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OFFICE OF PEOPLE'S COUNSEL

State of Maryland

Comments on EmPOWER Maryland 2025 Q3-Q4 Semi-Annual Reports

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Key Definitions and Acronyms

Definitions

Annual savings/reductions refer to the savings achieved in the first year after a measure is installed or otherwise paid for. Annual savings can be used to measure greenhouse gas (GHG) reductions or energy savings; in this report we generally differentiate GHG reductions from energy savings.

Lifecycle savings/reductions refer to the total energy savings or greenhouse gas reductions predicted to be achieved throughout the expected life of the measure, taking into account projected changes over time (e.g., avoided emissions from future electricity savings will be lower). When lifetime savings are put in monetary terms, projected future energy costs are used and all amounts are discounted to present value dollars.[1]

Forecasted or target savings/reductions refers to the amount of savings or greenhouse gas reductions each utility or DHCD predicted in its plan to save in each program sector (residential or commercial & industrial), or total portfolio, for a given year or over the full plan cycle.[2] Forecasted savings may exceed the statutory savings goal (see below).

The utilities do not forecast savings in half-year increments; however, for any half-year report, such as in the Q1-Q2 semi-annuals, the utilities and VEIC consider the program, sector, or portfolio "on target" if savings are close to half of what was forecasted for the full year.

Reported savings/reductions refers to the amount of energy savings or GHG reductions each utility or DHCD claims to have achieved in the cycle to date (CTD) or the year to date (YTD). With the mid-cycle shift from annual energy savings to lifecycle greenhouse gas reductions as the primary performance metric, utilities and DHCD filed updated plans covering program

[1] The formulas and values for projecting future energy savings and GHG reductions, as well as future energy costs and discount rates, are established and clarified when necessary by the Evaluation Advisory Group in accordance with Maryland Public Service Commission orders.

[2] With the 2025 shift in primary metric from annual energy savings to lifecycle greenhouse gas reductions, utilities filed updated plans including only 2025 and 2026. This has caused some discrepancies where energy savings forecasts and impacts are reported from 2024, but greenhouse gas reductions are reported only from 2025. These cases will be clarified throughout these comments.

years 2025 and 2026. This has introduced some discrepancies between metrics (e.g., energy savings CTD are from 2024 whereas greenhouse gas reductions CTD only includes 2025) that are specified throughout these comments. Typically, VEIC pro-rates the forecasted cycle savings to correspond to reported CTD savings. For example, after one year of a typical three-year cycle, we compare reported savings to one-third of the forecasted cycle savings. In other words, we consider whether a program has achieved one-third of its cycle forecast after one year. Savings claims are later verified on an annual basis through the EmPOWER evaluation process, in which the Commission's independent evaluator verifies EmPOWER program savings based on a process that is discussed in the evaluator-led Evaluation Advisory Group.

Market transformation refers to self-sustaining shifts in market behavior whereby high efficiency and/or low GHG emissions products are manufactured, sold, and adopted as the standard option rather than the exception driven only by customer rebates. In a transformed market for a given technology, contractors routinely propose high efficiency equipment, distributors keep them readily available, manufacturers continue to innovate and scale production, and end-use customers view the equipment as the normal, reliable choice. The process by which market transformation occurs includes coordinated interventions across the market aimed at reducing upfront cost barriers, building contractor familiarity and confidence, aligning distributor incentives, and improving consumer awareness. Over time, as barriers diminish and supporting infrastructure matures, reliance on program incentives declines, and the market continues to advance toward efficient, low-emissions technologies on its own.

Downstream programs provide incentives directly to end-use customers. Typically, customers fund the project upfront and apply for a rebate after completion.

Midstream programs provide incentives to distributors, contractors, or other market actors who in turn sell the equipment to end-use customers. This design is often intended to encourage stocking practices for high efficiency equipment and leverage economies of scale in driving higher participation rates with fewer dollars relative to downstream programs.

Upstream programs provide incentives directly to manufacturers or large retailers to produce and/or distribute efficient products, intended to reduce wholesale costs.

GHG reduction goal refers to the minimum GHG reduction amounts called for by law for the EmPOWER electric utilities for any given year. In 2025, this amount is based on translating 2.25 percent of the utilities' baseline (2016) electricity sales into equivalent lifecycle GHG reductions. The gas utilities have a goal based on past program achievement from the 2021-2023 cycle. DHCD has been given a goal metric relative to baseline, but delays in the determination of the baseline meant that no goal was provided until February 6, 2026.[3] Since this date was after the 2025 program year ended and only several days before the filing deadline, DHCD has not reported GHG impacts.

Acronyms

AMI: Area Median Income or Advanced Metering Infrastructure
ASHP: Air-source heat pump
BGE: Baltimore Gas and Electric Company
BTU: British Thermal Unit
BYOD: Bring Your Own Device, often referring to demand response programs where customers enroll with their own smart thermostat or similar device.
CAC: Central air conditioner
C&I: Commercial and industrial customer segment
CO2e: Carbon dioxide (CO_2) equivalent
CVR: Conservation Voltage Reduction
DHCD: Department of Housing and Community Development (Maryland)
DPL: Delmarva Power & Light Company
DR: Demand Response
EE&C: Energy Efficiency & Conservation Programs
EPA: U.S. Environmental Protection Agency
ESRPP: ENERGY STAR Retail Products Platform
GHG: Greenhouse gas, frequently referring to a reduction in greenhouse gas emissions
HEIP: Home Energy Improvement Program (SMECO and Potomac Edison)
HER: Home Energy Report
HERS: Home Energy Rating System

[3] EmPOWER Maryland Limited Income Programs Semi-Annual Report. DHCD. February 15, 2026. Page 4.

HPWH: Heat pump water heater
HPwES: Home Performance with EnergyStar
HVAC: Heating, ventilation and air conditioning
IEA: International Energy Agency
IECC: International Energy Conservation Code
IOU: Investor-owned utility
IRA: Inflation Reduction Act (U.S.)
KWh: Kilowatt-hour
LED: Light emitting diode
MEA: Maryland Energy Administration
MEEHA: Multifamily Energy Efficiency and Housing Affordability Program (DHCD only)
MEET: Maryland Energy Efficiency Tune-Up (DHCD only)
ML: MailLog. This is a reference to a filed document identifier on the Maryland Public Service Commission's website.[4]
MMBtu: Million BTU
MWh: Megawatt-hour (1,000 kilowatt-hours)
OHEP: Office of Home Energy Programs (Maryland)
PE: The Potomac Edison Company or "Potomac Edison"
Pepco: The Potomac Electric Power Company
PJM: PJM Interconnection, LLC, the RTO serving all or parts of 13 states, including Maryland, and the District of Columbia.
QHEC: Quick Home Energy Check-up
RTO: Regional Transmission Organization
SMECO: Southern Maryland Electric Cooperative, Inc.
WGL: Washington Gas Light Company

[4] Filed documents can be searched by MailLog number through this page: https://webpscxb.psc.state.md.us/DMS/maillogsearch

Summary of Key Findings & Recommendations

Key Findings

1. Most utilities have achieved their statutory minimum GHG reduction targets in 2025. WGL reports achieving 86 percent of statutory minimum.
2. Generally, all utilities have overestimated the budgets necessary to achieve GHG reductions.
3. Residential portfolios underachieved relative to forecasts. BGE is the only utility to report residential GHG reductions at or above forecast. This trend contrasts with C&I portfolios that generally did achieve forecasted GHG reductions.
4. EmPOWER generated energy efficiency savings in program year 2025 at a cost of 6.2 cents/kWh, well below the cost of delivered electricity.
5. EmPOWER generated GHG reductions in program year 2025 at a cost of $300 per metric ton of CO2e across the electric utilities and BGE.
6. While the Department of Housing and Community Development (DHCD) continues to fall short of the increased goals this cycle, its 2025 achievement of over 60 percent of its annual target represents a notable improvement from last year. However, recent Public Service Commission Order 92176 will impact the scale of DHCD's future efforts to achieve GHG reductions, given the goal for the next cycle will be reduced pursuant to this order to 0.9 percent of the baseline *across six years*.[5] DHCD had been scaling up program activity and resources with the intent of achieving 0.9 percent of the baseline annually.

[5] Maryland Public Service Commission, Order No. 92176, The 2024-2026 EmPOWER Maryland Program, (Case No. 9705, Feb 6, 2026) at 17-20. The Commission ruled that under PUA § 7-224, DHCD's greenhouse gas reduction goals are to be based on aggregate rather than annual savings. The Commission concluded that the statutory language is plain and lacks the word "annual," which was explicitly present in the predecessor statute, PUA § 7-211.1. In its decision, the Commission noted that requiring an annual savings goal could mandate a significant budget increase and a higher EmPOWER surcharge for ratepayers. Furthermore, the Commission found that an annual interpretation would set a goal highly improbable for DHCD to meet, given its performance history against 2024 and 2025 targets. *See* Order No. 92176 at 17-20.

7. HVAC programs generally and midstream programs in particular continue to lag participation numbers needed to align with the state's policy objectives. The lack of agreement about the scale and role of midstream programming as a means for market transformation appears unlikely to be resolved without further direction.
8. Utilities appear to be reporting cycle-to-date information inconsistently. Many report the cycle as 2025-2026, coinciding with the revised plans and lifecycle GHG alignment, while others continue to report 2024-2026. This discrepancy makes cycle-to-date comparisons complicated, so nearly all data and figures presented throughout these comments consider 2025 program achievements and forecasts only.

Key Recommendations

These comments were drafted as EmPOWER-related legislation was being discussed in the Maryland General Assembly. As of the time that these comments were finalized House Bill (HB) 1532 had not yet been signed by Governor Moore. HB 1532 will have significant effects on EmPOWER. Due to the close proximity between the end of the legislative session and the deadline for these comments, as well as the fact that HB 1532 has not yet become law, the recommendations made throughout these comments do not consider any potential impacts of HB 1532. Many recommendations will not change based on HB 1532, but others may either change or become obsolete.

1. The Public Service Commission should end new gas-burning appliance incentives in EmPOWER programs. BGE has already eliminated these measures from its programs. WGL is the only utility still offering incentives for the installation of new gas equipment. Every gas appliance installed today could operate for the next 20 years or more, locking in gas emissions and gas system reliance over that period. As overall gas consumption declines due to competition from highly efficient electric technologies, customer concerns about health and safety, and climate policy, the costs of the gas infrastructure will be spread among fewer customers, further increasing rates for those remaining on

the gas system.[6] For Maryland to achieve its climate objectives and keep unnecessary costs in check, EmPOWER must cease incentivizing new gas equipment.

2. The Commission should retain an independent, skilled, professional consultant to facilitate strategic planning to work with the Commission. The Commission should direct EmPOWER stakeholders and state agencies to establish an overall roadmap or framework for heat pump market transformation. Assuming other state agencies are willing to contribute, both with their participation and funding, the roadmap would allow the Commission to develop EmPOWER programs in ways that align with the strategies and programs of agencies such as Maryland Department of the Environment (MDE), Maryland Energy Administration (MEA), the Building Code Administration, and others.
3. Expanding Order 92176,[7] the Commission should direct all utilities to provide details in their prospective semi-annual reports about full contractor reimbursement timing in addition to distributor reimbursement timing.
4. The Commission should direct all EmPOWER utilities to eliminate CAC incentives by July 2026 and focus on the promotion of ASHPs which provide high efficiency heating and cooling and greater GHG reductions.
5. Utilities should develop complementary demand response dispatch strategies that proactively target utility-specific or PJM Mid-Atlantic coincident peak conditions – the periods that most directly drive transmission cost allocations and capacity requirements – by leveraging existing demand response resources. Utilities should incorporate local DR strategies to alleviate local grid constraints and help reduce or defer infrastructure upgrade costs. These approaches would expand the ratepayer benefits delivered by current programs without requiring additional resource enrollment.

[6] Maryland Office of People's Counsel, *Maryland Gas Utility Spending Projections and Analysis of Future Capital Investments* (Feb. 2025, Third Edition), https://opc.maryland.gov/Portals/0/Files/Publications/Gas%20Utility%20Spending%20Report%20February%202025.pdf?ver=RP_bNtF-Hn7szyL7eLY-Lw%3d%3d.

[7] Maryland Public Service Commission, Order No. 92176, The 2024-2026 EmPOWER Maryland Program, (Case No. 9705, Feb 6, 2026) at 12-13.

EmPOWER Residential Program Descriptions

Each EmPOWER program is designed to target specific technologies, customers, or both. Programs focus on different decision points related to energy use and equipment purchase. For example, some programs target customers who are shopping in a store (or online) for a new appliance and others seek to engage and motivate them when they are at home reviewing their energy bills. Other programs target the contractors and suppliers who influence customer choices about equipment installed for them (e.g. a new heating system).

Appliance Rebate

The Appliance Rebate programs offer instant, online, and paper rebates for select ENERGY STAR products, including room air conditioners, dehumidifiers, room air purifiers, heat pump water heaters, refrigerators, freezers, clothes washers, clothes dryers, pool pumps, advanced power strips, and smart thermostats.

The EmPOWER electric utilities deliver appliance program rebates through separate "downstream" and "midstream" channels, which seek to influence equipment purchases in different ways. The suite of eligible measures varies from utility to utility except for those offerings delivered through the ENERGY STAR® Retail Products Platform (ESRPP), which is a midstream channel. The traditional downstream offerings involve individual customer applications, whereas participating distributors deliver the midstream point-of-sale offerings through instant coupon rebates, instant markdown, or a midstream retailer incentive (i.e., the ESRPP) to participating retailers. All five electric utilities also offer a midstream heat pump water heater initiative offering incentives through participating distributors, which typically sell equipment to contractors not end-use customers.

Appliance Recycling

The Appliance Recycling program encourages early retirement and recycling of inefficient operating appliances by offering customers a rebate and free appliance pick-up. The program primarily targets recycling of refrigerators and freezers but offers ancillary pick-ups for room air conditioners and dehumidifiers in addition to hosting local community turn-in events.

HVAC

The HVAC program promotes efficient heating and cooling technology for homes, including efficient air conditioners, heat pumps, and furnace technology, along with smart thermostats installed with HVAC measures. For most HVAC equipment, contractors and distributors are highly influential about the choice of equipment that customers have effective access to, whether due to stocking, installer knowledge, or other factors. Starting in 2018, HVAC programs largely transitioned to a midstream channel model, which targets incentives and engagement at equipment distributors and installation contractors. Although some residential retrofit projects include HVAC measures, the HVAC Program is the primary EmPOWER program for influencing replacement of heating and cooling equipment.

Residential Retrofit

The Residential Retrofit program group includes Quick Home Energy Check-up (QHEC), Home Performance with Energy Star (HPwES) and the Home Energy Improvement Program (HEIP), which combines elements of the two other programs. BGE, Pepco, and DPL deliver QHEC and HPwES. SMECO and Potomac Edison deliver HEIP. Washington Gas supports residential retrofits through its Coordinated Program, through which WGL and electric utilities share costs and savings in homes with electric and gas savings. The residential retrofit programs are distinct from most other EmPOWER programs in that they employ a "whole home" (vs. technology specific) approach.

Quick Home Energy Checkup

QHEC (and HEIP) include an initial walk-through where a certified technician inspects the condition of a home, identifies opportunities for savings, and offers the direct installation of smaller measures that provide immediate savings, such as smart power strips or efficient flow showerheads. QHEC is free to EmPOWER ratepayers.

Home Performance with ENERGY STAR

HPwES begins with a more comprehensive energy audit—including a blower door test, for example—to identify energy savings opportunities. Direct installation measures are also offered. Audit results point participants to performance-based rebates for air sealing and insulation,

heating and cooling equipment, and other weatherization measures. Participants in need of financing may be directed to the Clean Energy Advantage Loan Pilot Program, an EmPOWER pilot implemented by the Maryland Clean Energy Center and the Montgomery County Green Bank.[8] The Moderate Income Offering (MIO) was added to HPwES in 2025 offering enhanced rebates targeting moderate income households and providing referrals to DHCD for qualifying households.

Home Energy Improvement Program

HEIP differs in implementation between SMECO and Potomac Edison. SMECO provides a free Home Energy Analysis that includes a visit to analyze the home's energy use, install energy saving items, and provide recommendations on energy efficiency upgrades. The program also advertises an HVAC Tune-Up and deep discounts on smart thermostats. Potomac Edison, on the other hand, offers a Quick Home Energy Checkup and Home Performance Program that appear quite similar to the other utilities' QHEC and HPwES programs but do not use the ENERGY STAR branding.

New Construction

The EmPOWER incentive program for residential new construction is based on the national ENERGY STAR® Residential New Construction program. It is generally referred to by the utilities as ENERGY STAR for New Homes. The core program and incentive structure targets whole home energy performance. Homes that earn the ENERGY STAR label are estimated to be at least 10 percent more energy efficient than the prevailing energy code and are backed by established national quality standards. ENERGY STAR periodically develops new and more stringent program standards in response to the adoption of new energy codes in order to ensure savings above baseline code construction. The Environmental Protection Agency (EPA) specifies which version of the ENERGY STAR program requirements must be met by each state according to its adopted

[8] Md. Pub. Serv. Comm'n Technical Staff, *Finance Work Group Status Report on the Extension of the Clean Energy Advantage Pilot Program*, ML No. 323533 (Case No. 9705, Oct. 21, 2025), at 1.

energy code. With the adoption of IECC 2021,[9] Maryland is required to meet ENERGY STAR v3.2 for certification of homes permitted on or after Jan 1, 2025. However, because Maryland adopted an amended, less stringent, version of the 2021 International Energy Conservation Code (IECC), EmPOWER utilities requested to offer a "Code-Plus" tier which allows builders to meet the requirements of ENERGY STAR v3.1 with some additional criteria. In the 2024-2026 program cycle, builders may receive incentives for the following certification levels:

- Code-Plus (ENERGY STAR v3.1)
- ENERGY STAR (ENERGY STAR v3.2)
- ENERGY STAR NextGen (ENERGY STAR v3.2 + electrification requirements)

NextGen certification requires that primary heating and hot water loads be met by heat pump equipment, induction cooking, and electric vehicle charging capabilities. NextGen certified homes must also be constructed to ENERGY STAR's highest national program version. Some utilities also provide incentives to builders for constructing homes that achieve U.S. DOE's Zero Energy Ready Homes (ZERH) and/or Passive House certification.

In addition to whole-home certifications, EmPOWER utilities offer additional incentives for "additive measures"—individual measures such as high efficiency heating, cooling, and water heating equipment, smart thermostats, and verification of high-quality HVAC installation by a Home Energy Rating System (HERS) rater.[10]

Energy Efficiency Kits

Several electric utilities and DHCD distribute free energy efficiency kits through different channels. The kits contain basic energy efficiency measures, such as advanced power strips and faucet/shower aerators, that customers can install to reduce energy consumption. The kits may

[9] An International Energy Conservation Code (IECC), developed by the International Code Council, is a model building code established every three years that sets minimum efficiency standards in new construction for a structure's walls, floors, ceilings, lighting, windows, doors, duct leakage, and air leakage.
[10] HVAC installations verified against the "Standard for Grading the Installation of HVAC Systems", ANSI/RESNET/ACCA 310-2020, June 23, 2025. https://www.resnet.us/wp-content/uploads/ANSIRESNETACCA_310-2020_v7.1.pdf

be offered to customers opening new utility accounts, upon request, or other circumstances. DHCD started a kits-based program in 2022, targeting limited income households.

Behavioral

Behavioral energy efficiency programs encompass a wide range of strategies designed to motivate individuals and organizations to alter their energy consumption habits. These programs leverage insights and techniques from behavioral science to encourage energy saving actions and participation in other efficiency programs. Many programs offer general advice to improve energy consumption, though programs continue to evolve to target specific behaviors relevant to the end user such as no- or low-cost actions, seasonal tips, cross-promotional messaging, or insights from "disaggregating" metered usage to see patterns from individual end uses (e.g. cooling load that is correlated with outdoor temperature). Generally, behavioral programs result in habitual curtailment or small efficiency upgrades (such as lightbulbs). Savings tend to be largest in the summer and winter when space-conditioning appliances are most heavily relied on. Behavioral programs may also recommend participation in other utility programs, though this spillover represents a small fraction of overall program savings which are not accrued in behavioral program totals.

The EmPOWER Behavioral programs save energy by providing insights to customers through printed and emailed home energy reports (HERs), digital tools, and messaging to customers. These tools leverage advanced meter infrastructure (AMI) data to influence energy saving behavioral changes by customers (compared statistically to non-targeted customers). Energy savings accrue as end-users adopt behaviors that the reports recommend based on usage patterns and historical trends.

Each utility maintains a randomly selected control group of customers which do not receive program interventions. Behavioral program customers' usage is compared against the control group to determine savings impact. In EmPOWER, savings from behavioral programs are assumed to last for a single year.

Limited Income

The Maryland Department of Housing and Community Development (DHCD) programs serve both single family and multifamily markets. Eligible customers have household incomes less than 250 percent of the Federal Poverty Level. Although participation in DHCD single-family programs has no direct cost to participants, identifying eligible customers and engaging and supporting them to participate in programs is an enormous and complex task. For the single-family segment, a comprehensive suite of programs (including Energy Kits, Whole Home and Base Efficiency, and the recently ended Maryland Energy Efficiency Tune-up (MEET) program) targets customers at different stages of their journey toward energy efficiency, based on specific barriers to participation.

Energy Kits: This is often the first step in a customer's journey. A kit is sent to each new applicant to "demonstrate the benefits of the program and provide immediate value to clients." Average energy and GHG savings per participant are small.

Audit: The next step a customer may choose to undertake is an audit. The existing condition of the dwelling units is assessed by a local weatherization agency. Depending on whether extensive repairs are needed and/or localized health and safety issues are identified, income-eligible participants are recommended for comprehensive treatment under the Whole Home program or directed to the Base Efficiency program.

Whole Home: This program is the most comprehensive and highest impact option a customer may consider. The Whole Home program provides cost-effective energy upgrades, limited health and safety measures, and incidental repair measures. Top measures include lighting, HVAC distribution system improvements, air sealing, attic and floor insulation. Average energy and GHG savings per participant are relatively high.

Base Efficiency: The base efficiency program is recommended when no comprehensive, whole home improvements are needed. The base efficiency program delivers direct installation measures and HVAC improvement measures. Top measures include lighting, HVAC distribution system improvements, HVAC cleaning and tuning, and water pipe

insulation. Average energy and GHG savings per participant are modest, higher than kits but less than the comprehensive whole home option.

