



Recommendations for Implementing the District's Building Energy Performance Standard in Affordable Multifamily Housing

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Summary of Recommendations

NHT and the HAND convened D.C. affordable housing advocates, developers, and owners to discuss how to implement the District's new Building Energy Performance Standards (BEPS) in affordable housing. This section provides an overview of our recommendations to the Department of Energy and Environment (DOEE) in its implementation of BEPS as it pertains to multifamily affordable housing developers and owners in the District.

Background

- The Clean Energy D.C. Omnibus Amendment Act of 2018 (Act) establishes a minimum BEPS that owners of private buildings will be required to comply with every five years starting in 2021.
- Preserving both subsidized and unsubsidized affordable housing is critical to stemming the loss of low-cost housing and meeting the future housing needs of D.C. and the wider region. The District's housing affordability challenges and the resulting threat of displacement disproportionately impact communities of color.
- There are nearly 43,000 units in Public Housing, Section 8, LIHTC, and naturally-occurring affordable housing (NOAH) that will likely be covered by BEPS.
- D.C.'s Climate and Energy Action Plan ("Clean Energy DC") underscores the importance of planning for equity when enacting and implementing climate policies, including protecting low- to moderate-income residents from increased financial burdens. Clean Energy DC also states that race and ethnicity are the most powerful signifying factors of communities facing financial hardship and that institutional racism has created extreme wealth and income gaps between White and non-White households in the District.

Implementation Recommendations

- The primary obstacles for multifamily affordable housing developers will face relate to limited access to financial resources and the capacity required to undertake building upgrades.
- DOEE should take full advantage of the flexibility allowed under the law to accommodate the unique challenges owners face. Close coordination and alignment among an array of D.C. agencies are also needed to ensure that owners have the financial and technical resources needed to comply.

Exemptions to delay compliance:

- **Ability to Pay for Upgrades/Financial Hardship** – Delay compliance if building reserves or net operating income are insufficient to cover the cost of upgrades, and the owner cannot access debt.
- **Financing Cycle** – Delay compliance if the building is expected to be recapitalized.
- **Subsidized Buildings with Utility Allowances**- Since building owners cannot recoup the cost of energy efficiency upgrades, delay compliance until the property goes through a refinancing.

- **District-owned Public Housing**
- **Residents Exercising their Rights Under the Tenant Opportunity to Purchase Act (TOPA)**

Defining property types:

- **Building Style** - Set different performance standards for garden/low-rise buildings compared to mid-rise.
- **Affordability** - The 2018 median EnergyStar score is lower for deeply subsidized buildings and naturally-occurring affordable housing as compared to the median score for all multifamily rental housing. DOEE should provide additional accommodation to these properties by providing funding to help them cover the cost of efficiency upgrades.

Compliance pathways:

- **Prescriptive Pathway-**
 - Allow energy efficiency measures installed within the preceding three years of the first compliance cycle to be counted towards meeting the prescriptive pathway.
 - Tailor Prescriptive Measures to Building Styles (garden, low-rise, mid-rise)
 - Provide Flexibility in the Types of Measures for Historic Properties
- **Performance Pathway-**
 - Incent Deeper Energy Savings by Offering Automatic Compliance with Future Cycles - Buildings that demonstrate a decrease in normalized site energy use intensity by increments of 5% above the required 20% should be rewarded by DOEE as automatically compliant with one or more future compliance cycle.
- **Alternative Compliance Pathways-**
 - Allow Progress Made in the Previous 3-5 Years to Count Toward the 20% Reduction Requirement
 - Allow a 20% Reduction in Source Energy Use Intensity to Comply
 - Allow Improvement in Energy Star Score to Count Towards Compliance
 - Align Compliance Requirement with the D.C. Qualified Allocation Plan
 - Develop an Alternative Compliance Pathway for Public Housing

Non-Compliance / Penalties:

- Base Fines on the Distance from Reduction Requirement
- Waive Fines if an Owner Demonstrates a Plan to Comply
- Institute an Appeals Process
- Provide Flexibility to Account for Resident Energy Use Behavior

Technical Assistance:

- **Awareness of Resources –**
 - Common Cost-Effective Measures – Provide a base-level list of energy efficiency upgrades

- Approved Vendor List – Develop a list of approved vendors who meet certain industry standards
- Agency Contacts/Coaches - Provide a list of resources across the District government for various aspects of building processes, from permitting and assistance with energy-efficient retrofit planning.
- **Create a One-Stop-Shop-** Provide a single access point to all available incentive programs and assist owners to execute all project design, predevelopment, and construction tasks.
- **Tenant Education** - Provide resources and tools to help building owners engage their residents and educate them about energy-saving habits and energy use.
- **Third-Party Data Verification** - Allow building owners to use management agents to conduct the verification. DOEE should also encourage owners to create a consortium to pool staff resources to complete verifications and provide financial resources to help cover the cost of verification services.

Financial assistance:

- **Structure Funding to Address Unmet Needs** - Additional analysis should be done to understand the scale of the costs of BEPS compliance and the unmet resource needs in the market. Use the \$3M annually as grants for flexible uses, including predevelopment expenses, energy audits, health and safety measures, etc.
- **Target Properties with Limited Access to Financial Resources-** These may include smaller properties, limited-equity co-ops, buildings in mid-cycle financing, and NOAH/rent-controlled properties.

Complementary Policy Recommendations

- Close coordination and alignment among an array of D.C. agencies are also needed to ensure that owners have the financial and technical resources needed to comply.

Align Financial Resources to Support BEPS Implementation:

- **DCSEU-** Increase the percent of overall portfolio savings that come from low-income properties; Align rebates with the measures required for the prescriptive compliance pathway; Adopt a benchmark of average energy saved per unit or household.
- **AltaGas-WGL Merger Program-** WGL and DCSEU should work together to ensure that program design supports comprehensive retrofits.
- **Pepco-Exelon Merger Program-** DC PSC should expedite the selection of an implementer.
- **D.C. Green Bank-** Develop tailored financing products that overcome barriers to financing for affordable housing owners.
- **Align with LHITC and other DHCD Funding**



Design Efficiency Programs to Minimize Renters' Risk of Displacement:

- Efficiency programs that significantly subsidize energy efficiency upgrades should include protections for residents, including restrictions on rent increases.

Engage/Educate Lenders about the Need to Underwrite Energy Efficient Upgrades

- The lending community will need to be engaged and educated about the benefits of and how to underwrite energy-efficient upgrades.

Education/Outreach especially to Co-op Owners/Housing Counselors

- DOEE should consider aggressive outreach through multiple avenues to ensure that there is enough education provided to smaller building owners, such as co-op owners or single multifamily building owners and developers, so that they are aware of the BEPS requirement and the consequences if they are out of compliance.

Background

The Clean Energy D.C. Omnibus Amendment Act of 2018 (Act) establishes a minimum Building Energy Performance Standard (BEPS) that owners of private buildings will be required to comply with every five years. If buildings meet the square footage thresholds (equal to or greater than 50,000 square feet by 2021, then including all buildings 10,000 square feet or greater by 2026), owners will be required to make certain unspecified energy efficiency repairs and improvements if they do not meet the energy performance standard.

The National Housing Trust (NHT) and Housing Association of Nonprofit Developers (HAND) appreciate the opportunity to provide recommendations to D.C. Department of Energy and the Environment (DOEE) on how to implement BEPS for affordable housing developers and owners in the District of Columbia. This document provides an overview of the BEPS program, the consultative process that NHT and HAND undertook to gather feedback from the affordable housing industry in D.C., and the recommendations that resulted from that process.


The recommendations described in this document are grounded in the realities of the D.C. affordable housing crisis. This crisis is resulting in the displacement of low-income households and people of color at a greater rate than any other city in the country. Climate policy must be implemented equitably to alleviate the economic burdens of under-resourced communities while providing a clean and safe environment.

Preserving both subsidized and unsubsidized affordable housing is critical to stemming the loss of low-cost housing and meeting the future housing needs of D.C. and the wider region. Improving the energy and water efficiency of buildings provides an opportunity to preserve affordable housing. However, affordable housing owners face several obstacles to improving the energy efficiency of their properties. Obstacles primarily relate to limited access to the funding and capacity required to undertake building upgrades.

Therefore, to implement BEPS equitably in affordable housing, we recommend that DOEE take full advantage of the flexibility allowed under the law to accommodate the unique challenges owners face in making energy-efficient upgrades to their buildings. We also recommend close coordination and alignment among an array of D.C. agencies to ensure that owners have the financial and technical resources needed to comply.

Overview of Sessions

The National Housing Trust (NHT), a national non-profit affordable housing advocacy organization based in Washington, D.C., and the Housing Association of Nonprofit Developers (HAND), convened D.C. affordable housing advocates, developers, and owners to discuss how to implement BEPS in affordable housing. These discussions happened throughout two 3-hour



sessions in August and September 2019. Representatives from DOEE and several other city agencies were also in attendance.¹

The discussions focused on several implementation decisions that DOEE has yet to make, including the following:

- **Exemptions to delay compliance-** The law provides DOEE authority to provide flexibility to affordable housing owners by delaying compliance based on criteria that is yet-to-be-determined. DOEE sought input on the circumstances under which to grant flexibility to owners of affordable housing.
- **Defining property types-** The BEPS performance standard will be set based on the median Energy Star score for different property types. The law grants discretion to DOEE to define the property types. The discussion focused on whether the energy performance standard should be the same for affordable housing as it is for other types of buildings.
- **Compliance pathways-** Building owners with Energy Star scores below the median for their property type must follow a compliance pathway to reduce energy usage. Building owners can choose to either follow a performance pathway that requires a 20% reduction in energy use intensity or implement prescriptive efficiency measures. The law also provides DOEE discretion to develop additional pathways. Attendees discussed if DOEE should adopt a different compliance pathway that is specific to affordable housing.
- **Non-Compliance/Penalties-** Buildings failing to comply with the building energy performance requirements at the end of the 5-year compliance period shall pay an alternative compliance penalty established by DOEE. Attendees discussed whether penalties for non-compliance should be specific to affordable multifamily housing given unique challenges.
- **Technical Assistance-** Attendees discussed the types of technical assistance building owners would need to comply with the law.
- **Financial assistance.** The law requires DOEE to coordinate with the D.C. Sustainable Energy Utility (DCSEU) and the Green Finance Authority (Green Bank) to establish incentive and financial assistance programs to help buildings owners with the cost of compliance. The law also provides for a minimum of \$3.1 million annually in funding support for affordable housing owners. Attendees discussed the types of financial assistance that would be helpful to owners.

