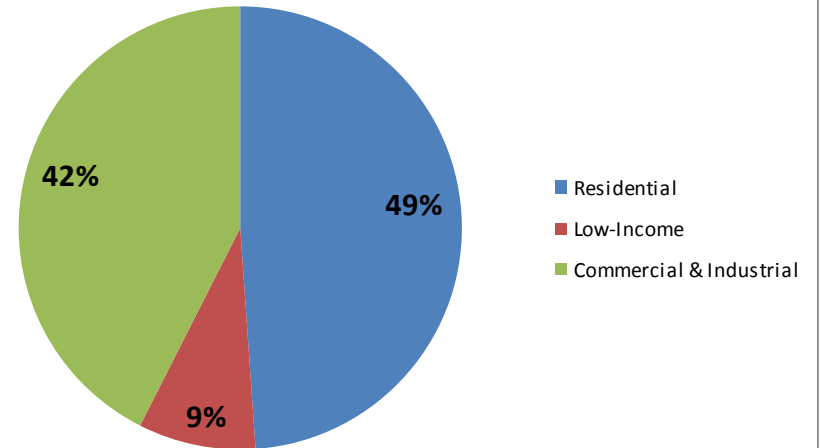


Electric Statewide Benefits

Electric Statewide Benefits Compared to Goal



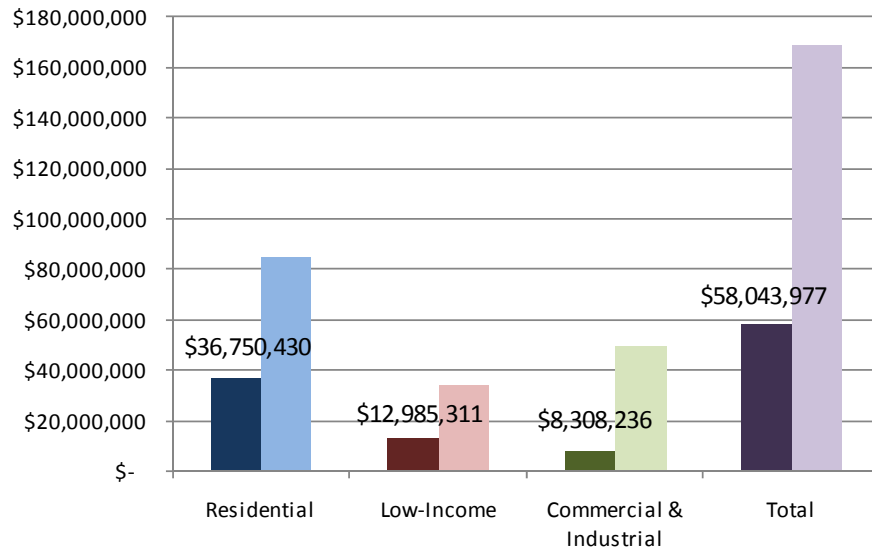
Electric Statewide Benefits Percentage by Sector



