



Natural Gas Efficiency Programs Report

2023 Program Year

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Executive Summary

In 2025, the American Gas Association (AGA) conducted a survey of their U.S. members to assess the status and metrics of ratepayer-funded natural gas efficiency and low-income weatherization programs for the 2023 program year. It should be noted that in years past the Consortium for Energy Efficiency (CEE) has collected data representing their Canadian natural gas utility members to supplement the information collected by AGA. CEE did not collect data for the 2023 program year, therefore Canadian natural gas programs are not represented in this report¹. The metrics reported throughout this report are the results of analysis completed on the responses supplied by AGA member companies and/or their third-party administrators. The AGA survey included utility and third-party program administrators and maintained consistency with previous years' questions. The report defines "natural gas efficiency program" as encompassing a range of activities aimed at optimizing energy usage, including low-income weatherization and direct and indirect impact measures. With 74 organizations participating, the survey gathered insights on program expenditures, energy savings and future budgets, though variability in responses means direct comparisons with prior years are limited. Detailed methodology is provided in the report's Methodology and Survey Sample section, as well as footnotes throughout.

The 2023 data on natural gas utility efficiency programs in the U.S. showcases consistency in offered programs and increase in customer rebate funding. In 2023 there were 72 natural gas efficiency programs in the U.S., a slight decline from the 83 programs reported the year prior. The apparent decline in offered programs could reflect the 13% decline in response rate which may not fully capture all available programs.

- 86% of natural gas energy efficiency programs have been operational for 10 or more years, and 22% of programs have been operational for two decades or more.
- 62% of the expenditures for 2023 were for financial incentives for customers to adopt and implement energy efficiency measures.
- In 2023, natural gas efficiency programs saved over 371 million therms of energy, roughly 34% higher than 2022 savings.
- In 2023, utilities in the U.S. spent \$1.42 billion on energy efficiency programs, a \$74 million increase in year-over-year spending.
- Respondents reported budgeting \$1.53 billion for the 2024 budget.

¹ Given the exclusion of CEE Canadian data for this report (2023 program year) any AGA member responses outside of the U.S. were not included to preserve respondent anonymity.

Program Longevity and Participation

Most programs are well-established, with 86% operational for more than a decade and 22% for at least 20 years. Newer programs are relatively few, with only six initiated in the past decade. Participation data shows relative consistency year-over-year with only minor declines in participants across sectors, likely due to the variable response rate. Enrollment figures vary widely across program types, ranging from 110,000 participants enrolled in the multi-family program to roughly 12 million participants in single family residential programs.

Program Components and Spending

Efficiency programs encompass various activities including direct impact measures (e.g., equipment upgrades, retrofits) and indirect impact activities (e.g., education outreach). Weatherization remains a common component, especially in low-income and single-family residential programs. Despite the prevalence of efficiency measures, training and certification for contractors lag. Financial incentives dominate 2023 expenditures, comprising 62% of the budget, while administrative and marketing costs account for 27%.

Program Energy Savings

In 2023, U.S. utilities achieved substantial energy savings through natural gas efficiency programs, totaling 371 million therms of energy, roughly 34% higher than 2022 savings. This reduction in emissions is comparable to removing approximately 533,000 cars from the road for one year. The Western U.S. led in gross savings with 178 million therms, followed by the Midwest with 88 million therms in energy savings. The Northeast region had the highest efficiency expenditure, yielding significant savings and emissions reductions in spite of high implementation costs. Residential programs yielded 40% of energy efficiency program savings in the U.S., followed closely by 24% savings in the residential sector. Data variability and differing reporting methodologies mean these figures are estimates, but they highlight the significant impact of regional efficiency efforts. For detailed breakdowns of energy expenditures and savings by state and region, refer to associated Appendices E and F².

Funding and Expenditures

In 2023, natural gas utilities in the U.S. spent \$1.42 billion on energy efficiency programs. Spending was highest in the Northeast, followed by the West and Midwest regions. Utilities budgeted nearly \$1.53 billion for 2024, indicating a continued commitment to efficiency programs while combating increased implementation costs.

² Metrics reported in the Appendices may be different than those throughout the report due to data carry over methodologies utilized in the creation of the Appendices while the metrics throughout the report are based entirely on the response rate of the given survey year.

Regulatory and Financial Mechanisms

A significant proportion of utilities (28%) have explicit greenhouse gas or carbon reduction goals. Seven participants have sought approval for cost recovery and/or earnings on project investments where greenhouse gas emissions are an explicit and measurable goal. Cost recovery mechanisms primarily include special tariffs or efficiency riders, and there are varying methods for recovering costs across different rate classes, with residential programs being the most commonly supported.

Fuel Switching Incentives

Approximately 25% of respondents offer incentives for fuel switching, promoting the transition to natural gas from other energy sources. These incentives vary by rate class and are often subject to conditions such as efficiency requirements and cost-effectiveness.

Overall, the data highlights a robust and adaptive landscape of natural gas efficiency programs with meaningful participant engagement and funding, though challenges remain in consistency and program implementation.

Introduction

Public awareness of the energy economy has grown beyond the purview of business and policy. Economic, environmental and energy security concerns have become increasingly important drivers of utility and regulatory decisions about energy. With this has come heightened attention to the potential for energy efficiency to moderate consumer cost increases, reduce greenhouse gas emissions and enhance energy system reliability and resilience. Although energy efficiency can lower greenhouse gas emissions, it is not synonymous with decarbonization³. Energy efficiency is using less energy to perform the same task or produce the same outcome, while decarbonization is the process of reducing greenhouse gas emissions across energy and end-uses or sectors of the economy. While both energy efficiency programs and decarbonization goals share overlapping qualities, they are not synonymous. For natural gas utilities, investing in energy efficiency programs presents an opportunity to achieve both lowering greenhouse gas emissions and reducing the number of therms, benefiting the communities they serve. Many natural gas utilities across North America have long-performing natural gas efficiency programs and undertake efforts to collaborate with regulators to create new or expanded programs. These efforts do not always materialize as the narrative surrounding the cost-benefit tests for natural gas energy efficiency programs evolves.

The analysis and results presented within this report showcase the impact natural gas energy efficiency programs offer to customers, while the accompanying appendices outline detailed metrics regarding energy efficiency expenditures, budgets and greenhouse gas emissions saved. The results within this report show utilities continue to seek to invest in energy efficiency programs that will help customers use less energy, and save on their energy bills, a shared goal of utilities and regulators alike.

The American Gas Association Natural Gas Efficiency Programs Report – 2023 Program Year presents a review of ratepayer-funded natural gas efficiency and conservation programs in the U.S. The report looks retrospectively at the status of the U.S. natural gas efficiency market in 2023, including data on aggregated expenditures, savings impacts, carbon dioxide emissions reductions and the expected budget for 2024. The survey questions also explore regulatory approaches to advancing the natural gas efficiency market, as well as their initial establishment.

This report portrays results from those respondents who chose to answer, showcasing an example of the trends in natural gas energy efficiency program planning, funding, administration, and evaluation. The findings illustrate how natural gas utilities have worked with their customers to reduce their greenhouse gas emissions footprint, increase cost savings and improve delivered energy services.

The data and findings presented in this report are based on a survey of natural gas utility members of the American Gas Association (AGA) with appendices supplemented by the Consortium for Energy

³ <https://www.aga.org/research-policy/resource-library/beyond-the-buzzwords-unpacking-energy-efficiency-electrification-and-decarbonization/>

Efficiency (CEE)⁴. CEE did not directly collect data for the 2023 program year, therefore data for Canadian members is not represented. In general, data collection efforts have expanded significantly since AGA and CEE began coordinating efficiency data gathering in 2009. By joining efforts, AGA and CEE have reduced the reporting burden for respondents, eliminated duplicative efforts and significantly enlarged the sample pool by extending the survey to more utilities in the U.S. and Canada and third-party administrators of ratepayer-funded efficiency programs.

The report is based on survey responses that are not audited nor normalized and may elicit different responses based on the unique accounting and regulatory circumstances of each company. However, multiple efforts are taken to confirm the accuracy of responses throughout the data collection and analysis timeframes to confirm ambiguous or incomplete responses. Furthermore, this is a snapshot of a given point in time based on the information available at the time the survey was completed and may not reflect annual results.

AGA would like to thank its U.S. Energy Utility Members for participating in this critical data-collection effort. It appreciates tremendously the time and effort given by all survey respondents throughout the information gathering process, including extensive clarification and data validation follow-up.

⁴ An essential contributor to this data-gathering project is the Consortium for Energy Efficiency (CEE). CEE is an award-winning consortium of efficiency program administrators from the United States and Canada. Members work to unify program approaches across jurisdictions to increase the success of efficiency in markets. By joining forces at CEE, individual electric and gas efficiency programs are able to partner not only with each other, but also with other industries, trade associations, and government agencies. Working together, administrators leverage the effect of their ratepayer funding, exchange information on successful practices and by doing so achieve greater energy efficiency for the public good.

Methodology and Survey Sample

In 2025, AGA surveyed their U.S. and Canadian members on the status, characteristics and metrics of their 2023 ratepayer-funded natural gas efficiency and low-income weatherization programs⁵. Although AGA surveyed their Canadian members, the results are not included within this report as CEE's Canadian members were not surveyed in this cycle, and inclusion of AGA Canadian members would have jeopardized the anonymity of the subsequent results. AGA expects to include Canadian information in future iterations of this report should CEE renew the collection of information from their Canadian members. Respondents to the AGA survey include utility and non-utility, or third-party, efficiency program administrators. The 2023 program year survey asked consistent questions as seen in previous iterations to continue building the compendium of information and build upon any preexisting trends.

In this report, the term "natural gas efficiency program" refers to a set of activities designed to promote a cost-effective and prudent approach to energy usage, including low-income single and multi-family home weatherization, indirect impact activities (such as conservation education, energy audits, and contractor certification) and direct impact activities in new and existing buildings and homes (e.g., equipment replacement and Energy Star Homes).

The sample frame consists of 74 member organizations identified as large program administrators of AGA. The survey asked respondents to describe their natural gas efficiency programs, including program expenditures and energy savings during the 2023 calendar years or coinciding program year for which data were available, in addition to collecting data on 2024 program budgets.

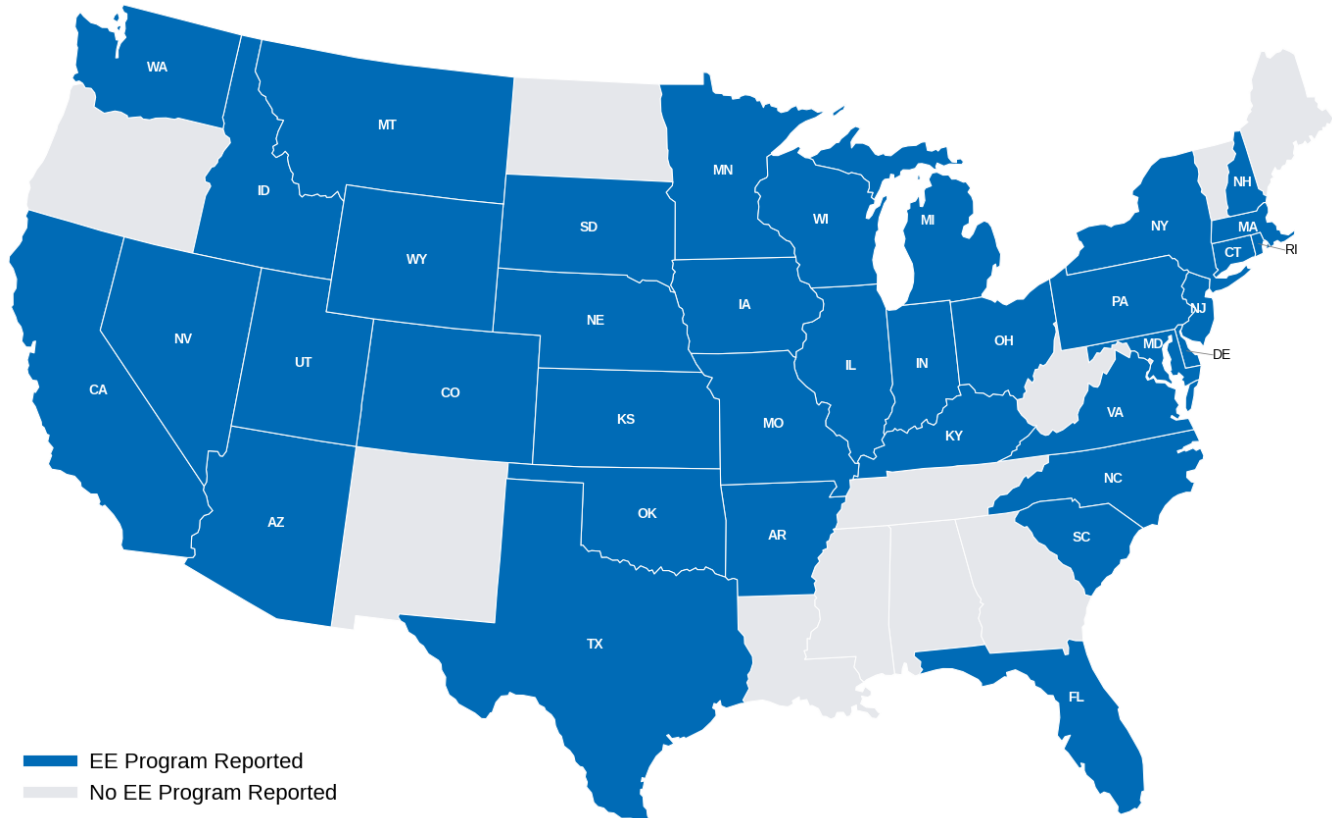
Not all responding parties answered every survey question. Therefore, the response sample varies by question and corresponding graphic. Because the sample pool is not normalized and varies year to year, this report does not directly compare collected data with prior years data, except for illustrative purposes. Tables and charts generally represent a simple tally of the responses to the survey questionnaire. Report footnotes and section introductions provide additional information regarding methodology.

