



Second Quarter 2017 YTD Performance

Presentation by the PAs to the EEAC

August 16, 2017



BLACKSTONE
GAS COMPANY



Columbia Gas
of Massachusetts
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2017 Comparison to 2015 and 2016 Q2 YTD



Electric

	2015		2016		2017	
Lifetime MWh	5,277,204	38%	4,913,673	38%	5,199,270	39%
Annual MWh	495,690	39%	527,840	38%	636,838	46%
Spending	\$231,499,062	45%	\$220,469,332	37%	\$222,576,490	36%
Benefits	\$1,015,419,355	43%	866,535,870	42%	\$816,924,116	40%

Gas

	2015		2016		2017	
Lifetime therms	136,705,987	43%	165,867,993	44%	132,348,909	35%
Annual therms	11,912,270	48%	12,872,155	46%	11,085,975	39%
Spending	\$76,276,228	42%	\$85,933,037	40%	\$80,780,604	36%
Benefits	212,954,509	44%	\$269,913,766	49%	\$214,281,930	39%

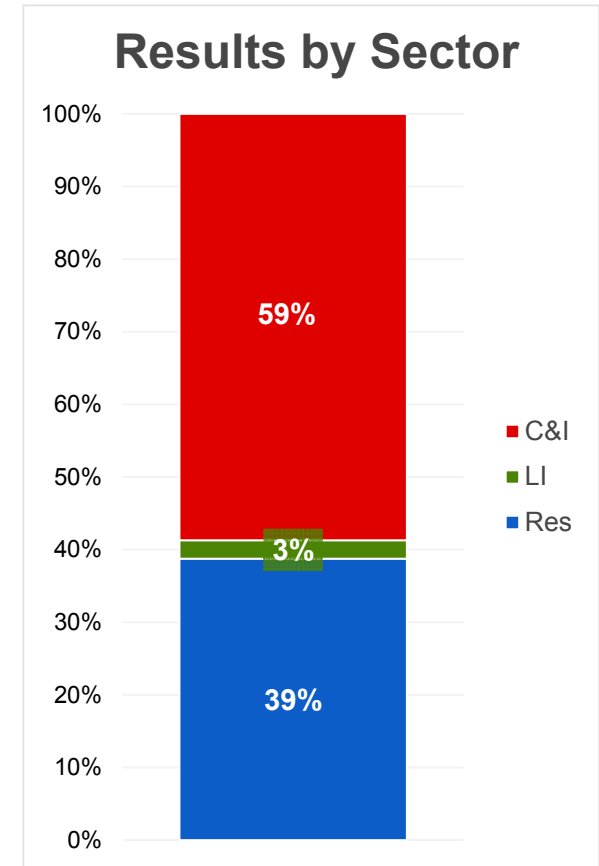
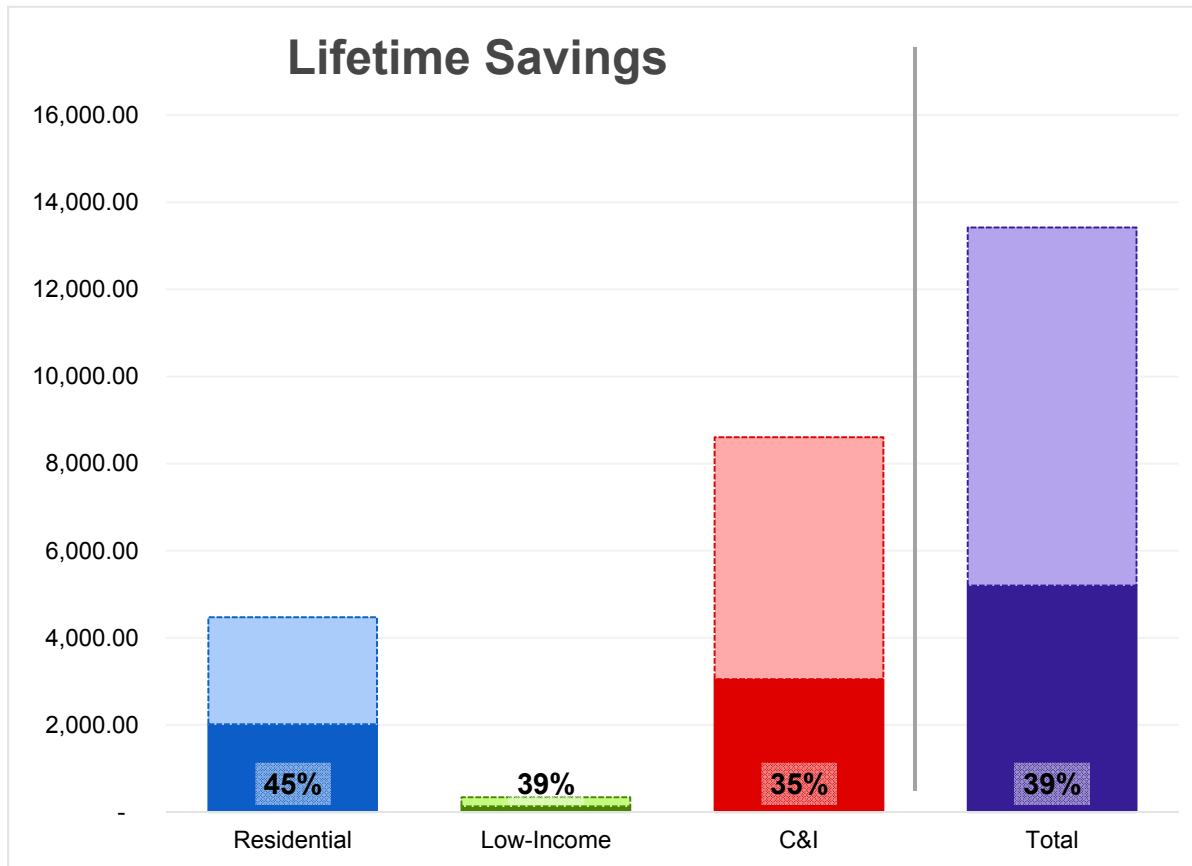


Q2 Electric Performance

Electric Lifetime Savings



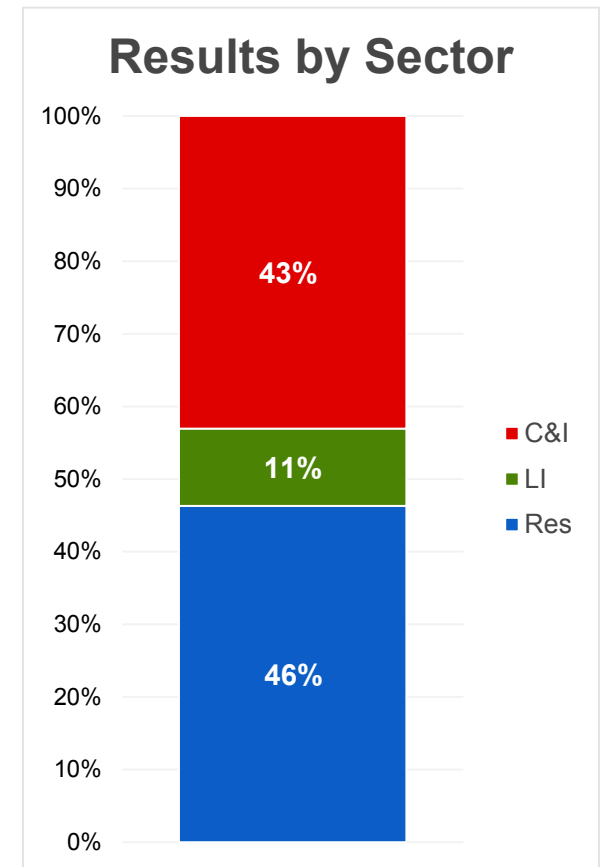
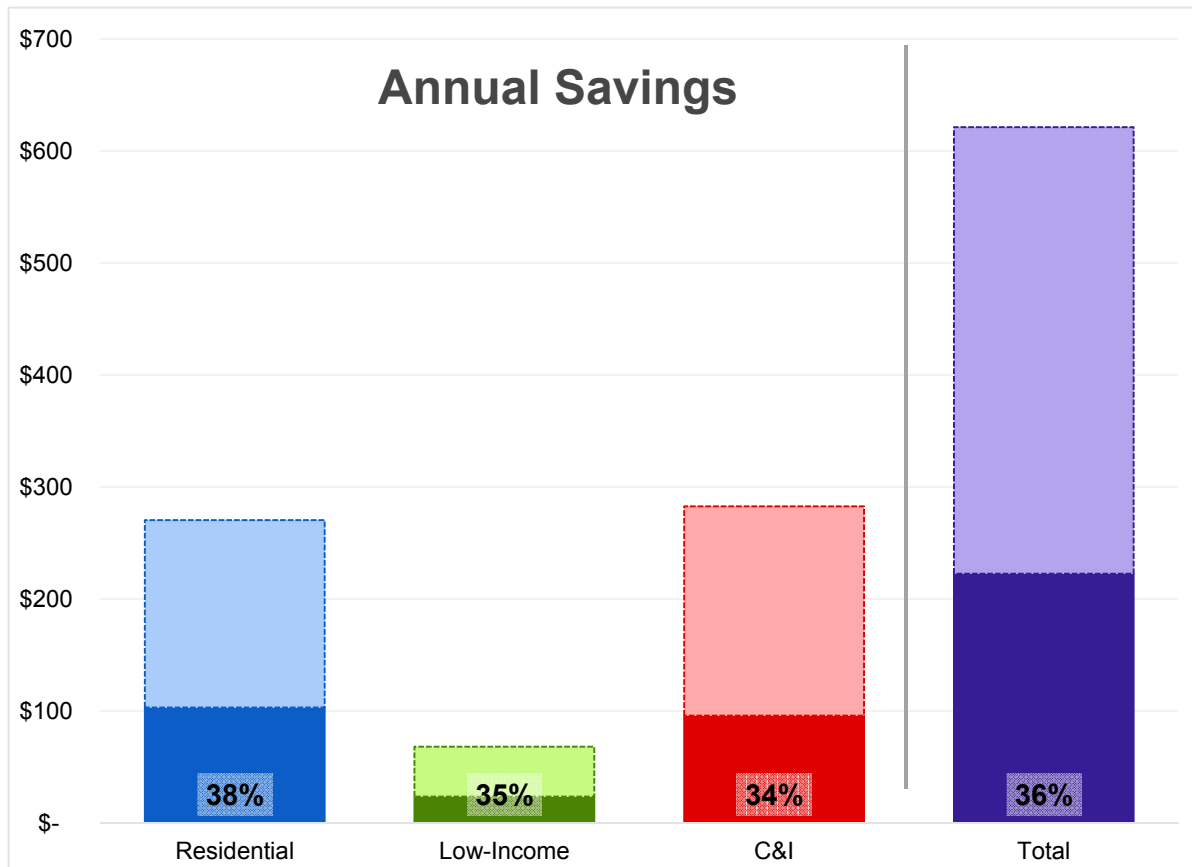
Statewide Achievements as Percent of 2017 Planned Goal
(6/12 Months) 50% of term



