



Durham County High Performance Building Policy

Adopted April 27, 2026

I. Purpose of this Policy

The purpose of the High Performance Building Policy (HPBP) is to guide the County in implementing design and construction practices that prioritize energy and water efficiency, renewable energy, durability, occupant well-being, and cost-effectiveness, resulting in buildings that are high-performing, resilient, and sustainable.

This policy establishes a process for identifying, implementing, and verifying energy efficient design and renewable energy incorporation for renovation and construction practices in all new construction as well as major renovation projects in County-operated buildings. This policy will also outline energy conservation measures to be taken by the County.

The Durham Board of County Commissioners (BOCC) adopted the Durham County Renewable Energy Resolution in 2018 and Renewable Energy Plan in 2022. The Renewable Energy Resolution and Plan commits the County to:

- A. Work toward achieving a transition from fossil fuel-powered operations to 100% clean, renewable energy by December 31, 2050, and 80% by 2030.
- B. Implementing energy efficiency as an important part of the County's approach by minimizing the amount of energy used overall.

The Durham County High Performance Building Policy, revised and adopted in 2025, is intended to direct County employees to design, construct, renovate, repair, and operate County buildings in a manner aligned with the BOCC's Renewable Energy goals. The focus of this policy builds on the elements of the original High Performance Building Policy, established in 2008, and incorporates new requirements that:

- A. Reduce the County's energy usage.
- B. Facilitate on-site renewable energy generation.
- C. Prepare for growth in electric vehicle (EV) use.
- D. Shift all fossil fuel powered equipment in County buildings to electric when possible.
- E. Provide a mechanism by which progress toward the 2030 and 2050 renewable energy goals can be regularly and accurately measured.
- F. Compliment other Durham County documents and policies, such as the Environmentally Preferred Purchasing Policy.

II. Policy

All Durham County employees shall share in the responsibility for the implementation of this policy, be diligent in their efforts to conserve resources, and use energy efficiently.

Department heads shall encourage staff members with facility construction, operations, maintenance, and/or renovation responsibilities to pursue the LEED Green Associate credential or other relevant credentials in sustainable facilities or energy efficient building operations. Education,

training, and engagement of County staff is critical to achieving the County's renewable energy goals. As such, operational budget requests shall include adequate funds and staff resources to create and implement educational campaigns and training tools to ensure that all staff are aware of the conservation behaviors expected of them and receive the necessary training to perform them properly.

County budget requests for the operation, maintenance, and equipment in existing facilities shall include adequate funds to maintain and enhance the energy efficiency of building systems and equipment. Proposed capital budgets shall provide for quality, energy-efficient facilities and equipment which meet or exceed the performance criteria established in this policy.

When a required action is contingent on being designated 'as practical' and is determined by the Project Manager or Point of Contact to be impractical, the Design Team shall review the considerations of this requirement and make a final decision. Justifications for impracticality may include building functionality, feasibility constraints, or other project-specific limitations.

This policy will undergo periodic updates to reflect revisions to US Green Building Council (GBC)'s LEED certifications and advancements in international building codes, as well as technological changes, when relevant. The Sustainability Manager, Director of Engineering, and Director of General Services are responsible for the annual review of this policy. The Policy will be reviewed as needed to determine the need for revisions due to changes in the BOCC's sustainability priorities or goals, the availability of new technology for designing and maintaining sustainable facilities, and other relevant factors. Note that when this policy conflicts with federal and state regulations, the most restrictive regulations will be adopted.

III. Procedure

The Project Manager or Point of Contact is responsible for completing the HPBP Requirements Checklist, a structured spreadsheet designed to track compliance by systematically verifying and documenting each requirement, included in detail below. The Checklist is available as a supplemental resource to download in MyDCo.

A. Construction & Renovation Design Requirements

To reduce environmental and economic harms associated with excessive energy use and greenhouse gas emissions that disproportionately impact underserved communities, all new construction of occupied public buildings larger than 5,000 square feet, as well as major and minor renovations of all existing, occupied public buildings of any size will meet the following requirements. Requirements are denoted below with C (New Construction), R (Major Renovation), and U (Upgrade & Minor Renovation), respectively.

