New Jersey Board of Public Utilities and Rutgers University Goal Setting Study

PISCATAWAY, NEW JERSEY

May 1, 2023

Prepared for:

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Executive Summary

Study Objectives and Findings

The New Jersey Board of Public Utilities (NJ BPU) asked Cadmus to update the prior potential energy savings study conducted in 2019, as required in New Jersey's Clean Energy Act (CEA) of 2018. The NJ BPU determined that this adjustment was appropriate to ensure New Jersey had the best possible information to set achievable goals. As part of this goal setting study, Cadmus conducted market research to find new energy efficiency measures that led to new projections for potential energy savings, costs, and program budgets.

This research and goal setting study had three main objectives:

- Adjust the savings potential and goals set in the 2019 potential study analysis to account for subsequent regulatory and market changes
- Assess key new measures, estimate their market potential and cost elements, and use the results as inputs for the potential study adjustments
- Create integrated goals under various future scenarios that are practical, cost-effective, and achievable based on best practices

The scope, methodology, results, and conclusions are summarized in this report, its technical appendix, and models. This study covers a 10-year time horizon from 2024 through 2033, and it adjusted the annual potential of selected measures from the 2019 potential study. Those adjustments were based on changes to state building codes, federal standards, appliance standards, recent building stock baseline studies, program savings, net-to-gross (NTG) ratio updates, current technology market trends, and other priority underlying assumptions suggested by NJ BPU, the Statewide Evaluator (SWE), Rutgers University, and utility working groups.

In 2018, the CEA set targets for state- and utility-administered programs to achieve 2% electric savings and 0.75% natural gas savings compared to utility sales by 2026 (planning year 5 [PY5]). In the 2020 Straw Proposal, the NJ BPU used the 2019 potential study to set performance requirement targets of 2.15% electric savings and 1.10% natural gas savings compared to utility sales by PY5.¹

These are several directional findings for NJ BPU to consider as it works to finalize the next triennium targets for both state- and utility-administered programs:

• CEA minimum target for electricity savings of 2% of sales can be achieved but will require accelerated adoption of electric programs and/or measures. Utilities will need to quickly expand existing programs and promote electric energy efficiency more aggressively to customers to meet the CEA target if the New Jersey state initiatives play a minor role in achieving these goals. As a result, these programs could meet legal mandates without further

¹ New Jersey Board of Public Utilities, Division of Clean Energy. March 20, 2020. *Straw Proposal for New Jersey's Energy Efficiency and Peak Demand Reduction Programs*. PY1 is fiscal year 2022, PY2 is fiscal year 2023, etc.

contributions from state initiatives under the Full Compliance Scenario (Scenario B) with sufficient funding and customer awareness of energy efficiency programs.

- The prior electric performance requirement target, 2.15% by 2026, would require significant investment and is likely unobtainable given the scarcity of cost-effective efficiency remaining. This study found a decline of electric maximum achievable potential from 21% (2019 potential study) to 14% (goal setting study). This one-third drop is a result of multiple factors (loss of residential LED lighting, high saturation and adoption of commercial LED lighting already in the market, new state appliance and federal equipment standards, etc.).
- The natural gas CEA target of 0.75% can be achieved without accelerating measure adoption from prior projections. The maximum gas savings potential declined from 11% (2019 potential study) to 10% (goal setting study); therefore, the prior annual gas savings target of 1.10% could be changed. The required target could be lowered to 1.0% to account for this change in potential. Alternatively, the CEA target of 0.75% could be maintained if any surplus budget could be diverted from natural gas efficiency programs and reserved for other programs, such as efficiency improvements for low-income housing or other priorities for the NJ BPU.
- To achieve CEA targets by 2026 (PY5), the budgets to fund energy efficiency programs are projected to increase by 55% from 2024 (PY3) levels. In PY3, the NJ BPU projected a budget of roughly \$1.2 billion, and even with that investment, the electric CEA target will be met according to the 2020 Straw Proposal performance requirement target. Without the state contributions through other initiatives, the projected investment will increase to \$1.8 billion to achieve the CEA targets (Full Compliance Scenario). This investment assumes an increase in marketing and administration costs as well as offering incentives of 100% of incremental measure cost.
- Moving from state-administrated programs to utility-administrated programs resulted in higher savings targets for utilities since this implies more responsibility for mandated targets. The CEA changed energy efficiency program requirements, and utility-run programs had increased the projected utility savings as well as the projected utility budgets. State-run programs had their ratio further reduced by other factors such as code changes, but the Appliance Standard Law (A5160) and other non-BPU state programs would likely lower the utility contribution and budget needed to meet the CEA.
- Commercial and industrial lighting opportunities still contribute significant, cost-effective potential in the near term. Significant near-term potential savings in lighting remain, though benchmarking conducted for this study as well as recent program accomplishments indicated high saturation of linear LED lighting already in the marketplace. Capturing the remaining commercial and industrial lighting potential will be a large component in achieving the electric CEA target. Considering current market trends, nonresidential LED lighting opportunities will likely reach market saturation in the coming years.
- New program measures and emerging technology potential offer some achievable long-term energy efficiency goals. Interior-insert products for windows, advanced clothing dryers, steam heat upgrades, air source heat pumps to replace unidirectional air conditioning units, and wastewater heat recovery (WWHR) were found cost-effective in certain applications. These

measures would benefit from monitoring these technologies for consideration as future program opportunities. The state and utility programs will also benefit from continued research, active pursuit, and promotion of viable technologies as more data become available in coordination with industry partners. In addition, to advance new program measures and emerging technologies may require the development of pilot programs as well as research and development initiatives to explore new opportunities to capture cost-effective savings and help transform the nascent markets and technologies.

• New Jersey could clarify fuel switching rules more comprehensively. The 2019 New Jersey Energy Master Plan acknowledges the need for fuel switching and the need to consider it in future utility plans. However, it is still unclear if gas utilities may propose fuel switching as a non-pipeline solution or how those utilities could adapt to decreasing demand while maintaining their current infrastructure. New Jersey is developing a Building Decarbonization Plan that focuses on getting customers whose fuel is delivered (fuel oil, propane, etc.) to switch to electric heat pumps. However, fuel switching was not considered in this study, and additional research is needed to forecast adoption rates and savings potential for various heat pump solutions.

This study is intended in part to inform the NJ BPU if the current targets need to be revised considering the dramatic changes in the energy efficiency program landscape for utilities across the country since the spring of 2020. For example, the onset of the COVID-19 pandemic resulted in restrictions on in-person interactions, so utilities had to rethink and reposition their programs and delivery mechanisms. Although program operations have largely returned to normal, utilities face continued uncertainty in achieving energy efficiency and demand reduction targets given supply chain issues, labor shortages, and increasing costs for raw materials and products. Also, the potential for energy efficiency is declining due in part to the high market saturation of residential and nonresidential LED lighting and the adoption of a range of new equipment standards.

The study provides estimates of potential energy savings and budgets for energy efficiency programs in New Jersey, aimed at informing energy efficiency targets and the investments required to achieve them. The final savings target chosen by the NJ BPU may be somewhere between the various scenarios that resulted from this study.

There are also several important considerations that should be kept in mind while reviewing and interpreting these results.

- First, this study does not consider other New Jersey statewide initiatives that may count toward the CEA mandates, such as savings achieved through state energy codes and standards.
- Second, the study uses broad assumptions about the adoption of energy efficiency measures based on current market trends and projected adoption, but program design requires a more detailed look at past participation and incentive levels on a measure-by-measure basis.
- Third, this study cannot predict future markets or building electrification and did not consider program implementation barriers, which may slow the delivery of efficiency measures.

Specific utility-level targets are intended to provide directional guidance, but differences between utilities may impact program design and the ability to achieve a certain level of savings. The study includes estimates of program-level savings and budgets based on a measure-by-measure allocation to planned PY3 programs, but it may not reflect the measure mix of the planned design of future programs.

In conclusion, while the study provides useful estimates, it is directional rather than an indication of a clear and fixed goal. It is important to consider its limitations and the need for continued planning and adjustment to account for changing market conditions and policies.

Goal Setting Targets

Based on the scenario analysis shown in **Table 1**, adoption rates could have a significant impact on achieving the CEA targets. The first scenario, where there is no acceleration in adoption rates, falls short of meeting the CEA targets. Scenario B required accelerated adoption along with a 55% increase in the budget for PY5 as compared to the Board's prior estimated budget for PY3. Scenario C, in which the adoption rates exceed expectations, leads to achieving the targets for CEA; however, this achievement comes at the cost of more than doubling the anticipated budget for PY5.

Table 1. FTS Savings Achievement by Scenario								
	Scenario A	Scenario B	Scenario C					
	Base Case	Full Compliance	High Adoption					
Electricity Savings Achievement PY5	1.65%	2.00%	2.20%					
Gas Savings Achievement PY5	0.75%	0.75%	1.54%					
Budget (Increases from PY3 Board Order Funding to Goal Set PY5)	35%	55%	157%					

Table 1. PY5 Savings Achievement by Scenario

This study identified a scenario (Full Compliance Scenario) to meet the targets set by the CEA—annual electric savings of 2% and annual gas savings of 0.75% by 2026. **Table 2** lists the adjusted targets for the Full Compliance Scenario in this study for 2024 through 2027. Potential savings gradually increase in PY3 (FY2024) and PY4 (FY2025) until plateauing at their mandated targets in PY5 (FY2026).

Triennium -	Electric Goals			Na	tural Gas Go	als	Budget (millions of USD)		
Year	Utility	State	Total	Utility	State	Total	Utility	State	Total
T1 - 2024	1.18%	0.13%	1.31%	0.55%	0.07%	0.61%	\$924	\$240	\$1,163
T2 - 2025	1.48%	0.18%	1.66%	0.61%	0.08%	0.68%	\$1,193	\$297	\$1,490
T2 - 2026	1.77%	0.23%	2.00%	0.67%	0.08%	0.75%	\$1,499	\$367	\$1,866
T2 - 2027	1.77%	0.23%	2.00%	0.67%	0.08%	0.75%	\$1,586	\$383	\$1,969

Table 2. New Jersey Full Compliance Scenario Targets

There are two implications for energy efficiency programs in meeting this target. First, this study found that the 2019 potential study adoption rates (after accounting for all of the adjustments) could not achieve the CEA goal for electric savings by 2026 without aggressively increasing adoption of measures (e.g., increasing adoption in the near term). Second, achieving the target requires more investment through marketing and incentives. In addition, the shift from state-led programs toward utility-led programs puts a larger burden on the utility-led programs to achieve the targets under this scenario.

This study found that the natural gas savings target of 0.75% can be achieved without increasing adoption in the near term.

Considering the implications of trying to achieve full compliance by 2026, this study also assessed another scenario where no increased adoption was assumed. In parallel to this study, the NJ BPU is investigating the amount of savings that can be achieved through statewide initiatives to also count toward the CEA mandates. These initiatives include savings from recently passed appliance standards and new construction codes.² This may mean that a Full Compliance Scenario may not be necessary when considering that state programs may account for a larger portion of the targets than this study modeled.

Table 3 shows a scenario (Base Case Scenario) where no adoption adjustments were made and, as a result, the savings do not achieve the CEA electric targets by 2026. Under this scenario, the natural gas CEA target of 0.75% can be achieved by 2025.

Triennium Electric Goals			Natural Gas Goals			Budget (millions of USD)			
- Year	Utility	State	Total	Utility	State	Total	Utility	State	Total
T1 - 2024	1.17%	0.12%	1.29%	0.54%	0.07%	0.61%	\$888	\$230	\$1,117
T2 - 2025	1.32%	0.14%	1.46%	0.60%	0.08%	0.68%	\$1,080	\$272	\$1,352
T2 - 2026	1.48%	0.17%	1.65%	0.66%	0.09%	0.75%	\$1,306	\$323	\$1,628
T2 - 2027	1.65%	0.20%	1.85%	0.67%	0.08%	0.75%	\$1,492	\$357	\$1,849

Table 3.	New Jersey	Base Case	Scenario	Targets
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Figure 1 illustrates the implications of state initiatives on utility budgets and goals. As the size (amount of savings) of the state initiative increases, the state share of the CEA goal becomes larger and, as a result, the utility budget and target share declines.

² This study did not assess the impacts of appliance standards and new constructions codes since they were considered outside the scope of the study.



Figure 1. Impact of State Initiatives on Utility Goals and Budgets

The investment for future energy efficiency through programs will require increased funding as low-cost measures opportunities are declining or are no longer available (e.g., residential lighting). In **Figure 2**, the study compared prior Straw Proposal funding (2020) and Board Order funding through approved energy efficiency plans. The dashed lines indicate linear trend projections from the available data.

This study estimates a \$1.866 billion annual budget to achieve the CEA goal (2% electric and 0.75% natural gas) by PY5. This is an increase compared to prior projections, but it is only about \$250 million higher than 2020 Board Order funding would have been in that year. The prior Straw Proposal budgets in 2020 (including the prior 2019 potential study targets) were based on secondary data from other program administrators (e.g., Massachusetts utility programs) before New Jersey programs were approved. This study used the New Jersey data instead.



Figure 2. Projected Energy Efficiency Program Budget Comparison

This study found that the targets mandated by the CEA can be achieved, but the budgets for energy efficiency will need to be increased compared to prior projections. There are several factors that led to differences in budget estimates.

- First, the targets mandated by the CEA will require significant investment in programs to achieve them. The easily attainable savings within New Jersey's energy efficiency landscape, such as from residential LED lighting, are gone, so further savings must be found in more expensive measures like HVAC equipment.
- Second, the goal setting study budget assumes incentives are equal to 100% of the measure incremental cost (this aligns with adoption assumptions within the maximum achievable potential results). This, in practice, may not be the level of incentives that the state- and utility-administered programs offer to customers.

As a result, the future planning budgets may be different than projected in **Figure 2**. Third, the Straw Proposal (including the prior 2019 potential study Straw Proposal budget) did not incorporate inflation, whereas the goal setting study did include annual inflation. Finally, in the first triennium, spending has been lower than expected along with the realized energy savings, so more resources are likely needed to catch up.

Comparison of 2023 Potential Study to 2019 Potential Study

This study updates the estimates of economic potential and achievable potential set in the 2019 potential study and adds new and emerging efficiency measures.³

Economic potential includes all measures screened as cost-effective and technically feasible,⁴ assuming no market barriers and 100% adoption of all efficiency opportunities. Maximum **achievable potential** for energy efficiency is defined as the maximum level of program activity and savings possible, given market barriers to adoption of energy-efficient technologies, without typical limits on incentive payments, and including administrative costs necessary to implement programs.

Starting with the prior study's assumptions, Cadmus revised savings and costs by reviewing a range of sources. Cadmus incorporated changes made to state building codes and federal standards since 2019, updated the measure potential to account for recent program accomplishments, incorporated 2023 NTG values, revised projected statewide energy forecasts, and integrated utility feedback (where feasible). Cadmus also reviewed and integrated updates made to the New Jersey Technical Reference Manual (NJ TRM) and mapped possible measures to utility programs. To ensure accuracy, Cadmus also incorporated data from recent building stock baseline studies, such as the commercial building audits, commercial baseline studies, and the New Jersey Multifamily Building Baseline Study.

Details on these adjustments can be found in the Methodology Overview section of this report.

Cadmus conducted a lighting analysis, using regional building audit data and New Jersey building stock assessments, to estimate the current and projected market saturation of nonresidential LED lighting. This analysis confirmed that recent New Jersey and utility nonresidential lighting programs have coincided with high market adoption of advanced lighting. This new study also accounted for other state and utility program accomplishments and trends, such as the accelerated adoption of smart thermostats under different scenarios, which were included in the previous study. By addressing these changes and trends, this study gives a comprehensive and accurate analysis of the potential energy savings that could be achieved through known energy efficiency measures in New Jersey.

Table 4 provides a comparison of the primary adjustments made as part of this study, relative to thescenario where CEA goals are met by 2026 (Full Compliance Scenario). This comparison shows theoverall impact by each sensitivity adjustment that include changes to state appliance and federal

³ The prior potential study was conduct by Optimal Energy in 2019. The final version of that report and its appendices is here: <u>NJ+EE+Potential+Report+-+FINAL+with+App+A-H+-+5.24.19.pdf</u>

⁴ To assess the new measures, Cadmus used the New Jersey Cost Test, which follows the NJ BPU Agenda item 8A, adopted August 24, 2020. The 2019 study considered a measure to be cost-effective if the net present value (NPV) of the benefits over its effective useful life is equal to or greater than the NPV of the measure cost, based on a societal cost test (SCT). This definition represents the avoided cost assumptions from Rutgers Center for Green Building's "Energy Efficiency Cost Benefit Analysis Avoided Cost Assumption: Technical Memo," dated May 1, 2019.

equipment standards, NJ TRM updates, NTG changes, equipment saturation changes, program accomplishments, utility requested updates and review, and inflation reduction act impacts.

The updates shown in **Table 4** impacted the results in different ways and were applied on a measure level. The biggest collective change came from updates made based on anticipated federal funding for building upgrades in the Inflation Reduction Act (IRA, H.R. 5376), adjustments made to address utility feedback on the prior study, and program accomplishments to date. In some cases, the savings and budget may decrease or increase depending on the adjustment. For example, an NJ TRM update found that some measures required a reduction in savings and in other cases found increases in measure savings. In other adjustments, there was a shift from electric to natural gas due to changes in residential equipment fuel shares based on building stock and Energy Information Administration's Residential Energy Consumption Survey (RECS) data.

Table 4. Adjustment Sensitivity Comparison to Full Compliance Scenario (2024-2027)

Year Range	Item Isolated for Sensitivity Analysis	Electric Savings Sensitivity (MWh)	Natural Gas Savings Sensitivity (Dth)
PY3-PY6 (2024-2027)	Full Compliance Scenario	5,222,379	12,893,090
	State Appliance Standards/Federal Standards ^a	-6%	4%
	NJ TRM Update	-4%	9%
	Net-to-Gross	-10%	-3%
	Building Stock/RECS Fuel Share Saturations	-4%	12%
	IRA/Utility Feedback discussed in Methodology Section/Program Accomplishments	-14%	-7%

^a Residential HVAC federal standard changes include two embedded factors: new federal standard efficiency tier changes and alignment to HVAC efficiency tiers offered through current programs. For certain measures, it represents an increase in savings. Negative numbers indicate that including an adjustment reduces achievable potential.

Table 5 shows the comparison of electric cumulative 10-year potential for the 2019 potential study andthis goal setting study. As shown, this study's estimates of electric *economic* and maximum *achievable*potential savings are substantially lower than the 2019 study, by approximately 11 and sevenpercentage points, respectively. This represents a reduction of 9 million MWh of economic potential and5 million MWh of maximum achievable potential in the state. This indicates less availability for cost-effective electric energy efficiency potential.

Study and Year	Net Potential	Residential Savings		Commercial Savi	& Industrial ngs	Total Savings	Total Savings
		(MWh)	% of Sales	(MWh)	% of Sales	(MWh)	(% of Sales)
2019 Potential	Economic Potential	7,575,463	23%	20,069,796	42%	27,645,258	34%
Study (2020-2029)	Max Achievable Potential	4,110,030	13%	12,749,878	27%	16,859,908	21%
2023 Goal Setting	Economic Potential	4,814,223	15%	13,759,748	29%	18,573,971	23%
Study (2024-2033) ^a	Max Achievable Potential	2,988,332	9%	8,627,516	18%	11,615,847	14%

Table 5. Net Electric Cumulative Potential Comparison (10-year)

^a Potential savings results includes the cost-effective iterations of the new measures researched as part of this study.

Table 6 shows the comparison of natural gas cumulative 10-year potential for the 2019 study and this study. This study's adjusted estimates were relatively close to the previous study, and economic and maximum achievable potential gas savings decreased by only one percentage point. That decrease represents an approximately 6 million dekatherms of economic potential and 5 million dekatherms of achievable potential in the state. As with electric potential, this indicates less availability for cost-effective natural gas energy efficiency potential, but the adjustments resulted in minimal impact to the available natural gas potential overall (e.g., less than 10% decline in potential).

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Study and Year	Net Potential	Residential Savings		Commercial Savi	& Industrial ngs	Total Savings	Total Savings
		(Dth)	% of Sales	(Dth)	% of Sales	(Dth)	(% of Sales)
2019 Potential Study (2020-2029)	Economic Potential	25,161,000	9%	59,483,000	26%	84,644,000	17%
	Max Achievable Potential	21,264,000	8%	35,741,000	16%	57,005,000	11%
2023 Goal Setting Study (2024-2033)ª	Economic Potential	26,797,224	10%	51,671,801	23%	78,469,026	16%
	Max Achievable Potential	21,537,210	8%	30,091,497	13%	51,628,707	10%

Table 6. Net Natural Gas Cumulative Potential Comparison (10-year)

^a Potential results include the cost-effective iterations of the new measures researched as part of this study.

New Measures and Projected Scenarios

The adjustments to the prior study resulted in new potential energy saving estimates for 2024 to 2033. This study also assessed market trends to identify key energy efficiency gaps, new innovative technology, and areas for greatest progress to inform energy efficiency goal setting for the second triennium and overall potential results. Cadmus analyzed market potential to better understand the economic and market factors that may drive adoption of energy efficiency measures in New Jersey and revised the 10-year achievable potential estimates for selected measures.

This study assessed technical potential, economic potential, and achievable potential for the measures and three achievable scenarios. Cadmus combined the results with updated potential study estimates from the 2019 study. The market potential study found 10 new or high-potential energy efficiency measures. Five were found to be cost-effective depending on building sector and application, as shown in **Table 7**. Discussion of all 10 measures can be found in the *New Measure Characterization* section.

Fable 7. New Cost-Effective Measures	for Energy	/ Efficiency in New J	ersey
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New Measure	Sector	Segment
Interior-insert products for windows	Residential	Single-family, multifamily
Ultrasonic or desiccant-based clothing dryers	Residential	Single-family, multifamily
Thermostatic restrictor valves (TRVs), water meters, master vents, and other steam heat upgrades	Residential	Single-family, multifamily
Air source heat pumps to replace unidirectional air conditioning units	Residential	Single-family
Wastewater heat recovery (WWHR) using a heat pump to extract heat from water in a building's main sewer line and use it to preheat fresh water for domestic hot water system.	Commercial	Food service, health service, hospital, lodging

Cadmus made projections to describe New Jersey's energy efficiency potential in three different future scenarios for base case, full compliance, and high adoption. These scenarios, modeled to meet the CEA-mandated energy efficiency targets, represent the maximum achievable net savings potential.

BASE CASE SCENARIO (SCENARIO A) represents potential study adjustments and measures, including new emerging measures, that passed the cost-effectiveness screen. Under this scenario, electric annual savings were below the CEA-mandated targets in 2026, while natural gas met the CEA targets. This is the business-as-usual (BAU) scenario in which measure adoption is not accelerated with additional programming budget.

FULL COMPLIANCE SCENARIO (SCENARIO B) aimed to meet the CEA-mandated targets in 2026 by increasing the rate of annual adoption for selected measures, adjusting maximum achievable scenario penetrations based on current market conditions, and increasing administrative costs by 10% for these measures. Adoption was capped once savings reached 2% for electric and 0.75% for gas.

HIGH ADOPTION SCENARIO (SCENARIO C) represents an increased rate of annual adoption and budgets, including an increase in marketing funding. This scenario exceeded CEA-mandated targets and was not restricted by the cost-effectiveness screen. Certain non-cost-effective measures were added, and administrative costs increased by 10% to account for the higher marketing budget. The High Adoption Scenario aimed to achieve the highest level of energy savings by allowing unconstrained adoption of measures.

Figure 3 shows the annual electric savings under each of the three scenarios starting in 2024 (PY3) and continuing through the second triennium of this decade (2025-2027). Scenarios A and B have roughly the same electric potential in 2024, but Scenario B accelerates quickly in 2025 (PY4) and continues to accelerate in 2026 (PY5) to reach the CEA target. Scenario C outpaces both, and its maximum potential was not capped to CEA targets and includes some non-cost-effective measures.





■ Goal Set Scenario A (Base - BAU) ■ Goal Set Scenario B (Full Compliance) ■ Goal Set Scenario C (High Adoption)

Figure 4 shows the annual natural gas savings under each of the three scenarios starting in 2024 (PY3) and continuing through the second triennium of this decade (2025-2027). Mandated natural gas savings (e.g., CEA goal of 0.75% of sales) can be achieved without accelerating measure adoption from prior projections, so natural gas potential is identical for Scenarios A and B. Natural gas saving potential in

Scenario C was consistently more than double the mandated amount. This indicates that large amounts of natural gas maximum achievable potential continue to be available for programs.⁵



Figure 4. Gas Potential Savings by Goal Setting Study Scenario

Figure 5 shows the Board Order budgets in the first triennium along with the annual energy efficiency budgets under each of the three scenarios starting in 2024 (PY3). The project budgets continue through the second triennium of this decade (2025-2027). Budgets for Scenarios A and B are close through the second triennium, varying by less than \$500 million in total over that period. Scenario C, High Adoption, program budgets are consistently at least 85% higher than Scenario A, the Base Case. This budget increase resulted from using certain non-cost-effective measures, as well as removing the CEA goal cap.



Figure 5. Total Energy Efficiency by Scenario

⁵ This study acknowledges that New Jersey is developing the Building Decarbonization Plan that may lower the available natural gas energy efficiency potential.

BPU Goal Setting Study Overview

Scope of Assessment and Objectives

In 2019, the New Jersey Board of Public Utilities (NJ BPU) commissioned a study to determine the maximum potential for electricity savings, gas savings, and peak reduction potential for gas and electric utilities in New Jersey and scenarios to achieve various levels of that potential. The 2019 study also established quantitative performance indicators that are used to administer performance-based incentives for utilities.

In 2022, NJ BPU sought to update these goals and performance indicators and contracted Cadmus to review the 2019 potential study and develop estimates of energy consumption and peak demand in New Jersey for certain measures. Impacted measures from the 2019 study were updated for changes to state building codes, federal standards, recent building stock baseline studies, program savings, current technology market trends, and other priority underlying assumptions suggested by NJ BPU, the Statewide Evaluator (SWE), Rutgers University, and utility working groups.

Cadmus prepared a comprehensive plan for the research, analysis, and estimation of energy efficiency goals. Cadmus conducted a full review of the public feedback on the 2019 study to address as many stakeholder concerns as possible and of the key assumptions and outcomes for scenarios set by NJ BPU, Rutgers University, and SWE.

For this study, which covers 2024 through 2033, Cadmus adjusted annual potential (informed by the criteria above) on selected measures by scaling up or down the prior potential study results. Cadmus compared the revised measure characterization and savings with the 2019 potential study and documented each step with information sources and sensitivity analyses.

Cadmus completed the following three main tasks to adjust the 2019 study results:

- Review and incorporate updates to federal standards (e.g., heating equipment efficiencies)
- Integrate revisions based on the utility feedback
- Review and incorporate ongoing New Jersey Technical Reference Manual (NJ TRM) updates

These adjustments produced results at the statewide level. To obtain results at the utility level, Cadmus used U.S. Energy Information Administration (EIA) historical data to find customer counts by utility, Pennsylvania, New Jersey, and Maryland (PJM) forecasts to project electric power demand over the course of this study, and gas forecasts based on the 2019 study projections. The EIA data and the 2019 study also provided reporting by sector.

Updating the estimates of savings and costs from the 2019 potential study involved several steps with customized methods that included characterizing the prior study's measures and approach. For example, the 2019 study did not define before and after conditions for measures nor specify a calculation method, so Cadmus referred to additional information sources and relied on engineering and

program design judgment. The 2019 study used a net-to-gross (NTG) factor of 84% for any measures that had no additional program data and the same percentage to determine the gross potential.

This 2022 study also includes the results of subsequent utility program accomplishments, which required multiple mapping of potential measures to utility program reports. Cadmus revisited its initial NTG mapping, based on engineering and program design judgment, and averaged across all NTG values.

The NJ TRM was updated in parallel with this study, and Cadmus reviewed and integrated these changes into the 2022 study.

To inform energy efficiency goal setting for the second triennium, Cadmus also conducted a market study to identify key energy efficiency gaps, new innovative technology, and areas for the greatest progress (in the near and medium term) and benchmark New Jersey's energy efficiency goals against leading jurisdictions. Benchmarking results helped NJ BPU summarize key issues and best practices related to the following priorities:

- Defining goals for high-priority and high-impact measures with significant market and economic trends and changes
- Accounting for the impacts of current and emerging codes and standards (federal and state)
- Attributing savings to programs
- Defining near-term versus long-term goals, annual versus cumulative goals, and behavior versus equipment or service-based program goals
- Defining electrification and market transformation goals

Cadmus discussed these priorities for achieving savings in the second triennium with NJ BPU, Rutgers, and the SWE. Cadmus then conducted a flexible market potential analysis for the priority measures identified in the market research to better understand the economic and market factors that may drive adoption of energy efficiency measures in New Jersey. Cadmus identified savings potential and relevant market factors, which involved ranking savings results, estimating cost information, and conducting a cost-effectiveness analysis.

This activity produced a set of possible goals for priority measures in the state, with results under a range of plausible scenarios, to inform NJ BPU about any uncertainties around assumptions and their impacts.

Finally, Cadmus conducted a targeted market potential analysis exercise to revise the 10-year achievable potential estimates for selected measures by identifying emerging energy efficiency technology or existing products with more savings potential. This exercise enhanced some existing measures in the 2019 potential study and added some new measures.