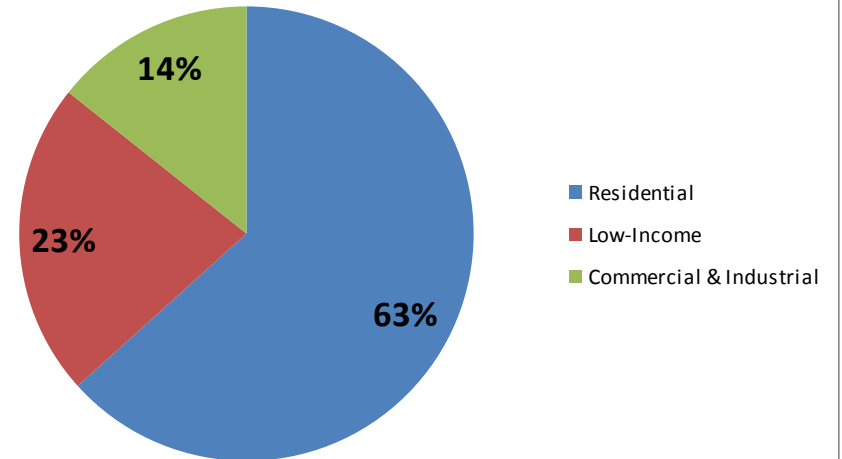


Gas Statewide Budgets

Statewide Gas Spend Compared to Goal

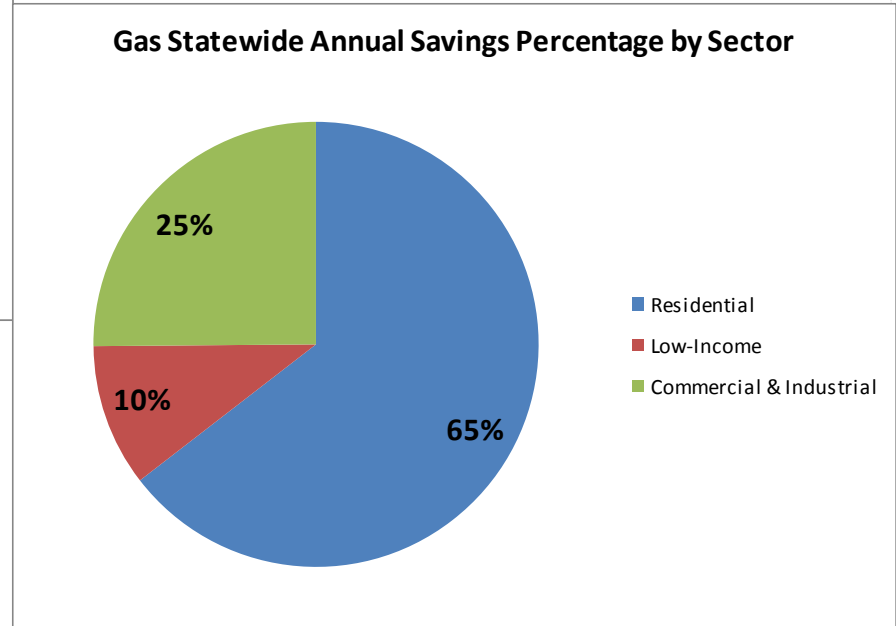
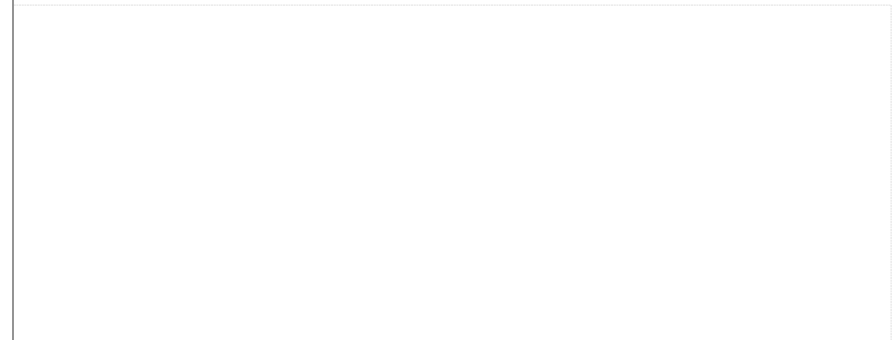
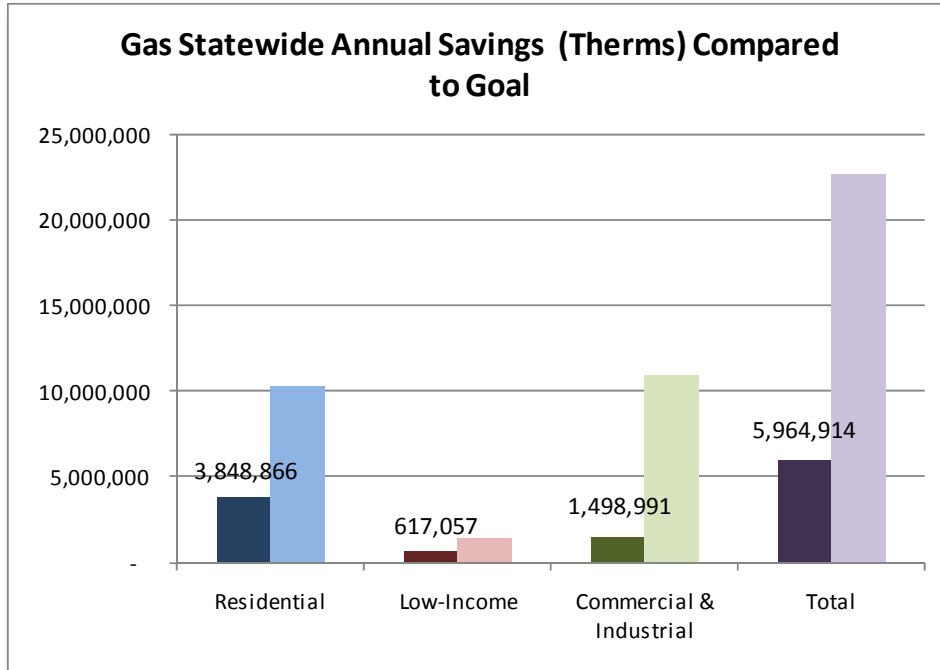