Electric Annual Savings



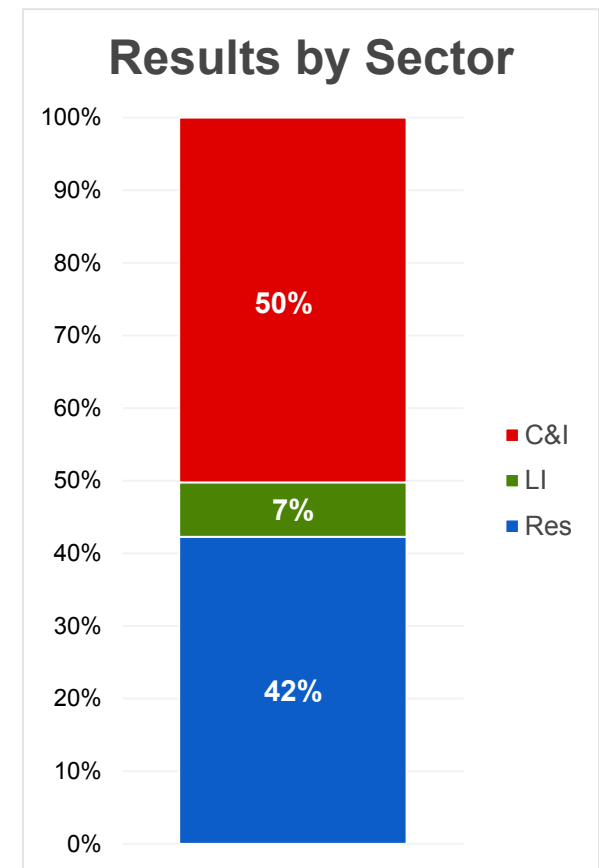
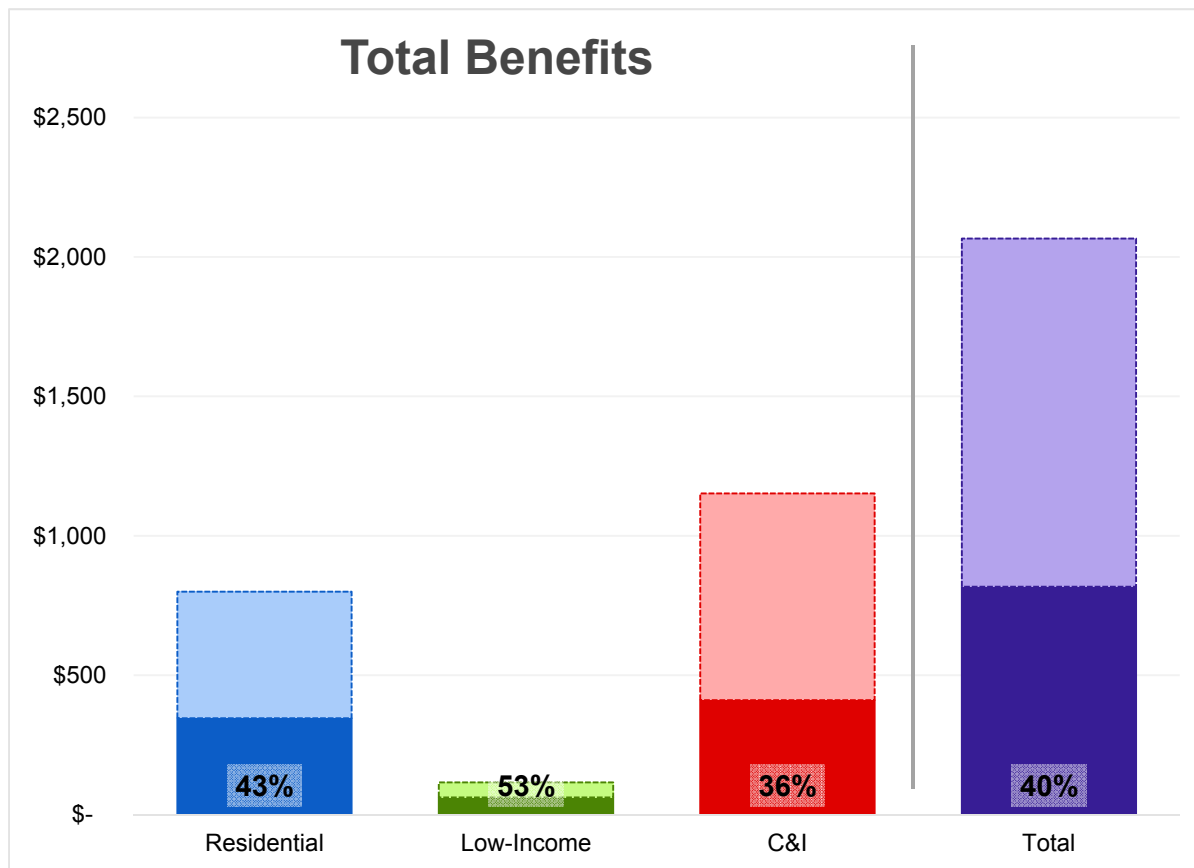
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Electric Total Benefits



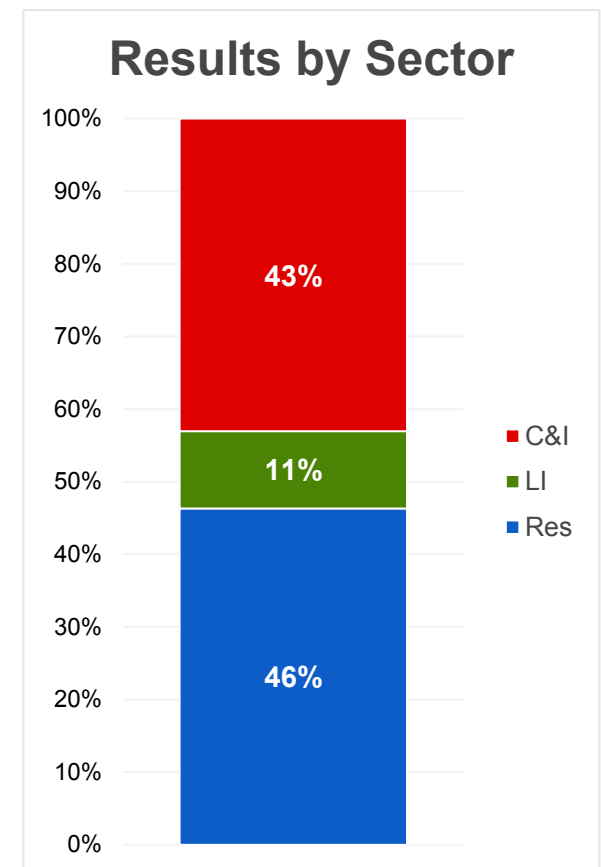
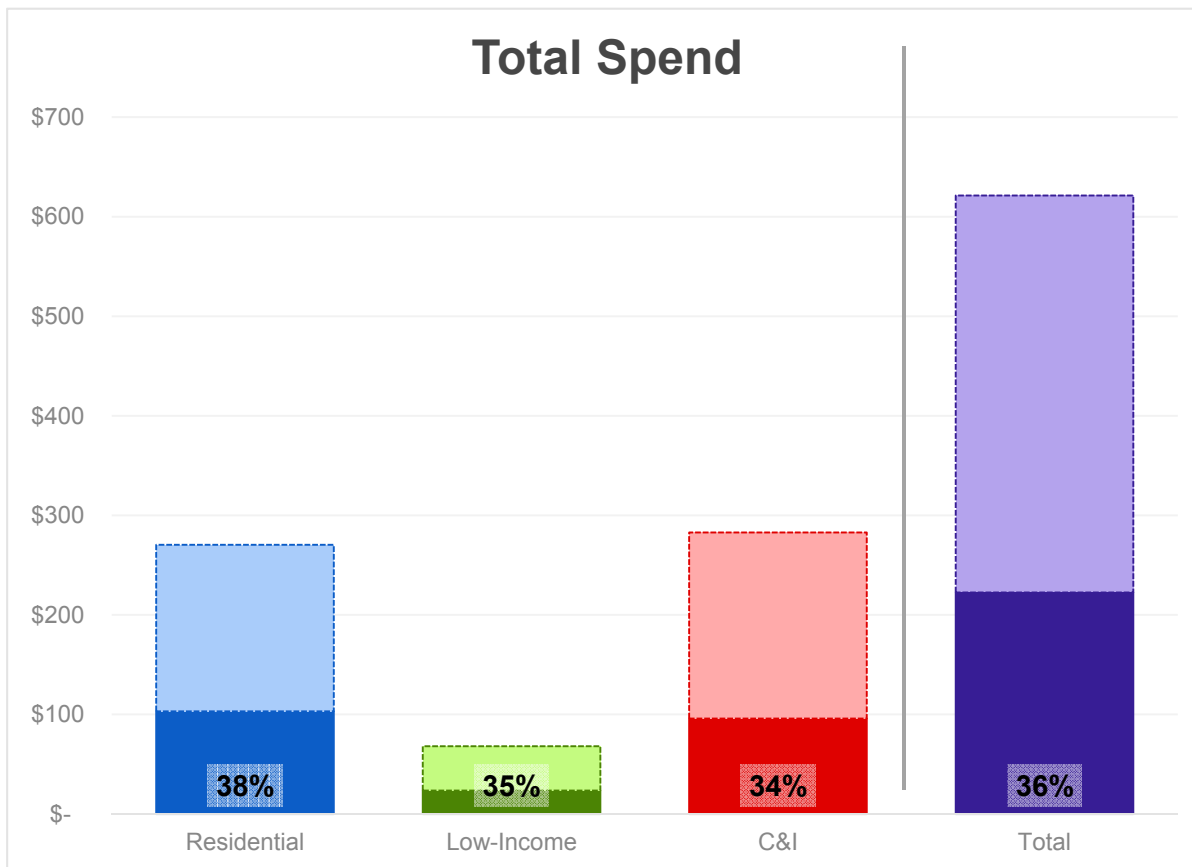
Statewide Achievements as Percent of 2017 Planned Goal
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Electric Total Spend