Cadmus assessed technical potential, assuming 100% customer participation and that savings are limited only by technical constraints, then assessed economic potential for measures that passed an economic cost screen. These data helped determine how close each measure was to being cost-effective. The analysis also quantified the incentive levels needed to achieve a target customer payback and, in turn,

the incentive levels needed to drive adoption for each measure in New Jersey's residential and commercial markets.

Cadmus then estimated achievable potential, a subset of the economic potential that accounts for market barriers, using measure-level market barrier data from the 2019 potential study, New Jersey stakeholders and interviews, and other recent regional potential assessments. To help manage the uncertainty in customers' willingness to adopt energy efficiency, Cadmus developed three achievable scenarios for these targeted measures. Each scenario had a maximum achievable potential savings for the targeted measures. Cadmus combined the achievable results with the updated potential study estimates from the prior 2019 study. The scenarios represent the maximum achievable net savings potential and are described as base case, full compliance, and high adoption scenarios.

BASE CASE SCENARIO (SCENARIO A) represents potential study adjustments and measures, including new emerging measures, that passed the cost-effectiveness screen. Under this scenario, electric annual savings were below the CEA-mandated targets in 2026, while natural gas met the CEA targets. This is the business-as-usual (BAU) scenario in which measure adoption is not accelerated with additional programming budget.

FULL COMPLIANCE SCENARIO (SCENARIO B) aimed to meet the CEA-mandated targets in 2026 by increasing the rate of annual adoption for selected measures, adjusting maximum achievable scenario penetrations based on current market conditions, and increasing administrative costs by 10% for these measures. Adoption was capped once savings reached 2% for electric and 0.75% for gas.

HIGH ADOPTION SCENARIO (SCENARIO C) represents an increased rate of annual adoption and budgets, including an increase in marketing funding. This scenario exceeded CEA-mandated targets and was not restricted by the cost-effectiveness screen. Certain non-cost-effective measures were added, and administrative costs increased by 10% to account for the higher marketing budget. The High Adoption Scenario aimed to achieve the highest level of energy savings by allowing unconstrained adoption of measures.

Stakeholder Involvement

Each week, Cadmus met with NJ BPU staff, Rutgers University, and SWE to discuss interim results. These core stakeholders provided feedback and suggestions on how to overcome certain obstacles and interact with other researchers working on analyzing energy use and costs across New Jersey.

During January through March 2023, Cadmus also interviewed 10 experts in the Northeast and national energy efficiency markets. The interviews explored emerging energy efficiency technologies, policy developments in other states regarding energy and climate, and overall real estate and energy market trends. These interviews are described in more detail in the *New Measure Characterization* section.

Cadmus met with the Evaluation, Measurement, and Verification (EM&V) Working Group six times to present the study's purpose and framework, modeling approach, interim results, and final results and to answer technical questions related to the study.

- December 7, 2022: Data Requests and review of study goals
- February 15, 2023: Measure characterization and interim results
- March 15, 2023: Key model inputs and approach

- March 22, 2023: Results of the New Jersey Potential Study
- April 26, 2023: First Q&A session
- May 3, 2023: Final Q&A session to explain study methodology and results

Study Limitations and Considerations

This study provides estimates of potential energy savings and budgets for energy efficiency programs in New Jersey along with insights for the NJ BPU to inform energy efficiency targets and the investments to achieve those targets.

However, the following considerations about the design of this study are important to keep in mind when reviewing and interpreting the results and may cause NJ BPU targets to differ from study results:

- This study does not include other NJ BPU statewide initiatives that may count toward the CEA mandates, such as naturally occurring savings achieved through state codes and standards intervention (such as from Appliance Efficiency Standards in Assembly Bill 5160). Therefore, the final NJ BPU target may vary from scenarios represented in this study.
- This study uses broad assumptions about the adoption of energy efficiency measures based on the 2019 potential study, current market trends, and projected adoption to achieve targets under certain scenarios. Program design, however, requires a more detailed examination of historic participation and incentive levels on a measure-by-measure basis. The study can inform planning for the state and utilities, but it is not intended to dictate how programs should be designed.
- This potential study does not consider program implementation barriers. Though it includes a comprehensive set of efficiency measures, it does not examine if these measures can be delivered through incentive programs or identify the appropriate incentive rate. Many programs require strong trade ally networks or must overcome market barriers to succeed.
- This potential study cannot predict market changes over time. It accounts for updated codes
 and standards as they are enacted today, but the study cannot predict future changes in or
 savings resulting from policies, pending codes and standards, or which new technologies may
 become available. State- and utility-administered programs are not static and have the flexibility
 to address changes in the marketplace, whereas a potential study estimates potential using
 information collected at a single point in time.
- This study did not consider building electrification and the associated impact on energy efficiency measures. Building electrification considerations will be addressed by NJ BPU in other planning work and are not intended to be incorporated in this study.
- Specific utility-level targets are intended to provide directional guidance and not a characterization of each individual utility's service area. The utility-specific savings and budgets in this study are calculated based on the sales distributions of each utility and, as a result, differences between utilities (other than sales) may impact program design and the ability to achieve a certain level of savings. For example, differences in customer heating fuel between utilities may result in different program measure offerings and expected program savings. In

addition, this study did not include energy efficiency financing funding, which may have additional impacts on cost not shown in this study.

- This study is built on the prior analysis and adjusted to best reflect programs in the aggregate, considering the limited data and time available. Estimates of program-level savings and budgets are based on a measure-by-measure allocation to planned PY3 programs. However, measures in each program may vary by utility, and this study may not reflect the measure mix of the planned design of future programs. In addition, this study includes cost-effective measures that are not in current programs and, conversely, current program measures are not included in this study.
- This potential study does not attempt to forecast or otherwise predict future changes in energy
 efficiency measure costs. The study includes cost data from the 2019 potential study and
 applied an average annual inflation of 2.14% to determine the incremental energy efficiency
 measure costs, including equipment and labor, but it does not attempt to forecast other market
 changes to these costs during the course of the study. For example, changes in incremental
 costs may impact some emerging technologies, which may then impact both the speed of
 adoption and the cost-effectiveness of that measure.

Overall, though the study provides useful estimates of potential energy savings and budgets, it is important to keep in mind the study's limitations and the need for continued planning and adjustment to account for changing market conditions and policies.

Methodology Overview

Adjustments to the 2019 Potential Study

Cadmus reviewed the assumptions and developed a plan for updating savings and costs from the 2019 potential study. These updates involved several steps with customized methods and included characterizing the prior study's measures and approach.

Cadmus started with the 2019 study's output, which provided statewide annual net incremental and cumulative results, not broken down by electric or gas utility, for both economic and maximum achievable potential. These outputs also contained cost-effective and non-cost-effective results, which allowed for the calculation of technical potential results. These 2019 study results contained electric energy, demand, and natural gas energy potential but not the associated annual incremental costs or program administrated costs. The 2019 study results that were used were hardcoded and therefore the underlying methodology, calculations, and assumptions had to be inferred from the 2019 study report and the associated appendix.

The 2019 report appendix was crucial in shaping Cadmus' adjustments for the 2022 potential study. This appendix contained measure-level definitions, percentage savings, cost-per-energy unit, and other key potential modeling assumptions such as annual economic and achievable ramp rates. Though the appendix provided sources for certain measure characterization inputs, these sources were at a high level and not sufficient for a measure-level calculation methodology. The 2019 appendix had limited or no pre- and post-efficiency definitions. To determine the assumed 2019 efficiency levels in some cases, Cadmus used additional information sources such as the U.S. Department of Energy federal standards or ENERGY STAR specifications available in 2018 and engineering judgment.

Cadmus used the 2019 potential study resources and its understanding of the measure assumptions to make the following adjustments to the 2019 study for the 2024 to 2033 base case scenario.

Accounting for Changes to Building Code and Federal Standards since 2018

Several changes have been made to state building codes since the 2019 potential study, and it was anticipated that these changes would mainly affect new construction potential. To determine appropriate adjustments, Cadmus reviewed the residential code (2015 IECC versus 2018 IECC) and commercial code (ASHRAE 90.1-2013 versus ASHRAE 90.1-2016) and found that the overall impact to potential for new construction was minimal.

Cadmus also reviewed changes to federal standards enacted after 2018 to determine the impact to the existing and new construction potential of certain measures, such as lighting and HVAC equipment. Cadmus made adjustments based on these newly enacted federal standards:

- General Purpose LED Lighting 2022 Federal Standard
- Residential Air Source Heat Pump 2023 Federal Standard
- Residential Boiler 2022 Federal Standard
- Residential Central Air Conditioner 2023 Federal Standard

- Residential Clothes Washer 2018 Federal Standard •
- Residential Dehumidifier 2019 Federal Standard •
- Residential Furnace Proposed 2029 Federal Standard •
- Residential Pool Pump 2021 Federal Standard •
- Commercial Air Conditioner 2024 Federal Standard •
- Commercial Boiler 2023 Federal Standard
- Commercial Clothes Washer 2018 Federal Standard
- Commercial Heat Pump 2024 Federal Standard
- Pre-Rinse Spray Valve 2019 Federal Standard
- Refrigerated Vending Machine 2020 Federal Standard •

Cadmus also updated the efficient case for residential and commercial HVAC lost opportunity measures impacted by federal standards to match current program efficiency tier(s) requirements. Adjustments based on the federal standard usually reduced the overall potential relative to the 2019 study. However, for some HVAC equipment, potential increased because the difference in the new efficiency percentage savings between the updated federal standard and the current program efficiency tier increased.

For discretionary measures impacted by these federal standard updates, such as thermostat control savings from more efficient federal standard HVAC equipment, Cadmus developed equipment turnover adjustment calculations to reduce potential as new federal standard higher efficiency equipment was installed rather than using the equipment efficiency assumed during replacement in the 2019 study. These updates to annual turnover had a minimal impact overall as only the difference between the previous and updated federal standards impacted the annually replaced lost opportunity equipment. Cadmus calculated the percentage of annual turnover as one over the lifetime of the efficient product, as defined in the 2019 study.

Updates Based on 2019 Study Utility Feedback

Cadmus worked with NJ BPU and Rutgers staff to address utility feedback about the 2019 study, primarily concerning the overall methodology and reporting of the 2019 study. Within the scope of this project and as time allowed, Cadmus ranked feedback topics based on the ability to make updates on specific measures or across a broad swath of measures.

One feedback concern was that the Appliance Efficiency Standards in A5160/S3324 was not included in the 2019 study. For this potential adjustment, where possible, Cadmus referred to the baseline efficiency New Jersey sale requirements from A5160/S3324 for the following measures:

• Faucet aerators

•

Fryers

Showerheads

Convection ovens

- Hot food holding cabinets
- Steam cookers

Cadmus' review found that some of these required baseline efficiencies were already included in the 2019 study or the specific technologies were not present in the 2019 study.

Another feedback concern was regarding high savings for specific measures. Cadmus conducted an engineering review and reduced the percentage savings for the following measures.⁶:

- Commercial programmable thermostat
- Retro-commissioning

• Data center improvements

• Water heater jacket

The largest update based on utility feedback was for residential space heating and water heating fuel share saturations. Most of the 2019 study was based on Pennsylvania and New York resources and, consequently, the study used Pennsylvania and New York fuel shares. The New Jersey utilities called out the difference in their residential customer's fuel type for space heating and water heating and customers in Pennsylvania and New York. Because no resources specific to the utility or to New Jersey building stock were available to determine customer fuel shares, Cadmus used the latest EIA Residential Energy Consumption Survey (RECS) 2020 microdata to develop building type and income type fuel shares for the three states. Cadmus then developed adjustment factors for the associated fuel type and end use to scale measure potential up and down. Cadmus also addressed utility feedback about cooling saturation in residential buildings.

The adjustment factors based on this analysis are shown in Table 8.

Building and Income Type	Primary Fuel	Electric	Gas
	End Use	Adjustment	Adjustment
Single-Family	Water Heating	51%	150%
Single-Family	Space Heating	48%	141%
Single-Family	Cooling	138%	N/A
Multifamily	Water Heating	114%	99%
Multifamily	Space Heating	118%	103%
Multifamily	Cooling	151%	N/A
Low-Income Single-Family	Water Heating	51%	150%
Low-Income Single-Family	Space Heating	48%	141%
Low-Income Single-Family	Cooling	138%	N/A
Low-Income Multifamily	Water Heating	114%	99%
Low-Income Multifamily	Space Heating	118%	103%
Low-Income Multifamily	Cooling	151%	N/A

Table 8. RECS 2020 Microdata Analysis for Pennsylvania/New York to New Jersey End-Use Adjustments

Cadmus also looked into the ability to make a similar adjustment for commercial heating fuel share and cooling saturations, but no resources specific to utility or New Jersey building stock were available, and the recent Commercial Buildings Energy Consumption Survey (CBECS) 2018 microdata provided only census division granularity and no state-level data.

⁶ Cadmus reviewed the cool roof measure as part of the utility feedback; however, this measure was not costeffective and not incorporated in the final results and, therefore, no adjustments were made.

New Jersey 2023 TRM Percentage Savings Update

The New Jersey 2023 TRM (NJ TRM) was finalized during the course of making adjustments for this study, so NJ BPU staff, Rutgers, and a consultant who helped develop and update the NJ TRM assisted Cadmus with developing percentage savings adjustments to numerous measures.

The 2019 potential study reviewed the percentage savings for roughly the top 75% of all electric and gas potential to incorporate as many adjustments as allowed during the study period. After accounting for Cadmus' adjustments to the measures listed in **Table 8** above, the NJ TRM consultant started with the top-saving measures by fuel type (using the 2019 study appendix for measure context) and analyzed the baseline and measure definitions and percentage savings. This analysis was done on a measure-by-measure basis using engineering calculations to develop new percentage savings and, for specific measures, new baseline and measure definitions to align with the NJ TRM requirements.

Cadmus then incorporated these adjustments at a statewide potential-savings level so that estimates in the 2019 potential study align with the savings methodology utility program planners will use going forward and to provide a more accurate estimate of economic and achievable potential relative to statewide savings targets.

Incorporating Program Accomplishments and Updating Percent Incompletes

To account for program accomplishments since the 2019 study, the 2022 study also considered utilityand state-administrated program savings since 2020. Cadmus mapped program accomplishment savings by utility at a utility-administrated program and subprogram level to specific 2019 study measures impacted by these programs and subprograms. Cadmus removed any utility-administrated program savings from the utilities portion of the overall statewide potential rather than applying all utility savings equally across all statewide potential.

Cadmus also mapped measure-level program data to the specific 2019 study measures. Cadmus removed the state-administrated program savings from the overall statewide 2019 potential and applied these savings on a utility level using the 2019 study percentage of sales.

Because some utility- and state-administrated program offerings may not exist in the 2019 potential study for specific program or measures, Cadmus did not remove associated savings from the overall potential rather than reducing potential across all statewide potential for any missing measures.

Cadmus researched and analyzed current technology market trends for commercial LED linear lighting and benchmarked these trends against assumptions in the 2019 study. To ensure accuracy in the available potential estimate, Cadmus reviewed data from recent building stock baseline studies, such as commercial building audits, commercial baseline studies, and the New Jersey Multifamily Building Baseline Study (September 2019) for information related to linear LED lighting saturation.

Cadmus also performed a lighting analysis to verify market saturation for commercial linear LED saturations. Cadmus used building audit data gathered under Local Law 87 for large buildings in New York City to assess the saturation of LED lighting in the city between 2014 and 2018. Cadmus calculated

an annual lighting saturation trend for this period, extended this trend out to 2023, and then referenced the extrapolated saturation percentage against lighting sales data in New Jersey.

When comparing these additional resources for linear LED lighting saturations, Cadmus found that, after applying the New Jersey program accomplishments savings to the 2019 potential, the overall adjusted New Jersey saturation resulted in a similar or higher saturation than these reviewed resources and therefore applied no additional reduction to the commercial linear LED lighting potential.

Adjustments to Statewide Load Forecast and Utility-Specific Distributions

Utility sales have changed since the 2019 potential study, so Cadmus used various resources to develop a new statewide and utility-specific sales forecast by sector. These updated statewide and utility forecasts can be used to develop statewide forecast adjustment ratios by sector to scale statewide potential. In addition, updated utility-specific sales forecasts by sector allows application of a new utility distribution of the statewide share of potential to allocate the adjusted statewide potential to utility potential results.

For the electric energy and demand updated utility sales, Cadmus used the Annual Electric Power Industry Report, Form EIA-861 detailed data files.⁷ For the gas energy updated utility sales, Cadmus used Natural Gas Annual Respondent Query System, Form EIA-176.⁸ These reports provided sales by utility by sector for the years 2018 to 2021.

To forecast sales beyond the historical data available in the EIA forms, for electric sales and demand Cadmus used the January 2022 PJM Load Forecast Report.⁹ The PJM data provide forecasted sales from 2023 to 2037, so the entire time horizon of the Cadmus' potential adjustment was covered. Cadmus benchmarked and reviewed EIA historical reports against the PJM data and found no outliers that would require adjustments to PJM data. Therefore, Cadmus used the PJM data source as the basis for total utility sales and demand values. However, Form EIA-861 contains splits in sales by sector (residential, commercial, and industrial), so Cadmus applied the EIA sector splits by utility for 2021 to the PJM data by utility to develop forecasted utility sales by sector.

For the gas sales forecast, Cadmus attempted to forecast utility sales out to 2033 using data available in Form EIA-176 by using the historical trend from 2018 to 2021 by utility. However, this extrapolation seemed unrealistic due to variation in annual gas sales that led to large increases or decreases in the 10-year calculated forecast. Therefore, since utility-specific forecasts were unavailable at the time of this

Annual electric energy based on the Form EIA-861 detailed workbooks "Sales_Ult_Cust" and the tab "States." Annual electric demand based on Form EIA-861 detailed workbooks "Operational_Data" and the tab "States." U.S. Energy Information Administration. October 6, 2022. <u>https://www.eia.gov/electricity/data/eia861/</u>

⁸ Annual gas energy based on the Form EIA-176 website. U.S. Energy Information Administration. https://www.eia.gov/naturalgas/nggs/#?year1=2018&year2=2021&company=Name

⁹ See tables Table E-1 for MWh annual values and adjustment ratios and Table B-1 for MW annual values and adjustment ratios. Available on PJM website: <u>https://www.pjm.com/-/media/library/reports-notices/load-forecast/2022-load-report.ashx</u>

study and the attempted forecast seemed unrealistic, Cadmus developed an annual utility-specific adjustment factor using gas sales in the 2019 study that were based on a 10-year annual average trend by utility. These forecasted utility gas sales appeared much more agreeable, and Cadmus used these for the gas sales forecast by utility. Also, since the basis for the updated gas forecast still used historical Form EIA-176, the updated forecast still allowed variations in results from the 2019 data overall and by sector.

Cadmus used its electric energy, demand, and gas energy 2024 to 2033 forecasts by utility by sector to develop a rolled-up statewide total forecast. Cadmus then compared this forecast to the 2019 study statewide forecast to develop adjustment ratios to increase or decrease annual potential by fuel type and by sector. The overall statewide adjustment factors are shown in **Table 9**.

Туре	Sector	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Electric	Res	100%	100%	100%	100%	101%	100%	101%	101%	101%	101%
Demand	Res	88%	88%	88%	88%	89%	89%	89%	90%	90%	91%
Gas	Res	100%	101%	101%	100%	100%	100%	100%	100%	100%	100%
Electric	C&I	97%	97%	97%	97%	98%	97%	98%	98%	99%	99%
Demand	C&I	88%	88%	88%	88%	89%	89%	89%	90%	90%	91%
Gas	C&I	94%	95%	96%	96%	96%	97%	97%	98%	98%	98%

Table 9. Annual Potential Adjustment Factors to Account for Changes in Statewide Sales Forecast

To develop utility-specific estimates of statewide potential, Cadmus used its electric energy, demand, and gas energy 2024 to 2033 forecasts by utility by sector relative to the calculated statewide sales by sector to update utility distribution ratios by sector. Cadmus developed annual distribution ratios to allow for statewide potential to shift as the utility forecasts change each year.

Cadmus incorporated the updated sales forecast methodology described above into the development of the new measure characterization presented in *New Measure Characterization* section.

Incorporate New Jersey Net-to-Gross Ratios

The 2019 potential study data used for this analysis contained only net potential; therefore, Cadmus had to back into estimating gross potential. That is, to calculate 2019 estimated gross potential, Cadmus used the weighted average NTG value of 0.84, provided subsequently by Optimal, for all measures except residential low-income measures, which used a NTG value of 1.

Cadmus then applied a new measure-specific NTG value to calculate an adjusted net potential value. The basis of this updated NTG value was the NTG values from the NJ 2023 TRM update, which were mapped to specific 2019 measures.

Cadmus used the following logic regarding how to apply these new NTG values and develop one NTG value per measure:

- Moderate-income/low-income programs
 - Calculated a weighted average of moderate- and low-income NTG values by measure using New Jersey-specific income splits from American Community Survey 2021 income data and definitions from the FY2023 Low-Income Home Energy Assistance Program and Universal Service Fund Income.¹⁰
- Non-income-related programs
 - For NTG values for the same measure, such as NTG variations between delivery mechanisms, used a straight average across mapped NTG values
- Measures not in New Jersey utility programs
 - Applied a NTG value of 0.84, similar to the 2019 study, for all remaining measures except low-income measures, which have a NTG value of 1

Develop Program Incentives and Administration Costs

Measure-level cost details of the 2019 study were not available, so Cadmus calculated the basis of the program incentives and administration costs using available data. Cadmus used incremental cost on a dollar-per-energy-unit basis, provided in the 2019 study appendix, to help inform program incentives. Though adjustments to savings changed the baseline or measure definitions of measures since the basis of the 2019 incremental costs, Cadmus assumed a linear relationship to 2019 costs such that, as energy savings increase or decrease, so do incremental costs. This may be a limitation of this study, but the underlying incremental cost methodology was not available to Cadmus to determine the basis of costs without completely redoing all cost research.

Using the 2019 study's incremental costs-per-energy unit, Cadmus assumed 100% of incremental cost to represent program incentive cost. This assumption is consistent with the 2019 study assumption on how to calculate program incentive cost for the Maximum Achievable Scenario, which reflects what could theoretically be accomplished by aggressive energy efficiency programs.

For the program administration costs, NJ BPU staff and Rutgers provided Cadmus with available program data for historical program accomplishments and costs along with detailed forecasted program costs by utility. Cadmus developed program-specific dollars-per-energy unit administration cost estimates and then mapped these to each measure in the 2019 study and calculated utility-specific administration costs. Some state or utility programs were not mature or had low participation for the available study years, so for selected cases Cadmus developed and applied an administration cost calculation relative to

¹⁰ NJ FY2023 Low-Income Home Energy Assistance Program and Universal Service Fund Income definitions available at: <u>https://www.nj.gov/dca/divisions/dhcr/offices/docs/FY2023%20USFHEA%20Factsheet%20-%20English.pdf</u>

the program incentive costs. The study includes cost data from the 2019 potential study and applied an average annual inflation rate of 2.14%.

Inflation Reduction Act Impact

The federal Inflation Reduction Act (IRA) currently has around \$183 million over 10 years allocated to fostering residential energy efficiency and electrification upgrades in New Jersey.¹¹ These funds are broken down into two separate programs:

- Home Efficiency Rebates \$4.3 billion nationwide
- Home Electrification and Appliance Rebates \$4.5 billion nationwide

To account for the increase in potential possible by these additional funds, Cadmus applied an annual adjustment ratio to the economic and achievable ramp rates to the associated impacted measures of these two programs. This adjustment increases total annual program incentive and program planning spending to \$18.3 million annually over the course of this potential study.

To develop these annual ramp rate adjustment ratios, Cadmus grouped these residential measures to the program:

- Home Efficiency Rebates:
 - Air sealing
 - Attic insulation
 - Duct sealing
 - Wall insulation
- Home Electrification and Appliance Rebates:
 - Heat pump water heaters
 - Air source heat pumps

These were the only measures available in the 2019 study that clearly qualify for the federal programs; utility programs can pursue other available residential energy efficiency and electrification measures. This study assumed that increasing the annual spending for these measures above the estimated program costs in the 2019 study, after all other Cadmus adjustments and before accounting for the IRA, would be a general approximation on the overall potential impact these national programs would unlock.

To allocate the roughly 10-year \$183 million provided to New Jersey for the two programs, the national spending split was used as an approximation. Cadmus used the overall state-administrated and total utility-administrated program costs for measures by program to develop and apply annual economic and achievable ramp rate adjustment ratios. Since this calculation adjustment was the last calculation done

¹¹ Further Inflation Reduction Act context available at: <u>https://www.energy.gov/articles/biden-harris-administration-announces-state-and-tribe-allocations-home-energy-rebate</u>

https://www.energy.gov/scep/home-energy-rebate-Programs-frequently-asked-questions

in each of this study's scenarios, Cadmus recalculated these ramp rate adjustment ratios for each scenario due to impacts to the underlying measures in the three scenarios.

Full Compliance Scenario Changes from Base Case Scenario

For the Full Compliance Scenario, the overall goal was to allow both net achievable incremental electric and gas potential to hit the statewide savings target as a percentage of statewide sales in 2026. The two targets were 2% of net achievable incremental electric potential as a percentage of sales and 0.75% of net achievable incremental gas potential as a percentage of sales.

Based on findings from the Base Case Scenario, the net achievable incremental gas potential has already exceeded this savings target and therefore was not the primary focus of this scenario. For the electric potential, the Base Case Scenario results showed only 1.65% of net achievable incremental electric potential as a percentage of sales, and therefore various updates to underlying potential assumptions would need to be made for the study to hit the 2% target.

To accomplish these adjustments to electric potential assumptions, Cadmus used the 2019 study's economic and achievable annual ramp rates, which account for annual measure adoption for new construction, replacement, and retrofit applications assigned to one of the 4,067 measure iterations in the 2019 study.

One restriction on scenario development was not to include any measures that did not pass the 2019 study's cost-effectiveness test screening. Therefore, as part of this ramp rate review, no non-cost-effective measure was included or adjusted to calculate updated results.

Using its understanding of market and program design trends since the 2019 study, Cadmus focused first on the specific technologies most likely not to be aligned with future possible program design or market uptake. The following are specific classes of measures first identified in the 2019 study:

- Commercial and industrial LED lighting replacement
- Commercial and industrial lighting controls
- Residential and commercial smart thermostats
- Commercial refrigeration upgrades

To adjust annual ramp rates, Cadmus applied two approaches, depending on measure application:

- For **new construction and retrofit applications**, Cadmus shifted adoption seen late in the 2019 study to earlier in the annual adoption ramp rate, while possibly increasing the overall 10-year total percentage of overall market adoption. This assumes that at the time of construction the program can capture a greater portion of the market than assumed in the 2019 study or the program design can increase market update of discretionary measures for retrofit applications.
- For **replacement applications**, Cadmus increased the total annual adoption of 2019 potential by a varying annual adjustment factor to account for programs that captured and achieved more lost opportunity potential from aggressive program design.

Smart thermostats was one of the measures chosen by Cadmus to increase ramp rate adoption, and this also increased both electric and gas potential. Cadmus decided that utility planners should design programs to target specific customers for specific potential savings rather than forcing assumptions in the estimation of potential.

Other than the four specific classes of measure listed above, other measures also had ramp rate adjustments to hit the overall 2.00% of net achievable incremental electric potential as a percentage of sales. For additional context on the overall savings and costs, see the report appendix.

High Adoption Scenario Changes from Base Case Scenario

For the High Adoption Scenario, NJ BPU staff and Rutgers wanted to analyze the overall impact on annual savings and potential if there were no annual limits on the state- or utility-administered program spending after reaching the statewide 2.00% electric and 0.75% gas targets. Cadmus therefore updated the 2019 study's cost-effective test screening and included measures previously deemed not cost-effective.

Though Cadmus attempted to include all non-cost-effective measures in the High Adoption Scenario, the overall impact to total statewide program costs nearly doubled, while providing limited increases in overall potential relative to spending. Therefore, to make this scenario more realistic, Cadmus performed a rough cost screening using 10-year total savings relative to 10-year total program cost and included only the non-cost-effective measures that appeared to nearly pass the cost screening from the 2019 study. For additional context on the overall savings and costs, see the report appendix section A.

New Measure Characterization

Cadmus conducted extensive market research to find new and emerging opportunities for energy efficiency and identified 44 energy efficiency measures that were either new to New Jersey or had significant potential for further adoption and savings. These measures were ranked on a qualitative scale to gauge their potential impact on energy savings, and the 10 measures with the highest potential were selected for further analysis.

Research

Cadmus researched emerging electricity and gas saving measures with technologies that are either commercial-ready or very close to commercialization. Cadmus conducted a literature review of reputable scientific and industry sources to understand the current state of the energy efficiency market and to find potential new measures to incorporate into the model.

Cadmus also interviewed leading industry experts in various building energy areas, such as HVAC systems and engineering design. In-house experts at Cadmus provided additional insights into current and future energy efficiency trends that exist in other parts of the Northeast and across the country.

Measure Selection and Characterization

Cadmus selected new measures to be included in this study based on selection criteria designed to determine the measures with the greatest potential over the study's 10-year timeframe. The process

started by producing a list of all new energy saving methods and emerging technologies which could feasibly be implemented in New Jersey over the next decade.

This list was compiled through a literature review of newly commercialized technologies, interviews with market experts in the building energy space, and an internal survey of Cadmus subject matter experts. Interviews were conducted with experts from equipment manufacturers, local facility managers, efficiency advocacy groups, engineering and architectural consultants, and real estate developers were interviewed for this 2022 potential study.