Statewide Gas Percentage Spent by Sector





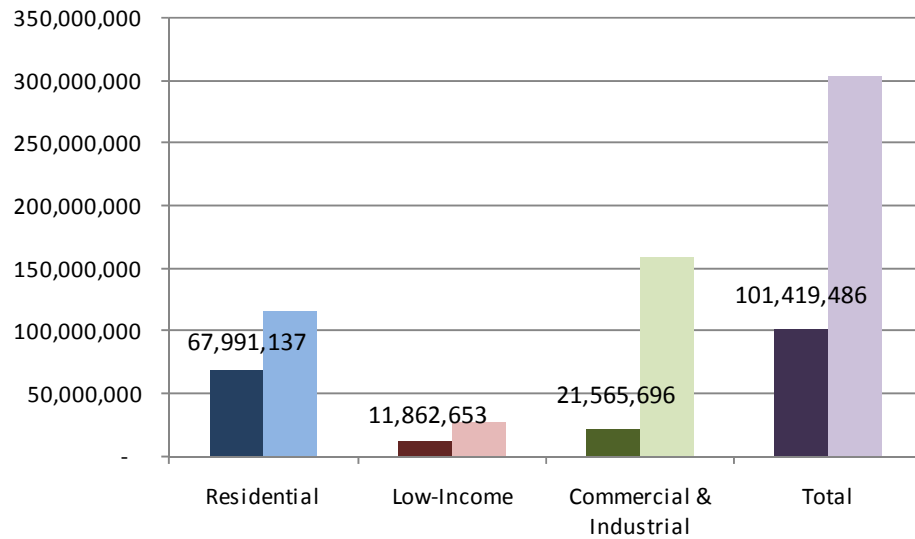
Gas Statewide Annual Savings



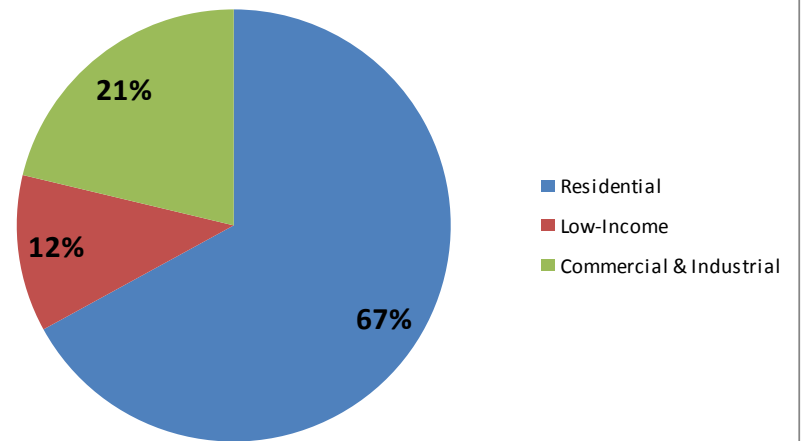


Gas Statewide Lifetime Savings

Gas Statewide Lifetime Savings (Therms) Compared to Goal



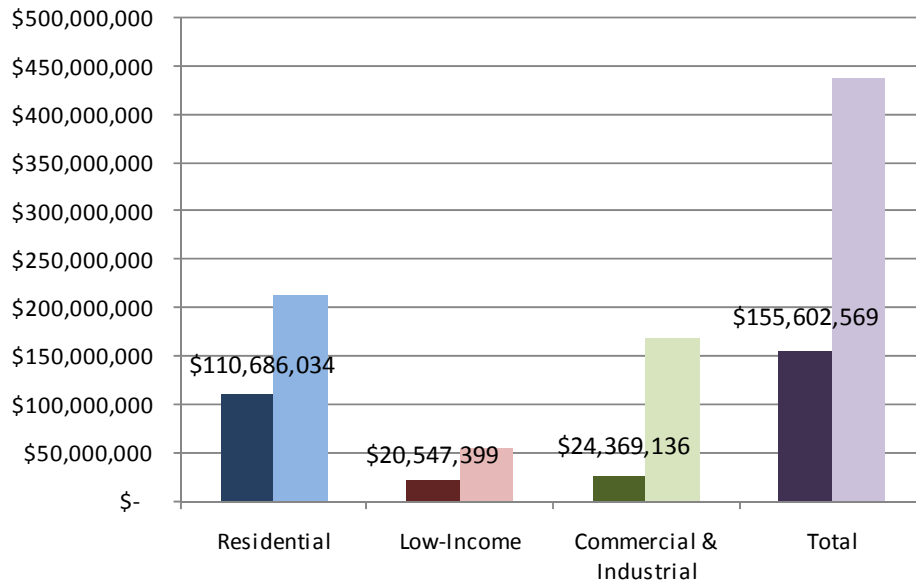
Gas Statewide Lifetime Savings Percentage by Sector