- 1. [C, R]:** Buildings will be designed and constructed to a minimum of LEED Gold certification equivalent (or approved alternate). Sustainable design elements should be incorporated into each project concentrating on those which provide energy, greenhouse gas emission, and cost savings. To the fullest extent practical, facilities will be designed to run on 100% clean, renewable energy. All relevant architects must submit comprehensive documentation

demonstrating compliance with LEED Gold certification standards or higher, or an approved equivalent, to the design team.

Projects where meeting the requirements for the energy performance standard are deemed impractical, the form in MyDCo must be submitted: HPBP Exemption Form

- 2. [C]:** Building designs must earn the maximum points available for the current LEED requirements for Building Design + Construction, Optimize Energy Performance. Option 1, 2, or 3 credits are all acceptable.
- 3. [C]:** Site location and selection process shall consider the adaptive re-use of existing County-owned and community resources (e.g. existing structures, available infrastructure, and brownfield or greyfield real properties) over the development of new facilities or structures and the development of greenfield sites. Project teams must also look for opportunities to co-locate facilities.
- 4. [C]:** New public buildings shall be strategically sited to minimize energy consumption related to transportation when feasible. This entails selecting sites that are easily accessible via public transit or are within close proximity to existing infrastructure, reducing the need for long commutes and promoting alternative modes of transportation such as walking or cycling. Additionally, consideration should be given to the building's proximity to amenities and services to further minimize the reliance on vehicular travel.
- 5. [C]:** Investigate potential passive design approaches to natural ventilation and temperature control. Evaluate suitable building orientations, aligning them with room or area purposes, adequately sizing south-facing windows, utilizing thermal mass and overhangs effectively, and implementing strategies for the retention and even distribution of heat across different seasons. Consider passive design principles, including shading, radiation control glazing, enthalpy recovery ventilation, airtightness, thermal bridge elimination, and high-performance insulation.
- 6. [C, R]:** Enhanced Commissioning is required and must include:
 - Mechanical
 - Electrical
 - Plumbing
 - Building envelope
 - Renewable energy systems
 - Electric vehicle supply equipment (EVSE) infrastructure
 - Security systems and life safety
- 7. [C, R]:** All new construction and renovation projects that are 'opted in' to the Duke Energy EE Rider must utilize the Energy Design Assistance services offered by Duke Energy (or comparable program if Duke Energy's offering changes).
[C, R]: All new construction and renovation projects must utilize all-electric equipment, except in cases where the replacement of natural gas or other fossil-fuel-based equipment is

deemed uniquely cost-prohibitive. In such instances, the form in MyDCo must be submitted:
HPBP Exemption Form

- 8. [C, R]:** All new construction and renovation projects will meet current LEED requirements for chlorofluorocarbon-based (CFC) refrigerants in heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems and will use only refrigerants (naturally occurring or synthetic) that have an ozone depletion potential of zero and a global warming potential of less than 50.
- 9. [C, R]:** Implement bird-friendly practices following the guidelines established by the American Bird Conservancy (ABC). Require the use of bird-friendly glass and window glazing, sourced from the continuously-updated [ABC database](#) of product listings, for 100% of the building envelope.
- 10. [U]:** Ensure replacement equipment meets or exceeds the energy efficiency of the original equipment.
- 11. [C, R, U]:** All new construction and renovations shall install or replace all appliances with energy-saving ENERGY STAR certified devices including refrigerators, stoves, and dishwashers.
- 12. [C, R, U]:** All new construction and renovations shall install or replace all devices with US EPA [WaterSense](#) certified devices, including toilets, faucets, showerheads, and water fountains.
- 13. [C, R, U]:** All new construction and major renovation projects, as well as all roof replacement projects on buildings of the same minimum size requirements, must include an on-site solar photovoltaic (PV) energy system as part of the capital project scope. This standard applies to roof-mounted and ground-mounted solar PV that would feed into a building's electrical systems.