Marylanders in the multifamily market are eligible to receive an energy kit. DHCD also runs the Multifamily Energy Efficiency and Housing Affordability Program (MEEHA) to generate deep energy savings and GHG reductions in buildings that are home to a minimum of 20 percent of households at 80 percent of the average median income (AMI) or less.[3] MEEHA is an application based program supporting retrofit/rehabilitation projects and new construction projects, requiring a landlord co-payment for retrofits.

Demand Response

EmPOWER Maryland's Demand Response (DR) programs leverage a mix of technologies, equipment, and behavioral or economic incentives to encourage shifts in residential and small commercial energy use during critical or strategic periods, particularly when electricity demand is at its peak. By activating DR during PJM system peak events, utilities can reduce their capacity obligations. Similarly, targeting their own system peaks allows utilities to lower their share of transmission costs.

EmPOWER customers are compensated for their enrollment (availability) to participate in demand response events and not necessarily for the performance of their individual assets.

Introduction

The 2025 program year represents the first full year after EmPOWER Maryland programs shifted from electricity and natural gas energy savings to lifecycle greenhouse gas reductions. Utilities generally performed well under the new framework, with most exceeding their statutory GHG targets. These results suggest that the portfolio has adapted relatively quickly as administrators adjust to the lifecycle emissions framework.

A notable gap persists between achievement and spending. Several utilities met or exceeded their GHG targets while remaining significantly under budget. Pepco was closest to budget at 90 percent while Potomac Edison spent just over half of its budget. This trend is most notable within the residential portfolios where most utilities failed to achieve forecast GHG targets yet report significant unspent budget. While on the surface this may appear as cost-efficient programming, it suggests not just underperformance, but under-deployment of resources. The fact that many utilities are failing to achieve their residential EmPOWER GHG reduction forecasts while underspending their budgets may indicate program design or delivery issues, inadequate customer engagement, or other concerns. Ultimately, failing to meet forecast GHG reduction targets while leaving budget unspent suggests that the residential programs are not treated as a priority by most utilities.

Policy alignment remains an issue for the gas programs. WGL is reportedly ahead of schedule in achieving its three-year statutory GHG reduction targets, yet a significant share of its GHG reductions still comes from installing new high-efficiency gas equipment. While these upgrades deliver incremental efficiency gains in the near term, they conflict with the state's broader climate goals and threaten to result in increased costs for those left behind on the gas system by locking in emissions and gas infrastructure that is likely to remain beyond the 2045 net-zero target year. As overall gas consumption declines due to competition from highly efficient electric technologies, customer concerns about health and safety, and climate policy, the costs

of the gas infrastructure will be spread among fewer customers, further increasing rates for those remaining on the gas system.[11]

Within the residential sector, new construction programs were the strongest performers. Updated ENERGY STAR and Code Plus standards emphasize longer measure lives, which align well with lifecycle GHG accounting and allowed several programs to significantly exceed their targets. Appliance programs also saw strong results. In contrast, whole-home retrofit programs generally fell short of GHG targets. Fuel-switching/electrification incentives have begun to see increased participation, though they have not yet reached the scale needed to meaningfully transform the HVAC market.

The Department of Housing and Community Development reported continued growth in its limited-income programming, notwithstanding the Commission's ruling that DHCD's greenhouse gas reduction goals from 2027-2033 are to be based on aggregate rather than annual savings.[12] However, financing access remains uneven. The Clean Energy Advantage financing pilot is active, but most loans (over 97 percent across all utilities) are going to households above 250 percent of the federal poverty line, indicating a continued gap for moderate-income households.

Overall, the 2025 results show that the portfolio is successfully navigating the transition to a GHG-focused framework, but several adjustments may be needed moving forward. The persistent gap between achievement and spending suggests an opportunity to shift resources toward deeper retrofits and electrification efforts that better align with Maryland's long-term

[11] Maryland Office of People's Counsel, *Maryland Gas Utility Spending Projections and Analysis of Future Capital Investments* (Feb. 2025, Third Edition), https://opc.maryland.gov/Portals/0/Files/Publications/Gas%20Utility%20Spending%20Report%20February%202025.pdf?ver=RP_bNtF-Hn7szyL7eLY-Lw%3d%3d.

[12] It was late in the program year before MDE provided the 2016 baseline upon which DHCD's goals are based. DHCD then argued that its 0.9 percent statutory goal was not an annual goal. The Commission ruled that under PUA § 7-224, DHCD's greenhouse gas reduction goals are to be based on aggregate rather than annual savings. The Commission concluded that the statutory language is plain and lacks the word "annual," which was explicitly present in the predecessor statute, PUA § 7-211.1. In its decision, the Commission noted that requiring an annual savings goal could mandate a significant budget increase and a higher EmPOWER surcharge for ratepayers. Furthermore, the Commission found that an annual interpretation would set a goal highly improbable for DHCD to meet, given its performance history against 2024 and 2025 targets. *See* Order No. 92176 at 17-20.

climate goals and affordability interests. The success of heat pump water heaters in the midstream delivery channel may be replicated with other higher cost technologies like air-source heat pumps.

These Q3-Q4 2025 semi-annual reports represent both the first full year of GHG reduction programs as well as the last reporting cycle ahead of the 2027-2029 plan filings. Findings from 2025 provide insights into the status of the EmPOWER programs and highlight opportunities and barriers for GHG reductions through energy efficiency as Maryland continues to pursue its climate objectives.

EmPOWER Portfolio-Level Results

EmPOWER programs in 2025 pursued GHG reduction as the primary measure of success, in alignment with Maryland's climate objectives. The observations and recommendations in the following sections focus primarily on the GHG reductions, including energy savings and other metrics only when necessary to add valuable context. This transition away from energy savings goals to GHG reduction goals leads to notable new dynamics like challenges associated with increasing the numbers of electrification measures and programs, as well as disagreements between utilities involving fuel-switching measures. A notable example of the latter occurred during the Fall EmPOWER hearing when Pepco and WGL both raised their right to claim GHG reductions from a project at a shared customer site.

Total GHG Reductions

EmPOWER utilities and DHCD are reporting lifecycle GHG reductions as the primary program metric in 2025. As shown in Table 1 below, all the electric utilities (and BGE as a dual-fuel utility) have exceeded the statutory GHG reduction targets while WGL and DHCD report GHG totals below target. Potomac Edison reports nearly a four-fold increase in GHG reductions in the second half of 2025 compared to the first half. The other utilities and DHCD exhibit similar GHG reductions across the two reporting periods. Note that DHCD did not have an official statutory

target throughout 2025, though the official baseline was determined early 2026 just before reports were due.

Table 1. Program year 2025 reported GHG reductions relative to statutory targets.

Utility	Reported Lifecycle GHG Reduction in Metric Tons (CO2e)	Annual Targeted Lifecycle GHG Reduction in Metric Tons (CO2e)	Percent of Statutory Target
Potomac Edison	211,068	179,454	**118%**
BGE	954,653	835,887	**114%**
Pepco	403,122	387,702	**104%**
DPL	112,195	103,427	**108%**
SMECO	93,661	86,513	**108%**
WGL	141,618	164,500	**86%**
DHCD	103,852	166,396*	**62%**

*DHCD did not receive a statutory target until after the program year ended. Achievement relative to forecast is shown.

EmPOWER utilities and DHCD reported a combined 2 million tons of lifecycle GHG reductions in 2025. The residential programs contributed about 875,000 tons, or about 43 percent of the total. This ratio varies notably across electric utilities, from a low of 17 percent GHG reductions from residential programs for Potomac Edison to a high of 52 percent for SMECO, though relatively in line with how forecasts vary across utility. WGL and DHCD programs rely on residential programs for over 80 percent of GHG reductions. A closer look reveals that most electric utilities saw underperformance across residential programs while relying on C&I programs to make up the difference.[13] Figure 1 shows the variation in share of savings from residential programs across electric utilities, as well as how each utility's *actual* share of GHG reductions from residential programs differs from the share implied in forecasts.

[13] Note that this section considers the electric utilities generally, though BGE is treated as a dual-fuel utility with combined electric and natural gas programs reflected in this analysis. WGL and DHCD operate programs that rely primarily on residential customers to achieve savings and GHG reduction targets and thus are excluded.

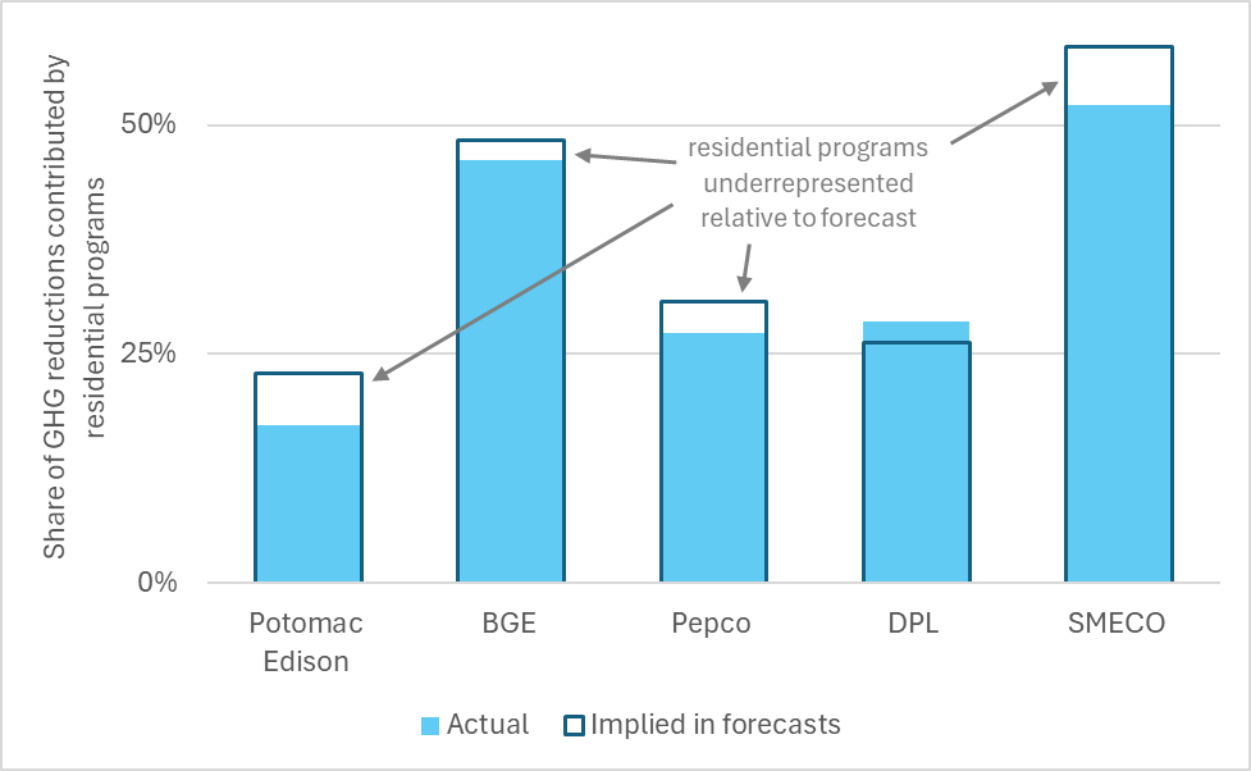

Figure 1. Forecast and actual share of overall GHG reductions contributed by residential programs by utility.

Most electric utilities forecast total GHG reductions above and beyond the statutory minimum targets. BGE is the only utility that exceeded its own forecasts, while all but WGL and DHCD exceeded statutory targets. The analyses throughout these comments generally rely on assessing performance relative to forecast, though it is important to consider achievement that falls short of forecast yet exceeds statutory minimum. Figure 2 illustrates how most electric utilities underperformed their own forecasts for residential programs (straight average of 85 percent of forecast achieved) while aligning with forecast on the C&I side (straight average of 100 percent of forecast achieved). C&I programs generally are hitting forecasts while residential programs are not, yet all electric utilities report achieving statutory minimum GHG reductions. This raises the concern that poor residential program performance is masked by over-forecasting and then relying on C&I programs to make up a larger share of total savings. Another explanation could be that utilities are shifting priority away from residential programming once statutory minimum targets are achieved. This also suggests a departure in

actual program performance relative to the approved plans: C&I programs make up a larger relative share of actual activity than was initially proposed.

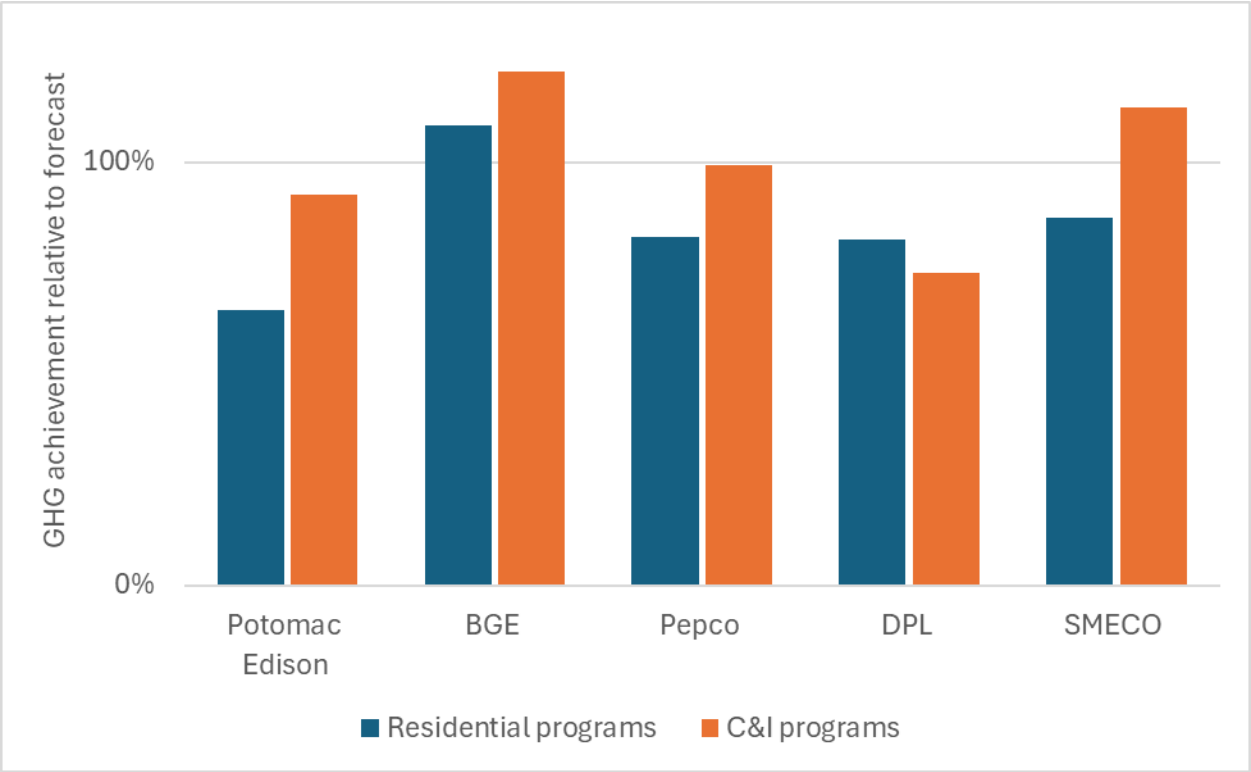

Figure 2. GHG reduction achievement relative to forecast, comparing residential programs and C&I programs, by utility.

Potomac Edison reports being below target in every residential program. At mid-year Potomac Edison's C&I programs were well below target at only 16 percent of forecast, indicating significant program activity in the second half of the year. Other utilities generally report a mixture of programs at or above target balanced by others below target. Electric utilities report 2 to 5 percent of total lifecycle GHG reductions from CVR[14] and other front-of-the-meter sources – a small but not insignificant share.

[14] Conservation voltage reduction (CVR) is a utility-side, non-surcharge program designed to improve electric distribution system performance by optimizing voltage levels at certain distribution circuits. Consistent with the recommendations put forth in the August 1, 2024 EmPOWER Conservation Voltage Reduction Working Group Report (Maryland Public Service Commission Technical Staff, EmPOWER Conservation Voltage Reduction Working Group Report, ML No. (Case No. 9705, Aug. 1, 2024)). CVR continues to provide a small amount of GHG impact this cycle and has been excluded from prospective goal setting exercises as its impact has waned under the current lifecycle GHG framework.

Note that EmPOWER continues to generate electricity savings that cost far less than the cost of generated and delivered electricity.[15] As shown in Table 2, the average cost of electricity savings achieved by EmPOWER year-to-date is 6.2 cents/kWh. The average cost per ton of lifecycle GHG reduction is just under $300 across the electric utilities and BGE.

Table 2. Program year 2025 reported electric utility savings and GHG reductions with reported cost per savings.

Utility	Lifecycle Energy Savings (MWh)	Lifecycle GHG Reductions (MT CO2e)	Total Program Expenditure	Reported Cost per Lifecycle Electric Savings ($/kWh)	Reported Cost per Lifecycle GHG Savings ($/MT CO2e)
Potomac Edison	1,369,090	211,068	$51,894,327	$0.038	$246
BGE	4,169,086	954,653	$286,094,870*	$0.069	$300
Pepco	1,927,079	403,122	$130,131,494	$0.068	$323
DPL	667,958	112,195	$35,983,490	$0.054	$321
SMECO	453,497	93,661	$28,181,957	$0.062	$301
Total	**8,586,710**	**1,774,699**	**$532,286,138**	**$0.062**	**$300**

*BGE's total expenditure includes gas and electric programs combined, inflating the cost per kWh.

Residential Portfolio-Level GHG Reductions

In these comments, we primarily evaluate at the program level, against the quantities forecasted by each utility in their Commission-approved plans, considering GHG reductions and program spending. Figure 3 shows the reported 2025 GHG reductions and spending for the residential programs compared to each utility's respective annual forecasts. Most utilities fell short on GHG

[15] The EmPOWER evaluation team estimates statewide residential retail rates between $0.14-0.16 per kWh and commercial retail rates between $0.11-0.12 per kWh for use in assessing program benefits and costs. (*EmPOWER BCA Cost & Benefit Summary 12.15.2023*, https://docs.google.com/spreadsheets/d/1CbC3qJNYKPULDMVGiHGEqo9vlgTi0N1F/edit?gid=1884521688#gid=1884521688).

reductions, with only BGE's residential programs exceeding forecast. WGL is the only other utility whose residential programs are reasonably on target having achieved 94 percent of its annual forecast (this rounds up to 95 percent of forecast if considering both residential energy efficiency and residential demand response programs together). The remaining utilities and DHCD report achievement of between 65 percent to 87 percent of their annual forecasts.

Most utilities report that GHG reduction achievement relative to forecast outpaces spending relative to budget. This is illustrated in Figure 3 below as only DPL and Pepco report GHG reduction and spending relative to forecast as approximately equal, while all the other administrators report GHG achievement outpacing spending relative to forecast. This finding is consistent with a long-observed trend of achieving savings or GHG reductions with less budget than anticipated. Further, failing to achieve forecast while significantly underspending residential budgets suggests missed opportunities in the residential sector.

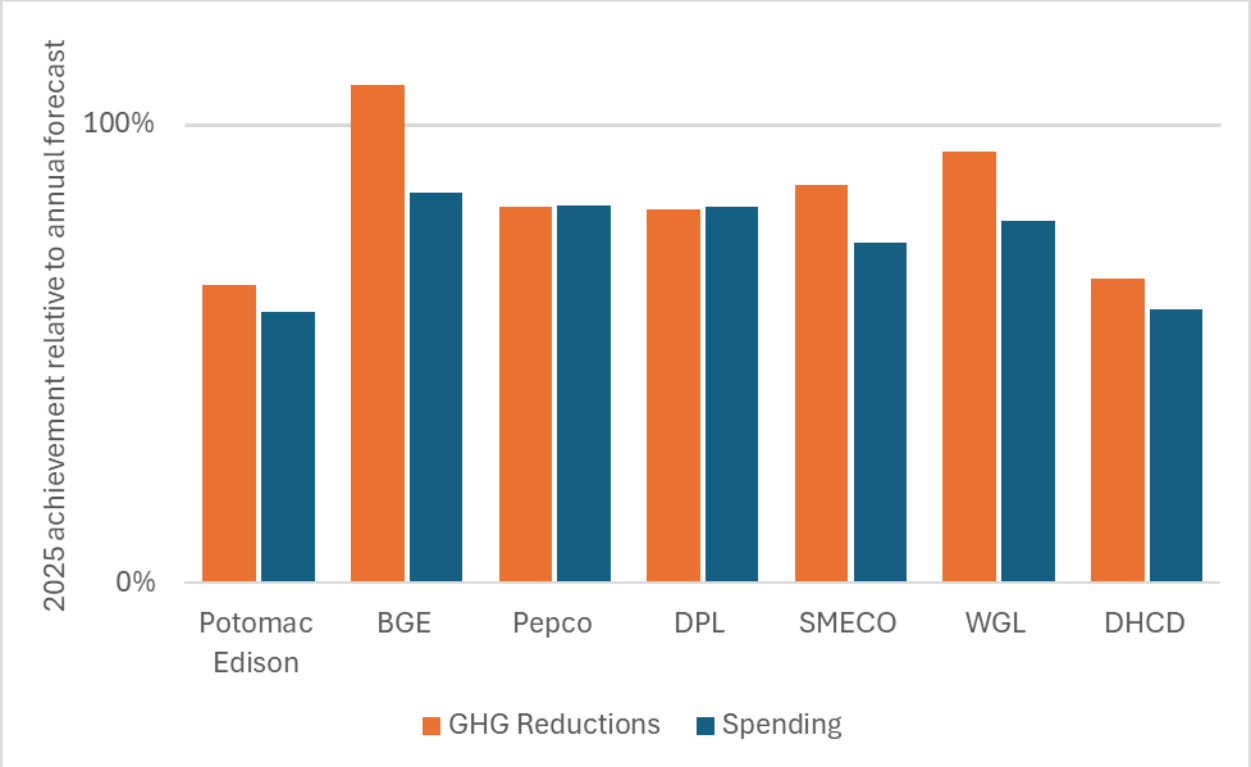

Figure 3. Program year 2025 reported GHG reductions and spending relative to annual forecasts, by utility.