Cadmus cross-referenced the potential new measure list with the measures in the 2019 study and removed any that were already included. Cadmus also removed any new measures that overlapped significantly with other measures in the 2019 study. As the final step in selecting the final 10 measures, Cadmus assigned qualitative rankings for potential energy savings, cost-effectiveness, and implementation potential based on its technical engineering judgment. Cadmus shared this list of measures and rankings with the project members at Rutgers for additional input and revision. After this screening, the top 10 measures were selected for inclusion in the new measure model. These measures are shown in **Table 10**.

	Measure Category	Measure Name	Measure Description	Sector (Residential, Multifamily, Commercial)
1	DHW efficiency	Wastewater heat recovery	Wastewater heat recovery (WWHR) using a heat pump to extract heat from water in a building's main sewer line and use it to preheat fresh water for domestic hot water system.	Multifamily, Commercial
2	Appliance efficiency	Workstation virtualization	Small network PC controller and the use of virtual machines on remote servers to handle high computational loads for various sectors including financial modeling, architectural rendering, and weather predictions.	Commercial
3	Appliance efficiency	Advanced clothing dryers	Ultrasonic and desiccant-based clothing dryers	Residential, Multifamily
4	Heating efficiency	Steam heat efficiency upgrades	Thermostatic restrictor valves (TRVs), orifice plates, master vents, makeup water meters, and other upgrades for one-pipe and two-pipe steam heat systems.	Multifamily
5	Heating efficiency	Packaged cold- climate heat pumps	Cold-climate packaged heat pump to replace terminal units that use electric resistance heat	Multifamily, Commercial
6	Cooling efficiency	Heat pump replacements for central air conditioners	Air source heat pumps to replace unidirectional air-conditioning units	Residential
7	Envelope upgrade	Advanced air sealing	Aerosol whole home air sealing reduces infiltration by 90%	Residential
8	Envelope upgrade	Window inserts	Interior-window insert products	Residential, Multifamily
9	Envelope upgrade	Advanced windows	Advanced windows (triple pane)	Residential, Multifamily
10	Heating efficiency	Radiator enclosures	Thermostatic radiator enclosures (TREs) with fans and digital controls	Multifamily

Table 10. Top Ten New Measures

To characterize new measures, Cadmus calculated energy use for baseline equipment found in the NJ TRM. Most of the 10 measures had relevant energy use equations in the NJ TRM; notably, however, measures for window replacements, aerosol home sealing, and commercial workstation power controls did not have baseline energy consumption equations in the NJ TRM. For these measures, Cadmus consulted additional sources to produce baseline energy consumption values.

Cadmus then calculated energy savings for each measure by multiplying the baseline energy consumption by a savings percentage or by subtracting its energy consumption from the baseline consumption. Cadmus obtained new measure savings from sources found during the initial literature review or provided by industry experts. Cadmus obtained implementation costs for the new measures from literature review sources and estimated useful lifetimes from the NJ TRM as well as literature review sources.

Cost-Effectiveness Screen

Cadmus conducted a thorough market potential analysis of the new energy efficiency measures and determined the economic and market factors that will drive adoption of new efficiency measures in New Jersey. The task involved identifying savings potential from selected measures and relevant factors affecting the market and potential in the state.

To evaluate cost-effectiveness of these measures, Cadmus developed estimated savings and costs for each. The measure analysis used the New Jersey Cost Test and Participant Cost Test, as described in State of New Jersey Board of Public Utilities Agenda item 8A, adopted August 24, 2020.¹² NJ BPU staff and Rutgers provided details specific to the New Jersey Cost Test via the technical memo dated August 2, 2022, titled "Efficiency Benefit-Cost Analysis Avoided Cost Assumptions for 2020 BCA." The memo also contained values for avoided electric energy and capacity costs, Demand Reduction Induced Price Effects (DRIPE), gas prices, environmental externalities, line loss, discount rate, and avoided electricity transmission and distribution costs.

Electricity DRIPE considers the full impact of energy efficiency investments that tend to reduce demand, which in turn can push prices down. Using the 2020 NJ Cost Test Methodology, DRIPE was calculated by regressing 2020 historical PJM locational marginal price (LMP) prices as a function of load to determine the impact of reduced load on electric energy prices. DRIPE is calculated as the difference between the price at the average zonal load and the zonal load less the demand reduction of efficiency measures installed. Based on utility data from 2020, the overall electricity DRIPE for New Jersey was calculated as \$1.85 per MWh. Cadmus recommends that the benefits of efficiency investments be recalculated every one to three years, using utility-specific data where available. This study found that DRIPE accounted for 17% of benefits through avoided carbon emissions to avoid energy costs for generation in 2024.

State of New Jersey, Board of Public Utilities. August 24, 2020. "Order adopting the first New Jersey cost test." Docket No. QO19010040 and QO20060389. <u>https://www.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A%20-</u> %200RDER%20New%20Jersey%20Cost%20Test.pdf

Cadmus applied these values to the cost-effectiveness screening using New Jersey-specific electricity and gas load shapes to accurately model savings profiles. Cadmus assessed the economic potential (a subset of the technical potential) based on the potential that passed this economic screening (New Jersey Test and Participant Cost Test). For each targeted measure, all economic assumptions were consistent with the Rutgers Energy Efficiency Benefit Cost Analysis Avoided Cost Assumptions data.

Based on the results of the cost-effectiveness analysis, Cadmus worked with NJ BPU, Rutgers, and SWE to determine which measures to include. These measures for certain building types and applications passed the cost screen:

- Wastewater heat recovery using heat pumps in building sewer lines
- Ultrasonic and desiccant-based clothing dryers
- Steam heat upgrades such as thermostatic restrictor valves (TRVs), master vents, and makeup water meters
- Air source heat pumps to replace unidirectional air-conditioning units for summer cooling
- Interior-window insert products

New Measure Model

The new measure model used a units-based approach to estimate the energy efficiency savings potential. This approach combines estimates of individual measure savings and costs with building stock estimates for the residential and commercial sectors as well as forecasts of utility program achievements over time. New measure characterization is described in detail above. Each measure had defined savings and cost per home for residential measures and per square foot for commercial measures.

With the savings and costs defined, Cadmus expanded the individual measure savings potential and cost to the utility and state levels by applying them to estimates of residential or commercial building stock. Cadmus used a similar approach to quantify commercial and residential sector building stock, though it used estimates of number of homes as the basis for the residential sector and total floor area for the commercial sector. Stock calculations in the residential sector, estimates of floor area were based on utility-level commercial sales as well as regional distributions of floor area and energy-use intensities. The study used historical customer growth rates to project future growth in building stock by sector and incorporated an annual demolition rate of 0.25%.

The last piece of the model was forecasting the pace of future measure adoption. In this model, Cadmus estimated future measure adoption by applying ramp rates that have been used in potential studies across the country. These ramp rates estimate the share of available potential that will be acquired in each year of the study timeline.

Depending on the type of measure, the characteristics of the ramp rate differ. Retrofit measures, like added insulation, can be installed at any time, while lost opportunity measures are available only at the time of equipment replacement. Accordingly, ramp rates for retrofit measures reflect the share of the

total building stock being replaced and typically sum to 100% over 20 years, whereas ramp rates for lost opportunity measures designate the percentage of opportunities available in a given year that will be achieved.

The estimated number of measures installed per year was based on the estimated stock, measure characteristics like equipment saturations and feasibility constraints, and ramp rates. Cadmus then calculated the final energy savings potential from the number of units multiplied by calculated savings per measure. Cadmus also used the cost-effectiveness screen to determine if a measure should be incorporated into final cost and savings results depending on the scenario being addressed.
Summary of Results

The following two figures, introduced in the *Executive Summary*, show electric and gas savings between PY3 (2024) and PY6 (2027) for the three different scenarios investigated. These scenarios, modeled to meet the CEA-mandated energy efficiency targets, represent the maximum achievable net savings potential. **Figure 6** shows the annual electric savings, and **Figure 7** shows the annual gas savings starting in 2024 (PY3) and continuing through the second triennium of this decade (2025-2027).



Figure 6. Electric Potential Savings by Scenario

■ Goal Set Scenario A (Base - BAU) ■ Goal Set Scenario B (Full Compliance) ■ Goal Set Scenario C (High Adoption)



Figure 7. Gas Potential Savings by Scenario

■ Goal Set Scenario A (Base - BAU) ■ Goal Set Scenario B (Full Compliance) ■ Goal Set Scenario C (High Adoption)

Scenario B, the Full Compliance Scenario, meets the CEA-mandated targets in 2026 by increasing the rate of annual adoption for selected measures, adjusting maximum achievable scenario penetrations based on current market conditions, and increasing administrative costs by 10% for these measures. Adoption is capped once savings reach 2% for electric and 0.75% for gas.

Table 11 through **Table 13** show annual electric savings, annual gas savings, and annual budgetsbetween PY3 and PY6 for the Full Compliance Scenario broken out by individual state programs. TheMethodology Overview section above explains savings allocations by program.

Program Category	2024 - PY3 (MWh)	2025 - PY4 (MWh)	2026 - PY5 (MWh)	2027 - PY6 (MWh)
Efficient Products	55,480	78,395	97,765	100,103
Existing Homes	28,661	39,814	54,157	63,576
Multifamily	17,820	25,040	33,245	36,979
Behavioral	275,179	300,679	317,814	295,327
Moderate Income Weatherization	8,583	11,153	13,869	14,815
Low Income	23,490	30,521	37,955	40,544
C&I Direct Install	121,025	151,165	183,280	191,096
Energy Solutions for Business	325,034	433,865	544,566	541,631
Residential New Construction	4,720	6,820	9,862	11,526
C&I New Construction	56,167	68,610	81,867	85,823
Large C&I	26,458	39,387	58,079	56,345
Non-Program Residential	7,012	9,741	12,457	13,499
Non-Program Low Income	2,387	3,309	4,228	4,579
Non-Program C&I	26,620	34,520	41,783	43,119
Res New Measures	763	1,818	3,245	4,469
Low Income Res New Measures	32	53	122	212
C&I New Measures	864	1,483	3,130	5,065
Total	980,294	1,236,372	1,497,423	1,508,708

Table 11. Full Compliance Scenario (Scenario B) – Electric Results (MWh)

Table 12. Full Compliance Scenario (Scenario B) – Gas Results (Dth)

Program Category	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
riogram category	(Dth)	(Dth)	(Dth)	(Dth)
Efficient Products	333,553	403,617	439,994	396,416
Existing Homes	264,387	276,529	296,225	291,582
Multifamily	66,378	75,349	81,954	77,065
Behavioral	768,581	765,399	771,287	738,149
Moderate Income Weatherization	73,619	81,617	87,854	82,211
Low Income	201,469	223,357	240,425	224,985
C&I Direct Install	1,667	2,134	2,689	3,086
Energy Solutions for Business	708,950	872,791	1,045,637	1,162,148
Residential New Construction	100,859	105,551	116,520	108,403
C&I New Construction	100,428	115,210	133,067	145,655
Large C&I	(1,102)	5,057	8,907	12,576
Non-Program Residential	20,707	24,883	30,199	33,634
Non-Program Low Income	8,229	9,923	12,038	13,426
Non-Program C&I	135,053	163,275	206,483	219,534
Res New Measures	294	579	1,023	1,573
Low-Income Res New Measures	-	-	-	-
C&I New Measures	-	-	-	-
Total	2,783,074	3,125,270	3,474,303	3,510,444

Program Category	2024 - PY3 (ŚM)	2025 - PY4 (ŚM)	2026 - PY5 (\$M)	2027 - PY6 (\$M)
Efficient Products	\$96	\$126	\$158	\$165
Existing Homes	\$86	\$102	\$121	\$128
Multifamily	\$32	\$41	\$52	\$58
Behavioral	\$30	\$32	\$34	\$33
Moderate Income Weatherization	\$68	\$78	\$88	\$87
Low Income	\$186	\$214	\$242	\$237
C&I Direct Install	\$60	\$73	\$87	\$91
Energy Solutions for Business	\$398	\$550	\$724	\$776
Residential New Construction	\$21	\$24	\$29	\$31
C&I New Construction	\$86	\$106	\$129	\$141
Large C&I	\$29	\$46	\$69	\$71
Non-Program Residential	\$8	\$12	\$15	\$17
Non-Program Low Income	\$17	\$22	\$29	\$32
Non-Program C&I	\$44	\$57	\$75	\$83
Res New Measures	\$2.5	\$6.2	\$11.2	\$15.7
Low-Income Res New Measures	\$0.0	\$0.1	\$0.1	\$0.3
C&I New Measures	\$0.6	\$1.1	\$2.3	\$3.8
Total	\$1,163	\$1,490	\$1,866	\$1,969

Table 13. Full Compliance Scenario (Scenario B) – Budget

Scenario Descriptions

The New Jersey Clean Energy Act (CEA) mandates for energy savings require compliance with energy efficiency targets. This study modeled three different scenarios along with various sensitivity analyses.

In the Base Case Scenario, potential study adjustments and new measures were incorporated. State policies passed before 2023, such as the Appliance Efficiency Standards in A5160/S3324, were included.

The measures passed the cost-effectiveness screen, and assumptions around the Inflation Reduction Act and accelerated ramp rates were added. Additionally, \$18.3 million in annual federal funding to New Jersey was incorporated for the Home Owner Managing Energy Savings (HOMES) and High-Efficiency Electric Home Rebate Act (HEEHRA) programs over 10 years. However, the analysis revealed that the electric annual savings were below the mandated targets, while natural gas met the targets under the base scenario.

The Full Compliance Scenario, on the other hand, met the CEA mandated targets, where measures must pass the cost-effectiveness screen. Adoption was capped at 2% for electric and 0.75% for gas. The prior study maximum achievable scenario penetrations were adjusted based on current market conditions, for example, commercial lighting upgrade, smart thermostats, and others. The rate of annual adoption for selected measures was increased, and administrative costs were increased by 10% for those measures. This scenario aims to achieve full compliance with CEA targets while ensuring costeffectiveness and realistic adoption rates.

In the High Adoption Scenario, there is an increased rate of annual adoption and budgets, including an increase in marketing. This scenario is not restricted by the cost-effectiveness screen and exceeds CEA-mandated targets. Its adoption gas energy efficiency was allowed to exceed the policy mandate, and certain non-cost-effective measures were added. Additionally, administrative costs increased by 10% to account for the increased marketing budget. The High Adoption Scenario aims to achieve the highest level of energy savings by allowing unconstrained adoption of measures that may not be cost-effective.

Figure 8 shows the comparison of the budgets for each scenario for the second triennium as well as Board Order first triennium planned funding levels. The investment for future energy efficiency through programs will require increased funding across all scenarios. Low-cost measures opportunities have declined or no longer available (e.g., residential lighting) and resulting in opportunities from higher-cost equipment, such as HVAC equipment. This study's Full Compliance Scenario estimates an increase in annual spending starting at \$1.163 billion budget in PY3 with an increase to \$1.866 billion annual budget to achieve the CEA goal (2% electric and 0.75% natural gas) by PY5.





Base Case Scenario Results

Table 14 through **Table 16** show annual electric energy reductions, annual gas energy reductions, and annual budgets between 2024 and 2033 for the Base Case Scenario (Scenario A) overall, and also the split between state- and utility-administered programs. The overall reductions for electric and gas energy are capped at the target percentages for this scenario.

	Statewide Electric	Scenari	Scenario A. Annual Energy Reduction Target (%)					
Year	(MWh) ^a	Overall	State-Administered	All Utility-Administered				
2024	74,801,155	1.29%	0.12%	1.17%				
2025	74,693,230	1.46%	0.14%	1.32%				
2026	74,959,246	1.65%	0.17%	1.48%				
2027	75,435,405	1.85%	0.20%	1.65%				
2028	76,339,250	2.00%	0.22%	1.78%				
2029	76,934,889	2.00%	0.22%	1.78%				
2030	77,698,636	2.00%	0.22%	1.78%				
2031	78,619,953	2.00%	0.21%	1.79%				
2032	79,860,986	2.00%	0.21%	1.79%				
2033	80,601,328	2.00%	0.21%	1.79%				

Table 14. Base Case Scenario (Scenario A) Electric Results

^a Percent of sales shown is relative to the given year's energy forecast. The CEA requirement is for an average of the prior three years energy use for energy reduction comparisons.

	Statewide Gas	Scenario	Scenario A. Annual Energy Reduction Target (%)				
Year	(Dth) ^a	Overall	State-Administered	All Utility-Administered			
2024	453,762,012	0.61%	0.07%	0.54%			
2025	458,474,852	0.68%	0.08%	0.60%			
2026	463,240,355	0.75%	0.09%	0.66%			
2027	468,059,140	0.75%	0.08%	0.67%			
2028	472,931,831	0.75%	0.08%	0.67%			
2029	477,859,062	0.75%	0.07%	0.68%			
2030	482,841,474	0.75%	0.07%	0.68%			
2031	487,879,714	0.75%	0.07%	0.68%			
2032	492,974,441	0.75%	0.08%	0.67%			
2033	498,126,318	0.75%	0.08%	0.67%			

Table 15. Base Case Scenario (Scenario A) Gas Results

Table 16. Base Case Scenario (Scenario A) Overall Annual Electric and Natural Gas Energy EfficiencyReduction Budget by Year (State-Administered, Utility) - \$(000) - Nominal Dollars

Year	State- Admin. Budget	All Utility Budget	Total Budget	State- Admin. Electric Budget	All Utility Electric Budget	Total Electric Budget	State- Admin. Natural Gas Budget	All Utility Natural Gas Budget	Total Natural Gas Budget
2024	\$229,783	\$887,682	\$1,117,465	\$82,641	\$484,042	\$566,683	\$147,142	\$403,641	\$550,782
2025	\$271,597	\$1,080,063	\$1,351,660	\$100,915	\$603,778	\$704,693	\$170,682	\$476,285	\$646,967
2026	\$322,610	\$1,305,802	\$1,628,412	\$125,138	\$750,641	\$875,779	\$197,472	\$555,160	\$752,632
2027	\$357,015	\$1,492,049	\$1,849,064	\$152,340	\$906,140	\$1,058,480	\$204,675	\$585,909	\$790,584
2028	\$385,067	\$1,670,346	\$2,055,414	\$173,520	\$1,051,265	\$1,224,785	\$211,548	\$619,081	\$830,629
2029	\$379,409	\$1,734,912	\$2,114,321	\$181,171	\$1,121,058	\$1,302,229	\$198,238	\$613,854	\$812,092
2030	\$394,203	\$1,818,768	\$2,212,971	\$190,627	\$1,185,722	\$1,376,348	\$203,577	\$633,046	\$836,623
2031	\$405,975	\$1,902,884	\$2,308,859	\$196,491	\$1,251,499	\$1,447,990	\$209,484	\$651,385	\$860,869
2032	\$419,034	\$1,983,898	\$2,402,932	\$203,354	\$1,314,995	\$1,518,349	\$215,680	\$668,904	\$884,584
2033	\$431,908	\$2,052,868	\$2,484,776	\$209,672	\$1,366,661	\$1,576,333	\$222,236	\$686,207	\$908,443

Full Compliance Scenario Results

Table 17 through **Table 19** show annual electric energy reductions, annual gas energy reductions, and annual budgets between 2024 and 2033 for the Full Compliance Scenario overall and also the split between state- and utility-administered programs. The overall reductions for electric and gas energy are capped at the target percentages for this scenario as well.

Year	Statewide Electric Energy Forecast	Scenari	Scenario B. Annual Energy Reduction Target (%)				
	(MWh)ª	Overall	State-Administered	All Utility-Administered			
2024	74,801,155	1.31%	0.13%	1.18%			
2025	74,693,230	1.66%	0.18%	1.48%			
2026	74,959,246	2.00%	0.23%	1.77%			
2027	75,435,405	2.00%	0.23%	1.77%			
2028	76,339,250	2.00%	0.23%	1.77%			
2029	76,934,889	2.00%	0.23%	1.77%			
2030	77,698,636	2.00%	0.21%	1.79%			
2031	78,619,953	2.00%	0.20%	1.80%			
2032	79,860,986	2.00%	0.19%	1.81%			
2033	80,601,328	2.00%	0.18%	1.82%			

Table 17. Full Compliance Scenario (Scenario B) Electric Results

Year	Statewide Gas Energy Forecast	Scenari	Scenario B. Annual Energy Reduction Target (%)				
	(Dth) ^a	Overall	State-Administered	All Utility-Administered			
2024	453,762,012	0.61%	0.07%	0.55%			
2025	458,474,852	0.68%	0.08%	0.61%			
2026	463,240,355	0.75%	0.08%	0.67%			
2027	468,059,140	0.75%	0.08%	0.67%			
2028	472,931,831	0.75%	0.08%	0.67%			
2029	477,859,062	0.75%	0.07%	0.68%			
2030	482,841,474	0.75%	0.08%	0.67%			
2031	487,879,714	0.75%	0.08%	0.67%			
2032	492,974,441	0.75%	0.08%	0.67%			
2033	498,126,318	0.75%	0.08%	0.67%			

Table 18. Full Compliance Scenario (Scenario B) Gas Results

Table 19. Full Compliance Scenario (Scenario B) Overall Annual Electric and Natural Gas Energy Efficiency Reduction Budget by Year (State-Administered, Utility) - \$(000) - Nominal Dollars

Year	State- Administered Budget	All Utility Budget	Total Budget	State- Administered Electric Budget	All Utility Electric Budget	Total Electric Budget	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	Total Natural Gas Budget
2024	\$239,631	\$923,603	\$1,163,234	\$91,678	\$515,678	\$607,355	\$147,953	\$407,925	\$555 <i>,</i> 878
2025	\$297,408	\$1,193,038	\$1,490,447	\$124,781	\$710,139	\$834,921	\$172,627	\$482,899	\$655,526
2026	\$366,909	\$1,498,722	\$1,865,631	\$166,519	\$936,234	\$1,102,753	\$200,390	\$562 <i>,</i> 489	\$762,878
2027	\$383,005	\$1,586,069	\$1,969,074	\$177,738	\$999,214	\$1,176,952	\$205,267	\$586 <i>,</i> 855	\$792,122
2028	\$396,584	\$1,678,719	\$2,075,302	\$186,495	\$1,063,449	\$1,249,944	\$210,088	\$615,270	\$825 <i>,</i> 358
2029	\$382,942	\$1,729,963	\$2,112,905	\$186,373	\$1,121,211	\$1,307,583	\$196,570	\$608,752	\$805,322
2030	\$388,145	\$1,815,531	\$2,203,675	\$186,748	\$1,190,103	\$1,376,851	\$201,397	\$625,427	\$826,824
2031	\$394,570	\$1,898,481	\$2,293,051	\$188,688	\$1,257,887	\$1,446,575	\$205,882	\$640,594	\$846,477
2032	\$400,802	\$1,981,986	\$2,382,788	\$190,420	\$1,326,987	\$1,517,407	\$210,382	\$654,999	\$865,380
2033	\$406,935	\$2,053,100	\$2,460,035	\$191,212	\$1,384,304	\$1,575,516	\$215,723	\$668,795	\$884,519

High Adoption Scenario Results

Table 20 through **Table 22** show annual electric energy reductions, annual gas energy reductions, and annual budgets between 2024 and 2033 for the High Adoption Scenario overall, and the split between state- and utility-administered programs. The overall reductions for electric and gas energy are not capped at the target percentages for this scenario; thus, the highest possible energy savings are allowed.

Year	Statewide Electric Energy Forecast	Scenari	Scenario C. Annual Energy Reduction Target (%)				
	(MWh) ^a	Overall	State-Administered	All Utility-Administered			
2024	74,801,155	1.62%	0.16%	1.46%			
2025	74,693,230	1.89%	0.19%	1.70%			
2026	74,959,246	2.20%	0.23%	1.97%			
2027	75,435,405	2.41%	0.26%	2.15%			
2028	76,339,250	2.58%	0.28%	2.30%			
2029	76,934,889	2.64%	0.27%	2.36%			
2030	77,698,636	2.65%	0.26%	2.39%			
2031	78,619,953	2.69%	0.25%	2.44%			
2032	79,860,986	2.72%	0.24%	2.48%			
2033	80,601,328	2.72%	0.23%	2.49%			

Table 20. High Adoption Scenario (Scenario C) Electric Results

^a Percent of sales shown is relative to the given year's energy forecast. The CEA requirement is for an average of the prior three years energy use for energy reduction comparisons.

Veer	Statewide Gas Energy	Scenario C. Annual Energy Reduction Target (%)				
rear	Forecast (Dth) ^a	Overall	State-Administered	All Utility-Administered		
2024	453,762,012	1.24%	0.14%	1.10%		
2025	458,474,852	1.39%	0.16%	1.24%		
2026	463,240,355	1.54%	0.17%	1.36%		
2027	468,059,140	1.62%	0.18%	1.44%		
2028	472,931,831	1.71%	0.19%	1.52%		
2029	477,859,062	1.57%	0.15%	1.42%		
2030	482,841,474	1.60%	0.16%	1.44%		
2031	487,879,714	1.61%	0.17%	1.44%		
2032	492,974,441	1.62%	0.17%	1.45%		
2033	498,126,318	1.62%	0.17%	1.45%		

Table 21. High Adoption Scenario (Scenario C) Gas Results

Table 22. High Adoption Scenario (Scenario C) Overall Annual Electric and Natural Gas Energy Efficiency Reduction Budget by Year (State-Administered, Utility) - \$(000) - Nominal Dollars

Year	State- Administered Budget	All Utility Budget	Total Budget	State- Administered Electric Budget	All Utility Electric Budget	Total Electric Budget	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	Total Natural Gas Budget
2024	\$419,210	\$1,632,383	\$2,051,593	\$116,611	\$798,080	\$914,691	\$302,599	\$834,303	\$1,136,902
2025	\$503,756	\$2,030,979	\$2,534,735	\$145,657	\$1,029,250	\$1,174,907	\$358,099	\$1,001,730	\$1,359,828
2026	\$600,787	\$2,493,177	\$3,093,964	\$184,114	\$1,323,589	\$1,507,703	\$416,673	\$1,169,588	\$1,586,261
2027	\$663,730	\$2,840,959	\$3,504,689	\$213,260	\$1,553,068	\$1,766,328	\$450,471	\$1,287,891	\$1,738,362
2028	\$725,811	\$3,187,660	\$3,913,471	\$238,407	\$1,760,236	\$1,998,643	\$487,404	\$1,427,424	\$1,914,828
2029	\$663,199	\$3,186,668	\$3,849,867	\$244,482	\$1,889,952	\$2,134,434	\$418,717	\$1,296,716	\$1,715,433
2030	\$681,754	\$3,354,639	\$4,036,393	\$247,072	\$2,004,758	\$2,251,830	\$434,682	\$1,349,880	\$1,784,562
2031	\$702,259	\$3,534,132	\$4,236,391	\$255,378	\$2,143,679	\$2,399,057	\$446,881	\$1,390,454	\$1,837,335
2032	\$720,152	\$3,698,664	\$4,418,815	\$262,135	\$2,272,683	\$2,534,818	\$458,017	\$1,425,980	\$1,883,997
2033	\$735,123	\$3,824,750	\$4,559,873	\$265,046	\$2,367,395	\$2,632,441	\$470,077	\$1,457,355	\$1,927,432

Future Policy Considerations

In addition to adjusting the prior study's savings potential, Cadmus also assessed market and policy options that can accelerate or slow growth of New Jersey's energy efficiency and electrification market. The findings of that supplemental research are summarized here.

National and Local Context for New Jersey's Current Energy Efficiency Programs

A broad range of recent market disruptions led to declining potential and increasing acquisition costs, making it more challenging for utilities to find cost-effective energy savings. With the maturity and high market saturation of LEDs, the decline or elimination of low-cost energy savings from lighting has impacted utility programs across the country. As a result, utilities will no longer be able to claim energy savings from the distribution of efficient, low-cost lighting measures, and acquisition costs for electric energy savings will increase.

At the same time, viable new technologies have not emerged to replace the impacts being lost due to these market changes. While energy efficiency potential is declining, demand requirements are growing. New equipment and technologies such as electric vehicles, electric heat pumps, and the growth of computational needs (such as server farms) have contributed to a rapid increase in electric demand across the country. Most projections indicate even larger capacity needs soon.

In August 2022, the Biden administration passed the Inflation Reduction Act (IRA), which will provide financial benefits to help decarbonize energy systems, improve the efficiency and comfort of homes and businesses, accelerate the adoption of renewable energy resources, and reduce the energy burden for lower-income Americans. Some portions of the IRA are expected to provide added benefits to customers who invest in energy-efficient upgrades. Other portions of the IRA have the potential to introduce new market disruptions and create customer confusion. The IRA relies on two primary mechanisms to achieve these goals: tax credits and grants to state energy offices.

TAX CREDITS. IRA tax credits will be available to consumers who install a range of renewable energy systems, energy efficiency measures, electrical improvements, and commercial building efficiency improvements and who build new single-family and multifamily homes that meet ENERGY STAR or Zero Energy Ready Home program qualifications. Tax credits will be available beginning in 2023 and are expected to supplement utility program incentives for applicable projects, and potentially boost utility program uptake.

STATE GRANTS. The IRA includes \$4.3 billion in grants (\$183 million portion for New Jersey) for state energy offices to implement rebate programs for whole-home retrofits (single family and multifamily), with the rebates doubled for qualifying low- and moderate-income residents. Grants are also earmarked for efficient home electrification measures in existing and new construction applications for low- and moderate-income residents and installers. It will require a full regulatory process to establish and promulgate state grant program rules before the states will be able to apply for grant funds, which is not anticipated until at least the third quarter of 2023.