For instances that on-site solar energy is not practical, then the project must, at a minimum, scope the project such that the facility is deemed 'solar ready' upon completion of the project. The designer should identify adequate, maintainable, unshaded roof area for solar, and identify the standard output capacity based on this area. The drawing should be provided to the County in an architectural and electrical drawing for future use. The conduit sizing should be based on this maximum size build out.

Guidance for solar-ready is as follows:

1. Buildings shall be designed to maximize available space and sun exposure for solar panel installation and optimize solar energy generation. Avoid elements which could preclude the installation of solar thermal or solar PV during or after construction. Minimize the sizing and location of rooftop equipment and keep the south-facing section of the roof obstruction-free.
2. Avoid shading, including from trees and buildings. Trees shall not be removed to decrease shading for the purpose of increased solar capacity.
3. Identify areas for future PV array during the design phase and estimate full build-out capacity and provide an outline drawing.

4. Select compatible roofing systems and ensure structure is capable of carrying additional load, including wind load.
5. Identify the location of the electric panel and available spare breaker for PV interconnection. Ensure the electric panel has sufficient capacity to accommodate the total incoming power from both the PV system and the breaker protecting the main.
6. Install conduit pathways sized to full build-out including roof penetrations and external disconnect per the utility requirements for AC disconnect. Adequate space should be provided for future inverters and related equipment.

Exemptions may be considered from this requirement by submitting the HPBP Exemption Form on MyDCo. Project managers for exempted projects must provide documented justification and share it with the design team. Potential justification for exemptions includes:

- Designated historic structures or applicable buildings within historic districts will be considered for exemption.
- Projects where solar PV system installations are not practical due to structural roof constraints, shading or physical obstacles, or applicable regulations or where governing agencies (such as the FAA or other environmental regulations) prohibit them are exempt from this policy.
- Buildings scheduled to be demolished or to have a roof replacement in less than 5-7 years are exempt from this policy requirement.

14. [C, R, U]: Employee and County fleet vehicle parking areas of newly constructed facilities as well as qualifying renovation projects are required to provide electric vehicle supply equipment (EVSE) infrastructure at a level consistent with the County fleet transition to electric vehicles (EVs) and the anticipated 2040 EV market. In addition to major renovation projects, any capital projects where parking spaces are added or where greater than 50% of the existing parking spaces are being repaved are also subject to this policy. Of all the required motor vehicle spaces, a minimum of 15% shall be EV-ready spaces and a minimum of 3% shall be EV charging spaces. All EVSE will conform to County specifications.

If parking areas are identified as not requiring EV chargers due to constraints, such as no fleet vehicles overnight or no public parking, then those buildings shall be exempt from the EV-ready and EVSE requirement. For exemption, the form in MyDCo must be submitted: HPBP Exemption Form

15. [C, R, U]: All new construction projects and major renovations that include exterior light fixtures, including outdoor sports lighting, shall meet DarkSky International DarkSky Approved certification standards that minimize glare, reduce light trespass, and limit night sky pollution when practical. The [Five Lighting Principles for Responsible Outdoor Lighting](#) shall be applied in all lighting additions and replacements. Fixtures shall be fully shielded, full cut-off type and must be directed downward. Additionally, full cutoff LED fixtures that have a maximum color temperature of 3000 degrees Kelvin (K) shall be used for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures. [DarkSky Approved products](#) shall be purchased and installed whenever practical.

B. Operations & Maintenance

To reduce environmental and economic impacts associated with excessive energy use, all County-operated buildings shall meet the following requirements:

1. A scheduled replacement approach shall be implemented for all major HVAC systems including air conditioners, chillers, cooling towers, air handling units, heat pumps, furnaces, and boilers.