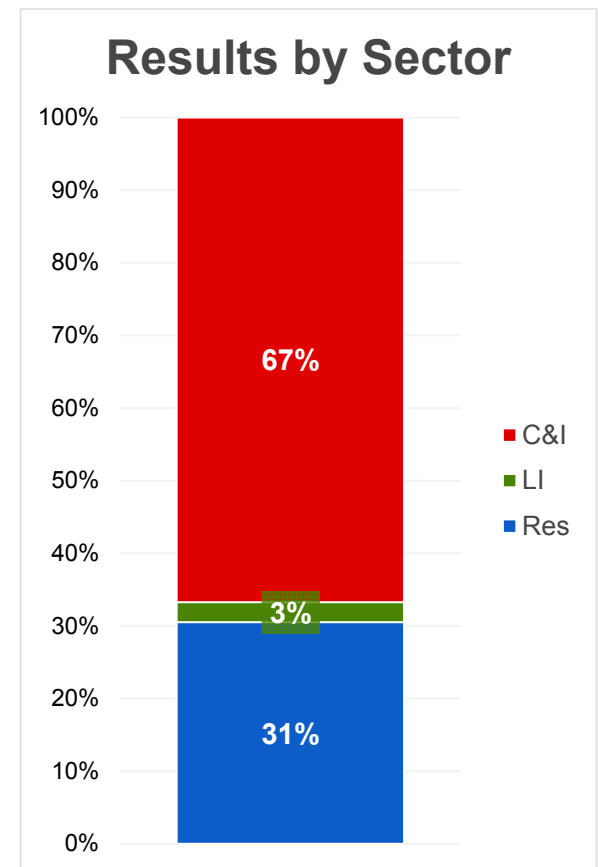
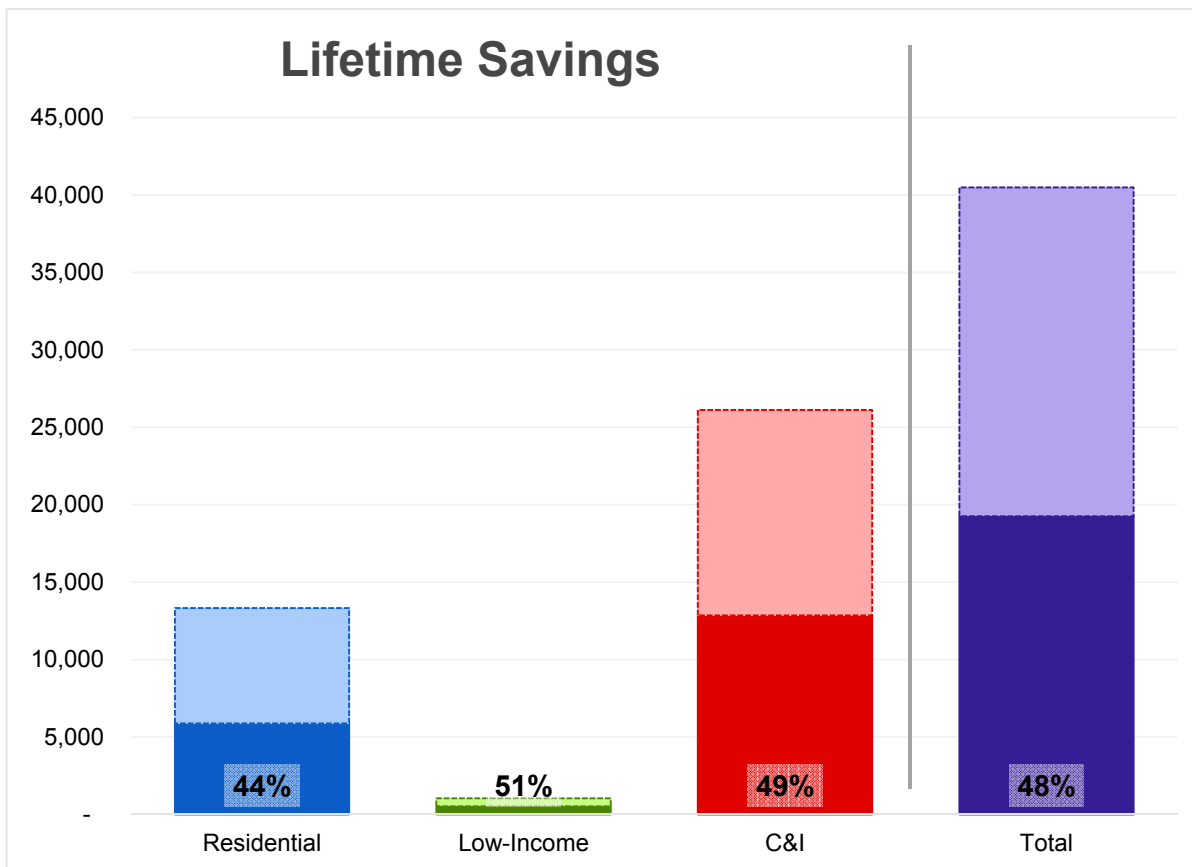
Cumulative Statewide Achievements as Percent of 2016-2018 Planned Goal
(18/36 Months) 50% of term



Electric Cumulative Lifetime Savings



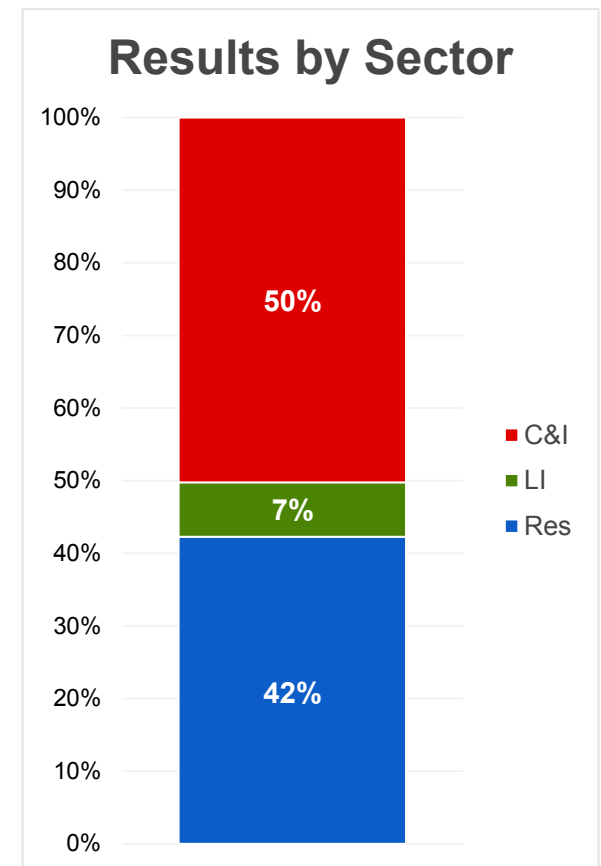
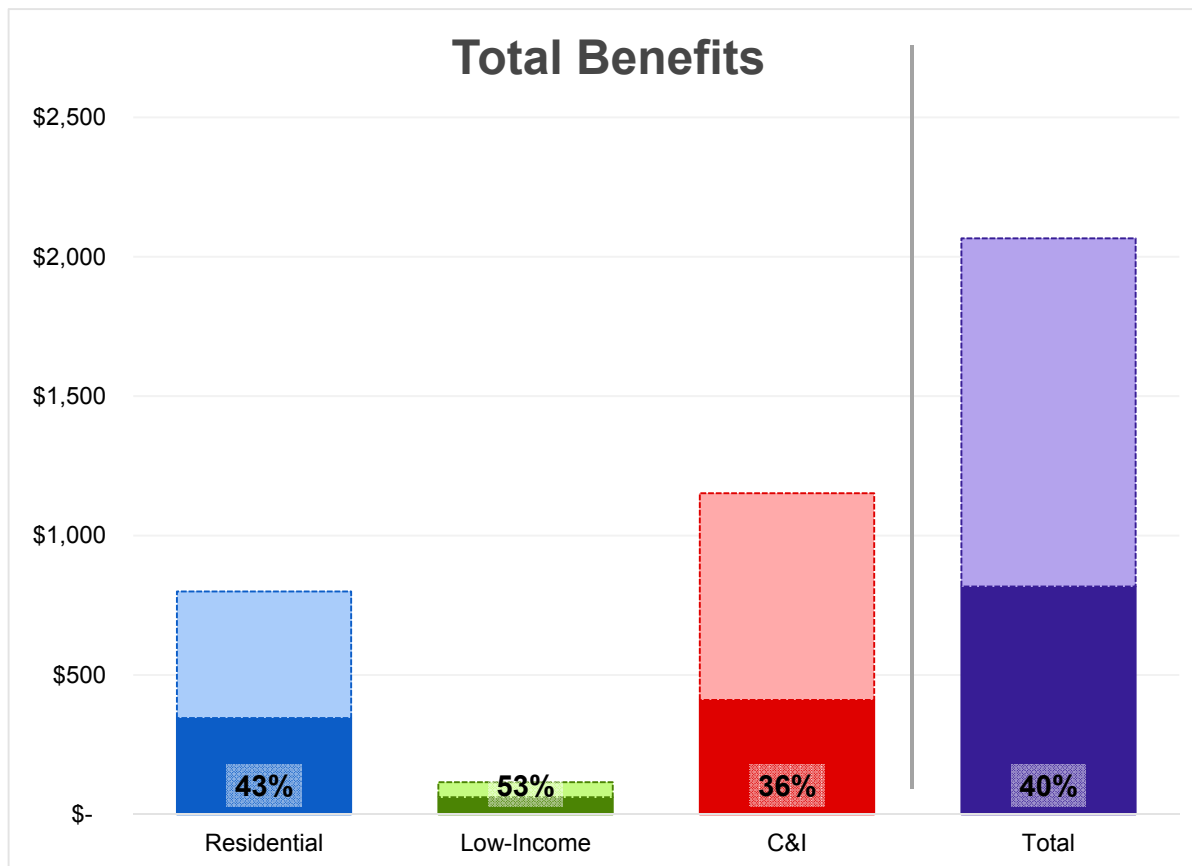
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(18/36 Months) 50% of term