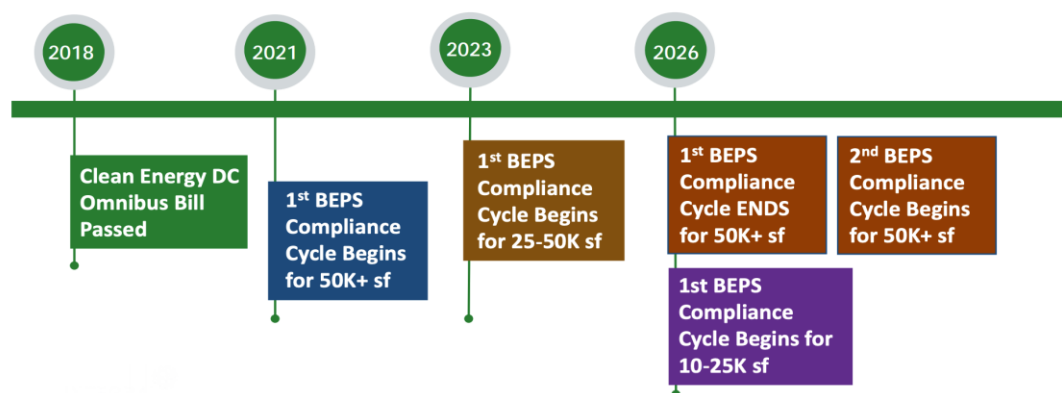
¹ See list of attending organizations in Appendix A. Note: The inclusion of these organizations on this list does not imply their full endorsement or support of all the recommendations described in this report.

Brief Background on BEPS

The D.C. City Council passed BEPS as part of the Clean Energy D.C. Omnibus Act of 2018. Privately-owned buildings larger than 50,000 square feet and District-owned buildings larger than 10,000 square feet must begin complying with the law in 2021. The law sets the energy performance standard no lower than the median Energy Star score for each building type. DOEE has the authority to set a more stringent standard. If a building's Energy Star score is below the performance standard for its property type, the owner has five years to complete one of the

Figure 1: BEPS Compliance Cycle

BEPSDC COMPLIANCE CYCLES



Source: <https://doee.dc.gov/node/1406676>

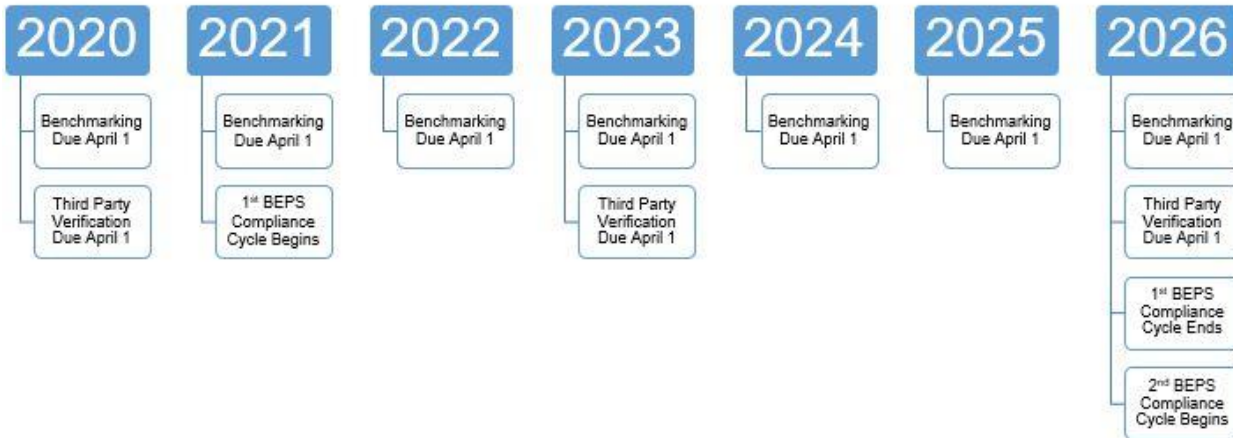
compliance pathways described above or face a penalty. Compliance will begin in 2023 for owners of buildings between 25,000 and 50,000 square feet and in 2026 for owners of buildings between 10,000 and 25,000 square feet.

The BEPS requirements build upon the success of the District's Energy Benchmarking program, which has been collecting energy and water performance data on properties over 50,000 square feet since 2013.² The law requires owners of buildings smaller than 50,000 square feet to begin benchmarking energy and water usage. Owners of buildings with 25,000 square feet or more must begin benchmarking in 2021, and owners of buildings with 10,000-plus square feet must begin benchmarking in 2024. The law also requires benchmarking data to be third-party verified every three years.

² D.C. Department of Energy and the Environment, Building Energy Performance Standards website. <https://doee.dc.gov/service/building-energy-performance-standards>

Figure 2: Example Timeline for Benchmarking

Example Timeline: Private-Owned Building at/below 50,000 square feet



Source: <https://doee.dc.gov/node/1406676>

The Important Role of Equity in D.C.'s Climate Plan

D.C.'s Climate and Energy Action Plan ("Clean Energy DC") underscores the importance of planning for equity when enacting and implementing climate policies.³ Clean Energy DC describes equitable climate action as "focus[ing] on providing support to those disproportionately affected [by climate change], and ensuring equal access to social benefits and opportunities."⁴ The plan cites several potential risks to equity from climate action if strategies are not carefully executed, including increasing financial burdens that are disproportionately carried by low- to moderate-income residents and reinforcing structural inequality by increasing social equity gaps in the District.⁵

To combat risks to equity, Clean Energy DC recommends that the District "create actions to directly support at-risk communities including low-to-middle income populations and populations of color" when developing and implementing climate and energy policies.⁶ Clean Energy DC cites several potential unintended consequences that could harm historically-marginalized communities if climate policies are not implemented equitably. The plan explicitly acknowledges the potential added pressure on rents from the costs of complying with energy retrofit requirements.⁷

The District is already wrestling with significant and growing housing affordability challenges. The Urban Institute recently reported that "home prices and rents are climbing out of reach for a growing share of households" and that such trends threaten the economic well-being of the Washington region.⁸ Contributing to these challenges has been the loss of low-cost rental units that rent for less than \$1,300 per month.⁹ Units at that rent level are affordable to individuals making \$52,000 per year or less, equivalent to less than 80% of the District's median household income.¹⁰

Increased housing costs and the loss of affordable housing results in the displacement of long-time District residents. A recent report on neighborhood change from the Institute on Metropolitan Opportunity at the University of Minnesota Law School found that Washington, D.C. has suffered the most widespread low-income displacement of any major central city since 2000.¹¹

The District's housing affordability challenges and the resulting threat of displacement disproportionately impact communities of color.¹² As stated in Clean Energy DC, race and

³ Clean Energy DC: The District of Columbia Climate and Energy Action Plan, August 2018.

⁴ Ibid., 41.

⁵ Ibid., 47.

⁶ Ibid., 42.

⁷ Ibid.


⁸ The Urban Institute. Meeting the Washington Region's Future Housing Needs: A Framework for Regional Deliberations. September 2019.

⁹ Ibid. The report found that the D.C. region lost an average of 12,600 units each year renting at less than \$1,300 per month from 2000 and 2010 and 10,500 units between 2010-2017.

¹⁰ Ibid., 19.; U.S. Census Bureau Quick Facts for D.C.

¹¹ Institute on Metropolitan Opportunity, University of Minnesota Law School. American Neighborhood Change in the 21st Century. April 2019.

¹² Ibid.



ethnicity are the most powerful signifying factors of communities facing financial hardship and that institutional racism has created extreme wealth and income gaps between White and non-White households in the District.¹³

The continued loss of affordable housing threatens to exacerbate displacement trends. Another 10,000 subsidized affordable rental units serving very low-income residents are at risk of being lost from the District's affordable housing stock over the next ten years.¹⁴ Subsidized affordable housing is at risk of being lost from the affordable housing stock because of financial and physical distress or when existing owners choose to opt-out of affordability commitments to attract market-rate renters if located in strong housing markets.¹⁵ If the added cost to comply with BEPS is significant, it could lead the building owner to choose to exit the Section 8 program and redevelop the property to market-rate development.

¹³Clean Energy DC: The District of Columbia Climate and Energy Action Plan, August 2018.

¹⁴ PAHRC and the National Low Income Housing Coalition. 2018 Preservation Profile: District of Columbia.

¹⁵ U.S. Department of Housing and Urban Development Office of Policy Development and Research. Opting In, Opting Out a Decade Later. May 08, 2015.

Overview of Affordable Housing in the District

There are several different types of affordable housing in the District. They include privately-owned, subsidized affordable housing, District-owned public housing, and privately-owned, unsubsidized housing that rents at levels below the median market level due to their location and building condition or are subject to the District's rent control law.

Owners of subsidized affordable housing receive project-based rental subsidies or favorable financing from the federal government. The most common federal programs are the Project-Based Section 8 (Section 8), the Low-Income Housing Tax Credit (LIHTC), and Public Housing programs. These programs serve households at different affordability levels.

The Section 8 program provides deep rental subsidies to ensure that residents do not pay more than 30% of their income on rent and utilities. Nationwide, the average income of a Section 8 household is less than \$13,000 annually. In the District, an annual income of around \$13,000 equates to 15% of median household income.¹⁶ There are 9,300 households in the District living in privately-owned Section 8-subsidized apartment buildings.¹⁷

As with the Section 8 program, public housing serves extremely low-income households and guarantees that residents pay no more than 30% of their income on rent and utilities. Nationwide, the average income of a public housing resident is approximately \$14,000 per year.¹⁸ Public housing is owned and operated by the D.C. Housing Authority. There are approximately 8,500 units in public housing properties in the District. Nearly 3,500 of these units are in buildings in need of immediate investment.¹⁹ Recently, the D.C. Housing Authority announced plans to demolish or significantly rehabilitate ten public housing buildings with 2,160 apartments.²⁰ Public housing larger than 10,000 square feet must begin complying with BEPS in 2021 along with other types of District-owned buildings.