Faced with these challenges of declining (cost-effective) potential as well as the requirement to achieve the CEA 2% electric savings goal, New Jersey is among a small group of states and utilities in the U.S. that recognize the environmental imperative of addressing the climate crisis and the critical role of

energy efficiency. Achieving this goal will require expanding existing programs and increasing participation through increasing incentives and marketing, as well as investing in new initiatives and research and development efforts. Utilities are undertaking various program strategies to achieve their goals.

While the following program strategies may already be considered within New Jersey programs, these represent strategies from other utilities with similar targets:

- Develop pilot programs and research initiatives to explore new opportunities to capture costeffective savings and help transform the nascent markets and technologies like those identified in this study.
- Transition to midstream and online program deployment strategies where appropriate to help manage costs and foster market transformation. Midstream programs typically include nonresidential lighting, residential and nonresidential HVAC and water heating equipment, and nonresidential food service. If there is a successful distributor/vendor network, participation for these types of programs can be several times larger than traditional downstream programs.
- Continue emphasis on providing deep building and home retrofits by focusing on customers and measures that offer the best savings opportunities, and then concentrating support for comprehensive measure packages that increase savings per customer interaction.
- Introduce alternative ways for customers to engage with programs using virtual tools and "no-touch" approaches. Invest in new ways to target, reach, and recruit customers to participate in programs, such as investments in market research and advanced data analytics capabilities, relationship building, and project sales. In nearly every industry, customer choice, personalized services, and competitive pricing have become the norm. Customers increasingly demand that their service providers offer a variety of simple, low-cost options from which to customize their engagement. Consumer communication preferences range from a variety of digital and traditional platforms. To get attention, utilities must continue to invest in technologies and systems that support customized engagement, a personalized experience, and, increasingly, a total digital solution. Though utilities have invested in data analytics, online engagement, and other resources to enable targeted, personalized interactions with customers, the available options and costs to maintain these capabilities have grown significantly.
- Continue and enhance the importance of equity and diversity in how programs are designed, marketed, and delivered, as well as new implementing strategies to increase outreach to and recruitment of diverse community members.
- Invest in workforce training to increase the pool of skilled workers who can deliver high-quality energy efficiency services for primarily low- and limited-income customers.
- For utilities facing capacity constraints, offer integrated efficiency and demand response incentives and focused cross-promotional campaigns for products, such as smart thermostats, that provide both energy savings and direct load management capabilities.

New Jersey's Current Energy Policy Landscape

New Jersey has been at the forefront of efforts to address climate change and promote sustainability, with a range of legislative and policy initiatives aimed at cutting greenhouse gas emissions and promoting clean energy. In 2018, the state passed the Clean Energy Act (CEA), which set ambitious goals for reducing greenhouse gas emissions and increasing the use of renewable energy sources. Under the act, New Jersey committed to generating 50% of its electricity from renewable sources by 2030. In 2020, the NJ BPU issued an Energy Master Plan to set the strategic vision to achieve the state's goal of 100% clean energy by 2050.

Energy-efficient buildings have been a key area of focus in New Jersey, and the state has introduced a range of measures aimed at improving energy efficiency and reducing energy waste. New Jersey Assembly Bill 5160, passed in 2022, establishes energy and water performance standards for 17 types of appliances. Any of these products, such as air purifiers and dishwashers, sold in New Jersey must adhere to modern standards of efficiency. The impacts of this law on building energy use were included in the analysis and modeling for this study.

In 2023, New Jersey's governor signed three more executive orders. These orders will help accelerate clean energy adoption by moving up the 100% clean energy target to 2035, require zero-carbon space heating and cooling systems (e.g., electric heat pumps) in 400,000 homes and 20,000 commercial properties by 2030, and ask the NJ BPU to work with stakeholders to plan for the future of natural gas utilities in the state given its decarbonization goals. Overall, New Jersey's efforts to improve building energy efficiency and support clean energy are an important parts of the state's broader climate and sustainability goals.

Considerations for Future New Jersey Policy:

- New Jersey could clarify and address fuel switching rules more comprehensively. The New
 Jersey Energy Master Plan acknowledges the need for fuel switching and the need to consider it
 in future utility plans. However, it is still unclear if gas utilities may propose fuel switching as a
 non-pipeline solution or how those utilities could adapt to decreasing demand while maintaining
 their current infrastructure.
- New Jersey's emission goals could be aligned with energy savings and fuel switching targets. This reframing could lead to a more effective and efficient approach to achieving the state's overall economic and climate objectives.
- To these ends, New Jersey is developing a Building Decarbonization Plan that focuses on getting customers whose fuel is delivered (fuel oil, propane, etc.) to switch to electric heat pumps. However, switching from gas-fired appliances to electric heat pumps may not reduce utility costs for all New Jersey households. Additional research is needed to forecast heat pump adoption rates and the savings potential for various hybrid solutions.

Key Findings and Conclusions

These are several directional findings for NJ BPU to consider as it works to finalize the next triennium targets for both state- and utility-administered programs:

- CEA minimum target for electricity savings of 2% of sales can be achieved but will require accelerated adoption of electric-forced programs and/or measures. If the NJ BPU state initiatives have a minimum impact on the state goals, utilities will need to more quickly expand existing programs and more aggressively promote electric energy efficiency opportunities to customers to meet the CEA target. As a result, the incentive programs could meet legal mandates without further contributions from state initiatives under the Full Compliance Scenario (Scenario B) and with sufficient funding and customer awareness of energy efficiency programs.
- The prior electric performance requirement target of 2.15% by 2026 would require significant investment and is most likely not obtainable considering the declining cost-effective available potential. This study found a decline of electric maximum achievable potential from 21% (2019 potential study) to 14% (goal setting study). This decline by one-third is a result of multiple factors (loss of residential LED lighting, high saturation and adoption of commercial LED lighting already in the market, new state appliance and federal equipment standards, etc.).
- The natural gas CEA target of 0.75% can be achieved without accelerating measure adoption from prior projections. The natural gas maximum achievable potential declined from 11% (2019 potential study) to 10% (goal setting study); therefore, the prior target natural gas performance requirement target of 1.10% could be reevaluated. The natural gas performance requirement target could be adjusted slightly downward, to 1.0%, to account for this change in potential. Alternatively, the CEA target of 0.75% could be maintained if any surplus budget could be diverted from natural gas efficiency programs and reserved for other programs, such as efficiency improvements for low-income housing or other priorities for the NJ BPU. If electrification goals are included in the plan, then higher natural gas goals may not be feasible over the long term.
- To achieve CEA targets by 2026 (PY5), the budgets to fund energy efficiency programs are
 projected to increase by 55% from 2023 (PY3) levels. In PY3, the NJ BPU projected a budget of
 roughly \$1.2 billion and, even with that investment, the electric CEA target will be met according
 to the 2020 Straw Proposal performance requirement target. Without the state contributions
 through other initiatives, the projected investment will increase to \$1.8 billion to achieve the
 CEA targets. This investment assumes an increase in marketing and administration costs as well
 as offering incentives of 100% of incremental measure cost.
- With the transition of state-administrated programs to utility-administrated programs, the share of the CEA target also transitioned to the utilities, resulting in higher targets for the utility. The shift to utility-run programs increased the projected utility savings as well as the projected utility budgets.

- Commercial and industrial lighting opportunities still contribute significant, cost-effective potential in the near term. Though benchmarking conducted for this study as well as recent program accomplishments indicated high saturation of linear LED lighting already in the marketplace, there remains significant potential, at least in the near term. Capturing the remaining nonresidential lighting potential will be a large component in achieving the electric CEA target. Considering current market trends, nonresidential LED lighting opportunities will likely reach market saturation by the end of the decade.
- New program measures and emerging technology potential offer some achievable long-term energy efficiency goals. Interior-insert products for windows, advanced clothing dryers, steam heat upgrades, air source heat pumps to replace unidirectional air conditioning units, and wastewater heat recovery (WWHR) were found cost-effective under certain applications. These measures, as well as other new measures reviewed as part of this study, may benefit from monitoring and tracking these technologies for consideration as future program opportunities. The state and utility programs will also benefit from continued research, active pursuit, and promotion of viable technologies as more data become available in coordination with industry partners. In addition, to advance new program measures and emerging technologies may require the development of pilot programs as well as research and development initiatives to explore new opportunities to capture cost-effective savings and help transform the nascent markets and technologies.
- New Jersey could clarify fuel switching rules more comprehensively. The New Jersey Energy Master Plan acknowledges the need for fuel switching and the need to consider it in future utility plans. However, it is still unclear if gas utilities may propose fuel switching as a non-pipeline solution or how those utilities could adapt to decreasing demand while maintaining their current infrastructure. New Jersey is developing a Building Decarbonization Plan that focuses on getting customers whose fuel is delivered (fuel oil, propane, etc.) to switch to electric heat pumps. However, switching from gas-fired appliances to electric heat pumps may not reduce utility costs for all New Jersey households. Additional research is needed to forecast heat pump adoption rates and the savings potential for various hybrid solutions.

New Jersey should consider conducting a new potential study in the future. That study could properly plan to accurately account for existing building stock, recent incremental cost data, the most recent NJ TRM data, and potential projections of electrification.

Appendix A. Detailed 2019 Study Update Results

Base Case Scenario (Scenario A)

Table A-1 through **Table A-3** show annual electric savings, annual gas savings, and annual budgets between PY3 and PY6 for the Base Case Scenario broken out by individual state programs. The explanation for how savings are allocated to different programs is described in the *Methodology Overview* section above.

Drogram Category	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
Program Category	MWh	MWh	MWh	MWh
Efficient Products	53,730	68,485	84,071	102,321
Existing Homes	29,768	34,855	41,449	51,754
Multifamily	18,087	22,427	28,110	35,365
Behavioral	317,315	316,771	317,814	319,793
Moderate Income Weatherization	8,983	10,466	12,579	15,441
Low Income	24,583	28,642	34,425	42,257
C&I Direct Install	121,876	138,226	158,401	178,695
Energy Solutions for Business	269,382	328,540	387,709	447,943
Residential New Construction	4,684	5,580	7,007	9,147
C&I New Construction	53,321	60,538	70,350	81,279
Large C&I	22,071	26,642	31,739	37,487
Non-Program Residential	7,272	9,211	11,173	13,115
Non-Program Low Income	2,486	3,142	3,807	4,466
Non-Program C&I	30,696	36,367	41,783	46,691
Res New Measures	880	1,915	3,245	4,839
Low Income Res New Measures	37	56	122	229
C&I New Measures	996	1,563	3,130	5,485
Total	966,167	1,093,427	1,236,915	1,396,308

Table A-1. Base Case Scenario (Scenario A) Electric Results (MWh)

Program Category	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
Filigram Category	Dth	Dth	Dth	Dth
Efficient Products	248,273	286,424	328,444	357,772
Existing Homes	285,609	304,260	324,789	309,698
Multifamily	60,513	66,732	73,158	74,357
Behavioral	830,274	842,157	845,659	784,011
Moderate Income Weatherization	69,429	75,207	81,292	80,626
Low Income	190,002	205,817	222,469	220,646
C&I Direct Install	1,801	2,348	2,948	3,278
Energy Solutions for Business	709,839	885,589	1,052,391	1,126,000
Residential New Construction	104,380	105,878	109,445	101,698
C&I New Construction	101,807	118,006	134,622	141,469
Large C&I	3,676	14,269	25,261	26,059
Non-Program Residential	22,369	27,378	33,111	35,724
Non-Program Low Income	8,890	10,918	13,199	14,260
Non-Program C&I	145,894	179,649	226,393	233,173
Res New Measures	318	637	1,122	1,670
Low Income Res New Measures	-	-	-	-
C&I New Measures	-	-	-	-
Total	2,783,074	3,125,270	3,474,303	3,510,444

Table A-2. Base Case Scenario (Scenario A) Gas Results (Dth)

Table A-3. Base Case Scenario (Scenario A) - Budget

Program Category	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
	(\$M)	(\$M)	(\$M)	(\$M)
Efficient Products	\$96	\$118	\$145	\$170
Existing Homes	\$93	\$105	\$119	\$126
Multifamily	\$33	\$40	\$49	\$58
Behavioral	\$33	\$34	\$35	\$35
Moderate Income Weatherization	\$66	\$74	\$83	\$86
Low Income	\$182	\$203	\$227	\$237
C&I Direct Install	\$62	\$68	\$78	\$88
Energy Solutions for Business	\$344	\$452	\$572	\$674
Residential New Construction	\$23	\$25	\$28	\$30
C&I New Construction	\$78	\$93	\$112	\$129
Large C&I	\$26	\$37	\$49	\$57
Non-Program Residential	\$9	\$11	\$14	\$16
Non-Program Low Income	\$18	\$22	\$28	\$32
Non-Program C&I	\$50	\$61	\$77	\$90
Res New Measures	\$2.9	\$6.5	\$11.2	\$17.0
Low Income Res New Measures	\$0.0	\$0.1	\$0.1	\$0.3
C&I New Measures	\$0.7	\$1.1	\$2.3	\$4.2
Total	\$1,117	\$1,352	\$1,628	\$1,849

High Adoption Scenario (Scenario C)

Table A-4 through **Table A-6** show annual electric savings, annual gas savings, and annual budgetsbetween PY3 and PY6 for the High Adoption Scenario broken out by individual state programs. Theexplanation for how savings are allocated to different programs is described in the *Methodology*Overview section above.

Program Category	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
	MWh	MWh	MWh	MWh
Efficient Products	82,954	108,062	128,980	143,605
Existing Homes	31,909	41,055	53,345	68,037
Multifamily	29,582	38,419	48,245	57,614
Behavioral	317,315	316,771	317,814	319,793
Moderate Income Weatherization	10,324	12,808	15,548	18,217
Low Income	28,253	35,052	42,550	49,853
C&I Direct Install	150,981	177,652	214,910	251,648
Energy Solutions for Business	406,711	498,630	600,972	651,919
Residential New Construction	5,751	7,549	10,316	13,060
C&I New Construction	65,762	73,553	83,452	94,845
Large C&I	30,509	41,495	58,079	61,013
Non-Program Residential	14,231	17,738	21,158	24,310
Non-Program Low Income	4,019	4,955	5,874	6,735
Non-Program C&I	30,696	36,367	41,783	46,691
Res New Measures	880	1,915	3,245	4,839
Low Income Res New Measures	37	56	122	229
C&I New Measures	996	1,563	3,130	5,485
Total	1,210,909	1,413,639	1,649,523	1,817,895

Table A-4. High Adoption Scenario (Scenario C) Electric Results (MWh)

Program Category	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
	Dth	Dth	Dth	Dth
Efficient Products	642,386	783,546	849,376	796,458
Existing Homes	540,733	573,634	615,945	639,895
Multifamily	122,984	139,856	150,489	146,245
Behavioral	1,571,929	1,587,750	1,603,745	1,619,915
Moderate Income Weatherization	146,356	163,317	175,103	171,663
Low Income	400,526	446,944	479,198	469,783
C&I Direct Install	6,442	9,207	12,207	15,296
Energy Solutions for Business	1,449,766	1,810,256	2,173,873	2,550,187
Residential New Construction	205,047	217,476	240,443	235,561
C&I New Construction	205,398	238,992	276,687	319,648
Large C&I	(2,253)	10,490	18,520	27,600
Non-Program Residential	42,351	51,617	62,794	73,812
Non-Program Low Income	16,831	20,584	25,030	29,464
Non-Program C&I	276,216	338,699	429,342	481,780
Res New Measures	602	1,201	2,127	3,451
Low Income Res New Measures	-	-	-	-
C&I New Measures	-	-	-	-
Total	5,625,313	6,393,569	7,114,878	7,580,757

Table A-5. High Adoption Scenario (Scenario C) Gas Results (Dth)

Table A-6. High Adoption Scenario (Scenario C) Budget

Brogram Catagory	2024 - PY3	2025 - PY4	2026 - PY5	2027 - PY6
	(\$M)	(\$M)	(\$M)	(\$M)
Efficient Products	\$200	\$254	\$306	\$339
Existing Homes	\$148	\$167	\$190	\$211
Multifamily	\$69	\$87	\$106	\$122
Behavioral	\$45	\$46	\$48	\$49
Moderate Income Weatherization	\$137	\$158	\$178	\$184
Low Income	\$374	\$433	\$487	\$503
C&I Direct Install	\$94	\$117	\$157	\$199
Energy Solutions for Business	\$653	\$857	\$1,101	\$1,285
Residential New Construction	\$41	\$45	\$52	\$57
C&I New Construction	\$133	\$158	\$188	\$221
Large C&I	\$37	\$58	\$84	\$94
Non-Program Residential	\$24	\$30	\$37	\$43
Non-Program Low Income	\$33	\$41	\$50	\$60
Non-Program C&I	\$60	\$75	\$97	\$117
Res New Measures	\$2.9	\$6.5	\$11.3	\$17.1
Low Income Res New Measures	\$0.0	\$0.1	\$0.1	\$0.3
C&I New Measures	\$0.7	\$1.1	\$2.3	\$4.2
Total	\$2,052	\$2,535	\$3,094	\$3,505

Base Case Scenario (Scenario A)

Table A-7 through Table A-11 show the detailed Scenario A results by utility and state program.

		Re	sidential & Low Inco	me	Commercial 8	k Industrial	Total	
Utility or State-Administered	Year	Residential Electric (MWh)	Low-Income Electric (MWh)	All Residential Electric (% Sales)	C&I Electric (MWh)	C&I Electric (% Sales)	Total Electric (MWh)	Total Electric (% Sales)
State-Administered	2024	4,689	12,691	0.06%	75,847	0.17%	93,227	0.12%
State-Administered	2025	5,586	14,825	0.07%	87,719	0.20%	108,131	0.14%
State-Administered	2026	7,015	17,824	0.08%	102,709	0.23%	127,548	0.17%
State-Administered	2027	9,157	21,845	0.10%	119,459	0.27%	150,461	0.20%
State-Administered	2028	10,380	24,465	0.11%	130,751	0.29%	165,596	0.22%
State-Administered	2029	11,108	24,768	0.11%	130,624	0.29%	166,500	0.22%
State-Administered	2030	10,671	24,053	0.11%	133,872	0.29%	168,597	0.22%
State-Administered	2031	10,139	22,967	0.10%	134,420	0.29%	167,526	0.21%
State-Administered	2032	9,841	22,185	0.10%	135,744	0.29%	167,771	0.21%
State-Administered	2033	9,472	21,386	0.09%	136,772	0.29%	167,630	0.21%
Atlantic City Electric	2024	49,465	16,286	1.46%	48,711	0.99%	114,461	1.22%
Atlantic City Electric	2025	52,694	17,289	1.57%	57,843	1.19%	127,826	1.37%
Atlantic City Electric	2026	56,740	18,487	1.68%	67,368	1.38%	142,595	1.53%
Atlantic City Electric	2027	62,168	20,072	1.83%	77,139	1.58%	159,379	1.70%
Atlantic City Electric	2028	65,933	21,098	1.92%	86,540	1.75%	173,570	1.83%
Atlantic City Electric	2029	65,012	20,620	1.87%	88,638	1.78%	174,271	1.82%
Atlantic City Electric	2030	63,722	19,976	1.81%	91,554	1.82%	175,251	1.81%
Atlantic City Electric	2031	62,386	19,458	1.75%	95,042	1.87%	176,886	1.81%
Atlantic City Electric	2032	61,802	19,184	1.71%	98,252	1.90%	179,238	1.81%
Atlantic City Electric	2033	60,542	18,571	1.65%	101,287	1.94%	180,400	1.80%
Jersey Central Power & Light	2024	119,779	38,892	1.47%	106,591	1.00%	265,261	1.23%
Jersey Central Power & Light	2025	128,177	41,420	1.57%	127,140	1.19%	296,736	1.38%
Jersey Central Power & Light	2026	138,740	44,480	1.70%	148,698	1.39%	331,919	1.54%
Jersey Central Power & Light	2027	152,488	48,361	1.85%	170,467	1.58%	371,316	1.71%
Jersey Central Power & Light	2028	161,644	50,842	1.93%	191,221	1.75%	403,707	1.83%
Jersey Central Power & Light	2029	159,632	49,790	1.89%	196,072	1.78%	405,493	1.83%

Table A-7. Base Case Scenario (Scenario A) – Detailed Electric Results

		Re	sidential & Low Inco	me	Commercial & Industrial		Total	
Utility or State-Administered	Year	Residential Electric (MWh)	Low-Income Electric (MWh)	All Residential Electric (% Sales)	C&I Electric (MWh)	C&I Electric (% Sales)	Total Electric (MWh)	Total Electric (% Sales)
Jersey Central Power & Light	2030	156,267	48,319	1.83%	202,541	1.82%	407,127	1.82%
Jersey Central Power & Light	2031	152,751	47,111	1.76%	210,476	1.87%	410,338	1.81%
Jersey Central Power & Light	2032	151,101	46,494	1.72%	217,865	1.91%	415,460	1.80%
Jersey Central Power & Light	2033	147,943	45,137	1.66%	224,900	1.95%	417,979	1.80%
Public Service Electric and Gas	2024	162,567	53,512	1.47%	260,061	0.95%	476,140	1.12%
Public Service Electric and Gas	2025	173,763	57,177	1.57%	310,703	1.13%	541,643	1.28%
Public Service Electric and Gas	2026	187,547	61,483	1.68%	364,468	1.32%	613,498	1.44%
Public Service Electric and Gas	2027	205,147	66,865	1.82%	419,254	1.51%	691,265	1.61%
Public Service Electric and Gas	2028	216,458	70,263	1.90%	471,077	1.67%	757,798	1.74%
Public Service Electric and Gas	2029	213,745	68,699	1.86%	483,646	1.70%	766,091	1.75%
Public Service Electric and Gas	2030	209,399	66,476	1.79%	500,480	1.74%	776,355	1.76%
Public Service Electric and Gas	2031	205,372	64,816	1.74%	520,256	1.79%	790,444	1.77%
Public Service Electric and Gas	2032	203,819	63,968	1.69%	539,121	1.83%	806,908	1.77%
Public Service Electric and Gas	2033	199,587	61,848	1.64%	556,129	1.87%	817,563	1.78%
Rockland Electric	2024	7,478	2,431	1.48%	7,132	0.99%	17,041	1.23%
Rockland Electric	2025	7,981	2,582	1.59%	8,470	1.19%	19,033	1.38%
Rockland Electric	2026	8,605	2,760	1.71%	9,868	1.38%	21,233	1.54%
Rockland Electric	2027	9,412	2,984	1.86%	11,261	1.58%	23,658	1.71%
Rockland Electric	2028	9,968	3,133	1.95%	12,626	1.75%	25,727	1.84%
Rockland Electric	2029	9,798	3,051	1.90%	12,908	1.78%	25,757	1.84%
Rockland Electric	2030	9,538	2,941	1.84%	13,296	1.82%	25,776	1.83%
Rockland Electric	2031	9,316	2,865	1.77%	13,817	1.87%	25,998	1.83%
Rockland Electric	2032	9,173	2,813	1.73%	14,236	1.91%	26,222	1.82%
Rockland Electric	2033	8,948	2,718	1.67%	14,673	1.95%	26,339	1.81%



		Re	sidential & Low Inco	me	Commercial 8	Industrial	Total	
Utility or State-Administered	Year	Residential Natural Gas (Dth)	Low-Income Natural Gas (Dth)	All Residential Natural Gas (% Sales)	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)
State-Administered	2024	104,385	98,781	0.08%	110,521	0.05%	313,687	0.07%
State-Administered	2025	105,884	107,551	0.09%	138,479	0.07%	351,914	0.08%
State-Administered	2026	109,452	116,847	0.09%	167,701	0.08%	394,000	0.09%
State-Administered	2027	101,706	116,387	0.09%	175,581	0.08%	393,674	0.08%
State-Administered	2028	98,925	118,607	0.08%	174,023	0.08%	391,555	0.08%
State-Administered	2029	73,863	104,561	0.07%	172,374	0.08%	350,799	0.07%
State-Administered	2030	77,036	105,979	0.07%	173,606	0.08%	356,621	0.07%
State-Administered	2031	81,379	107,379	0.07%	175,931	0.08%	364,688	0.07%
State-Administered	2032	85,985	108,633	0.07%	178,640	0.08%	373,258	0.08%
State-Administered	2033	90,382	109,893	0.07%	181,295	0.08%	381,571	0.08%
Elizabethtown Gas	2024	137,988	36,659	0.72%	113,172	0.42%	287,819	0.56%
Elizabethtown Gas	2025	146,043	38,774	0.75%	141,567	0.51%	326,384	0.63%
Elizabethtown Gas	2026	153,720	40,820	0.78%	170,705	0.61%	365,245	0.69%
Elizabethtown Gas	2027	149,398	39,609	0.74%	182,362	0.64%	371,369	0.69%
Elizabethtown Gas	2028	147,794	39,100	0.72%	190,223	0.66%	377,117	0.69%
Elizabethtown Gas	2029	146,290	38,860	0.70%	206,064	0.70%	391,214	0.70%
Elizabethtown Gas	2030	147,703	39,272	0.70%	210,399	0.71%	397,374	0.70%
Elizabethtown Gas	2031	149,025	39,687	0.70%	214,809	0.71%	403,520	0.70%
Elizabethtown Gas	2032	150,364	40,108	0.69%	219,310	0.72%	409,782	0.70%
Elizabethtown Gas	2033	152,042	40,602	0.69%	223,464	0.72%	416,109	0.70%
New Jersey Natural Gas	2024	264,241	70,677	0.71%	86,508	0.42%	421,426	0.62%
New Jersey Natural Gas	2025	277,108	73,955	0.75%	107,041	0.51%	458,105	0.67%
New Jersey Natural Gas	2026	288,948	77,029	0.77%	127,676	0.61%	493,654	0.72%
New Jersey Natural Gas	2027	278,250	73,950	0.74%	134,918	0.64%	487,118	0.71%
New Jersey Natural Gas	2028	272,659	72,226	0.72%	139,211	0.66%	484,096	0.70%
New Jersey Natural Gas	2029	268,329	71,016	0.71%	149,172	0.70%	488,517	0.71%
New Jersey Natural Gas	2030	268,069	70,994	0.70%	150,662	0.71%	489,724	0.71%
New Jersey Natural Gas	2031	267,619	70,968	0.70%	152,154	0.71%	490,741	0.70%
New Jersey Natural Gas	2032	267,174	70,946	0.70%	153,662	0.72%	491,781	0.70%
New Jersey Natural Gas	2033	267,297	71,044	0.69%	154,878	0.72%	493,218	0.70%

Table A-8. Base Case Scenario (Scenario A) – Detailed Gas Results

		Residential & Low Income		Commercial & Industrial		Total		
Utility or State-Administered	Year	Residential Natural Gas (Dth)	Low-Income Natural Gas (Dth)	All Residential Natural Gas (% Sales)	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)
Public Service Electric and Gas	2024	695,203	226,904	0.61%	550,796	0.41%	1,472,903	0.52%
Public Service Electric and Gas	2025	742,252	238,887	0.64%	685,762	0.51%	1,666,901	0.58%
Public Service Electric and Gas	2026	791,445	250,344	0.68%	823,102	0.60%	1,864,891	0.64%
Public Service Electric and Gas	2027	782,002	241,807	0.66%	875,049	0.64%	1,898,858	0.65%
Public Service Electric and Gas	2028	785,880	237,614	0.65%	908,351	0.65%	1,931,844	0.65%
Public Service Electric and Gas	2029	764,108	235,069	0.63%	979,143	0.70%	1,978,320	0.66%
Public Service Electric and Gas	2030	767,309	236,446	0.63%	994,785	0.70%	1,998,540	0.66%
Public Service Electric and Gas	2031	768,644	237,822	0.62%	1,010,712	0.70%	2,017,178	0.66%
Public Service Electric and Gas	2032	769,338	239,215	0.62%	1,026,950	0.71%	2,035,503	0.66%
Public Service Electric and Gas	2033	771,497	241,027	0.61%	1,041,437	0.71%	2,053,961	0.66%
South Jersey Gas	2024	145,385	39,834	0.70%	102,019	0.42%	287,239	0.56%
South Jersey Gas	2025	153,025	41,929	0.73%	127,012	0.51%	321,966	0.63%
South Jersey Gas	2026	160,152	43,930	0.76%	152,431	0.61%	356,512	0.69%
South Jersey Gas	2027	154,936	42,418	0.72%	162,070	0.64%	359,424	0.68%
South Jersey Gas	2028	152,444	41,670	0.70%	168,262	0.66%	362,377	0.68%
South Jersey Gas	2029	152,465	41,214	0.69%	181,414	0.70%	375,093	0.70%
South Jersey Gas	2030	153,241	41,455	0.69%	184,357	0.71%	379,052	0.70%
South Jersey Gas	2031	153,942	41,695	0.69%	187,334	0.71%	382,970	0.70%
South Jersey Gas	2032	154,688	41,938	0.68%	190,358	0.72%	386,984	0.70%
South Jersey Gas	2033	155,785	42,255	0.68%	193,050	0.72%	391,089	0.70%



Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
State-Administered	2024	\$4,840	\$14,988	\$62,793	\$82,621
State-Administered	2025	\$6,188	\$18,175	\$76,519	\$100,883
State-Administered	2026	\$8,380	\$22,228	\$94,458	\$125,066
State-Administered	2027	\$10,993	\$26,650	\$114,559	\$152,202
State-Administered	2028	\$12,674	\$29,938	\$130,670	\$173,282
State-Administered	2029	\$13,581	\$31,558	\$135,664	\$180,803
State-Administered	2030	\$13,419	\$32,865	\$143,785	\$190,070
State-Administered	2031	\$13,084	\$34,163	\$148,453	\$195,700
State-Administered	2032	\$12,944	\$35,717	\$153,608	\$202,270
State-Administered	2033	\$12,791	\$37,206	\$158,231	\$208,228
Atlantic City Electric	2024	\$18,790	\$6,197	\$35,789	\$60,777
Atlantic City Electric	2025	\$23,248	\$7,387	\$44,855	\$75,490
Atlantic City Electric	2026	\$28,986	\$8,875	\$55,660	\$93,520
Atlantic City Electric	2027	\$35,316	\$10,524	\$66,913	\$112,753
Atlantic City Electric	2028	\$40,093	\$11,701	\$78,753	\$130,547
Atlantic City Electric	2029	\$42,165	\$12,113	\$84,499	\$138,777
Atlantic City Electric	2030	\$42,775	\$12,166	\$91,172	\$146,113
Atlantic City Electric	2031	\$43,674	\$12,330	\$97,612	\$153,616
Atlantic City Electric	2032	\$44,908	\$12,607	\$103,366	\$160,882
Atlantic City Electric	2033	\$45,340	\$12,650	\$108,689	\$166,679
Jersey Central Power & Light	2024	\$46,736	\$14,788	\$78,249	\$139,773
Jersey Central Power & Light	2025	\$57,683	\$17,691	\$98,516	\$173,891
Jersey Central Power & Light	2026	\$71,837	\$21,357	\$122,765	\$215,959
Jersey Central Power & Light	2027	\$87,272	\$25,367	\$147,751	\$260,390
Jersey Central Power & Light	2028	\$98,527	\$28,212	\$173,883	\$300,623
Jersey Central Power & Light	2029	\$103,326	\$29,261	\$186,771	\$319,358
Jersey Central Power & Light	2030	\$104,156	\$29,432	\$201,537	\$335,125
Jersey Central Power & Light	2031	\$105,653	\$29,859	\$216,016	\$351,527
Jersey Central Power & Light	2032	\$107,979	\$30,560	\$229,034	\$367,574
Jersey Central Power & Light	2033	\$108,468	\$30,738	\$241,149	\$380,355
Public Service Electric and Gas	2024	\$63,008	\$20,358	\$191,000	\$274,366

Table A-9. Base Case Scenario (Scenario A) – Detailed Electric Budgets

Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
Public Service Electric and Gas	2025	\$78,431	\$24,417	\$240,225	\$343,073
Public Service Electric and Gas	2026	\$98,206	\$29,494	\$299,424	\$427,124
Public Service Electric and Gas	2027	\$119,672	\$35,032	\$361,399	\$516,103
Public Service Electric and Gas	2028	\$135,592	\$38,942	\$425,982	\$600,516
Public Service Electric and Gas	2029	\$143,209	\$40,331	\$458,538	\$642,078
Public Service Electric and Gas	2030	\$145,944	\$40,472	\$496,086	\$682,502
Public Service Electric and Gas	2031	\$149,977	\$41,058	\$532,044	\$723,079
Public Service Electric and Gas	2032	\$155,128	\$42,023	\$564,883	\$762,034
Public Service Electric and Gas	2033	\$157,279	\$42,125	\$594,583	\$793,987
Rockland Electric	2024	\$2,944	\$926	\$5,235	\$9,105
Rockland Electric	2025	\$3,623	\$1,103	\$6,566	\$11,292
Rockland Electric	2026	\$4,488	\$1,325	\$8,153	\$13,966
Rockland Electric	2027	\$5,422	\$1,565	\$9,768	\$16,755
Rockland Electric	2028	\$6,114	\$1,737	\$11,490	\$19,342
Rockland Electric	2029	\$6,381	\$1,792	\$12,303	\$20,476
Rockland Electric	2030	\$6,398	\$1,791	\$13,235	\$21,425
Rockland Electric	2031	\$6,487	\$1,815	\$14,183	\$22,486
Rockland Electric	2032	\$6,603	\$1,849	\$14,968	\$23,420
Rockland Electric	2033	\$6,610	\$1,852	\$15,735	\$24,196

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
State-Administered	2024	\$18,260	\$83,139	\$45,742	\$147,142
State-Administered	2025	\$19,160	\$92,486	\$59,036	\$170,682
State-Administered	2026	\$20,472	\$102,961	\$74,039	\$197,472
State-Administered	2027	\$19,641	\$105,046	\$79,988	\$204,675
State-Administered	2028	\$19,748	\$109,600	\$82,200	\$211,548
State-Administered	2029	\$13,560	\$100,372	\$84,305	\$198,238
State-Administered	2030	\$14,048	\$103,398	\$86,131	\$203,577
State-Administered	2031	\$14,658	\$106,367	\$88,459	\$209,484
State-Administered	2032	\$15,296	\$109,266	\$91,117	\$215,680
State-Administered	2033	\$15,967	\$112,320	\$93,949	\$222,236
Elizabethtown Gas	2024	\$13,605	\$14,517	\$18,923	\$47,045
Elizabethtown Gas	2025	\$14,937	\$16,193	\$24,967	\$56,098
Elizabethtown Gas	2026	\$16,331	\$18,073	\$31,499	\$65,903
Elizabethtown Gas	2027	\$16,327	\$18,495	\$35,162	\$69,985
Elizabethtown Gas	2028	\$16,745	\$19,355	\$38,090	\$74,190
Elizabethtown Gas	2029	\$15,196	\$17,890	\$42,140	\$75,226
Elizabethtown Gas	2030	\$15,710	\$18,519	\$43,737	\$77,967
Elizabethtown Gas	2031	\$16,202	\$19,144	\$45,301	\$80,647
Elizabethtown Gas	2032	\$16,664	\$19,766	\$46,839	\$83,270
Elizabethtown Gas	2033	\$17,143	\$20,424	\$48,318	\$85,885
New Jersey Natural Gas	2024	\$25,834	\$27,989	\$14,465	\$68,288
New Jersey Natural Gas	2025	\$28,087	\$30,887	\$18,879	\$77,853
New Jersey Natural Gas	2026	\$30,402	\$34,107	\$23,560	\$88,069
New Jersey Natural Gas	2027	\$30,099	\$34,535	\$26,016	\$90,649
New Jersey Natural Gas	2028	\$30,556	\$35,756	\$27,877	\$94,189
New Jersey Natural Gas	2029	\$27,628	\$32,703	\$30,507	\$90,837
New Jersey Natural Gas	2030	\$28,255	\$33,486	\$31,321	\$93,061
New Jersey Natural Gas	2031	\$28,827	\$34,242	\$32,089	\$95,159
New Jersey Natural Gas	2032	\$29,334	\$34,972	\$32,820	\$97,127
New Jersey Natural Gas	2033	\$29,860	\$35,745	\$33,489	\$99,094
Public Service Electric and Gas	2024	\$59,744	\$89,853	\$91,990	\$241,587

Table A-10. Base Case Scenario (Scenario A) – Detailed Gas Budgets

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
Public Service Electric and Gas	2025	\$66,690	\$99,763	\$120,804	\$287,257
Public Service Electric and Gas	2026	\$74,579	\$110,835	\$151,710	\$337,123
Public Service Electric and Gas	2027	\$76,338	\$112,906	\$168,561	\$357,804
Public Service Electric and Gas	2028	\$80,304	\$117,610	\$181,732	\$379,646
Public Service Electric and Gas	2029	\$67,955	\$108,217	\$200,077	\$376,249
Public Service Electric and Gas	2030	\$70,099	\$111,492	\$206,645	\$388,236
Public Service Electric and Gas	2031	\$71,914	\$114,716	\$212,999	\$399,629
Public Service Electric and Gas	2032	\$73,398	\$117,885	\$219,174	\$410,458
Public Service Electric and Gas	2033	\$74,843	\$121,234	\$225,015	\$421,092
South Jersey Gas	2024	\$13,886	\$15,773	\$17,062	\$46,721
South Jersey Gas	2025	\$15,164	\$17,508	\$22,405	\$55,077
South Jersey Gas	2026	\$16,487	\$19,444	\$28,133	\$64,065
South Jersey Gas	2027	\$16,415	\$19,799	\$31,257	\$67,471
South Jersey Gas	2028	\$16,740	\$20,616	\$33,700	\$71,057
South Jersey Gas	2029	\$15,474	\$18,961	\$37,107	\$71,541
South Jersey Gas	2030	\$15,916	\$19,534	\$38,332	\$73,782
South Jersey Gas	2031	\$16,337	\$20,098	\$39,515	\$75,950
South Jersey Gas	2032	\$16,733	\$20,653	\$40,664	\$78,050
South Jersey Gas	2033	\$17,147	\$21,239	\$41,750	\$80,136

Table A-11. Base Case Scenario (Scenario A) – Detailed Results by Program

		_		Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
Res	Efficient Products	2024	0	53,730	\$0	\$59,793,186	0	248,273	\$0	\$36,433,375		
Res	Efficient Products	2025	0	68,485	\$0	\$76,415,004	0	286,424	\$0	\$41,088,830		
Res	Efficient Products	2026	0	84,071	\$0	\$98,440,274	0	328,444	\$0	\$46,284,535		
Res	Efficient Products	2027	0	102,321	\$0	\$120,994,036	0	357,772	\$0	\$49,025,674		
Res	Efficient Products	2028	0	117,800	\$0	\$138,342,821	0	388,273	\$0	\$52,148,801		
Res	Efficient Products	2029	0	115,375	\$0	\$141,845,537	0	435,571	\$0	\$59,641,928		

			Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	
Res	Efficient Products	2030	0	105,430	\$0	\$136,768,798	0	439,491	\$0	\$61,058,879	
Res	Efficient Products	2031	0	101,486	\$0	\$134,700,697	0	442,645	\$0	\$62,465,707	
Res	Efficient Products	2032	0	98,732	\$0	\$134,078,648	0	446,435	\$0	\$64,050,139	
Res	Efficient Products	2033	0	88,529	\$0	\$128,124,031	0	451,354	\$0	\$65,869,287	
Res	Existing Homes	2024	0	29,768	\$0	\$36,703,101	0	285,609	\$0	\$56,695,242	
Res	Existing Homes	2025	0	34,855	\$0	\$43,069,431	0	304,260	\$0	\$62,264,288	
Res	Existing Homes	2026	0	41,449	\$0	\$50,216,699	0	324,789	\$0	\$68,363,283	
Res	Existing Homes	2027	0	51,754	\$0	\$58,396,177	0	309,698	\$0	\$67,190,908	
Res	Existing Homes	2028	0	54,829	\$0	\$62,181,154	0	308,803	\$0	\$69,302,840	
Res	Existing Homes	2029	0	56,033	\$0	\$63,813,196	0	161,683	\$0	\$40,621,328	
Res	Existing Homes	2030	0	52,054	\$0	\$61,792,099	0	162,128	\$0	\$42,242,675	
Res	Existing Homes	2031	0	47,767	\$0	\$59,782,457	0	161,041	\$0	\$43,450,096	
Res	Existing Homes	2032	0	44,339	\$0	\$58,314,047	0	157,991	\$0	\$43,992,711	
Res	Existing Homes	2033	0	40,300	\$0	\$56,198,576	0	154,396	\$0	\$44,239,679	
Res	Moderate Income Weatherization	2024	0	8,983	\$0	\$8,066,252	0	69,429	\$0	\$58,322,328	
Res	Moderate Income Weatherization	2025	0	10,466	\$0	\$9,511,617	0	75,207	\$0	\$64,530,600	
Res	Moderate Income Weatherization	2026	0	12,579	\$0	\$11,548,435	0	81,292	\$0	\$71,462,611	
Res	Moderate Income Weatherization	2027	0	15,441	\$0	\$13,838,059	0	80,626	\$0	\$72,591,701	
Res	Moderate Income Weatherization	2028	0	17,282	\$0	\$15,312,584	0	81,956	\$0	\$75,548,757	
Res	Moderate Income Weatherization	2029	0	17,446	\$0	\$15,716,749	0	71,043	\$0	\$68,073,504	
Res	Moderate Income Weatherization	2030	0	16,832	\$0	\$15,428,764	0	71,937	\$0	\$70,033,902	
Res	Moderate Income Weatherization	2031	0	15,943	\$0	\$14,928,413	0	72,844	\$0	\$71,971,312	
Res	Moderate Income Weatherization	2032	0	15,275	\$0	\$14,585,290	0	73,676	\$0	\$73,883,962	
Res	Moderate Income Weatherization	2033	0	14,600	\$0	\$14,221,041	0	74,520	\$0	\$75,911,505	
Res	Multifamily	2024	0	18,087	\$0	\$22,791,041	0	60,513	\$0	\$10,557,185	

			Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	
Res	Multifamily	2025	0	22,427	\$0	\$28,393,276	0	66,732	\$0	\$11,575,966	
Res	Multifamily	2026	0	28,110	\$0	\$36,198,027	0	73,158	\$0	\$12,652,701	
Res	Multifamily	2027	0	35,365	\$0	\$45,317,471	0	74,357	\$0	\$12,768,474	
Res	Multifamily	2028	0	40,223	\$0	\$50,508,563	0	75,703	\$0	\$12,924,455	
Res	Multifamily	2029	0	40,875	\$0	\$52,481,885	0	84,036	\$0	\$14,614,518	
Res	Multifamily	2030	0	39,308	\$0	\$50,909,940	0	84,989	\$0	\$14,997,067	
Res	Multifamily	2031	0	37,181	\$0	\$48,917,886	0	85,804	\$0	\$15,367,070	
Res	Multifamily	2032	0	35,590	\$0	\$47,466,393	0	86,667	\$0	\$15,767,972	
Res	Multifamily	2033	0	33,758	\$0	\$44,729,546	0	87,625	\$0	\$16,208,345	
Res	Behavioral	2024	0	317,315	\$0	\$20,147,570	0	830,274	\$0	\$13,168,575	
Res	Behavioral	2025	0	316,771	\$0	\$20,566,307	0	842,157	\$0	\$13,658,051	
Res	Behavioral	2026	0	317,814	\$0	\$21,096,862	0	845,659	\$0	\$14,022,497	
Res	Behavioral	2027	0	319,793	\$0	\$21,698,441	0	784,011	\$0	\$13,288,207	
Res	Behavioral	2028	0	319,680	\$0	\$22,163,025	0	733,486	\$0	\$12,702,544	
Res	Behavioral	2029	0	307,233	\$0	\$21,755,478	0	811,127	\$0	\$14,347,448	
Res	Behavioral	2030	0	305,249	\$0	\$22,071,315	0	808,255	\$0	\$14,598,467	
Res	Behavioral	2031	0	299,842	\$0	\$22,135,469	0	805,676	\$0	\$14,857,352	
Res	Behavioral	2032	0	298,123	\$0	\$22,467,362	0	804,268	\$0	\$15,140,542	
Res	Behavioral	2033	0	297,658	\$0	\$22,896,271	0	805,711	\$0	\$15,481,458	
Res	Low Income	2024	12,292	12,292	\$11,037,297	\$11,037,297	95,001	95,001	\$79,804,210	\$79,804,210	
Res	Low Income	2025	14,321	14,321	\$13,015,034	\$13,015,034	102,908	102,908	\$88,299,176	\$88,299,176	
Res	Low Income	2026	17,213	17,213	\$15,802,074	\$15,802,074	111,235	111,235	\$97,784,457	\$97,784,457	
Res	Low Income	2027	21,129	21,129	\$18,935,036	\$18,935,036	110,323	110,323	\$99,329,425	\$99,329,425	
Res	Low Income	2028	23,647	23,647	\$20,952,673	\$20,952,673	112,142	112,142	\$103,375,654	\$103,375,654	
Res	Low Income	2029	23,872	23,872	\$21,505,704	\$21,505,704	97,210	97,210	\$93,147,039	\$93,147,039	
Res	Low Income	2030	23,031	23,031	\$21,111,646	\$21,111,646	98,434	98,434	\$95,829,511	\$95,829,511	
Res	Low Income	2031	21,815	21,815	\$20,427,000	\$20,427,000	99,675	99,675	\$98,480,527	\$98,480,527	
Res	Low Income	2032	20,901	20,901	\$19,957,494	\$19,957,494	100,813	100,813	\$101,097,665	\$101,097,665	
Res	Low Income	2033	19,978	19,978	\$19,459,082	\$19,459,082	101,968	101,968	\$103,872,013	\$103,872,013	
Res	Residential New Construction	2024	4,684	0	\$4,636,737	\$0	104,380	0	\$18,212,633	\$0	

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
Res	Residential New Construction	2025	5,580	0	\$5,922,330	\$0	105,878	0	\$19,100,355	\$0			
Res	Residential New Construction	2026	7,007	0	\$8,048,341	\$0	109,445	0	\$20,398,282	\$0			
Res	Residential New Construction	2027	9,147	0	\$10,595,085	\$0	101,698	0	\$19,559,238	\$0			
Res	Residential New Construction	2028	10,369	0	\$12,213,706	\$0	98,916	0	\$19,659,937	\$0			
Res	Residential New Construction	2029	11,096	0	\$13,069,925	\$0	73,854	0	\$13,458,998	\$0			
Res	Residential New Construction	2030	10,657	0	\$12,827,474	\$0	77,026	0	\$13,943,170	\$0			
Res	Residential New Construction	2031	10,123	0	\$12,378,883	\$0	81,369	0	\$14,549,564	\$0			
Res	Residential New Construction	2032	9,823	0	\$12,134,041	\$0	85,975	0	\$15,184,407	\$0			
Res	Residential New Construction	2033	9,453	0	\$11,875,432	\$0	90,372	0	\$15,851,518	\$0			
Res	Non-Program Residential	2024	5	7,266	\$202,971	\$6,686,657	5	22,364	\$47,437	\$1,616,136			
Res	Non-Program Residential	2025	7	9,204	\$266,111	\$8,766,717	6	27,372	\$59,346	\$2,021,845			
Res	Non-Program Residential	2026	8	11,164	\$331,782	\$10,930,174	7	33,104	\$73,731	\$2,511,912			
Res	Non-Program Residential	2027	10	13,105	\$397,457	\$13,093,750	8	35,716	\$81,343	\$2,771,264			
Res	Non-Program Residential	2028	11	14,961	\$460,395	\$15,167,158	8	37,943	\$87,953	\$2,996,456			
Res	Non-Program Residential	2029	12	16,366	\$510,749	\$16,826,014	10	43,082	\$101,200	\$3,447,775			
Res	Non-Program Residential	2030	14	18,684	\$591,963	\$19,501,524	10	44,151	\$105,038	\$3,578,530			
Res	Non-Program Residential	2031	16	21,155	\$705,168	\$23,230,937	10	45,044	\$108,644	\$3,701,381			
Res	Non-Program Residential	2032	18	23,667	\$810,420	\$26,698,320	10	45,720	\$111,955	\$3,814,184			
Res	Non-Program Residential	2033	19	26,014	\$915,180	\$30,149,540	10	46,360	\$115,355	\$3,930,011			
Res	Non-Program Low Income	2024	399	2,087	\$3,950,290	\$5,637,056	3,780	5,110	\$3,334,861	\$4,588,526			

				Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
Res	Non-Program Low Income	2025	504	2,638	\$5,160,205	\$7,363,604	4,642	6,275	\$4,186,839	\$5,760,785		
Res	Non-Program Low Income	2026	611	3,196	\$6,426,288	\$9,170,302	5,612	7,586	\$5,176,705	\$7,122,769		
Res	Non-Program Low Income	2027	717	3,750	\$7,715,106	\$11,009,443	6,064	8,196	\$5,716,535	\$7,865,535		
Res	Non-Program Low Income	2028	818	4,278	\$8,985,390	\$12,822,135	6,464	8,738	\$6,224,277	\$8,564,151		
Res	Non-Program Low Income	2029	895	4,685	\$10,052,209	\$14,344,485	7,351	9,937	\$7,225,039	\$9,941,128		
Res	Non-Program Low Income	2030	1,022	5,348	\$11,753,348	\$16,772,007	7,545	10,199	\$7,568,114	\$10,413,173		
Res	Non-Program Low Income	2031	1,152	6,027	\$13,736,053	\$19,601,322	7,704	10,414	\$7,886,082	\$10,850,674		
Res	Non-Program Low Income	2032	1,284	6,721	\$15,759,937	\$22,489,402	7,820	10,571	\$8,168,720	\$11,239,563		
Res	Non-Program Low Income	2033	1,408	7,370	\$17,747,104	\$25,325,085	7,925	10,713	\$8,448,004	\$11,623,839		
C&I	C&I Direct Install	2024	0	121,876	\$0	\$62,013,366	0	1,801	\$0	\$0		
C&I	C&I Direct Install	2025	0	138,226	\$0	\$68,436,893	0	2,348	\$0	\$0		
C&I	C&I Direct Install	2026	0	158,401	\$0	\$77,542,768	0	2,948	\$0	\$0		
C&I	C&I Direct Install	2027	0	178,695	\$0	\$87,663,248	0	3,278	\$0	\$0		
C&I	C&I Direct Install	2028	0	194,336	\$0	\$95,620,857	0	3,092	\$0	\$0		
C&I	C&I Direct Install	2029	0	186,580	\$0	\$92,923,034	0	3,446	\$0	\$0		
C&I	C&I Direct Install	2030	0	181,762	\$0	\$91,824,559	0	3,439	\$0	\$0		
C&I	C&I Direct Install	2031	0	184,067	\$0	\$94,153,959	0	3,418	\$0	\$0		
C&I	C&I Direct Install	2032	0	188,093	\$0	\$97,423,524	0	3,393	\$0	\$0		
C&I	C&I Direct Install	2033	0	192,145	\$0	\$100,914,829	0	3,378	\$0	\$0		
C&I	Energy Solutions for Business	2024	0	269,382	\$0	\$211,124,541	0	709,839	\$0	\$133,374,158		
C&I	Energy Solutions for Business	2025	0	328,540	\$0	\$276,489,836	0	885,589	\$0	\$175,305,344		
C&I	Energy Solutions for Business	2026	0	387,709	\$0	\$353,785,176	0	1,052,391	\$0	\$217,755,434		
C&I	Energy Solutions for Business	2027	0	447,943	\$0	\$432,781,452	0	1,126,000	\$0	\$240,919,190		

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
C&I	Energy Solutions for Business	2028	0	509,758	\$0	\$519,840,979	0	1,179,034	\$0	\$259,187,541			
C&I	Energy Solutions for Business	2029	0	533,048	\$0	\$567,692,486	0	1,277,076	\$0	\$285,886,138			
C&I	Energy Solutions for Business	2030	0	558,099	\$0	\$619,225,976	0	1,304,500	\$0	\$296,241,492			
C&I	Energy Solutions for Business	2031	0	585,038	\$0	\$671,030,628	0	1,327,349	\$0	\$305,948,091			
C&I	Energy Solutions for Business	2032	0	608,681	\$0	\$716,383,755	0	1,347,573	\$0	\$315,169,960			
C&I	Energy Solutions for Business	2033	0	631,872	\$0	\$758,646,617	0	1,363,494	\$0	\$323,698,965			
C&I	C&I New Construction	2024	53,321	0	\$40,376,919	\$0	101,807	0	\$37,911,629	\$0			
C&I	C&I New Construction	2025	60,538	0	\$48,001,939	\$0	118,006	0	\$45,436,056	\$0			
C&I	C&I New Construction	2026	70,350	0	\$58,922,647	\$0	134,622	0	\$53,476,734	\$0			
C&I	C&I New Construction	2027	81,279	0	\$71,376,191	\$0	141,469	0	\$57,618,674	\$0			
C&I	C&I New Construction	2028	87,966	0	\$81,590,565	\$0	143,784	0	\$60,142,792	\$0			
C&I	C&I New Construction	2029	88,242	0	\$85,979,276	\$0	145,951	0	\$62,522,249	\$0			
C&I	C&I New Construction	2030	90,730	0	\$91,936,478	\$0	149,905	0	\$65,222,789	\$0			
C&I	C&I New Construction	2031	91,456	0	\$95,625,639	\$0	153,102	0	\$67,634,821	\$0			
C&I	C&I New Construction	2032	92,706	0	\$99,512,608	\$0	155,762	0	\$69,951,331	\$0			
C&I	C&I New Construction	2033	93,720	0	\$103,022,001	\$0	158,218	0	\$72,308,798	\$0			
C&I	Large C&I	2024	22,071	0	\$21,146,423	\$0	3,676	0	\$5,080,554	\$0			
C&I	Large C&I	2025	26,642	0	\$26,979,410	\$0	14,269	0	\$10,035,398	\$0			
C&I	Large C&I	2026	31,739	0	\$33,709,754	\$0	25,261	0	\$15,360,652	\$0			
C&I	Large C&I	2027	37,487	0	\$41,048,403	\$0	26,059	0	\$16,279,159	\$0			
C&I	Large C&I	2028	42,049	0	\$46,707,157	\$0	22,229	0	\$15,318,791	\$0			
C&I	Large C&I	2029	41,623	0	\$47,154,684	\$0	18,007	0	\$14,519,264	\$0			

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
C&I	Large C&I	2030	42,332	0	\$49,077,966	\$0	15,393	0	\$13,690,084	\$0			
C&I	Large C&I	2031	42,148	0	\$49,996,382	\$0	14,450	0	\$13,556,856	\$0			
C&I	Large C&I	2032	42,210	0	\$51,182,727	\$0	14,318	0	\$13,785,695	\$0			
C&I	Large C&I	2033	42,211	0	\$52,218,397	\$0	14,280	0	\$14,094,602	\$0			
C&I	Non-Program C&I	2024	456	30,240	\$1,270,067	\$36,427,567	5,038	140,856	\$2,750,272	\$9,066,128			
C&I	Non-Program C&I	2025	540	35,827	\$1,537,596	\$44,100,723	6,204	173,445	\$3,564,561	\$11,750,390			
C&I	Non-Program C&I	2026	620	41,162	\$1,825,201	\$52,349,714	7,818	218,575	\$5,201,317	\$17,145,870			
C&I	Non-Program C&I	2027	693	45,998	\$2,134,616	\$61,224,223	8,053	225,121	\$6,090,310	\$20,076,388			
C&I	Non-Program C&I	2028	736	48,849	\$2,372,236	\$68,039,555	8,010	223,921	\$6,738,115	\$22,211,843			
C&I	Non-Program C&I	2029	759	50,370	\$2,530,320	\$72,573,650	8,416	235,272	\$7,263,712	\$23,944,448			
C&I	Non-Program C&I	2030	810	53,786	\$2,770,938	\$79,474,964	8,308	232,263	\$7,218,050	\$23,793,926			
C&I	Non-Program C&I	2031	816	54,172	\$2,830,987	\$81,197,268	8,379	234,241	\$7,267,354	\$23,956,452			
C&I	Non-Program C&I	2032	829	55,016	\$2,912,378	\$83,531,695	8,560	239,314	\$7,380,040	\$24,327,917			
C&I	Non-Program C&I	2033	840	55,763	\$2,990,734	\$85,779,085	8,798	245,956	\$7,545,411	\$24,873,052			
Res	Res New Measures	2024	0	880	\$0	\$2,885,990	0	318	\$0	\$14,722			
Res	Res New Measures	2025	0	1,915	\$0	\$6,481,954	0	637	\$0	\$30,143			
Res	Res New Measures	2026	0	3,245	\$0	\$11,164,849	0	1,122	\$0	\$54,264			
Res	Res New Measures	2027	0	4,839	\$0	\$16,887,777	0	1,670	\$0	\$82,604			
Res	Res New Measures	2028	0	6,640	\$0	\$23,468,813	0	2,342	\$0	\$118,361			
Res	Res New Measures	2029	0	8,462	\$0	\$30,288,683	0	3,664	\$0	\$189,082			
Res	Res New Measures	2030	0	10,703	\$0	\$38,779,044	0	4,904	\$0	\$258,436			
Res	Res New Measures	2031	0	12,857	\$0	\$47,128,220	0	6,258	\$0	\$336,709			
Res	Res New Measures	2032	0	15,005	\$0	\$55,601,935	0	7,630	\$0	\$419,083			
Res	Res New Measures	2033	0	17,087	\$0	\$63,958,466	0	8,900	\$0	\$499,006			
Res	Low Income Res New Measures	2024	18	18	\$20,594	\$20,594	0	0	\$0	\$0			

			Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	
Res	Low Income Res New Measures	2025	28	28	\$32,309	\$32,309	0	0	\$0	\$0	
Res	Low Income Res New Measures	2026	61	61	\$71,948	\$71,948	0	0	\$0	\$0	
Res	Low Income Res New Measures	2027	115	115	\$138,034	\$138,034	0	0	\$0	\$0	
Res	Low Income Res New Measures	2028	193	193	\$237,810	\$237,810	0	0	\$0	\$0	
Res	Low Income Res New Measures	2029	293	293	\$368,596	\$368,596	0	0	\$0	\$0	
Res	Low Income Res New Measures	2030	434	434	\$556,823	\$556,823	0	0	\$0	\$0	
Res	Low Income Res New Measures	2031	603	603	\$790,815	\$790,815	0	0	\$0	\$0	
Res	Low Income Res New Measures	2032	810	810	\$1,084,480	\$1,084,480	0	0	\$0	\$0	
Res	Low Income Res New Measures	2033	1,057	1,057	\$1,444,048	\$1,444,048	0	0	\$0	\$0	
C&I	C&I New Measures	2024	0	996	\$0	\$707,562	0	0	\$0	\$0	
C&I	C&I New Measures	2025	0	1,563	\$0	\$1,135,163	0	0	\$0	\$0	
C&I	C&I New Measures	2026	0	3,130	\$0	\$2,324,063	0	0	\$0	\$0	
C&I	C&I New Measures	2027	0	5,485	\$0	\$4,162,442	0	0	\$0	\$0	
C&I	C&I New Measures	2028	0	8,520	\$0	\$6,606,922	0	0	\$0	\$0	
C&I	C&I New Measures	2029	0	11,265	\$0	\$8,922,197	0	0	\$0	\$0	
C&I	C&I New Measures	2030	0	14,224	\$0	\$11,504,282	0	0	\$0	\$0	
C&I	C&I New Measures	2031	0	16,315	\$0	\$13,473,678	0	0	\$0	\$0	
C&I	C&I New Measures	2032	0	17,685	\$0	\$14,912,172	0	0	\$0	\$0	
C&I	C&I New Measures	2033	0	17,209	\$0	\$14,814,569	0	0	\$0	\$0	

Full Compliance Scenario (Scenario B)

Table A-12 through Table A-16 show the detailed Scenario B results by utility and state program.

