

Fairfax County
Sustainable Development Policy for Capital Projects
Revised September 15, 2020

Purpose

The purpose of the Sustainable Development Policy is to fulfill the Fairfax County Board of Supervisors' commitment to environmental, economic, and social stewardship through sustainable development practices for County facilities and buildings. This Policy is intended to further the County's established goals for environmental stewardship as defined by the Operational Energy Strategy, the Green Initiatives Board Matter, and the Comprehensive Plan goals for Environmental Protection and Energy Conservation. In keeping with these established County goals, the Policy provides a framework to preserve natural resources; to meet or exceed federal, state and local standards for water and air quality, to promote energy efficiency and energy conservation; to use all resources wisely and to protect and enhance the County's natural environment and open space. The Policy also provides a framework within which to yield cost savings through reduced operating costs; to provide healthy work environments for County employees and visitors to County facilities; and to help establish a community standard of sustainable development for Fairfax County.

Background

In February 2008, the BOS adopted the County's Sustainable Development Policy for County Capital Facilities Projects. This Policy established Leadership in Energy and Environmental Design (LEED) as the standard for County projects and established the Silver Certification level as the goal for projects over 10,000 square feet (SF) in size.

Since adoption of the 2008 Policy the County has made great progress in many areas of sustainability including low Impact development for stormwater and landscaping, vegetative roofs, parking reductions, infrastructure for EV charging stations, recycling and use of recycled content materials, use of locally sourced and rapidly renewable materials, indoor environmental quality, reduction in domestic water usage, and energy performance improvement.

This updated Policy further strengthens the LEED sustainability goals and provides for incremental energy performance improvement and reduction in Green House Gas (GHG) emissions with a target of achieving Net Zero Energy eligibility by no later than FY 2031.

Departments Affected

This Policy is applicable to all County departments that are responsible for financing, planning, designing, developing, constructing, and operating County-owned facilities and buildings, including their design consultants and their contractors.

Policy

It is the Policy of the Board of Supervisors to finance, plan, design, construct, operate, renovate, maintain, and ultimately decommission its facilities and buildings to be sustainable. New facility construction, additions, and major renovations with an occupied area greater than 10,000 SF shall be designed and built under the LEED program, shall be guided by a LEED certified professional, and shall strive to achieve the following, at a minimum:

- Achieve LEED Gold certification
- Incorporate solar and EV readiness features

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- Provide an on-site renewable energy generation component, as practicable, with supplemental off-site renewable energy generation as required

In addition, for all projects beginning design in FY 2021 or later, all buildings shall achieve:

- Minimum of 30% energy performance improvement for new construction, and 25% for major renovations, as demonstrated by cost.
- Reduction in Greenhouse Gas (GHG) emissions of 32% for new construction, and 24% for major renovations.

For all projects beginning design in FY 2024, or later, all buildings shall achieve:

- Minimum of 40% energy performance improvement for new construction, and 35% for major renovations, as demonstrated by cost.
- Reduction in Greenhouse Gas (GHG) emissions of 65% for new construction, and 50% for major renovations.

For all projects beginning design in FY 2027, all buildings shall achieve:

- Minimum of 50% energy performance improvement for new construction, and 45% for major renovations, as demonstrated by cost.
- Reduction in Greenhouse Gas (GHG) emissions of 100% for new construction, and 80% for major renovations.

For all projects beginning in FY 2031 or later, all buildings shall achieve:

- NZE by demonstrating that the amount of energy consumed by the building every year will be supported by an amount of energy produced by on-site renewable energy generation, to the extent practicable, to be supplemented with off-site energy generation as needed.

These energy performance values apply to buildings over 10,000 SF and shall be calculated using the most current version of LEED/ANSI/ASHRAE 90.1/IESNA in effect at the time of the project's design. County staff shall continuously strive to exceed the achievement levels and timelines outlined in this policy for energy reduction, GHG reduction, and implementing on and off-site renewable energy generation.

This policy shall apply to all building projects funded from county sources. In addition, all co-located county and county-funded facilities shall be designed and constructed to work in tandem to maximize the energy goals of the individual buildings. New facility construction, additions, and major renovations with an occupied area of 5,000 SF to 10,000 SF, are to incorporate the following: 1) be designed and built under the LEED program, 2) engage a LEED Certified professional, 3) be registered with LEED, 4) shall strive to achieve LEED Certified level, and 5) strive to achieve reductions in energy performance and GHG emissions, and incorporate renewable energy sources.