Figure 4, below, shows 2025 utility GHG reductions relative to annual forecasts for the major residential program areas. BGE, Pepco, and SMEO report new construction programs

significantly exceeding their annual forecasts (BGE reported 775 percent of forecast, well beyond the range included in the figure below, as noted by the arrow). New construction programs and appliance programs in general show some of the highest achievements relative to forecasts. Behavior, HVAC, and retrofit programs generally came up short of forecasts.

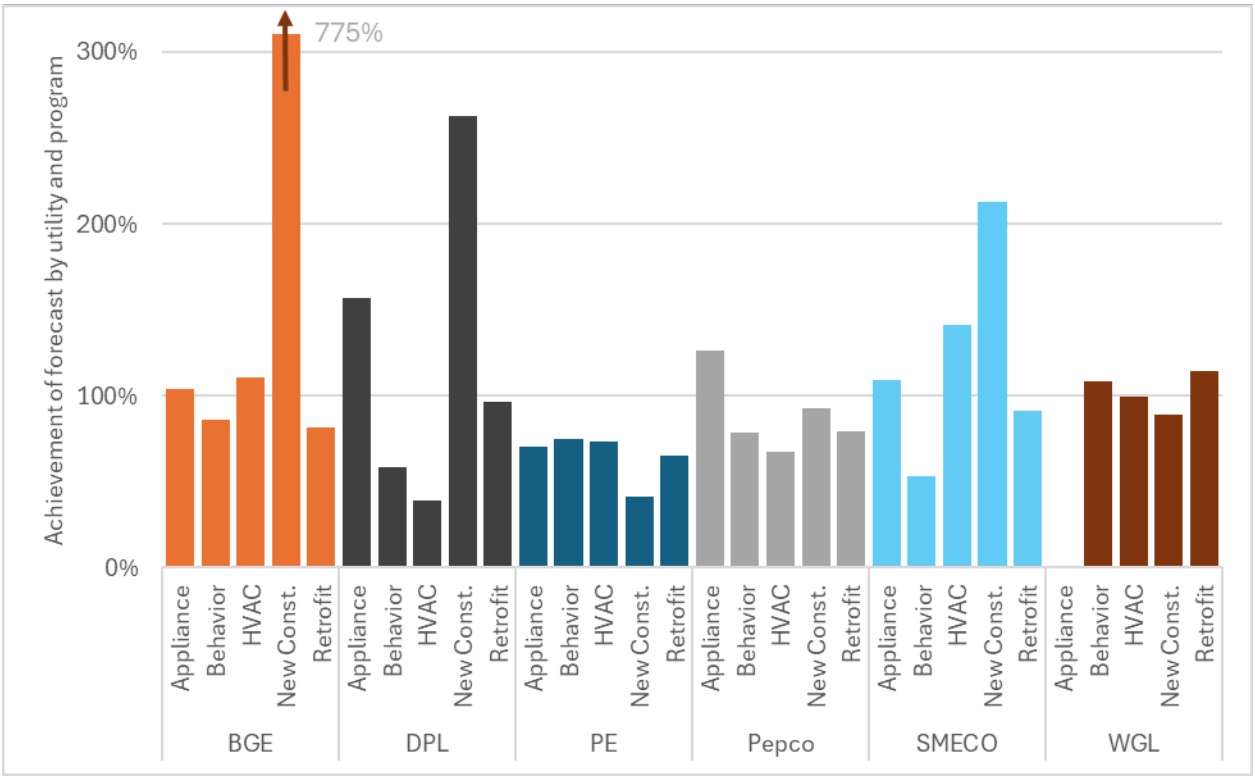

Figure 4. Program year 2025 achievement of GHG reductions relative to forecast by residential program area and utility. Note that BGE's new construction program reports achievement significantly higher than forecast, beyond the range included in the figure.

Figure 5 below illustrates the 2025 costs to achieve lifecycle GHG reductions across the main residential program areas. In general, reported abatement costs for new construction, appliance, and behavioral programs are lowest with most utilities reporting costs below $250 per metric ton CO2e reduced. HVAC programs are generally above $250 per metric ton, with the notable exception of Potomac Edison's HVAC programs reporting costs over $1,400 per metric ton.[16]

[16] Potomac Edison's high abatement costs from HVAC appear to be due in part both to relatively low GHG reductions per participant and to lack of electrification projects. It's unclear whether the former may also stem from errors in the reported program data.

Retrofit programs tend to report the highest abatement costs with most utilities reporting around $500 per metric ton.

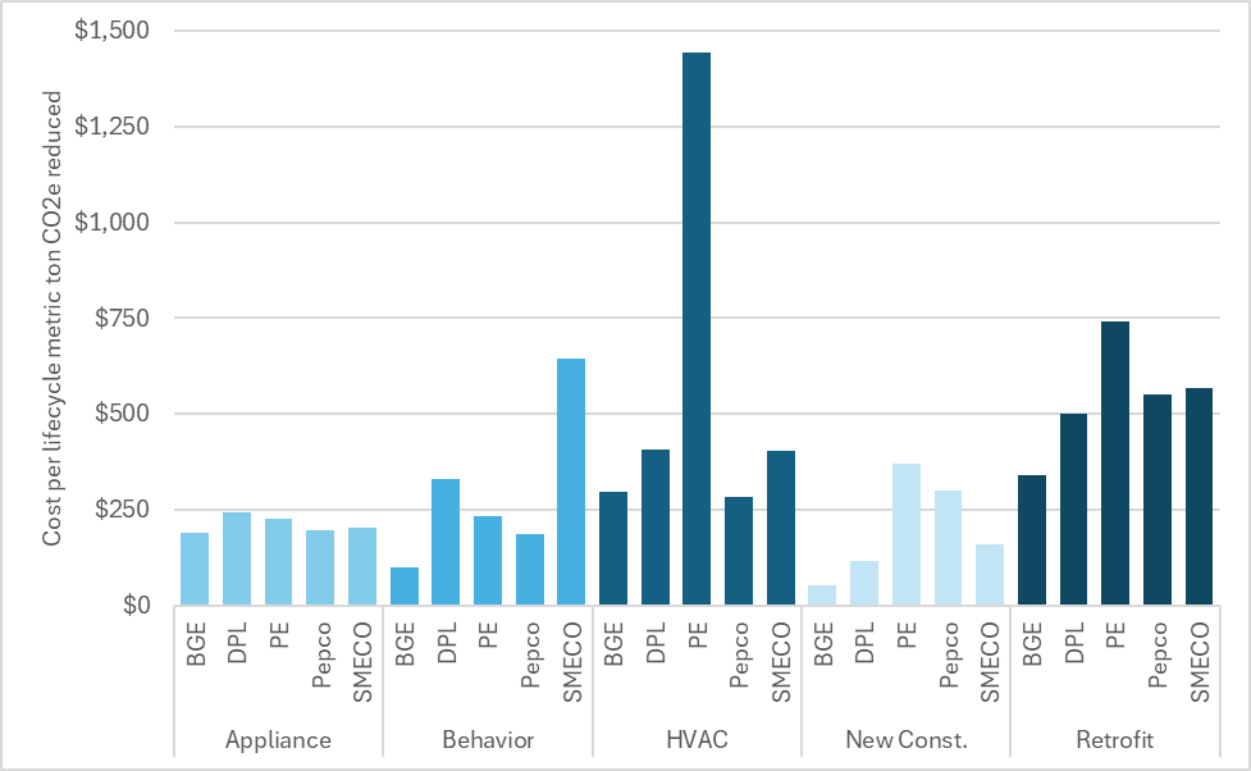

Figure 5. Reported cost per lifecycle metric ton CO2e reduced in program year 2025 by program area and utility.

DHCD

Observations

Overall, DHCD's performance in the second half of 2025 reflects a marked increase in program delivery and GHG reductions across its limited-income portfolio. Q3 and Q4 results indicate that DHCD materially accelerated program delivery relative to the first half of the year, following earlier ramp-up challenges related to staffing, contractor capacity, and program scale.

In the second half of 2025, DHCD reports achieving 103,852 metric tons of CO2e in lifetime GHG reductions, reflecting a substantial increase compared to first-half performance. While these efforts to expand program impacts to meet higher statutory goals have been generally successful, there is now uncertainty about the future scale of these programs discussed in detail below.

GHG Reductions

The language outlining DHCD's goal is somewhat ambiguous, noting that "for the period 2025-2033, the programs…shall be on a trajectory to achieve greenhouse gas reductions after 2027 of at least 0.9% of the baseline."[17] Commission Order 92176 ultimately interprets this to mean that DHCD's goal after 2027 should be 0.9 percent of baseline *in aggregate* across 2028-2033 (i.e., 0.15 percent of baseline each year).[18] Because both the baseline determination and the Commission's interpretation were finalized late in the reporting period, DHCD's 2025 reporting primarily reflects progress relative to program forecasts rather than a fully established statutory benchmark.

EmPOWER Limited-Income Programs

Across the EmPOWER limited-income portfolio, Q3 and Q4 results demonstrate that DHCD increased production substantially following lower-than-anticipated performance in the first half of the year. By year-end, the Base Efficiency and Whole Home Efficiency programs collectively

[17] Maryland Public Utilities Article (PUA) § 7-224(a)2.
[18] Order No. 92176 at 17-20.

delivered services to 3,506 units in 2025, representing an increase of approximately 30 percent over 2024 and the highest annual production level reported to date. DHCD also reports leveraging nearly $6M in supplemental funding, enabling deeper retrofits and supporting 691 additional units beyond what would otherwise have been served using EmPOWER funds alone.

The Base Efficiency program showed steady growth serving more households over the course of the year. While first-half reporting reflected lower achievement relative to forecast, second-half production increased as marketing efforts expanded and contractor capacity improved. Specifically, DHCD reports ongoing procurement of additional state weatherization contractors and onboarding of local weatherization agencies, contributing to workforce development and greater contractor capacity to complete more projects. The program continued to deliver appliance, HVAC, lighting, and hot water efficiency measures to an increasing number of households, contributing to the overall rise in single-family production observed by year-end.

Energy Kits program experienced reduced activity in the first half of 2025 due to the transition to a new provider. DHCD reports that this transition was completed during the year and that distribution volumes increased in Q3 and Q4. By year-end, the program had resumed its role as a high-volume entry point for limited-income households, with improved operational stability and increased production relative to earlier in the year.

Whole Home Efficiency program also increased production in the second half of 2025, despite inherent variability related to housing conditions and repair needs. Total units completed in 2025 exceeded prior-year levels, reflecting expanded outreach, improved referral pipelines, and increased leveraging of external funds to address health and safety barriers that can delay comprehensive weatherization projects.

MEEHA experienced significant growth in the second half of 2025 and continues to represent one of DHCD's strongest-performing programs. During Q3 and Q4, the program completed 2,966 units, resulting in 10,467 MWh and 264,063 therms of annual savings and 60,894 metric tons of CO2e in lifecycle GHG reductions. DHCD also committed funding to a record 57 projects totaling 10,427 units, representing the largest pipeline reported in the program's history. A substantial share of this pipeline includes electrification measures, along with limited new construction activity, reflecting increased alignment with statewide decarbonization objectives

and Building Energy Performance Standards–driven demand. MEEHA Residential continued to contribute to overall portfolio performance, particularly through increased multifamily retrofit activity. Demand for funding remained strong throughout 2025, with applications and commitments exceeding initial expectations and contributing to the expanding pipeline of projects under construction.

MEET concluded operations during the first half of 2025, consistent with prior Commission approval. Remaining funds were reallocated to other limited-income programs, including MEEHA and Whole Home Efficiency, to support higher-impact measures and growing demand in those programs.

Analysis

While early-year reporting indicated that DHCD programs were behind forecast for GHG reductions, Q3 and Q4 results demonstrate a clear acceleration in production and measurable progress toward forecast. However, forecast-based comparisons alone do not fully capture the significance of late-year gains, record levels of units served, and unprecedented amounts of leveraged funding.

Recommendations

1. DHCD should continue efforts to right-size program capacity, including staffing level, workforce development, and contractor availability, to sustain recent gains in production and GHG reductions and consider alignment with future program expectations.
2. DHCD should continue implementing its approach to utilizing Washington Gas funding for building envelope (e.g., insulation and air sealing) and water efficiency measures in BEPS-covered buildings where such measures result in measurable GHG reductions. These improvements reduce overall energy demand and the use of existing gas-fired equipment - delivering cost-effective GHG reductions while maintaining consistency with BEPS requirements and broader State climate objectives.

Washington Gas

Observations

Washington Gas (WGL) achieved nearly 142,000 metric tons CO2e in GHG reductions in 2025, representing 86 percent of its statutory target. Unlike the electric utilities, WGL had notable underperformance in its C&I programs, achieving just over half of forecast while spending two-thirds of budget. Residential energy efficiency programs achieved 94 percent of forecast GHG reductions with 79 percent of budget.

Only the Prescriptive program is notably below target at 83 percent of forecast.[19] The New Construction program achieved 89 percent of its forecast. Due to its magnitude, the New Construction program was responsible for most of WGL's overall GHG underachievement within its residential portfolio. All residential programs except Demand Response finished the year under budget – both in terms of spend relative to budget (i.e., total spend is below budget) but also relative to achievement (i.e., share of budget spent trails share of GHG reductions achieved). This continues a trend where residential programs can achieve GHG reductions (and previously energy savings) with lower costs than initially budgeted.

[19] WGL's Prescriptive program includes standalone rebates for appliances, HVAC equipment (primarily new gas-fired furnaces), and a small number of other efficiency measures, as well as energy conservation kits.

Table 3. WGL's program year 2025 reported GHG reductions and spending relative to forecast, by program.

Program	Percent of Gross GHG Reductions Reported-to-Forecast	Percent Budget Utilized
Residential Prescriptive	83%	75%
Residential New Construction	89%	71%
Behavior Based	109%	88%
Residential Coordinated	114%	91%
Demand Response	219%	106%
Residential Total	**95%**	**81%**

The majority of GHG reductions in WGL's residential programs come from new gas-fired equipment. Gas furnaces remain the most common measure across the Prescriptive and New Construction programs, which combined represent two thirds of the residential GHG reductions. Nearly 80 percent of GHG reductions in the Residential Coordinated program came from Pepco territory, though this is generally aligned with service territory overlap.

Analysis

Overall, WGL's portfolio of residential programs ended 2025 modestly under forecast for GHG reduction targets. As has often been the case, WGL is achieving GHG reductions with less budget than initially projected. Multiple programs ended the year under target but with significant unspent budget, suggesting missed opportunities rather than market saturation.

New gas-fired equipment

Continued reliance on the installation of new gas-fired equipment to drive GHG reductions is inconsistent with Maryland's climate objectives. It also raises concerns about long-term affordability for gas customers. Once again, new gas furnaces are the most common measure in WGL's programs. Furnaces have an estimated useful life of 21 years according to the Maryland

Technical Reference Manual.[20] That means furnaces installed in 2025 and beyond are *expected* to remain in use beyond the state's 2045 target for net zero emissions, and many may remain in service well beyond that time. WGL characterizes these measures as a low-cost option for Maryland residents, reflecting a narrow, near-term consideration of GHG reductions and costs.

Continued use of ratepayer funds to install new gas-fired furnaces today introduces the possibility that ratepayer (or taxpayer) funds may be spent to uninstall them in the future. It also raises the possibility that customers will be effectively locked in, reliant on the gas system even as overall consumption declines and costs of gas infrastructure are spread among fewer customers and gas rates rise.

Even more concerning is the continued use of ratepayer dollars to incentivize new gas-fired equipment in new construction projects. Every new home with gas service locks in emissions and infrastructure costs fundamentally at odds with the state's climate goals.

These stranded assets – from equipment in homes to pipes in the ground – will need to be removed, replaced, abandoned, or offset if the state is to meet its goals, leading to increased systemwide transition costs down the road, further compounded by being spread across fewer gas customers. These future costs should not be dismissed or ignored, but accounted for today, ensuring ratepayer dollars are being used strategically in alignment with the state's net-zero commitments.

C&I programs

WGL's C&I programs finished 2025 significantly under target, achieving only 54 percent of forecast. Participation was even further below forecast; WGL's C&I programs reached fewer than 200 participants in 2025, representing less than 40 percent of target. 120 of those participants came from the first half of the year, showing a steep decline in program activity during the second half.

[20] Maryland EmPOWER Technical Reference Manual v11.0 Volume 2 – Residential Energy Efficiency Measures, January 2024, Accessed via EmPOWER Maryland Evaluation. https://drive.google.com/drive/folders/1m1oUr6l4Zzo4mBc0-2TSPd9FYKpEBVF

Recommendations

1. The Commission should end incentives for new gas-burning appliances in all programs, especially new construction programs.[21] WGL has illustrated that achieving statutory minimum GHG reduction targets is possible with the elimination of new gas-burning appliances through its filing of an alternative program plan in 2025. New gas appliances could operate for over 20 years, remaining in use beyond Maryland's net-zero target of 2045. New *homes* built with gas equipment lock in emissions and gas infrastructure costs for decades. EmPOWER must transition incentives away from new gas equipment toward electric alternatives if the state is to achieve its policy goals. Continued inclusion of new gas equipment introduces the risk of spending ratepayer or taxpayer funds in the future to help these same homes electrify as gas consumption declines, driving costs higher for customers remaining on the gas system.
2. Echoing previous recommendations, WGL should increase program engagement in the commercial and industrial sectors. These programs failed to reach 200 customers in 2025, and most of those were from the first half of the year. The share of total GHG reductions that come from commercial customers is less than 15 percent, far below all other utilities.

[21] Exceptions for narrowly defined commercial applications where no viable alternative exists are appropriate.

EmPOWER Utility Program-Level Results

Residential Home Retrofit

Observations

Residential Home Retrofit includes the subprograms Quick Home Energy Checkup (QHEC), Home Performance with ENERGY STAR (HPwES), and Home Energy Improvement Program (HEIP). The Exelon utilities BGE, Pepco, and DPL offer QHEC and HPwES to their customers. SMECO and Potomac Edison had previously offered QHEC and HPwES but currently offer HEIP.

As depicted in Table 4, the utilities were challenged to meet or surpass their expected emission reductions through the Residential Home Retrofit suite of programs in 2025. Only SMECO exceeded its goal; DPL approached its goal. By and large, program expenditures roughly matched emissions reductions as a percentage of forecast, though none of them were fully utilized in 2025.

Table 4. Retrofit programs' GHG reductions and spending relative to forecast by utility, for program year 2025.

	PE	BGE	Pepco	DPL	SMECO
Forecasted Lifecycle GHG Reduction In Metric Tons (CO2e)	9,606	145,056	38,792	10,975	6,900
Reported Lifecycle GHG Reduction In Metric Tons (CO2e)	6,581	115,430	30,756	10,606	7,674
% Achievement of Forecast, Lifecycle GHG Reduction	69%	80%	79%	97%	111%
Budgeted Total Program Expenditures, $	8,523,288	43,777,158	22,034,973	5,865,277	5,269,258
Reported Total Program Expenditures, $	4,870,513	40,338,455	16,922,616	5,298,317	4,356,692
% of Budget Expenditures	57%	92%	77%	90%	83%

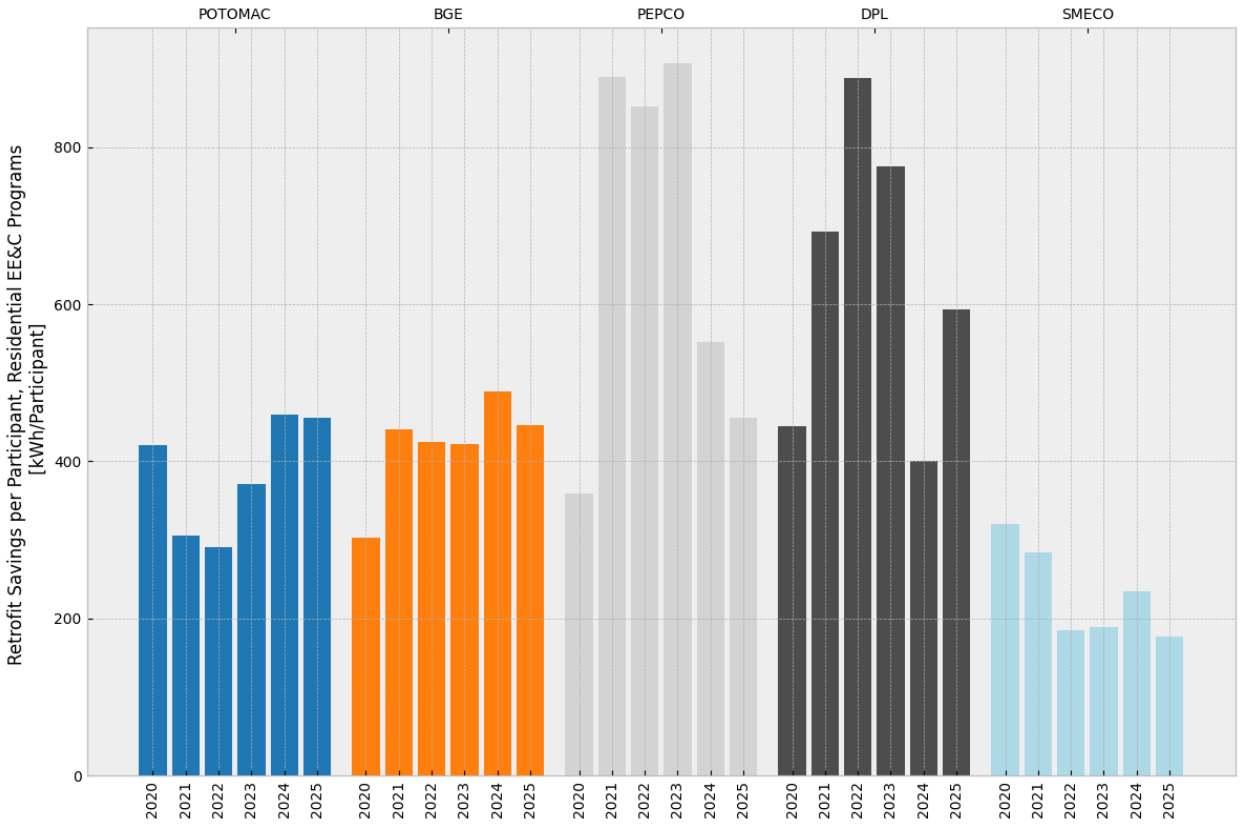

Figure 6. Electricity savings per participant in Retrofit programs, 2020 through 2025.