		Re	sidential & Low Inco	me	Commercial 8	& Industrial	Tota	al
Utility or State-Administered	Year	Residential Electric (MWh)	Low-Income Electric (MWh)	All Residential Electric (% Sales)	C&I Electric (MWh)	C&I Electric (% Sales)	Total Electric (MWh)	Total Electric (% Sales)
State-Administered	2024	4,725	12,128	0.05%	83,020	0.19%	99,873	0.13%
State-Administered	2025	6,827	15,791	0.07%	108,509	0.25%	131,128	0.18%
State-Administered	2026	9,871	19,656	0.10%	140,566	0.32%	170,093	0.23%
State-Administered	2027	11,536	21,007	0.11%	142,808	0.32%	175,351	0.23%
State-Administered	2028	12,088	21,597	0.11%	143,331	0.32%	177,016	0.23%
State-Administered	2029	13,056	22,365	0.11%	137,714	0.31%	173,134	0.23%
State-Administered	2030	12,504	21,971	0.11%	130,105	0.29%	164,581	0.21%
State-Administered	2031	11,736	20,982	0.10%	125,943	0.27%	158,660	0.20%
State-Administered	2032	11,096	20,134	0.10%	121,790	0.26%	153,019	0.19%
State-Administered	2033	10,586	19,286	0.09%	117,177	0.25%	147,049	0.18%
Atlantic City Electric	2024	44,916	14,486	1.32%	55,036	1.12%	114,438	1.22%
Atlantic City Electric	2025	53,423	16,962	1.57%	71,848	1.47%	142,233	1.52%
Atlantic City Electric	2026	61,161	19,078	1.80%	88,966	1.83%	169,206	1.81%
Atlantic City Electric	2027	60,989	18,827	1.78%	89,345	1.83%	169,160	1.80%
Atlantic City Electric	2028	60,558	18,586	1.74%	91,508	1.85%	170,652	1.80%
Atlantic City Electric	2029	61,368	18,639	1.75%	92,047	1.85%	172,055	1.80%
Atlantic City Electric	2030	60,790	18,321	1.71%	95,254	1.89%	174,366	1.81%
Atlantic City Electric	2031	59,796	18,015	1.67%	98,739	1.94%	176,550	1.81%
Atlantic City Electric	2032	59,210	17,830	1.62%	102,502	1.98%	179,542	1.81%
Atlantic City Electric	2033	57,940	17,332	1.57%	106,074	2.03%	181,346	1.81%
Jersey Central Power & Light	2024	108,912	34,597	1.33%	120,344	1.12%	263,853	1.22%
Jersey Central Power & Light	2025	130,321	40,643	1.59%	157,792	1.48%	328,757	1.53%
Jersey Central Power & Light	2026	150,286	45,911	1.82%	196,194	1.83%	392,390	1.82%
Jersey Central Power & Light	2027	150,537	45,363	1.80%	197,281	1.83%	393,182	1.81%
Jersey Central Power & Light	2028	149,466	44,789	1.77%	202,063	1.85%	396,318	1.80%
Jersey Central Power & Light	2029	151,748	45,007	1.77%	203,500	1.85%	400,255	1.80%

Table A-12. Full Compliance Scenario (Scenario B) – Detailed Electric Results

		Re	sidential & Low Inco	me	Commercial 8	k Industrial	Tota	al
Utility or State-Administered	Year	Residential Electric (MWh)	Low-Income Electric (MWh)	All Residential Electric (% Sales)	C&I Electric (MWh)	C&I Electric (% Sales)	Total Electric (MWh)	Total Electric (% Sales)
Jersey Central Power & Light	2030	150,060	44,316	1.74%	210,618	1.90%	404,994	1.81%
Jersey Central Power & Light	2031	147,325	43,616	1.68%	218,560	1.95%	409,501	1.81%
Jersey Central Power & Light	2032	145,615	43,211	1.64%	227,178	1.99%	416,004	1.81%
Jersey Central Power & Light	2033	142,340	42,126	1.59%	235,409	2.04%	419,875	1.80%
Public Service Electric and Gas	2024	147,783	47,587	1.33%	289,710	1.05%	485,079	1.14%
Public Service Electric and Gas	2025	176,597	56,078	1.58%	380,358	1.38%	613,033	1.45%
Public Service Electric and Gas	2026	203,033	63,432	1.80%	473,945	1.71%	740,410	1.74%
Public Service Electric and Gas	2027	202,360	62,707	1.78%	480,602	1.73%	745,669	1.74%
Public Service Electric and Gas	2028	199,970	61,896	1.73%	495,265	1.76%	757,131	1.74%
Public Service Electric and Gas	2029	202,989	62,099	1.74%	502,162	1.77%	767,249	1.75%
Public Service Electric and Gas	2030	200,885	60,970	1.70%	521,694	1.82%	783,549	1.77%
Public Service Electric and Gas	2031	197,848	60,011	1.66%	542,720	1.87%	800,579	1.79%
Public Service Electric and Gas	2032	196,166	59,457	1.62%	565,212	1.92%	820,835	1.80%
Public Service Electric and Gas	2033	191,779	57,729	1.56%	585,745	1.97%	835,254	1.82%
Rockland Electric	2024	6,798	2,162	1.34%	8,060	1.12%	17,020	1.23%
Rockland Electric	2025	8,113	2,533	1.60%	10,523	1.47%	21,168	1.53%
Rockland Electric	2026	9,320	2,848	1.83%	13,033	1.83%	25,202	1.83%
Rockland Electric	2027	9,293	2,799	1.82%	13,043	1.83%	25,135	1.82%
Rockland Electric	2028	9,220	2,760	1.78%	13,350	1.85%	25,329	1.82%
Rockland Electric	2029	9,317	2,758	1.79%	13,401	1.85%	25,477	1.82%
Rockland Electric	2030	9,163	2,697	1.75%	13,829	1.90%	25,689	1.82%
Rockland Electric	2031	8,989	2,652	1.69%	14,348	1.95%	25,989	1.82%
Rockland Electric	2032	8,843	2,615	1.65%	14,845	1.99%	26,303	1.83%
Rockland Electric	2033	8,613	2,536	1.59%	15,359	2.04%	26,508	1.83%


		Re	sidential & Low Inco	me	Commercial 8	k Industrial	Total		
Utility or State-Administered	Year	Residential Natural Gas (Dth)	Low-Income Natural Gas (Dth)	All Residential Natural Gas (% Sales)	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)	
State-Administered	2024	100,864	104,234	0.08%	103,990	0.05%	309,088	0.07%	
State-Administered	2025	105,556	115,898	0.09%	125,906	0.06%	347,360	0.08%	
State-Administered	2026	116,527	125,331	0.10%	149,104	0.07%	390,962	0.08%	
State-Administered	2027	108,411	118,201	0.09%	165,813	0.08%	392,425	0.08%	
State-Administered	2028	105,093	115,237	0.09%	171,207	0.08%	391,537	0.08%	
State-Administered	2029	80,156	100,021	0.07%	174,303	0.08%	354,479	0.07%	
State-Administered	2030	81,720	100,101	0.07%	185,465	0.08%	367,286	0.08%	
State-Administered	2031	83,574	98,467	0.07%	195,139	0.09%	377,180	0.08%	
State-Administered	2032	83,654	96,560	0.07%	205,343	0.09%	385,557	0.08%	
State-Administered	2033	88,582	95,099	0.07%	215,131	0.09%	398,813	0.08%	
Elizabethtown Gas	2024	138,658	36,348	0.72%	111,675	0.41%	286,681	0.56%	
Elizabethtown Gas	2025	147,933	38,682	0.76%	137,758	0.50%	324,373	0.62%	
Elizabethtown Gas	2026	155,239	40,809	0.78%	167,235	0.60%	363,283	0.69%	
Elizabethtown Gas	2027	147,116	38,947	0.73%	185,485	0.65%	371,549	0.69%	
Elizabethtown Gas	2028	142,191	37,829	0.70%	198,967	0.69%	378,987	0.69%	
Elizabethtown Gas	2029	138,990	37,175	0.67%	217,063	0.74%	393,227	0.71%	
Elizabethtown Gas	2030	139,351	37,328	0.66%	222,211	0.75%	398,890	0.71%	
Elizabethtown Gas	2031	138,556	37,278	0.65%	229,962	0.76%	405,795	0.71%	
Elizabethtown Gas	2032	137,914	37,224	0.64%	237,929	0.78%	413,068	0.71%	
Elizabethtown Gas	2033	137,392	37,300	0.63%	245,033	0.79%	419,725	0.71%	
New Jersey Natural Gas	2024	265,686	70,100	0.72%	85,364	0.41%	421,150	0.62%	
New Jersey Natural Gas	2025	280,866	73,813	0.75%	104,162	0.50%	458,841	0.68%	
New Jersey Natural Gas	2026	291,931	77,042	0.78%	125,081	0.60%	494,054	0.72%	
New Jersey Natural Gas	2027	274,036	72,729	0.73%	137,229	0.65%	483,995	0.71%	
New Jersey Natural Gas	2028	262,326	69,880	0.70%	145,611	0.69%	477,816	0.69%	
New Jersey Natural Gas	2029	254,947	67,938	0.67%	157,134	0.74%	480,019	0.69%	
New Jersey Natural Gas	2030	252,926	67,479	0.67%	159,120	0.75%	479,526	0.69%	
New Jersey Natural Gas	2031	248,859	66,653	0.65%	162,888	0.76%	478,400	0.69%	
New Jersey Natural Gas	2032	245,120	65,831	0.64%	166,708	0.78%	477,660	0.68%	
New Jersey Natural Gas	2033	241,640	65,247	0.63%	169,827	0.79%	476,715	0.68%	

Table A-13. Full Compliance Scenario (Scenario B) – Detailed Gas Results

		Re	sidential & Low Inco	me	Commercial 8	Industrial	Total		
Utility or State-Administered	Year	Residential Natural Gas (Dth)	Low-Income Natural Gas (Dth)	All Residential Natural Gas (% Sales)	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)	
Public Service Electric and Gas	2024	711,220	225,025	0.62%	543,297	0.41%	1,479,543	0.52%	
Public Service Electric and Gas	2025	768,327	238,390	0.66%	667,044	0.49%	1,673,761	0.58%	
Public Service Electric and Gas	2026	814,132	250,346	0.69%	806,027	0.59%	1,870,505	0.64%	
Public Service Electric and Gas	2027	775,708	237,798	0.65%	889,623	0.65%	1,903,129	0.65%	
Public Service Electric and Gas	2028	756,156	229,893	0.63%	949,616	0.68%	1,935,665	0.65%	
Public Service Electric and Gas	2029	725,196	224,879	0.60%	1,030,777	0.73%	1,980,851	0.66%	
Public Service Electric and Gas	2030	722,267	224,743	0.59%	1,049,947	0.74%	1,996,957	0.66%	
Public Service Electric and Gas	2031	710,342	223,371	0.58%	1,081,259	0.75%	2,014,971	0.66%	
Public Service Electric and Gas	2032	698,529	221,988	0.56%	1,113,324	0.77%	2,033,842	0.66%	
Public Service Electric and Gas	2033	687,132	221,383	0.55%	1,141,092	0.78%	2,049,606	0.66%	
South Jersey Gas	2024	146,457	39,485	0.70%	100,671	0.41%	286,613	0.56%	
South Jersey Gas	2025	155,523	41,816	0.74%	123,597	0.50%	320,936	0.62%	
South Jersey Gas	2026	162,260	43,903	0.76%	149,335	0.60%	355,498	0.68%	
South Jersey Gas	2027	152,794	41,703	0.71%	164,849	0.65%	359,346	0.68%	
South Jersey Gas	2028	146,669	40,314	0.68%	176,000	0.69%	362,983	0.68%	
South Jersey Gas	2029	144,838	39,428	0.66%	191,100	0.74%	375,366	0.70%	
South Jersey Gas	2030	144,537	39,404	0.65%	194,711	0.75%	378,652	0.70%	
South Jersey Gas	2031	143,031	39,167	0.64%	200,553	0.76%	382,751	0.70%	
South Jersey Gas	2032	141,730	38,929	0.63%	206,524	0.78%	387,182	0.70%	
South Jersey Gas	2033	140,575	38,827	0.62%	211,687	0.79%	391,089	0.70%	

Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
State-Administered	2024	\$4,513	\$13,629	\$73,519	\$91,660
State-Administered	2025	\$6,623	\$18,202	\$99,926	\$124,751
State-Administered	2026	\$9,865	\$23,411	\$133,171	\$166,447
State-Administered	2027	\$12,016	\$25,658	\$139,937	\$177,611
State-Administered	2028	\$13,059	\$27,230	\$145,997	\$186,287
State-Administered	2029	\$14,335	\$29,530	\$142,176	\$186,040
State-Administered	2030	\$14,237	\$31,378	\$140,623	\$186,238
State-Administered	2031	\$13,928	\$33,263	\$140,763	\$187,954
State-Administered	2032	\$13,777	\$35,244	\$140,384	\$189,405
State-Administered	2033	\$13,580	\$37,196	\$139,073	\$189,849
Atlantic City Electric	2024	\$16,946	\$5,532	\$41,853	\$64,330
Atlantic City Electric	2025	\$23,334	\$7,251	\$57,661	\$88,246
Atlantic City Electric	2026	\$31,015	\$9,167	\$75,725	\$115,907
Atlantic City Electric	2027	\$34,726	\$9,957	\$78,833	\$123,516
Atlantic City Electric	2028	\$37,160	\$10,466	\$83,527	\$131,153
Atlantic City Electric	2029	\$40,136	\$11,141	\$86,552	\$137,829
Atlantic City Electric	2030	\$41,177	\$11,401	\$93,014	\$145,591
Atlantic City Electric	2031	\$42,427	\$11,751	\$99,052	\$153,230
Atlantic City Electric	2032	\$43,784	\$12,150	\$105,129	\$161,064
Atlantic City Electric	2033	\$44,354	\$12,336	\$110,759	\$167,449
Jersey Central Power & Light	2024	\$42,205	\$13,202	\$91,456	\$146,863
Jersey Central Power & Light	2025	\$58,091	\$17,369	\$126,556	\$202,016
Jersey Central Power & Light	2026	\$77,321	\$22,063	\$166,897	\$266,281
Jersey Central Power & Light	2027	\$86,432	\$24,002	\$173,960	\$284,394
Jersey Central Power & Light	2028	\$91,999	\$25,238	\$184,330	\$301,567
Jersey Central Power & Light	2029	\$99,112	\$26,915	\$191,238	\$317,264
Jersey Central Power & Light	2030	\$101,001	\$27,582	\$205,540	\$334,123
Jersey Central Power & Light	2031	\$103,367	\$28,459	\$219,137	\$350,963
Jersey Central Power & Light	2032	\$105,986	\$29,455	\$232,873	\$368,314
Jersey Central Power & Light	2033	\$106,763	\$29,976	\$245,667	\$382,406
Public Service Electric and Gas	2024	\$56,883	\$18,169	\$219,806	\$294,858

Table A-14. Full Compliance Scenario (Scenario B) – Detailed Electric Budgets

Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
Public Service Electric and Gas	2025	\$78,899	\$23,963	\$303,812	\$406,674
Public Service Electric and Gas	2026	\$105,494	\$30,460	\$400,729	\$536,682
Public Service Electric and Gas	2027	\$118,235	\$33,141	\$421,444	\$572,820
Public Service Electric and Gas	2028	\$126,283	\$34,832	\$449,957	\$611,073
Public Service Electric and Gas	2029	\$136,957	\$37,095	\$471,365	\$645,416
Public Service Electric and Gas	2030	\$141,053	\$37,926	\$509,518	\$688,497
Public Service Electric and Gas	2031	\$146,191	\$39,131	\$545,172	\$730,495
Public Service Electric and Gas	2032	\$151,675	\$40,501	\$580,937	\$773,113
Public Service Electric and Gas	2033	\$154,218	\$41,083	\$613,444	\$808,746
Rockland Electric	2024	\$2,658	\$826	\$6,125	\$9,609
Rockland Electric	2025	\$3,647	\$1,083	\$8,443	\$13,172
Rockland Electric	2026	\$4,829	\$1,369	\$11,093	\$17,291
Rockland Electric	2027	\$5,369	\$1,480	\$11,508	\$18,357
Rockland Electric	2028	\$5,708	\$1,554	\$12,186	\$19,448
Rockland Electric	2029	\$6,120	\$1,648	\$12,600	\$20,368
Rockland Electric	2030	\$6,205	\$1,679	\$13,499	\$21,382
Rockland Electric	2031	\$6,347	\$1,730	\$14,388	\$22,465
Rockland Electric	2032	\$6,481	\$1,782	\$15,218	\$23,482
Rockland Electric	2033	\$6,506	\$1,806	\$16,029	\$24,341

Table A-15. Full Compliance Scenario (Scenario B) – Detailed Gas Budgets

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
State-Administered	2024	\$17,154	\$86,423	\$44,376	\$147,953
State-Administered	2025	\$18,002	\$98,302	\$56,323	\$172,627
State-Administered	2026	\$19,796	\$109,548	\$71,046	\$200,390
State-Administered	2027	\$19,363	\$106,242	\$79,662	\$205,267
State-Administered	2028	\$19,690	\$106,409	\$83,989	\$210,088
State-Administered	2029	\$13,654	\$95,998	\$86,917	\$196,570
State-Administered	2030	\$14,031	\$97,737	\$89,629	\$201,397
State-Administered	2031	\$14,517	\$97,844	\$93,521	\$205,882

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
State-Administered	2032	\$14,882	\$97,651	\$97,850	\$210,382
State-Administered	2033	\$15,649	\$97,885	\$102,189	\$215,723
Elizabethtown Gas	2024	\$13,591	\$15,069	\$18,507	\$47,167
Elizabethtown Gas	2025	\$15,055	\$17,185	\$24,019	\$56,259
Elizabethtown Gas	2026	\$16,458	\$19,208	\$30,453	\$66,118
Elizabethtown Gas	2027	\$16,059	\$18,699	\$35,186	\$69,943
Elizabethtown Gas	2028	\$16,111	\$18,791	\$39,082	\$73,985
Elizabethtown Gas	2029	\$14,433	\$17,111	\$43,396	\$74,940
Elizabethtown Gas	2030	\$14,810	\$17,507	\$45,144	\$77,461
Elizabethtown Gas	2031	\$15,031	\$17,616	\$47,354	\$80,000
Elizabethtown Gas	2032	\$15,226	\$17,674	\$49,603	\$82,503
Elizabethtown Gas	2033	\$15,405	\$17,811	\$51,716	\$84,933
New Jersey Natural Gas	2024	\$25,839	\$29,065	\$14,148	\$69,052
New Jersey Natural Gas	2025	\$28,351	\$32,798	\$18,162	\$79,311
New Jersey Natural Gas	2026	\$30,680	\$36,269	\$22,778	\$89,726
New Jersey Natural Gas	2027	\$29,622	\$34,924	\$26,033	\$90,578
New Jersey Natural Gas	2028	\$29,401	\$34,716	\$28,603	\$92,719
New Jersey Natural Gas	2029	\$26,240	\$31,278	\$31,416	\$88,934
New Jersey Natural Gas	2030	\$26,634	\$31,654	\$32,328	\$90,616
New Jersey Natural Gas	2031	\$26,737	\$31,503	\$33,543	\$91,784
New Jersey Natural Gas	2032	\$26,795	\$31,262	\$34,756	\$92,813
New Jersey Natural Gas	2033	\$26,820	\$31,161	\$35,845	\$93,826
Public Service Electric and Gas	2024	\$61,484	\$93,289	\$89,944	\$244,717
Public Service Electric and Gas	2025	\$69,734	\$105,907	\$116,184	\$291,825
Public Service Electric and Gas	2026	\$77,615	\$117,829	\$146,629	\$342,073
Public Service Electric and Gas	2027	\$76,072	\$114,163	\$168,619	\$358,854
Public Service Electric and Gas	2028	\$77,281	\$114,185	\$186,399	\$377,866
Public Service Electric and Gas	2029	\$64,381	\$103,502	\$205,955	\$373,838
Public Service Electric and Gas	2030	\$65,732	\$105,396	\$213,195	\$384,323
Public Service Electric and Gas	2031	\$65,792	\$105,547	\$222,540	\$393,878
Public Service Electric and Gas	2032	\$65,524	\$105,391	\$231,985	\$402,900
Public Service Electric and Gas	2033	\$65,056	\$105,704	\$240,709	\$411,470

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
South Jersey Gas	2024	\$13,938	\$16,364	\$16,687	\$46,989
South Jersey Gas	2025	\$15,382	\$18,568	\$21,554	\$55,505
South Jersey Gas	2026	\$16,720	\$20,652	\$27,199	\$64,571
South Jersey Gas	2027	\$16,191	\$20,011	\$31,278	\$67,480
South Jersey Gas	2028	\$16,108	\$20,015	\$34,578	\$70,701
South Jersey Gas	2029	\$14,693	\$18,134	\$38,213	\$71,040
South Jersey Gas	2030	\$14,995	\$18,467	\$39,565	\$73,027
South Jersey Gas	2031	\$15,130	\$18,496	\$41,306	\$74,932
South Jersey Gas	2032	\$15,247	\$18,472	\$43,064	\$76,783
South Jersey Gas	2033	\$15,351	\$18,530	\$44,686	\$78,567

Table A-16. Full Compliance Scenario (Scenario B) – Detailed Results by Program

					ummary with Target Adjustment Cap					
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget
Res	Efficient Products	2024	0	55,480	\$0	\$53,418,177	0	333,553	\$0	\$42,948,866
Res	Efficient Products	2025	0	78,395	\$0	\$75,044,770	0	403,617	\$0	\$50,918,683
Res	Efficient Products	2026	0	97,765	\$0	\$101,178,917	0	439,994	\$0	\$56,411,953
Res	Efficient Products	2027	0	100,103	\$0	\$112,882,899	0	396,416	\$0	\$52,313,995
Res	Efficient Products	2028	0	103,314	\$0	\$121,330,830	0	373,345	\$0	\$50,143,855
Res	Efficient Products	2029	0	103,177	\$0	\$127,651,685	0	407,151	\$0	\$56,027,023
Res	Efficient Products	2030	0	94,897	\$0	\$124,834,692	0	401,531	\$0	\$56,334,399
Res	Efficient Products	2031	0	90,194	\$0	\$124,092,304	0	379,211	\$0	\$54,880,581
Res	Efficient Products	2032	0	86,050	\$0	\$124,003,291	0	357,943	\$0	\$53,545,829
Res	Efficient Products	2033	0	74,841	\$0	\$118,881,867	0	336,901	\$0	\$52,202,100
Res	Existing Homes	2024	0	28,661	\$0	\$33,510,454	0	264,387	\$0	\$52,482,516
Res	Existing Homes	2025	0	39,814	\$0	\$45,132,932	0	276,529	\$0	\$56,589,260
Res	Existing Homes	2026	0	54,157	\$0	\$58,806,442	0	296,225	\$0	\$62,351,025
Res	Existing Homes	2027	0	63,576	\$0	\$64,745,205	0	291,582	\$0	\$63,260,477
Res	Existing Homes	2028	0	64,276	\$0	\$65,796,149	0	296,931	\$0	\$66,638,379

				Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
Res	Existing Homes	2029	0	67,705	\$0	\$69,692,874	0	154,664	\$0	\$38,857,821		
Res	Existing Homes	2030	0	63,373	\$0	\$67,911,241	0	155,159	\$0	\$40,426,898		
Res	Existing Homes	2031	0	58,624	\$0	\$66,174,701	0	155,296	\$0	\$41,900,085		
Res	Existing Homes	2032	0	54,526	\$0	\$64,531,188	0	153,707	\$0	\$42,799,744		
Res	Existing Homes	2033	0	49,458	\$0	\$61,876,093	0	151,321	\$0	\$43,358,534		
Res	Moderate Income Weatherization	2024	0	8,583	\$0	\$7,149,940	0	73,619	\$0	\$60,903,595		
Res	Moderate Income Weatherization	2025	0	11,153	\$0	\$9,280,431	0	81,617	\$0	\$69,059,937		
Res	Moderate Income Weatherization	2026	0	13,869	\$0	\$11,831,146	0	87,854	\$0	\$76,608,784		
Res	Moderate Income Weatherization	2027	0	14,815	\$0	\$12,903,220	0	82,211	\$0	\$73,710,034		
Res	Moderate Income Weatherization	2028	0	15,202	\$0	\$13,439,243	0	79,675	\$0	\$73,391,493		
Res	Moderate Income Weatherization	2029	0	15,690	\$0	\$14,154,587	0	67,958	\$0	\$65,106,295		
Res	Moderate Income Weatherization	2030	0	15,296	\$0	\$14,094,868	0	67,879	\$0	\$66,135,119		
Res	Moderate Income Weatherization	2031	0	14,458	\$0	\$13,768,303	0	66,532	\$0	\$65,948,616		
Res	Moderate Income Weatherization	2032	0	13,724	\$0	\$13,503,689	0	65,008	\$0	\$65,556,837		
Res	Moderate Income Weatherization	2033	0	12,996	\$0	\$13,219,405	0	63,824	\$0	\$65,485,317		
Res	Multifamily	2024	0	17,820	\$0	\$20,591,302	0	66,378	\$0	\$11,020,510		
Res	Multifamily	2025	0	25,040	\$0	\$28,614,638	0	75,349	\$0	\$12,400,689		
Res	Multifamily	2026	0	33,245	\$0	\$38,883,407	0	81,954	\$0	\$13,606,386		
Res	Multifamily	2027	0	36,979	\$0	\$44,560,195	0	77,065	\$0	\$12,993,062		
Res	Multifamily	2028	0	38,682	\$0	\$46,782,529	0	73,861	\$0	\$12,565,593		
Res	Multifamily	2029	0	40,284	\$0	\$49,930,499	0	80,495	\$0	\$13,981,070		
Res	Multifamily	2030	0	38,969	\$0	\$48,999,079	0	80,367	\$0	\$14,194,994		
Res	Multifamily	2031	0	36,729	\$0	\$47,424,675	0	78,731	\$0	\$14,198,164		
Res	Multifamily	2032	0	34,804	\$0	\$46,107,094	0	77,011	\$0	\$14,201,865		
Res	Multifamily	2033	0	32,622	\$0	\$43,514,088	0	75,796	\$0	\$14,281,577		

			Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	
Res	Behavioral	2024	0	275,179	\$0	\$17,472,223	0	768,581	\$0	\$12,190,088	
Res	Behavioral	2025	0	300,679	\$0	\$19,521,518	0	765,399	\$0	\$12,413,199	
Res	Behavioral	2026	0	317,814	\$0	\$21,096,862	0	771,287	\$0	\$12,789,278	
Res	Behavioral	2027	0	295,327	\$0	\$20,038,338	0	738,149	\$0	\$12,510,893	
Res	Behavioral	2028	0	280,369	\$0	\$19,437,642	0	705,286	\$0	\$12,214,174	
Res	Behavioral	2029	0	276,854	\$0	\$19,604,292	0	775,913	\$0	\$13,724,578	
Res	Behavioral	2030	0	279,390	\$0	\$20,201,570	0	773,513	\$0	\$13,970,960	
Res	Behavioral	2031	0	278,183	\$0	\$20,536,508	0	776,935	\$0	\$14,327,340	
Res	Behavioral	2032	0	278,897	\$0	\$21,018,423	0	782,458	\$0	\$14,729,970	
Res	Behavioral	2033	0	280,845	\$0	\$21,602,990	0	789,664	\$0	\$15,173,106	
Res	Low Income	2024	11,745	11,745	\$9,783,479	\$9,783,479	100,735	100,735	\$83,336,235	\$83,336,235	
Res	Low Income	2025	15,260	15,260	\$12,698,696	\$12,698,696	111,679	111,679	\$94,496,805	\$94,496,805	
Res	Low Income	2026	18,977	18,977	\$16,188,915	\$16,188,915	120,213	120,213	\$104,826,121	\$104,826,121	
Res	Low Income	2027	20,272	20,272	\$17,655,867	\$17,655,867	112,492	112,492	\$100,859,674	\$100,859,674	
Res	Low Income	2028	20,802	20,802	\$18,389,323	\$18,389,323	109,021	109,021	\$100,423,804	\$100,423,804	
Res	Low Income	2029	21,469	21,469	\$19,368,151	\$19,368,151	92,989	92,989	\$89,086,918	\$89,086,918	
Res	Low Income	2030	20,930	20,930	\$19,286,435	\$19,286,435	92,880	92,880	\$90,494,688	\$90,494,688	
Res	Low Income	2031	19,784	19,784	\$18,839,587	\$18,839,587	91,037	91,037	\$90,239,491	\$90,239,491	
Res	Low Income	2032	18,779	18,779	\$18,477,507	\$18,477,507	88,952	88,952	\$89,703,407	\$89,703,407	
Res	Low Income	2033	17,782	17,782	\$18,088,512	\$18,088,512	87,332	87,332	\$89,605,545	\$89,605,545	
Res	Residential New Construction	2024	4,720	0	\$4,315,253	\$0	100,859	0	\$17,110,203	\$0	
Res	Residential New Construction	2025	6,820	0	\$6,339,227	\$0	105,551	0	\$17,947,815	\$0	
Res	Residential New Construction	2026	9,862	0	\$9,493,090	\$0	116,520	0	\$19,729,160	\$0	
Res	Residential New Construction	2027	11,526	0	\$11,604,808	\$0	108,403	0	\$19,286,260	\$0	
Res	Residential New Construction	2028	12,077	0	\$12,608,062	\$0	105,085	0	\$19,605,506	\$0	
Res	Residential New Construction	2029	13,043	0	\$13,820,701	\$0	80,147	0	\$13,557,213	\$0	
Res	Residential New Construction	2030	12,490	0	\$13,631,755	\$0	81,711	0	\$13,930,460	\$0	