LIHTC properties serve a mix of people of lower, moderate, and middle income. Rents in LIHTC properties are affordable to tenants earning no more than 50% to 60% of area median income (AMI). There are approximately 19,000 units in 153 LIHTC properties in the District.²¹

Unsubsidized, or naturally-occurring affordable housing (NOAH), is an important component of the District's affordable housing stock and is also at risk of being lost. Apartments in NOAH buildings rent at levels below the median market rent level without housing subsidies.²² NOAH buildings tend to be older, located in less desirable neighborhoods, be in poorer physical condition, and have fewer amenities than more expensive buildings. Since many of these

¹⁶ The median household income in D.C. was \$77,649 in 2017. U.S. Census Bureau Quick Facts for D.C.

¹⁷ National Low Income Housing Coalition. 2019 Advocate's Guide. 4-46-4-51.

¹⁸ Ibid., 4-25-4-32.

¹⁹ PAHRC and the National Low Income Housing Coalition. 2018 Preservation Profile: District of Columbia

²⁰ Delgadillo, Natalie. "D.C. Housing Authority Proposes to Completely Demolish or Gut Ten Public Housing Properties." DCIST. July 3, 2019.

²¹ NHT analysis of the data from the National Housing Preservation Database.

²² "Naturally Occurring Affordable Housing". CoStar Real Estate/Portfolio Strategist. January 2017. Vol. 21 no 2.

buildings are older, they may require major system upgrades and other structural improvements. The challenge is to renovate these buildings without leading to increased rents.

Since there is no comprehensive database of asking rent levels in multifamily buildings, it can be difficult to identify NOAH properties. However, the commercial real estate market research company CoStar has developed a Building Rating System to identify properties that may qualify as NOAH based on an evaluation of building age, physical condition, level of amenities, and other variables. Based on CoStar's methodology, there are potentially 26,000 units in 1,452 multifamily buildings in the District that likely rent at levels below the market median.²³ These buildings tend to be smaller in size- approximately 16 total units and 14,309 total square feet on average.²⁴ There are approximately 3,000 units in 29 NOAH properties covered under the first BEPS cycle.

Some residents of NOAH buildings may be protected from significant rent increases because their buildings are subject to the District's rent control law. D.C.'s rent control law restricts annual rent increases in covered buildings to the Consumer Price Index (CPI-W) percentage plus 2% and no more than 10% per year. However, buildings that undertake capital improvements can increase rents up to 20% to recover the costs of improvements.²⁵ Any work to substantially rehabilitate or improve a building can be considered a capital improvement.²⁶ Owners can pass on the cost of building upgrades that result in a net saving in energy use so long as the cost savings are passed on to the tenants.²⁷ Owners are required to recover the cost of improvements by spreading rent increases over 96 months if the improvements were made building-wide or 64 months for improvements made to a subset of rental units.²⁸

While there is no definitive data source of the number of properties and units subject to rent control, the Urban Institute has estimated that 4,818 properties with 79,145 housing units are potentially subject to rent control regulation in the city.²⁹ Approximately half of the units located in rent-controlled properties are in buildings with 50 or more units, according to the Urban Institute.³⁰ Buildings with 50 or more units are likely to be large enough to be required to comply during the first BEPS cycle.

Table 1 below summarizes the total number of housing units in affordable multifamily properties in the District, as well as provides estimates of the number and percentage of affordable housing units covered under the different BEPS compliance cycles based on building size.³¹ The table

²³ NHT analysis of CoStar Group data accessed October 2017.

²⁴ Ibid.

²⁵ D.C. Department of Housing and Community Development. What you should know about rent control in the District of Columbia. Revised October 2018.

²⁶ D.C. Office of Tenant Advocate Capital Improvement Petition Process webpage.
<https://ota.dc.gov/page/capital-improvement-petition-process>

²⁷ Code of the District of Columbia. § 42-3502.10. Petitions for capital improvements.
<https://code.dccouncil.us/dc/council/code/sections/42-3502.10.html>

²⁸ D.C. Department of Housing and Community Development. What you should know about rent control in the District of Columbia. Revised October 2018

²⁹ The Urban Institute. A Rent Control Report for the District of Columbia. June 2011.

³⁰ Ibid.

³¹ As stated above, privately-owned buildings with at least 50,000 square feet and District-owned buildings with at least 10,000 square feet are required to start complying with the law in 2021. Privately-owned buildings with at least 25,000 square feet are required to begin complying in 2023. Privately-owned buildings with at least 10,000 square feet are required to begin complying in 2026.

does not include rent-controlled buildings because of the lack of detailed information available about these buildings.

Table 1: Number of Units in Buildings by Affordability and Building Size

	All DC Units	Units in Buildings > 50k Sq. Feet/ Public Housing > 10k Sq Feet; Compliance begins in 2021		Units in Buildings 25K to 50K Sq. Feet ³² ; Compliance begins in 2023		Units in Buildings 10K to 25K Sq. Feet; Compliance begins in 2026		Total Covered Units	
		Number	Pcnt	Number	Pcnt	Number	Pcnt	Number	Pcnt
Public housing	7,174	6,790	95%	--	--	--	--	6,790	95%
Section 8	11,294	7,666	68%	1,075	10%	1,141	10%	9,882	88%
LIHTC	12,009	5,005	42%	1,723	14%	2,305	19%	9,033	75%
NOAH	26,604	2,994	11%	4,124	16%	10,051	38%	17,169	65%
Total:	57,081	22,455	39%	6,922	12%	13,497	24%	42,874	75%

Note: It is possible for LIHTC properties to also have Section 8 assistance. The count of LIHTC properties in this table only includes properties without Section 8 assistance. This approach was taken to avoid double-counting units that participate in both programs, as well as to provide a precise count of units that serve a lower-income population of renters.

Median 2018 Energy Star Scores of Affordable Housing

NHT reviewed multiple datasets to assess the energy performance of affordable buildings larger than 50,000 square feet and covered under the first BEPS cycle to assess the Energy Star score of multifamily rental buildings based on their affordability category. Buildings of this size have been required to disclose energy performance data since the passage of the Clean and Affordable Energy Act of 2008 (CAEA). DOE publishes Energy Star scores on its website. NHT merged DOE's data with data from the National Housing Preservation Database, a comprehensive

³² The number of units subject to begin complying in cycles 2 and 3 of BEPS were estimated based on the average square footage of individual buildings. In some cases, a property can consist of multiple individual buildings. If each building within a property is served by an individual utility meter, then it's possible that the buildings will only be considered covered if they individually meet the square footage requirement, rather than based on the aggregate size of all buildings. Since access to data on metering is not available, the assumption was made that buildings are individually-metered when properties consist of multiple buildings. This methodology could overestimate the number of units in buildings that must begin complying in cycle 3 and underestimate the number of units in buildings that must begin complying in cycle 2 if many individual buildings are on the same meter.

source of data on the inventory of publicly supported housing properties. Additional data were used to identify and determine the Energy Star score of naturally-occurring affordable housing.

Table 2 below summarizes the median Energy Star scores for all multifamily rental housing and different types of affordable housing. The median Energy Star score varies across the building types. The overall median score for multifamily rental housing is 67. The median score of LIHTC properties without Section 8 subsidies is also 67.

The median 2018 Energy Star score of Section 8, naturally-occurring affordable housing, and public housing properties are all less than the median Energy Star score for multifamily rental housing. While the median score for Section 8 properties is only slightly less than the median score for all multifamily rental housing, approximately 60% of units in buildings subject to the first compliance cycle will need to undertake energy efficiency upgrades using the overall 2018 median Energy Star score for multifamily rental housing.

The median scores for both NOAH and public housing properties are considerably lower than the overall median score for multifamily rental housing. As described earlier, NOAH buildings tend to be older, located in less desirable neighborhoods, be in poorer physical condition, and have fewer amenities than more expensive buildings. As a result, NOAH buildings may not be generating enough rental income to cover the cost of building upgrades, including energy efficiency upgrades. The much lower median score for public housing properties is likely the result of a legacy of disinvestment by the federal government in the public housing stock in the District and throughout the country.

Table 2: Median 2018 Energy Star Scores by Affordability Type

	Median 2018 Energy Star Score	Number of Units Below the MF Rental Housing Median	Percent of Units Covered in Cycle 1 Below the MF Rental Housing Median
All MF Rental Housing	67	38,275	50%
LIHTC w/out Sec 8	67	1,748	35%
Section 8	64	4,618	60%
NOAH	55	1,742	58%
Public Housing^a	31	1,987	100%
<p><i>^aOnly public housing properties deemed in compliance with DOEE's benchmarking requirement were included in this analysis. More than half (15 out of 26) of public housing properties were not considered compliant with the requirement in 2018 and did not have accurate Energy Star scores.</i></p>			

Barriers to Energy Efficiency in Affordable Buildings

Affordable housing owners face several obstacles to improving the energy efficiency of their properties. Obstacles primarily relate to limited access to funding to pay for improvements and limited staff time to dedicate to the process of identifying and pursuing upgrades.

Financial Challenges

Affordable housing owners lack access to funding for efficiency upgrades for several reasons. One reason is limited access to upfront capital. Subsidized affordable housing, in particular, tends to operate on tight margins. Properties underwritten to serve very low-income households may not generate sufficient net income to cover unexpected costs. While both Section 8 and LIHTC properties are required to fund replacement reserves to cover the cost of expected repairs and upgrades, the amount of reserves is often insufficient to fund needed improvements fully.³³ Also, building owners often need to request permission from HUD or investors to access the reserves they do have. In public housing, funding from the federal government to housing authorities has been insufficient to keep up with the capital needs of buildings. The total capital needs backlog for public housing nationwide is estimated to be \$56 billion.³⁴

Access to debt to finance efficiency upgrades is often unavailable to affordable housing owners, especially mid financing cycle. One challenge is that the amount of debt an affordable housing property can leverage is limited when cash flows are thin and given traditional underwriting standards. Credit enhancements and flexible capital from non-traditional lenders like Community Development Financial Institutions (CDFIs) can help address this challenge, but such products are rare in the market.³⁵ Encouraging lenders to underwrite energy savings is also needed.³⁶

A second challenge relates to restrictions imposed by existing mortgage holders that limit an owner's ability to take on new debt, especially when using the property as collateral, or there are pre-existing conditions that limit the overall amount of debt allowed on the property.³⁷ Unsecured or junior lien financing can help to address this challenge.