Figure 6 shows that Potomac Edison, BGE, and Pepco all achieved similar average levels of savings per participant in 2025; DPL and SMECO were outliers to the high and low ends, respectively, consistent with similar performance over the previous half decade.

All utilities referenced considerable multi-channel communications efforts throughout 2025 to promote their retrofit programs including brochures, magnets, social medias ads, emails, search advertisements, direct mail, and community events.

Quick Home Energy Checkup

The QHEC program had mixed results across the three utilities that run this program. All of them exceeded their participation goals; when combined, they ended the year 72 percent above forecast, with the lowest performer (Pepco) reaching 59 percent more participants than forecasted. Where forecasts were made, they also completed more measures than anticipated, installing over 550,000 in all. Actual savings across the three utilities reached 94 percent of their savings goal while spending 98 percent of the anticipated budget. However, at the individual

utility level, DPL lagged behind the other utilities, achieving only 72 percent of savings while spending 105 percent of its budget. DPL also reported a much higher average cost per metric ton of CO2e reduced, at $576 compared to a combined program average across Pepco and BGE of $389.

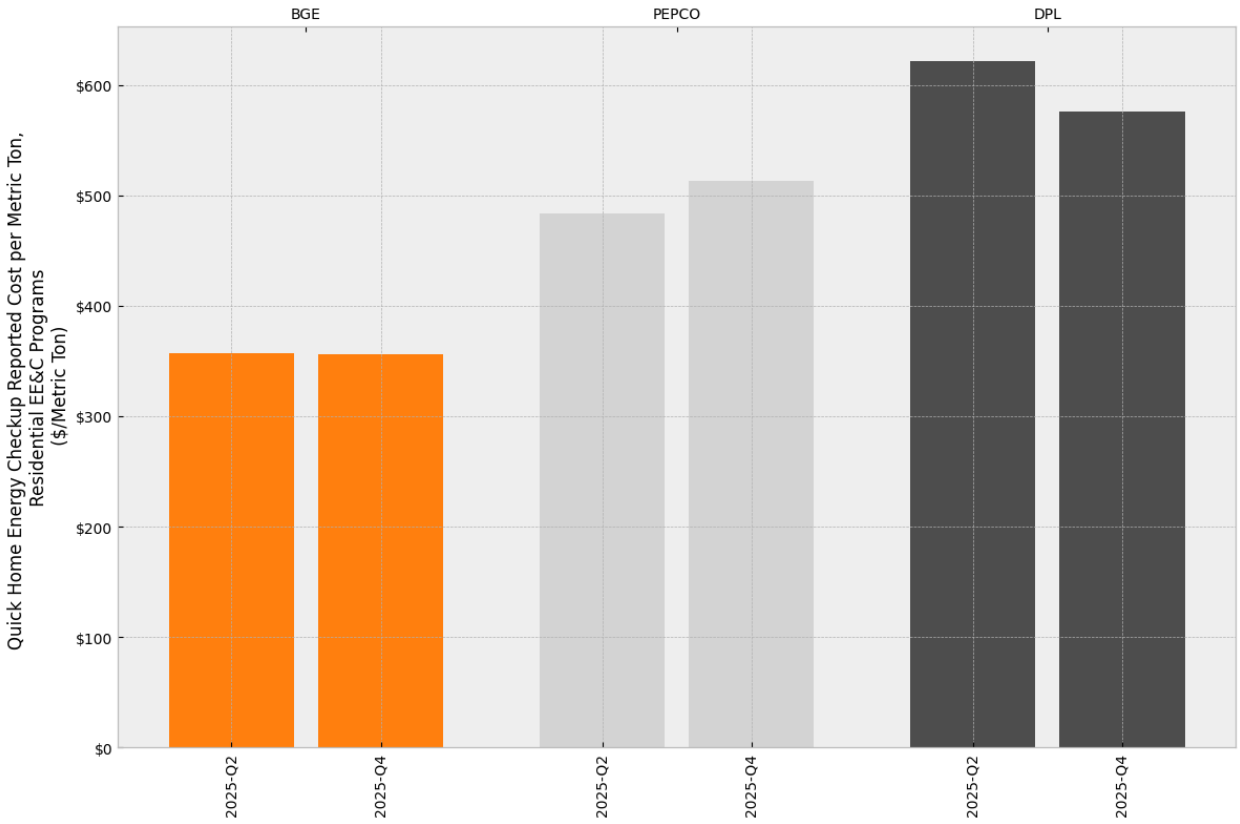

Figure 7. Reported cost per lifecycle metric ton CO2e reduced in QHEC program in 2025, by utility.

As opportunities to replace older, less efficient lighting diminish, BGE, Pepco and DPL launched two new weatherization measures in 2025: door sweeps and weatherstripping.

Home Performance with ENERGY STAR & Home Energy Improvement Program

The HPwES and HEIP programs yielded mixed results. Only two utilities - DPL and SMECO - achieved their savings goals. The average cost per emission reduction across the utilities was also somewhat higher at $450 per metric ton for this program as opposed to $397 for QHEC.

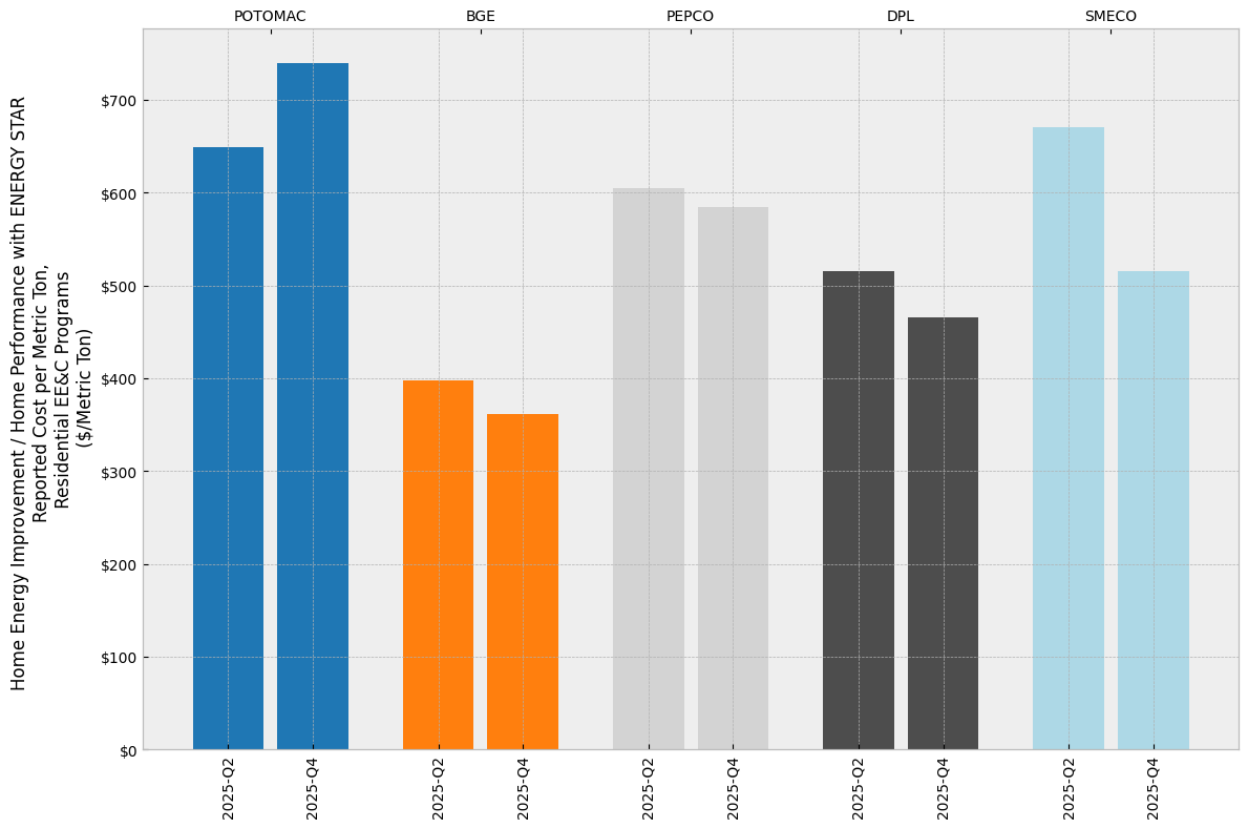

Figure 8. Reported cost per lifecycle metric ton CO2e reduced in HPwES and HEIP programs in 2025, by utility.

BGE, Pepco, DPL, and SMECO all launched incentives of up to $15,000 for projects that electrify space or water heating with high-efficiency heat pumps. The program has met with moderate initial success, with BGE completing 133 electrification projects, Pepco 47, DPL 10, and SMECO 19, including 8 units in a multifamily building that were converted from fuel oil heating to electric.

BGE continued its Clean Energy Advantage Lending Pilot in 2025, providing access to financing for 203 homes in the HPwES program.

WGL Residential Coordinated Program

As a whole, the WGL Residential Coordinated program moderately underperformed its goals with participation and savings goals about 85 percent of forecast and spending somewhat lower. More concerning, however, the WGL Coordinated program yielded vastly different results across utilities. This is surprising given that the approach is consistent, and it is expected that the cost to reduce emissions ought to be fairly consistent as well. Instead, Potomac Edison was a

considerable outlier in the program. Whereas the other participating utilities (SMECO, Pepco, and BGE) cost just $70 per metric ton reduced, Potomac Edison took $333 to achieve a metric ton reduction. It also lagged the average of 41 therms per participant for the other utilities, saving only 9 therms per participant.

Moderate Income Offering

In 2025, BGE, Pepco, and DPL launched the Moderate Income Offering (MIO) integrated as a subcomponent into their HPwES programs. The offer relies on contractors familiar with DHCD's limited-income programming who are well-positioned to support moderate-income households navigating HPwES. MIO intends to bridge the gap between limited-income programs and market rate programs, targeting households with incomes above DHCD's upper limit and below 100 percent area median income. This segment has historically seen low participation due to difficulty managing upfront costs even with standard rebates.

In reviewing historical versions of the MIO program webpages, VEIC notes that while the minimum household income has risen about 6.5 percent since the program inception in 2024, the maximum household income has remained constant.[22]

This program continues to see only modest uptake. BGE received 227 applications, with 88 applicants qualifying as moderate-income and 117 qualifying as limited-income and referred to DHCD's limited-income program. DPL offered 13 audits through its MIO program. Pepco performed 81 audits and completed 38 jobs through the MIO. Complete data for program impact is unavailable.

Analysis

Given overall lagging performance in the retrofit sector, both in terms of savings and expenditure, the utilities have an opportunity to grow these programs further, utilizing the proposed budgets to reach their emission reduction goals next year.

The cause of DPL's high cost of emission abatement relative to the other two utilities with QHEC programs is curious, and its cause is not immediately obvious from the data provided. In their

[22] Compare this Pepco page from November 2nd, 2024, from the Internet Archive with the current Pepco page.

filings, utilities report a breakdown of the specific measures implemented under the program, such as LED conversion, smart power strips distribution, and weatherstripping. This measure mix, as well as the number of implemented measures and size of savings per checkup are not dramatically different between the three utilities. Given DPL's poorer performance in terms of cost per emission reduction, this suggests that overhead costs, rather than ineffective visits or a difference in measure emphasis is driving the high cost of emission abatement. Therefore, there may be opportunities for DPL to reduce the overall cost of running the QHEC program or the per visit cost in order to bring its performance in line with its peers as opposed to focusing on increasing emission savings per visit or a change in the measures emphasized during each visit.

The MIO program continues to lag behind its potential in terms of volume of applicants and completed audits and jobs. For all three utilities that offer this program (BGE, DPL, and Pepco), the income-eligible opportunities are not advertised on the utilities' primary Home Performance with Energy Star page and must be located either through a different drop-down menu or link rather than being prominently displayed on the HPwES main page. Integrating the programs into the main website design may help increase uptake. Similarly, DPL and Pepco neglected to include the moderate-income offering on their HPwES flyers.

On a number of key metrics noted above, Potomac Edison lags behind its peers: reducing many fewer therms per customer while costing considerably more per metric ton of GHG reduced. The Commission should consider requiring that Potomac Edison conduct an in-depth comparison of their programs with the other EmPOWER utilities to understand why their programs are more costly and less successful at reducing emissions.

For the MIO program, because BGE, Pepco, and DPL, are all using a single Maximum Household Income across their entire combined service area, they should use the highest Area Median Income (AMI) to ensure inclusivity regardless of geography. Based on The Department of Housing and Urban Development's median income analysis by county for 2025,[23] the highest county-level AMI for EmPOWER ratepayers is $91,187.50 for a one-person household, or about

[23] Income Limits | HUD USER

6.5 percent above the current MIO maximum income level. Program uptake would likely increase if the band between minimum and maximum income levels were increased.

Recommendations

1. The Commission should require DPL to examine the cost structure of its visits for QHEC to understand why it lags its peers in savings for this program.
2. The Commission should require DPL, BGE, and Pepco to integrate the Moderate Income Offering component of HPwES program into their main HPwES website page rather than hosting it as a separate drop-down menu.
3. The Commission should require DPL and Pepco to include the Moderate Income Offering component of HPwES on their brochure.
4. The Commission should require that BGE, Pepco, and DPL increase the maximum household income threshold for the Moderate Income Offering. An immediate increase of 6.5 percent will help align program design with increases in area median income since program launch, and direction for prospective annual true-ups would ensure that annual increases are routinely applied going forward to stay in line with area median income.
5. The Commission should require utilities to report costs, savings, and other program metrics of MIO as a subprogram of HPwES. Without this data, program success is impossible to assess.
6. The Commission should require that Potomac Edison submit a thorough analysis explaining why it lags its peer utilities among so many key metrics, most notably the cost of emission reductions for both its HEIP and WGL Coordinated programs.

HVAC

Observations

HVAC programs across EmPOWER utilities delivered significant participation and lifecycle GHG reductions in 2025, though program scale varied widely across utilities.

BGE reported the largest level of HVAC participation in the state, with 10,070 heat pumps installed during 2025. The filing describes growth in heat pump participation by 23 percent over

the first half of the year and nearly doubling participation from 2024 and expanded engagement with 340 contractors and 28 distributors.

Pepco and DPL also reported increases in heat pump installations compared to 2024, though at a smaller scale. Pepco reported 1,942 heat pumps installed in 2025, while DPL reported 746 installations. Both utilities noted that electrification incentives were introduced during 2025 and suggested participation may increase as contractors become more familiar with the new program offerings.

SMECO reported strong program performance relative to its program targets, exceeding both participation and lifecycle GHG savings goals. SMECO reported 2,178 heat pumps installed during 2025 and described extensive engagement with participating contractors and distributors. SMECO reported 261 participating contractors, along with regular distributor meetings, contractor training events, and distributor scorecards used to track program performance.

Potomac Edison reported 2,176 heat pumps installed during 2025, a notable level of participation given the size of its service territory. Potomac Edison reported 140 participating contractors and described continued efforts to expand contractor participation and increase program awareness.

Several utilities also referenced operational challenges related to rebate reimbursement timelines within midstream HVAC programs. Contractors often provide the incentive to the customer at the time of installation and must wait for reimbursement through distributors and utilities. While utilities reported efforts to streamline rebate processing and improve communication with distributors, contractor feedback indicates that delays in reimbursement can create financial challenges for contractors who must temporarily carry the cost of incentives.

Utilities also reported continued efforts to engage contractors and distributors through training and outreach activities. Pepco reported conducting more than 80 training and outreach events during the year, while DPL reported more than 70 such events and regular meetings with participating distributors.

Utilities introduced electrification incentives through different program structures during 2025. BGE, Pepco, and DPL incorporated electrification incentives into their HVAC programs during the year. SMECO implemented electrification incentives primarily through its Home Energy Improvement Program rather than through the HVAC midstream program, and Potomac Edison introduced electrification incentives later in the year through other program offerings.

These differences in program design and implementation contribute to variation in participation levels and program outcomes across utilities.

Analysis

The HVAC program began a transition in 2025 with the addition of electrification measures and incentives, as well as tracking to new GHG EmPOWER goals.[24] However, the reported contractor financial burden of carrying the costs – especially for the new, higher electrification rebates – during extended rebate reimbursement periods threatens to discourage contractor participation in the program. Furthermore, despite the completion of the Uniform Program Manual (UPM) in October 2025, programs continue to lack consistency in rebate levels and implementation of new electrification measures across the EmPOWER utilities. Altogether, these remain as barriers to the success of the midstream HVAC program.

Service territory size varies substantially across the EmPOWER utilities, ranging from BGE serving the largest residential market with approximately 1.2 million customers, to SMECO with about 161,000 customers. Normalizing participation relative to the number of customers provides a more meaningful comparison of program performance across all EmPOWER utilities based on the number of heat pumps installed and participating contractors. The table below is a summary of all HVAC reported heat pump measures in the full year 2025 semi-annual filings by the EmPOWER utilities.

[24] Electrification in the HVAC program was proposed by and approved by the Commission in December 2024 for the investor-owned electric utilities only.

Table 5. HVAC program performance based on heat pump installations and participating contractors, normalized by customers in service territory.

Utility	Approximate customers in service territory	No. of heat pumps installed	Heat pumps per 10,000 customers	Contractors per 10,000 customers
BGE	1,200,000	10,070	84	2.8
Pepco	554,000	1,942	35	2.9
DPL	186,000	746	40	4.7
SMECO	161,000	2,178	135	16.2
Potomac Edison	257,000	2,176	85	5.5
EmPOWER Utilities	**2,358,000**	**17,112**	**73**	4.3

This comparison helps contextualize BGE's success in doubling heat pump installations over 2024 to over 10,000 units but lagging normalized performance relative to SMECO in the rate of installations and the number of participating contractors with respect to the number of households served. However, the relatively low performance of Pepco and DPL with only 35 and 40 heat pump installations respectively per 10,000 customers is only one-fourth of SMECO's rate of installations of 135. SMECO's outperformance on the rate of heat pump installations is aligned with the fact that SMECO has 3-4 times more contractors participating relative to the size of its service territory compared to the other EmPOWER utilities. This may be attributable in part to the demographics in SMECO territory, though the difference in approach to the market is likely a factor as well. For example, SMECO's HEIP program does not incorporate midstream electrification.

With the exception of SMECO and BGE, the EmPOWER utilities' HVAC programs in 2025 are not meeting lifetime GHG goals for the HVAC program.

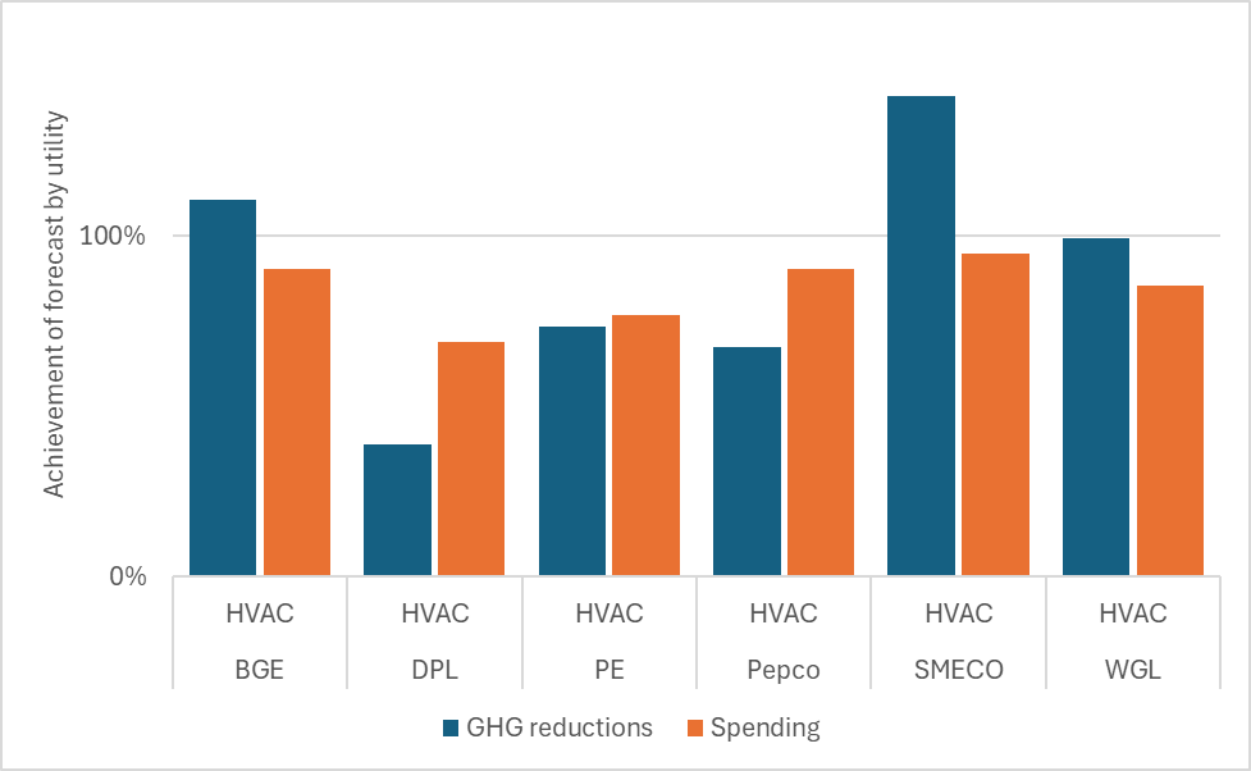

Figure 9. Reported lifecycle GHG reduction achievement and spending relative to forecast for HVAC programs in 2025, by utility.

In 2025, the utilities provided rebates for 17,112 heat pumps[25], generating over 8,600 MWh in electricity savings[26] and over 114,724 tons of lifetime GHG reduction. The programs also provided incentives for 5,158 central air conditioners (CAC), which generated 1,577 MWh of electric savings. Central air conditioners represent 23 percent of the combined rebated measures but contributed only 3 percent of the GHG reduction. Continued EmPOWER utility support of CAC equipment reflects a missed opportunity to focus on heat pump adoption. Many peer states and programs have already eliminated rebates for residential CAC equipment

[25] Includes air-source, ductless and geothermal heat pumps in energy efficiency and fuel-switch applications.
[26] Electric annualized energy savings for heat pumps is reduced from 17,561 MWh to 8,616 MWh due to negative electric savings from fuel switching measures.