Equipment shall be replaced with all-electric systems, when feasible, and with the highest energy efficiency rating, including equipment that:

- Reaches its expected end-of-life;
- Is no longer under warranty;
- Fails or requires costly repairs before the scheduled end-of-life; or
- The cost of the repair is 50% or more than the cost of a replacement.

At a minimum, equipment will meet the minimum rating for energy efficient equipment found in the [International Green Construction Code](#).

2. Temperature set points will be standardized and set within a four-degree deadband with 72°F as the midpoint. An exception may be made for buildings under performance contracts during the contract period. For occupied hours, occupants or HVAC technicians may set the midpoint one degree up or down.
 - Occupied Hours' Heating & Cooling Set Points: 70°F (heating) - 74°F (cooling)
 - Unoccupied Hours' Heating & Cooling Set Points: 60°F (heating) - 84°F (cooling)

Relative humidity should be maintained between 30-60 percent to meet ASHRAE Standard 55-2020, "Thermal Environmental Conditions for Human Occupancy."

3. In buildings with centralized electronic or computerized controls, the start time for the HVAC equipment shall be set as late as practical while still allowing time to condition the building to temperature set points specified in section D.2. above by the beginning of the workday.

Outdoor air dampers shall be closed, and exhaust fans shut down during unoccupied hours and during building startup, except where the use of outdoor air for cooling would be more energy-efficient than utilizing return air or where outdoor air is necessary for flushing the building post-construction or for occupant health reasons (i.e. during a pandemic or other health emergency).

In buildings and areas with individual thermostat controls, programmable thermostats will be installed and programmed in accordance with the temperature set points specified in section D.2. above.

All HVAC equipment, including supply and return air fans, are to be at minimum operation during unoccupied times, including on weekends, holidays, and at night, except for those buildings conducting County business. These down times also include any time the building

is minimally occupied and not serving its primary function. This includes times when only security, cleaning, and maintenance personnel are present and/or during unoccupied hours.

4. To help manage the County's peak electrical load, all discretionary equipment, such as backwash cycles at water reclamation and water treatment facilities, should be run during off-peak hours whenever practical.

Discretionary equipment, when added or replaced, should be equipped with a means for remotely automated load shedding.

5. All natural gas fired boilers, furnaces, and generators will be tuned annually and brought up to maximum efficiency. Verification of combustion efficiency shall be made by licensed operators and a permanent record of these readings will be maintained at each location.
Minimize the testing of generators to the necessary level to guarantee safety and operability.
6. Buildings over 5,000 square feet and/or sufficient complexity, such as advanced HVAC, lighting, or mechanical controls, will be equipped with Building Automation Systems to enhance energy efficiency.
7. When maintaining buildings, County departments shall use products with the least amount of volatile organic compound (VOC)s, highest recycled content, and low or no formaldehyde and other toxic substances whenever practicable when purchasing materials such as paint, carpeting, adhesives, and furnishings.
8. Reduce unnecessary energy use of equipment, including ceiling fans in gyms and televisions in lobbies, when not in active use. Ensure that these devices are turned off during unoccupied times.
9. The County will employ a utility monitoring and analysis software system for all buildings and facilities. Energy and water use, cost data, and abnormal usage for each major facility shall be monitored monthly by Engineering and Environmental Services and General Services department staff. County-owned facilities that are leased to other entities must include a provision in the lease to provide access to monthly energy data to the County.

C. Lighting

To reduce environmental and economic impacts associated with excessive energy use, all County-operated buildings shall meet the following requirements:

1. Wherever practical, all lighting in buildings and parking structures and lots will be upgraded to high-efficiency LEDs. All original lighting should be recycled.
2. Indoor lighting should be designed to provide minimum lighting levels at standard.
3. Timers, photocells, and motion detectors shall be installed where feasible. In addition, maintenance staff shall perform routine inspections of all devices to maintain proper operation.

