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TESTIMONY WASHINGTON GAS LIGHT COMPANY ECONOMIC MATTERS COMMITTEE

FEBRUARY 29, 2024

HOUSE BILL 864

Energy Efficiency and Conservation Plans

Washington Gas respectfully submits this statement in **OPPOSITION** to *HB 864 - Energy Efficiency and Conservation Plans* ("HB 864").

Washington Gas Light Company ("the Company") provides safe, reliable natural gas service to more than 1.2 million customers in Maryland, Virginia, and the District of Columbia. Washington Gas has been providing energy to residential, commercial, government, and industrial customers for more than 175 years, and currently serves more than 500,000 Maryland customers in Montgomery, Prince George's, Charles, St. Mary's, Frederick, and Calvert Counties. The Company employs over 400 people within Maryland, including contractors, plumbers, union workers, and other skilled tradespeople. We strive to improve the quality of life in our communities by maintaining a diverse workforce, working with suppliers that represent and reflect the communities we serve, and giving back through our charitable contributions and employee volunteer activities.

Background

The Maryland General Assembly passed the EmPOWER Maryland Energy Efficiency Act of 2008, which created a statewide program that helps homeowners, renters, and businesses save energy and money. According to Energy Efficient Maryland, "combined with other energy initiatives, EmPOWER Maryland has helped 21,000 low-income households save \$340 annually on their electric bills" and EmPOWER "has saved Marylanders more than \$4 billion on their

energy bills and reduced statewide greenhouse gas emissions by at least 9.6 million metric tons". These statistics exemplify the success and necessity of the EmPOWER programs.

The original intent of EmPOWER Maryland was to focus on reducing electricity consumption across the State. However, certain regulations authorized Washington Gas to deliver complementary energy efficiency programs through the EmPOWER Maryland regulatory framework. As of early 2015, Washington Gas has been an active participant of EmPOWER. Washington Gas has been delivering cost-effective energy efficiency programs to Maryland residents, businesses, and underserved communities. These programs have been designed to **reduce energy consumption by promoting and incentivizing the efficient use of natural gas**, which is realized through (1) installing high-efficiency equipment and appliances such as furnaces or commercial kitchen equipment, (2) optimizing home and commercial building operations to use less energy, and (3) educating customers and changing consumption behaviors towards energy conservation. The Company's energy efficiency programs have resulted in:²

- Serving over 413,000 Maryland customers through the various program offerings.
- Issuing a total of \$35 million in incentives (rebates) to participating customers, making the investment of energy improvement projects more affordable.
- Investing over \$14 million towards 3,200 projects that serve low-income customers and communities, making homes and buildings more efficient and safer.
- Reducing over 113 million therms in natural gas consumption over the useful lifetime of installed measure or equipment (lifecycle energy savings), which has resulted in helping Maryland residents and businesses save over \$223 million in energy costs.

The Company supports Maryland's climate goals and believes that reducing emissions through pragmatic means is important. The Company's EmPOWER program is a pragmatic solution that can help the State achieve its climate goals and help Maryland consumers reduce their climate impact while retaining access to critically needed energy solutions. However, the Company is opposed to HB 864 due to the inclusion of certain clauses. These concerns are addressed in detail below, and a list of the Company's proposed amendments to HB 864 are included as an addendum to this testimony.

Beneficial Electrification

HB 864 mandates that the Company include beneficial electrification as one of the solutions it must promote or implement to meet the newly established greenhouse gas ("GHG") emissions reduction targets. HB 864 defines beneficial electrification as the replacement of the direct use of fossil fuels with electricity that meets only one (1) of three (3) criteria: a reduction in overall lifetime GHG emissions, a reduction in customers' energy costs, or enables better management of