(including Efficiency Vermont[27], Wisconsin's Focus on Energy[28], and Energy Trust of Oregon[29]) and offer standard rebates for heat pumps only. Increasing heat pump adoption is critical to helping utilities – and the state of Maryland – to meet GHG targets.[30]

Table 6. Reported energy and GHG savings impact by HVAC equipment type.

Measure	Measure Quantity	Annualized Savings (MWh)[31]	Peak Demand Reduction (MW)	Lifecycle GHG Reduction in Metric Tons (CO2e)
Air Source Heat Pumps- EE	12,501	14,281	6.764	22,997
Air Source Heat Pumps- Fuel-Switch	2,115	-8,865	-1.369	73,217
Central Air Conditioners	5,158	1,577	1.255	2,985
Ductless Mini-Split Heat Pumps	1,858	1,620	0.497	6,343
Heat Pump - Water & Geothermal-EE	592	1,659	0.385	7,694

[27] Efficiency Vermont, HVAC rebates for residential customers available at https://www.efficiencyvermont.com/rebates/list?cat=Heating%2C+Cooling+%26+Ventilation&hvacfilter=Cooling&type=res.
[28] Focus on Energy, HVAC rebates for residential customers available at https://focusonenergy.com/residential/heating-and-cooling.
[29] Energy Trust of Oregon, cooling rebates for residential customers available at https://www.energytrust.org/residential/incentives/cooling-solutions.
[30] BGE stopped incentivizing central air conditioners in the fall of 2025.
[31] An error in Pepco's filing was identified which reversed the energy savings for EE and fuel switch measures. These calculations include an estimate of Pepco's energy savings utilizing an extrapolation of BGE's per unit savings.

Heat Pump - Water & Geothermal-Fuel Switch	46	-80	0.031	4,473
HVAC Total	**22,270**	**10,193**	**7.56**	**117,709**
HVAC- Heat Pump EE Total	**14,951**	**17,561**	**7.65**	**37,035**
HVAC- Heat Pump Fuel Switch Total	**2,161**	**-8,945**	**-1.34**	**77,690**
HVAC- CAC Total	**5,158**	**1,577**	**1.25**	**2,985**

HVAC program results are inconsistent with the level of market penetration for space and water heating equipment required to meet Maryland's climate and building energy transition targets and plans. Participants in the midstream and future programming work groups remain uncertain and divided about the role of EmPOWER programs (including but not limited to the HVAC program) in achieving Maryland's overall state objectives. This uncertainty is unlikely to be resolved without further direction from the Commission (or the General Assembly, or a cross-agency planning effort as OPC has urged). EmPOWER could do more to support a market transformation objective with a clearer directive, but the strategies likely required to do so might not yield higher GHG in the near term and thus are naturally unappealing to the utilities in the current goal framework. OPC and other parties have concerns about the risk of putting greater costs on ratepayers even in support of worthy market transformation goals. A proposal from the HVAC contractors has been brought to the midstream work group, though minimal progress to consensus has been achieved thus far. Further discussion can be found in the Midstream Work Group section below.

Recommendations

1. The Commission should initiate a professionally led strategic planning process related to heat pump market transformation, as described in the Midstream Work Group section of these comments.

2. Expanding its directive under Order 92176,[32] the Commission should direct all utilities to provide details in their prospective semi-annual reports about full contractor reimbursement timing in addition to distributor reimbursement timing.
3. Following BGE's lead – as well as that of many other states and programs – with the termination of central air conditioner incentives in 2025, the Commission should direct all EmPOWER utilities to eliminate CAC incentives by July 2026 and focus on the promotion of ASHPs which provide high efficiency heating and cooling and greater GHG reductions.
4. The Commission should direct the utilities to continue working together on implementation plans for *consistent* midstream electrification measures in periodic consultation with the Midstream Work Group.

[32] Order No. 92176 at 12-13.

New Construction

The EmPOWER residential new construction program is a whole-home performance initiative aligned with the national ENERGY STAR® framework, offering tiered incentives for homes that exceed baseline energy code requirements. Builders can pursue multiple certification pathways, from Code-Plus to ENERGY STAR NextGen and beyond, alongside additional incentives for high-efficiency equipment and verified installation practices.

Observations

2025 saw significant uptake of the Code-Plus tier of incentives with 1,196 of the 5,200 homes completed under the program qualifying for it. In addition, the number of NextGen homes, while still very small, increased slightly to 30, with two utilities (BGE and DPL) successfully completing projects. In response to an information request, BGE reported that program success was in part driven by an engaged builder network, consistent program support, and participant readiness.

Utilities are attentive to their builder networks and their concerns; Pepco, DPL and SMECO all cultivated builder engagement through participation in the Maryland Building Industry Association Builder Mart. Pepco and DPL released six technical bulletins in the second half of the year to spread best practices and inform builders of code transitions and program updates. WGL provided individualized technical assistance to builders in the form of modeling support, guidance on submittal requirements, and clarification on eligibility criteria.

Potomac Edison supported 252 affordable all-electric units through the program with SMECO supporting 55 affordable housing units, including some in a small multi-family development.

Potomac Edison introduced a tier 2 heat pump incentive for more efficient units that is double that of a tier 1 heat pump. Pepco, DPL, and SMECO also increased incentives significantly for heat pumps in Q3 of 2025, in some cases doubling the size of the incentive, while announcing that they will discontinue their air conditioner incentives in 2026, something BGE already committed to. Potomac Edison has not committed to eliminating CAC incentives.

All utilities reported considerable marketing campaigns to reach builders and potential homeowners.

Figure 10 shows the exceptionally high emissions reduction for some utilities compared to their forecasted amounts; in contrast, Potomac Edison fell far short of its goal.

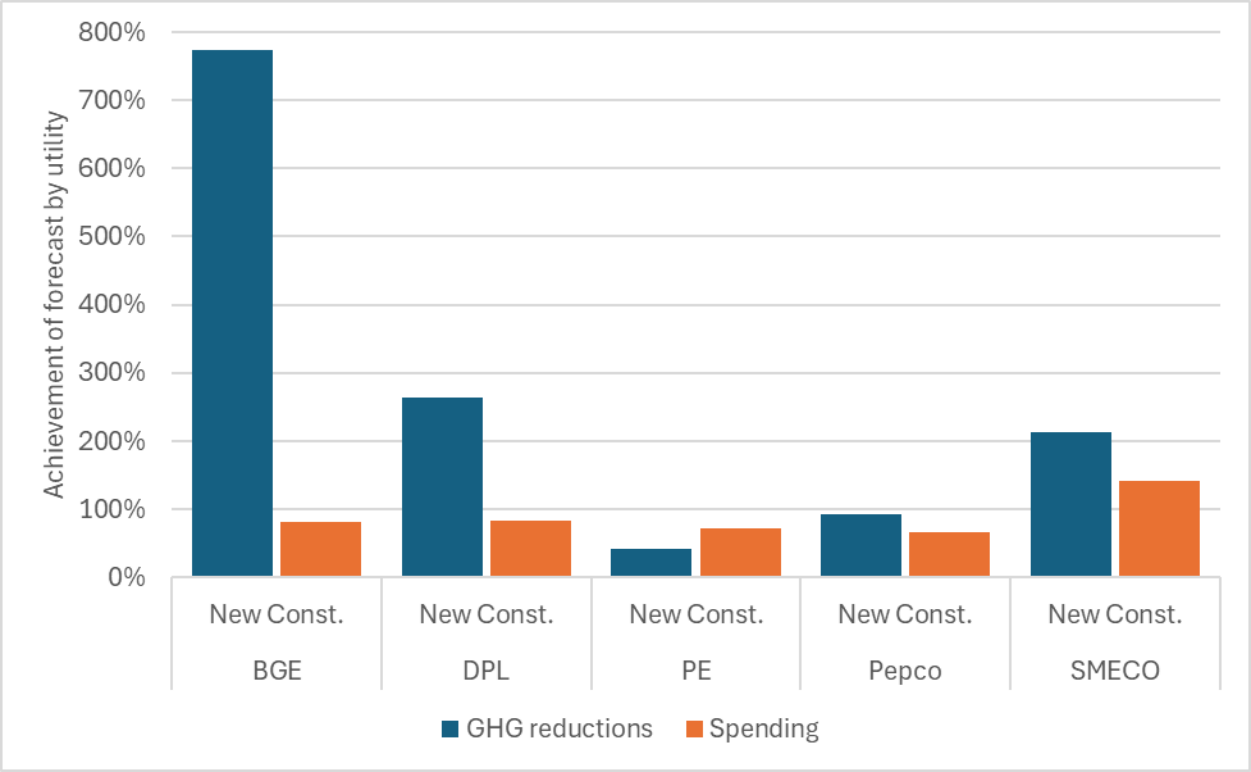

Figure 10. Reported lifecycle GHG reduction achievement and spending relative to forecast for new construction programs in 2025, by utility.

Figure 11 shows the respective electricity savings per participant by utility over time, which highlights DPL's impressive results on this metric.

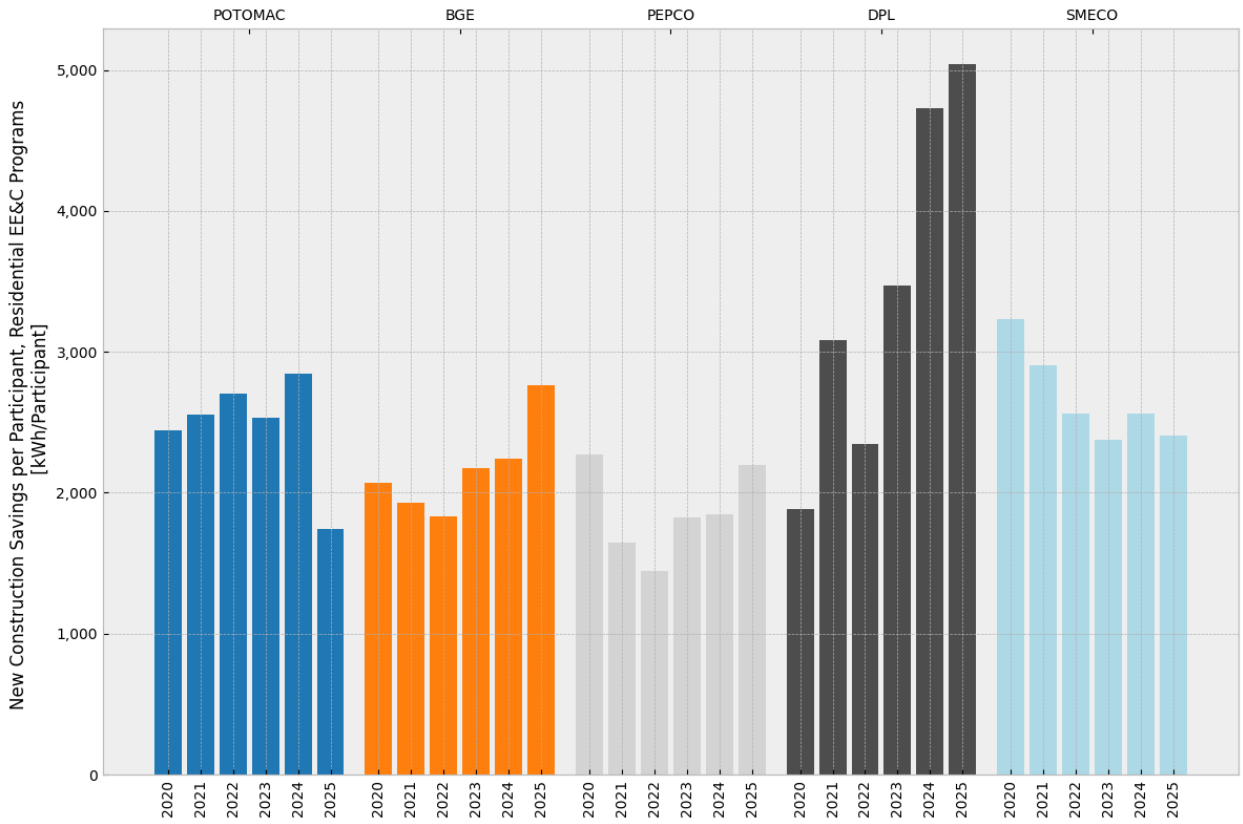

Figure 11. Reported electricity savings per participant for new construction programs, by utility, 2020 to 2025.

Figure 12 shows the considerable variability of the cost per emissions reduction by utility. As noted in the last semi-annual cycle, the utilities that claim gas savings lead in this metric. Potomac Edison, while still the costliest at driving reductions, successfully cut that cost in half from the first to second half of the year.

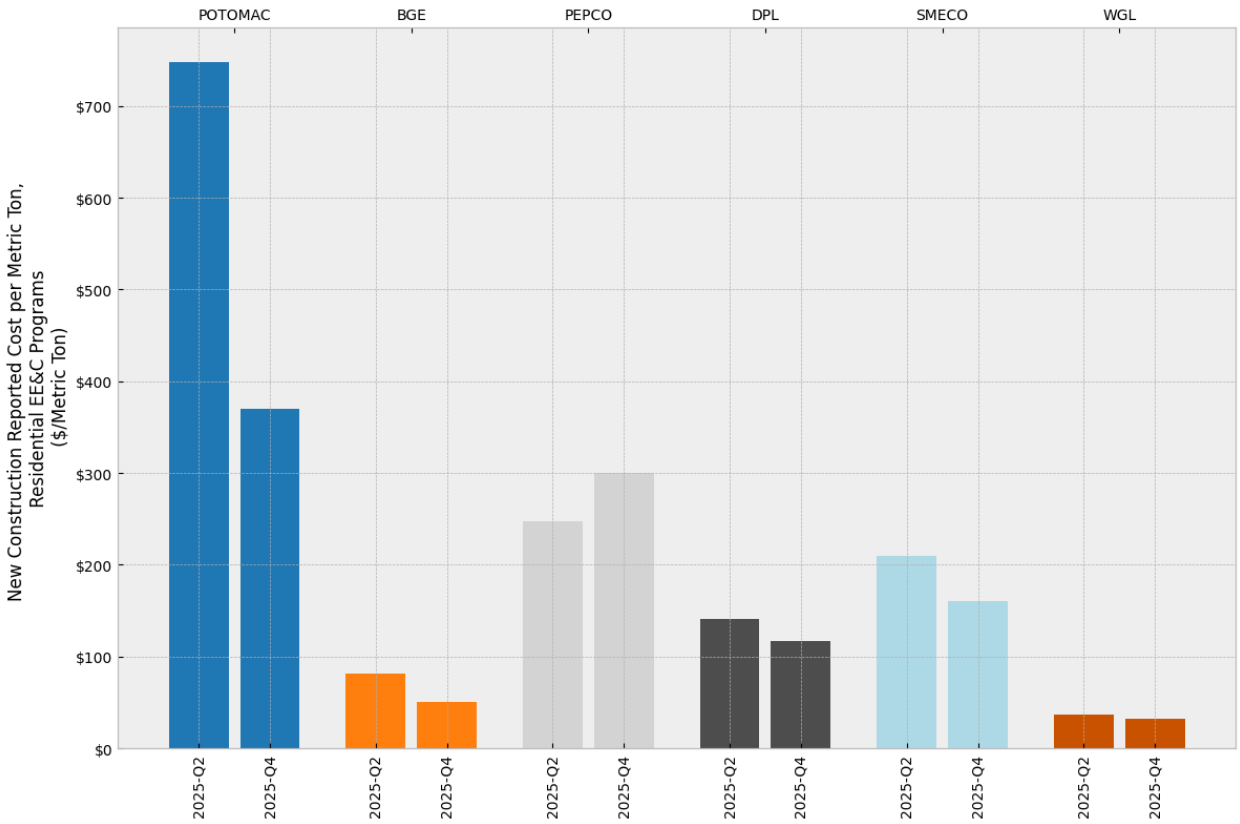

Figure 12. Reported cost per lifecycle metric ton CO2e reduced in new construction program, by utility.

DPL and BGE are beginning to show success at increasing the important electrification additive measures of high efficiency heat pumps, heat pump water heaters, and HVAC verified quality installs. However, overall, installations of heat pumps and heat pump water heaters have continued to lag other additive measures. Table 7 shows the percentage of additive measures as a portion of overall RNC participants. Some participants install multiple instances of the same additive measure, two smart thermostats, for instance, so the percentage does not directly match the unique participation rate; however, the percentages below are indicative of uptake and are a reasonable proxy for relative adoption of each additive measure.

Table 7. Installation choices of new construction participants as share of participants that include a given measure (not necessarily unique participation), by utility.

Utility	High eff. CAC	High eff. heat pump	Heat pump water heater	HVAC verified quality install	Smart thermostat
PE	60%	1%	1%	0%	67%
BGE	48%	6%	11%	23%	94%
Pepco	52%	4%	0%	0%	75%
DPL	37%	16%	37%	37%	86%
SMECO	55%	0%	6%	9%	90%

Analysis

While many utilities performed very strongly in terms of emissions reduced (DPL and SMECO achieved over 200 percent of forecasted savings and BGE achieved 775 percent of forecasted savings), participation levels were below the forecasted amount for all of the utilities. While the amount of emissions reduced is admirable, it suggests that there is an opportunity for the utilities to commit to substantially increase their savings per participant goals in the next cycle.

As in the Residential Retrofit programs, Potomac Edison is a clear outlier for this program in terms of poor performance relative to the other utilities. It lagged other utilities in terms of kWh saved/participant with only 1,744 compared to an average of 2,827. It also dramatically exceeded the average cost per metric ton of emissions reduced, at $370 compared to $73/metric ton for the other utilities.

Recommendations

1. The Commission should require that Potomac Edison submit a thorough analysis explaining why it lagged its peer utilities among so many key metrics, most notably the cost of emissions reductions.

2. Citing the example of the other four EmPOWER utilities, the Commission should require Potomac Edison to phase out incentives for high efficiency air conditioning in order to promote high efficiency heat pump adoption.
3. The Commission should direct utilities to pilot means to drive additional ENERGY STAR NextGen uptake in each utility territory, including a further increase of incentives.

Demand Response

Observations

Residential Air Conditioners, non-BYOD, Summer-only

BGE, Pepco, and DPL reported results for their residential air conditioners, direct load controlled (DLC devices). These DLC are one-way communication devices that control the compressors cycling of air conditioning units. Units can completely shut off (100 percent) or reduce operation by 75 percent or by half (50 percent). Utilities have been making an effort to move their customers to 50 percent cycling to decrease customer disruption.

Program performance varies substantially across utilities. As shown in Table 8, DPL and Pepco exhibit the highest average demand reduction performance per active device[33] (1.08 kW and 0.92 kW per active device, respectively) while also achieving the lowest incentive costs per kW. In contrast, BGE reports significantly lower average performance (0.26 kW per active device) at a considerably higher incentive cost.

Table 8. Residential non-BYOD summer only kW performance and incentive costs.

	Utility	Unenrollment rate	Average performance (kW per active device)	Incentive costs ($ per kW)
Res. air conditioners – non-BYOD, summer-only	**BGE**	12%	0.26	$ 250.8
	Pepco	1%	0.92	$ 61.7
	DPL	2%	1.08	$ 41.8

[33] These values are calculated by dividing the average overall load reduction (kW) by the average number of devices that *actively participated* in each event, not all devices enrolled in the programs.

Figure 13 Illustrates the relationship between average incentive cost per active device and average performance per active device. The figure highlights that DPL and Pepco achieve superior cost-effectiveness, delivering higher load reductions per device at lower incentive levels compared to BGE.

Notably, unenrollment rates, defined by the number of customers that choose to leave the program, differ markedly across the three programs. BGE's unenrollment rate (12 percent) is an order of magnitude higher than those of Pepco (1 percent) and DPL (2 percent). These differences may influence the cost-effectiveness results shown in Figure 13, as customers who unenrolled may still have received enrollment incentives despite not contributing to event performance. As a result, higher unenrollment rates can inflate average incentive costs per active device and adversely affect observed cost-benefit ratios.

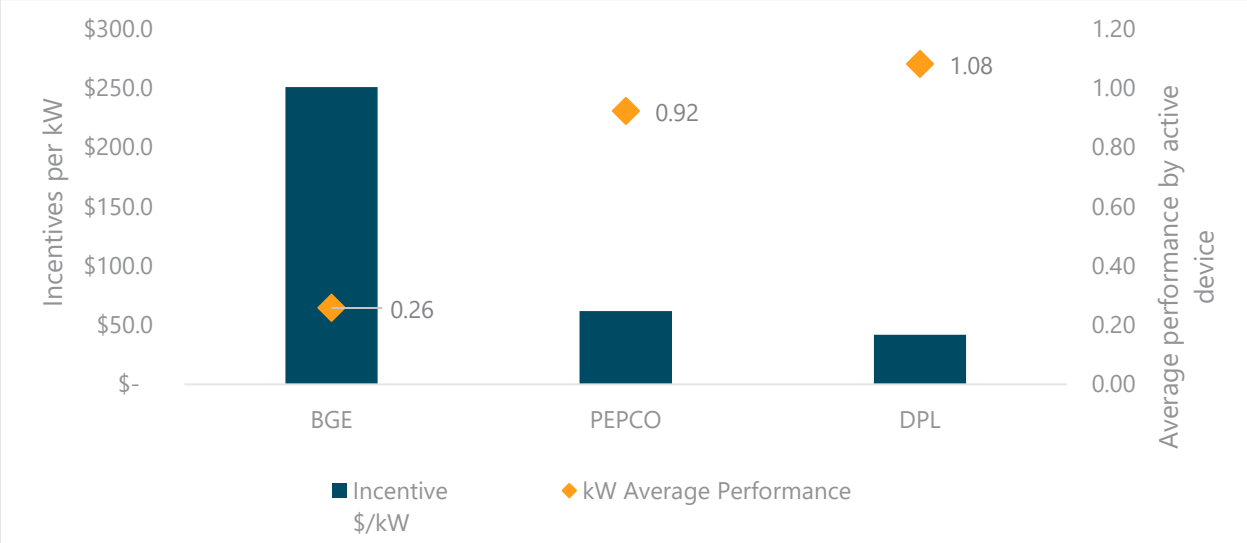

Figure 13. Incentive costs relative to kW performance (blue bar, left axis) and average kW performance per active device (orange marker, right axis) for residential non-BYOD programs.