These restrictions are especially problematic when an owner wants to undertake a standalone retrofit between refinancing cycles. Affordable housing owners can more easily finance energy efficiency upgrades when they are refinancing their debt and can fold in the cost of energy efficiency improvements into new first mortgages. Therefore, timing retrofits to occur as part of the refinancing process is a key strategy that helps ensure that building owners can access the resources they need to complete building upgrades.

³³ Abt Associates Inc. What Happens to Low-Income Tax Credit Properties at Year 15 and Beyond?. August 2012.

³⁴ National Low Income Housing Coalition. 2019 Advocate's Guide. 4-25-4-32.

³⁵ State and Local Energy Efficiency Action Network. (2017). Energy Efficiency Financing for Low- and Moderate Income Households: Current State of the Market, Issues, and Opportunities. Prepared by: Greg Leventis, Chris Kramer, and Lisa Schwartz of Lawrence Berkeley National Laboratory.

³⁶ Community Preservation Corporation. Underwriting Efficiency. 2017.

³⁷ State and Local Energy Efficiency Action Network.

Another financial challenge some affordable housing owners face is their inability to recoup the costs of building upgrades due to utility allowance requirements. In individually-metered, subsidized affordable properties, the amount of rent paid by the tenant includes an allowance to cover the cost of utilities. In the case of Section 8 properties, any reduction in utility allowances because of savings from an energy retrofit also reduces the amount of subsidy that the owner gets from HUD.³⁸ As a result, owners are not incentivized to invest in energy efficiency upgrades and cannot use cost savings to replenish operating reserves or repay loans.

Capacity Challenges

Affordable multifamily owners and managers have limited staff capacity and resources to devote to planning for and implementing energy efficiency improvements. They often must deal with competing building needs and priorities. They will require both technical resources as well as the flexibility to ensure they can comply with BEPS.

Property owners and managers generally do not have the expertise to conduct audits and evaluate which energy efficiency measures make the most sense to implement. They may also be unfamiliar with how to find construction contractors that are qualified to make efficiency improvements. Building owners will need assurances that the measures selected and implemented will result in the amount of energy savings required to comply with the law. Complementary programs that provide robust technical assistance and project management services will need to be made available to help owners comply with BEPS.

Building retrofits can take a considerable amount of time to complete, especially in the case of comprehensive retrofits that require extensive work to building systems and tenant living spaces. Owners and managers will need to coordinate construction work with tenant schedules and possibly contend with disruptions to tenants. Not only will these administrative burdens increase the cost of energy retrofits, but they could also cause unanticipated delays in the project timeline. Flexibility is needed so that buildings undergoing comprehensive retrofits have additional time.

Lack of coordinated and easy to navigate efficiency incentive programs can also increase costs for owners and cause project delays. Electricity and gas efficiency incentives are available through different programs administered by a variety of entities in the District. These include various incentive programs offered by DCSEU, the federal Weatherization Assistance Program administered by DOEE, the DC PACE program, and green building resources provided by DHCD through their Build Green DC program. Additional sources of incentives and financing will soon become available through the District's Green Bank and a whole-building affordable multifamily retrofit program funded through the Exelon-Pepco merger settlement and administered by the Public Service Commission. Also, the DC Clean Energy Omnibus Act permits Pepco to start developing and administering energy efficiency programs. Coordination across these various programs will be needed to assist building owners in accessing all of the funding sources that can help them achieve comprehensive, whole-building energy savings.

³⁸ California Housing Partnership Corporation. An Affordable Housing Owner's Guide to Utility Allowances. April 2016.

Implementation Recommendations

Exemptions to Delay Compliance

The law requires DOEE to establish exemption criteria for qualifying buildings to delay compliance with the building energy performance requirements for up to three years. The law also allows DOEE to grant exemptions to delay compliance for more than three years for qualifying affordable housing. The law specifies conditions that DOEE should consider exemptions for, including financial distress, change of ownership, vacancy, major renovation, pending demolition, or other acceptable circumstances determined by DOEE by regulation.

When considering the compliance cycle for multifamily affordable housing owners and developers, DOEE should consider allowing for flexibility regarding the following criteria.

- **Ability to Pay for Upgrades/Financial Hardship** - DOEE should consider financial distress to include the ability to pay for energy efficiency upgrades and general financial hardship of the ownership. Considerations should include whether the building owner has access to sufficient reserves or net operating income to cover the cost of upgrades and whether the building owner can feasibly take on new debt. Jurisdictions such as Boulder, Colorado have introduced similar building performance standards with a specific delay and required proof of documentation³⁹ of financial hardship for building owners unable to comply due to lack of capital to make energy-efficient upgrades.
- **Financing Cycle** - DOEE should consider the financing cycles of affordable multifamily housing and the limited access to capital between financing cycles when completing any required rehabilitation or upgrades in compliance with the BEPS. DOEE should consider a delay in compliance if recapitalization is expected within five years of the compliance deadline. Buildings undergoing a recapitalization will have better access to capital to make major building system upgrades that can achieve deep energy savings.

DOEE should also consider providing additional flexibility to building owners that pursue a recapitalization but aren't successful in securing new financing. There are limited sources of funding available to affordable multifamily building owners to recapitalize and rehabilitate a property. Two prominent sources accessible to affordable housing owners are the Low Income Housing Tax Credit program and the District's Housing Production Trust Fund (HPTF). Both programs are highly competitive. Building owners that commit to recapitalizing their building and demonstrate a good faith effort to do so but are unable to win an allocation of funding or tax credits may require additional time to comply with the law.

Flexibility should also be provided to properties that have completed a substantial rehabilitation but are still not performing to the standard. A delay in compliance may be

³⁹ City of Boulder Colorado. Building Performance Ordinance – Exemptions Reference Guide. November 2018.

required to allow the building owner to accumulate the reserves necessary to pay for additional upgrades.

- **Individually-metered, Project-based Rental Assistance Properties** – As stated above, owners of HUD-subsidized properties where tenants have utility allowances are unable to recoup the cost of energy efficiency upgrades. Any savings generated by the efficiency improvements accrue to HUD. Grants will need to be provided to cover the cost of in-unit efficiency upgrades. If funding is not available, building owners should be exempt from having to achieve energy reductions in tenant spaces until the property has access to funding or is going through refinancing. The performance standard could still be applied to common-area energy usage.
- **Public Housing**- A delay in compliance and additional flexibility will likely be required for District-owned public housing. Public housing larger than 10,000 square feet must begin complying with BEPS in 2021 along with other types of District-owned buildings. There are approximately 6,800 units in public housing buildings that are covered by the law. The median 2018 Energy Star score for public housing is far below the median for all multifamily rental housing. DOEE should take into consideration these and other challenges to determine whether it's feasible to expect all buildings to be compliant by 2026.
- **Flexibility for Residents Exercising their Rights Under the Tenant Opportunity to Purchase Act (TOPA)**- Residents who purchase their building under the District's TOPA law should be granted additional time to comply with BEPS. Tenant groups that are new to owning their building face many challenges when taking over operations and maintenance responsibilities. They should be afforded additional time to understand the requirements of the law and access the financial and technical assistance they will need to comply.

Defining Property Types

DOEE should use the median Energy Star score for sub-categories of multifamily buildings when setting the energy performance standard. This will help ensure that building owners are not penalized if their ability to achieve energy savings is limited by their access to existing or potential resources or by the structural characteristics of their properties.

- **Building Style** - DOEE should set different energy performance standards for garden and low-rise buildings compared to mid-rise buildings.⁴⁰ The 2018 median EnergyStar score for garden and low-rise buildings is lower (63.5) than the median score for mid-rise buildings (69). Creating separate sub-categories based on building style is necessary to

⁴⁰ Based on the following definitions: Garden is 1-3 Stories, 4 or more buildings; Low-Rise is 1-3 Stories, 1-3 buildings; Mid-Rise is 4-14 Stories, 1 or more buildings; High Rise is 15+ Stories, 1 or more buildings.

compare energy performance across buildings that face the same economies of scale and structural realities.

- **Affordability** - As described above, the 2018 median Energy Star score varies among subsidized affordable housing by affordability level. Section 8 and public housing properties that serve very low-income renters have median scores of 64 and 31, respectively. Buildings that serve this population may have especially limited financial resources or access to financing (as described above).

Naturally-occurring affordable housing (NOAH) also has a median score markedly below the median for multifamily rental housing generally- 55 compared to 67. As stated above, NOAH properties may not generate sufficient income to cover the cost of building upgrades at current rent levels. These buildings are susceptible to rent increases because they do not receive government subsidies and are not subject to affordability covenants. DOEE should provide additional accommodation to these properties by providing funding to help them cover the cost of efficiency upgrades in exchange for a commitment to keep rents affordable (as described below). If funding is unavailable, DOEE should set different performance standard levels based on building affordability type.

Compliance Pathways

The law specifies that building owners can follow either the performance or prescriptive compliance pathway if their building is below the energy performance standard. The performance pathway requires a building to demonstrate a greater than 20% decrease in normalized site energy usage intensity averaged over the last two years of the 5-year compliance cycle, as compared to the normalized site energy use intensity averaged over the two years preceding the first year of the 5-year compliance cycle. The prescriptive pathway allows building owners to comply by implementing required energy efficiency measures with savings comparable to the performance pathway. The law also provides DOEE discretion to develop additional pathways.

Prescriptive Pathway –

- **Allow Measures Installed Before the Start of the Compliance Period to Count Toward Prescriptive Checklist-** DOEE should allow energy efficiency measures that have been installed within the preceding three years of the first compliance cycle to count towards meeting the goals of the prescriptive compliance pathway. DOEE should reward owners of affordable housing that began taking action to improve the energy performance of their buildings before the start of the compliance period.
- **Tailor to Different Property Types –** DOEE should tailor the prescriptive measure list to different building styles (garden, low-rise, mid-rise) based on the efficiency opportunities relevant to each property type. The prescriptive measure list should also take into consideration the mix of fuels used in a property.