4. Lights that are designed to be on at all times for safety reasons shall be designed to dim to a minimum level and use motion detectors to switch to full illumination when needed.
5. Evening shift workers and contractors shall only turn on lights in the specified area where they are working. They shall ensure that all controllable lighting is turned off at the conclusion of their work and prior to the next day's business hours.
6. Employees will make certain that all task lights are turned off when the area is unoccupied.
7. Vending machines and coolers shall have their lights removed to reduce energy consumption. All new vending machines, including those that are leased, will be ENERGY STAR certified and equipped with a vending miser or a similar energy-saving device that regulates the amount of energy the equipment consumers.
8. All outside lights shall be turned off during daylight hours. Outside lighting and accent lighting will be used only when the building is occupied unless the lighting is used for security or safety purposes. If lighting needs to remain on for safety purposes, it should be equipped with motion sensors to ensure efficient use.
9. All athletic lighting shall be in use only during scheduled events or to ensure public safety. Athletic lighting turned on when no one is using a facility or after scheduled hours shall be reported to the Durham County Stadium Manager. Where practical, new sports field lighting installations shall use LEDs and computerized lighting controls that allow for scheduling and dimming.
10. All outdoor lighting shall meet the Dark Sky International standards outlined in section III.A.16.

D. Electric Motors

Departments with responsibility for the operation and maintenance of electric motors used in fans, pumps, compressors, and other equipment shall develop and implement an Electric Motor Program. The Program should be reviewed annually.

Such a program shall:

1. Maintain an inventory of critical motors for sustainable operations in case of motor failure with data plate information and vendor listings. This inventory should be updated on an annual basis at a minimum.
2. Specify the highest efficiency motors appropriate for each application.
3. Ensure the manufacturer's recommended preventative maintenance cycles and tasks are accomplished such as lubrication, adequate ventilation, enhanced drive belting, and electric load surveying.

E. Energy Conservation by Durham County Employees

1. All Durham County employees are expected to practice energy efficient behaviors, including turning off lights when not in use, switching off non-essential equipment once tasks are completed, conserving water by turning off taps while washing hands or dishes, and promptly reporting any issues to their Department Director.
2. The use of space heaters and portable A/C units is prohibited. If General Services notifies employees that the building cannot maintain temperatures within the acceptable ranges outlined in section B.2. of this policy, approved space heaters may be allowed during those conditions. Employees with documented medical needs may request a written exemption through the EEO and ADA Counsel through submitting the form in MyDCo: HPBP Exemption Form. All space heaters must be approved by Risk Management and comply with safety guidelines. Any unauthorized space heaters or portable A/C units in other areas are subject to removal. Table and pedestal fans are permitted.
3. Personal appliances are not to be used in areas that are not considered common areas, including individual offices.

Personal appliances include, but are not limited to:

- Coffee makers
- Refrigerators (mini fridges)
- Toaster ovens
- Microwaves
- Hot plates
- Air fryers

Personal appliances for legitimate medical needs, such as nursing mothers and those individuals with prescribed medications requiring refrigeration when communal refrigerators are not available, are exempt from this requirement. Exemptions for personal appliances, including space heaters, must be approved by the EEO and ADA Counsel through submitting the form in MyDCo: HPBP Exemption Form

4. Employees will keep all exterior windows closed when HVAC units are in use.
5. For those facilities not equipped with central air conditioning systems, temperature control should be achieved by using fans and window adjustments, such as window blinds or curtains, or Energy Star rated window units. The County shall install efficient heat-pump mini-splits. All units should be set for minimal operation when the space is unoccupied.

County employees are also expected to follow the [Environmental Responsibility Expectation for Employees Policy](#) and the [Environmentally Preferred Purchasing Policy](#), both of which are available on My DCo.

IV. Reporting

The Engineering and Environmental Services department will prepare a Building Benchmark report each fiscal year that highlights the bottom quartile of buildings based on energy performance. Each building in the bottom quartile will be reviewed and assigned to one of three action categories:

- Re-Commissioning
- Capital Improvement Project Integration
- Deferred Action

V. Administration

A. Design Team

The design team's qualifications related to comprehensive design services including energy design and building electrification will be included in the selection criteria for any applicable Request for Qualifications (RFQ).