The rate of device participation by utility at the end of Q4 2025 is significantly different across participating utilities. For example, with about 1.2 million customers, BGE's participation rate is 24 percent, while with almost the same number of active devices enrolled, Pepco has managed to engage 39 percent of its residential customers in DR (Table 9).

Table 9. Gross device participation and participation rate relative to total accounts at the end of Q4 2025, by participating utility.

Utility	Approximate customers in service territory	Active devices at end of season	Share of accounts with active devices
BGE	1,200,000	286,318	24%
DPL	186,000	35,805	19%
Pepco	554,000	217,486	39%

This divergence suggests that differences in enrollment alone do not explain the observed performance gap. Further research is therefore warranted to better understand the underlying drivers of the performance discrepancy between BGE and Pepco, including potential differences in cycling strategies, event dispatch practices, customer behavior, device characteristics, or program implementation.

Figure 14 shows that utilities have been successful in transitioning away from load control strategies that are more disruptive to customers, such as 75 percent cycling or full compressor shutoff, toward less intrusive 50 percent cycling options.

The majority of enrolled customers now participate in programmatic options designed to minimize customer discomfort while still delivering meaningful load reductions. This shift reflects intentional program design choices aimed at improving customer acceptance, retention, and overall program sustainability.

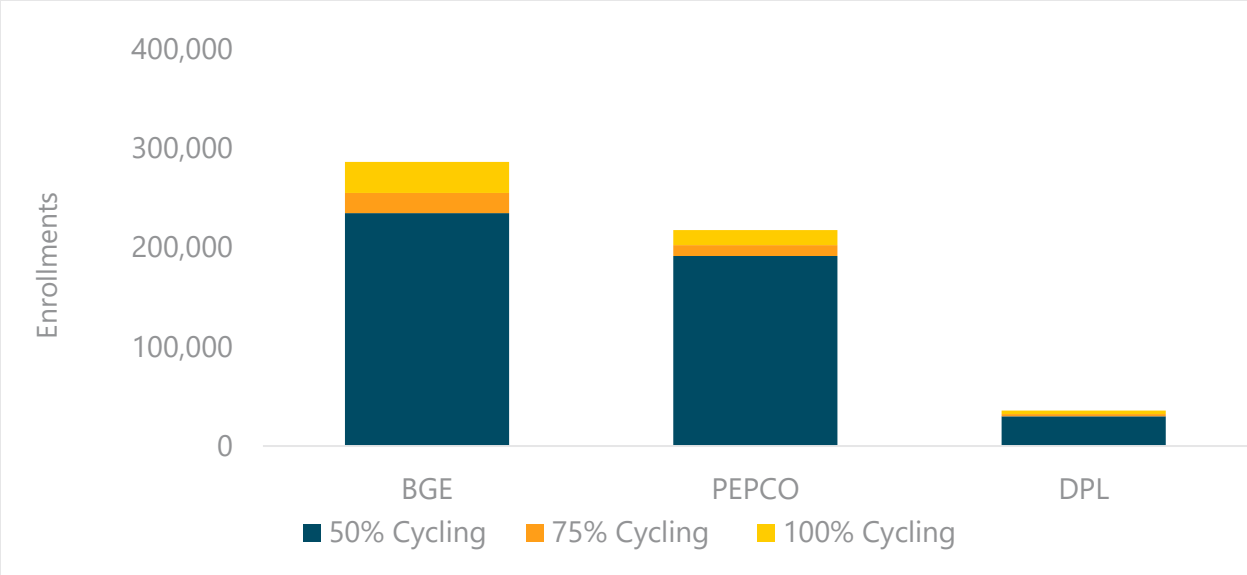

Figure 14. End of period participant enrollment by compressor cycling level for residential non-BYOD programs.

Residential Thermostats, BYOD, Seasonal

Utilities reported performance results for residential smart thermostat demand response programs operating under a "bring your own device" (BYOD) model during the summer season. These programs rely on customer-owned smart thermostats that are remotely adjusted during demand response events, typically through temperature setpoint offsets rather than direct compressor control. Compared to non-BYOD programs, BYOD offerings place greater emphasis on customer choice and behavioral response, which can influence both performance outcomes and participant retention.

Program performance varies across utilities. As shown in Table 10 and Figure 15, BGE and SMECO (summer) report comparable average load reductions per active device, at 0.98 kW and 1.03 kW respectively. Incentive costs, however, differ across the two programs. BGE achieves this performance at a lower incentive cost ($42.6/kW) relative to SMECO ($59.5/kW).

Table 10. Residential smart thermostat BYOD summer only kW performance and incentive costs.

	Utility	Unenrollment rate	Average performance (kW per active device)	Incentive costs ($ per kW)
Res. smart thermostats, BYOD, summer-only	**BGE**	39%	0.98	$42.6
	SMECO	7%	1.03	$59.5

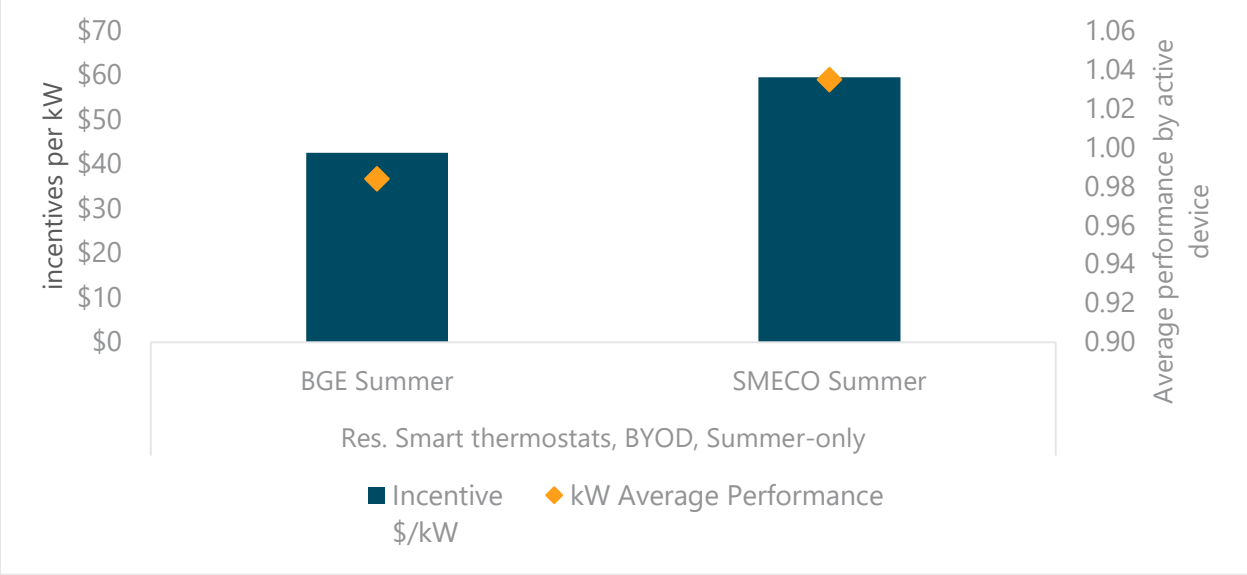

Figure 15. Incentive costs relative to kW performance (blue bar, left axis) and average kW performance per active device (orange marker, right axis) for residential smart thermostat BYOD summer-only programs.

Overall, summer only residential BYOD thermostat programs demonstrate strong average per device performance relative to other residential demand response offerings. However, the wide difference in unenrollment rates highlights the importance of customer engagement strategies, optout experience, and event design in sustaining participation and maximizing long term program value.

Residential Thermostats, BYOD, Year-Round

Year-round residential BYOD thermostat programs are offered by DPL, Pepco, and SMECO and are designed to provide demand response capability across both cooling and, in some cases, heating seasons.

Participation levels vary significantly across utilities. Pepco, which has almost twice as many residential accounts as DPL and SMECO, reports the largest enrollment (24,264 participants). Despite similar numbers of residential accounts, DPL has roughly five times more enrollments (5,256) than SMECO (1,447). Unenrollment rates for year-round programs range from 5 to 10 percent, with SMECO exhibiting the lowest rate (5 percent), followed by Pepco (9 percent) and DPL (10 percent) as shown in Table 11.

Table 11. Residential smart thermostat BYOD year-round kW performance and participant counts.

Utility	Unenrollment rate	Average performance (kW per active device)	Participants	Approx. customers
DPL	10%		5,256	186,000
Pepco	9%		24,264	554,000
SMECO	5%	0.68	1,447	161,000

While average performance data is not reported for DPL and Pepco, SMECO reports an average load reduction of 0.68 kW per active device. This value is lower than the summer-only BYOD performance observed across utilities, likely reflecting the inclusion of non-cooling season events and more diverse operating conditions. During the cooling season, controllable load is larger and more predictable. The non-cooling season includes shoulder months and heating season with less load to shed, thus year-round programming tends to see lower average kW per device.

Figure 16 summarizes participation levels and reported performance across year-round BYOD programs. The results suggest that while year-round programs may deliver lower average per event performance than summer-only offerings, they provide broader system value by enabling load flexibility across multiple seasons and grid conditions. Lower unenrollment rates in year-

round programs further indicate stronger participant retention, potentially supporting more stable long-term resource availability.

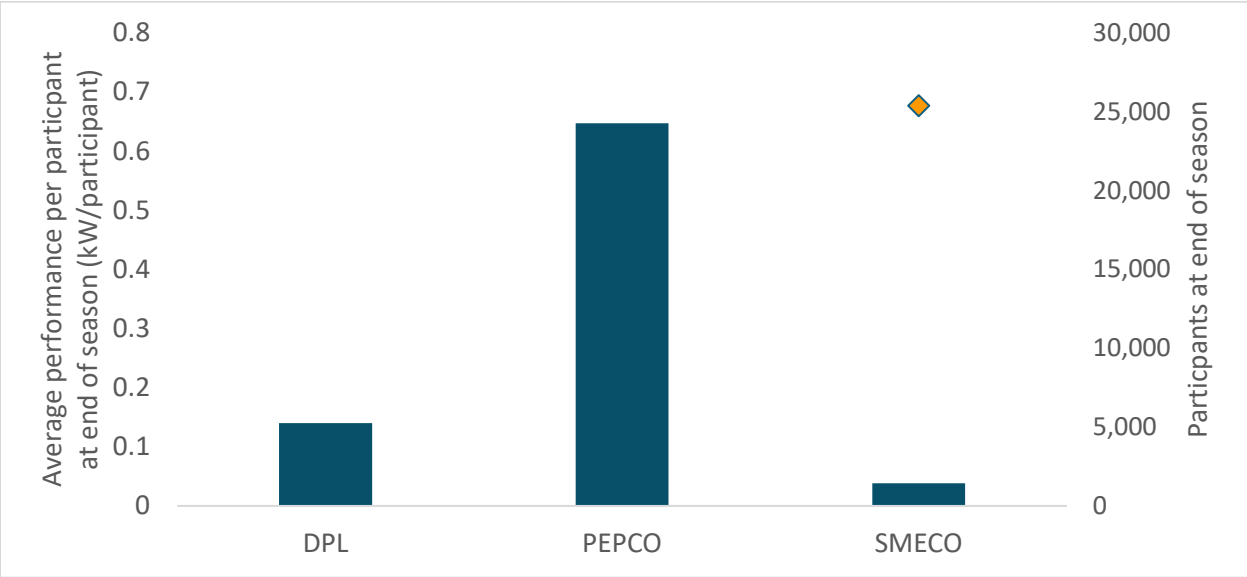

Figure 16. Average kW performance per participant (orange market, left axis) and active participants at end of season (blue bar, right axis) for residential smart thermostat BYOD year-round programs.

Residential Water Heaters, SMECO

SMECO reported performance results for its residential electric water heater demand response program, which uses direct load control to temporarily curtail water heating during demand response events. Unlike HVAC-based programs, water heater load control targets short duration, thermal storage–enabled end uses that can be curtailed with minimal customer disruption, but that typically provide smaller per- device- load impacts.

As shown in Table 12, the SMECO water heater program delivered an average load reduction of approximately 0.10 kW per active device during the reporting period. This level of performance is substantially lower than that observed for residential HVAC and thermostat-based programs, reflecting both the lower connected load of individual water heaters and the operational constraints associated with maintaining customer hot water availability.

Incentive costs for the program are high on a per kW basis, with an average incentive cost of approximately $3,663 per kW reduced. This elevated cost reflects the combination of modest

per device load impacts, a relatively small participant base, with only 85 customers enrolled at the end of the season, and high incentive costs.

Despite its limited scale and lower average performance, the residential water heater program may still provide system value by contributing incremental, fast-responding load flexibility during targeted events. Water heater control can be particularly useful as a complementary resource alongside HVAC-focused programs, helping diversify the demand response portfolio and reduce reliance on a single end-use category.

Overall, SMECO's residential water heater program demonstrates the tradeoffs inherent in smaller, niche demand response resources: while per device performance is modest and incentive costs are high, the program offers a low impact option for customers and may support grid reliability when deployed strategically and in coordination with higher performing residential programs.

Table 12. Performance metrics for SMECO's residential water heater year-round program.

Average performance (kW per active device)	0.1
Incentive costs ($ per kW)	$3,663
Customers enrolled at of end of period	85

Residential water heaters exhibit the lowest average performance across program types in Q3–Q4, reinforcing their role as a supplemental rather than primary source of residential demand response capacity.

Small Commercial, BYOD

BGE enrolled 25 customers (Table 13) in its Small Commercial BYOD program during the reporting period; however, no demand response events were dispatched in Q3–Q4. As a result, performance and cost-effectiveness metrics are not yet available for evaluation.

Table 13. Small commercial BYOD performance metrics from BGE. No events called.

Utility	Unenrollment rate	Average performance (kW per active device)	Incentive costs ($ per kW)	Customers enrolled at of end of period	Active Devices as End of Period
BGE	-	-	-	25	-

The absence of dispatched events suggests that the program remains in an early implementation phase. Additional operational experience will be required before conclusions can be drawn regarding customer responsiveness, performance per device, or overall system value. Future reporting periods may provide greater insight as event activity increases.

Small Commercial, non-BYOD

Small Commercial non-BYOD programs rely on direct load control equipment that cycles or temporarily shuts off HVAC compressors during demand response events. Pepco and DPL both operate programs in which participating HVAC systems are cycled at 50 percent capacity, balancing customer comfort with meaningful load reductions. Program performance varies substantially across utilities, as shown in Table 14.

Table 14. Small commercial non-BYOD performance metrics by utility.

Utility	Unenrollment rate	Average performance (kW per active device)	Incentive costs ($ per kW)	Customers enrolled at end of period	Active Devices as End of Period	Reported MW Demand Reduction Capacity
Pepco	1%	2.01	$38.3	4,280	5,982	12
DPL	1%	0.44	$104	1,008	2,229	4

Pepco reports the highest average performance per active device among all programs, at approximately 2.01 kW per device. The program achieved a reported demand reduction capacity of 12 MW, representing roughly 80 percent of its 15 MW target. Average event level performance is reported at approximately 5 MW.

In contrast, DPL reports a lower average performance of approximately 0.44 kW per active device, with a total reported demand reduction of 4 MW across events. Incentive costs also differ, with Pepco achieving delivered load reductions at a lower average cost per kW ($38.30 per kW) relative to DPL ($104 per kW).

Enrollment and retention metrics are strong for both programs, with unenrollment rates of approximately 1 percent. PEPCO reports 4,280 enrolled customers and nearly 6,000 active devices, while DPL reports just over 1,000 customers and approximately 2,200 active devices. These low unenrollment rates suggest a high level of customer acceptance, likely supported by predictable event dispatch and limited operational disruption.

Overall, small commercial non-BYOD programs deliver the highest per device load reductions among all evaluated demand response offerings. While program scale remains smaller than residential portfolios, these programs provide substantial system value due to their high per -customer impacts and reliable performance. As such, small commercial non-BYOD resources represent- an important complement to residential demand response, particularly for meeting peak demand and targeted reliability needs.

Small commercial programs exhibit the highest average per device performance across all program types in Q3–Q4, reinforcing their role as a high impact but capacity -constrained demand response resource.

DR Events

Seasonal Programs

EmPOWER demand response resources are currently dispatched by PJM in response to economic or emergency reliability signals, generating market revenues for the utilities. However, PJM dispatch events do not consistently coincide with utility-specific peaks or PJM Mid-Atlantic

system peaks, which are the conditions that drive transmission cost allocations and capacity requirements.

This misalignment points to an unrealized opportunity: utilities could dispatch the same demand response assets not only in response to PJM signals, but also proactively during system and coincident peak periods. Doing so would reduce transmission cost allocations and capacity obligations, delivering bill savings that benefit both the utilities and all ratepayers.

The following tables summarize demand response event activity across BGE, DPL, and Pepco during the reporting period, illustrating the alignment between PJM-issued dispatch events, PJM Mid-Atlantic system peaks, and each utility's monthly peak demand days. Across all three utilities, multiple monthly and system peak days occurred without any corresponding PJM dispatch, while some PJM economic events were called on days that did not coincide with peak system stress conditions, confirming that PJM dispatch alone is insufficient to capture the full cost-reduction potential of these resources.

For BGE (Table 15), PJM events were dispatched on several summer dates, including June 24, August 11, and August 20, primarily for economic, reliability, or testing purposes. BGE's monthly peak demand, however, fell on different dates, including June 23, July 25, and additional days in August and September during which no PJM events were issued. This pattern illustrates the gap between PJM dispatch timing and periods of highest system stress for the utility and highlights the potential value of a complementary dispatch strategy targeting those peak periods directly.

Table 15. BGE event logs illustrating coincidence between PJM issued events and BGE system peaks.

Month	Date	Program type	Reason for call PJM issued events	BGE peak
June	6/23/2025			Peak
	6/24/2025	Residential (Connected Rewards)	Economic	
	6/24/2025	Residential (PeakRewards)	Economic	
July	7/25/2025			Peak
	7/29/2025			

August	8/11/2025	Residential (Connected Rewards)	Reliability	
	8/11/2025	Residential (PeakRewards)	Reliability	
	8/12/2025			
	8/17/2025			Peak
	8/20/2025	Residential (Connected Rewards)	PJM Test	
	8/20/2025	Residential (PeakRewards)	PJM Test	
September	9/5/2025			Peak
	9/19/2025			
October	10/6/2025			
November	11/2/2025			
December	12/15/2025			
	12/16/2025			Peak

DPL (Table 16) experienced multiple monthly peak days across June through September, many of which did not align with PJM-issued events. While DPL dispatched both residential and commercial programs during PJM economic and test events in July, several utility peak days, such as July 25, August 12, and September 6, occurred without corresponding to PJM dispatch.

Table 16. DPL event logs illustrating coincidence between PJM issued events and DPL system peaks.

Month	Date	Program type	Reason for call PJM issued events	DPL peak
June	6/23/2025			
	6/24/2025			Peak
July	7/3/2025	Commercial	Economic	
		Residential	Economic	
	7/17/2025	Commercial	Economic	
		Residential	Economic	

	7/22/2025	Commercial	PJM Test	
		Residential	PJM Test	
	7/25/2025			Peak
	7/29/2025	Commercial	Economic	
		Residential	Economic	
August	8/12/2025			
	8/17/2025			Peak
September	9/5/2025	Commercial	Economic	
		Residential	Economic	
	9/6/2025			Peak
	9/19/2025			

Pepco shows a comparable pattern (Table 17). PJM economic events were called on several dates in July and September across residential and small commercial programs, yet Pepco's system peaks mostly occurred on different days (with the exception of July 29th), including June 24, July 25, August 12, and September 19. As with BGE and DPL, this misalignment suggests that PJM-driven dispatch does overlap with utility-specific peak conditions.

Table 17. Pepco event logs illustrating coincidence between PJM issued events and Pepco system peaks.

Month	Date	Program type	Reason for call PJM issued events	Pepco peak
June	6/23/2025			
	6/24/2025			Peak
July	7/3/2025	Residential	Economic	
		Small Commercial	Economic	
	7/17/2025	Residential	Economic	
		Small Commercial	Economic	
	7/25/2025			Peak
	7/29/2025	Residential	Economic	
		Small Commercial	Economic	

August	8/12/2025			
	8/17/2025			Peak
September	9/5/2025	Residential	Economic	Peak
		Small Commercial	Economic	
	9/19/2025			

Overall, the event logs indicate that while demand response programs are successfully participating in PJM-issued events, there is an opportunity for utilities to further diversify dispatch strategies by proactively targeting utility-specific and coincident peak conditions, including those not captured by PJM dispatch signals. Leveraging existing demand response resources during these peak periods could significantly increase ratepayer benefits through avoided capacity costs and reduced transmission and distribution allocations. This approach would build on current program performance while improving alignment with broader utility system needs.

Annual Programs

SMECO is the only utility reporting annual DR programs. Table 18 summarizes SMECO's annual demand response event activity and average reported load reductions across HVAC cooling, HVAC heating, and residential water heater programs. The results highlight clear differences in dispatch frequency, performance magnitude, and customer response across end uses.

HVAC cooling events were dispatched during October, with a total of two events during the month. These events delivered the highest average load reductions observed across all end-uses, at approximately 8.41 MW per event. Optout rates averaged 8 percent, indicating generally strong customer participation during cooling related dispatches.

The relatively high average performance reflects both the larger connected load associated with air conditioning and the favorable operating conditions for load curtailment during late season cooling events. Despite the limited number of events, HVAC cooling continues to represent the most impactful residential demand response resource in terms of delivered load reduction.

HVAC heating events were dispatched more frequently than cooling events, with ten events in November and nine events in December. However, average load reductions during heating

events were substantially lower, at approximately 0.71 MW per event in both months. Average opt-out rates were 6 percent, slightly lower than those observed for cooling events.

The lower performance associated with HVAC heating reflects a combination of smaller controllable electric heating loads and operational constraints designed to maintain customer comfort during colder conditions. While heating events provide additional seasonal flexibility, their contribution to peak load reduction is more modest relative to cooling events.

Residential water heater events were dispatched most frequently among the three end uses, with 15 events in October, 14 events in November, and 10 events in December. Despite this high event frequency, average load reductions were minimal, at approximately 0.01 MW per event across all months. Opt-out rates were very low, ranging from zero to 2 percent.

These results reflect the small per device load impacts of residential water heaters, even when aggregated across multiple events. The low optout rates suggest high customer acceptance and minimal disruption, but the limited magnitude of load reduction reinforces the role of water heaters as a supplemental rather than primary demand response resource.