⁵ Because a number of low-income weatherization programs that are run by state agencies do not participate in this survey, report data tend to understate low-income program expenditures and budgets.

Natural Gas Efficiency Program Characteristics

According to the 2023 program year data, there are at least 72 natural gas utility rate-payer funded efficiency programs in the U.S. The number of reported natural gas utility rate-payer funded efficiency programs declined from 83 programs in the U.S. in 2022, the change in programs reported could be reflective of the change in participation and response rate and therefore may not encompass all natural gas efficiency programs available. Below is an illustrative map showcasing those states with natural gas energy efficiency programs who answered for this survey iteration, and may not be entirely representative of all natural gas energy efficiency programs across the U.S.

States with Energy Efficiency Programs in 2023
72 Utilities Across 37 States



Program Structure and Administration

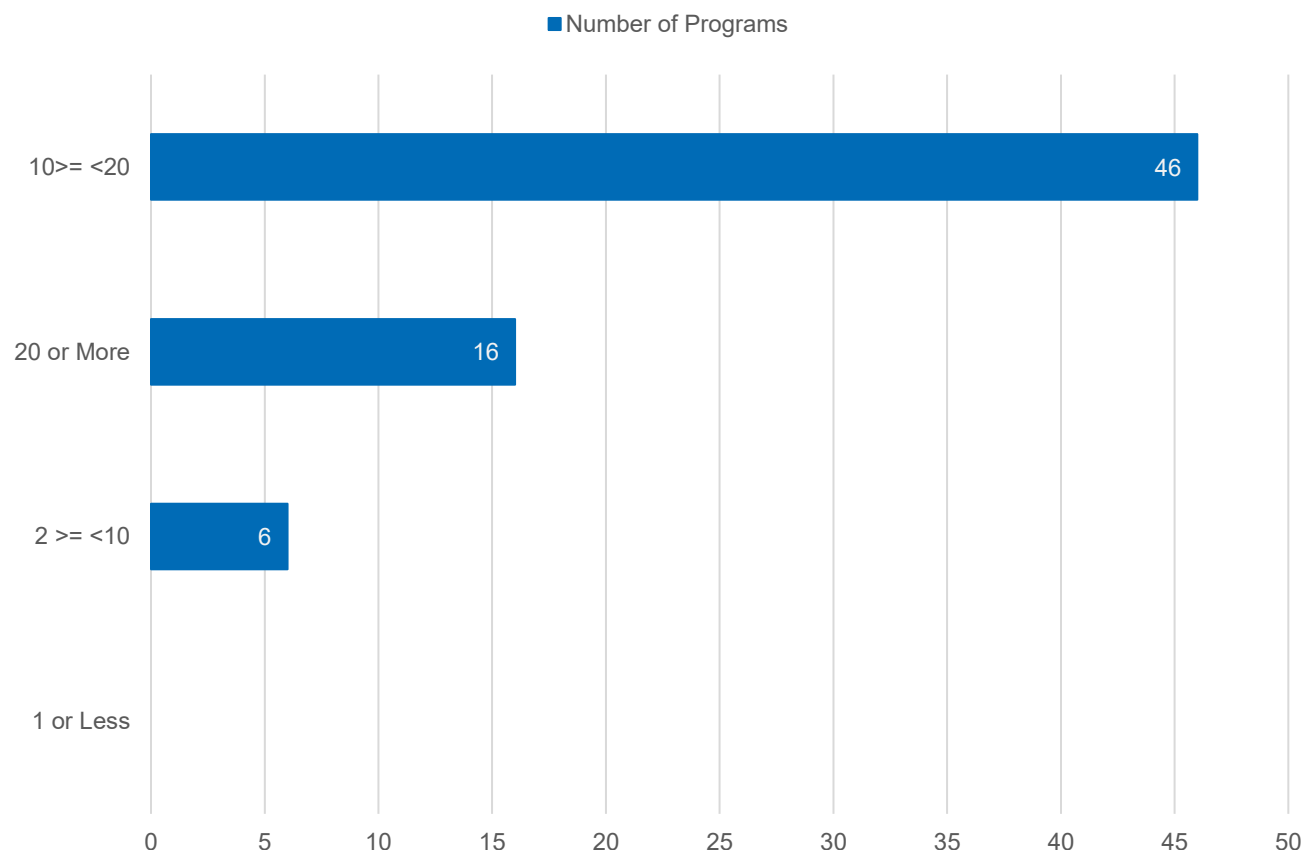
From this point forward, this report describes the responses of a subset of ratepayer-funded natural gas efficiency programs for which the survey data was obtained. The number of respondents for a particular question is included in the text and tables provided.

While many natural gas efficiency programs have been in place for years, the breadth and depth of programs continue to adapt to changing market, regulatory, and legislative conditions. Programs range from the newly launched to mature programs that span 20 years or more.

For the 2023 program year, 86% of programs have been in place ten years or longer, and 22% have operated for at least 20 years. Only six natural gas efficiency programs were reported to have been launched within the last ten years.

Natural Gas Efficiency Programs Since Inception	
72 Programs, 2023 Data	
Years in Service	Number of Programs
1 or Less	0
2 >= <10	6
10>= <20	46
20 or More	16

Natural Gas Efficiency Programs Years Since Inception (2023 Data)



Customer Segments and Participants

Participant counts were obtained for the 2023 program year, noting that some programs track or report participation rates vs the number of enrollments. In cases where respondents do not actively monitor participants, some respondents provided estimates. Other programs track the number of paid rebates or grants instead of participating customers. Still, others differ on whether to count online audits, behavioral conservation program reports, home savings evaluations or students participating in school-based education programs. The numbers in the table below reflect these discrepancies, and thus participant figures should be considered as very rough estimates.

Respondents were asked to identify all customer segments in their efficiency programs. For the 2023 program year, 49% (35 of 71 respondents) have multi-family programs, 92% have residential efficiency programs, 89% have combined commercial and industrial and 85% have low income.

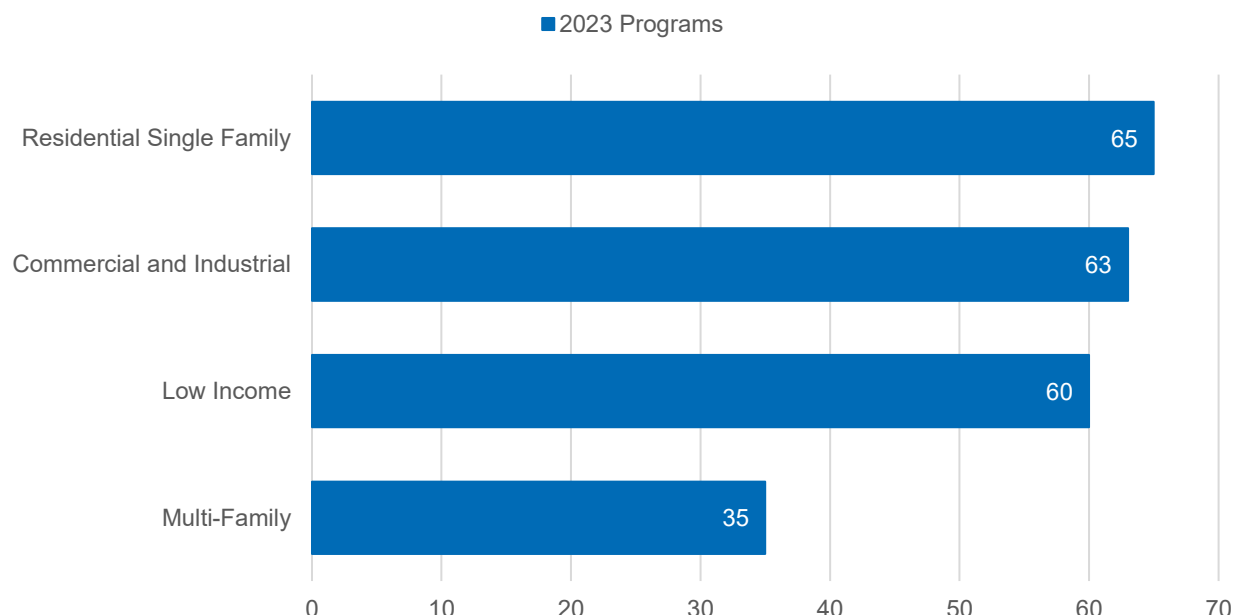
During 2023, enrollments in natural gas efficiency programs reached more than 12 million residential customers, 340 thousand low-income customers, about 100 thousand multi-family customers and about 120 thousand commercial and industrial customers.

According to respondents, there was a year-over-year decline in both available natural gas efficiency programs and customer participation. This decline may be in part due to the lower response rate for the 2023 program year, as these results are a snapshot of metrics reported by those survey participants who choose to respond and not inclusive of all programs and participants across the U.S. The decline may also be in part due to the lack of Canadian programs represented in the 2023 program year that may have been represented in the 2022 program year.

Program Participants by Customer Segment (71 respondents)				
	Residential Single Family	Low Income	Multi-Family	Commercial and Industrial
2023 Programs	65	61	36	64
2023 Participants	12,030,650	338,498	102,234	122,582
2022 Programs	75	73	39	70
2022 Participants	12,548,420	388,378	122,913	150,379

Participants per program vary widely during the 2023 program year. The median number of participants for residential programs was 23,305 ranging from as few as 54 to as many as 3.4 million customers. In low-income programs, the median was 609 participants, ranging from two participants to just over 65,500. Additionally, multi-family program customers ranged from one to 63,000 accounts, with a median of 57 participants. Commercial and industrial programs ranged from two to more than 35,000 accounts, with a median of 126 participants. The variation in participation across programs is an example of the diversity of program structures implemented throughout natural gas utility jurisdictions to accommodate the range of participants.

2023 Efficiency Programs by Customer Segment



Energy Efficiency Program Activities and Components

Survey participants were asked to provide a breakout of their 2023 expenditures into four activities, including:

1. Administrative, marketing, other implementation costs
2. Customer incentives (rebates, loans and other financial incentives)
3. Evaluation, measurement and verification (EM&V) and supporting research studies⁶
4. Other costs

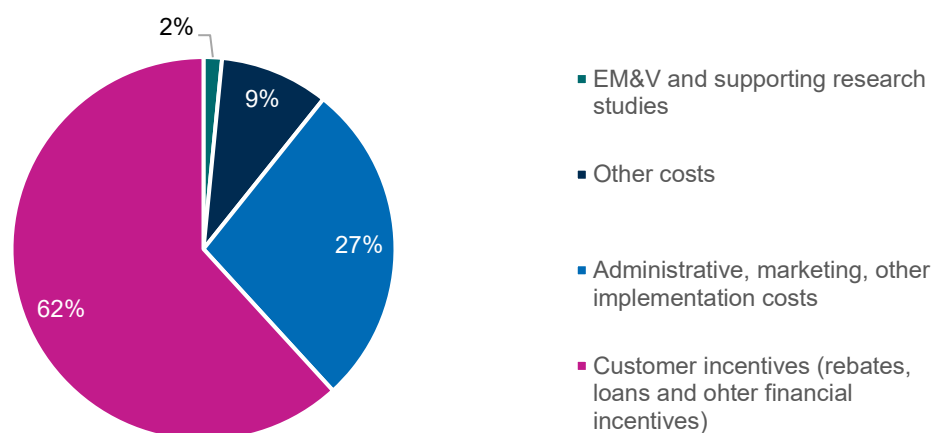
Where data were not available by specific activity (such as EM&V), a slight percentage of respondents reported overall spending amounts in the “Other” category. Other costs include but are not limited to equipment, utility oversight, database utilization, education and awareness, performance incentive for sales, technical and training costs, industry dues and ally incentives.

Participants indicated that a majority, 62%, of energy efficiency expenditures were allocated to customer incentives such as rebates, loans and other financial incentives. Incentives being the largest expenditure in 2023 remains consistent with the 2022 program year results and showcases how utilities are striving to ensure customers benefit directly from the programs invested in and implemented

⁶ Evaluation, Measurement and Verification (EM&V) is the collection of methods and processes used to assess the performance of energy efficiency activities so that planned results can be achieved with greater certainty and future activities can be more effective. According to the U.S. Department of Energy.
https://www.energy.gov/sites/prod/files/2014/05/f16/what_is_emv.pdf

throughout their territories. These incentives offer the opportunity for both direct customer savings, as well as avoided greenhouse gas emissions as customers use less energy and more efficient appliances. Moreover, the survey results indicate utilities spent about 27% of their budgets on administration, marketing and other implementation costs in 2023 to provide materials and education opportunities for customers about available energy efficiency programs to encourage participation⁷.