- **Flexibility for Historic Properties** - Historic properties may be unable to make certain building upgrades. DOEE should provide flexibility in the types of measures historic buildings are required to implement.

Performance Pathway –

- **Incent Deeper Energy Savings by Offering Automatic Compliance with Future Cycles** - As described above, building owners can comply with the performance pathway by achieving a 20% decrease in normalized site energy use intensity. DOEE should offer an incentive to encourage building owners to achieve greater energy savings. Buildings that demonstrate a decrease in normalized site energy use intensity by increments of 5% above the required 20% should be automatically compliant with one future compliance cycle. For every 5% greater than the base requirement, buildings will be automatically compliant with a future compliance cycle to incent deeper energy savings for affordable multifamily housing.

Alternative Compliance Pathways - DOEE should consider the following alternative compliance pathways to provide additional flexibility to affordable housing owners.

- **Allow Progress Made in the Previous 3-5 Years to Count Toward the 20% Reduction Requirement**- The current BEPS law states that owners must demonstrate a greater than 20% decrease in energy use intensity averaged over the last two years of the 5-year compliance cycle. In practice, a building owner must effectively execute all energy-saving measures before the end of year three to reduce energy usage by the final two years of the compliance cycle. A 3-year window to achieve comprehensive energy savings is too short for most affordable housing owners to achieve, given the capacity constraints mentioned above. Permitting building owners to count energy savings achieved before the start of the compliance period based on an earlier year baseline would essentially extend the compliance period to a more manageable five to seven years in total and allow owners a longer period to meet the reduction requirement.
- **Allow a 20% Reduction in Source Energy Use Intensity**- Building owners should also have the option to demonstrate a reduction in **source** energy use intensity (EUI) to comply with the law. Energy Star scores are set based on source EUI. Source EUI is a more equitable assessment of building-level efficiency because it evaluates energy performance based on whole-building energy use, independent of heating system, or building technology.⁴¹ Source EUI also reflects the use of on-site renewable energy sources.
- **Allow Improvement in Energy Star Score to Count Towards Compliance**- The cost of achieving a 20% reduction in EUI could be significant for buildings with Energy Star scores only slightly below the performance standard. In many cases, these buildings will already include low-hanging, relatively lower cost efficiency measures, such as lighting upgrades, leaving only more expensive measures to be completed. To address this challenge, DOEE

⁴¹ Energy Star Portfolio Manager. Technical Reference: Source Energy. August 2019.

should provide owners flexibility so that they can demonstrate compliance if they improve their Energy Star score enough to reach the median performance standard even if the required improvements achieve less than a 20% EUI reduction. The City of San José Energy and Water Building Performance Ordinance includes improvement in Energy Star score as a compliance pathway option along with options to reduce EUI by a certain percentage.⁴²

- **Alignment with the D.C. Qualified Allocation Plan** - The District of Columbia 2019 Qualified Allocation Plan (QAP) awards maximum points to projects that design and construct their project to achieve International Living Future Institute's Zero Energy Building certification or Passive House (PHI or PHIUS standards). A lesser number of points are awarded to projects that demonstrate that they will meet: (1) DOE Zero Energy Ready Home; (2) LEED certification at the Platinum level; or (3) achieve a HERS index score of 70 or lower, or Energy Star version 3.0 certification (for preservation projects only). Also, the QAP requires all properties to be certified by Enterprise Green Communities. DOEE should consider affordable multifamily buildings compliant with BEPS if they meet the QAP criteria. Aligning BEPS compliance with the QAP requirements will alleviate the challenge of owners having to meet two energy performance standards.

Non-Compliance

The law specifies that buildings that fail to comply with BEPS requirements shall pay an alternative compliance penalty and that DOEE may impose civil infraction penalties, fines, and fees as sanctions for a violation of the BEPS ruling. DOEE should consider the following recommendations in determining how to impose penalties on owners of affordable housing.

- **Base Fines on the Distance from Reduction Requirement**- DOEE should assess fine amounts for non-compliance based on how close the building owner is to achieving the required energy savings or to installing the required prescriptive measures. Building owners that made progress toward achieving the compliance requirement but fell short should be fined less than building owners that made no progress and are unable to justify the need for an exemption.
- **Waive Fines if an Owner Demonstrates a Plan to Comply**- If an owner can demonstrate a plan to comply with either the performance-based or prescriptive compliance pathway but has not been able to meet the requirements in time, DOEE should waive non-compliance fines. DOEE should outline what qualifies as sufficient evidence that the building owner has a plan to comply with the requirement. Thus, owners will be fined if they are taking no actions towards meeting the BEPS.
- **Institute an Appeals Process** - The law does not require any formal appeals process at any stage of the BEPS compliance period. An appeals process must be in place before

⁴² San Jose, CA Energy and Water Building Performance Ordinance website.
<https://www.sanjoseca.gov/index.aspx?NID=6305>

the rulemaking comes into effect to ensure that there are clarity and accountability for all parties at all stages of the compliance process.

- **Provide Flexibility for Resident Behavior-** Building owners should not be penalized if resident energy usage remains high despite installing energy-efficient measures and educating residents about how they can reduce their energy consumption.

Technical Assistance

Affordable multifamily owners and managers have limited staff capacity and resources to devote to planning for and implementing energy efficiency improvements. They often must deal with competing building needs and priorities. They will require both technical resources as well as the flexibility to ensure they can comply with BEPS. DOEE should consider providing the following technical resources and services to affordable multifamily owners.

Awareness of Resources - Building owners request that DOEE provide sources to help ensure that affordable housing buildings can meet BEPS, including but not limited to:

- **Common Cost-Effective Measures** - DOEE should put together a base-level list of energy efficiency upgrades to implement without requiring the use of energy consultants or an energy audit. The list should include estimated costs and savings for each measure.
- **Approved Vendor List** - As described above, building owners will require help identifying qualified consultants and contractors to perform retrofit services. DOEE should assist owners by developing lists of approved vendors who meet certain industry standards and charge fees that are consistent with the market average. For example, DOEE can follow the practice of the Maryland Department of Housing and Community Development, which provides a list of approved auditors to building owners who participate in the Multifamily Energy Efficiency and Housing Affordability program.⁴³
- **Agency Contacts/Coaches** - DOEE should put together a list of the best contacts or resources across the District government for various aspects of building processes, from permitting and assistance with energy-efficient retrofit planning, to understanding the various financial options through grants or loans that are available to developers or owners.

One-Stop-Shop - Ideally, the services described above, as well as additional project management assistance, would be available to building owners as part of a one-stop-shop. A one-stop shop program model has been shown to successfully overcome technical and capacity challenges faced by affordable multifamily owners. A one-stop-shop would provide a single access point to all available incentive programs. The one-stop-shop would also assist owners to

⁴³ Maryland Department of Housing and Community Development. Multifamily Energy Efficiency Improvement Programs website.
<https://dhcd.maryland.gov/HousingDevelopment/Pages/EnergyEfficiencyWeatherization.aspx>

execute all project design and predevelopment tasks. Figures 3 and 4 below summarize the one-stop-shop model and services provided.

Figure 3. One-Stop-Shop Process



Under this model, building owners have access to integrated program services through a single point of contact (SPOC). Services provided by the SPOC include help navigating program offerings and project development and technical assistance services.⁴⁴ SPOCs act as trusted partners to building owners. Successful SPOCs will be able to build relationships with local partners, including program administrators, contractors, and lenders.⁴⁵ Examples of successful one-stop-shop models include the Low-Income Energy Affordability Network (LEAN) in Massachusetts, Elevate Energy and Community Investment Corporation’s multifamily energy efficiency program in Chicago, and the Delaware Sustainable Energy Utility’s Energize Delaware multifamily program.⁴⁶ These programs have been shown to achieve three times as much energy savings compared to efficiency programs that do not provide the same level of services.⁴⁷ (See Appendix B for descriptions of one-stop-shops).

Tenant Education - Encouraging residents to reduce their energy usage could be a potential source of energy savings and may impact an owner's ability to comply with the BEPS requirement. DOEE should consider providing resources and tools to help building owners engage their residents and educate them about energy-saving habits and the connection between behavior and energy use. Also, DOEE should provide resources to help owners communicate with their residents about BEPS and how it relates to achieving the District’s climate goals.

⁴⁴ Energy Efficiency for All. One-Stop Shops for the Multifamily Sector.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

Figure 4. Identifying the Elements of a One-Stop-Shop

Element	Incomplete One-Stop-Shop	True One-Stop-Shop
Navigating Offerings	SPOC refers customer to other programs.	SPOC coordinates access to other programs or has agreements in place for co-delivery.
Customer Intake	Customer fills out multiple applications.	A single application streamlines the process. SPOC assists customer with enrolling and applying.
Initial Assessments and Audits	Limited assessment is based on what an individual program offers.	Comprehensive audit provides utility benchmarking to gauge efficiency compared with peers and evaluates electric, water, gas, and non-utility upgrade opportunities.
Project Development and Approval	Customer makes decisions regarding which measures to incorporate without much guidance or flexibility.	Energy auditor uses audit information to develop a recommended scope of work, including a comprehensive set of improvements, installation costs, available utility incentive programs, available financing options, and economic benefits. SPOC supports customer in making final project decisions.
Identifying Funding Sources and Financing Options	Only applies utility incentives specific to program. Does not include outside sources (e.g., bill repayment or Property Assessed Clean Energy Programs (PACE)).	SPOC assists with coordination of rebates, incentives, and financing options. Develops relationships with institutions (e.g., Community Development Financial Institutions, PACE, and housing institutions).
Hiring Contractors	List of qualified contractors may be provided, but scoping assistance is not provided. Clients may have to find their own contractors or may have limited flexibility in choosing contractors.	Client is provided with a list of qualified and available contractors. SPOC helps customer evaluate bids and select contractors and facilitates scheduling to ease the administrative burden on the owner.
Construction Process	Client must handle all communications with contractors.	SPOC is involved in communications with contractors and project managers and monitors progress.
Quality Assurance	Inspections occur only after installation and may not cover all work	Quality inspections on 100% of participating properties. Inspections are done during installation when necessary and at project completion. Ongoing annual benchmarking services are provided. If quality issues arise, SPOC returns to site to resolve issues. SPOC ensures that all utility incentives are obtained.