Overall, Table 18 illustrates a clear tradeoff between event frequency and delivered load reduction across end uses. HVAC cooling events deliver the largest load reductions but are dispatched infrequently, while HVAC heating and water heater programs provide more frequent dispatch opportunities with significantly lower average performance. Together, these resources contribute to a diversified demand response portfolio that balances high impact events with incremental, low disruption flexibility across seasons.

Table 18. SMECO annual program event logs and performance metrics.

	Month	Average of reported MW reduction	Number of events per month	Average rate of opt-outs
HVAC Cooling	October	8.41	2	8%
HVAC Heating	November	0.71	10	6%
	December	0.71	9	6%
Water Heater	October	0.01	15	2%

	November	0.01	14	0%
	December	0.01	10	0%

Conclusion

Across Q3 - Q4, EmPOWER demand response programs delivered measurable load reductions across a diverse portfolio of residential and small commercial offerings. Performance varied by program type and end use, with small commercial non-BYOD and residential HVAC cooling programs providing the highest per device and per event load impacts, while residential BYOD thermostat programs demonstrated strong average performance. Water heater programs delivered comparatively small load reductions but were dispatched frequently and exhibited high customer acceptance, reinforcing their role as a supplemental resource within the broader portfolio.

Event activity data show that demand response resources were successfully deployed during PJM issued economic, reliability, and test events, generating market value and operational experience across utilities. At the same time, the comparison of PJM dispatch dates with utility specific system and monthly peaks indicates that many local peak demand conditions occurred without corresponding event calls. This pattern suggests that existing demand response resources have the potential to provide additional system value beyond current dispatch practices.

Taken together, the results highlight an opportunity for utilities to further enhance customer benefits by diversifying dispatch strategies to better align with utility specific peak conditions. Leveraging demand response resources during local system peaks could increase avoided capacity benefits and reduce long-term transmission and distribution costs, while continuing to build on the strong performance and customer participation demonstrated across program types.

Recommendations

The following is a summary of key recommendations based on the analysis performed in the Demand Response section:

1. The Commission should direct electric utilities to evaluate current incentive structures to improve the alignment with program performance. Current enrollment incentive designs may reward customers who unenroll before contributing to demand response event performance, inflating average incentive costs per active device and distorting cost-effectiveness results. The Commission should require utilities to review and redesign incentive structures to condition payments, or a meaningful portion thereof, on verified participation and event performance rather than enrollment alone. This requirement would improve cost allocation to measurable load reductions.
2. The Commission should direct electric utilities to collaboratively investigate performance drivers across utilities and share experiences and best practices. The observed performance gap between BGE and Pepco's non-BYOD programs cannot be fully explained by enrollment differences alone. Further research is warranted to identify the underlying drivers of this discrepancy, including potential differences in cycling strategies, event dispatch practices, customer behavior, device characteristics, and program implementation approaches. Findings from this investigation should inform program design improvements and support more consistent performance outcomes across utility territories.
3. The Commission should direct electric utilities to expand dispatch strategies to target system and coincident peaks to reduce overall costs for ratepayers and for the utilities. While demand response programs are successfully responding to PJM-issued economic and reliability events, PJM dispatch signals do not consistently coincide with utility-specific or PJM Mid-Atlantic coincident peak conditions, the periods that most directly drive transmission cost allocations and capacity requirements. Utilities should develop complementary dispatch strategies that proactively target these peak periods, leveraging existing demand response resources to reduce avoided capacity costs and transmission

and distribution allocations. This approach would expand the ratepayer benefits delivered by current programs without requiring additional resource enrollment.

Dynamic Pricing

Observations

Dynamic pricing programs are voluntary programs where customers are paid an incentive ($/kWh) to reduce their overall energy (kWh) consumption during the period of the event. These programs are enabled by advanced metering infrastructure (AMI), through which utilities rely on metering data to measure customers' response to utility-led events.

Dynamic pricing programs are also referred to as Peak Energy Savings Credit (PESC) for Delmarva and Pepco and Smart Energy Rewards for BGE. Enrolled customers are notified of a planned event and encouraged to shift their energy usage during that time. After the event, customers who successfully reduced their energy usage during the event are credited for their participation. There is no penalty for not participating in events.

In 2025, BGE reported its dynamic pricing program (Smart Energy Rewards) alongside its EmPOWER demand response programs. Pepco and DPL did not report any activity in their EmPOWER programs but did report some activity for dynamic pricing in the non-surcharge, "Other EE&C Programs" section. SMECO and PE did not report any activity related to dynamic pricing.

BGE called one "Energy Savings Day" event in 2025 on June 24, reporting a 63 percent participation rate among eligible customers and delivering nearly 50 MW of load reduction. Pepco and DPL have not called a "Critical Event Day" since 2022, and both are proposing to eliminate their dynamic pricing programs altogether.

Analysis

OPC has collected information about these peak time rebate programs through DRIVE Act filings and information requests. BGE reports over 1.1 million enrolled customers and load reductions between 0.14 to 0.18 kW per participant between 2019 and 2024.[34] Pepco reports over 513,000 customers enrolled and load reductions between 1.04 to 2.14 kW per enrolled

[34] BGE Data Responses to OPC 1, MD Case 9761, August 25, 2025.

customer from 2020 to 2022.[35] DPL reports over 167,000 customers enrolled and load reductions between 1.61 to 2.23 kW per enrolled customer from 2020 to 2022.

However, the evaluated results from 2024 programs are significantly different from the average per participant impact reported by the utilities.[36] A summary of the corresponding demand reductions evaluated in 2024, for BGE, DPL and Pepco is shown in Table 19.

Table 19: Summary of dynamic pricing programs including enrolled participants and historic evaluated and reported performance per participant.

Utility	Program Name	2024 Enrolled Participants	Reported Enrollments by the Utilities	Average kW/Participant reported by Evaluator (2024)	Average kW/Participant reported by the utilities (2025)
BGE	Smart Energy Rewards	~1,170,000		0.09	0.14 – 0.18
Pepco	Peak Energy Savings Credit (PESC)	385,923	513,000	0.07*	1.04 – 2.14**
DPL	Peak Energy Savings Credit (PESC)	153,120	167,000	0.08*	1.61 - 2.23**

* estimated by evaluator

** reported between 2020 to 2022[37]

Despite the discrepancy between the utilities' and evaluator's reported demand response impacts, we recognize that these tariffs exhibit low attrition (opting out is rare, and many eligible customers remain enrolled), are additive to existing demand response offerings, and would likely increase the utilities' overall demand response impact if operationalized.

[35] PHI Data Responses to OPC 1-16 and 1-18, MD Case 9761, September 4, 2025.
[36] Evaluation reports accessed via EmPOWER Maryland Evaluation.
[37] It's unclear why Pepco and DPL report savings an order of magnitude larger than BGE's program.

Recommendations

Despite the robust load reduction performance, and widespread customer adoption, DPL and Pepco are proposing to eliminate the dynamic pricing offerings (PESC), citing diminishing revenues.

This proposal warrants closer consideration, particularly given that both utilities reportedly plan to launch new time of use tariffs under DRIVE Act:

a) The new time of use tariff will require utilities to actively recruit customers, raising concern about adequate cost allocation, especially given that the existing dynamic tariff program is widespread and has delivered significant peak reduction.
b) Utilities should instead consider operationalizing the current dynamic tariff program
c) Eliminating the dynamic pricing program would remove one of the few tools available to customers for managing their bills in response to peak events, cutting off a meaningful avenue for bill savings and peak time demand flexibility.

Based on these considerations, we recommend that:

1. The Commission should direct Pepco and DPL to keep the programs under EmPOWER but update them so utility and customer interests are better aligned. Utilities might consider updating the structure, credits, or performance rules so the utility still has a workable path to participate in markets, while customers keep access to rebates, bill savings, and peak-time flexibility.

Behavior

Behavior-based utility programs remain an important part of modern energy efficiency portfolios because they can reach large numbers of customers at relatively low cost while supporting multiple policy objectives at once, including affordability, emissions reduction, and grid reliability. Industry practice has evolved beyond general energy education toward more personalized, data-driven engagement that uses customer segmentation, tailored savings recommendations, and digital delivery channels to encourage specific actions and improve program outcomes.

More recently, behavioral offerings across the utility sector have become increasingly integrated with advanced metering infrastructure (AMI), demand flexibility objectives, and broader market transformation strategies. Utilities now commonly use AMI-enabled home energy reports, usage alerts, web-based tools, and other customer communications not only to encourage reductions in overall energy consumption, but also to influence the timing of usage, support participation in peak demand or flexible-load initiatives, and direct customers toward complementary offerings such as smart thermostats, dynamic rates, rebates, and whole-home efficiency or electrification upgrades. These developments reflect a broader industry trend toward treating customer engagement, energy efficiency, and load management as interconnected components of program design rather than as separate program functions.

This evolution is particularly relevant in the context of EmPOWER. The Commission has emphasized that utilities may pursue program goals through a mix of energy efficiency, electrification, demand response, and AMI- or smart grid-enabled opportunities. Maryland's recent program framework places greater weight on greenhouse gas reductions alongside traditional savings objectives. Within that framework, behavior-based programs provide a broad mechanism for producing near-term savings, delivering actionable energy information to customers, and creating pathways to deeper participation in complementary efficiency and electrification offerings over time.

EmPOWER's behavioral programs continue to promote energy savings through printed and emailed home energy reports, digital tools, and customer messaging informed by usage data

and statistical comparison to non-participants. These savings typically result from no-cost or low-cost operational changes, seasonal adjustments, and modest efficiency improvements adopted in response to program communications. Consistent with current EmPOWER practice, savings from these programs are generally treated as persisting for a single year. At the same time, the function of behavioral programs within the portfolio is expanding. In addition to producing direct savings, these programs can support targeted outreach, reinforce participation in other utility offerings, and improve the ability of utilities to extend program benefits to harder-to-reach and income-constrained customers while preserving the scale and administrative flexibility that have historically made behavioral programs a useful component of the EmPOWER portfolio.

Observations

Although each EmPOWER utility exceeded its participant target in the 2025 Q3-Q4 semiannual reporting period, the results of that participation were mixed. On the electric side, BGE (121 percent), Pepco (113 percent), and Potomac Edison (113 percent) exceeded their targets for annualized energy savings, while DPL (81 percent) and SMECO (71 percent) fell short of their forecasted targets. All utilities underspent relative to their forecasted annual budgets. For gas utilities, WGL exceeded its target for forecasted annual energy savings (109 percent), while BGE fell short, achieving 90 percent of its forecast.[38]

Behavioral programs generally provide information and recommendations to customers and empower them to take control of their energy usage, ideally in ways that provide both customer and system benefits. For example, customers may be encouraged to run appliances outside of peak periods. This passive load management shows up as coincident peak demand reduction. BGE was a clear leader for summer coincident peak demand reduction, exceeding its annual target by 153 percent. Potomac Edison was the only other utility to be on target; DPL achieved

[38] The filings from DPL and Pepco appear to present inconsistent forecasted annualized energy savings values for the Residential Behavior Based Program across the current-year net and gross wholesale summary tables. Gross wholesale figures were used for analysis of results.

just 68 percent of its forecast, while Pepco and SMECO failed to reach 50 percent of their forecasts.

Commercial behavior-based offerings are opt-in programs that mirror the residential approach, providing businesses with personalized insights into their energy use patterns, demand trends, weather-related impacts, and practical recommendations to support behavioral and operational changes that reduce energy consumption. Commercial behavioral programs showed generally strong performance on reported savings and participation metrics, although the results should be understood in the context of relatively small program scale and continued ramp-up. BGE's Commercial Business Energy Manager (BEM) exceeded its target for lifecycle GHG savings, participants, and annualized electric savings, reporting 1,896 metric tons CO2e against a forecast of 1,244 metric tons (152 percent), 791 participants against a target of 430 (184 percent), and 10,742 MWh of annualized savings against a forecast of 5,434 MWh (198 percent), while using about 60 percent of its forecasted budget. DPL's Commercial Customer Engagement Portal / BEM likewise exceeded its target for emissions, participation, and annualized energy savings, reporting 113 metric tons CO2e against a forecast of 74 (153 percent), 68 active commercial customers against a target of 46 (148 percent), and annualized energy savings of nearly double forecast, despite spending only about 27 percent of budget as the program remained in a ramp-up stage. Pepco's Commercial BEM showed a similar pattern, achieving 337 metric tons CO2e against a target of 261 (129 percent), 1,952 MWh of annualized savings against 1,057 MWh forecast (185 percent), and exactly meeting its participant target of 150, while spending only $228,916 against a budget of $1,075,100. Taken together, these results suggest that the commercial behavioral offerings generally outperformed expectations on direct savings metrics even while operating below budget, though the filings also indicate that several of these programs remained in a developmental phase focused on internal training, customer portal promotion, and broader outreach rather than full deployment at mature scale.

The greenhouse gas results for EmPOWER's behavior-based programs show a generally weaker performance picture than the energy savings results alone would suggest. Based on Table 20, the six utilities collectively achieved only about 66,907 metric tons of lifecycle GHG reductions, or roughly 83 percent of collective forecast for the 2025 program year. In other words, the

weighted average performance of the behavioral portfolio was 83 percent of forecast. Five of the six utilities fell short of their lifecycle GHG targets, with WGL as the sole utility exceeding its forecast at 109 percent. In other words, several utilities appear to have delivered energy savings at or above target while nonetheless failing to translate those savings into forecasted greenhouse gas reductions.

Table 20. Lifecycle GHG reductions achieved by each utility for behavioral programs in Q3-Q4 2025 compared to forecasted targets, including achievement percentages and cost per metric ton of CO2e.

Utility	Forecasted lifecycle GHG reduction (metric tons CO2e)	Reported lifecycle GHG reduction (metric tons CO2e	Achievement relative to forecast	Cost per lifecycle GHG reduced ($ per metric ton CO2e)
BGE	51,344	44,100	86%	$98.80
DPL	2,629	1,533	58%	$328.25
Pepco	11,478	9,055	79%	$185.93
SMECO	3,221	1,712	53%	$643.76
Potomac Edison	6,561	4,922	75%	$231.21
WGL	5,146	5,586	109%	$143.31
Portfolio	**80,379**	**66,907**	**83%**	**$143.24**

Analysis

For several residential behavioral offerings, the combination of budget underspend and missed savings or emissions targets suggests that program potential may not have been fully realized during the reporting period. Where utilities spent less than planned, and still fell short of forecasted outcomes, the results are more consistent with limits in program delivery, targeting, customer response, or evaluation assumptions than with a market that has already been substantially saturated. That interpretation appears particularly relevant for utilities such as DPL and SMECO, whose residential behavioral programs were both under budget and below forecast on key metrics. For BGE and Pepco, however, underspending occurred alongside strong

participation and energy-savings performance, which suggests that the more significant issue in those territories may be due to the shift from an annual energy savings framework (behavioral programs claim savings with a one-year lifetime) to the current lifecycle GHG reduction framework.

From a comparative standpoint, BGE reported the largest volume of lifecycle GHG reductions at 44,100 metric tons but still achieved only 86 percent of its forecast of 51,344 metric tons. At the same time, BGE reported the lowest cost per metric ton CO2e saved among the electric utilities at $98.80/ton, suggesting that while the program did not achieve its emissions forecast, it remained relatively cost-efficient on a per-ton basis compared with peer electric utilities. Although Potomac Edison exceeded annualized energy savings forecast on the electric side (113 percent), the utility reached only 75 percent of its lifecycle GHG target, with a reported cost of $231.21 per metric ton. Likewise, Pepco achieved 113 percent of forecasted annualized energy savings for its residential behavioral program, yet only 79 percent of forecasted lifecycle GHG reductions, reporting 9,055 metric tons against a target of 11,478 metric tons.[39] Pepco's cost per lifecycle metric ton CO2e saved was $185.93, higher than BGE's but materially lower than several smaller utilities.

As expected, based on energy savings results, the weaker performers on this metric were DPL and SMECO. DPL achieved only 58 percent of its lifecycle GHG forecast and reported a relatively high cost of $328.25 per metric ton CO2e saved. SMECO performed worst on both achievement and cost, reaching only 53 percent of forecast with a reported cost of $643.76 per metric ton, by far the highest among the utilities shown.

WGL stands apart as the only utility to exceed its lifecycle GHG target, reporting 5,586 metric tons against a forecast of 5,146 metric tons, or 109 percent achievement, at a cost of $143.31 per metric ton. This result is directly consistent with WGL's reported energy savings performance, where the utility also exceeded forecast. One plausible explanation is that the relationship between gas savings and GHG reductions is more direct than the relationship between electric savings and GHG reductions. For gas programs, avoided emissions are tied to

[39] Pepco's filing is especially notable because it stated that the program was "on track" to exceed its annual GHG target even though the reported results showed only 79% achievement (p. 37 of filing).

reduced onsite combustion, creating a relatively linear connection between savings and emissions impacts. For electric programs, avoided emissions depend in part on assumptions about grid emissions factors and the timing or characteristics of avoided electricity consumption, which introduces more variability.

Importantly, this observation does not suggest that electrification fails to reduce GHG emissions, only that the accounting mechanisms differ.[40] In fact, electrification is expected to deliver increasingly significant emissions benefits as Maryland's power system continues to decarbonize, and behavioral programs can play a meaningful role in supporting that transition. Although this point is not explicitly resolved in the utilities' filings, it is consistent with the broader policy context in Maryland, where the EmPOWER framework now places greater emphasis on emissions outcomes and beneficial electrification in a power system expected to become cleaner over time.

Across the EmPOWER utilities, data in Table 21 and Table 22 indicates a general year-over-year deterioration in behavioral-program cost performance between Q3-Q4 2025 and Q3-Q4 2024, the last semiannual period in which behavioral programs were evaluated in depth. In aggregate, year-to-date lifecycle energy savings declined from approximately 1.30 million MMBtu to 1.19 million MMBtu (about 9 percent lower), while lifecycle CO2e savings declined from 74,752 metric tons to 66,907 metric tons (about 10 percent lower). At the same time, weighted-average expenditures per unit of savings increased from approximately $7.36 to $8.07 per MMBtu saved and from $127.94 to $143.25 per metric ton of CO2e saved, indicating that the portfolio produced fewer savings for roughly similar overall spending levels. The portfolio appears to have become less cost-efficient in 2025, with reduced savings output driving higher expenditures per unit saved.

[40] Note for example that the Commission approved in Order 92176 the Future Programming Work Group's recommendation that electric utilities' goals be based on marginal emissions instead of average emissions in the next cycle.

Table 21. Year-over-year changes in combined electric and gas lifecycle energy savings and spending efficiency across EmPOWER utilities, comparing Q3–Q4 2024 to Q3–Q4 2025.

Utility	Year-to-Date Combined Electric and Gas Lifecycle Energy Savings (MMBtu)		YoY Change	Spend per MMBtu Saved		YoY Change
	Q3-Q4 2024	Q3-Q4 2025		Q3-Q4 2024	Q3-Q4 2025	
BGE	852,604	777,821	-9%	$ 5.20	$ 5.60	8%
Delmarva Power	31,044	29,558	-5%	$ 13.96	$ 17.03	22%
Pepco	201,838	179,124	-11%	$ 8.40	$ 9.40	12%
SMECO	39,994	31,376	-22%	$ 26.75	$ 35.12	31%
Potomac Edison	102,784	102,179	-1%	$ 11.29	$ 11.14	-1%
Washington Gas	71,584	67,182	-6%	$ 10.74	$ 11.92	11%

Table 22. Year-over-year changes in combined electric and gas lifecycle GHG savings and spending efficiency across EmPOWER utilities, comparing Q3–Q4 2024 to Q3–Q4 2025.

Utility	Year-to-Date Combined Electric and Gas Lifecycle CO2e Savings (metric tons)		YoY Change	Spend per MT CO2e Saved		YoY Change
	Q3-Q4 2024	Q3-Q4 2025		Q3-Q4 2024	Q3-Q4 2025	
BGE	49,791	44,100	-11%	$ 89.08	$ 98.80	11%
Delmarva Power	1,610	1,533	-5%	$ 269.16	$ 328.25	22%
Pepco	10,203	9,055	-11%	$ 166.27	$ 185.93	12%
SMECO	2,181	1,712	-22%	$ 490.59	$ 643.76	31%
Potomac Edison	5,015	4,922	-2%	$ 231.35	$ 231.21	0%
Washington Gas	5,952	5,586	-6%	$ 129.12	$ 143.31	11%

This pattern is visible across five of the six utilities. BGE, which remains by far the largest behavioral program in the group, recorded declines in lifecycle energy savings (-9 percent) and CO2e savings (-11 percent), accompanied by higher unit costs (+8 percent per MMBtu and +11 percent per metric ton CO2e). Because BGE accounts for roughly two-thirds of total portfolio behavioral savings, changes in its performance materially shape the overall portfolio trend. Pepco showed a similar pattern, with lifecycle savings declining by 11 percent and expenditure per unit of savings increasing by roughly 12 percent. WGL also experienced a moderate decline in savings (-6 percent) and a corresponding increase in cost per unit saved (+11 percent). For BGE and Pepco, the higher unit costs appear to have been driven primarily by lower savings

output rather than higher total spending, which was roughly flat or slightly lower year over year. WGLe, however, appears to reflect a more mixed pattern, with both lower savings and a modest increase (4 percent) in spending contributing to higher unit costs.

The most pronounced deterioration appears in the smaller behavioral portfolios. SMECO experienced the sharpest year-over-year decline, with lifecycle energy savings and CO2e savings both down by roughly 22 percent, while expenditures per MMBtu and per metric ton CO2e rose by approximately 31 percent. DPL also showed a notable decrease in cost performance: savings declined by about 5 percent, while expenditures per unit saved increased by about 22 percent. These results may reflect sensitivity to relatively small program scale, changes in realization rates, customer response, or evaluation/modeling assumptions, all of which can have an outsized effect on behavioral-program economics when total savings volumes are limited. Regardless of the cause, both utilities' 2025 results indicate weaker cost-effectiveness than in the prior annual period.

Potomac Edison is the only utility showing essentially stable year-over-year performance. Lifecycle energy savings were nearly unchanged (-1 percent), lifecycle CO2e savings declined only slightly (-2 percent), and expenditures per MMBtu and per metric ton CO2e were effectively flat. Potomac Edison therefore stands out as the only utility whose behavioral program maintained roughly the same cost efficiency across the two reporting periods. From a comparative standpoint, Potomac Edison's stability distinguishes it from the broader portfolio trend of declining savings productivity.