Contracts for design services shall specify energy analysis for the whole process from site selection and programming through evaluations after occupancy as specified in the High Performance Building Policy. The design team is expected to collect, organize, and share documents for utility rebates and federal direct pay eligibility.

Energy analysis shall be performed by the design team at appropriate intervals in the design process. At minimum, energy analysis will be conducted during the planning, schematics, design development, construction document, and commissioning phases to inform data-driven decision-making about how different energy conservation measures will impact cost, energy use, and greenhouse gas emissions. Additionally, the design team will include a comparison of expected versus actual energy use in relevant reports after the building has been in operation for two years.

In the design phase, value-engineering that increases the energy usage of the building shall not be used.

B. Project Review Committee

For all new construction and major renovation projects over 5,000 square feet, the Renewable Energy Project Manager will be involved in the project in the early stages of design, prior to completion of Schematic Design Phase, to ensure adherence to this policy.

C. Policy Acknowledgement

Project Management and General Services department employees shall read and acknowledge this policy through MyDCo.

D. Establish a Cost-Recovery Capital Energy Program

Fifty percent of energy savings and incentive payments for energy efficient equipment and solar installations shall be reinvested into a Cost-Recovery Capital Energy Program fund for additional energy efficiency and renewable energy measures. These funds may be derived from amounts budgeted for utilities expenses which were not incurred (savings) due to diligent energy conservation efforts or from utility rebates, direct payments from Federal and State grants, and other sources.

VI. Unique Exemptions

All exemptions must be submitted using the form in MyDCo: HPBP Exemption Form

A. Health and Safety

Any provision of this policy that is deemed by Risk Management, Fire Marshal, or building code as a health or safety hazard will be granted an exemption.

B. Buildings Currently in Design Phase

Any buildings in the design phase at the time this Policy is adopted shall be exempted from these requirements and encouraged to apply sustainable practices where feasible.

C. Fossil-Fuel Based Equipment

Exemptions for natural gas or other fossil-fuel based equipment, such as back-up generators, must be approved by the Assistant County Manager or Director of Engineering and Environmental Services and/or their designee, and submitted with design strategies or maintained or facility file and to a central database maintained by the Engineering and Environmental Services department using the form posted in MyDCo: HPBP Exemption Form

D. Historic Structures

Guidelines and mandates by the National Park Service's (NPS) Historic Preservation Program and National Register of Historic Places will take precedence over this Policy in matters concerning the preservation of structures designated as historically significant by those authorities. Exemptions from specific policy requirements will be granted following a thorough review process, ensuring alignment with preservation goals while still promoting sustainable practices where feasible.

VII. Definitions

Benchmarking: A method used to determine whether a building is using more or less energy than its peer facilities with similar occupancies, climates, and sizes. Benchmarking is done by taking a building's total energy use and dividing by the building's total area. This number is frequently referred to as the Energy Usage Intensity or EUI. It is then compared to buildings of the same use type to determine how efficiently the building is utilizing energy.

Clean, Renewable Energy: Energy derived from ongoing natural processes that rapidly replenish and are sustainably collected from renewable sources such as solar, wind, and geothermal.

County-operated Building: A building owned and operated by County staff or leased by the County. The energy bills for these buildings are paid by the County.

Commissioning: The process of planning, documenting, scheduling, testing, adjusting, verifying, and training to provide a facility that operates as a fully functional system per the Owner's Project Requirements.

Common Areas: Areas that are reasonably designated by the Department Director as ones which serve a group of people in the building. Examples include conference rooms, break rooms, kitchens, work areas, and lounges.

Electric Vehicle Supply Equipment (EVSE): Equipment that supplies electricity to an electric vehicle (EV). Commonly called charging stations, they provide electric power to the vehicle and use that to recharge the vehicle's batteries. EVSE systems include electrical conductors, related equipment, software, and communications protocols that deliver energy efficiently and safely to the vehicle.