Source: Energy Efficiency for All, One-Stop Shops for the Multifamily Sector. See Appendix B for the full fact sheet.

Third-Party Data Verification

The law requires building owners to perform third-party verification of their building's benchmark and Energy Star statements every three years and provides DOEE discretion to determine the requirements for third-party verification. Given the financial and capacity constraints that many multifamily affordable housing developers and owners in the District face, DOEE should allow property or asset managers to qualify to conduct the third-party verification to reduce the added cost of hiring consultants to do third-party verification. DOEE could provide mandatory education sessions to ensure that agents of the building owner are aware of the proper protocols for verifying the data. DOEE should also encourage owners to create a consortium to pool staff resources to complete verifications and provide financial resources to help cover the cost of verification services.

Financial Resources


The law provides at least \$3 million annually to be used by DOEE or the Sustainable Energy Utility to assist owners of affordable housing and rent-controlled buildings complete energy efficiency upgrades in buildings subject to BEPS. DOEE should consider the following recommendations when determining how to deploy these funds.

Structure Funding to Address Unmet Needs - The funding should be used to supplement existing DCSEU rebate programs and potential Green Bank products and be used flexibly to meet the needs of capital-constrained property owners. Flexible uses could include covering the costs of predevelopment expenses, energy audits, health and safety measures, in addition to subsidies to cover the hard costs of energy efficiency upgrades. The funding should be provided in the form of grants to complement existing funding mechanisms, e.g., rebates and debt. Additional analysis should be done to understand better the unmet needs in the market that can be addressed using a flexible source of funding.

Target Properties with Limited Access to Financial Resources- DOEE should consider targeting the \$3 million annual revenue resource to assist affordable housing and rent-controlled buildings with limited access to other sources of financial resources to make improvements to meet the BEPS. Examples of properties that will likely need access to financial resources include:

- **Smaller Properties** - Owners of smaller buildings or properties have limited access to capital and technical capacity to implement the required upgrades to comply with BEPS.
- **Limited Equity Co-ops (LECs)** - A general cooperative is an association organized to own and operate a residential property. Cooperative members/shareholders are entitled to live in the property based on the terms of a proprietary lease or occupancy agreement. A "Limited-equity cooperative" is one in which a government agency or nonprofit organization limits the resale price of membership shares to keep the housing affordable to incoming low- and moderate-income members.⁴⁸ Tenants form LECs when exercising

⁴⁸ The D.C. Department of Housing and Community Development. Limited-Equity Cooperatives Task Force. <https://dhcd.dc.gov/page/limited-equity-cooperative-task-force>



their right to purchase their property under the Tenant Opportunity to Purchase Act. Given the need to maintain affordability as members of the co-op are low- and moderate-income owners, LECs will have extremely limited access to outside capital to comply with the BEPS.

- **Mid-Cycle Financing** - Buildings that are in the middle of a financing cycle, such as a LIHTC 15-year cycle, will struggle to find financing to meet the BEPS compliance threshold without access to additional sources of funding. Therefore, DOEE should ensure that buildings in the middle of a financing cycle are targeted to receive a portion of the \$3 million to complete rehabilitation that will allow them to meet the compliance standards.
- **NOAH and Rent-Controlled Properties-** As stated above, naturally-occurring affordable housing and rent-controlled properties are significant sources of the District's affordable housing supply. These properties are not often targeted for resources because they may be challenging to identify and reach with energy efficiency incentives. Preserving this affordable housing will be key to addressing the District's housing challenges. Tenants in these buildings are susceptible to displacement in a strong housing market like the District's. Rents in NOAH buildings are not subject to restrictions. Owners of rent-controlled properties are permitted to raise rents above the rate of inflation if making energy-saving building improvements. Funding should be available to these properties in exchange for commitments from owners to keep rents affordable.

Recommendations for Complementary Policies

Align Financial Resources - In addition to the \$3 million provided in the law, multiple other funding sources are available to affordable housing owners. As mentioned above, financial resources should be coordinated and offered via a one-stop-shop to provide building owners with streamlined and easy access to the full suite of available programs. A single point of contact should help owners apply for whichever funding sources make the most sense for their property. Examples of additional sources of funding are below. DOEE should work with its sister agencies to align these programs, so they support building owner efforts to meet the BEPS requirement.

- **DCSEU Rebate Programs** - DCSEU offers incentives for prescriptive measures and comprehensive retrofit projects in low-income housing. In 2018, DCSEU exceeded both its low-income spending and minimum low-income savings benchmark targets. DCSEU also met 96% of its maximum low-income energy savings target.⁴⁹ However, energy savings from its low-income multifamily programs amounted to only 4.4% of total annual energy savings across all of DCSEU's programs, whereas its commercial building programs accounted for 81% of total annual energy savings.⁵⁰ DOEE should work with DCSEU to increase the percentage of portfolio savings achieved by low-income multifamily buildings. DOEE should also work with DCSEU to align prescriptive measure rebates with the measures included in the BEPS prescriptive compliance pathway.

Also, DCSEU's performance benchmarks may need to be adjusted to align better with the goals of BEPS. DCSEU's two current benchmarks related to low-income programs include overall expenditures and savings. DCSEU should consider adopting a benchmark that reflects the importance of achieving deep energy savings in a building, such as the amount of energy saved per unit or household.

- **AltaGas-WGL Gas Merger Program**- Washington Gas has committed \$4.2 million to fund gas-saving upgrades in affordable multifamily housing as part of its merger agreement with AltaGas that was approved by the D.C. Public Service Commission (PSC). DCSEU has been designated to administer the program. On June 18, 2019, Washington Gas filed its proposed program structure with the PSC. The proposed program design is not conducive to comprehensive retrofit projects. Among the barriers to achieving deeper energy savings is the short application and construction timelines being proposed.⁵¹ Applications will only be accepted over four months, and the construction timeline is limited to six months. Both timeframes are unreasonably short and will limit the ability of owners to achieve comprehensive savings. A four-month application timeline is not enough time for building owners to assess the full scope of comprehensive energy-saving measures to address at the property. Comprehensive energy efficiency upgrades could easily take longer than 6-months to implement for reasons beyond the control of the building owner or property manager. As described above, unexpected delays in construction are not

⁴⁹ NMR Group, Inc. Performance Benchmark Assessment of FY2018 DC Sustainable Energy Utility Programs. June 25, 2019.

⁵⁰ NMR Group, Inc. Evaluation of DC Sustainable Energy Utility FY2018 Programs. June 25, 2019.

⁵¹ D.C. Public Service Commission. Formal Case No. 1142, In the Matter of the Merger of AltaGas, Ltd. and WGL Holdings Inc.

uncommon in building retrofits. Providing flexibility rather than tight timeframes is a best practice in multifamily energy efficiency program design.⁵² DOE should work with Washington Gas and DCSEU to ensure that the program design is conducive to helping owners comply with BEPS.

- **Pepco-Exelon Merger Whole-Building, Deep Energy Retrofit Program-** Pepco has committed \$11.25 million to fund a whole-building, deep energy retrofit program in affordable multifamily housing. The commitment was made as part of the settlement agreement in the Exelon-Pepco merger approved by the PSC in March 2016. The program has yet to launch nearly four years later. Deployment of these resources will significantly help owners comply with BEPS. The D.C. PSC should act expeditiously to identify a program implementer so that building owners can have access to these resources and align the program design to support the goals of BEPS.⁵³
- **D.C. Green Bank** - The D.C. Green Bank should provide building owners access to flexible capital that would not otherwise be available in the market to help with the costs of complying with BEPS. Given the need for long-term financing for affordable housing developers, to make the appropriate rehabilitation renovations in addition to recouping capital costs to repay loans, the Green Bank loan product should have a longer amortization period of at least ten years. An energy efficiency loan with a longer amortization period helps to ensure that cost savings from the measures exceed the cost of debt payments. Tiered terms and pricing should be made available so that affordable housing is treated preferentially. The Green Bank should also consider offering deferred payment loans that delay payment of principal and interest until the property is refinanced or transferred to a new owner. Deferred payment loans should be available to owners of buildings that do not generate sufficient cash flow to cover both operating expenses and debt service payments. The Green Bank should also offer unsecured loan products that don't require an additional lien on the property and should offer loan guarantees to encourage existing lenders, like CDFIs, to finance energy upgrades.⁵⁴
- **Align with LIHTC and other DHCD Funding-** Many multifamily affordable housing developers seek funding through the D.C. QAP and consolidated funding application. The convening recommends that DOE work alongside DHCD to align the points awarded to project applications to benefit projects that are meeting their BEPS standards to ensure that there is a uniform push from the D.C. government to meet the BEPS. This will also

⁵² American Council for an Energy-Efficient Economy. Reaching More Residents: Opportunities for Increasing Participation in Multifamily Energy Efficiency Programs. Report U1603. May 2016.

⁵³ D.C. Public Service Commission. Formal Case No. 1148, In the Matter of the Investigation into the Establishment and Implementation of Energy Efficiency and Energy Conservation Programs Targeted Towards Both Affordable Multifamily Units and Master Metered Buildings Which Include Low and Limited Income Residents in the District of Columbia.

⁵⁴ An example of a successful Green Bank multifamily program is the Connecticut Green Bank's Multifamily Housing Program. It has provided financing and technical assistance to more than 100 multifamily projects since the program's inception in 2014. The Multifamily Program has deployed over \$34 million in financing for energy efficiency, solar and health and safety upgrades.

better align DCHFA/DHCD financing used for not only general renovations but specifically for energy-efficient retrofits that will assist affordable housing in meeting the BEPS.