The year-over-year changes are directionally consistent across both energy and emissions metrics, which suggests that the 2025 decline is not limited to one reporting lens but reflects a broader reduction in program output. Second, the results indicate that behavioral-program cost performance remains highly uneven across utilities. In 2025, expenditures per MMBtu ranged from $5.60 at BGE to $35.12 at SMECO, and expenditures per metric ton CO2e ranged from $98.80 at BGE to $643.76 at SMECO. That suggests meaningful differences in scale, program design, customer mix, or evaluation methods.

These patterns may also reflect a combination of factors that commonly emerge as behavioral programs mature. Behavioral programs generally show the strongest savings in early years,

when customers first engage with new feedback and prompts. Over time, savings can taper as customers habituate, and subsequent savings require more tailored outreach or deeper engagement with customers. That shift can raise costs even if the underlying program structure hasn't changed. These programs also exhibit evolving customer baselines (customer behavior, housing stock efficiency, appliance saturation, or external events) and participation patterns across the EmPOWER portfolio which can influence how much incremental savings behavioral programs are able to generate in any given cycle. Behavioral savings are often driven by targeting the right customer segments, at the right time, with the right message - and are further influenced by integration with other programs (cross-program lift) and customer mix (high-usage vs low-usage households). Variations in how utilities target and deliver behavioral offerings can lead to lower savings and higher unit costs over time. Because behavioral programs are often justified in part by their broad reach and relatively low administrative burden, a year-over-year increase in unit cost warrants attention, especially where it is paired with declining savings.

The key implication is that the EmPOWER results appear consistent with the literature that behavioral savings are inherently variable, but they also underscore the importance of continued program refinement. Utilities showing the largest increases in expenditures per MMBtu and per metric ton CO2e saved may warrant additional scrutiny, particularly as to whether their behavioral offerings are sufficiently targeted and whether current reporting captures the broader functions these programs may serve, including demand flexibility, cross-program lift, and customer reach. Those are the same issues now shaping behavioral-program design and oversight more broadly, and they support targeted Commission action to improve the reporting and evaluation framework for these programs in future EmPOWER filings.

Limited Income Participation

From an equity and regulatory oversight perspective, Table 23 highlights both the importance of limited-income participation in behavioral programs and the current limitations of the reporting framework. The reported participant counts show that utilities are reaching a substantial number of limited-income customers through behavioral offerings, but the absence of consistent savings

and expenditure data makes it difficult to determine whether that participation is translating into meaningful, measurable benefits.

Table 23. Reported limited-income participation, energy savings, expenditures, and associated lifecycle cost savings across EmPOWER utilities for the 2025 reporting period.

Utility	**Reported limited-income participation**		**Reported limited-income annualized energy savings**		**Reported limited-income expenditures**	**Lifecycle limited-income cost savings**
	Total	*Percent of treatment population*	*MWh*	*Therms*		
BGE	53,694	5.4%	-	-	$235,274	-
DPL	15,502	14%	1,213	-	$70,457	-
Pepco	20,094	5%	2,677	-	$85,865	$416,052[41]
SMECO	12,601	16%	1,493	-	$0	$0
PE	14,725	11%	3,892	-	$147,889	$469,869
WGL	7,130	6%	-	39,348	$46,884	-

Several utilities describe limited-income behavioral strategies in qualitative terms – for example, targeted reports, cross-promotion of other assistance offerings, or coordination with related programs – but do not report corresponding outcome metrics showing whether those actions resulted in greater participation, measurable cross-program lift, or identifiable customer savings. BGE, for instance, states that its Limited Income Home Energy Report was designed to reflect the circumstances of income-constrained households and cross-promote offerings such as Office of Home Energy Programs (OHEP), yet the filing also states that the utility does not maintain dedicated low-income treatment and control groups and therefore cannot separately estimate

[41] Pepco inadvertently referenced New Construction savings instead of Behavior Based Program savings in reported lifecycle savings for Limited Income. The correct amount, 2,677 MWh, is referenced here. This alters the reported lifecycle energy savings ($) reported in their filling from $151,389 to $416,052.

savings for that segment with accuracy. The utilities also appear to identify limited-income customers differently: BGE and SMECO started using Oracle's Energy Affordability Score and related indicators to identify likely limited-income households, whereas other utilities appear to rely more narrowly on known Electric Universal Service Program (EUSP) participation. These differences make the reported values difficult to compare across utilities.

The filings therefore show that utilities are taking actions directed at limited-income customers, but not whether those actions are producing measurable outcomes. That distinction matters. If limited-income reporting is intended to show whether behavioral programs are extending affordability benefits and savings opportunities to income-constrained households, then the Commission should direct utilities to report outcome-based metrics alongside narrative descriptions of program design and outreach.

Recommendations

Maryland's transition to GHG goals is intended to better align EmPOWER with state climate policy and beneficial electrification objectives, but the same shift also creates a new layer of complexity in forecast setting, evaluation, and interpretation.

These considerations are particularly important for behavior-based programs. Unlike equipment-based measures, behavioral savings are generally estimated through statistical comparison of treatment and control groups, which makes reported results more sensitive to customer selection, control-group usage patterns, treatment waves, persistence assumptions, and model parameters. DOE/LBNL[42] guidance has long recognized these issues as central to the credibility of residential behavioral savings and recommends rigorous experimental or quasi-experimental evaluation methods to support confidence that observed savings are valid, attributable, and durable. As a result, reported performance should be interpreted with care, particularly where short-duration energy savings are converted into lifecycle greenhouse gas reductions.

[42] The Lawrence Berkeley National Laboratory (LBNL) is a U.S. Department of Energy (DOE) funded laboratory that conducts research and analysis of energy programs and policy.

That caution is warranted here, as several utilities appear to have met or exceeded forecasted annualized energy savings while still falling short of lifecycle GHG targets. The gap suggests that at least part of the issue may lie in the way behavioral savings are converted into emissions outcomes under the current framework, rather than in program performance alone. Behavioral programs are still largely designed as broad-reach energy-saving offerings built around reports, alerts, and customer messaging. Those tools can produce meaningful savings, but they do not necessarily align neatly with the assumptions used to forecast lifecycle emissions reductions, especially where avoided emissions depend on grid conditions, timing of usage, or persistence assumptions applied to one-year savings.

For behavior-based offerings, even modest changes in evaluation design can materially affect reported savings, and any change in reported savings can then carry through to greenhouse gas results. That dynamic is particularly important under Maryland's current EmPOWER structure, where behavioral programs are being evaluated within a framework that places greater weight on emissions outcomes than in prior years. If the underlying assumptions used to convert savings into CO2e are overly aggressive, outdated, or otherwise mismatched to realized program effects, utilities may appear to underperform on emissions even where the programs continue to deliver energy savings at meaningful scale. Put differently, a program can still be effective at reducing energy consumption in aggregate while being less effective at reducing emissions than forecast if the avoided energy is less carbon-intensive than assumed or if the program does not meaningfully influence the types of consumption most relevant to the emissions model.

The limited-income discussion points to a similar reporting problem. Although the filings show substantial participation by limited-income customers, they do not consistently report the savings, expenditures, or other outcome measures needed to determine whether that participation is producing measurable benefits. Differences in how utilities identify limited-income customers further limit comparability across filings.

For those reasons, the Commission should take the following steps in future semiannual periods to assess whether behavioral programs are delivering meaningful emissions and affordability benefits under the current framework:

1. The Commission should direct the Evaluation Advisory Group, or other appropriate evaluation body, to review the assumptions used for behavioral-program greenhouse gas accounting, including persistence and avoided-emissions factors, and to recommend any needed revisions for future forecasting and reporting.
2. The Commission should direct utilities to report standardized limited-income behavioral-program metrics, including participation, savings, expenditures, and program-lift or cross-program outcomes where feasible.

Appliances

The appliance programs serve as the primary entry point for residential engagement in the EmPOWER portfolio. Historically valued for high-volume savings and relatively low upfront cost commitments, these programs are now driving GHG reductions with long-lived measures like refrigerators and heat pump water heaters. These programs are characterized by diverse delivery channels, ranging from traditional downstream mail-in rebates to midstream distributor incentives and retail markdown partnerships to free appliance pick-ups.

Observations

Appliance programs delivered strong results across nearly all utilities in 2025, with most exceeding their GHG reduction targets while underspending budgets as illustrated in Figure 17 below. DPL significantly outperformed expectations, while Pepco also reported strong performance, and both BGE and SMECO met or slightly exceeded their goals. These results indicate the appliance programs continue to meet expectations, representing a successful segment of the overall residential portfolio.

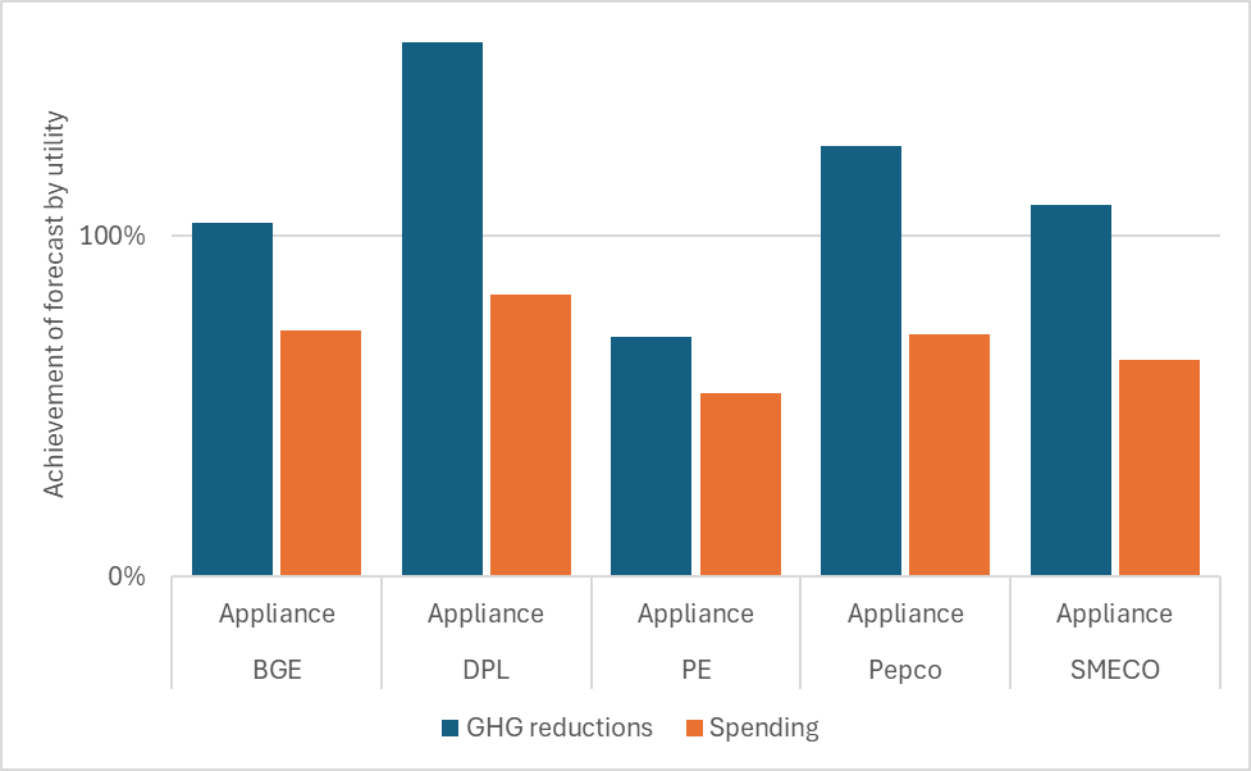

Figure 17. Reported lifecycle GHG reduction achievement and spending relative to forecast for appliance programs in 2025, by utility.

This success was paired with a persistent gap between achievement and spending. Most utilities reached or exceeded their targets while using only a fraction of their available budgets. BGE, for example, spent about 70 percent of its appliance rebate budget, while Potomac Edison used less than 60 percent. This dynamic is consistent with a broader trend where reported GHG performance outpaces spending, raising questions about how effectively program costs are being forecast and subsequently leveraged – especially within the residential portfolios. The fact that appliance programs are generally achieving GHG reduction forecasts lessens this concern.

An element of the strong performance was the evolution of the appliance recycling program to include non-energy greenhouse gas benefits. By accounting for the environmental value of reclaiming materials such as foam insulation, metals, plastics, and refrigerants, utilities were able to boost reported savings. In some cases, this led to achievement levels far exceeding targets even when participation volumes did not increase proportionally, highlighting how methodological changes can materially influence program outcomes.

High participation in retail-focused measures continued to underpin overall success. Advanced power strips (APS) in particular saw high measure counts through markdown channels, where discounted products are placed in high-traffic retail environments. While this approach generates large volumes of low-cost savings, it contributes to the broader concern about the depth of impact being achieved. Over-reliance on a single measure with minimal oversight presents a risk that claimed impacts are far more optimistic than actual impacts realized by customers.

The programs also expanded into new areas in 2025 with some utilities introducing rebates for electric lawn equipment, including mowers, snowblowers, and chainsaws. These offerings were quickly integrated into existing retail markdown platforms, reportedly allowing for rapid deployment and early participation. While still emerging, this category represents a natural extension of retail-based electrification efforts and may provide a foundation for broader market transformation over time.

Analysis

The ENERGY STAR Retail Products Platform has become the dominant delivery channel for residential appliance programs, marking a clear shift away from traditional downstream rebates. By incentivizing retailers directly, utilities are capturing high-efficiency purchases at the point of sale while lowering administrative costs. This approach is now operating at scale, with Pepco and DPL each driving significant volumes through the platform in 2025. For some utilities, it has become a primary savings engine, with SMECO attributing a substantial share of its appliance program performance to this channel. In response, utilities are actively migrating products like clothes washers and refrigerators into the platform, with some discontinuing standalone rebate programs entirely in favor of this model.

Heavy reliance on advanced power strips (APS) sold through retail markdown channels raises concern of concentration risk, since these products are generating large amounts of low-cost savings and playing an outsized role in overall program performance. If evaluation findings adjust savings calculation input parameters or identify higher than expected rates of improper installation, the impacts scale quickly across the program. Similarly, high volumes may lead to

market saturation and exhaust remaining potential without a viable alternative pipeline, as over-reliance on a single measure often signals a lack of diversification and innovation within the program.

Table 24 below illustrates that APS measures account for between 11 percent and 28 percent of total appliance program savings across the utilities. Another way to consider this is by total APS units relative to customer accounts. With this lens we find that in 2025 alone, more than one in every eight households received an APS. That number is nearly one in four households for DPL, Research suggests that APS savings are particularly sensitive to customer behavior and awareness. Units sold through retail markdown channels may be lacking this crucial customer support. Altogether, this illustrates the extent to which potential concentration risk could impact the program should savings assumptions, installation quality, or remaining market potential diverge from expectations.

Table 24. Reported GHG reduction contributions from APS measures as a share of total GHG reductions from appliance programs by utility.

Utility	Lifecycle GHG from APS Measures	Total Lifecycle GHG Reductions	Share from APS
BGE	14,661	82,244	18%
DPL	4,107	14,884	28%
Pepco	7,574	37,073	20%
Potomac Edison	1,843	16,827	11%
SMECO	1,548	13,175	12%

In contrast, heat pump water heaters are emerging as a key pathway toward electrification. While volumes remain smaller – especially for electrification – growth has been rapid. Utilities are also integrating these measures into retail channels, and early results suggest that midstream delivery can work even for higher-cost technologies. Table 25 below shows significant increases in volume for heat pump water heaters across the utilities, with the over five-fold year-over-year growth in the midstream channel outpacing overall growth. This positions heat pump water heaters as an important bridge from traditional efficiency programs toward broader electrification goals. Further, the success of this technology in midstream delivery models indicates that it should be possible to see similar success with HVAC equipment.

Table 25. Number of heat pump water heaters rebated via downstream (DS) and midstream (MS) delivery channels by utility and by year, illustrating year-over-year (YOY) growth in midstream channel and overall.

Utility	2025		2024			
	Units in DS	Units in MS	Units in DS	Units in MS	Percent Increase YOY - Midstream	Percent Increase YOY - Overall
BGE	631	998	535	138	623%	142%
DPL	115	81	48	5	1520%	270%
Pepco	487	58	150	37	57%	191%
Potomac Edison	0	411	0	95	333%	333%
SMECO	38	184	65	64	188%	72%
Total	**1,271**	**1,732**	**798**	**339**	**411%**	**164%**

Meanwhile, utility-run online marketplaces are being phased out. These platforms have struggled with low participation and high costs. BGE and SMECO closed their marketplaces in 2025 after determining that sales volumes did not justify the operational overhead. This reinforces a broader shift toward embedding incentives within existing retail environments rather than relying on utility-branded platforms.

Across all appliance programs, a consistent pattern emerges: strong GHG reduction performance paired with underspending. This pattern is similar to that observed across the entire portfolio, but with the notable exception that appliance programs are in fact achieving forecast - utilities are exceeding targets while leaving significant portions of their budgets unused. While the broader trend points to missed opportunities and under-deployment of budget within the residential portfolio, for the appliance programs this suggests cost-efficiencies gained through shifts to midstream delivery channels.

Recommendations

1. The Commission should direct utilities to continue shifting appliance rebates to retail markdown delivery channels. Appliance programs are among the only residential programs achieving forecast as cost-efficiencies of retail delivery drive program performance.

2. Based on the relative success of delivering HPWH and other electrification appliances through retail markdown channels, the Commission should direct the utilities and/or the Midstream Work Group to continue developing instant discount models for other program areas.
3. The Commission should direct utilities to diversify the range of appliances delivering GHG savings, as a large share of overall program impact is coming from a single measure – advanced power strips. Overreliance on a single measure introduces concentration risk where small shifts in savings assumptions or reduced market potential can quickly undercut program impact. Advanced power strips are particularly sensitive to awareness and behavior.

Work Groups

Midstream Work Group

The midstream work group submitted its status report on October 15, 2025, outlining discussion around the strengths and weaknesses of the program design. There is disagreement among workgroup members about reimbursement issues. Contractors report significant concern about carrying large rebate balances, particularly those associated with electrification measures. Reimbursement timelines of several weeks to months place considerable stress on the finances of small companies.

The Commission order includes a request that utilities share data on the timelines for processing payments, specifically requesting data from May 1, 2025, to September 1, 2025 including:

1. The time from sale to contractor and the corresponding rebate submission from the distributor
2. The time between receipt of rebate submission from distributor and the utility's payment of rebate to distributor
3. The time between the utility's payment of rebate to distributor and the distributor's reimbursement of contractor.

As of March 30th, only SMECO had provided this data.

The HVAC contractors have identified pain points in the current program design and proposed program changes intended to alleviate them. The key components of this proposal include:

- Instant rebates at point of sale from distributor to contractor for qualifying equipment.
- Downstream rebates for site-specific project details, including but not limited to electrification or fuel-switching.
- Streamlined equipment eligibility requirements based on equipment specifications.
- Uniform and consistent program details across utility territories.

OPC generally supports these proposals though has some reservations that warrant additional discussion, specifically regarding qualifying equipment specifications and data collection

practices. Overall, the proposal represents a thoughtful way to meaningfully improve the program and drive the higher volumes necessary for Maryland to achieve its climate goals.

Utilities continue to report that there is no need to improve the midstream program, as they are hitting goals as is. With no structural requirement to update the program, the work group has reached an impasse.

OPC continues to recommend that the Commission retain an independent, skilled, professional consultant to facilitate strategic planning to work with the Commission and EmPOWER stakeholders and state agencies. The goal should be to establish an overall roadmap or framework for heat pump market transformation. Assuming other state agencies are willing to contribute, both with their participation and funding, the roadmap would allow the Commission to develop EmPOWER programs in ways that align with the strategies and programs of agencies such as MDE, MEA, the Building Code Administration, and others.

Future Programming Work Group

The future programming work group addressed multiple key issues in 2025. The most time was devoted to developing methodology for setting GHG reduction goals for the upcoming 2027-2029 program cycle. The work group also discussed whether and how a demand response goal should be formalized for EmPOWER, though DRIVE Act filings have complicated this effort.[43] The work group continues to discuss the merits and practicality of shifting from utility-led programs to a statewide, third-party administrator model.

OPC believes that statute requires demand response programming to be included as part of the EmPOWER programs. As such, a goal against which to benchmark performance is appropriate. OPC and VEIC put forth a straw proposal for a DR goal framework based on installed MW capacity. This framework is very similar to the DR goals utilities have proposed within their respective DRIVE Act filings.

[43] OPC's position is detailed in its comments in the DRIVE Act docket.
See The Maryland Office of People's Counsel, *Comments of the Office of People's Counsel*, ML No. 328631 (Case No. 9761/PC77, April 1, 2026).

OPC supported, during the course of the Future Programming Work Group, an independent study to weigh the costs and benefits of a statewide, third-party administrator model. However, the work group agreed that if HB 1532 were to become law, the work group would defer to the statutory provisions regarding third-party administration. OPC continues to support such an approach.

Evaluation Advisory Group

A major point raised by nearly all utilities in their semi-annual reports was the frustration with retroactive adjustments to greenhouse gas intensity factors and the treatment of interactive lighting effects that were issued late in the reporting cycle. Because these changes altered previously calculated savings values, several programs experienced reductions in reported performance after implementation had already occurred. Utilities argue that this type of retroactive adjustment undermines effective program management and erodes confidence among implementers and stakeholders who rely on stable evaluation rules to plan program delivery.

The evaluation team has put forth an expedited timeline intended to get information to relevant stakeholders sooner and prevent retroactive savings adjustments from occurring again. OPC supports this effort and commends the work group members for coordinating through the shift in framework from annual energy savings to lifecycle GHG savings.

Updates to C&I lighting savings methodologies – including blended baselines, the aforementioned interactive effects, and other routine measure updates – have triggered concern about utilities' ability to hit goals going forward, as a notable amount of GHG reduction potential would disappear. The independent evaluator team has worked with utilities to quantify the magnitude of these changes and together suggest the goals for 2027-2029 should be reduced accordingly.

OPC acknowledges the reduction of savings potential from C&I lighting has cost implications – C&I lighting has been a low-cost part of utility portfolios and would likely be replaced by something costlier. OPC recommends that utilities be expected to evolve portfolios as the market and landscape change.