Energy Audit: An inspection survey and an analysis of energy flows for energy conservation in a building. It may include a process or system to reduce the amount of energy input into the system without negatively affecting the output. An energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprint.

Energy Conservation Measure: A project or technology that includes upgrades, retrofits, repairs, and replacements that are primarily designed to improve energy efficiency in a building. These may include, but are not limited to, insulation, replacement of windows and doors, automatic energy control systems, modifying or replacing heating, ventilation, or air conditioning systems, and installing energy-efficient LED light fixtures.

Energy Modeling: A process that estimates how much energy a building will consume once built.

EV-Ready: The state of a building or infrastructure being equipped with the necessary electrical infrastructure and provisions to support the future installation and use of electric vehicle charging stations.

High Performance Building: A structure designed, constructed, and operated to maximize energy efficiency, minimize environmental impact, and enhance occupant health and productivity. These buildings integrate innovative design, advanced technologies, and sustainable materials to achieve optimal performance across various metrics, including energy consumption, water usage, indoor air quality, and overall environmental footprint. Key features of high-performance buildings often include efficient heating, ventilation, and air conditioning (HVAC) systems, renewable energy sources, superior insulation, passive design strategies for natural lighting and ventilation, water-efficient fixtures, and intelligent building automation systems. Investments made for high performance buildings result in significant economic benefits due to reduced energy and maintenance costs and increased worker productivity. By prioritizing sustainability and performance, these buildings contribute to reducing greenhouse gas emissions, conserving natural resources, and promoting a safer, healthier indoor environment for occupants and visitors.

LEED (Leadership in Energy and Environmental Design): Consensus based generalized point rating system for locating, designing, constructing, operating, and certifying sustainable buildings. The rating system addresses environmental categories that include sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, design, and process innovation.

Life Cycle Cost Analysis (LCCA): A process of evaluating the economic performance of a building or energy conservation measure over the entire life of the asset. An LCCA balances the initial capital investment with the long-term expense of owning and operating the building.

Maintenance and Repair: The ongoing routine servicing and processes of buildings, equipment, and their systems to ensure proper function and good working conditions. Or action taken to restore a damaged item back to its proper function, operation, or use.

Major Renovation: Extensive alteration work in addition to work on the exterior shell of the building and/or primary structural components and/or the core and peripheral mechanical, electrical, plumbing, and service systems and/or site work. A project shall be considered a major renovation when the project

work includes at least 2 of the following: Whole replacements of HVAC, roof replacement, 50% or more of gross floor area, 50% or more of lighting fixtures, 50% or more of interior surfaces, or 50% or more of the building's exterior wall envelope.

Minor Renovation: Building upgrade including minimal alteration work that does not meet at least 2 of the characteristics listed under Major Renovation.

New Construction: County-owned, -operated, and -leased buildings and facilities that are to be planned and constructed on a new or existing site, including existing buildings that are demolished to their structural components and main utility service lines.

Occupied Facility or Space: A facility or enclosed space provided for human activity on a regular basis, including parking decks.

Re-commissioning: The application of the commissioning process to existing buildings. Re-commissioning is a process that seeks to improve how building equipment and systems function together. Depending on the age of the building, re-commissioning can often resolve problems that occurred during design or construction or address problems that have developed throughout the building's life. In all, re-commissioning improves a building's operations and maintenance procedures to enhance overall building performance. Re-commissioning work should follow ASHRAE Guideline 0.2-2015, "Commissioning Process for Existing Building Systems and Assemblies."

Uniquely Cost Prohibitive: If a Life Cycle Cost Analysis demonstrates a cost premium greater than 15% over the lifetime of the asset over the cost of the alternative, it may receive an exemption if approved by the Assistant County Manager of Community Stewardship or their designee. Cost premiums can occur due to site constraints, building or zoning regulations, or other unique conditions that cannot be reasonably overcome.