2023 Natural Gas Efficiency Program Expenditures by Activity in North America



Survey respondents were also asked to identify the efficiency components they offered in each of the four customer segments for the 2023 program year. Of the reported programs, one or more efficiency activities, as seen in the table below, are offered to each of the four customer segments. At least one of the efficiency activities is offered in 66 programs to the residential single-family segment, 64 programs to the commercial and industrial (C&I) segment, in 61 programs to the residential low-income segment and in 36 programs to the residential multi-family segment.

A look at specific efficiency activities shows that of indirect impact programs, education outreach is most adopted across segments, particularly in the residential single-family and low-income residential segments, 59 and 61 programs, respectively. These results are consistent with the 2022 program year, indicating the importance of customer education on the benefits of energy efficiency programs available for them. Examples of such “indirect impact” education activities include school education programs, brochures and bill inserts.

Also, widely prevalent is direct impact activities in existing homes or buildings. These direct impact activities include equipment replacement and upgrades (e.g., appliances, doors, windows and thermostats), building retrofits, commercial foodservice, process equipment, energy management systems and custom process improvements.

⁷ Additional data available in the 2023 Appendix D - Natural Gas Efficiency Program Expenditures by Activity and Region.

Weatherization is the most common component of residential natural gas efficiency programs — offered in all 61 available low-income programs and 92% of residential single-family programs. These weatherization activities incorporate building shell insulation and air sealing of ducts and wall cracks.

2023 Utility-Implemented Gas Efficiency Program Activities by Customer Segment				
Energy Efficiency Activities	Residential Single-Family 65 Programs	Residential Multi-Family 36 Programs	Residential Low Income 61 Programs	Commercial & Industrial 64 Programs
Weatherization	60	29	60	N/A
Indirect Impact Programs				
Certification	21	15	21	19
Education	5	42	60	52
Online Tools	43	31	38	34
Technical Assessment	38	30	47	41
Training	30	20	31	34
Direct Impact Programs				
Existing Buildings	60	43	56	55
New Construction/ Expansions	39	24	16	33
Other	13	7	7	8

While not as prevalent as existing building retrofit programs, the direct impact new home/building program was implemented in 60% of residential single-family and 52% of C&I programs. Such direct impact activities encompass energy-efficient homes, efficiency design assistance and industrial efficiency.

Many programs also include other types of indirect impact activities, including online tools for energy usage/savings calculators and technical assessments such as on-site energy audits. These indirect impact activities account for 53% and 64% of C&I programs, respectively. Technical assessments accounted for 77% of residential low-income programs, showcasing the importance of onsite energy audits for the low-income program participants to assess how their homes could be more energy efficient.

Efficiency training and certification (of contractors, installers and building operators) tend to lag compared to other programs. Technical training is provided in 46% of single-family, 53% of commercial/industrial and 51% of low-income programs. Moreover, professional certification is offered in only 32% of residential single-family, 34% of low income, 30% of commercial and industrial programs and 42% of multi-family programs.

A relatively small number of respondents, as seen in the table, selected “other” energy efficiency activities, which include school efficiency education (some of which include direct install efficiency kits), natural gas safety inspections and behavioral change programs.

Greenhouse Gas or Carbon Emissions Targets and Credits

Respondents were asked if their state targets greenhouse gas (GHG) or carbon reduction as an explicit and measurable goal, and 28% (19 of 67 respondents) said ‘yes’ while the remaining 48 respondents, 72%, said ‘no’. When asked if there are regulator-approved mechanisms for earning credit on GHG-emissions reduction projects such as renewable energy certificates, carbon offset projects, supporting wind farms, or biogas generating plants, 17 of the 67 responded ‘yes’ while two have pending requests before regulators. Of the 17 who have regulatory approval to earn credit, seven earn this credit via cost recovery and four via return on investment (ROI).

When asked whether they had sought regulatory approval for cost recovery or earnings on project investments where GHG emissions reduction is the primary goal, seven of 59 respondents indicated that they had secured regulatory approval, and ten companies are exploring such options. Two respondents have requests pending before their regulators, while 39 of the 59 (66%) of the respondents are not considering exploring the option of cost recovery.

Natural Gas Efficiency Program Funding and Impacts

The 2023 natural gas energy efficiency program expenditures correspond to funding by 72 utilities for programs administered either by the utility or by a third party, such as a non-profit public benefit organization or a state agency that runs a statewide program.

The natural gas efficiency program dollars discussed in this report are primarily sourced from ratepayers. Some efficiency program funds originate from other sources, such as non-ratepayer funds, including utility shareholders, for efficiency programming. Non-ratepayer efficiency funds have been excluded to the extent it was able to be separated from the aggregated figures provided from this report or included in the other section of expenditures and budgets. Survey responses indicate the scale of these non-ratepayer funds are very small compared to the ratepayer program dollars dictated in this report. Given that the reporting methodology varies among respondents, expenditure and budget data should be regarded as estimates⁸.

Respondents were asked to categorize their 2023 expenditures and 2024 budgets by customer class and segment. Where data were not available by a specific segment, respondents reported overall spending amounts in the “Other” category. “Other” costs include but are not limited to cross-cutting funds for portfolio-wide activities, education and awareness costs, trade ally incentives, emerging technology management, school outreach and technical assistance. If respondents were unable to categorize spending for specific activities by the customer segment, they placed these dollar amounts under “Other,” as previously mentioned.

Similarly, some respondents were not able to separate low-income program dollars from residential program funds (either overall or for specific activities, such as education and online resources) due to tracking restrictions thus, a small number of low-income program dollars were combined with residential program funds.

Expenditure and budget figures in this section utilize carryover methodology described in the methodology section to account for respondents who were unable to answer the survey in the designated timeframe.

Natural Gas Efficiency Program Expenditures and Funding

In the U.S., participating utilities spent \$1.42 billion in 2023 on natural gas efficiency programs⁹. Participating utilities also budgeted nearly \$1.53 billion for the 2024 programs in the U.S. as seen in the

⁸ Budget data were collected during winter of 2024 and spring of 2025; therefore, any budgetary changes made after this period, such as those due to newly approved programs or funding cuts, are not reflected in this report.

⁹ Additional data available in the 2023 Appendix B - Natural Gas Efficiency Program Expenditures and Budgets by Region.

table below¹⁰. Appendix A and B present a breakdown of 2023 expenditures and 2024 budgets by state and region.

U.S. Natural Gas Efficiency Program Expenditures and Budgets by Customer Class		
Customer Segment	2023 Expenditures (\$ Million)	2024 Budgets (\$ Million)
Residential	\$ 584.91	\$ 618.37
Low-Income	\$ 375.60	\$ 424.90
Multi-Family	\$ 50.72	\$ 44.29
Commercial	\$ 276.90	\$ 296.92
Industrial	\$ 19.56	\$ 29.48
Other	\$ 107.48	\$ 115.91
Total	\$ 1,415.18	\$ 1,529.87

Program expenditures in the U.S. increased roughly 11% from 2022, rising from \$1.34 billion to \$1.42 billion as outlined in the table below. As indicated, the low-income customer sector saw a roughly 12% decline in funding year-over-year as compared with the 71% increase in spending from 2021 to 2022. This change in expenditures may be in part due to changes in accounting for spending across different programs and jurisdictions. Although the low-income customer sector experienced a decline in expenditures, the single-family residential sector experiences 5% increase in spending from 2022 to 2023. Notably, funding increased across all other customer sectors, with the largest increase in the commercial sector rising roughly \$59 million year-over-year.

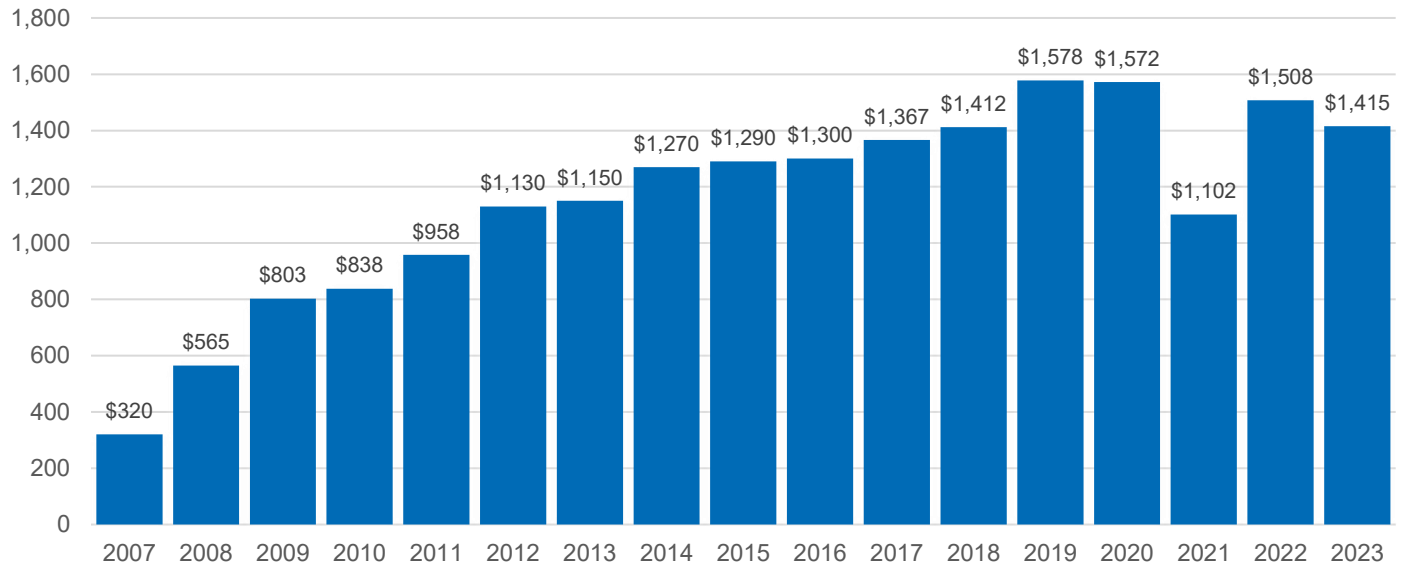
U.S. Natural Gas Efficiency Program Expenditures and Budgets by Customer Class		
Customer Segment	2022 Expenditures (\$ Million)	2023 Budgets (\$ Million)
Residential	\$ 559.00	\$ 584.91
Low-Income	\$ 422.31	\$ 375.60
Multi-Family	\$ 32.40	\$ 50.72
Commercial	\$ 217.67	\$ 276.90
Industrial	\$ 14.22	\$ 19.56
Other	\$ 94.71	\$ 107.48
Total	\$ 1,340.32	\$ 1,415.18

The figure below presents natural gas efficiency program funds from 2007 through 2023 for the United States. This comparison is intended for illustrative purposes since spending growth cannot be entirely attributed to new and expanded programs but also differences in survey samples from one year to the next¹¹.

¹⁰ Subcategories might not add up exactly to reported totals due to rounding.

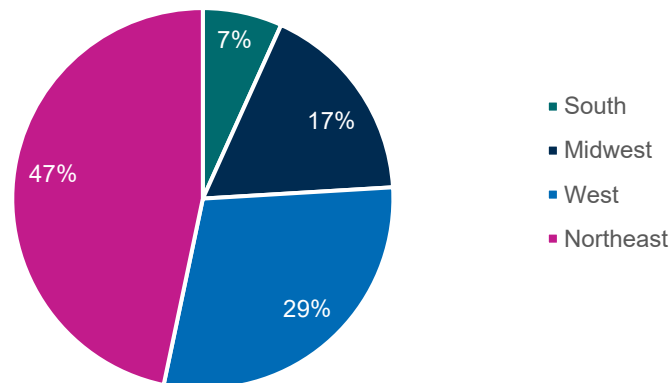
¹¹ Additional data available in the 2023 Appendix B - Natural Gas Efficiency Program Expenditures and Budgets by Region.

Yearly Natural Gas Efficiency Program Investments United States (Million Dollars)



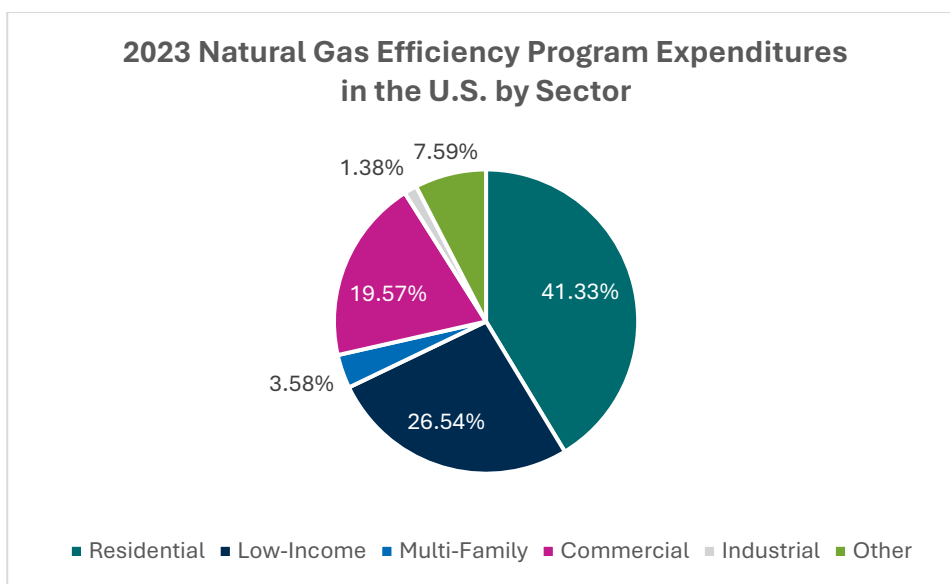
The regional breakout shows that the Northeast-U.S. region comprised the majority, 47%, of all the of 2023 participant expenditures totaling \$660 million. Additionally, the West-U.S. region accounted for roughly 29% of expenditures at \$413 million, the Midwest- U.S. region comprised of another 17% of all 2023 gas efficiency expenditures totaling more than \$244 million, as seen in the next figure.