Variance from this policy will be evaluated on a case-by-case basis. Variance from the policy standards and/or energy goals will be determined by the Director, Office of Environmental and Energy Coordination or by the Department Director responsible for design and construction management. Any building or facility that has been approved for a variance from this policy shall follow LEED design process and guiding principles. If a renovation or expansion project does not include the scope of work

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necessary to pursue the policy goals, the target energy performance and/or is ineligible for LEED certification, the project will be exempt from the Policy or eligible for a variance.

This Policy recognizes that certain project types, such as single family, townhouse and low-rise multi-family facilities of residential use group, parking structures, industrial facilities, non-conditioned spaces, and other low occupancy facilities, that may not be practically conducive to attaining this Policy’s LEED achievement goals, shall be developed under the LEED program. Such projects may be exempted from the expectation to attain a specific LEED certification level and may be eligible for a variance of the energy and GHG reduction requirements. Single family, townhouse and low-rise multi-family facilities of residential use group will be required to meet the ENERGY STAR qualification for homes, in lieu of a requirement for a specific level of certification under the LEED program. Other facility projects that cannot practically meet this Policy’s LEED achievement goals, due to unique factors or extenuating circumstances, shall be eligible for consideration of an exception or variance under this Policy. Written documentation detailing the extenuating reasons for an exception or variance shall be submitted to the appropriate department director, for approval, including an evaluation of whether the building can meet required LEED achievement and energy performance improvement levels. The department director shall provide a written response accepting or denying the exception request, including a determination of what level of LEED achievement and certification will be required.

A summary of these Policy applications for project over 10,000 SF is included in the table below:

SUMMARY OF POLICY GOALS				
Year(s)	Construction (New/Major Renovation)	Minimum Energy Performance	Minimum GHG Reduction	Minimum Certification Rating
FY 2021	New	30%	32%	Gold
	Renovation	25%	24%	Gold
FY 2024	New	40%	65%	Gold
	Renovation	35%	50%	Gold
FY 2027	New	50%	100%	Gold
	Renovation	45%	80%	Gold
FY 2031	New	NZE	NZE	Gold
	Renovation	NZE	NZE	Gold

Fairfax County will carry out its commitment to this Policy by assuring that County personnel who administer projects fully understand sustainable development principles and by requiring the selected design teams to maintain and employ these principles through every phase of design, construction, and operations planning. Criteria for choosing designers, architects, engineers, construction manager, and consulting teams shall include demonstrated knowledge of sustainable development practices in their specific fields and knowledge of the LEED rating system, Life Cycle Cost Analysis, Value Engineering, energy codes, and energy modeling.

This Policy shall be applicable to all County facility projects as defined herein, for which project scope and budget approvals are enacted after the effective date of the Policy. All currently, active County facility projects shall have a goal of meeting this Policy; however, it is recognized that certain active projects may not be able to fully comply with this Policy due to the pre-established funding constraints, and based on already advanced stages of design or construction. At no time shall this Policy take

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precedent over building codes or other regulatory requirements. This Policy recognizes the primary scope, goal and intent of the capital project is as defined by the Capital Improvement Program (CIP). This Policy shall be re-evaluated in a timeframe not to exceed three years.

This Policy also commits the County to an ongoing program for monitoring and analysis of actual building energy performance data; identifying existing buildings as priority candidates for systems recommissioning; recommissioning of priority buildings with initial focus on buildings previously certified by LEED; and for more proactive management of building systems and controls. Proactive management of building energy data, systems and controls, and periodic re-commissioning are necessary to optimize the cost, energy, and GHG saving benefits of the systems, and recover the first cost investment. This requires a recurring investment to analyze energy consumption and adjust electronic controls for major building systems and equipment.

Budgeting and Financing

All capital projects subject to this Policy shall include funding to meet the requirements of the Policy. Additional funding may be required to adjust previously approved budgets for projects in the design and construction phases to achieve the updated Policy requirements. Ongoing, life cycle utility budgets may need to be adjusted to address the need for utilizing off-site renewable energy to meet the updated Policy requirements. If it is determined that additional funding is required to meet this policy, the department responsible for design and construction management shall forward the additional funding request to Office of Environmental and Energy Coordination and Department of Management and Budget.

Procedures and Responsibilities

The Directors of all County Departments whose responsibilities include planning, designing, constructing, renovating, operating, maintaining, or decommissioning County-owned facilities shall be responsible for ensuring that facilities and buildings comply with this Policy. Affected Directors of County Departments shall be responsible for and reporting on the implementation of this Policy, annually.