Design Efficiency Programs to Minimize Renters' Risk of Displacement- D.C.'s strong housing market is putting pressure on rents. Efficiency programs that significantly subsidize energy efficiency upgrades should include protections for residents. There is precedent for such programs. In Maryland, the Multifamily Energy Efficiency and Housing Affordability program administered by the Department of Housing and Community Development covers 100% of the cost of comprehensive retrofits. Projects with existing affordability restrictions must have a minimum of five years of affordability remaining. Otherwise, an extension of affordability is required. If a property has no existing affordability restrictions, DCHD will impose five years of affordability on the property.⁵⁵ California's Low-Income Weatherization Program requires owners to make at least a 10-year affordability commitment in exchange for supporting whole-building energy retrofits.⁵⁶ The LEAN program in Massachusetts also requires a 10-year affordability agreement. Landlords in Minneapolis can receive favorable tax treatment along with subsidies that cover 90% of the cost of building energy and health upgrades if they agree to keep 20% or more of their rental units affordable.⁵⁷

Engage/Educate Lenders about the Need to Underwrite Energy Efficient Upgrades - The lending community will need to be engaged and educated about the benefits of and how to underwrite energy-efficient upgrades. Many affordable housing developers and owners utilize avenues of funding for both energy efficiency retrofits and general rehabilitation of affordable units, meaning that there could be an increase in funding requests to meet the compliance required for the BEPS. Lenders must be aware of this new threshold that multifamily affordable housing buildings are required to meet so that there are no additional burdens placed on the borrower and that there is an understanding of what these funds will be used for to tailor the underwriting standards and needs better.

Education/Outreach especially to Co-op Owners/Housing Counselors - DOEE should consider aggressive outreach through multiple avenues to ensure that there is sufficient education provided to smaller building owners, such as co-op owners or single multifamily building owners and developers so that they are aware of the BEPS requirement and the consequences if they are out of compliance. For example, DOEE could engage DHCD's limited-equity Cooperative Task Force to increase awareness about BEPS. DOEE multifamily housing owners and developers should be required to attend mandatory educational sessions around the importance of BEPS if they fail to comply. This is an additional mechanism to ensure all owners and developers that must adhere to the BEPS have adequate information and provide them with in-person direct access to DOEE staff for education and training so that they can comply without further financial or non-financial penalties.

⁵⁵ Maryland Department of Housing and Community Development. Multifamily Energy Efficiency and Housing Affordability Program website.

<https://dhcd.maryland.gov/HousingDevelopment/Pages/meeha/meehaempower.aspx>

⁵⁶ Energy Efficiency for All. Affordable Homes First: Advancing a Green New Deal for Los Angeles Renters.

⁵⁷ Minneapolis Community Planning and Economic Development. 4D Affordable Housing Incentive Program website. <http://www.minneapolismn.gov/cped/housing/WCMSP-214366>

Appendix A. BEPS Stakeholder Engagement Participating Organizations

Note: The inclusion of these organizations on this list does not imply their full endorsement or support of all the recommendations described in this report.

Audubon Enterprises	Joseph Development Inc.
CHPC	Manna DC
City First Bank of DC	Mi Casa Inc.
Community Preservation and Development Corporation	National Housing Trust
CPDC	Preservation of Affordable Housing (POAH)
Dantes Partners	SOME
DC DHCD	Somerset Development Company, LLC
DC DOEE	Standard Companies
DC Green Bank	Steven Winter Associates
Efficient Home LLC	The NHP Foundation
Enterprise Community Partners	Triad Housing Corporation
Gilbane Development Company	UPO
GRID Alternatives	USGBC
ICAST	Usource
Institute for Market Transformation	Wesley Housing Development Corporation
	WinnCompanies



Appendix B: Energy Efficiency for All, One-Stop-Shops for the Multifamily Sector

One-Stop Shops for the Multifamily Sector

The need for owners to navigate a complex landscape of clean energy and water programs greatly inhibits participation in multifamily efficiency programs nationwide. Yet, millions of lower-income rental households could significantly benefit from efficiency services, and save an aggregate of \$9.2 billion annually as a result.¹ To capture these savings and provide streamlined and straightforward access to programs tailored to this sector’s needs, jurisdictions are increasingly offering comprehensive one-stop multifamily programs.

COMPREHENSIVE ONE-STOP-SHOP SERVICES

A one-stop shop can provide coordination across electricity, gas, and water programs.

Because these services are often supplied by different entities, program administrators may not encourage projects that aim at comprehensive savings. A one-stop shop can assist owners in capturing the savings across all fuels and water.

- A single point of contact
- A universal intake application
- Comprehensive technical assistance
- Streamlined access to all multifamily

A one-stop shop provides building owners access to integrated program services through a single point of contact.

Program experience shows that building owners benefit from access to individuals who can help navigate program offerings and provide project

ONE STOP SHOP

3x 

One-stop-shop, whole-building programs can lead to **three times** as much savings in energy costs

7x 

AND **seven times** the uptake rate as other energy-efficiency programs.*

development and technical assistance, such as initial assessments, audits, and project support. These single points of contact can become trusted advisors to local building owners. The people in this function should be able to provide robust technical assistance and build relationships with local partners, such as lenders, contractors, and utility staff. A single point of contact should be able to assess entire portfolios in order to identify which programs meet the needs of individual properties and avenues for leveraging multiple funding sources.

A SINGLE POINT OF CONTACT (SPOC) ASSISTS AN OWNER THROUGHOUT THE RETROFITTING PROCESS



Image Source: Elevate Energy

CONSTRUCTION MANAGER

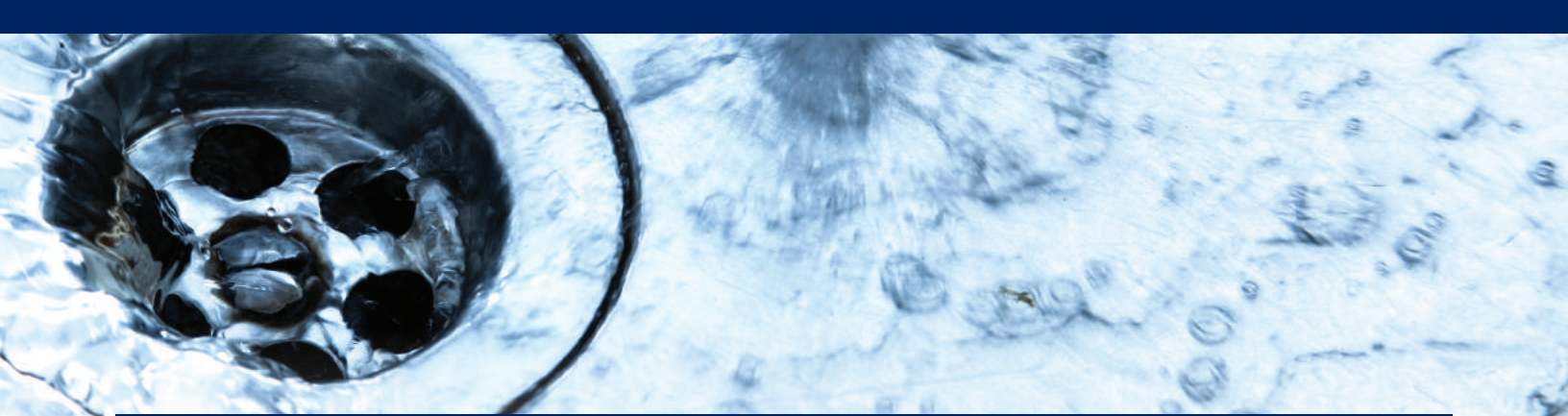
CONTRACTORS

IDENTIFYING THE ELEMENTS OF A COMPLETE ONE-STOP SHOP

ELEMENT	INCOMPLETE ONE-STOP SHOP	TRUE ONE-STOP SHOP
Navigating Offerings	SPOC refers customer to other programs.	SPOC coordinates access to other programs or has agreements in place for co-delivery.
Customer Intake	Customer fills out multiple applications.	A single application streamlines the process. SPOC assists customer with enrolling and applying.
Initial Assessments and Audits	Limited assessment is based on what an individual program offers.	Comprehensive audit provides utility benchmarking to gauge efficiency compared with peers and evaluates electric, water, gas, and non-utility upgrade opportunities.
Project Development and Approval	Customer makes decisions regarding which measures to incorporate without much guidance or flexibility.	Energy auditor uses audit information to develop a recommended scope of work, including a comprehensive set of improvements, installation costs, available utility incentive programs, available financing options, and economic benefits. SPOC supports customer in making final project decisions.
Identifying Funding Sources and Financing Options	Only applies utility incentives specific to program. Does not include outside sources (e.g., bill repayment or Property Assessed Clean Energy Programs (PACE)).	SPOC assists with coordination of rebates, incentives, and financing options. Develops relationships with institutions (e.g., Community Development Financial Institutions, PACE, and housing institutions).
Hiring Contractors	List of qualified contractors may be provided, but scoping assistance is not provided. Clients may have to find their own contractors or may have limited flexibility in choosing contractors.	Client is provided with a list of qualified and available contractors. SPOC helps customer evaluate bids and select contractors, and facilitates scheduling to ease the administrative burden on the owner.
Construction Process	Client must handle all communications with contractors.	SPOC is involved in communications with contractors and project managers, and monitors progress.
Quality Assurance	Inspections occur only after installation and may not cover all work.	Quality inspections on 100% of participating properties. Inspections are done during installation when necessary, and at project completion. Ongoing annual benchmarking services are provided. If quality issues arise, SPOC returns to site to resolve issues. SPOC ensures that all utility incentives are obtained.

IS A ONE-STOP SHOP NECESSARY?

A one-stop shop has many benefits. However, it may not be well suited to all cases. Establishing a one-stop shop requires time and resources and may require some significant restructuring of program outreach and delivery. If the program landscape is already relatively easy to navigate and owners have access to robust technical assistance, a one-stop shop may not be the best strategy. Also, property owners planning minor upgrades may not require the assistance of a one-stop shop; a direct install program could be sufficient for owners who are not prepared to make major investments in upgrades.



ONE-STOP-SHOP PROGRAMS BREAK DOWN THE BARRIERS TO MULTIFAMILY CLEAN ENERGY AND WATER IMPROVEMENTS

BARRIERS	BEST PRACTICES
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Many fragmented programs overwhelm potential participants who must navigate dozens of options.

Lack of targeted outreach efforts results in incomplete awareness of available programs, the spread of inaccurate information, and low program uptake.