Electric Cumulative Total Benefits



Cumulative Statewide Achievements as Percent of 2016-2018 Planned Goal (18/36 Months) 50% of term



C&I Savings Deeper Dive



Initiative	Annual Savings (MWh)	Achievement to 2017 Goal	Lifetime Savings (MWh)	Achievement to 2017 Goal
C&I New Buildings & Major Renovations	15,159	23%	232,027	22%
C&I Initial Purchase & End of Useful Life	11,753	25%	191,023	25%
C&I Existing Building Retrofit	113,667	36%	1,580,216	36%
C&I Small Business	34,065	33%	674,363	62%
C&I MF Retrofit	2,571	28%	21,309	25%
C&I Upstream Lighting	53,744	26%	353,994	29%

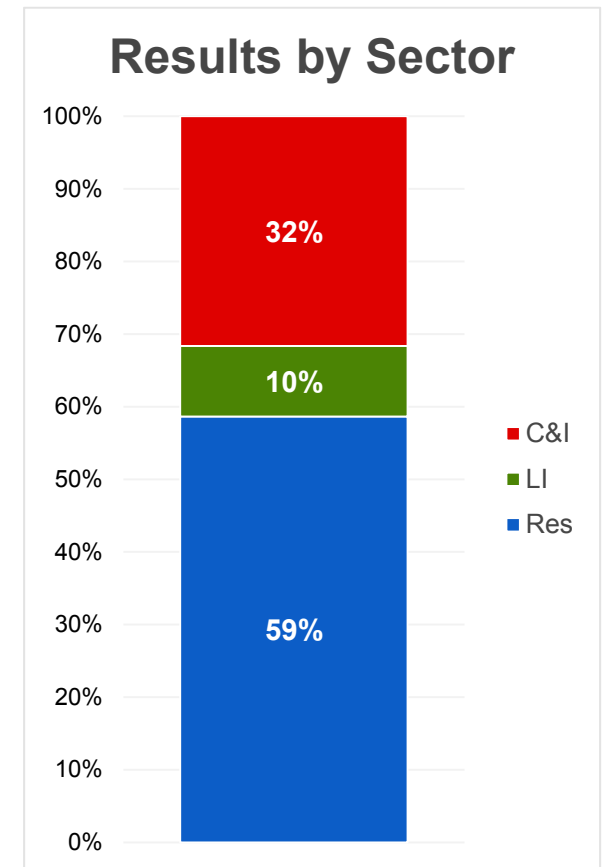
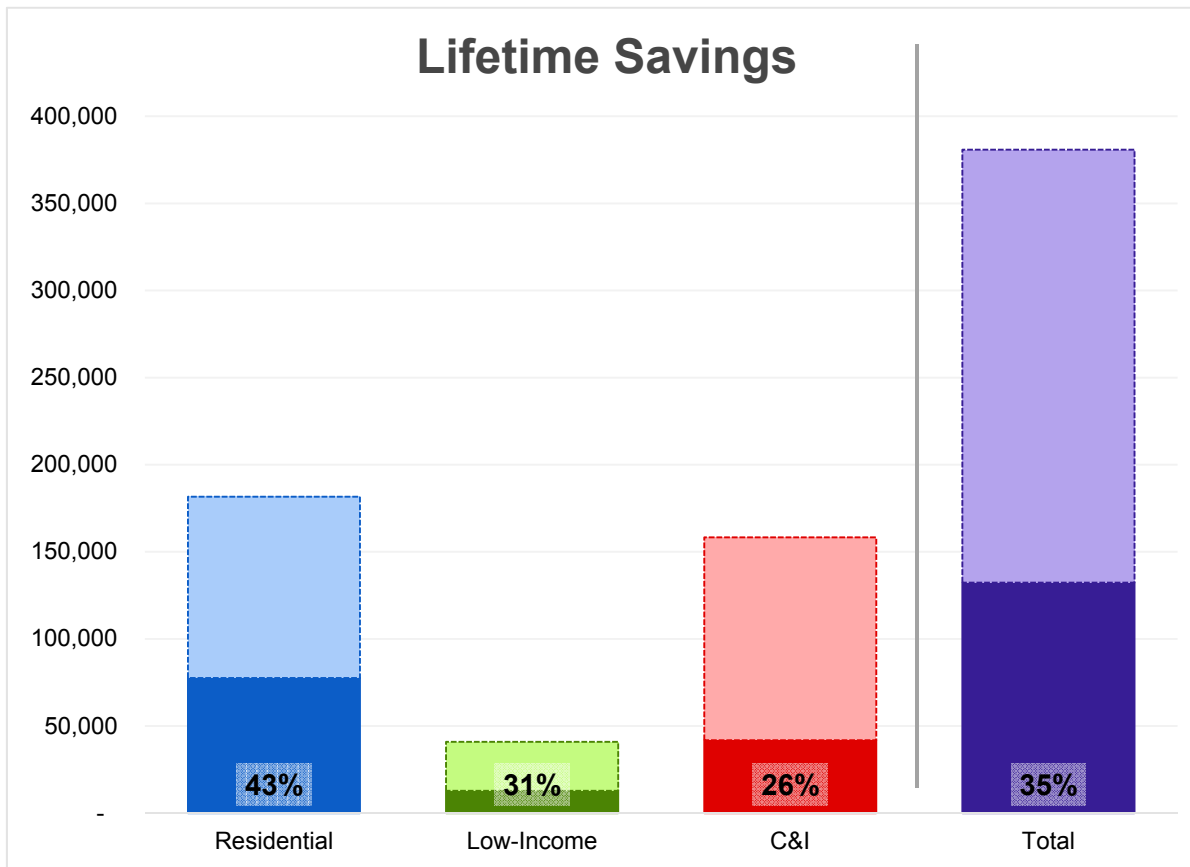


Q2 Gas Performance

Gas Lifetime Savings



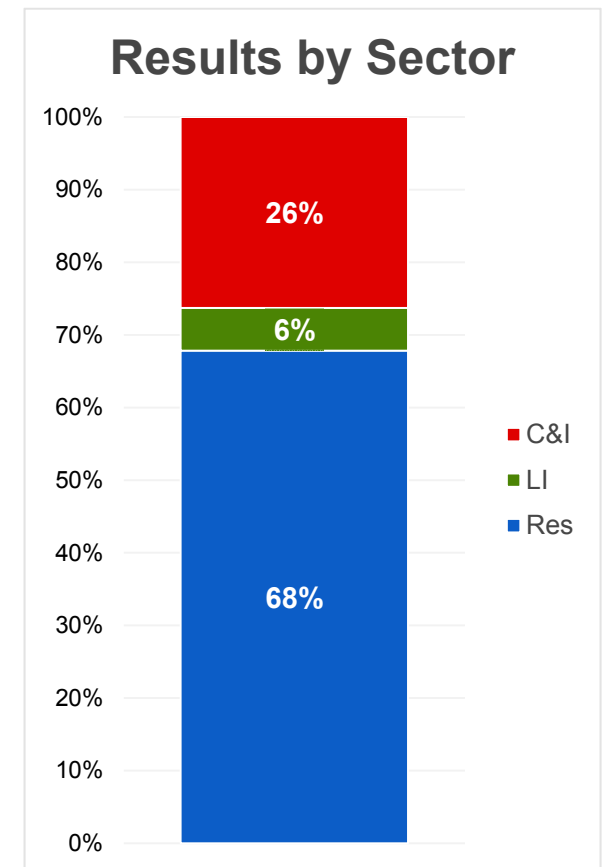
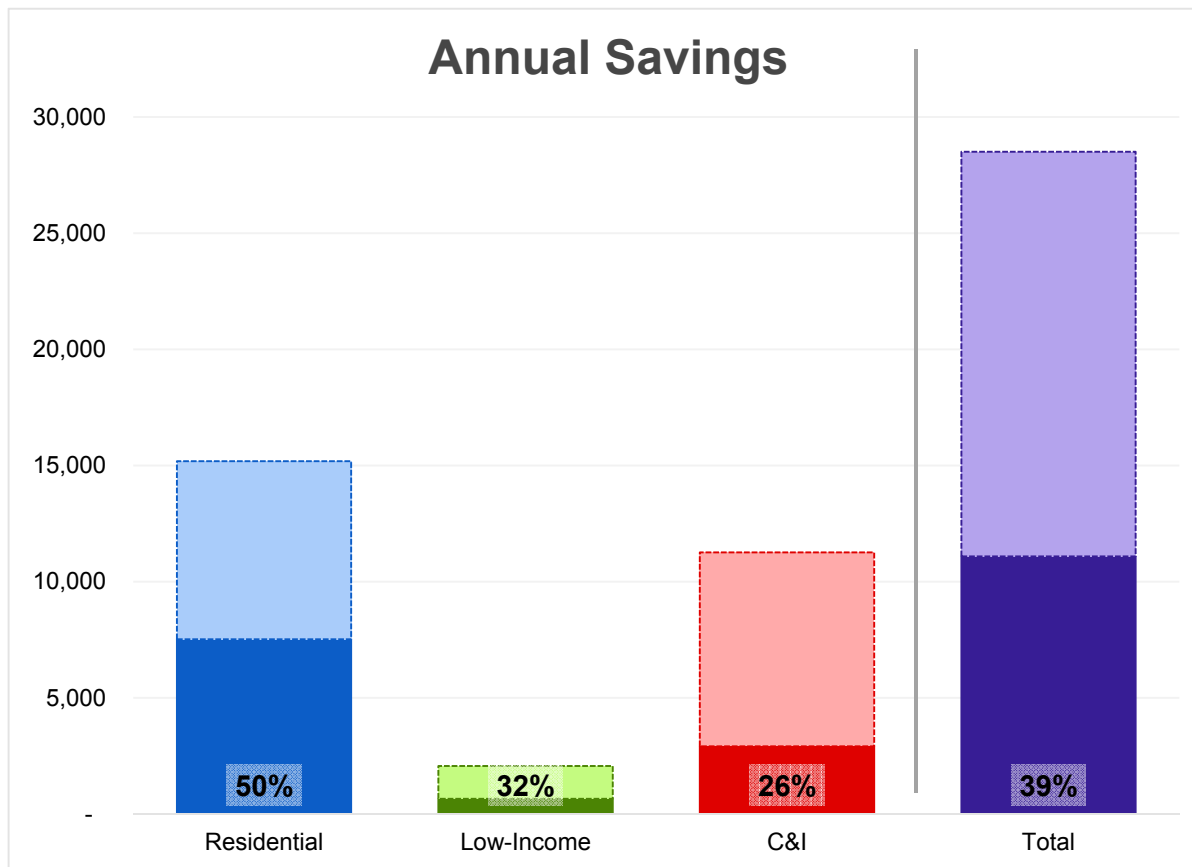
Statewide Achievements as Percent of 2017 Planned Goal (6/12 Months) 50% of term