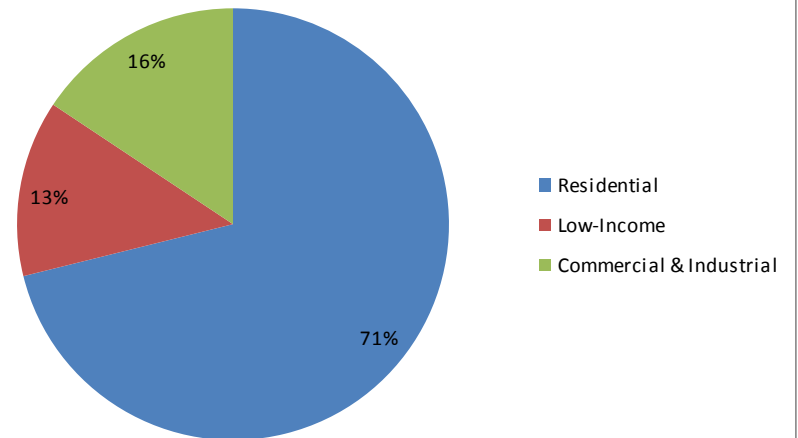


Gas Statewide Benefits

Gas Statewide Benefits Compared to Goal

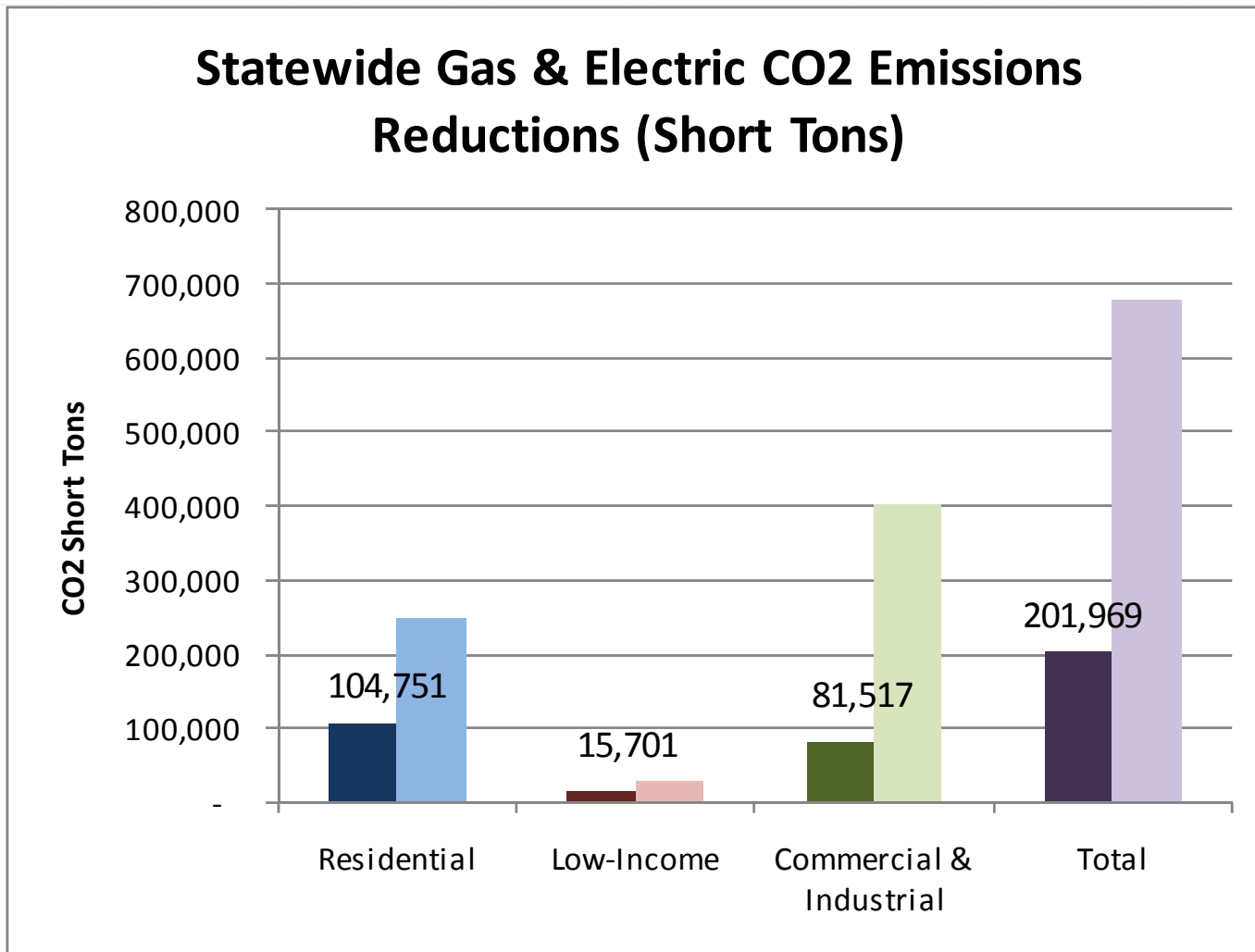


Gas Statewide Benefits Percentage by Sector





Statewide Gas and Electric CO2 Emissions Reductions





Comparison to 2011 and 2012 Q2

Electric

	2011		2012		2013	
Spending	\$87,259,207	21%	\$132,650,749	27%	\$151,089,426	31%
Annual MWh	229,976	25%	376,097	34%	303,275	25%
Lifetime MWh	1,955,619	19%	3,344,021	28%	3,042,068	23%
Benefits	\$344,553,342	20%	\$589,958,717	26%	\$653,316,839	28%

Gas

	2011		2012		2013	
Spending	\$35,796,869	34%	\$46,973,229	36%	\$58,043,977	34%
Annual therms	6,906,767	38%	9,912,308	42%	5,964,914	26%
Lifetime therms	93,635,315	34%	97,861,531	30%	101,419,486	33%
Benefits	\$102,563,496	31%	\$125,316,518	35%	\$155,602,569	36%

Note: percentages from year to year reflect increasing overall goals; thus, as shown above, equal or lower percentages do not necessary translate to equivalent or lower savings

Qualitative Review





Council Priorities- Highlight on Priority 1

- Priority 1: Achieve at least 100% of the savings and benefits goals set for the 2013 program year, and emphasize key actions to be implemented in 2013 for sustained program success going forward
 - Emphasis in Q2 on marketing and innovative program approaches to drive interest in the programs, with print, radio, digital, and billboard outreach
 - Continued efforts to overcome barriers to participation, including work in the Residential Barriers Working Group
 - Consolidating the review of new technologies through the combined Residential and C&I MTAC
 - Consideration of ways to sustain efforts over a three-year construct consistent with the Order and the GCA



Council Priorities- Highlight on Priority 3

- Priority 3: Support Key Program Development and Implementation Needs, with a Focus on Achieving Deeper Savings and Reaching All Customer Segments. Continuously Improve the Programs and Initiatives.