2023 Natural Gas Efficiency Program Expenditures in the U.S. by Region



A look at 2023 natural gas efficiency program expenditures across sectors shows that U.S. natural gas utilities apportioned 41% of funding for residential programs, 27% for low-income residential programs, 20% for commercial, about 1% for separate industrial programs, 4% for the multi-family sector, and 8% for other program activities as seen in the figure below.

The “other” category includes expenditures that were not provided by the customer segment. Likewise, in this category are programs that cross-cut residential and non-residential customer segments. These include baseline studies and market research including technology and market trials and pilot programs, planning and project development, consultation and cost-effectiveness analyses, EM&V, market transformation programs, marketing including statewide marketing and special projects such as non- profit kits, non-program specific administration costs (e.g., salaries, transportation, rebate processing), information systems upgrades (including tracking systems), conservation and efficiency education (e.g., school-based, online calculators, community education pilot), efficiency and technology training and regulatory and state oversight expenses (e.g., third- party alternative filings).



Natural Gas Efficiency Program Savings

Respondents were asked to report energy savings realized by gas efficiency measures across customer classes during the 2023 program year. Savings include calendar-year savings from natural gas efficiency measures already in place on the first day of the year (i.e., installed before 2023) as well as incremental savings realized from new measures implemented during the year. Some respondents were limited by how they track and report energy savings and thus did not provide annualized savings as defined above (with pre-existing measures and participation considered) but instead reported only incremental, or first-year therms savings. Where data were not available by segment, some respondents reported overall savings in the “Other” category.

As shown in the table below, participating utilities in the U.S. saved more than 371 million therms or 37.1 trillion Btu through natural gas efficiency programs, the equivalence of 2.2 million metric tons of avoided CO₂ emissions in 2023. For a breakdown of the 2023 estimated savings impacts by state and region, see Appendix E and F.

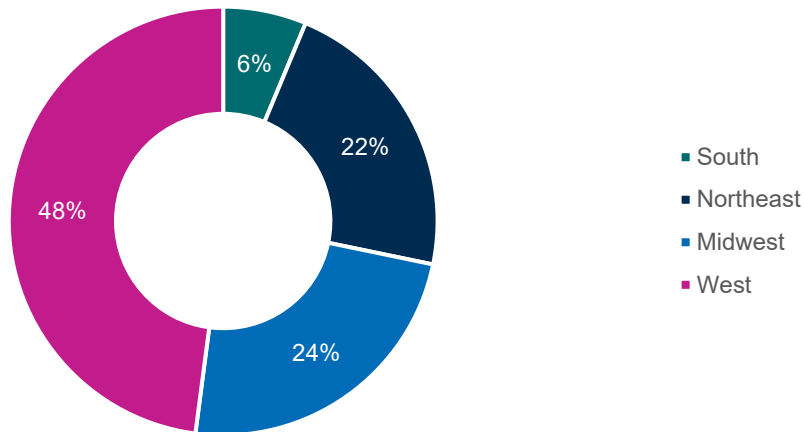
2023 Natural Gas Efficiency Program Estimated Savings by Impact Customer Segments (Million Therms)	
Sector	United States
Residential	147.94
Low-Income	17.28
Multi-Family	5.34
Commercial	89.02
Industrial	14.75
Other	97.22
Total	371.56

Respondents were also asked for gross impacts as well as net impacts — that is, to exclude free riders, spillover, savings due to government-mandated codes and standards, reduced usage owed to weather or business cycle fluctuations and reduced usage because of natural operations of the marketplace (e.g., higher prices). Many respondents report estimated savings — a set calculation of savings per measure, developed pre-installation, with built-in assumptions regarding free ridership and other specifications.

Some respondents were unable to separate low-income program savings from overall residential program savings, while others combined commercial program savings with residential impacts. Still, others included savings for multi-family programs with C&I program savings. These combined categories represent a tiny percentage of the data. Given that the reporting methodology varied among respondents, natural gas savings data should be regarded as estimates.

As utility program participation varies by region across the U.S., savings vary as seen in the figure below. The West accounted for roughly 29% of efficiency spending, as seen in the Program Expenditures and Funding section above. However, the West had the majority of gross savings totaling 12 million therms (35% of all savings) seen in the next figure. The total savings across all regions of the U.S. accounted for decreasing emissions by 1.7 million metric tons of CO₂, equivalent to keeping about 424 thousand cars off the road for one year.

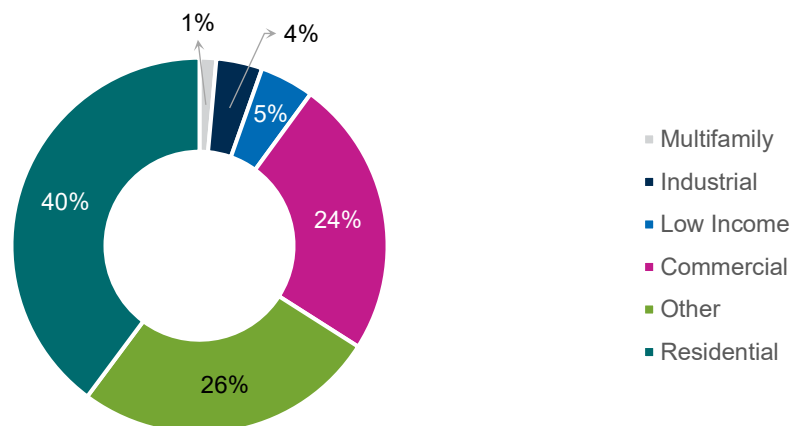
2023 Natural Gas Efficiency Program Gross Energy Savings by Regions



The Northeast accounted for the largest portion of spending in 2023, roughly 47%, and saved 87 million therms, curbing 465 thousand metric tons of CO₂ equivalent to keeping about 110 thousand cars off the road for a year or covering the energy usage for more than 60 thousand homes for a year.

As seen in the figure below, commercial programs contributed to 24% of energy savings in the U.S. in 2023. Residential programs accounted for 40%, industrial 4% and low-income activities 5%. Twenty-six percent is classified as “other,” representing data not allocable by customer class and including estimated savings for education, general outreach, codes and standards and pilot programs, as previously mentioned.

2023 Natural Gas Efficiency Program Gross Energy Savings by Sector



Natural Gas Efficiency Program Planning and Evaluation

EM&V Expenditures and Budgets

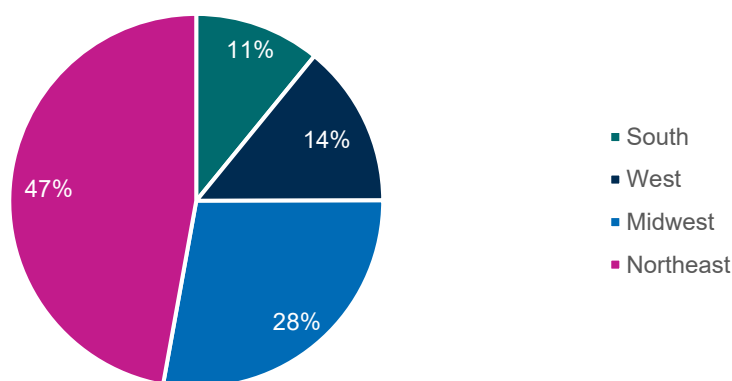
Survey respondents were asked to describe their approach to natural gas efficiency program planning, measurement and evaluation for the 2023 program year.

The majority of respondents indicated that they have some form of evaluation, measurement and verification (EM&V) program. However, not all participants were able to report EM&V expenditures for one of the following reasons:

- EM&V funds form part of the administrative budget
- In-house evaluations are covered under other program expenses
- Incremental costs are not itemized
- No evaluation report is due this program year
- Contract negotiations with third-party EM&V vendors are ongoing

EM&V expenditures exceeded \$22 million in the U.S. in 2023¹².

2023 Natural Gas Efficiency Program EM&V and Supporting Research Studies Expenditures in the United States



¹² Additional data available in the 2023 Appendix D - Natural Gas Efficiency Program Expenditures by Activity and Region.

Tracking Greenhouse Gas Emissions and Source Energy as a Measure

Forty-three respondents indicated that a reduction of greenhouse gas (GHG) or carbon emissions is a program provider goal for their 2023 natural gas efficiency programs. When asked about their program goals and targets, eighteen utilities indicated that reducing greenhouse gas emissions / direct impact on avoided emissions was a policy target in enabling legislation, versus 25 utilities indicating that it was due to a regulatory goal.

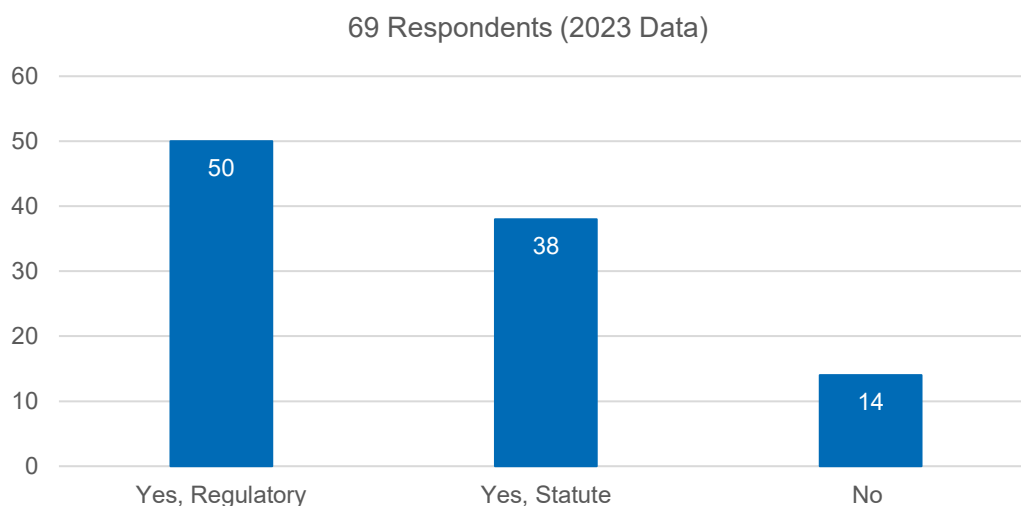
Natural Gas Efficiency Regulatory Requirements and Cost Recovery Treatment

This section describes some of the regulatory and legislative requirements that govern natural gas efficiency programs in the United States. Types of requirements include state potential studies, efficiency program spending requirements, recovery of direct program costs, lost margin recovery, financial incentives for well-performing programs, carbon offset programs and fuel switching to natural gas. Data was provided from 69 respondents for the 2023 program year, although not all respondents answered all questions.

Natural Gas Efficiency Program Requirements and Policy Goals

Many states mandate utility investment in natural gas efficiency programs through a regulatory order or legislation and utilities may be counted twice if they indicated both. Of the total 69 utilities who responded to this question for the 2023 program year, 57 indicated that the state in which it operates requires the funding of an efficiency program. Fifty respondents indicated a requirement via regulatory order, 38 utilities through a legislative bill¹³.

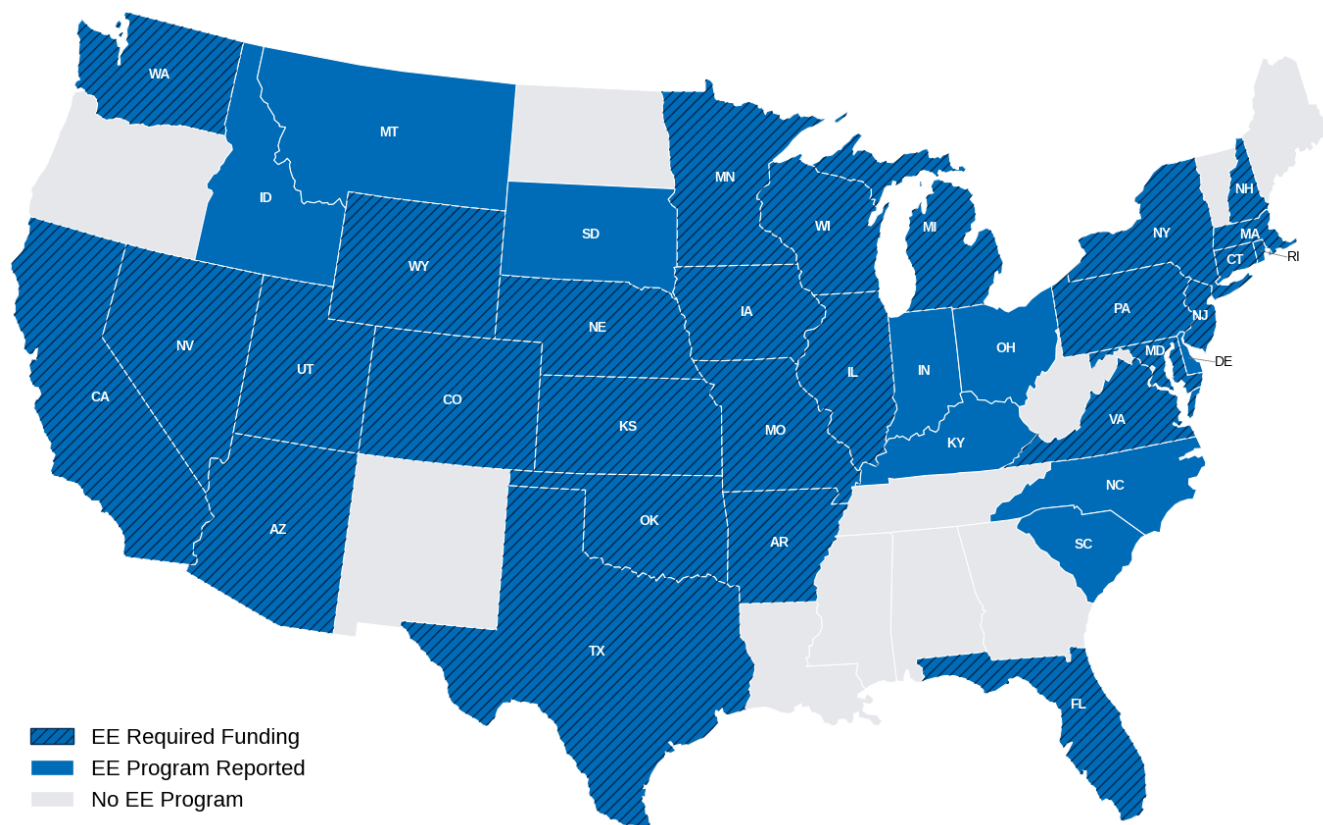
State Requirement for Utilities to Fund Efficiency Programs



¹³ Many states mandate utility investment in natural gas efficiency programs through a regulatory order or legislation and utilities may be counted twice if they indicated both.