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
Res	Residential New Construction	2031	11,719	0	\$13,191,918	\$0	83,564	0	\$14,412,431	\$0			
Res	Residential New Construction	2032	11,077	0	\$12,920,201	\$0	83,644	0	\$14,772,645	\$0			
Res	Residential New Construction	2033	10,565	0	\$12,601,332	\$0	88,572	0	\$15,535,795	\$0			
Res	Non-Program Residential	2024	5	7,006	\$197,473	\$6,505,512	5	20,703	\$43,913	\$1,496,049			
Res	Non-Program Residential	2025	7	9,734	\$283,443	\$9,337,710	6	24,877	\$53,937	\$1,837,566			
Res	Non-Program Residential	2026	9	12,448	\$372,144	\$12,259,843	7	30,193	\$67,246	\$2,291,000			
Res	Non-Program Residential	2027	10	13,489	\$411,078	\$13,542,478	7	33,626	\$76,585	\$2,609,155			
Res	Non-Program Residential	2028	11	14,613	\$451,271	\$14,866,586	8	36,484	\$84,572	\$2,881,252			
Res	Non-Program Residential	2029	12	16,435	\$513,818	\$16,927,117	9	41,211	\$96,807	\$3,298,096			
Res	Non-Program Residential	2030	14	19,105	\$605,471	\$19,946,514	9	42,254	\$100,523	\$3,424,709			
Res	Non-Program Residential	2031	16	22,084	\$736,452	\$24,261,529	10	43,437	\$104,769	\$3,569,340			
Res	Non-Program Residential	2032	19	25,042	\$856,934	\$28,230,665	10	44,480	\$108,919	\$3,710,753			
Res	Non-Program Residential	2033	21	27,864	\$978,851	\$32,247,084	10	45,437	\$113,058	\$3,851,735			
Res	Non-Program Low Income	2024	383	2,004	\$3,845,060	\$5,486,894	3,499	4,730	\$3,087,065	\$4,247,577			
Res	Non-Program Low Income	2025	531	2,778	\$5,503,631	\$7,853,672	4,219	5,703	\$3,805,233	\$5,235,723			
Res	Non-Program Low Income	2026	678	3,549	\$7,222,480	\$10,306,467	5,119	6,919	\$4,721,436	\$6,496,352			
Res	Non-Program Low Income	2027	735	3,844	\$8,001,680	\$11,418,384	5,709	7,717	\$5,382,138	\$7,405,429			
Res	Non-Program Low Income	2028	795	4,162	\$8,840,776	\$12,615,772	6,216	8,402	\$5,984,974	\$8,234,888			
Res	Non-Program Low Income	2029	896	4,686	\$10,162,070	\$14,501,256	7,032	9,505	\$6,911,376	\$9,509,550			
Res	Non-Program Low Income	2030	1,041	5,447	\$12,091,220	\$17,254,149	7,221	9,761	\$7,242,803	\$9,965,569			

				Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
Res	Non-Program Low Income	2031	1,198	6,268	\$14,423,545	\$20,582,373	7,430	10,043	\$7,604,759	\$10,463,594		
Res	Non-Program Low Income	2032	1,354	7,085	\$16,766,970	\$23,926,436	7,608	10,284	\$7,947,206	\$10,934,776		
Res	Non-Program Low Income	2033	1,503	7,867	\$19,107,802	\$27,266,799	7,768	10,500	\$8,279,741	\$11,392,320		
C&I	C&I Direct Install	2024	0	121,025	\$0	\$60,253,111	0	1,667	\$0	\$0		
C&I	C&I Direct Install	2025	0	151,165	\$0	\$73,012,950	0	2,134	\$0	\$0		
C&I	C&I Direct Install	2026	0	183,280	\$0	\$87,380,514	0	2,689	\$0	\$0		
C&I	C&I Direct Install	2027	0	191,096	\$0	\$91,218,990	0	3,086	\$0	\$0		
C&I	C&I Direct Install	2028	0	197,440	\$0	\$94,469,899	0	2,974	\$0	\$0		
C&I	C&I Direct Install	2029	0	194,560	\$0	\$94,177,331	0	3,296	\$0	\$0		
C&I	C&I Direct Install	2030	0	192,261	\$0	\$94,392,806	0	3,291	\$0	\$0		
C&I	C&I Direct Install	2031	0	197,398	\$0	\$98,156,306	0	3,296	\$0	\$0		
C&I	C&I Direct Install	2032	0	203,370	\$0	\$102,410,004	0	3,301	\$0	\$0		
C&I	C&I Direct Install	2033	0	209,489	\$0	\$106,972,755	0	3,311	\$0	\$0		
C&I	Energy Solutions for Business	2024	0	325,034	\$0	\$266,781,945	0	708,950	\$0	\$130,893,545		
C&I	Energy Solutions for Business	2025	0	433,865	\$0	\$380,520,668	0	872,791	\$0	\$169,240,547		
C&I	Energy Solutions for Business	2026	0	544,566	\$0	\$512,390,490	0	1,045,637	\$0	\$211,420,207		
C&I	Energy Solutions for Business	2027	0	541,631	\$0	\$534,141,127	0	1,162,148	\$0	\$242,212,955		
C&I	Energy Solutions for Business	2028	0	554,432	\$0	\$570,062,404	0	1,251,909	\$0	\$267,304,548		
C&I	Energy Solutions for Business	2029	0	561,010	\$0	\$594,139,492	0	1,367,720	\$0	\$296,074,855		
C&I	Energy Solutions for Business	2030	0	586,885	\$0	\$643,906,461	0	1,400,418	\$0	\$307,461,291		
C&I	Energy Solutions for Business	2031	0	611,575	\$0	\$691,760,858	0	1,445,480	\$0	\$321,640,617		
C&I	Energy Solutions for Business	2032	0	638,356	\$0	\$739,653,124	0	1,488,360	\$0	\$335,739,420		
C&I	Energy Solutions for Business	2033	0	664,248	\$0	\$784,014,771	0	1,523,271	\$0	\$348,578,553		

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
C&I	C&I New Construction	2024	56,167	0	\$48,434,504	\$0	100,428	0	\$37,126,653	\$0			
C&I	C&I New Construction	2025	68,610	0	\$61,737,570	\$0	115,210	0	\$43,962,763	\$0			
C&I	C&I New Construction	2026	81,867	0	\$76,394,151	\$0	133,067	0	\$52,292,225	\$0			
C&I	C&I New Construction	2027	85,823	0	\$82,148,752	\$0	145,655	0	\$58,601,104	\$0			
C&I	C&I New Construction	2028	87,870	0	\$87,845,232	\$0	152,076	0	\$62,780,472	\$0			
C&I	C&I New Construction	2029	86,904	0	\$86,548,439	\$0	156,836	0	\$66,080,125	\$0			
C&I	C&I New Construction	2030	90,618	0	\$93,166,620	\$0	162,782	0	\$69,619,114	\$0			
C&I	C&I New Construction	2031	92,415	0	\$97,431,093	\$0	169,201	0	\$73,439,355	\$0			
C&I	C&I New Construction	2032	94,221	0	\$101,399,085	\$0	175,165	0	\$77,257,950	\$0			
C&I	C&I New Construction	2033	95,740	0	\$104,908,272	\$0	180,479	0	\$80,980,300	\$0			
C&I	Large C&I	2024	26,458	0	\$23,982,699	\$0	(1,102)	0	\$4,703,044	\$0			
C&I	Large C&I	2025	39,387	0	\$36,728,690	\$0	5,057	0	\$9,120,730	\$0			
C&I	Large C&I	2026	58,079	0	\$54,951,176	\$0	8,907	0	\$14,009,749	\$0			
C&I	Large C&I	2027	56,345	0	\$55,817,106	\$0	12,576	0	\$15,326,886	\$0			
C&I	Large C&I	2028	54,816	0	\$56,071,612	\$0	11,429	0	\$14,729,835	\$0			
C&I	Large C&I	2029	50,126	0	\$53,347,168	\$0	9,417	0	\$13,888,934	\$0			
C&I	Large C&I	2030	38,746	0	\$44,920,384	\$0	14,731	0	\$13,101,624	\$0			
C&I	Large C&I	2031	32,770	0	\$40,705,011	\$0	17,858	0	\$13,073,237	\$0			
C&I	Large C&I	2032	26,794	0	\$36,260,126	\$0	21,850	0	\$13,411,863	\$0			
C&I	Large C&I	2033	20,644	0	\$31,342,563	\$0	26,030	0	\$13,813,872	\$0			
C&I	Non-Program C&I	2024	395	26,225	\$1,101,418	\$31,590,439	4,664	130,389	\$2,545,914	\$8,392,472			
C&I	Non-Program C&I	2025	512	34,007	\$1,459,484	\$41,860,364	5,639	157,636	\$3,239,672	\$10,679,411			
C&I	Non-Program C&I	2026	620	41,162	\$1,825,201	\$52,349,714	7,131	199,352	\$4,743,884	\$15,637,964			
C&I	Non-Program C&I	2027	640	42,479	\$1,971,301	\$56,540,085	7,581	211,952	\$5,734,048	\$18,901,990			
C&I	Non-Program C&I	2028	646	42,842	\$2,080,523	\$59,672,743	7,702	215,312	\$6,479,057	\$21,357,872			

			Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
C&I	Non-Program C&I	2029	684	45,390	\$2,280,121	\$65,397,555	8,050	225,058	\$6,948,371	\$22,904,940		
C&I	Non-Program C&I	2030	742	49,230	\$2,536,201	\$72,742,336	7,951	222,280	\$6,907,787	\$22,771,158		
C&I	Non-Program C&I	2031	757	50,258	\$2,626,490	\$75,331,964	8,080	225,885	\$7,008,103	\$23,101,845		
C&I	Non-Program C&I	2032	776	51,468	\$2,724,556	\$78,144,665	8,328	232,824	\$7,179,913	\$23,668,208		
C&I	Non-Program C&I	2033	793	52,613	\$2,821,805	\$80,933,910	8,623	241,057	\$7,395,125	\$24,377,643		
Res	Res New Measures	2024	0	763	\$0	\$2,502,766	0	294	\$0	\$13,628		
Res	Res New Measures	2025	0	1,818	\$0	\$6,152,664	0	579	\$0	\$27,396		
Res	Res New Measures	2026	0	3,245	\$0	\$11,164,849	0	1,023	\$0	\$49,492		
Res	Res New Measures	2027	0	4,469	\$0	\$15,595,728	0	1,573	\$0	\$77,772		
Res	Res New Measures	2028	0	5,823	\$0	\$20,582,858	0	2,252	\$0	\$113,811		
Res	Res New Measures	2029	0	7,625	\$0	\$27,293,733	0	3,505	\$0	\$180,873		
Res	Res New Measures	2030	0	9,796	\$0	\$35,493,923	0	4,693	\$0	\$247,328		
Res	Res New Measures	2031	0	11,928	\$0	\$43,723,902	0	6,034	\$0	\$324,697		
Res	Res New Measures	2032	0	14,037	\$0	\$52,016,119	0	7,423	\$0	\$407,719		
Res	Res New Measures	2033	0	16,122	\$0	\$60,345,814	0	8,723	\$0	\$489,067		
Res	Low Income Res New Measures	2024	16	16	\$17,860	\$17,860	0	0	\$0	\$0		
Res	Low Income Res New Measures	2025	27	27	\$30,667	\$30,667	0	0	\$0	\$0		
Res	Low Income Res New Measures	2026	61	61	\$71,948	\$71,948	0	0	\$0	\$0		
Res	Low Income Res New Measures	2027	106	106	\$127,474	\$127,474	0	0	\$0	\$0		
Res	Low Income Res New Measures	2028	169	169	\$208,567	\$208,567	0	0	\$0	\$0		
Res	Low Income Res New Measures	2029	264	264	\$332,150	\$332,150	0	0	\$0	\$0		
Res	Low Income Res New Measures	2030	397	397	\$509,652	\$509,652	0	0	\$0	\$0		

			Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	
Res	Low Income Res New Measures	2031	560	560	\$733,691	\$733,691	0	0	\$0	\$0	
Res	Low Income Res New Measures	2032	758	758	\$1,014,541	\$1,014,541	0	0	\$0	\$0	
Res	Low Income Res New Measures	2033	997	997	\$1,362,482	\$1,362,482	0	0	\$0	\$0	
C&I	C&I New Measures	2024	0	864	\$0	\$613,607	0	0	\$0	\$0	
C&I	C&I New Measures	2025	0	1,483	\$0	\$1,077,496	0	0	\$0	\$0	
C&I	C&I New Measures	2026	0	3,130	\$0	\$2,324,063	0	0	\$0	\$0	
C&I	C&I New Measures	2027	0	5,065	\$0	\$3,843,982	0	0	\$0	\$0	
C&I	C&I New Measures	2028	0	7,473	\$0	\$5,794,470	0	0	\$0	\$0	
C&I	C&I New Measures	2029	0	10,151	\$0	\$8,039,969	0	0	\$0	\$0	
C&I	C&I New Measures	2030	0	13,019	\$0	\$10,529,710	0	0	\$0	\$0	
C&I	C&I New Measures	2031	0	15,136	\$0	\$12,500,404	0	0	\$0	\$0	
C&I	C&I New Measures	2032	0	16,544	\$0	\$13,950,474	0	0	\$0	\$0	
C&I	C&I New Measures	2033	0	16,237	\$0	\$13,977,778	0	0	\$0	\$0	

High Adoption Scenario (Scenario C)

 Table A-17 through Table A-21 show the detailed Scenario C results by utility and state program.

		Re	sidential & Low Inco	me	Commercial 8	& Industrial	Tota	al
Utility or State-Administered	Year	Residential Electric (MWh)	Low-Income Electric (MWh)	All Residential Electric (% Sales)	C&I Electric (MWh)	C&I Electric (% Sales)	Total Electric (MWh)	Total Electric (% Sales)
State-Administered	2024	5,761	14,771	0.07%	96,727	0.22%	117,259	0.16%
State-Administered	2025	7,562	18,321	0.08%	115,588	0.26%	141,471	0.19%
State-Administered	2026	10,332	22,218	0.11%	142,151	0.32%	174,700	0.23%
State-Administered	2027	13,078	26,007	0.13%	156,551	0.35%	195,636	0.26%
State-Administered	2028	14,678	28,694	0.14%	167,385	0.37%	210,757	0.28%
State-Administered	2029	16,219	30,316	0.15%	164,189	0.36%	210,724	0.27%
State-Administered	2030	15,594	30,018	0.14%	155,351	0.34%	200,963	0.26%
State-Administered	2031	14,918	29,473	0.14%	152,857	0.33%	197,248	0.25%
State-Administered	2032	14,331	28,804	0.13%	149,808	0.32%	192,943	0.24%
State-Administered	2033	13,742	27,827	0.13%	144,532	0.31%	186,100	0.23%
Atlantic City Electric	2024	56,577	17,265	1.64%	68,477	1.40%	142,319	1.51%
Atlantic City Electric	2025	62,639	18,763	1.82%	82,594	1.69%	163,996	1.75%
Atlantic City Electric	2026	68,911	20,297	2.00%	99,041	2.03%	188,249	2.02%
Atlantic City Electric	2027	74,832	21,877	2.15%	109,274	2.23%	205,983	2.20%
Atlantic City Electric	2028	79,251	23,143	2.25%	119,987	2.42%	222,382	2.34%
Atlantic City Electric	2029	81,534	23,725	2.30%	123,897	2.48%	229,156	2.40%
Atlantic City Electric	2030	80,446	23,390	2.25%	128,720	2.56%	232,556	2.41%
Atlantic City Electric	2031	80,020	23,417	2.21%	135,553	2.66%	238,990	2.45%
Atlantic City Electric	2032	79,605	23,461	2.17%	142,452	2.76%	245,517	2.48%
Atlantic City Electric	2033	77,760	22,887	2.10%	147,641	2.83%	248,288	2.48%
Jersey Central Power & Light	2024	137,067	41,241	1.65%	149,706	1.40%	328,014	1.52%
Jersey Central Power & Light	2025	152,614	44,969	1.83%	181,346	1.70%	378,929	1.76%
Jersey Central Power & Light	2026	169,034	48,859	2.02%	218,338	2.04%	436,231	2.02%
Jersey Central Power & Light	2027	184,297	52,731	2.18%	241,183	2.24%	478,211	2.20%
Jersey Central Power & Light	2028	195,170	55,792	2.28%	264,826	2.43%	515,788	2.34%
Jersey Central Power & Light	2029	201,164	57,303	2.33%	273,773	2.49%	532,239	2.40%

Table A-17. High Adoption Scenario (Scenario C) – Detailed Electric Results

		Re	sidential & Low Inco	me	Commercial 8	& Industrial	Tota	I
Utility or State-Administered	Year	Residential Electric (MWh)	Low-Income Electric (MWh)	All Residential Electric (% Sales)	C&I Electric (MWh)	C&I Electric (% Sales)	Total Electric (MWh)	Total Electric (% Sales)
Jersey Central Power & Light	2030	198,188	56,585	2.27%	284,462	2.56%	539,234	2.41%
Jersey Central Power & Light	2031	196,835	56,706	2.24%	299,882	2.67%	553,423	2.44%
Jersey Central Power & Light	2032	195,532	56,866	2.19%	315,537	2.76%	567,934	2.47%
Jersey Central Power & Light	2033	190,841	55,626	2.12%	327,456	2.84%	573,922	2.47%
Public Service Electric and Gas	2024	184,697	56,710	1.64%	360,717	1.31%	602,125	1.42%
Public Service Electric and Gas	2025	205,143	62,019	1.81%	437,633	1.59%	704,796	1.66%
Public Service Electric and Gas	2026	226,453	67,470	1.98%	528,285	1.91%	822,208	1.93%
Public Service Electric and Gas	2027	245,774	72,851	2.14%	588,641	2.11%	907,266	2.11%
Public Service Electric and Gas	2028	259,239	77,055	2.23%	650,444	2.31%	986,739	2.27%
Public Service Electric and Gas	2029	267,322	79,025	2.28%	676,996	2.38%	1,023,343	2.34%
Public Service Electric and Gas	2030	263,736	77,822	2.22%	706,172	2.46%	1,047,731	2.37%
Public Service Electric and Gas	2031	262,870	77,991	2.19%	746,355	2.57%	1,087,216	2.43%
Public Service Electric and Gas	2032	262,136	78,213	2.15%	786,890	2.67%	1,127,240	2.48%
Public Service Electric and Gas	2033	256,031	76,213	2.08%	816,765	2.74%	1,149,008	2.50%
Rockland Electric	2024	8,551	2,576	1.66%	10,028	1.40%	21,156	1.52%
Rockland Electric	2025	9,493	2,801	1.85%	12,098	1.69%	24,391	1.77%
Rockland Electric	2026	10,473	3,030	2.03%	14,510	2.03%	28,013	2.03%
Rockland Electric	2027	11,366	3,252	2.20%	15,952	2.23%	30,569	2.22%
Rockland Electric	2028	12,027	3,436	2.30%	17,503	2.42%	32,966	2.36%
Rockland Electric	2029	12,340	3,510	2.35%	18,035	2.49%	33,885	2.42%
Rockland Electric	2030	12,093	3,443	2.29%	18,682	2.56%	34,218	2.43%
Rockland Electric	2031	12,001	3,447	2.25%	19,689	2.67%	35,138	2.47%
Rockland Electric	2032	11,867	3,440	2.20%	20,620	2.77%	35,928	2.49%
Rockland Electric	2033	11,543	3,349	2.13%	21,365	2.84%	36,257	2.50%

Table A-18. High Adoption Scenario (Scenario C) – Detailed Gas Results

	Year	Residential & Low Income			Commercial & Industrial		Total	
Utility or State-Administered		Residential Natural Gas (Dth)	Low-Income Natural Gas	All Residential Natural Gas (%	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)
			(Dth)	Sales)				
State-Administered	2024	205,056	207,420	0.17%	212,684	0.10%	625,160	0.14%

		Re	sidential & Low Inco	me	Commercial 8	Industrial	Tota	al
Utility or State-Administered	Year	Residential Natural Gas (Dth)	Low-Income Natural Gas (Dth)	All Residential Natural Gas (% Sales)	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)
State-Administered	2025	217,487	232,225	0.18%	261,180	0.13%	710,891	0.16%
State-Administered	2026	240,456	250,242	0.19%	310,034	0.15%	800,733	0.17%
State-Administered	2027	235,577	247,420	0.19%	363,886	0.17%	846,883	0.18%
State-Administered	2028	240,933	254,836	0.19%	397,200	0.19%	892,968	0.19%
State-Administered	2029	167,398	200,842	0.14%	371,286	0.17%	739,526	0.15%
State-Administered	2030	172,991	205,041	0.14%	400,294	0.18%	778,326	0.16%
State-Administered	2031	178,005	203,810	0.14%	423,563	0.19%	805,379	0.17%
State-Administered	2032	178,726	201,776	0.14%	447,047	0.20%	827,548	0.17%
State-Administered	2033	189,631	199,900	0.14%	468,787	0.21%	858,318	0.17%
Elizabethtown Gas	2024	276,054	73,055	1.44%	228,828	0.84%	577,938	1.12%
Elizabethtown Gas	2025	296,692	78,460	1.52%	286,450	1.04%	661,602	1.27%
Elizabethtown Gas	2026	310,305	82,619	1.57%	348,689	1.25%	741,613	1.40%
Elizabethtown Gas	2027	308,724	82,877	1.54%	408,323	1.44%	799,925	1.49%
Elizabethtown Gas	2028	315,074	85,020	1.55%	463,214	1.61%	863,308	1.58%
Elizabethtown Gas	2029	281,630	76,472	1.36%	464,381	1.59%	822,483	1.48%
Elizabethtown Gas	2030	287,621	78,089	1.37%	482,054	1.62%	847,765	1.50%
Elizabethtown Gas	2031	288,813	78,657	1.36%	502,045	1.66%	869,516	1.52%
Elizabethtown Gas	2032	290,016	79,085	1.34%	521,332	1.70%	890,433	1.53%
Elizabethtown Gas	2033	290,368	79,553	1.32%	537,724	1.73%	907,646	1.54%
New Jersey Natural Gas	2024	528,866	140,896	1.43%	174,909	0.84%	844,671	1.25%
New Jersey Natural Gas	2025	563,218	149,721	1.51%	216,581	1.04%	929,520	1.37%
New Jersey Natural Gas	2026	583,467	155,975	1.56%	260,783	1.25%	1,000,226	1.47%
New Jersey Natural Gas	2027	575,022	154,769	1.54%	302,076	1.44%	1,031,867	1.51%
New Jersey Natural Gas	2028	581,262	157,059	1.55%	338,975	1.61%	1,077,295	1.57%
New Jersey Natural Gas	2029	516,714	139,759	1.37%	336,144	1.59%	992,618	1.44%
New Jersey Natural Gas	2030	522,163	141,168	1.38%	345,157	1.62%	1,008,487	1.45%
New Jersey Natural Gas	2031	518,852	140,644	1.36%	355,576	1.66%	1,015,072	1.45%
New Jersey Natural Gas	2032	515,561	139,866	1.35%	365,235	1.70%	1,020,662	1.46%
New Jersey Natural Gas	2033	510,785	139,162	1.33%	372,638	1.73%	1,022,585	1.45%
Public Service Electric and Gas	2024	1,435,402	452,282	1.25%	1,112,903	0.83%	3,000,586	1.06%
Public Service Electric and Gas	2025	1,568,156	483,543	1.35%	1,386,485	1.03%	3,438,184	1.20%

		Re	sidential & Low Inco	me	Commercial 8	Industrial	Tota	al
Utility or State-Administered	Year	Residential Natural Gas (Dth)	Low-Income Natural Gas	All Residential Natural Gas (%	C&I Natural Gas (Dth)	C&I Natural Gas (% Sales)	Total Natural Gas (Dth)	Total Natural Gas (% Sales)
			(Dth)	Sales)		,		,
Public Service Electric and Gas	2026	1,661,519	506,835	1.41%	1,679,830	1.23%	3,848,184	1.33%
Public Service Electric and Gas	2027	1,666,909	506,032	1.40%	1,957,428	1.42%	4,130,368	1.41%
Public Service Electric and Gas	2028	1,717,068	516,693	1.42%	2,209,585	1.59%	4,443,346	1.50%
Public Service Electric and Gas	2029	1,508,354	462,608	1.24%	2,203,737	1.57%	4,174,699	1.39%
Public Service Electric and Gas	2030	1,525,771	470,164	1.24%	2,275,906	1.60%	4,271,841	1.41%
Public Service Electric and Gas	2031	1,511,824	471,330	1.22%	2,358,452	1.64%	4,341,606	1.42%
Public Service Electric and Gas	2032	1,494,927	471,635	1.20%	2,436,999	1.68%	4,403,560	1.42%
Public Service Electric and Gas	2033	1,474,526	472,174	1.17%	2,501,393	1.70%	4,448,093	1.42%
South Jersey Gas	2024	291,352	79,361	1.40%	206,245	0.84%	576,959	1.13%
South Jersey Gas	2025	311,608	84,815	1.48%	256,949	1.04%	653,372	1.27%
South Jersey Gas	2026	323,950	88,881	1.53%	311,291	1.25%	724,123	1.39%
South Jersey Gas	2027	320,176	88,741	1.50%	362,797	1.44%	771,714	1.47%
South Jersey Gas	2028	324,480	90,605	1.50%	409,623	1.61%	824,708	1.55%
South Jersey Gas	2029	293,203	81,105	1.34%	408,687	1.59%	782,995	1.46%
South Jersey Gas	2030	298,076	82,431	1.35%	422,215	1.62%	802,722	1.48%
South Jersey Gas	2031	297,915	82,643	1.34%	437,627	1.66%	818,186	1.49%
South Jersey Gas	2032	297,848	82,707	1.32%	452,273	1.70%	832,827	1.50%
South Jersey Gas	2033	296,930	82,809	1.30%	464,271	1.73%	844,010	1.51%

Table A-19. High Adoption Scenario (Scenario C) – Detailed Electric Budgets

Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
State-Administered	2024	\$6,434	\$23,877	\$86,280	\$116,591
State-Administered	2025	\$8,470	\$29,915	\$107,240	\$145,625
State-Administered	2026	\$11,720	\$36,646	\$135,676	\$184,042
State-Administered	2027	\$15,334	\$43,167	\$154,621	\$213,121
State-Administered	2028	\$17,909	\$48,529	\$171,729	\$238,166
State-Administered	2029	\$20,165	\$53,133	\$170,792	\$244,091
State-Administered	2030	\$20,211	\$57,086	\$169,175	\$246,471
State-Administered	2031	\$20,220	\$62,168	\$172,111	\$254,499

Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
State-Administered	2032	\$20,376	\$66,574	\$173,953	\$260,903
State-Administered	2033	\$20,288	\$70,286	\$172,814	\$263,388
Atlantic City Electric	2024	\$32,192	\$9,095	\$60,141	\$101,428
Atlantic City Electric	2025	\$41,525	\$11,197	\$77,592	\$130,314
Atlantic City Electric	2026	\$52,024	\$13,548	\$100,903	\$166,474
Atlantic City Electric	2027	\$61,953	\$15,897	\$116,823	\$194,673
Atlantic City Electric	2028	\$69,483	\$17,789	\$132,561	\$219,833
Atlantic City Electric	2029	\$74,740	\$19,222	\$141,017	\$234,979
Atlantic City Electric	2030	\$76,482	\$19,991	\$151,479	\$247,952
Atlantic City Electric	2031	\$79,563	\$21,200	\$163,148	\$263,911
Atlantic City Electric	2032	\$81,514	\$22,189	\$174,719	\$278,422
Atlantic City Electric	2033	\$82,098	\$22,702	\$184,065	\$288,866
Jersey Central Power & Light	2024	\$79,029	\$21,741	\$131,370	\$232,141
Jersey Central Power & Light	2025	\$102,024	\$26,871	\$170,211	\$299,107
Jersey Central Power & Light	2026	\$128,145	\$32,662	\$222,240	\$383,047
Jersey Central Power & Light	2027	\$152,559	\$38,377	\$257,582	\$448,517
Jersey Central Power & Light	2028	\$170,582	\$42,952	\$292,287	\$505,821
Jersey Central Power & Light	2029	\$183,309	\$46,486	\$311,282	\$541,077
Jersey Central Power & Light	2030	\$186,777	\$48,392	\$334,406	\$569,575
Jersey Central Power & Light	2031	\$193,525	\$51,372	\$360,573	\$605,470
Jersey Central Power & Light	2032	\$197,509	\$53,819	\$386,602	\$637,931
Jersey Central Power & Light	2033	\$198,248	\$55,170	\$407,786	\$661,204
Public Service Electric and Gas	2024	\$103,367	\$29,846	\$316,170	\$449,383
Public Service Electric and Gas	2025	\$133,893	\$36,969	\$409,538	\$580,401
Public Service Electric and Gas	2026	\$168,802	\$44,982	\$535,452	\$749,237
Public Service Electric and Gas	2027	\$201,664	\$52,872	\$626,366	\$880,903
Public Service Electric and Gas	2028	\$226,459	\$59,154	\$716,226	\$1,001,839
Public Service Electric and Gas	2029	\$245,229	\$63,954	\$769,693	\$1,078,877
Public Service Electric and Gas	2030	\$252,401	\$66,455	\$831,438	\$1,150,294
Public Service Electric and Gas	2031	\$264,572	\$70,531	\$899,685	\$1,234,788
Public Service Electric and Gas	2032	\$273,306	\$73,879	\$967,369	\$1,314,553
Public Service Electric and Gas	2033	\$276,704	\$75,535	\$1,021,461	\$1,373,701