¹ Energy Efficient Maryland. <u>How Energy Costs Affect Maryland Households</u>

² Washington Gas EmPOWER Maryland Semi-Annual Report (Jul. 1, 2023 – Dec. 31, 2023)

the electric distribution system. As currently written, if a project reduces emissions, then it falls under "beneficial" electrification, even if the project would subject customers to inflated energy-related costs. This outcome would likely not create net benefits for customers, and therefore should not be considered "beneficial" electrification. For an electrification project to be considered beneficial, the Company believes it should have to meet all three (3) criteria. There is industry precedent to support this change. The Environmental and Energy Study Institute ("EESI") defines beneficial electrification as "replacing direct fossil fuel use with electricity in a way that reduces overall emissions and energy costs." Maryland should adopt a similar definition to ensure customers are not unduly burdened by the high costs that can be associated with electrification. Furthermore, the Company should not be required to implement beneficial electrification programs as part of its obligations under EmPOWER, as electrification is outside the scope of services the Company offers. Electrification programs should only be implemented where it makes sense for both the utility and the customer and can maintain energy choices for customers.

The Company believes many electrification programs will be challenged to meet any one (1) of the three (3) criteria identified in HB 864 given the dynamics affecting Maryland's energy systems and the financial challenges electrification presents.

1. Reduction in Lifetime GHG Emissions

PJM's current and future electricity generation mix presents challenges to reducing GHG emissions through electrification. Today, fossil fuel resources comprise over 55% of PJM's generation mix,⁴ with fossil generation often being higher during periods of peak demand,⁵ and PJM has documented challenges in interconnecting new renewable energy resources.⁶ Maryland's Climate Pollution Reduction Plan further anticipates that the State's reliance on imported power from PJM will increase ~81% by 2030 and ~142% by 2035 as it retires additional in-State fossil resources and fails to add in-State zero-emission generation at a commensurate pace.⁷ The high reliance on fossil-fuel heavy electricity imports from PJM underlines the fact that electrification is not guaranteed to reduce GHG emissions.

The State's inability to meet its own in-State renewable energy generation targets also highlights the challenges that the electric sector is facing to meet Maryland's climate goals. The Bureau of Ocean Energy Management ("BOEM") recently excluded a proposed offshore wind energy area in Maryland from an offshore wind lease sale that is set to occur this year. 278,000 acres off the shores of Delaware and Virgnia were approved by BOEM, while 78,265 acres off the shore of Ocean City, MD,⁸ were deemed unviable due to the significant costs and mitigation of negative environmental effects that would be required.⁹ The excluded area was projected to generate

³ EESI. Beneficial Electrification

⁴ PJM. Markets & Operations (last accessed Feb. 23, 2024).

⁵ PJM. Winter Operations of the PJM Grid: December 1, 2020 – February 28, 2021 (Apr. 7, 2021).

⁶ PJM. Energy Transition in PJM: Resource Retirements, Replacements & Risks (Feb. 24, 2023).

⁷ MDE. Climate Pollution Reduction Plan – Climate Plan Data (Dec. 28, 2023).

⁸ BOEM. <u>BOEM Finalizes Wind Energy Areas in the Central Atlantic</u> (Jul. 31, 2023).

⁹ BOEM. Biden Harris Administration Advances Offshore Wind in the Central Atlantic (Dec. 11, 2023).

between 1.1 - 2.2 GW of power.¹⁰ Meanwhile, Ørsted has cancelled its Maryland offshore wind projects as the State and the broader Northeast region has hit major stumbling blocks in adding their own in-State renewable energy sources.¹¹ In 2021, Senate Bill 65 revised down the solar carve-out requirement in Maryland's renewable energy portfolio standard for every year from 2023-2029,¹² and the State has been challenged to add sufficient new solar resources. According to the Public Service Commission's 2022 Annual Report, applications for in-State photovoltaic solar renewable energy credits were down by ~3.9% from 2021 and the total capacity of projects approved was only 263 MW, down more than 40% from 2021.¹³

2. Reduction in Customers' Energy Costs

According to the United States Department of Energy ("DOE"), natural gas costs 3.3x less than electricity on a per-unit of energy basis. ¹⁴ Besides increased energy bills, studies have shown there are large costs associated with electrifying homes and buildings. For example, Home Innovation Research Labs found that electrifying an average efficiency gas house in the Baltimore climate zone provides minimal annual benefit and incurs a 48-60 year payback period, far above the 15-20 year useful life of many home appliances, such as heat pumps. ¹⁵ In contrast, upgrading to a high-efficiency gas house from an average efficiency gas house can yield annual savings between \$176 and \$196, with a payback period of only 5-7 years. ¹⁶ High-efficiency natural gas equipment has low up-front and ongoing operating costs and can provide energy savings in-line with the EmPOWER program and Maryland's climate goals.

