

Auditor Qualification Form

January 1, 2023 – December 31, 2023

The Maryland Department of Housing and Community Development (DHCD) accepts comprehensive energy audits for DHCD financing and energy efficiency and conservation programs from qualified energy auditors. DHCD maintains a “Qualified Energy Auditor” list on an ongoing basis and requires annual submission to reaffirm qualification.

This qualification form must be executed by a responsible individual authorized to legally bind the entity to enter into agreements and signed by energy auditors.

- Current certifications for existing auditors must be submitted with this application. Minimum required certifications is BPI Multifamily Building Analyst **AND** at least one of the following: BPI Envelope Professional, BPI Energy Auditor, or similar building science certification.
- New applicants seeking consideration for inclusion on the [Qualified Auditors List](#) are required to submit copies of three (3) comprehensive multifamily energy audit reports for DHCD to review as examples of the applicant’s work. These reports will be used to determine the applicant’s qualifications in conjunction with other requested documentation (certifications etc.) and must demonstrate the extent of the applicant’s knowledge in building science and recommendations of energy efficiency measures.

Energy Auditors Are Responsible For The Following Activities:

1. Maintain required certifications throughout this period.
2. To perform comprehensive, unbiased whole building energy audits in full compliance with program guidance.¹
3. Consider all feasible energy saving opportunities, regardless of an owner’s desired work scope.
4. The performance, review, accuracy, and completeness of the final report and funding request issued for DHCD project funding consideration.
5. Create and sign the final Energy Audit Report and include the responsible auditors’ contact information IE: phone number, e-mail, and credentials.
6. Complete a Funding Request. The Funding Request must be completed and submitted to Ownership as a stand-alone document.

¹ Program Guidance consists of the current BPI [Multifamily Building Analyst Professional Standards](#) (and as amended), applicable [BPI Envelope Professional](#) and [Building Analyst standards](#), and the [Multifamily Energy Efficiency and Housing Affordability Program Guide](#).

Comprehensive Energy Audit

The auditor must:

- Obtain and use at least 12 months of actual utility consumption for the Owner (commercial) and Tenant (resident) for building energy modeling purposes. Obtain, direct, or assist the property management in obtaining signatures on DHCD's [Customer Consent to Obtain Energy Use Information](#) form for all commercial and residential meters as necessary per each utility. If this is not possible, an explanation must be stated in the audit report. DHCD may be able to assist with projects that use MEEHA funds.
- Identify, define and describe the building envelope (aligned thermal and pressure boundary) in the audit report. Develop a practical solution (scope of work) to repair pressure and thermal boundary deficiencies that will provide a continuous and aligned pressure and thermal boundary in all accessible spaces, including interstitial spaces (IE: chase ways, attics, porch overbuild areas, overhangs, and basement/crawl spaces). Individual unit compartmentalization must be a focus as well as utilizing current building science best practices (do no harm to occupants or building).
- Inspect a sample number of units: The auditor shall inspect a representative 10 percent sample of all dwelling units; or a minimum of 5 units, whichever is greater. The sample shall include, at a minimum, one representative dwelling unit from each unique type. In buildings where only one- or two-unit types exist, and testing shows little variation between similar units (no more than 20% difference), it is reasonable to reduce the sample size to no fewer than 10 units. In most cases, no more than 20 units should require inspection. However, if results are inconsistent, additional units must be sampled.
 - Variations in basic floor plan layout, HVAC type, capacity, quantity or fuel source located in each dwelling unit shall cause the dwelling unit to be considered a unique type.
- Visually inspect units, common areas, and interstitial spaces for air sealing and duct sealing opportunities.
- Document efficiency ratings for lighting, appliances, HVAC units and all other items that may be an energy saving opportunity. The auditor must be able to provide this information to DHCD upon request.

Energy Audit Report

The Auditor must:

- Model buildings and units as appropriate; and develop a list of energy conservation measures using the current updated version of one of the following software programs for multifamily buildings: RemRate, eQuest, EAQUIP, or TREAT. Proprietary calculation sheets are not acceptable.
- Appropriately calibrate models to within +/- 10% of actual utility usage.
- Upon request, provide project electronic energy model file, input reports, output reports, and all other information required by DHCD to verify data integrity. This information becomes DHCD property and is subject to third party and public review in accordance with Maryland's Public Information Act.
- Upon request provide a "Recommended Retrofit Package" report generated from the modeling software identifying an improvement package based on existing conditions, opportunity, practicality, and building science.
- The audit report and Funding Request must show interactive measure savings.