States Requiring Utilities to Fund Energy Efficiency Programs in 2023

57 Utilities Across 28 States



Various goals drive efficiency program funding requirements within the U.S. Utilities that answered “Yes” to the above regulatory vs statutorily mandated questions filled out specific policy and regulatory goal which have been aggregated in the table below. Utilities were also asked to indicate which goals were program- specific goals. These goals may overlap for utilities but should be considered independent goals for each category in the table.

The top five goals of the 2023 program year include energy conservation and savings, behavioral change and direct outreach programs, reduced usage for low-income customers, value-added customer service and options programs and reducing customer bills. These top five goals remain consistent year-over-year, and additional policy goals and program breakdown data are provided in the table below¹⁴.

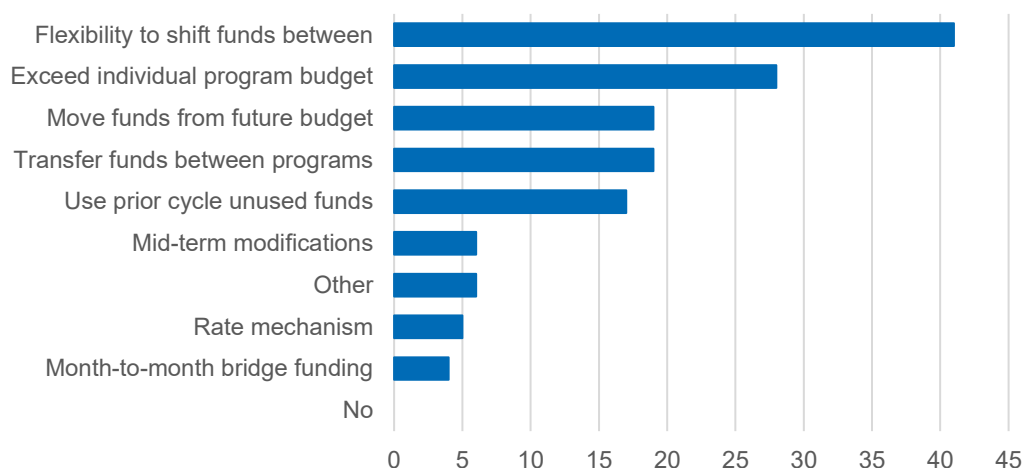
¹⁴ Utility efficiency goals are governed by program, policy and/or regulatory paths and may be counted multiple times if they indicated various targets.

Policy Goals Governing Efficiency Program Implementation			
2023 Data			
Target/Path	Program Provider Goal	Policy Target in Legislation	Regulator Goal
Minimize Customer Bill Payment Arrears and Utility's Uncollectable Balances	26	6	26
Behavioral Change (Via Education, Training Feedback or Direct Outreach to Customers and Others)	44	14	28
Encourage the Use of Combined Heat and Power	9	7	9
Customer Dollar Savings/ Reduce Customer Bills	42	20	32
Value-Added Customer Service and Options	38	7	15
Economic Development and Job Creation (or Green Jobs)	23	8	20
Meet State Energy Efficient Resource Standards (EERS) or Renewable Portfolio Standards Targets	15	17	21
Meet Electric Demand Side Management Program Targets	15	11	17
Promote Energy Conservation/ Direct Impact on Energy Saving	53	30	39
Reduce Natural Gas Supply and Infrastructure Costs	27	15	27
Reduce Green House Gas Emissions/ Direct Impact on Avoided Emissions	43	18	25
Reduce Low-Income Customer's Energy Use and Cost Burden	37	23	41
Improve Safety and Comfort Benefits to Low Income Customers	37	12	28
Reduce Peak/Off-Peak Electric Generation Needs and Electric Infrastructure Costs	17	11	16
Market Transformation (Via Manufacturers, Distributors, Retailers, and Consumers of Energy of Energy-Related Projects/Services)	35	12	23
Other	2	4	5

In order to reach program goals and legislatively mandated targets utilities must ensure a constant stream of funding and often employ mechanisms to prevent intra-year program funding disruptions. Most utilities, 41 participants, had the flexibility to shift funds between programs, while 28 participants were allowed to exceed individual program budgets, provided the portfolio as a whole is cost-effective. Two utilities had all eight mechanisms in place to prevent intra-year program funding disruptions, while 19 were able to transfer funds between programs or move funds from the future budget.

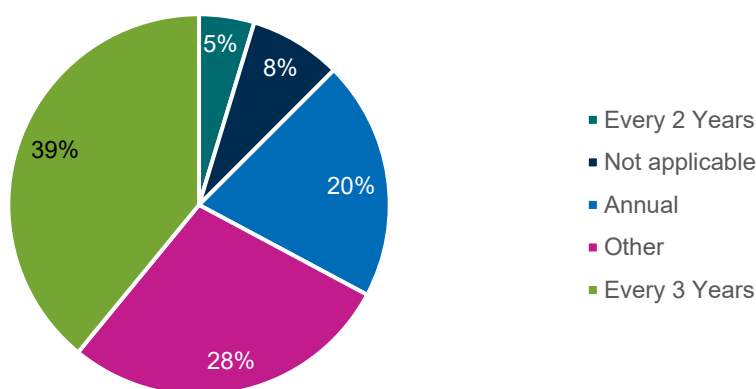
Even though some utilities had mechanisms built in to prevent program funding disruptions, interruptions may still occur depending on the severity or type of disruptions, which were metrics that were not collected in this survey. However, implementing mechanisms built in to prevent program funding disruptions can decrease the negative impact that disruptions may have on energy efficiency programs.

Built in Mechanisms to Prevent Intra-Year Program Funding Disruptions in the U.S. (2023 Data)



When asked “on what basis is your funding approved by your regulator or appropriate legal authority,” for the 2023 program year, 20% (13 out of 64) utilities in the U.S. have their funding approved annually while 39% (25 out of 64) utilities from have their funding approved every three years and 5% (3 out of 64) utilities are approved every two years. Further approval timeline are in the figure below.

U.S. Regulator or Legal Authority Cycle of Efficiency Funding Approval (2023 Data)



Rate Structures and Regulatory Treatment Aligned with Utility and Energy Efficiency Goals

An investor-owned utility has an intricate accounting and rate-setting methodology to recover its costs. Many resources explain utility accounting and rate design in depth. For this report, a simplified, brief description is provided as background for relaying the policies that have been progressively adapted to protect utilities from losses associated with energy conservation practices and to incentivize them to invest in energy efficiency programs.

When setting rates, an investor-owned utility negotiates with its regulator (public utility/ service commission) what it is permitted to charge its customers to be able to continue to meet its obligation to serve its customer base. These rates are calculated to match the revenue requirement of the utility, allowing it:

- a. to recover its incurred costs — both variable and fixed
- b. to pay the interest cost on its capital debts
- c. to earn a return for shareholders on investments

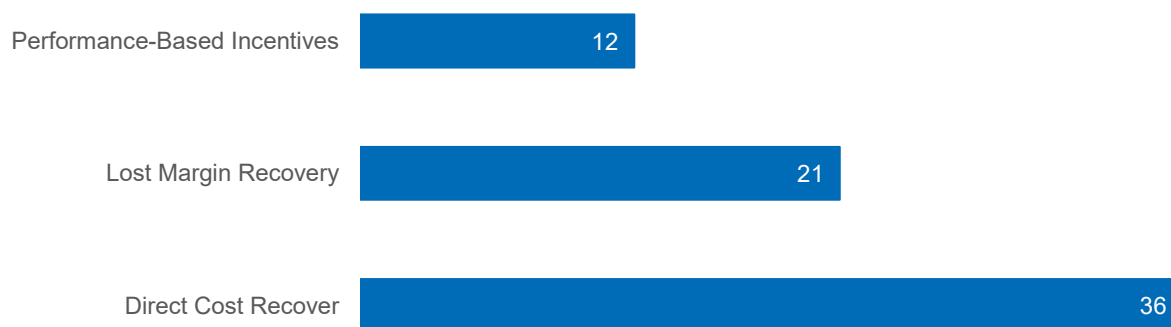
The profit margin is approved by the regulator, who sets the rate of return (or percentage) the utility may earn on its equity (a return on equity or ROE). In traditional rate designs, a portion of fixed costs is recovered via a volumetric charge or a price per therm. With this rate structure — because energy consumption varies while infrastructure costs remain fixed in the short term — the utility is at risk of under-recovering its fixed costs should customers reduce their gas consumption. In the long-term, it is thought that reductions in usage should eventually result in reduced natural gas supply capacity requirements and thus decreased capital costs, thereby eventually reducing costs for customers.

Also, decreased energy usage that results from successful efficiency program implementation can negatively impact the utility's revenues, furthering the potential disincentive for utilities to promote efficient energy use.

With growing interest in energy conservation and demand-side management, policymakers have increasingly approved mechanisms that allow utilities to recover the direct costs and the margin losses associated with implementing energy efficiency programs. Policymakers have also approved financial rewards to shareholders for investments in energy efficiency programs — quantifying the value of these demand-side programs and treating them similarly to supply-side resource investments (e.g., distribution infrastructure, transportation capacity, underground storage, etc.).

Respondents identified 36 states (an additional two states from the 2022 program year) that allow utilities to recover the direct costs of natural gas efficiency programs, 21 states that permit recovery of lost margins due to efficiency program implementation and 12 states that financially reward utilities for well-performing natural gas efficiency programs as seen below.

Regulatory Treatment for Gas Efficiency Program Direct Costs, Lost Revenues and Performance-Based Incentives Number of States (2023 Data)



Recovery of Energy Efficiency Costs

Energy efficiency program costs are divided into two categories in this survey: direct costs and margin costs. Direct costs may be recovered in three ways:

1. Base rates
2. Trackers (e.g., tariff riders, bill surcharges)
3. Deferral accounts

Margin losses (and gains) are adjusted and recovered in one of two ways:

1. Deferred and recovered via base rates (e.g., revenue decoupling, straight fixed variable rates and rate stabilization) *and/or*

2. Margin trackers (e.g., lost revenue adjustment mechanisms or LRAMs).

These mechanisms are discussed in more detail in the following sections.

Direct Program Cost Recovery

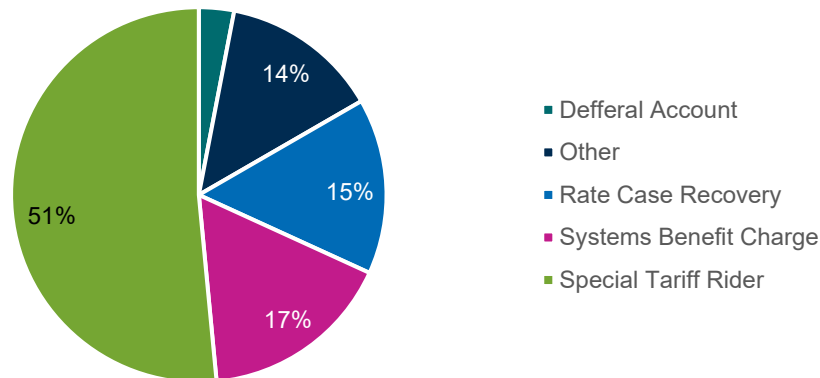
Direct cost recovery generally allows utilities to pass through efficiency costs to customers in one of three ways:

1. Program costs are treated as expenses that are embedded in base rates (or the charge per therm) in a general rate case.
2. Efficiency program costs are recovered via a separate tariff rider or a surcharge on customer bills (also known as system benefits charge), and the surcharge amount may be adjusted periodically to correct for over or under-recovery of efficiency costs.
3. Program expenditures accrue and are tracked in a balancing account for amortization and later recovery from customers over a period of time.

