

ATTACHMENT 6

Affordable Housing Retrofit Accelerator Energy Auditing and Analysis

AHRA Program Overview:

The Affordable Housing Retrofit Accelerator (“AHRA”) Program is designed to provide a comprehensive suite of technical and financial services to help affordable multifamily residential building owners decarbonize their buildings and comply with the District’s Building Energy Performance Standards (BEPS).

Energy Audit and Analysis Services:

The Affordable Housing Retrofit Accelerator Auditing and Analysis Program (the “Program”) is designed to provide ASHRAE Level Auditing Services to eligible Affordable Multifamily Residential Buildings or other facilities pre-approved by DOEE and located within the District of Columbia.

Qualifications:

Service Providers interested in qualifying for AHRA Energy Auditing and Analysis Services will be required to meet the following qualifications:

1. Must possess at least one of the following active certifications or licenses:
 - MFBA from Building Performance Institute (BPI) for Multi-Family property types
 - CEM Certified Energy Manager (Association of Energy Engineers (AEE) Certification)
 - CEA (AEE Certification)
 - BEAP from ASHRAE
 - HBDP from ASHRAE
 - Professional Engineer (PE)
 - Additional relevant ASHRAE, BPI, or RESNET certifications may be submitted for DCSEU consideration but will require DCSEU pre-approval in writing, prior to acceptance.
2. Provide highly qualified supervision and sufficient, qualified personnel to complete the performance testing services in a timely manner.
3. Ensure all services conform to the standard of care and practice appropriate for the nature of the services, including but not limited to, industry best practices and the requirements set forth below.
4. Ensure all services are performed in compliance with applicable laws, statutes, ordinances, rules, regulations, and orders enacted by or promulgated by federal, state, municipal, or other governmental authorities including but not limited to procuring all necessary permits, licenses, concurrences, other governmental approvals necessary to complete the work.

AHRA Energy Auditing and Analysis Services:

Service Providers deemed qualified by the DCSEU will be enrolled in the AHRA Energy Auditing and Services Program. Audit assignments will be authorized by the DCSEU through issuance of one or more Work Orders and must adhere to the DCSEU program protocols. Sample scopes of work are shown below.

Category 1: ASHRAE Level 1 Audit—this level of energy audit is defined as identification of opportunities for energy savings based on utility spend analysis and observed existing equipment, programming, and building use. Focus is on energy savings opportunities including (but not limited to) lighting, heating, and cooling equipment, thermal shell, and system scheduling. A written report containing a list of the opportunities with estimates of energy savings potential and costs.

Category 2: ASHRAE Level 2 Audit—this level of energy audit is defined as a more extensive examination of building systems which may include (but is not limited to) spot metering and/or data logging to determine the energy consumption of specific systems and equipment that should be targeted for further investigation for energy savings potential. The written report for Category 2 is inclusive of all Level 1 report requirements and includes the additional work product that identifies specific recommendations for efficiency improvements coupled with the calculated energy savings and implementation costs based on generally accepted energy engineering formulas and local contractor and materials pricing.

Category 3: ASHRAE Level 3 Audit—this level of energy audit is inclusive of all Category 1 and Category 2 requirements including the extensive examination of building systems and equipment. The written report is more detailed than the Category 1 & 2 reports and includes specific recommendations for energy equipment upgrades, process and procedure modifications, and a full inventory of equipment including the energy use for each piece of equipment alongside calculated energy savings and implementation costs. The savings and costs are based on generally accepted energy engineering formulas and local contractor and materials pricing. The savings estimates may also include energy modelling to confirm the energy calculations and support future investment / capital financing decisions.

Overall Expectations under each Audit Category:

Service Providers must be qualified and equipped to evaluate building facilities and propose actionable energy conservation measures. This work will include, but is not limited to optimization, installation, retrofit, upgrade, adjustment, retro-commissioning, partial and whole building electrification potential and/or replacement of:

- Heating ventilation and air conditional (HVAC) systems
- HVAC automated control systems
- Cool roofs and roof replacements
- Solar Photovoltaic including (but not limited to):
 - Suitability,
 - Roof condition,
 - Potential capacity
- Interior, exterior, and area lighting
- Water Heaters
- Water conservation equipment (low-flow plumbing fixtures, irrigation controls, etc.)
- Building Automation System (BAS) recommended upgrades
- Staff trainings, remote monitoring services, and/or on-going support services
- Other associated infrastructure and envelope improvements

Other Expectations:

- Coordination with the DCSEU and DOEE to allow staff to shadow Service Provider during the initial building walkthroughs and/or audits, if requested.
- Use of a template-based collection system, or audit format for submittal of results, per DCSEU program protocols.
 - Completed Energy Audits must be submitted via the online audit template website [Building Energy Asset Score/Audit Template | Home](https://buildingenergyscore.energy.gov/) <https://buildingenergyscore.energy.gov/>
- Documentation of existing building electric infrastructure and the current conditions including but not limited to:
 - Customer and/or Utility Owned Transformer size(s) (KVA), type and approximate age
 - Customer and/or Utility Owned Switchgear
 - Customer Owned Circuit Breakers, related panels and wiring (size and estimated age)
 - Existing Building and customer Electric and Gas meter(s) data
 - Identification of potential whole building electrification measures for HVAC and related pricing (including heavy ups)
- Coordination and participation the DCSEU, DOEE, and the facility owner (or its authorized agent) to help verify energy benchmarking data inputs
- Energy auditors will be required to submit all energy savings calculations, including algorithms, documentation (including product cut sheets and photos) and assumptions that will clearly support energy savings estimates from submitted audit reports.

General Information:

The DCSEU will also consider other relevant Energy Conservation Measures (ECMs) proposed that will deliver energy and cost savings for the building at the building system level or apartment/unit level, and or recommendations on common space and/or resident space redesign needs, or opportunities given current and/or future occupancy use and loads. All measures must be clearly explained and approved by the DCSEU, Facility Owner, and DOEE, including but not limited to, any changes to design, style, and/or the footprint of existing equipment.

After each audit report has been completed and submitted to the DCSEU and approved by the DOEE (if required), Service Provide will be required to attend a meeting with the DCSEU and the Facility owner (or its authorized representative) to review the audit report and recommendations. If the audit report is not approved by DOEE, Service Provider will be required to address DOEE's concerns and resubmit the audit report for approval.

Pricing

For each Audit Category, please provide an affirmation of interest to provide the level of service and the relative price per audit requested. Pricing should be based on a \$/SQFT for each level of service. Service Provider shall assume all buildings will be a minimum of 50,000 and may provide \$/SQFT pricing based on SQFT tiers (e.g., 50,000 – 60,000 SQFT, 60,0001 – 70,000, 70,001 – 80,0001).