- Include an Energy Conservation Measure (ECM) report/table showing **ALL** feasible ECM's and their energy savings that were considered but not included in the Funding Request.
- Calculate heating savings for the period November 1- March 31 (begin October 1 in Garrett Co.) and cooling savings for the period June 1 – August 31.
- Clearly identify and describe assumptions used to develop the energy model and ECM calculations including quantities, efficiencies, operation and run times (hours in use), and resources used to justify the assumptions. (Example: attic fiberglass batt insulation measured R-30, downgraded to R-28 using the BPI Batt insulation effectiveness chart based on installation quality.)
- Include matrices identifying all mechanical equipment, lighting, etc. quantities, sizes, model numbers, and efficiencies of those items inspected.
- Include photos of equipment inspected for a single unit that is a representation for all units inspected. Photos must be labeled to identify the date they were taken.
- Provide building ventilation recommendations that align with current building ventilation standards and take into account the recommended scope of work.
- HVAC system sizing **is a function of the energy audit and MUST** be based on demand/load calculations using Manuals “J” and “S” or appropriate ASHRAE calculations based on the improved building condition. Demand/load calculations must be submitted to DHCD upon request.
- Audit reports must contain a detailed ECM scope of work specific to each proposed ECM for the project. The scope of work must be detailed enough for appropriate lay persons to properly perform the identified work to achieve the auditors intended results. Project design teams must be able to incorporate the scope of work into project specifications to achieve the expected results.
- Audit reports must be revised as directed by DHCD to meet program requirements; including requirements identified in this document or other program guidance
- Submit a [Funding Request](#) with all audit reports.

Funding Request

All recommended ECM's must be listed on the most current Funding Request. The Funding Request is formatted and formulated to provide DHCD with the data required to determine program funding. Columns in the data entry fields with tinted backgrounds must be filled out and fields with a blank background will populate automatically.

- ECM's must be separated according to their respective utility meters (residential or commercial meters) for all projects.
- Each ECM must be identified on a separate row.
- The Auditor must clearly identify the efficiency, size, quantities, age, hours of use, etc. of existing conditions. Example: existing double hung vinyl windows with SHGC 0.40 and U-factor 0.38.
- Use DHCD's Expected Useful Life Table for ECM lives, the table is located on the Useful Lives tab in the Funding Request. Lighting measure “useful life” must be determined by the type and hours of use per day as stated in the Expected Useful Life Table.
- Measure Costs must be identified for each ECM utilizing actual contractor bids prepared by the owners' selected contractor(s) and must include cost of materials, equipment, and installation.



- Location of each lighting ECM must be stated (Example: Kitchen Ceiling, Bathroom Vanity, Entry/Foyer, etc.).
 - ECM's must be listed as separate ECM's if one of the following is different: Measure Category, Recommended ECM Specification, or Expected Useful Life.
 - Occupancy or photo sensor savings must be calculated using the recommended efficient condition of the lighting bulb/fixture when both the light and a sensor are being recommended.
 - Include **ALL** feasible ECM's and their energy savings in the "Measures Removed From Scope" section for measures that were considered but not included in the Funding Request. Include corresponding notes in the "Notes" section of the Funding Request.
 - Adhere to all Funding Request Rules as stated on the "Instructions" tab of the Funding Request.
 - Provide specific and detailed responses to audit report or Funding Request questions within 10 business days of DHCD issuing questions. Inadequate, delayed, or non-responses may result in the auditor being removed from the Qualified Auditors List.
- ❖ When in conflict with BPI, the Multifamily Energy Efficiency and Housing Affordability Program Guide takes precedence but does not take precedence over State and/or local code.
 - ❖ Entities that require excessive revisions to energy audit reports or Funding Requests to meet program guidance may be removed from the Qualified Auditor list at DHCD's sole discretion.



By signing this form, I hereby acknowledge that I have read this application form and agree to perform and deliver compliant energy audits and audit reports as outlined here and detailed in BPI and DHCD guidance. I represent and warrant all personnel that will perform audit activities for DHCD finance programs are aware of the requirements of this application.

I understand I will contract with the property owners and be paid by them for this service. DHCD is not contracting these services.

Entity/Individual name

Phone number

E-mail Address

Signature

Date

Printed name

Title

As an energy auditor seeking DHCD qualified status, I have read these requirements and agree to perform and be responsible for the final energy audit product produced under DHCD's guidelines. I have read and agree to perform said energy audits in accordance with all of DHCD's guidelines including those outlined in this document.

Auditor Print Name

Sign

Auditor Print Name

Sign

Auditor Print Name

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Auditor Print Name

Sign