 - In the Multi-Family initiative, the PAs are developing a streamlined delivery of packaged, comprehensive offerings
 - PAs launched the Early Boiler Replacement offering through HES to encourage the replacement of functioning boilers that are at least 30 years old
 - Low-Income Best Practices Group continues an effort towards standard marketing materials
 - PAs and DEP agreed to initial plans to focus on certain wastewater treatment plants and possible loan opportunity for municipalities
 - Other efforts include Efficient Neighborhoods+, MOU with DCAMM, MTAC, and marketing campaigns



Program Highlights- Residential Whole House

Home Energy Services

- In Q2, the following enhancements were being implemented:
 - Pre-Weatherization Barrier Offer
 - Early Boiler Replacement Rebate
 - Efficient Neighborhoods+
 - Cross Promotions with the Gas Heating Initiative (Early Boiler Replacement promotion)
 - 2-4 Incentive (Efficient Neighborhoods+ and Renew Boston)

Multi-Family Retrofit

- In Q2, a statewide template was developed, incorporating recommended measures and incentives into a packaged portfolio

Residential New Construction

- In Q2, there are over 2,346 units completed statewide
- Multi-Family High Rise – through Q2, pipeline had 27 projects with 1,800 residential units



Program Highlights- Residential Products

Gas Residential Heating and Water Heating

- 7 different trade ally trainings have taken place in Q2 promoting the 2013 incentives, as well as promotion of the Early Boiler Replacement initiative

Electric Residential Cooling and Heating

- Strong results through Q2 for equipment sales and quality installation (“QI”) verification. Equipment rebates were over 60% of the statewide goal, and quality testing surpassed the goal to over 130%
- Heat Pump Water Heater rebates exceeded 2013 goal through Q2