According to survey respondents, special tariffs or efficiency riders are currently the most common method for recovering program costs, which is consistent with previous years of this survey since 2011. Fifty-one percent of respondents (34 out of 66) use a special efficiency or conservation tariff rider, 17% (11 out of 66) apply a mandated system benefits (or public goods) surcharge to customer bills and 15% (10 out of 66) embed natural gas efficiency program costs in base rates. Additionally, two utilities track expenditures in a balancing account for amortization and later recovery over a period of time, as seen in the figure below. Fifteen percent (14 out of 66) of companies used “other” methods to recover program costs; which can be a combination of up to 3 recovery mechanisms, a conservation adjustment mechanism, annual true-up and collection rate adjustments or local distribution adjustment charges.

Regulator-Approved Gas Efficiency Program Recovery Cost Mechanism

66 Respondents (2023 Data)

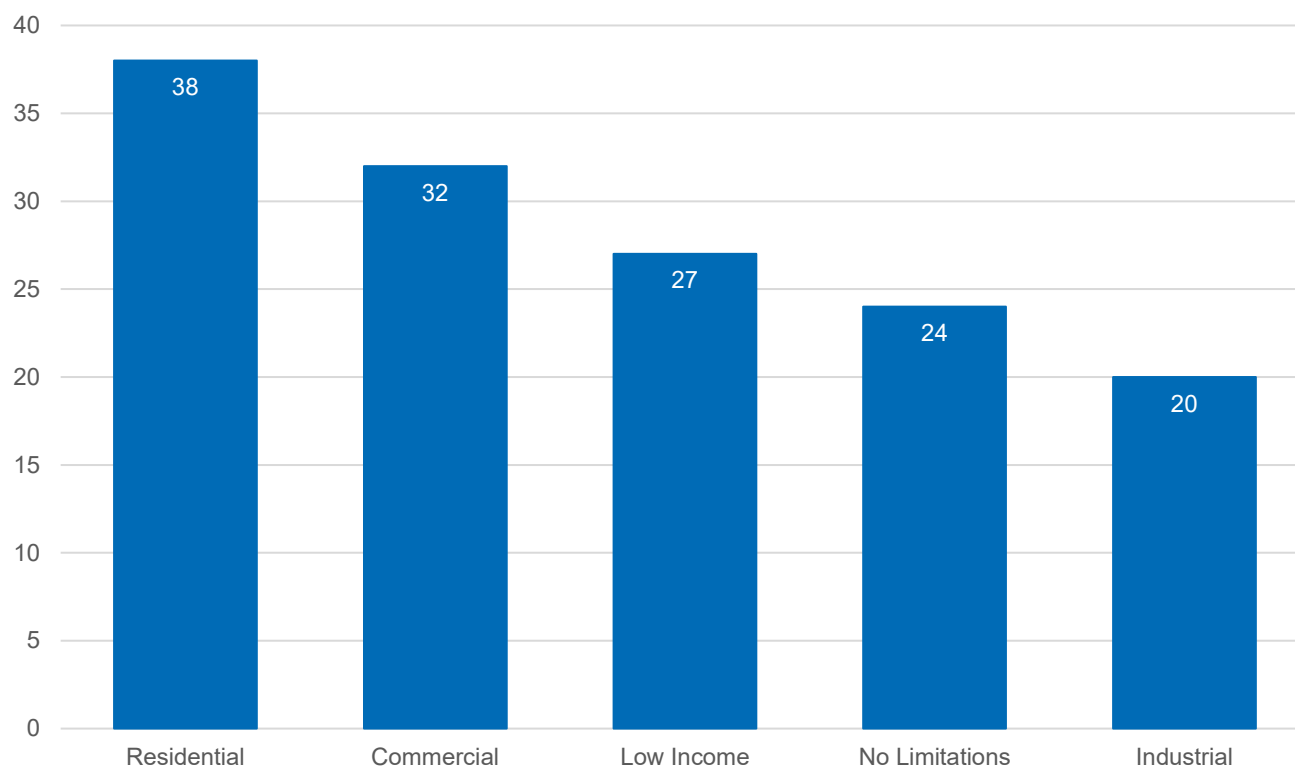


For some utilities, recovery of energy efficiency programs costs applies only to specific rate classes within their programs. Out of the 88 respondents, 30 respondents didn't have any limitations; however, this was not the case for the other 58 utilities. According to 41 respondents, residential programs had the highest applicability for the recovery of energy efficiency program costs. Commercial and low-income programs with 35 responses and 32 responses, respectively, were second and third most utilized. Industrial programs had 19 utility respondents that could recover energy efficiency program costs through the mechanisms mentioned above.

Of the 64 respondents that can recover their costs, 39 respondents were able to apply cost recovery methods for all four rate classes, 12 respondents were able to apply the mechanisms to 3 rate categories and nine respondents were able to apply recovery methods to two rate classes.

Recovery of Energy Efficiency Program Costs by Rate Class

64 Respondents (2023 Data)



Lost Margin Recovery

Recovery of margin losses and revenue shortfalls due to efficiency program implementation are increasingly allowed in more states, thereby removing the disincentive to invest in natural gas efficiency programs due to falling revenues. Thirty-three companies, roughly 52% of total responses, reported having an authorized mechanism for recovering lost margins correlating to efficiency implementation. However, thirty respondents reported that they are not allowed to recover the revenue losses resulting from implementing efficiency programs. Methods for recovering efficiency-related lost margins vary across programs and jurisdictions.

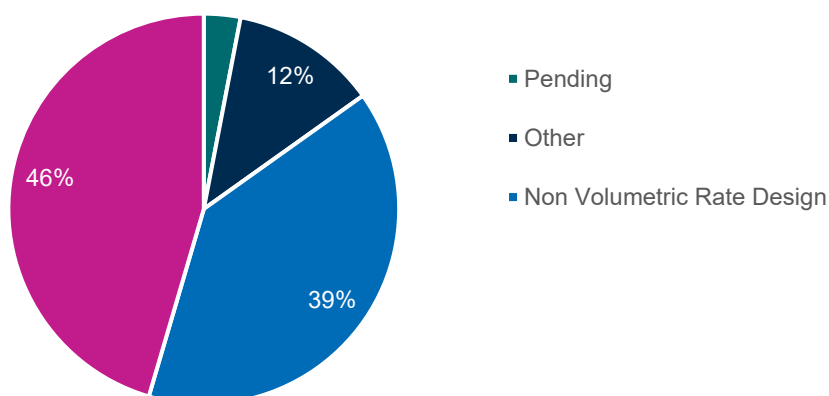
Non-volumetric rate structures are one method of recovering lost margins. With such rate designs, utilities may collect revenues from customers independent of therm usage. Within this structure of rate design margin recovery is not applied on a per therm basis but approximates a per-customer basis. These mechanisms include revenue decoupling, straight fixed variable (or SFV) rates and rate stabilized mechanisms.

Lost revenue adjustment mechanism or LRAM is the other method of recovering lost margins. It requires the utility to identify unrecovered margins associated with efficiency programming, track them over a time period and recover them after the fact. In this case, revenues continue to be recovered on a

therm usage basis; however, rates are adjusted to correct for under- or over- recovery of margins. This type of margin true-up is also generically referred to as a conservation adjustment mechanism.

As shown in the figure below, of the sixty-three responding utilities that are allowed to recover lost margins in the U.S., thirteen utilities have a non-volumetric rate design, fifteen utilities use a lost revenue adjustment mechanism (LRAM) four use another method to recover lost margins, and one utility is pending regulatory approval.

**Approved Mechanism for Recovering Lost Margins
(2023 Data)**



Revenue decoupling mechanisms have different names, such as conservation enabling tariff, conservation incentive program, conservation margin tracker, conservation rider and so on. Decoupling breaks the link between utility revenues or profits and gas throughput (or delivered volumes). It may be applied to total revenues or on a revenue-per-customer basis. When the recovered revenue varies from the allowed recovery amount, it is true'd up via periodic rate adjustments to adjust the under or over-recovery. Revenue variances specific to efficiency may be tracked in a separate balancing or adjustment account and applied to the next rate adjustment.

Decoupling takes on different forms:

1. Full revenue decoupling
2. Partial revenue decoupling where only a portion of losses are recovered
3. Revenue decoupling with certain restrictions (see below)

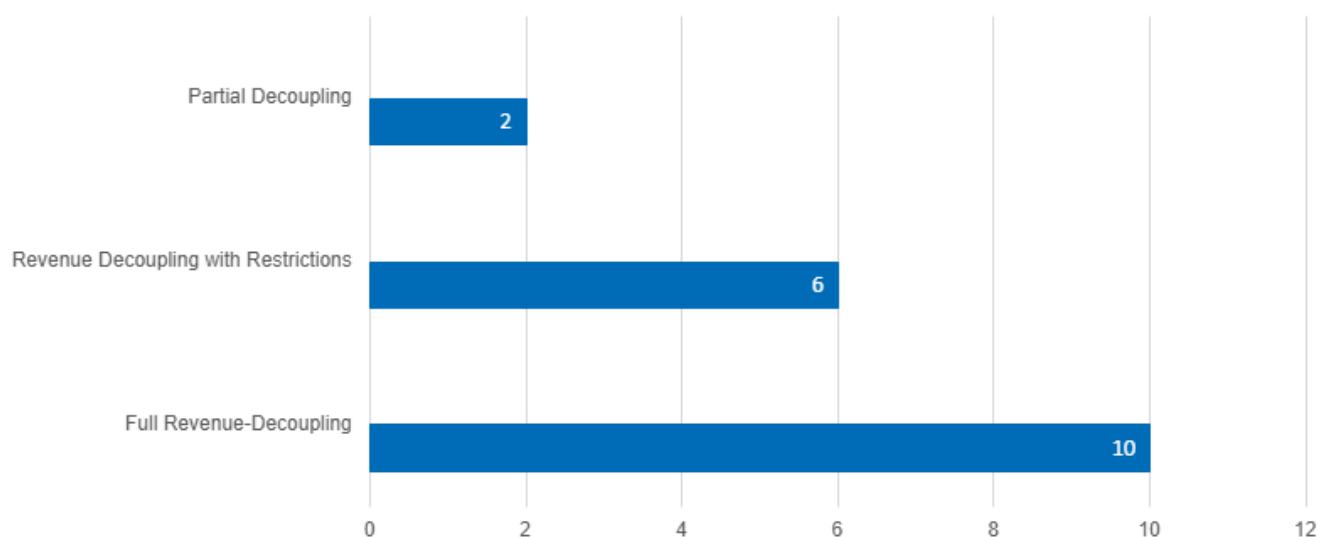
In some cases, the margin shortfall or surplus, specific to efficiency investments, is allowed to accrue in a deferral account, treated as a regulatory asset and the recovery is amortized over a period of time, generally applied to the class of customers benefiting from efficiency savings. Sometimes utilities may charge an annual interest rate on the unamortized balances, thus recovering the carrying cost on the deferred margins.

Partial revenue decoupling limits margin recovery to a specific percentage of revenues or must be equal to the achieved natural gas cost saving. Revenue decoupling with restrictions may involve caps on the authorized return on equity (ROE) or other limits on regulated earnings.

A revenue stabilization mechanism (also known as rate stabilization) is another form of non- volumetric rates, where utility revenues are de-linked from the amount of gas throughput. Rate stabilization combines lost margin recovery and recovery of operating costs within one mechanism. Here rates are adjusted periodically to adjust for variances in returns from the regulator-authorized ROE and utility cost variances since the last rate adjustment.

With straight fixed variable rates, there are no revenue impacts resulting from efficiency programming, because most or all fixed costs are recovered via a non-volumetric charge. The per-customer charge remains stable regardless of consumption variances (approximating a flat monthly fee).

Non-Volumetric Rate Structures in 2023: 18 Natural Gas Utilities (18 States)



Of the 18 utilities in the 18 states that have non-volumetric rate design, ten utilities across eleven states have full revenue decoupling, six utilities across five states have revenue decoupling with restrictions and two utilities in two states reported partial revenue decoupling. Straight fixed variable rates, rate stabilization mechanisms and non-specified revenue decoupling were not used by the participants in this survey cycle.

Non-Volumetric Rate Structures in the U.S. 2023: 18 Gas Utilities in 18 States

Mechanism	Number of Companies	Number of States
Full Revenue-Decoupling	9	11
Revenue Decoupling with Restrictions	5	5
Non-Specified Revenue Decoupling	0	0
Straight Fixed Variable	0	0
Partial Decoupling	2	2
Rate Stabilization Mechanism	0	0

Utility Performance-Based Incentives

Recovery of efficiency program costs and associated lost margins removes the utility's disincentive to promote energy efficiency, thereby making program implementation revenue neutral. To incentivize investor-owned utilities to commit fully to efficiency program improvements and expenditures, regulators have gradually approved more mechanisms that financially reward utilities for making energy efficiency investments. Efficiency performance-based incentives for utilities involve three mechanisms: shared savings, performance target rewards and rate of return incentives.

Shared savings mechanisms reward utilities either for investing in energy efficiency at pre-determined minimum spending levels or for making cost-effective efficiency investments. Financial incentives are calculated as a percentage of efficiency spending or as a percentage of the achieved net system benefits (the difference between efficiency costs and energy savings or other economic benefits). Awards are often capped at a specified dollar amount regardless of the rate applied to spend levels or net benefits. Commonly, investors and ratepayers share the savings. In some cases, penalties are applied when programs fail to meet the minimum threshold.