Gas Annual Savings



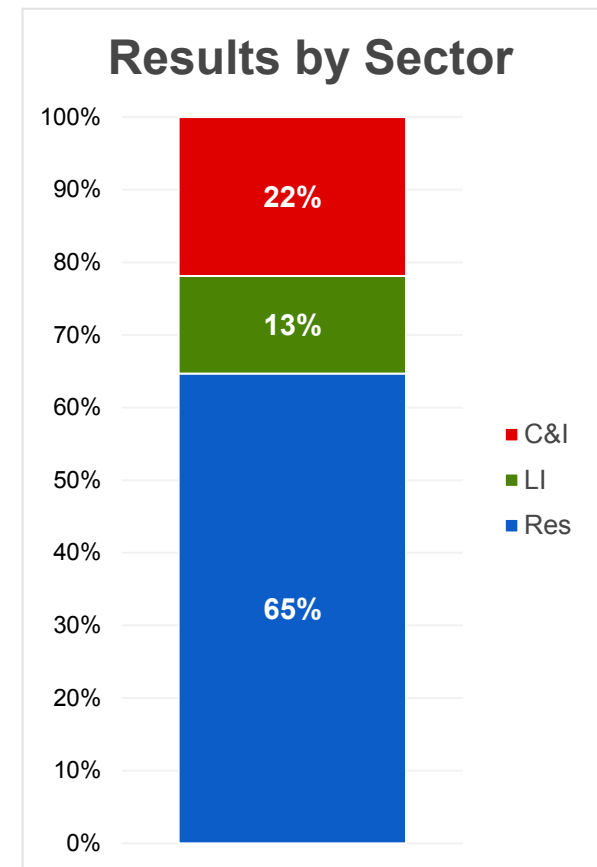
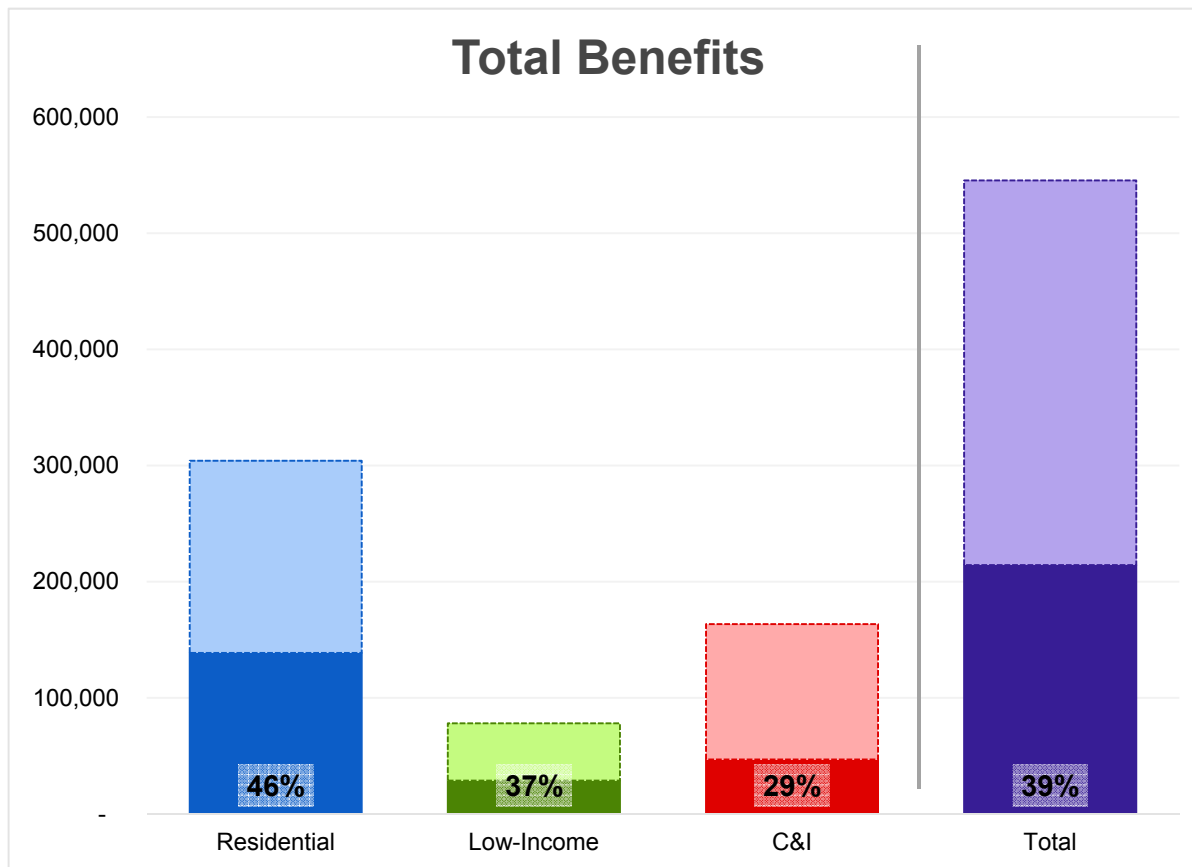
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Gas Total Benefits



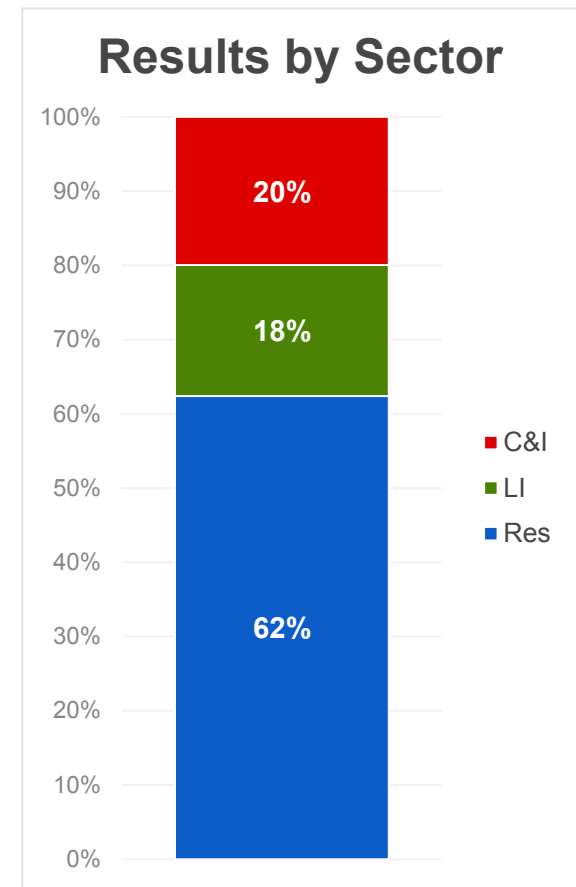
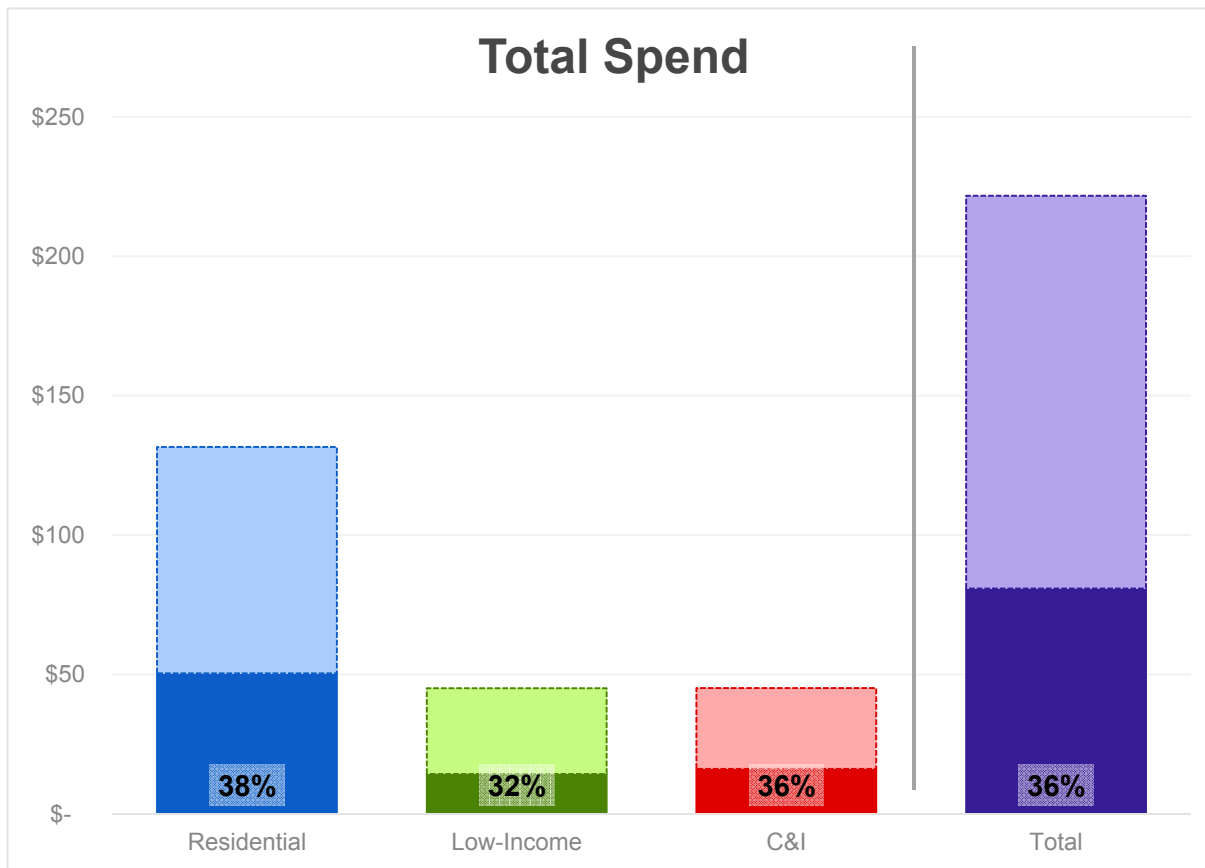
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Gas Total Spend



