

Fairfax County Sustainable Development Policy for Capital Projects

Purpose

The purpose of the Sustainable Development Policy is to demonstrate 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 Environmental Agenda, the County Vision Element for Environmental Stewardship, 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 quality, ambient air quality and other environmental standards; to promote energy efficiency and energy conservation; to seek ways 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 to County taxpayers through reduced operating costs; to provide healthy work environments for County employees and visitors to County facilities; to protect, conserve and enhance the region's environmental resources; and to help establish a community standard of sustainable development for Fairfax County.

This Policy directs appropriate departments to incorporate the use of the Leadership in Energy and Environmental Design (LEED) rating system into the design, construction, renovation, and operations of County facilities and buildings.

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.

Definitions

Sustainable Development – Sustainable development integrates building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction and operation of the built environment. Sustainable development looks at the environmental, economic and social effects of a building or built project as a whole and encompasses the following broad topics: efficient management of energy and water resources, management of material resources and waste, protection of environmental quality, protection of health and indoor environmental quality, reinforcement of natural systems, and the integration of the design approach to achieve economic and performance benefits.

LEED Rating System – LEED stands for Leadership in Energy and Environmental Design, and is a voluntary, consensus-based market driven green building rating system developed by the US Green Building Council. LEED is a nationally accepted benchmark for the design, construction, and operation of high performance green buildings. It is based on existing, proven technology and a rigorous evaluation of environmental performance from a “whole building” perspective. LEED is a third-party certification system designed for rating new and existing commercial, high-rise, and residential buildings. It contains prerequisites and credits in five categories: sustainable site development, water savings, energy efficiency, materials selection,

and indoor environmental quality. There are four rating levels that can be achieved: Certified, Silver, Gold, and Platinum.

Life Cycle Cost Analysis – Life cycle cost analysis is an inclusive approach to costing a program, facility, or group of facilities that encompasses planning, design, construction, operation and maintenance over the life of the facilities as well as any decommissioning or disassembly costs. Life cycle cost analysis looks at the net present value of design options as investments. The goal is to achieve the highest, most cost-effective environmental performance possible over the life of the project.

Value Engineering – Value Engineering is the systematic application of recognized techniques by multi-disciplined teams that identifies the function of a product or service; establishes a worth for that function; generates alternatives through the use of creative thinking; and provides the needed functions, reliably, at the lowest overall cost.

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. The US Green Building Council's LEED rating system and Reference Guide shall be the design and measurement standard used to determine the level of achievement for sustainable buildings under this Policy. This Policy applies to new construction, additions, and renovations to existing buildings and facilities whenever the gross occupied area of the new construction is over 2,500 square feet.

New facility construction, additions, and renovations with an occupied area greater than 10,000 square feet shall be designed and built under the LEED program, shall be guided by a LEED certified professional, and shall strive to achieve LEED certification at least the Silver rating level under the most recent version of the LEED rating system. Design and project management teams are encouraged to meet LEED ratings beyond the Silver level, if practicable.

New facility construction, additions, and renovations with an occupied area more than 2,500 square feet, and less than 10,000 square feet are to be designed and built under the LEED program, shall be guided by a LEED certified professional, and shall strive to achieve at least the Certified level of achievement under the most recent version of the LEED rating system. Design and project management teams are encouraged to obtain LEED certification, and are encouraged to meet LEED ratings at the Silver level, if practicable.

New facility construction, additions, and renovations with an occupied area less than 2,500 square feet shall be designed and built under the LEED program, and design and project management teams are encouraged to achieve the highest practical LEED rating level.

A summary of these Policy applications is included in the attached table.

Fairfax County will carry out its commitment of 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 managers, 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 and Value Engineering.

This Policy also 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; however, such projects may be exempted from the expectation to attain a specific LEED certification level. 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 extenuating circumstances, shall be eligible for consideration of an exception under this Policy. Written documentation detailing the extenuating reasons for an exception shall be submitted to the appropriate department director, for approval, including an evaluation of whether the building can meet required LEED achievement 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.

Consistent with the project scope and intent as identified in the approved Capital Improvement Program, this Policy is to be implemented in conjunction with the existing Value Engineering Policy, the fundamental principles of value engineering and life-cycle cost analysis to assure cost effective implementation of sustainable development principals. The sustainable development principles in the areas of Sustainable Site Design, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Air Quality, and existing County goals and policies shall be evaluated and implemented such that the most cost effective means are taken to achieve the appropriate balance of environmental benefits, and such that the greatest overall environmental benefit is achieved for the cost.

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 this 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 precedent over building codes or other regulatory requirements.

Budgeting and Financing

All capital construction subject to this Policy shall include funding to meet the requirements of this Policy. Budget planning and life cost analysis to achieve the highest rating is encouraged.

Building life cycle costs are typically lower with LEED buildings primarily due to substantial savings in energy costs. A life cycle cost analysis will be completed to determine the long-term benefit of using sustainable development practices.

Procedures and Responsibilities

The Directors of all County Departments whose responsibilities include planning, designing, constructing, renovating, operating, 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 on a recurring frequency of at least every ~~other~~ year. This report shall include documentation of cost increases, cost savings, and benefits.

Training

The County agencies responsible for implementation of this Policy shall make LEED training opportunities available for all its capital project managers currently managing or likely to manage projects within the purview of this Policy. All such project managers are expected to attend this training.

SUMMARY OF SUSTAINABLE DESIGN POLICY GOALS-

Project Size	Sustainable Design Standard	LEED Accredited Professional	LEED Registration	Minimum Achievement Goal	Formal LEED Certification
> 10,000 SF	LEED	Yes	Yes	Silver	Yes
> 2,500 SF and < 10,000 SF	LEED	Recommended	Yes	Certified	Recommended
< 2,500 SF	LEED	Recommended	No	Certified	No

END OF POLICY