Performance targets are often conditions for capturing earnings on efficiency investments. The pre-determined goals may be set at certain investment levels, total energy savings, the extent of cost-effective savings or the number of units installed. Financial awards may be tiered according to performance thresholds: for example, for attaining at least a proportion of goals, meeting the target or exceeding them. Also, penalties may apply if the utility falls short of the minimum requirements. Additionally, incentives may be capped, even if performance surpasses the maximum threshold and may involve a dead band, where incentives are suspended within this performance range.

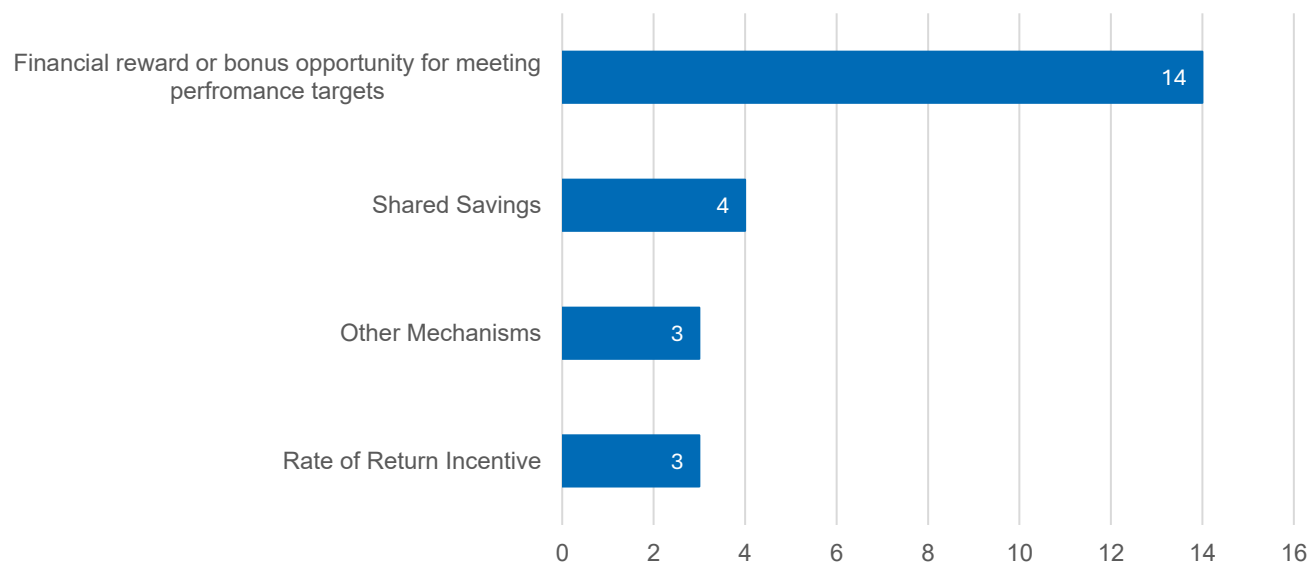
Rate of return incentives allows earnings on natural gas efficiency expenditures either equal to the utility's authorized ROE or at an enhanced level — an added or bonus ROE applied to efficiency investments. Incentive structures may involve a combination of these three mechanisms, making performance targets a prerequisite to shared savings or returns on efficiency investments.

In this survey cycle, twenty-one natural gas efficiency programs implemented across fourteen states identified as having utility performance-based incentives. When asked to identify all mechanisms that

formed their incentives, respondents indicated having one of the following mechanisms: four programs (in three states) offered a shared saving mechanism, three (in two states) had a rate of return (ROR) mechanism and twelve programs (in eight states) had a bonus opportunity for meeting performance targets. There were no utilities who had more than one incentive mechanism for this program cycle, although two reported other mechanisms. The table below shows the various arrangements as reported by companies.

Utility Financial Incentive Structure Specific to Natural Gas Efficiency Program Implementation and Performance (2023)		
Financial Incentive Mechanisms	# of programs	# of states (14)
Shared Savings	4	3
Rate of Return Incentive	3	2
Financial reward or bonus opportunity for meeting performance targets	12	8
Pending	0	0
A combination of mechanisms	0	0
Other Mechanisms	2	1

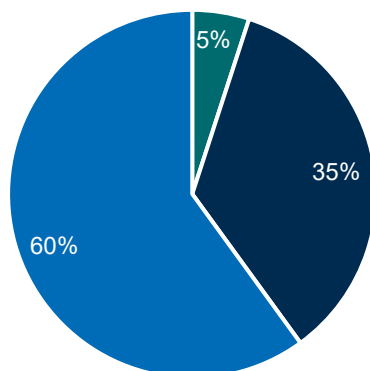
Utility Financial Incentive Structures Specific to Natural Gas Efficiency Program Implementation and Performance (2023 data)



When asked what authority the utility's regulator-approved performance incentive mechanism originated from, 11 of 19 respondents indicated it was by regulatory ratemaking. In comparison, an additional seven utilities indicated it was by statute and regulation. Only one of the respondents indicated that neither of the above two authorities were involved, as outlined in the figure below.

Regulatory Authority Supporting Utility Performance Incentive Mechanism in the U.S. in 2023

■ None ■ State and Regulation ■ Regulatory Ratemaking Only

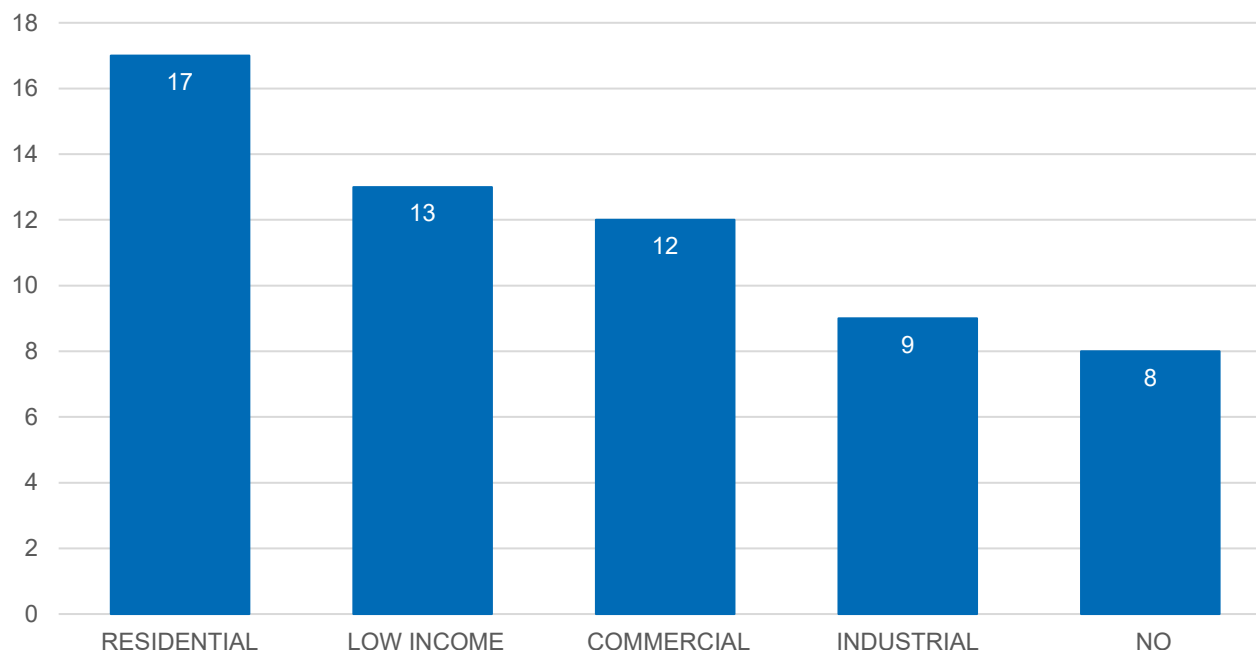


Fuel Switching

Respondents were also asked about any regulatory-approved energy efficiency programing which encourages fuel switching. Twenty-five percent of respondents (18 of 72) reported that their regulator-approved natural gas efficiency program encourages fuel switching through financial incentives (e.g., rebates, loans and other benefits) for customers who install natural gas equipment in new homes, convert to natural gas from other fuels or replace old equipment with new higher-efficiency natural gas equipment.

The programs that offered fuel conversion incentives to their customers varied by rate classes, with 17 utilities offering residential program incentives and 12 utilities offering commercial incentives. Thirteen utility participants offered fuel conversion incentives for the low-income rate class, an increase of six utilities year-over-year, and nine utility participants offered industrial customers the incentive. Fifteen utility programs offered two or more rate classes the opportunity for fuel switching incentives, of which seven utilities were offering three or more rate classes incentives in their program.

Utilities Offering Fuel Conversion Incentives to Customers by Rate Class in 2023



Four utilities were offering higher rebates for converting to natural gas, and eleven participants offered the same rebate level as for upgrading a gas appliance. Four other utilities offered other financial incentives, including covering installment costs, low-interest loans and tiered rebates.

In this case, fuel switching can apply for electric, fuel oil, propane, or other energy sources to natural gas. The types of equipment that were included in the fuel-switching incentives programs included a range of technologies from boilers, furnaces, water heaters, stoves/cooking ranges, dryers, HVAC and space heating to combined heat & power. In addition to the numerous technologies that were included in the fuel-switching program, there were also conditions or limitations that programs needed to work within. The most common constraint, according to utility participants, was that installed equipment must meet minimum efficiency levels followed by fuel switching being limited to specific applications or measures. Other limitations included cost-effectiveness requirements, customer cost-sharing and city/state fuel substitution requirements.

The other 25% of participants (18 out of 72) reported that they could encourage fuel switching through financial incentives, but not through their efficiency programs. When fuel switching was allowed but not through efficiency program incentives, utilities offered the financial incentive through other state-sponsored energy programs, voter-approved bonds or other regulatory authorities.

Eight respondents indicated that they are prohibited from promoting fuel switching/converting to natural gas in their states. One of those respondents are prohibited by statute, five by regulatory decree, and three respondents indicated both.

Customer Financing and Rebates

The 2023 program year survey asked respondents about the number of natural gas products included in both residential and commercial efficiency programs, results are outlined in the table below. Based on the results, natural gas furnaces were the product most included in respondent residential energy efficiency programs, while furnaces and boilers were the most popular for the commercial sector.

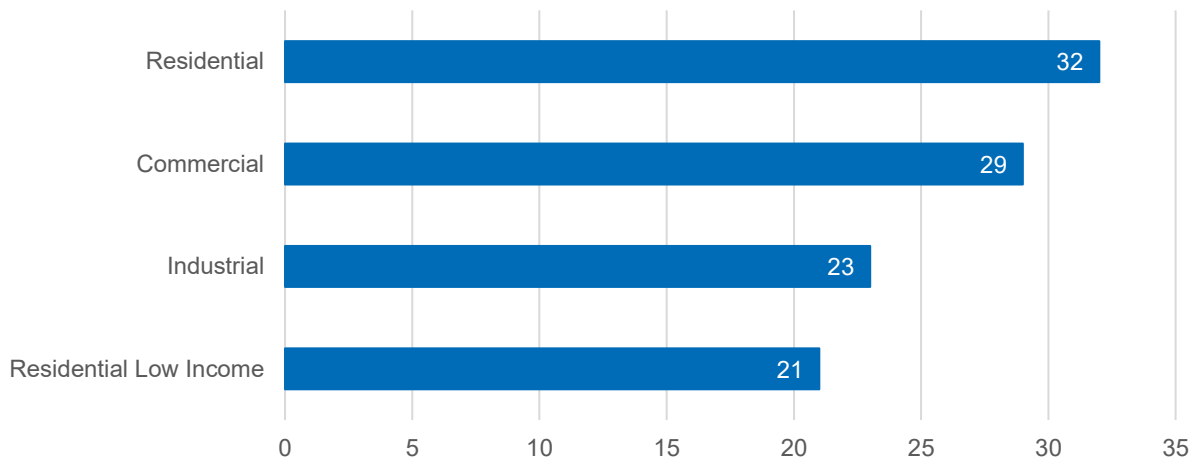
Products Included in Residential and Commercial Natural Gas Efficiency Programs		
2023 Program Year		
	<i>Residential</i>	<i>Commercial</i>
Energy Management	N/A	31
Furnaces	67	55
Boilers	54	55
Quality Installation	17	11
Gas-Fired Packaged Unitary Equipment	N/A	21
Unit Heaters	N/A	29
Tune-Up/Controls Upgrade	39	41
Direct Heating Equipment	22	N/A
Dishwashers	11	22
Clothes Washers	21	19
Storage	51	43
Tankless	55	47
Solar Thermal	7	6
Windows	28	N/A
Kitchens	0	46
New Construction	16	21
House Retrofit	31	30
Prescriptive- Separate Industrial Programs	N/A	29
Continuous Energy Improvement- Separate Industrial Programs	N/A	22
Plant Assessment- Separate Industrial Programs	N/A	26
Custom- Separate Industrial Programs	N/A	44
Other	36	22

The survey also asked respondents about customer financing and cash rebate opportunities within their efficiency programs. For the 2023 program year, 87% (34 out of 39) of respondents offered customer

financing for high efficiency natural gas products to a specific customer segment. Of the companies that offered customer financing, 53% of respondents (18 of 34) offered financing to four rate classes, 18% (6 of 34) offered financing to three rate classes, and 14% (5 of 34) offered financing to two rate classes.