Residential Lighting

- Statewide, LEDs exceeded 2013 goal in Q2; PAs adjusted LED and LED fixture incentives to be in line with the rapidly decreasing prices in the market

Residential Consumer Products

- Statewide, PAs were slower in achieving goals in Top Ten products (TVs, refrigerators, freezers, and computers)- to reach goals, PAs developed a strategy to (1) increase market penetration by offering retail training on the value of Top Ten rated products, and (2) enable local retailer search functions on the Top Ten USA webpage



Program Highlights- Low Income

Single-Family (1-4)

- Best Practices WG is working on creating standardized client education materials

Multi-Family (5+)

- PAs have benchmarked 20,315 accounts, reaching the anticipated statewide goal



Program Highlights - C&I

- **Division of Capital Asset Management and Maintenance**
 - PAs signed MOU with DCAMM in Q2 to accelerate the implementation of water and energy efficiency projects in MA
- **Main Streets Delivery Model**
 - This initiative proceeded to the initiation phase in Q2, with two towns working collaboratively with the PA to select roughly 30 small business sites in each for implementation
- **Commercial Real Estate**
 - In Q2, the WG reviewed the significant amount of work done in this area to date by other organizations throughout the country, including research by Northeast Utilities and the Green Ribbon Commission, and program development by the Office of the Future Consortium, BetterBricks of the Pacific Northwest, and others



Program Highlights - CHP

- The PAs are continuing to pursue CHP as a priority and are continuing to enhance the CHP program and promote this opportunity
- In order to encourage implementation of CHP systems and greater consideration of efficiency opportunities prior to CHP project development, the PAs have revised the available incentives for CHP projects effective July 1, 2013
- The new structure highlights the importance of right-sizing the CHP system in full consideration of available efficiency opportunities and provides extra motivation and financial support for smaller CHP projects
 - The structure provides three levels of incentives with greater incentives available based on greater consideration and adoption of efficiency measures prior to CHP development

- **Lifecycle Cost Project Analysis Model (Proforma)**
 - The PAs' newly created multi-measure Lifecycle Cost Project Analysis Model (Proforma) will assist in providing customers with pertinent financial information (beyond simple payback) to make informed decisions regarding the economics associated with installation of EE measures with and without financing.
 - The outputs of the Proforma will include:
 - Cash Flow Analysis, Return on Investment, Internal Rate of Return, No Upfront Cost/Financing, Cash Flow Analysis and Simple Payback
- **Mass Banker Association Financing**
 - The PAs and the Mass Banker Association (MBA) worked to add a prescriptive project financing option, in addition to the traditional custom projects that have been included in the financing program. In addition, the group approved:
 - An increase to the maximum loan amount from \$100,000 to \$500,000, enabling some of the largest customer projects to benefit from this resource.



Massachusetts Technical Assessment Committee (“MTAC”) Update

- During Q2, the newly merged Residential and C&I MTAC committee completed its restructuring with the selection of a new chair and vice chair to lead the group
- The mission of MTAC’s work remains to:
 - Evaluate new technologies that are submitted by manufacturers and vendors for consideration in the Massachusetts programs
- During Q2, the Committee received and evaluated four inquiries:
 - Residential Technologies
 - Shower head occupancy based flow restrictor
 - Air to water heat pump
 - C&I Technologies
 - Ozone treatment technology for laundry and wastewater
 - Solar Lighting Control project



Marketing

- Multi-media Advertising Campaign: The statewide Marketing Team and the third party contractor, KSV, collaboratively developed a multi-media advertising campaign targeted at both residential and C&I audiences, including radio, outdoor advertising, digital banner ads, paid search and Facebook advertising; the campaign kicked off on March 29 and will run through November 2013
- Pre-campaign awareness survey: A survey was conducted by the EM&V working group prior to the campaign launch to establish a baseline for measurement of the 2013 campaign
- MassSave.com: Continual improvements to Mass Save website

- On May 14, representatives of the PAs, EEAC Consultants, DOER, DPU, NEEP and evaluation contractors attended the 2013 Residential Evaluation Strategic Planning meeting
 - Planning for the next round of residential program evaluation studies to take place between 2013 and 2014 took place
 - Attendees considered long-term strategy for evaluation activities and encouraged alignment of each of the three research areas
- In addition to finalizing 25 studies for inclusion with the 2012 Energy Efficiency Annual Report, work continued on evaluation activities during Q2 in all research areas