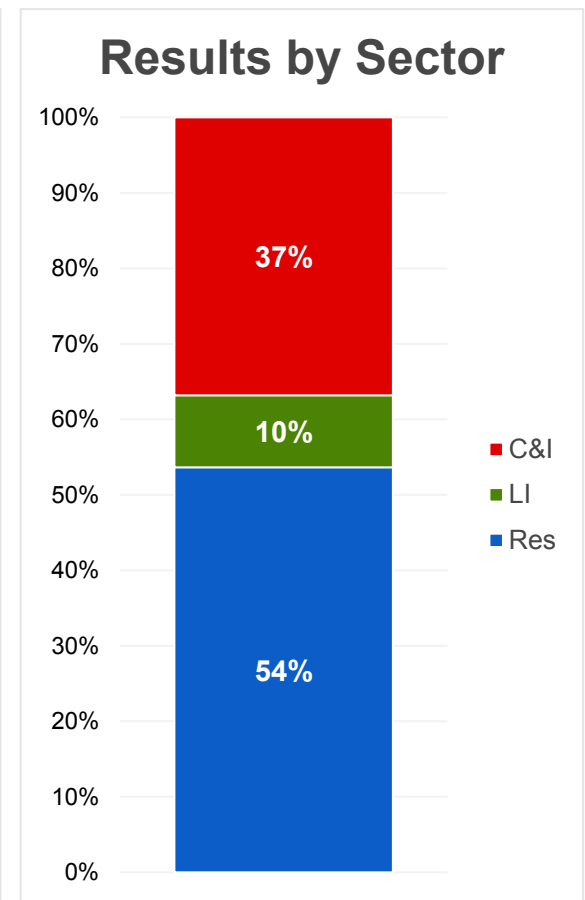
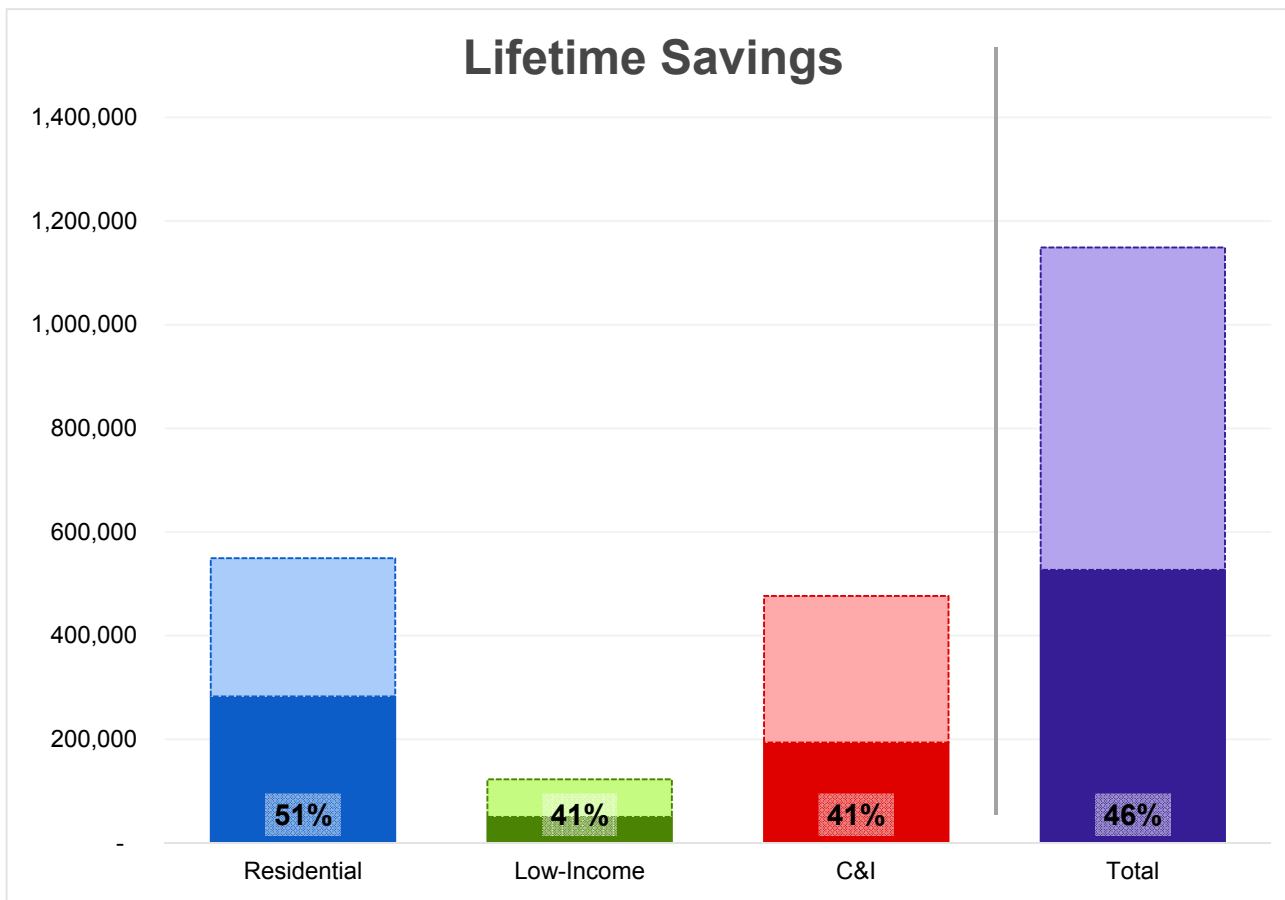
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Gas Cumulative Lifetime Savings



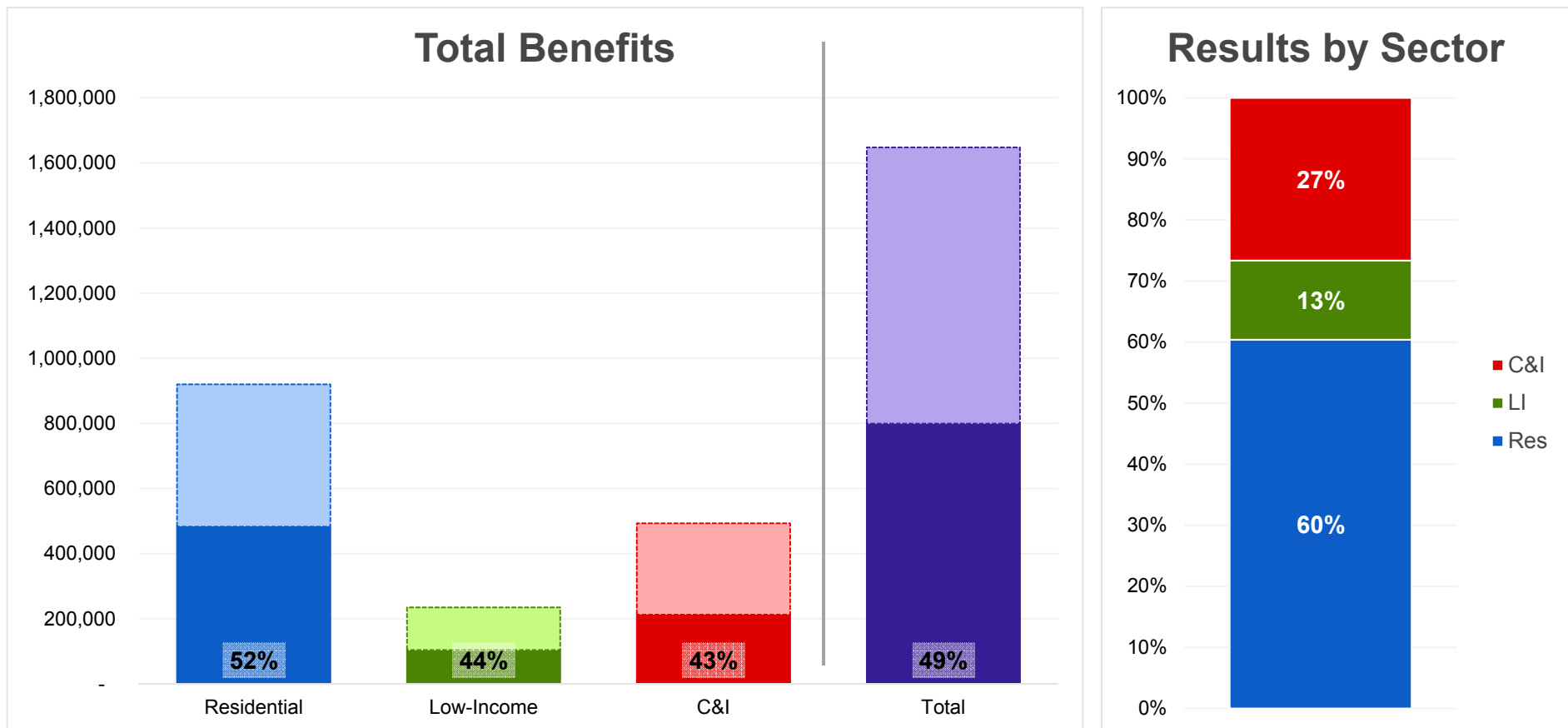
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(18/36 Months) 50% of term



Gas Cumulative Total Benefits



Cumulative Statewide Achievements as Percent of 2016-2018 Planned Goal (18/36 Months) 50% of term



C&I Savings Deeper Dive



Initiative	Annual Savings (therms)	Achievement to 2017 Goal	Lifetime Savings (therms)	Achievement to 2017 Goal
C&I New Buildings & Major Renovations	483,746	18%	9,543,933	19%
C&I Initial Purchase & End of Useful Life	561,640	49%	9,403,598	42%
C&I Existing Building Retrofit	1,709,786	26%	20,807,339	28%
C&I Small Business	96,391	23%	1,072,082	22%
C&I MF Retrofit	62,087	17%	1,035,798	18%