3. Enables Better Management of the Electric Distribution System

The Company is uncertain of what criteria must be met to achieve "efficient electric grid operations." However, there is a growing risk that Maryland's power system may not be able to accommodate the increased load associated with widespread electrification. By comparison, natural gas appliances do not add significant load to the electric distribution system, and necessarily present less risk than appliances that add higher loads to the electric distribution system. The DOE's 2023 Transmission Needs Study found that PJM must increase within-region transmission by 61% by 2035 and interregional transfer capacity with the Midwest region by 474% by 2035, both relative to 2020 to accommodate high load and high clean energy growth.¹⁷ It can

¹⁰ Offshore WIND. BOEM Issues Draft EIS for Maryland Offshore Wind Project (Oct. 2, 2023).

¹¹ Maryland Matters. <u>Md. offshore wind developer announces 'repositioning' of project, seeks new financial support</u> (Jan. 25, 2024).

¹² Maryland General Assembly. Senate Bill 65 (Jun. 1, 2021).

¹³ Maryland Public Service Commission. 2022 Annual Report (April 2023).

¹⁴ DOE. Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy (Aug. 28, 2023).

¹⁵ Home Innovation Research Labs. <u>Cost and Other Implications of Electrification Policies on Residential Construction</u> Page 15, Table 13 (Feb. 2021).

¹⁶ Home Innovation Research Labs. <u>Cost and Other Implications of Electrification Policies on Residential Construction</u> Page 14, Table 12 (Feb. 2021).

¹⁷ DOE. Transmission Needs Study Mid-Atlantic Region (Oct. 30, 2023).

take decades to obtain permits for major transmission lines, ¹⁸ and more time is needed to plan, purchase land, construct, and complete other transmission development activities.

Behind-the-Meter Mandate

HB 864 states that, starting in 2025, at least 80% of GHG emissions reductions counted towards utilities' targets must come from behind-the-meter ("BTM") programs. A BTM program is defined as a program that impacts the customer side of the utility meter, which can include energy efficiency measures, demand response programs, and "beneficial" electrification. This 80% threshold would severely limit gas utilities from pursuing programs such as front-of-the-meter methane reductions from pipeline leaks. Addressing distribution system leaks are one example of useful front-of-the-meter solutions that the Company and other gas utilities should be able to include in their EmPOWER portfolios to help the program and the State achieve their climate goals. Gas utilities should not have to forego cost-effective solutions that reduce GHG emissions in favor of less impactful offerings to meet the 80% threshold created by HB 864, and therefore should not be subject to this requirement.

Feasibility of Targets

HB 864 requires the Public Service Commission ("PSC") to establish new GHG emissions reduction targets for gas and electric utilities that will achieve an average annual reduction of at least 1.8% against a baseline consumption of gas and electricity in Maryland buildings. The Company believes it is fair to distribute the burden of reducing emissions across all of the State's utilities but is concerned that the final target assigned to Washington Gas will not be feasible. The *EmPOWER Greenhouse Gas Abatement Potential Study* analyzed each the State's utilities' ability to reduce energy consumption and GHG emissions across multiple modeled scenarios. For both the Achievable Potential BAU and Achievable Potential Maximum Scenarios, the study found that Baltimore Gas & Electric and Pepco have a significantly higher potential to reduce emissions through energy efficiency programs than the rest of the State's utilities. ¹⁹ More generally, the study found that energy efficiency measures that address electricity consumption can have the largest impact on GHG emissions reductions in the State. ²⁰ The targets created in HB 864 should be established in accordance with the findings of this study. No utility should be required to meet an emissions reduction target that exceeds a reasonably achievable threshold.