Residential Barriers Working Group

- The Residential Barriers Working Group met for the second time via conference call on May 1
- PAs discussed the following with Stakeholders:
 - Pre-weatherization evaluation results
 - As a result of this group's work, pre-weatherization subsidies are now being provided in the field, addressing an important barrier to participation
 - Efficient Neighborhoods+ progress and announcement of locations by each PA, with discussions regarding where PAs would be sharing in their efforts
- The RBWG has scheduled another meeting for August 27, 2013 to discuss landlord-tenant barriers and community initiatives, with two additional meetings to be scheduled soon to address the residential barriers report and evaluation of the initial rollout of Efficient Neighborhoods+



Performance Metrics- Residential #1

Whole House/Home Energy Services: Deeper Savings {Electric & Gas} – Statewide

- Close rates as of June 30, 2013 are presented below
- Achievement Levels are as follows:
 - Threshold: increase in close rate of HES Full Assessments of 6% over 2012.
 - Design: increase in close rate of HES Full Assessments 10% over 2012
 - Exemplary: increase in close rate of HES Full Assessments 12.5% over 2012

	Full HEAs YTD June	Weatherization (unique Insulation, Insulation/Air Sealing, or Air Sealing only) YTD June	Conversion Rate YTD June	Threshold Goal 6%	Design Goal 10%	Exemplary Goal 12.5%
NSTAR Electric	7,326	2,380	32.49%	36.81%	38.20%	39.07%
NSTAR Gas	4,679	1,283	27.42%	28.00%	29.06%	29.72%
National Grid Electric	12,709	4,030	31.71%	31.72%	32.91%	33.66%
National Grid Gas	12,718	3,453	27.15%	33.11%	34.36%	35.15%
WMECO	1,180	405	34.32%	42.27%	43.87%	44.87%
Berkshire Gas	441	153	34.69%	44.44%	46.12%	47.16%
Columbia Gas of MA	2,434	708	29.09%	35.53%	36.87%	37.71%
New England Gas	222	42	18.92%	28.20%	29.26%	29.93%
Unitil Electric	191	85	44.50%	60.42%	62.70%	64.12%
Unitil Gas	44	16	36.36%	60.42%	62.70%	64.12%

Please note that these numbers, while accurate, are not totally reflective of a program year as they do not include historical third and fourth quarter peak season demand and production



Performance Metrics - Residential #2

Mass Save/Weatherization: Early Boiler Replacement {Electric & Gas} – Statewide

- Early boiler replacements as of June 30, 2013 are presented below
- Achievement Levels are as follows:
 - Threshold: increase early boiler replacements by 6% over the 2013 planned goal
 - Design: increase early boiler replacements by 8% over the 2013 planned goal
 - Exemplary: increase early boiler replacements by 10% over the 2013 planned goal

	EBRs Offered	EBRs Completed	Threshold Goal 6%	Design Goal 8%	Exemplary Goal 10%
NSTAR Electric	409	16	887	904	921
NSTAR Gas	286	5	606	618	629
National Grid Electric	530	33	636	648	660
National Grid Gas	620	25	424	432	440
WMECO	72	4	53	54	55
Berkshire Gas	50	1	31	32	33
Columbia Gas of MA	212	6	60	62	63
New England Gas	36	3	42	43	44
Unitil Electric	13	3	7	8	9
Unitil Gas	3	0	7	8	9

“EBRs Offered” represents the number of customers identified as eligible for this initiative

“EBRs Completed” represents the number of rebates billed through June 2013

Please note that actual EBR net results are expected to increase significantly. Customers must submit their applications and complete the installation by October 1, 2013.



Performance Metrics- Low-Income #1

Strategic Targeting {Electric & Gas} – Statewide

- In coordination with LEAN, each utility PA identified the community to participate in this effort and developed their strategic marketing plan for this effort; the Utility PAs collectively submitted their detailed strategic marketing plans, which included all the key required elements to DOER and Council Consultants on May 1

Program Administrator	Target Community
Berkshire Gas	Turners Falls
Columbia Gas	Forest Park neighborhood in Springfield
National Grid Electric	Haverhill
National Grid Gas	Haverhill
New England Gas	Fall River
NSTAR Electric	Somerville
NSTAR Gas	Somerville
Unitil Electric	Fitchburg
Unitil Gas	Fitchburg
WMECo	Forest Park neighborhood in Springfield

- A status report memo was sent to DOER and the EEAC consultants on August 1, noting all utility PA plans are in the implementation phase



Performance Metrics – Low Income #2

Multi-family Building Inventory {Electric & Gas} – Statewide

- Each utility has conducted a monthly inventory and has exceeded the number of account reports as indicated in the table below. The utility PAs are well on their way to meeting this metric for 2013.