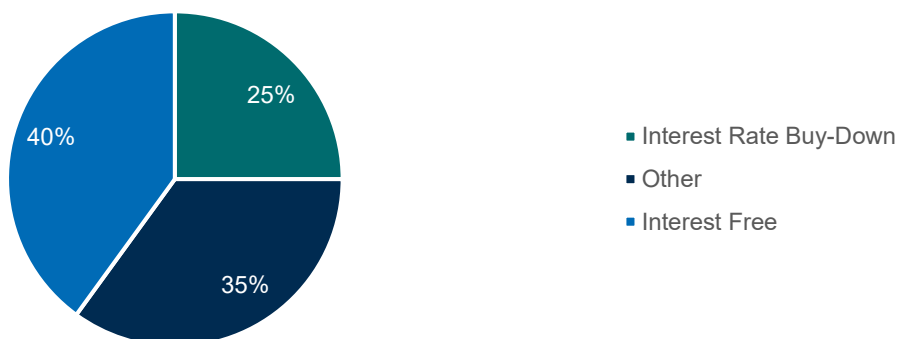
Of the 39 total respondents, only 13% (5 of 39) indicated that they offer no customer financing. Of the remaining respondents, 82% (32 of 39) reported financing for residential customers, 74% (29 of 39) reported financing for commercial customers, 59% (23 of 39) reported financing for industrial customers, and 54% (21 of 39) reported financing for residential low-income customers.

Number of Programs Offering Customer Financing for High Efficiency Natural Gas Appliances in 2023



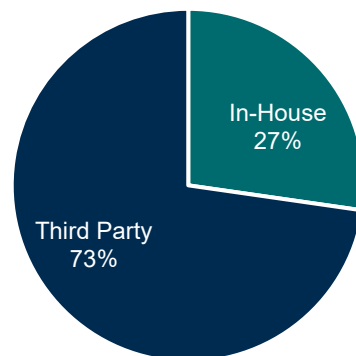
For respondents offering financing for natural gas high-efficiency appliances, interest rate buy-down, interest free loans, and other types of loans (including point prime plus, on-bill financing, a combination of loan types, etc) were offered. From the 20 respondents, eight offered interest free loans, 7 offered other loan types, and 5 offered interest rate buy-down loans.

Types of Loans Offered for Natural Gas High-Efficiency Appliances



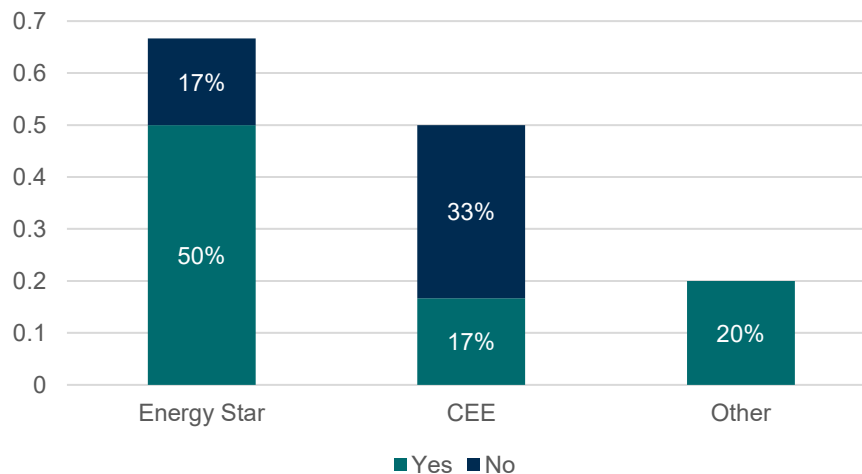
If respondents indicated that they offered loans for natural gas high-efficiency appliances, they were asked to specify if those loans were administered by the utility or via a third-party administrator. Based on the below, 27% of respondents indicated that the loans were administered in house and 73% indicated that they were administered by a third-party administrator.

Customer Financing Administration for High Efficiency Natural Gas Appliances in 2023

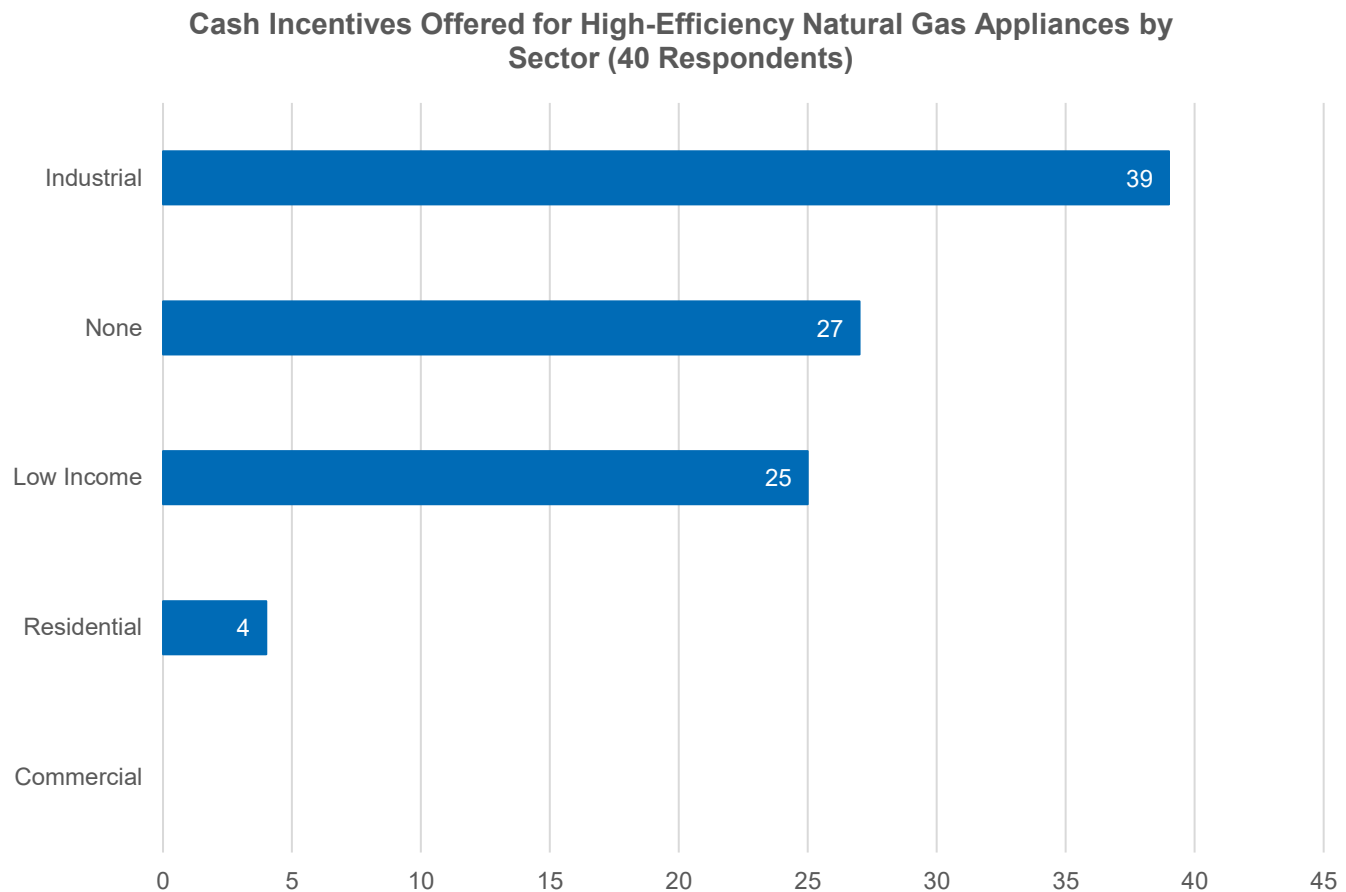


Respondents were also asked if the appliances for which they offered financing required specific certifications and, if so, which ones. Of the thirty respondents who answered, 50% utilize ENERGY STAR at the primary appliance certification to qualify for the program, followed by 17% utilizing CEE certifications.

Required Appliance Certifications for Customer Financing Programs (30 respondents)

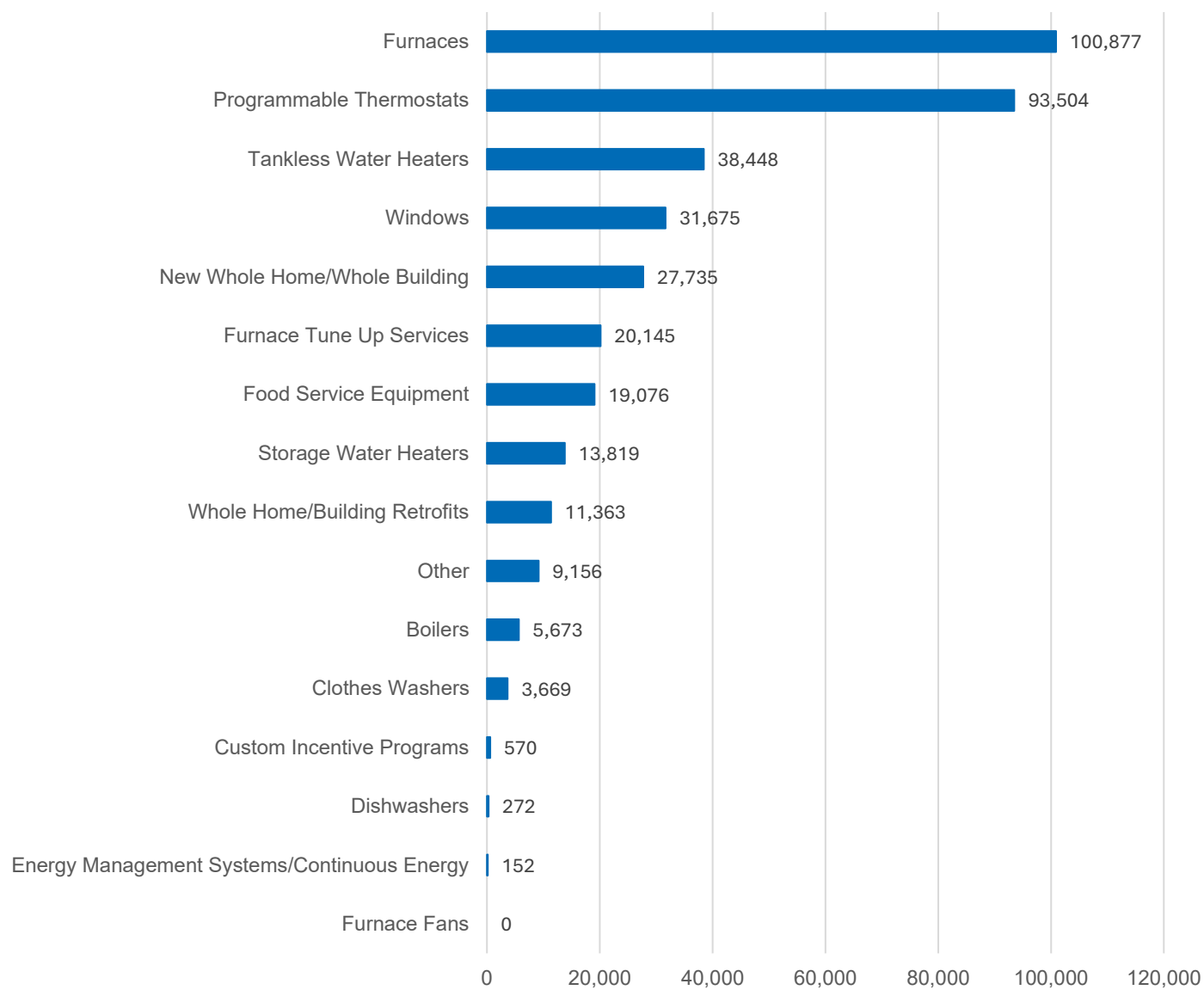


In addition to appliance certifications, forty respondents indicated that they offer some form of cash incentives for high-efficiency natural gas appliances. Based on the results outlined below, the majority of respondents had industrial sector incentives for the 2023 program year, followed closely by the low-income sector while a notable number of sectors do not have an incentive at all.



Given 27% of expenditures for the 2023 program year were reported to be utilized for customer rebates, as outlined earlier in the report, respondents were asked to identify the total number of rebates claimed by program participants. Based on the responses outlined below, furnaces were the leading product purchased utilizing offered rebates, followed by programmable thermostats.

Total Number of Claimed Rebates (2023 Data)



Conclusion

The 2023 program year results indicate that natural gas utilities continue to help their customers to reduce energy usage, lower their annual energy bills and reduce greenhouse gas emissions by investing in successful and innovative efficiency programs. These programs include cash rebates and financial incentives, low-income specific programs, strategic partnerships, joint programs with other electric and gas utilities, efficiency loans, education campaigns, targeted marketing, energy audits and more.

- In 2023, there were at least 72 natural gas utility rate-payer funded efficiency programs in the U.S.
- Investments in these efficiency programs in the U.S. increased roughly \$80 million from \$1.34 billion in 2022 to \$1.42 billion in 2023.
- With these significant investments, natural gas utilities in the U.S. aided their customers in offsetting more than 2.2 million metric tons of CO₂ in 2023, equivalent to removing over 533 thousand cars from the road for one year.
- U.S. customers saved more than 371 million therms in 2023, equating to roughly 37.1 trillion BTUs of energy saved.