Plan Reporting Timeline

The Company interprets the new timelines identified in HB 864 to mean there will be a new cadence for the three-year plan cycles, with 2025-2027, 2028-2030, 2031-2033, etc. being the new cycle. The bill language should be amended to maintain the current cadence of EmPOWER

¹⁸ National Governors Association Center for Best Practices. <u>Transmission Siting and Permitting: How Governor Leadership Can Advance Projects</u> (Feb. 2023). Page 7

¹⁹ PSC Mail log No. 300751. EmPOWER Maryland 2024-2029 GHG Abatement Potential Study – Final Report (Jan. 6, 2023) Pages 38 (BG&E) and 42 (Pepco)

²⁰ PSC Mail log No. 300751. EmPOWER Maryland 2024-2029 GHG Abatement Potential Study – Final Report (Jan. 6, 2023) Page 27

program filings and eliminate the need for refiling current energy efficiency programs less than a year after the 2024-2026 cycle was approved.

Conclusion

The Company is committed to working with stakeholders to help achieve Maryland's GHG emissions reduction targets. EmPOWER Maryland is an important tool in reducing GHG emissions from both electricity and gas usage. Electrification is not the sole solution to climate change in Maryland and should not be treated as such. There is a role for existing and future technology innovation to support diverse pathways to decarbonizing Maryland, and the State's existing gas infrastructure can and should be leveraged to preserve affordability, reliability, safety, and security of energy delivery.

For the above reasons Washington Gas respectfully requests an unfavorable report on House Bill 864. Thank you for your consideration of this information.

Contact:

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ADDENDUM: PROPOSED AMENDMENTS

Amendment 1 – Definition of Behind-the-Meter

Context:

The current definition of behind-the-meter program is very vague and could be misinterpreted. Having a more rigid definition is significant, especially with the proposed requirement for 80% of emissions reductions to come from behind-the-meter programs.

WGL Position:

WGL recommends providing additional language that clarifies the criteria that must be met for a program to be considered 'behind-the-meter.'

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (B) should be amended to state:

"Behind—the—meter program" means a program that impacts the onsite customer usage of energy in a manner that results in reductions in energy consumption or reductions in greenhouse gas emissions. program that impacts the customer side of the utility meter.

Amendment 2 – Definition of Beneficial Electrification

Context:

Amend the definition of beneficial electrification so that any replacement of fossil fuels with electricity must meet all three (3) criteria listed, not just one (1) of the three (3), to be considered beneficial electrification by changing an "or" to an "and".

WGL Position:

In order to be beneficial, an electrification project must be able to reduce GHG emissions, reduce energy costs to customers, and enable better management of the electric distribution system. For example, by only requiring one (1) of these three (3) criteria, customer may be burdened with higher energy costs due to "beneficial" electrification projects that reduce emissions but increase costs.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (C) (1)-(3) should be amended to state:

"Beneficial electrification" means the replacement of the direct use of fossil fuels in buildings with the use of electricity in a manner that:

- reduces overall lifetime greenhouse gas emissions;
- reduces customers' energy costs; and or
- enables better management of the electric distribution system.

Amendment 3 – Definition of Demand Response Program

Context:

The definition of demand response program should be expanded to incorporate both gas and electric programs.

WGL Position:

Gas utilities can implement demand response programs and should be allowed to do so under the EmPOWER statute, as HB 864 is currently written gas utilities would be excluded.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (E) should be amended to state:

"Demand response program" means a program established by an electric company or a gas company, an electricity supplier or a gas supplier, or a third party that promotes changes in electric or gas usage by customers from their normal consumption patterns in response to:

- (1) changes in the price of electricity or gas over time; or
- (2) incentives designed to:
 - (i) induce lower electricity or gas use at times of high wholesale market prices; or
 - (ii) ensure system reliability.

Amendment 4 – Definition of Front-of-the-Meter

Context:

Front-of-the-meter programs have never been clearly defined through EmPOWER, and providing clarity would help to determine what programs and services are eligible to be undertaken through EmPOWER.

WGL Position:

Adding specific language around utility operations can open the door for utilities to explore a wider range of cost-effective measures that can lower emissions, such as the potential to blend the existing natural gas supply with lower carbon fuels.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (H) should be amended to state:

"Front-of-meter community program" means a utility-administered program that:

- (1) is separate from front–of–meter utility programs;
- (2) impacts the utility side of the meter operations; and
- (3) directly benefits a set of customers.