Disparate eligibility requirements across programs confuse potential participants, create a barrier to entry, and result in complex and often duplicative application requirements.

The administrative burden of leveraging multiple programs is a disincentive to owner participation and requires excessive and often redundant documentation to be submitted by both tenants and owners.

Difficulty in gaining access to funding prohibits many affordable property owners with limited capital from financing retrofits. **Misaligned funding cycles** make it very difficult to leverage multiple programs for a single scope of work. In addition, many funding options have short, one-year program cycles that do not allow for substantial whole-building retrofits.

The administrative burden and difficulty in truly integrating disparate programs often results in **minimal savings achieved** through partial energy-efficiency measures that do not include all potential energy-efficiency improvements and do not integrate water-saving opportunities.

Provide access to separately administered programs through **a single point of contact**.

Form partnerships, including best-practice groups focused on program alignment, owner- association partnerships, and community partnerships that promote education and outreach efforts.

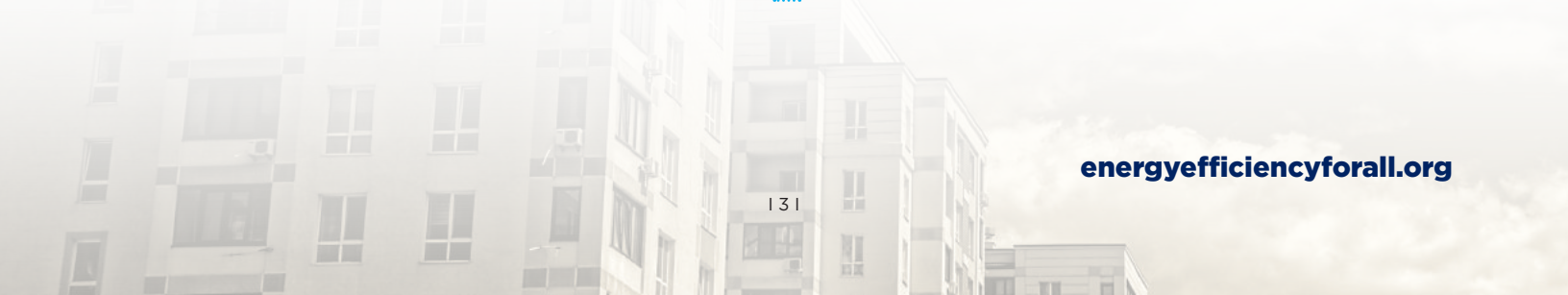
Provide technical assistance throughout the retrofit process.

Provide technical assistance throughout the retrofit process.

Form partnerships with finance and lending institutions.

Guarantee program funding and program budgets for at least three years.

Assure integrated scopes of work and count savings across electricity, gas, and water programs by designating a lead administrator that accounts for savings and budget sharing as part of its administrative process.





CALIFORNIA'S LOW INCOME WEATHERIZATION PROGRAM (LIWP)

The LIWP provides whole-building energy-efficiency and solar services to low-income single and multifamily homes in disadvantaged communities, as designated by the California Environmental Protection Agency. It provides incentives for up to 100 percent of solar installations and 80 percent of energy-efficiency upgrades.

BEST PRACTICE:
A Single Point of Contact

The Association for Energy Affordability (AEA), acting as an SPOC, assists with the coordination of rebates and incentives, the procurement of appropriate contractors, and on-site property assessments, among other services.

BARRIERS ADDRESSED:
Many fragmented programs, market confusion, lack of targeted outreach efforts, administrative burden, lack of owner capacity, and multiple decision makers

BEST PRACTICE:
Maximize Energy and Bill Savings

The LIWP is the first program in California to break down the silos of energy efficiency, solar PV, and solar thermal by providing all three offerings to property owners through the same program and single implementation model. The program has saved an average of 44 percent of properties' energy usage.

BARRIER ADDRESSED:
Fragmented programs resulting in minimal savings achieved and administrative burden



LOW-INCOME ENERGY AFFORDABILITY NETWORK (LEAN) AND THE MASSACHUSETTS UTILITIES' LOW INCOME MULTIFAMILY RETROFIT PROGRAM (LIMF)

LEAN operates the various LIMF programs offered by gas and electric companies in Massachusetts. This program provides gas energy upgrades to about 6,700 units annually and electric energy upgrades to 14,500 units, achieving average savings of 20 percent.

BEST PRACTICE:
Statewide Coordination

The program provides coordination between multiple utilities and the affordable housing community through its advisory committee. A best-practices group, which includes utility program administrators, meets regularly to align program incentives and requirements across utilities and to consider incorporating new measures.

BARRIER ADDRESSED:
Many fragmented programs, market confusion, and disparate eligibility requirements

BEST PRACTICE:
Technical Assistance

The SPOC helps with a full range of tasks, including gaining access to the WegoWise benchmarking tool, energy audits, development and approval of a scope of work, obtaining grants, project management, assigning a contractor to carry out the work, and quality assurance.

BARRIERS ADDRESSED:
Many fragmented programs, market confusion, lack of targeted community outreach efforts, administrative burden, lack of owner capacity, and multiple decision makers



ELEVATE ENERGY AND COMMUNITY INVESTMENT CORPORATION - MULTIFAMILY ENERGY EFFICIENCY PROGRAM (CHICAGO)

The Multifamily Energy Efficiency Program is a comprehensive energy retrofit program of Elevate Energy that targets existing subsidized, affordable, and mid- to low-income properties in the Chicago area. Since the program began in 2008, more than 61,000 apartment units have been assessed and more than 27,000 of those units have been retrofitted as of March 31, 2017, achieving between 20 and 30 percent energy savings.

BEST PRACTICE: **Funding Partnerships**

The program partners with Community Investment Corporation (CIC) provide owners with access to funding. CIC loans and grants have provided more than \$27 million for retrofit projects.

BARRIER ADDRESSED: **Difficulty gaining access to funding**



ENERGIZE DELAWARE OFFERS ONE-STOP-SHOP ENERGY SERVICES AIMED AT BOTH LOW-INCOME CUSTOMERS AND AFFORDABLE MULTIFAMILY BUILDING OWNERS

The Delaware Sustainable Energy Utility (DESEU) is a nonprofit organization offering a one-stop resource through its Energize Delaware initiative to help residents and businesses save money through clean energy and efficiency. The DESEU was created in 2007 by the state to foster a sustainable energy future. DESEU recently launched two pilot programs - Community Energy Centers and Affordable Multifamily Housing.

BEST PRACTICE: **Partnerships, Education, and Outreach**

DESEU is partnering with the Philadelphia-based Energy Coordinating Agency (ECA) to launch a pilot program of **Community Energy Centers** in Delaware. ECA will coordinate and optimize the delivery of energy assistance, education, and conservation services to low-income Delaware residents. ECA has been providing comprehensive solutions to Philadelphia's energy poverty problem for more than 30 years through a citywide network of 14 Neighborhood Energy Centers (NECs) where counselors provide more than 50,000 energy services to approximately 20,000 low-income households every year.

DESEU is partnering with two nationally recognized nonprofits, New Ecology, Inc. and Elevate Energy, which are applying their one-stop-shop expertise to create a comprehensive program that combines technical assistance with identifying financial incentives and low-cost financing. The Affordable Multifamily Housing Program helps multifamily building owners identify, plan, and implement energy-efficiency and renewable energy upgrades.

BARRIERS ADDRESSED: **Lack of targeted community outreach efforts**

BEST PRACTICE: **Comprehensive Approach**

The whole-building approach addresses all opportunities for savings (electricity, gas, oil, propane, water, etc.) and addresses common area and in-unit upgrades to heating systems and the building envelope.

BARRIER ADDRESSED: **Many fragmented programs and minimal savings achieved**



FOR MORE INFORMATION

California's Low-Income Weatherization Program (LIWP)

Call 510-431-1791 or visit:

<http://aea.us.org/efficiency-programs/low-income-weatherization-program-large-multi-family-ca.html>.

Low-Income Energy Affordability Network (LEAN)

Call 617-348-6425 or visit: <http://leanmultifamily.org>.

Elevate Energy and Community Investment Corporation's Multifamily Energy Efficiency Program

Call 773-269-4037 or visit: <http://www.elevateenergy.org>.

Energize Delaware's Community Energy Centers

Call 302-883-3048 or visit: <https://www.energizedelaware.org/community-energy-centers>.

Energize Delaware's Affordable Multifamily Program

Call 302-300-4321 or visit: <https://www.energizedelaware.org/multifamily> or www.newecology.org.



ABOUT ENERGY EFFICIENCY FOR ALL

Energy Efficiency for All (EEFA) is a project of the Energy Foundation, National Housing Trust, Natural Resources Defense Council, and Elevate Energy. The mission of the EEFA project is to bring together the energy and housing sectors to tap the benefits of energy efficiency for millions of Americans living on limited incomes. We work with a range of partners in 12 states to promote effective utility energy efficiency programs for affordable building owners and healthy and affordable housing for residents. We blend expertise in affordable housing, energy efficiency, building ownership, and utility engagement. We work to support local groups by providing tools and resources that can help them increase energy efficiency opportunities for underserved tenants in their states.


Sources:

¹ U.S. Department of Housing and Urban Development, “Quantifying Energy Efficiency in Multifamily Rental Housing” Accessed April 12, 2017. <https://www.huduser.gov/portal/periodicals/em/summer11/highlight1.html>.

*Source: Evergreen Economics, “PY 2011 Energy Savings Assistance Program Impact Evaluation Final Report,” p. 40 (August 30, 2013). Information Referenced: Energy Upgrade California programs in N. California (whole-building multifamily pilots) are achieving an average of 16-22% savings for less money per-unit than ESAP, which is achieving 3-9% savings on average and likely less in multifamily units.

Uptake rate refers to the percentage of projects that are completed following initial customer outreach. Energy Efficiency For All, “Program Design Guide: Energy Efficiency Programs in Multifamily Affordable Housing,” May 2015. Information Referenced: More than 40 percent of the energy audits provided by the program have resulted in installed projects.

“Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program,” Meredith Fowlie, Michael Greenstone, and Catherine Wolfram, June 2015. Information referenced: An aggressive encouragement intervention increased WAP participation from less than 1% in the control group to about 6% in the encouraged group.



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