Utility or State-Administered	Year	Residential Electric Budget	Low-Income Electric Budget	Commercial & Industrial Electric Budget	Total Electric Budget
Rockland Electric	2024	\$4,947	\$1,357	\$8,804	\$15,108
Rockland Electric	2025	\$6,363	\$1,670	\$11,363	\$19,396
Rockland Electric	2026	\$7,955	\$2,020	\$14,783	\$24,759
Rockland Electric	2027	\$9,423	\$2,361	\$17,053	\$28,837
Rockland Electric	2028	\$10,527	\$2,639	\$19,337	\$32,502
Rockland Electric	2029	\$11,264	\$2,842	\$20,521	\$34,627
Rockland Electric	2030	\$11,425	\$2,942	\$21,971	\$36,337
Rockland Electric	2031	\$11,832	\$3,119	\$23,679	\$38,630
Rockland Electric	2032	\$12,027	\$3,252	\$25,268	\$40,546
Rockland Electric	2033	\$12,038	\$3,322	\$26,607	\$41,967

Table A-20. High Adoption Scenario (Scenario C) – Detailed Gas Budgets

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
State-Administered	2024	\$35,084	\$176,756	\$90,759	\$302,599
State-Administered	2025	\$37,343	\$203,918	\$116,837	\$358,099
State-Administered	2026	\$41,163	\$227,783	\$147,726	\$416,673
State-Administered	2027	\$42,493	\$233,154	\$174,823	\$450,471
State-Administered	2028	\$45,681	\$246,868	\$194,855	\$487,404
State-Administered	2029	\$29,085	\$204,488	\$185,145	\$418,717
State-Administered	2030	\$30,284	\$210,950	\$193,448	\$434,682
State-Administered	2031	\$31,511	\$212,378	\$202,993	\$446,881
State-Administered	2032	\$32,398	\$212,593	\$213,026	\$458,017
State-Administered	2033	\$34,100	\$213,299	\$222,678	\$470,077
Elizabethtown Gas	2024	\$27,796	\$30,819	\$37,852	\$96,467
Elizabethtown Gas	2025	\$31,230	\$35,648	\$49,826	\$116,703
Elizabethtown Gas	2026	\$34,221	\$39,939	\$63,320	\$137,481
Elizabethtown Gas	2027	\$35,242	\$41,036	\$77,217	\$153,495
Elizabethtown Gas	2028	\$37,379	\$43,595	\$90,671	\$171,644
Elizabethtown Gas	2029	\$30,745	\$36,448	\$92,439	\$159,632
Elizabethtown Gas	2030	\$31,966	\$37,785	\$97,437	\$167,187

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
Elizabethtown Gas	2031	\$32,625	\$38,236	\$102,785	\$173,646
Elizabethtown Gas	2032	\$33,149	\$38,477	\$107,990	\$179,616
Elizabethtown Gas	2033	\$33,569	\$38,812	\$112,694	\$185,075
New Jersey Natural Gas	2024	\$52,847	\$59,445	\$28,935	\$141,228
New Jersey Natural Gas	2025	\$58,811	\$68,037	\$37,676	\$164,524
New Jersey Natural Gas	2026	\$63,793	\$75,414	\$47,362	\$186,568
New Jersey Natural Gas	2027	\$65,007	\$76,642	\$57,131	\$198,780
New Jersey Natural Gas	2028	\$68,209	\$80,540	\$66,359	\$215,108
New Jersey Natural Gas	2029	\$55,894	\$66,625	\$66,920	\$189,440
New Jersey Natural Gas	2030	\$57,485	\$68,320	\$69,775	\$195,580
New Jersey Natural Gas	2031	\$58,035	\$68,380	\$72,808	\$199,223
New Jersey Natural Gas	2032	\$58,334	\$68,059	\$75,667	\$202,060
New Jersey Natural Gas	2033	\$58,444	\$67,902	\$78,109	\$204,454
Public Service Electric and Gas	2024	\$125,750	\$190,798	\$183,957	\$500,505
Public Service Electric and Gas	2025	\$144,656	\$219,694	\$241,014	\$605,364
Public Service Electric and Gas	2026	\$161,386	\$245,002	\$304,888	\$711,275
Public Service Electric and Gas	2027	\$166,944	\$250,539	\$370,045	\$787,527
Public Service Electric and Gas	2028	\$179,292	\$264,909	\$432,446	\$876,647
Public Service Electric and Gas	2029	\$137,140	\$220,471	\$438,709	\$796,320
Public Service Electric and Gas	2030	\$141,872	\$227,479	\$460,145	\$829,497
Public Service Electric and Gas	2031	\$142,805	\$229,097	\$483,038	\$854,940
Public Service Electric and Gas	2032	\$142,652	\$229,444	\$505,048	\$877,143
Public Service Electric and Gas	2033	\$141,763	\$230,338	\$524,522	\$896,622
South Jersey Gas	2024	\$28,506	\$33,468	\$34,129	\$96,103
South Jersey Gas	2025	\$31,909	\$38,517	\$44,712	\$115,139
South Jersey Gas	2026	\$34,767	\$42,942	\$56,554	\$134,264
South Jersey Gas	2027	\$35,532	\$43,916	\$68,641	\$148,089
South Jersey Gas	2028	\$37,371	\$46,434	\$80,220	\$164,025
South Jersey Gas	2029	\$31,298	\$38,629	\$81,398	\$151,324
South Jersey Gas	2030	\$32,364	\$39,857	\$85,395	\$157,616
South Jersey Gas	2031	\$32,841	\$40,147	\$89,657	\$162,645
South Jersey Gas	2032	\$33,194	\$40,215	\$93,752	\$167,162

Utility or State-Administered	Year	Residential Natural Gas Budget	Low-Income Natural Gas Budget	Commercial & Industrial Natural Gas Budget	Total Natural Gas Budget
South Jersey Gas	2033	\$33,450	\$40,378	\$97,375	\$171,203

Table A-21. High Adoption Scenario (Scenario C) – Detailed Results by Program

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
Res	Efficient Products	2024	0	82,954	\$0	\$111,984,208	0	642,386	\$0	\$87,840,573			
Res	Efficient Products	2025	0	108,062	\$0	\$148,691,404	0	783,546	\$0	\$105,626,095			
Res	Efficient Products	2026	0	128,980	\$0	\$188,813,295	0	849,376	\$0	\$117,297,945			
Res	Efficient Products	2027	0	143,605	\$0	\$223,835,865	0	796,458	\$0	\$114,806,336			
Res	Efficient Products	2028	0	156,129	\$0	\$250,160,788	0	789,956	\$0	\$116,333,616			
Res	Efficient Products	2029	0	157,512	\$0	\$262,756,263	0	793,868	\$0	\$119,344,371			
Res	Efficient Products	2030	0	145,665	\$0	\$261,515,932	0	800,371	\$0	\$121,588,426			
Res	Efficient Products	2031	0	140,166	\$0	\$267,619,073	0	763,440	\$0	\$119,122,023			
Res	Efficient Products	2032	0	133,362	\$0	\$267,513,066	0	728,668	\$0	\$116,573,225			
Res	Efficient Products	2033	0	117,504	\$0	\$259,925,628	0	689,973	\$0	\$113,752,230			
Res	Existing Homes	2024	0	31,909	\$0	\$40,400,127	0	540,733	\$0	\$107,339,141			
Res	Existing Homes	2025	0	41,055	\$0	\$49,321,390	0	573,634	\$0	\$117,389,183			
Res	Existing Homes	2026	0	53,345	\$0	\$60,675,131	0	615,945	\$0	\$129,647,117			
Res	Existing Homes	2027	0	68,037	\$0	\$72,115,111	0	639,895	\$0	\$138,829,077			
Res	Existing Homes	2028	0	73,566	\$0	\$78,123,589	0	688,879	\$0	\$154,600,869			
Res	Existing Homes	2029	0	79,063	\$0	\$84,820,031	0	329,452	\$0	\$82,771,884			
Res	Existing Homes	2030	0	74,048	\$0	\$82,832,543	0	334,884	\$0	\$87,254,732			
Res	Existing Homes	2031	0	69,604	\$0	\$82,107,517	0	337,080	\$0	\$90,946,978			
Res	Existing Homes	2032	0	65,588	\$0	\$81,220,306	0	334,631	\$0	\$93,178,205			
Res	Existing Homes	2033	0	59,606	\$0	\$78,227,670	0	329,739	\$0	\$94,481,447			
Res	Moderate Income Weatherization	2024	0	10,324	\$0	\$12,111,570	0	146,356	\$0	\$124,562,235			
Res	Moderate Income Weatherization	2025	0	12,808	\$0	\$15,139,831	0	163,317	\$0	\$143,258,447			
Res	Moderate Income Weatherization	2026	0	15,548	\$0	\$18,655,142	0	175,103	\$0	\$159,293,420			

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
Res	Moderate Income Weatherization	2027	0	18,217	\$0	\$22,071,405	0	171,663	\$0	\$161,761,284			
Res	Moderate Income Weatherization	2028	0	20,081	\$0	\$24,652,362	0	175,699	\$0	\$170,268,076			
Res	Moderate Income Weatherization	2029	0	21,162	\$0	\$26,585,329	0	135,832	\$0	\$138,684,325			
Res	Moderate Income Weatherization	2030	0	20,812	\$0	\$27,626,165	0	138,458	\$0	\$142,741,648			
Res	Moderate Income Weatherization	2031	0	20,250	\$0	\$28,867,205	0	137,163	\$0	\$143,145,946			
Res	Moderate Income Weatherization	2032	0	19,594	\$0	\$29,493,164	0	135,357	\$0	\$142,722,076			
Res	Moderate Income Weatherization	2033	0	18,725	\$0	\$29,676,662	0	133,720	\$0	\$142,697,340			
Res	Multifamily	2024	0	29,582	\$0	\$46,576,558	0	122,984	\$0	\$22,539,545			
Res	Multifamily	2025	0	38,419	\$0	\$60,795,730	0	139,856	\$0	\$25,724,081			
Res	Multifamily	2026	0	48,245	\$0	\$77,432,911	0	150,489	\$0	\$28,291,896			
Res	Multifamily	2027	0	57,614	\$0	\$93,940,874	0	146,245	\$0	\$28,514,087			
Res	Multifamily	2028	0	63,947	\$0	\$105,076,346	0	146,689	\$0	\$29,152,144			
Res	Multifamily	2029	0	67,098	\$0	\$112,332,291	0	146,543	\$0	\$29,781,379			
Res	Multifamily	2030	0	64,611	\$0	\$111,538,952	0	150,422	\$0	\$30,637,533			
Res	Multifamily	2031	0	61,752	\$0	\$111,252,808	0	149,742	\$0	\$30,818,079			
Res	Multifamily	2032	0	58,547	\$0	\$109,002,272	0	148,921	\$0	\$30,918,508			
Res	Multifamily	2033	0	54,753	\$0	\$104,616,307	0	148,268	\$0	\$31,120,611			
Res	Behavioral	2024	0	317,315	\$0	\$20,147,570	0	1,571,929	\$0	\$24,931,608			
Res	Behavioral	2025	0	316,771	\$0	\$20,566,307	0	1,587,750	\$0	\$25,750,032			
Res	Behavioral	2026	0	317,814	\$0	\$21,096,862	0	1,603,745	\$0	\$26,592,875			
Res	Behavioral	2027	0	319,793	\$0	\$21,698,441	0	1,619,915	\$0	\$27,455,939			
Res	Behavioral	2028	0	323,624	\$0	\$22,436,462	0	1,636,263	\$0	\$28,336,853			
Res	Behavioral	2029	0	326,138	\$0	\$23,094,179	0	1,652,790	\$0	\$29,235,019			
Res	Behavioral	2030	0	329,372	\$0	\$23,815,524	0	1,669,498	\$0	\$30,153,992			
Res	Behavioral	2031	0	333,269	\$0	\$24,603,176	0	1,686,391	\$0	\$31,098,464			
Res	Behavioral	2032	0	338,518	\$0	\$25,511,588	0	1,703,469	\$0	\$32,068,232			
Res	Behavioral	2033	0	341,676	\$0	\$26,282,245	0	1,720,735	\$0	\$33,063,318			

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
Res	Low Income	2024	14,126	14,126	\$16,572,628	\$16,572,628	200,263	200,263	\$170,442,282	\$170,442,282			
Res	Low Income	2025	17,526	17,526	\$20,716,289	\$20,716,289	223,472	223,472	\$196,024,876	\$196,024,876			
Res	Low Income	2026	21,275	21,275	\$25,526,396	\$25,526,396	239,599	239,599	\$217,966,016	\$217,966,016			
Res	Low Income	2027	24,927	24,927	\$30,200,973	\$30,200,973	234,891	234,891	\$221,342,869	\$221,342,869			
Res	Low Income	2028	27,478	27,478	\$33,732,575	\$33,732,575	240,415	240,415	\$232,982,970	\$232,982,970			
Res	Low Income	2029	28,957	28,957	\$36,377,512	\$36,377,512	185,863	185,863	\$189,765,966	\$189,765,966			
Res	Low Income	2030	28,478	28,478	\$37,801,719	\$37,801,719	189,456	189,456	\$195,317,724	\$195,317,724			
Res	Low Income	2031	27,709	27,709	\$39,499,872	\$39,499,872	187,684	187,684	\$195,870,937	\$195,870,937			
Res	Low Income	2032	26,811	26,811	\$40,356,390	\$40,356,390	185,212	185,212	\$195,290,943	\$195,290,943			
Res	Low Income	2033	25,622	25,622	\$40,607,476	\$40,607,476	182,974	182,974	\$195,257,096	\$195,257,096			
Res	Residential New Construction	2024	5,751	0	\$5,812,132	\$0	205,047	0	\$34,994,406	\$0			
Res	Residential New Construction	2025	7,549	0	\$7,690,948	\$0	217,476	0	\$37,231,081	\$0			
Res	Residential New Construction	2026	10,316	0	\$10,782,067	\$0	240,443	0	\$41,023,042	\$0			
Res	Residential New Construction	2027	13,060	0	\$14,245,508	\$0	235,561	0	\$42,324,904	\$0			
Res	Residential New Construction	2028	14,657	0	\$16,678,269	\$0	240,914	0	\$45,484,725	\$0			
Res	Residential New Construction	2029	16,197	0	\$18,798,530	\$0	167,378	0	\$28,878,513	\$0			
Res	Residential New Construction	2030	15,569	0	\$18,682,128	\$0	172,971	0	\$30,066,579	\$0			
Res	Residential New Construction	2031	14,890	0	\$18,488,807	\$0	177,984	0	\$31,283,159	\$0			
Res	Residential New Construction	2032	14,300	0	\$18,438,080	\$0	178,704	0	\$32,161,140	\$0			
Res	Residential New Construction	2033	13,708	0	\$18,141,559	\$0	189,609	0	\$33,853,643	\$0			
Res	Non-Program Residential	2024	11	14,220	\$621,432	\$20,472,342	9	42,342	\$89,812	\$3,059,774			
Res	Non-Program Residential	2025	13	17,725	\$779,304	\$25,673,268	11	51,606	\$111,887	\$3,811,860			
Res	Non-Program Residential	2026	16	21,143	\$938,140	\$30,905,909	14	62,780	\$139,826	\$4,763,700			

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
Res	Non-Program Residential	2027	18	24,292	\$1,088,294	\$35,852,557	16	73,795	\$168,070	\$5,725,954			
Res	Non-Program Residential	2028	20	27,204	\$1,230,252	\$40,529,191	19	84,642	\$196,206	\$6,684,497			
Res	Non-Program Residential	2029	22	29,899	\$1,366,507	\$45,017,962	19	87,785	\$206,211	\$7,025,346			
Res	Non-Program Residential	2030	25	33,110	\$1,528,984	\$50,370,576	20	91,197	\$216,963	\$7,391,665			
Res	Non-Program Residential	2031	28	37,019	\$1,731,288	\$57,035,231	21	94,283	\$227,407	\$7,747,495			
Res	Non-Program Residential	2032	31	41,230	\$1,938,122	\$63,849,143	21	96,837	\$237,126	\$8,078,584			
Res	Non-Program Residential	2033	34	45,208	\$2,146,508	\$70,714,189	22	99,010	\$246,361	\$8,393,214			
Res	Non-Program Low Income	2024	645	3,375	\$7,303,902	\$10,422,655	7,157	9,674	\$6,313,778	\$8,687,298			
Res	Non-Program Low Income	2025	795	4,160	\$9,198,611	\$13,126,402	8,753	11,831	\$7,893,603	\$10,861,023			
Res	Non-Program Low Income	2026	942	4,932	\$11,119,928	\$15,868,117	10,643	14,387	\$9,817,329	\$13,507,929			
Res	Non-Program Low Income	2027	1,081	5,655	\$12,965,838	\$18,502,228	12,529	16,935	\$11,811,438	\$16,251,678			
Res	Non-Program Low Income	2028	1,216	6,364	\$14,796,446	\$21,114,502	14,421	19,493	\$13,885,125	\$19,104,920			
Res	Non-Program Low Income	2029	1,359	7,111	\$16,755,889	\$23,910,623	14,979	20,247	\$14,722,072	\$20,256,498			
Res	Non-Program Low Income	2030	1,540	8,058	\$19,283,806	\$27,517,957	15,585	21,067	\$15,632,385	\$21,509,022			
Res	Non-Program Low Income	2031	1,763	9,227	\$22,668,196	\$32,347,475	16,126	21,798	\$16,506,645	\$22,711,941			
Res	Non-Program Low Income	2032	1,994	10,432	\$26,217,325	\$37,412,076	16,563	22,389	\$17,301,654	\$23,805,815			
Res	Non-Program Low Income	2033	2,205	11,539	\$29,678,579	\$42,351,280	16,926	22,880	\$18,042,167	\$24,824,707			
C&I	C&I Direct Install	2024	0	150,981	\$0	\$93,896,121	0	6,442	\$0	\$0			
C&I	C&I Direct Install	2025	0	177,652	\$0	\$117,046,777	0	9,207	\$0	\$0			
C&I	C&I Direct Install	2026	0	214,910	\$0	\$156,943,214	0	12,207	\$0	\$0			
C&I	C&I Direct Install	2027	0	251,648	\$0	\$198,806,869	0	15,296	\$0	\$0			
C&I	C&I Direct Install	2028	0	282,382	\$0	\$233,728,129	0	17,580	\$0	\$0			

				Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget			
C&I	C&I Direct Install	2029	0	288,682	\$0	\$250,879,107	0	20,195	\$0	\$0			
C&I	C&I Direct Install	2030	0	289,435	\$0	\$263,329,089	0	23,039	\$0	\$0			
C&I	C&I Direct Install	2031	0	301,958	\$0	\$280,862,530	0	25,911	\$0	\$0			
C&I	C&I Direct Install	2032	0	315,177	\$0	\$299,577,256	0	28,702	\$0	\$0			
C&I	C&I Direct Install	2033	0	325,553	\$0	\$316,476,624	0	31,430	\$0	\$0			
C&I	Energy Solutions for Business	2024	0	406,711	\$0	\$385,454,281	0	1,449,766	\$0	\$267,708,212			
C&I	Energy Solutions for Business	2025	0	498,630	\$0	\$506,422,117	0	1,810,256	\$0	\$351,073,850			
C&I	Energy Solutions for Business	2026	0	600,972	\$0	\$661,761,296	0	2,173,873	\$0	\$439,608,177			
C&I	Energy Solutions for Business	2027	0	651,919	\$0	\$753,631,195	0	2,550,187	\$0	\$531,551,494			
C&I	Energy Solutions for Business	2028	0	712,301	\$0	\$851,115,243	0	2,904,294	\$0	\$620,145,870			
C&I	Energy Solutions for Business	2029	0	738,590	\$0	\$905,124,290	0	2,913,355	\$0	\$630,675,440			
C&I	Energy Solutions for Business	2030	0	775,217	\$0	\$977,796,366	0	3,022,540	\$0	\$663,604,028			
C&I	Energy Solutions for Business	2031	0	821,177	\$0	\$1,060,997,705	0	3,137,490	\$0	\$698,142,779			
C&I	Energy Solutions for Business	2032	0	867,771	\$0	\$1,142,598,472	0	3,240,262	\$0	\$730,929,519			
C&I	Energy Solutions for Business	2033	0	903,910	\$0	\$1,207,972,609	0	3,319,314	\$0	\$759,578,397			
C&I	C&I New Construction	2024	65,762	0	\$57,355,481	\$0	205,398	0	\$75,932,773	\$0			
C&I	C&I New Construction	2025	73,553	0	\$67,007,815	\$0	238,992	0	\$91,196,682	\$0			
C&I	C&I New Construction	2026	83,452	0	\$78,899,436	\$0	276,687	0	\$108,731,753	\$0			
C&I	C&I New Construction	2027	94,845	0	\$92,044,919	\$0	319,648	0	\$128,603,793	\$0			
C&I	C&I New Construction	2028	103,368	0	\$104,604,735	\$0	352,815	0	\$145,650,536	\$0			
C&I	C&I New Construction	2029	104,334	0	\$105,262,259	\$0	334,079	0	\$140,758,701	\$0			
C&I	C&I New Construction	2030	108,800	0	\$113,228,258	\$0	351,338	0	\$150,261,272	\$0			

			Summary with Target Adjustment Cap									
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
C&I	C&I New Construction	2031	112,690	0	\$120,198,541	\$0	367,262	0	\$159,405,103	\$0		
C&I	C&I New Construction	2032	116,345	0	\$126,634,765	\$0	381,347	0	\$168,196,265	\$0		
C&I	C&I New Construction	2033	118,452	0	\$131,249,650	\$0	393,277	0	\$176,462,051	\$0		
C&I	Large C&I	2024	30,509	0	\$27,654,930	\$0	(2,253)	0	\$9,618,837	\$0		
C&I	Large C&I	2025	41,495	0	\$38,694,403	\$0	10,490	0	\$18,920,109	\$0		
C&I	Large C&I	2026	58,079	0	\$54,951,176	\$0	18,520	0	\$29,130,612	\$0		
C&I	Large C&I	2027	61,013	0	\$60,441,348	\$0	27,600	0	\$33,635,811	\$0		
C&I	Large C&I	2028	63,273	0	\$64,722,285	\$0	26,516	0	\$34,173,179	\$0		
C&I	Large C&I	2029	59,049	0	\$62,843,840	\$0	20,059	0	\$29,585,118	\$0		
C&I	Large C&I	2030	45,677	0	\$52,956,403	\$0	31,795	0	\$28,277,675	\$0		
C&I	Large C&I	2031	39,259	0	\$48,765,473	\$0	38,763	0	\$28,376,349	\$0		
C&I	Large C&I	2032	32,521	0	\$44,011,551	\$0	47,569	0	\$29,198,616	\$0		
C&I	Large C&I	2033	25,115	0	\$38,131,431	\$0	56,721	0	\$30,101,448	\$0		
C&I	Non-Program C&I	2024	456	30,240	\$1,270,067	\$36,427,567	9,539	266,677	\$5,206,995	\$17,164,586		
C&I	Non-Program C&I	2025	540	35,827	\$1,537,596	\$44,100,723	11,697	327,002	\$6,720,400	\$22,153,449		
C&I	Non-Program C&I	2026	620	41,162	\$1,825,201	\$52,349,714	14,827	414,514	\$9,864,005	\$32,516,178		
C&I	Non-Program C&I	2027	693	45,998	\$2,134,616	\$61,224,223	16,638	465,142	\$12,583,727	\$41,481,600		
C&I	Non-Program C&I	2028	745	49,452	\$2,401,504	\$68,878,996	17,868	499,523	\$15,031,395	\$49,550,209		
C&I	Non-Program C&I	2029	806	53,470	\$2,686,020	\$77,039,395	17,148	479,400	\$14,800,874	\$48,790,308		
C&I	Non-Program C&I	2030	875	58,037	\$2,989,914	\$85,755,555	17,161	479,754	\$14,909,308	\$49,147,754		
C&I	Non-Program C&I	2031	907	60,211	\$3,146,591	\$90,249,303	17,538	490,299	\$15,211,562	\$50,144,121		
C&I	Non-Program C&I	2032	941	62,470	\$3,306,992	\$94,849,862	18,131	506,875	\$15,631,201	\$51,527,436		
C&I	Non-Program C&I	2033	965	64,009	\$3,433,014	\$98,464,372	18,789	525,282	\$16,114,523	\$53,120,683		
Res	Res New Measures	2024	0	880	\$0	\$2,885,990	0	602	\$0	\$27,873		
Res	Res New Measures	2025	0	1,915	\$0	\$6,481,954	0	1,201	\$0	\$56,830		
Res	Res New Measures	2026	0	3,245	\$0	\$11,164,849	0	2,127	\$0	\$102,909		
Res	Res New Measures	2027	0	4,839	\$0	\$16,887,777	0	3,451	\$0	\$170,676		

				Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget		
Res	Res New Measures	2028	0	6,721	\$0	\$23,758,361	0	5,225	\$0	\$264,041		
Res	Res New Measures	2029	0	8,982	\$0	\$32,152,466	0	7,465	\$0	\$385,282		
Res	Res New Measures	2030	0	11,548	\$0	\$41,843,598	0	10,129	\$0	\$533,815		
Res	Res New Measures	2031	0	14,290	\$0	\$52,382,170	0	13,098	\$0	\$704,777		
Res	Res New Measures	2032	0	17,038	\$0	\$63,135,746	0	16,160	\$0	\$887,634		
Res	Res New Measures	2033	0	19,614	\$0	\$73,416,850	0	19,008	\$0	\$1,065,712		
Res	Low Income Res New Measures	2024	18	18	\$20,594	\$20,594	0	0	\$0	\$0		
Res	Low Income Res New Measures	2025	28	28	\$32,309	\$32,309	0	0	\$0	\$0		
Res	Low Income Res New Measures	2026	61	61	\$71,948	\$71,948	0	0	\$0	\$0		
Res	Low Income Res New Measures	2027	115	115	\$138,034	\$138,034	0	0	\$0	\$0		
Res	Low Income Res New Measures	2028	196	196	\$240,744	\$240,744	0	0	\$0	\$0		
Res	Low Income Res New Measures	2029	311	311	\$391,278	\$391,278	0	0	\$0	\$0		
Res	Low Income Res New Measures	2030	468	468	\$600,826	\$600,826	0	0	\$0	\$0		
Res	Low Income Res New Measures	2031	670	670	\$878,977	\$878,977	0	0	\$0	\$0		
Res	Low Income Res New Measures	2032	920	920	\$1,231,422	\$1,231,422	0	0	\$0	\$0		
Res	Low Income Res New Measures	2033	1,213	1,213	\$1,657,599	\$1,657,599	0	0	\$0	\$0		
C&I	C&I New Measures	2024	0	996	\$0	\$707,562	0	0	\$0	\$0		
C&I	C&I New Measures	2025	0	1,563	\$0	\$1,135,163	0	0	\$0	\$0		
C&I	C&I New Measures	2026	0	3,130	\$0	\$2,324,063	0	0	\$0	\$0		
C&I	C&I New Measures	2027	0	5,485	\$0	\$4,162,442	0	0	\$0	\$0		

			Summary with Target Adjustment Cap								
Sector	Program	Year	State- Administered Electric (MWh)	All Utility Electric (MWh)	State- Administered Electric Budget	All Utility Electric Budget	State- Administered Natural Gas (Dth)	All Utility Natural Gas (Dth)	State- Administered Natural Gas Budget	All Utility Natural Gas Budget	
C&I	C&I New Measures	2028	0	8,625	\$0	\$6,688,436	0	0	\$0	\$0	
C&I	C&I New Measures	2029	0	11,958	\$0	\$9,471,216	0	0	\$0	\$0	
C&I	C&I New Measures	2030	0	15,348	\$0	\$12,413,419	0	0	\$0	\$0	
C&I	C&I New Measures	2031	0	18,133	\$0	\$14,975,751	0	0	\$0	\$0	
C&I	C&I New Measures	2032	0	20,081	\$0	\$16,932,704	0	0	\$0	\$0	
C&I	C&I New Measures	2033	0	19,754	\$0	\$17,005,395	0	0	\$0	\$0	