7-220 (I) should be amended to state:

"Front-of-meter utility program" means a program that impacts the utility side of a meter and benefits all utility customers utility operations in a manner that results in reductions in energy consumption or reductions in greenhouse gas emissions. Utility operations may include:

- (1) the production and generation of energy;
- (2) the transmission and distribution of energy; or
- (3) the storage of energy.

Amendment 5 – Definition of Greenhouse Gas Emissions Reductions

Context:

The current definition of greenhouse gas emissions reductions excludes any measures taken by gas utilities and gas customers to reduce emissions, and only considers measures related to electric utilities and electric customers. The definition of greenhouse gas emissions reductions should include efforts related to reducing emissions from both upstream and end-use natural gas delivery.

WGL Position:

The definition of greenhouse gas emissions reductions should include efforts related to reducing emissions from both upstream and end-use natural gas delivery.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (K) (1)-(2) should be amended to state:

"Greenhouse gas emissions reduction" means a reduction in greenhouse gas emissions, measured in metric tons of carbon dioxide equivalents, including:

- (1) greenhouse gas emissions from the generation of electricity delivered to and consumed in the state; and
- (2) greenhouse gas emissions from the combustion of natural gas by end users in the state; and
- (23) line losses from the transmission and distribution of electricity, regardless of whether the electricity is generated in the state or imported; and

(4) pipeline leakage of methane from the transmission and distribution of natural gas within the state.

Amendment 6 – Definition of Non-Energy Program

Context:

The current definition of nonenergy program is very broad and could result in confusion relative to what can qualify as a nonenergy program.

WGL Position:

HB 864 should contain a more detailed definition of what a nonenergy program is to reduce confusion around what programs would qualify.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (N) should be amended to state:

"Nonenergy program" means a program with greenhouse gas emissions reductions benefits that are primarily nonenergy based that results in reductions in greenhouse gas emissions that are not associated with the consumption, production, distribution, or storage of energy.

Amendment 7 – Required Programs and Services

Context:

Amend the requirements of the gas and electric companies' plans to only have to consider one (1) of the three (3) proposed programs and services instead of all three (3) by changing an "and" to an "or" in several places.

WGL Position:

Utilities and their customers should be able to have the flexibility to choose which programs and services best fit their energy needs. If one (1) of the included proposed programs and services does not align with the current needs of customers or falls outside the scope of services a utility offers, a utility should not be forced to implement it to comply with the proposed legislation.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (O) (1) should be amended to state:

 achieve greenhouse gas emissions reductions through energy efficiency, conservation, demand response, or and beneficial electrification;

7-222 (A) should be amended to state:

Subject to review and approval by the Commission, each electric company, each gas company, and the Department shall develop and implement programs and services in accordance with §§7–223, 7–224, and 7–225 of this subtitle to encourage and promote the efficient use and conservation of energy, demand response, or and beneficial electrification by consumers, electric companies, gas companies, and the Department in support of the greenhouse gas emissions reduction goals and targets specified in title 2, subtitle 12 of the environment article

7-222 (B) should be amended to state:

As directed by the Commission, each municipal electric or gas utility and each small rural electric cooperative shall include energy efficiency and conservation, demand response, or and beneficial electrification programs or services as part of their service to their customers.

7-223 (A)(3) should be amended to state:

Achieves the greenhouse gas emissions reduction target established for the electric company or gas company under subsection (b) of this section through cost–effective energy efficiency and conservation programs and services, demand response programs and services, or and beneficial electrification programs and services.

7-224 (A)(1) should be amended to state:

Beginning January 1, 2025, and every 3 years thereafter, the Department shall procure or provide to low— and moderate—income individuals energy efficiency and conservation programs and services, demand response programs and services, or and beneficial electrification programs and services that achieve the greenhouse gas emissions reduction targets established for the Department under paragraph (2) of this subsection.

Amendment 8 – PSC Programs and Services Determination

Context:

As currently written, utilities may implement any program or service that the PSC determines to be appropriate and cost-effective. The term appropriate is highly subjective and should be replaced with a more definitive criterion.