Greenhouse Gas Reductions

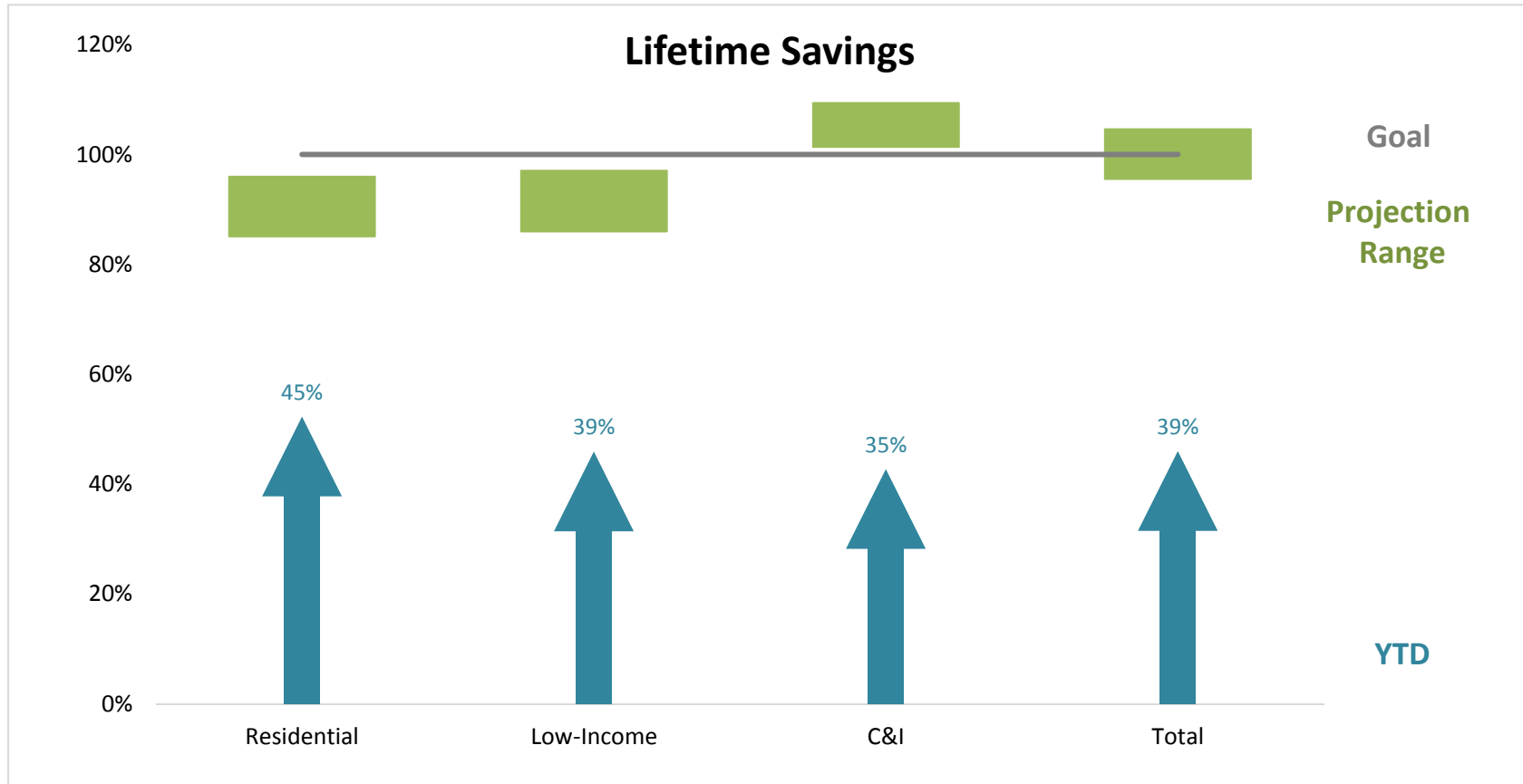


Three-Year Cumulative Greenhouse Gas Emissions Reductions (January 1, 2016 through June 30, 2017) 18/36 months; 50% of term complete

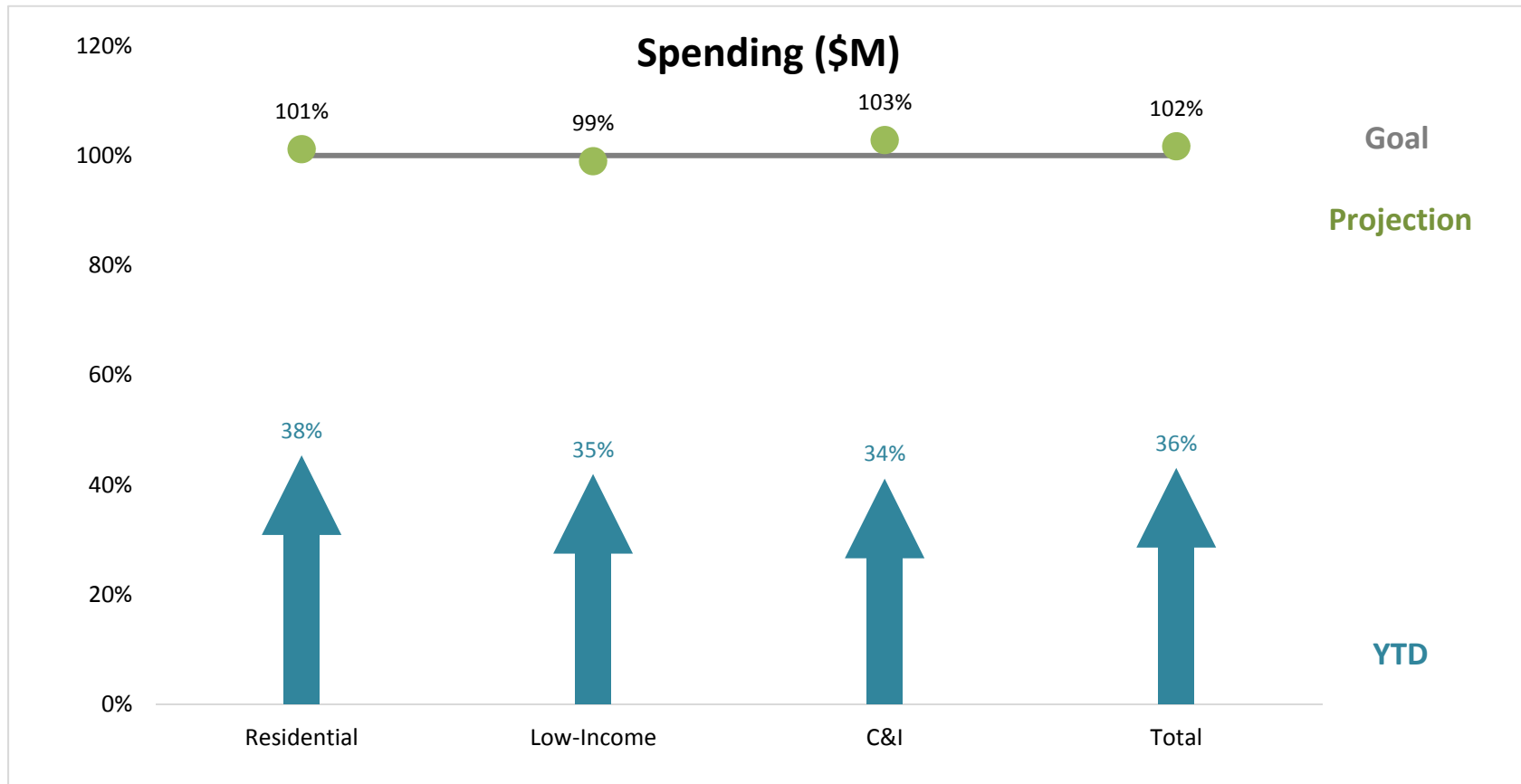
Sector	Net Annual Energy (MWh)	Net Annual Natural Gas (Therms)	Net Annual Oil (MMBTU)	NOX	SO2	CO2
2016-2018 Planned	4,151,386	58,446,676	567,471	838	407	2,165,214
A - Residential	1,767,618	34,900,670	826,732	401	195	1,076,556
B - Low-Income	120,239	6,193,762	284,777	22	11	106,837
C - Commercial & Industrial	2,263,529	17,352,244	(544,038)	415	202	981,821
Cumulative Plan-Term to Date (Q2 2017)	2,207,297	25,007,723	(175,006)	420	204	1,023,048
A - Residential	1,064,465	15,742,048	61,303	221	107	546,824
B - Low-Income	64,531	2,563,963	104,742	12	6	48,950
C - Commercial & Industrial	1,078,301	6,701,712	(341,052)	187	91	427,274
Cumulative Plan-Term to Date % of Planned	53%	43%	-31%	50%	50%	47%
A - Residential	60%	45%	7%	55%	55%	51%
B - Low-Income	54%	41%	37%	54%	54%	46%
C - Commercial & Industrial	48%	39%	63%	45%	45%	44%