Program Administrator	Goal			2013 ACTUAL Number of Account Reports per Month by PA							Remaining Acct Reports
	% Allocation	# of Acct Reports/ Month	# of Acct Reports/ Year	Jan	Feb	Mar	Apr	May	Jun	Total	
Berkshire Gas	2%	14	85	14	14	14	14	14	15	85	0
Columbia Gas	10%	75	448	75	75	71	79	70	81	451	(3)
National Grid Electric	20%	157	944	157	157	157	157	119	197	944	0
National Grid Gas	22%	186	1,118	186	186	186	186	167	207	1,118	0
New England Gas	2%	10	60	10	10	10	10	0	20	60	0
NSTAR Electric	24%	222	1,331	222	222	166	253	247	221	1,331	0
NSTAR Gas	14%	129	775	129	129	110	146	28	233	775	0
Unitil Electric	1%	1	8	1	1	1	1	1	3	8	0
Unitil Gas	1%	0	1	1	0	1	0	1	0	3	0
WMECO	4%	44	264	23	40	36	59	55	51	264	0
Total	100%	839	5,034	818	834	752	905	702	1,028	5,039	(3)



Performance Metrics- C&I #1

Large Retrofit Depth of Savings

- Projects through June 30, 2013 are presented below
- Targets are as follows:
 - Threshold: 5% more qualifying projects than were achieved in 2012
 - Design: 10% more qualifying projects than were achieved in 2012
 - Exemplary: 20% more qualifying projects than were achieved in 2012

	Number of Qualifying Projects YTD June	Number of Qualifying Projects in 2012	Threshold Goal 5%	Design Goal 10%	Exemplary Goal 20%
NSTAR Electric	12	28	29	31	34
NSTAR Gas	6	15	16	17	18
National Grid Electric	1	8	9	10	11
National Grid Gas	1	13	14	15	16
WMECO	2	3	4	5	6
Berkshire Gas	2	2	3	4	5
Columbia Gas of MA	3	8	9	10	11
New England Gas	1	2	3	4	5
Unitil Electric	0	0	1	2	3
Unitil Gas	0	0	1	2	3



Performance Metrics- C&I #2

New Construction Depth of Savings

- Percentage of qualifying projects through June 30, 2013 are presented below
- Targets are as follows:
 - Threshold: 5% increase in the percentage of qualifying projects than was achieved in 2012
 - Design: 10% increase in the percentage of qualifying projects than was achieved in 2012
 - Exemplary: 20% increase in the percentage of qualifying projects than was achieved in 2012

	% of Qualifying Projects YTD June	% of Qualifying Projects in 2012	Threshold Goal 5%	Design Goal 10%	Exemplary Goal 20%
NSTAR Electric	33%	22%	23%	24%	26%
NSTAR Gas	50%	40%	42%	44%	48%
National Grid Electric	55%	62%	65%	69%	75%
National Grid Gas	66%	40%	42%	44%	48%
WMECO	8%	0%	5%	10%	20%
Berkshire Gas	0%	0%	5%	10%	20%
Columbia Gas of MA	50%	83%	87%	91%	100%
New England Gas	0%	0%	5%	10%	20%
Unitil Electric	0%	0%	5%	10%	20%
Unitil Gas	0%	0%	5%	10%	20%



Performance Metrics- C&I #3

Small Business Direct Install Depth of Savings

- Percent depth achieved through June 30, 2013 is presented below
- Targets are as follows:
 - Threshold: 5% increase in average percentage depth achieved in 2012
 - Design: 10% increase in average percentage depth achieved in 2012
 - Exemplary: 20% increase in average percentage depth achieved in 2012

	% Depth Achieved YTD June	% Depth Achieved in 2012	Threshold Goal 5%	Design Goal 10%	Exemplary Goal 20%
NSTAR Electric	13%	13%	14%	15%	16%
NSTAR Gas	6%	5%	6%	7%	8%
National Grid Electric	13.8%	12.7%	13.3%	14.0%	15.9%
National Grid Gas	4.1%	5.6%	5.9%	6.2%	6.7%
WMECO	12%	15%	16%	17%	18%
Berkshire Gas	0%	10.34%	10.86%	11.37%	12.41%
Columbia Gas of MA	3.66%	6.08%	6.38%	6.69%	7.30%
New England Gas	3%	22.59%	23.71%	24.85%	27.10%
Unitil Electric	13.4%	16.3%	17.15%	17.96%	19.59%
Unitil Gas	7.45%	7.6%	7.94%	8.32%	9.07%