WGL Position:

Utilities should be able to implement programs or services that are not only cost-effective, but that can either reduce energy consumption or GHG emissions. This aligns with the ultimate goals of EmPOWER Maryland and the State's climate goals.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-222 (C)(1) should be amended to state:

Requiring each electric company and gas company to establish any program or service that the commission determines to be appropriate and cost–effective and reduces energy consumption or greenhouse gas emissions;

Amendment 9 – Ability to Pursue all GHG Reducing Measures

Context:

Through EmPOWER Maryland, utility-administered energy efficiency programs offer a wide array of energy savings measures to customers. Certain measures, such as energy conservation kits, home energy reports, and demand response events, offer shorter-lived energy savings. While other measures, such as boiler system and heat pump installations can produce tangible energy savings for 20 years or longer. The legislation calls for the Commission to prioritize the measures that produce longer-lived energy savings and GHG emission reductions by establishing a minimum weighted average measure life.

WGL Position:

While the Company agrees with the need to prioritize long-lived greenhouse emissions reduction measures, doing so with a minimum weighted average measure life would potentially eliminate long-standing EmPOWER energy efficiency programs that reduce shorter-lived (annual), but equally valuable GHG emissions. As long as EmPOWER cost-effectiveness thresholds are met, all sources of energy savings should be leveraged to achieve GHG reduction targets.

Proposed Amendment:

WGL proposes the following section be amended as shown by the text in bold:

7-223 (C) should be amended to state:

The Commission may give priority to long-lived greenhouse gas emissions reduction measures in the plans by establishing a minimum weighted average measure life for the plan of each electric company and gas company.

Amendment 10 – 80% Behind-the-Meter Requirement

Context:

HB 864 states that at least 80% of the GHG emissions reductions for both electric and gas utilities should come from "behind-the-meter" (BTM) programs that impact the customer's side of the utility meter. The main driver of having this split historically has been to limit the electric utilities' ability to claim energy savings towards their EmPOWER energy efficiency targets from the most prevalent "front of the meter" (FTM) electric utility program, Conservation Voltage Reduction (CVR).

WGL Position:

It should be clearly understood that the issue concerning the level of impact a FTM program has on a utility's ability to achieve a GHG reduction target is a broader categorization of a more specific debate. That specific debate is determining the appropriate level of contribution that electric utility CVR programs have towards achieving GHG reduction targets. CVR programs are specific to electric utilities and do not apply to WGL and other gas utilities.

WGL believes that gas utilities have a narrower pathway to reduce emissions compared to electric utilities, and that all tools in the "toolbox" should be available for gas utilities to pursue higher levels of GHG emission reductions. Applying an 80%/20% BTM/FTM mandate to gas utilities will limit the Company's ability to achieve those higher levels of GHG emission reductions. WGL believes no such split should apply to gas utilities.

Proposed Amendment:

WGL proposes the following section be amended as shown by the text **in bold**:

7-223 (E) should be amended to state:

Beginning January 1, 2025, at least 80% of the greenhouse gas emissions reductions counted toward each electric company's **and each gas company's** greenhouse gas emissions reduction targets established under this section shall come from behind-themeter programs.

Amendment 11 – Full Cost Impact to Customers for Retrofits

Context:

Amend the required contents of the DHCD's plan to provide energy efficiency retrofits to all low–income households by 2032 to include a full breakdown of what this plan will cost any participating customers – including energy costs, electric rate impacts, panel upgrades, appliance costs, weatherization, and grid upgrade costs.

WGL Position:

The State should, as a part of developing the plan outlined in the bill to provide energy efficiency retrofits to all low–income households by 2032, include all costs associated with implementing the plan. When considering a conversion from gas to electric, customers should be aware of the costs associated with that transition.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-224 (J)(1) should be amended to state:

The Department shall collaborate with the members of the Task Force to develop a plan, including a budget, a timeline, a complete breakdown of what a retrofit will cost the average low-income household, including but not limited to the change in their energy bills, cost to upgrade their appliances, cost to upgrade their paneling and wiring, cost to weatherize their home, and any charges due to required grid upgrades, and potential funding sources, to provide energy efficiency retrofits to all low–income households by 2032.