Q2 Forecasts

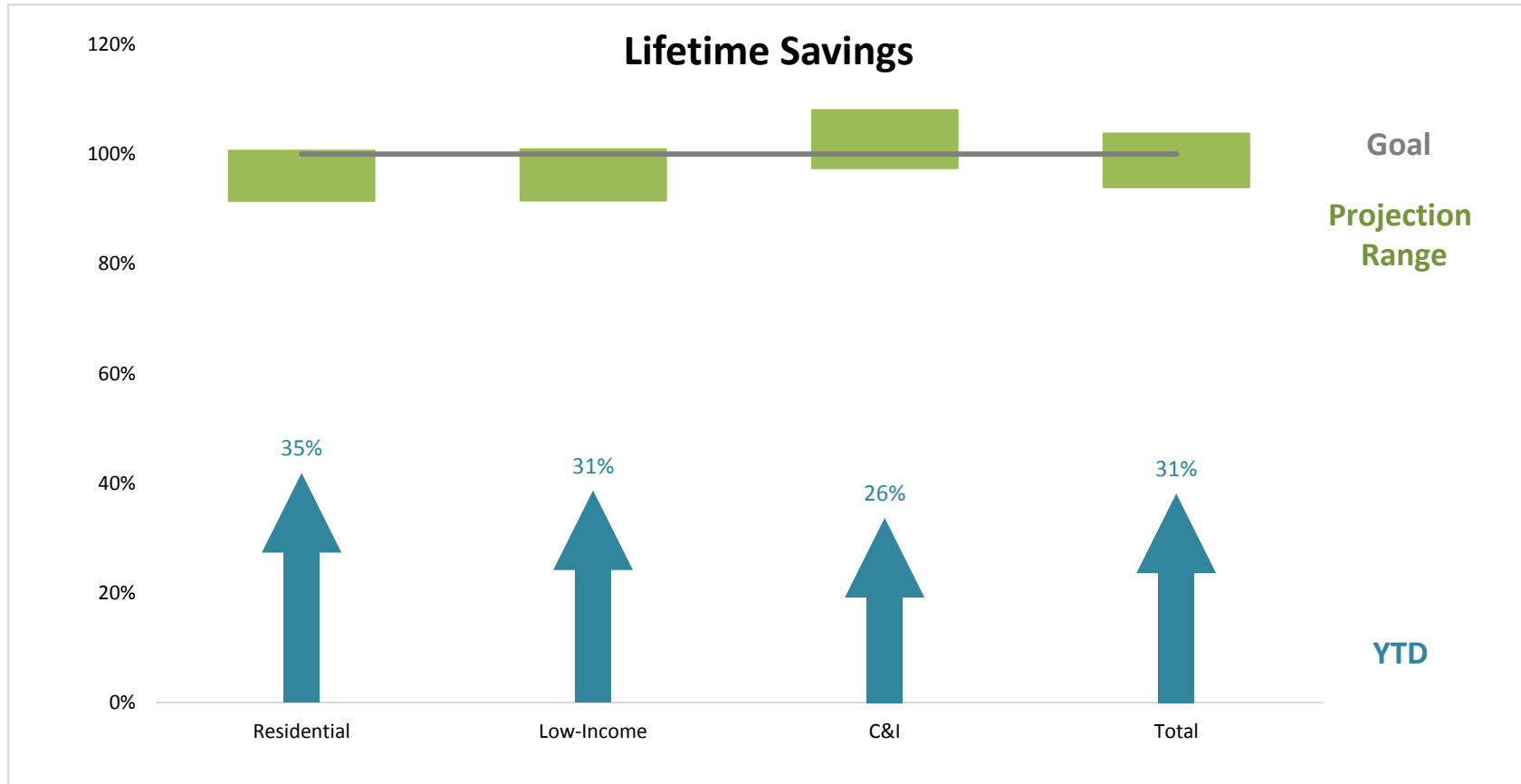
Electric 2017 Year End Forecasts



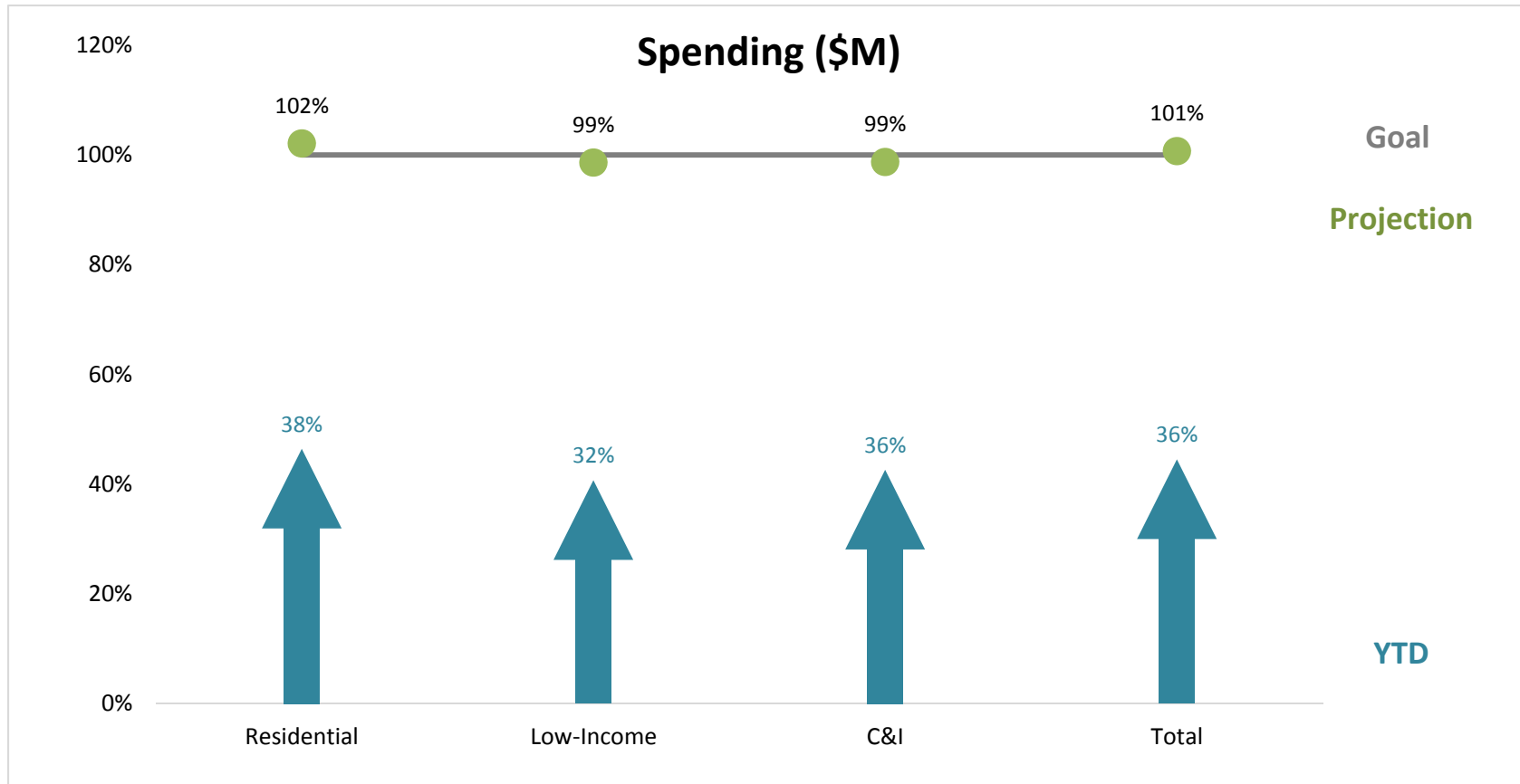
Electric 2017 Year End Forecasts



Gas 2017 Year End Forecasts



Gas 2017 Year End Forecasts



CHP Update

Completed Projects and 2017 Pipeline



	Category	Count	MW	MWh (annual)	MWh (lifetime)	Incentives
STATEWIDE TOTAL	Under Construction for 2017 completion	20	12.68	78,443	1,524,276	\$13,918,741
	Completed/Paid thru Q2 2017	20	12.35	82,406	1,663,992	\$9,536,315
	TOTAL	40	25.03	160,849	3,188,268	\$23,455,056
	Under Construction for 2017 completion (% change from Jan 2017)	0.0%	14.1%	7.7%	1.7%	9.0%
	Completed/Paid thru Q2 2017 (% change from Jan 2017)	53.8%	42.1%	29.3%	31.4%	22.4%
	TOTAL (% change from Jan 2017)	21.2%	26.4%	17.8%	15.3%	14.1%
Program Plan	3 Yr Plan Commitment - Statewide	-	21.43	185,282	3,593,803	\$26,003,544
% of Statewide 3yr Plan	Completed/Paid 2017 + Under Construction	n/a	117%	87%	89%	90%

Category Definitions

Under Construction: Customer has started work on the project (e.g., equipment has been ordered, contracts with engineers have been executed, etc.) – values weighted by probability of completion

Completed/Paid: The project has been installed and at least some incentives have been paid in 2017

Key EEAC Priority Updates

Priority 1: 2016-2018 Plan



Priority 1: 2016-2018 Plan: Monitor progress and provide input into priority commitments and new program initiatives included in the 10-26-15 Council Resolution and the 2016-2018 Three-Year Plan.

- PAs updated at an EEAC meeting through the [HES presentation](#), including performance updates, lessons learned, and evaluation plans.
- PAs provided information during the May 17th meeting on [low income NEIs](#).
- PAs updated the Council on activities related to [affordable housing groups](#), including the Affordable Housing Energy Efficiency Working Group and the Low Income Multi-Family Advisory Committee.
- MTAC approved Fire Smoke Dampers for Elevator Shaft Vents technology.
- PAs completed analysis of small business turnkey delivery program models.
- PAs established a consistent statewide approach to small and mid-size new construction projects.

Priority 2: 2019-2021 Planning



Priority 2: 2019-2021 planning: Identify key factors affecting the programs' ability to maintain high goals and cost-efficient program delivery and explore possible impacts on the 2019-2021 Three Year Plan.

- During the June 21st EEAC Meeting, PAs covered various evaluation considerations and lessons learned during the [Strategic Evaluation Plan update](#).
- PAs shared a slide deck on encouraging the [transformation of the residential new construction](#) market including implication of the User Defined Reference Home (UDRH) baseline (actual EEAC presentation delayed until July).
- PAs and other stakeholders continued to be engaged in ongoing discussions about changes that will affect the 2019-2021 Plan.

Priority 3: Equitable customer participation



Priority 3: Equitable customer participation: Ensure equal access to energy efficiency programs through enhanced delivery models.

- PAs continued to offer and study the targeted efforts for renters and moderate income customers and presented an update to the Council in April.
- PAs organized a joint meeting of Contractor Best Practices Working Group and representatives from LEAN in an effort to increase cross promotion and education of both low-income and HES offers, and to educate HES program contractors about the income-eligible programs.
- PAs added a clothes washer offering for low-income customers following feedback.

Priority 4: Data transparency



Priority 4: Data transparency: Advance transparency, availability and effectiveness of data and information to assess and improve energy efficiency programs.

- PAs continued to improve the information available on [Mass Save Data](#) in Q2.
 - During Q2, the PAs updated Mass Save Data with all performance data (including measure level data) filed in each PA's 2016 Plan-Year Report.
 - New HEAT Loan and Time Series tabs now available.
- The PAs shared monthly data dashboards and presentations.
- PAs launched the [Technical Reference Library](#) (“TRL”), a brand new electronic version of the Technical Reference Manual - the TRL is an electronic database that documents how the PAs consistently, reliably, and transparently calculate savings resulting from the installation of prescriptive energy efficiency measures.
- PAs continued work on [Evaluation, Measurement and Verification](#) (“EM&V”) and an entire EEAC meeting was dedicated to the subject in June.

Priority 5: Integrated Approach to Demand Side Management



Priority 5: Identify opportunities for advancing an integrated approach to demand side management for the 2019-2021 Plan, including peak load reduction, integration of distributed resources and planning in a manner that decreases costs, increases resilience and reliability, supports innovation, and improves both the environment and the economy.

- The [Demand Reduction Subcommittee](#) met on May 25th. National Grid presented and update on [Residential and C&I active Demand Response Demonstration Projects](#).
- The PAs continue to implement their Demand Response Demonstration Projects, and have been working with various demand response consultants, equipment vendors, installers, and other vendors.
- Eversource and Unitil completed briefing in their demand dockets pending at the Department of Public Utilities.

Thank you

