

7.14. GREEN BUILDING POLICY for County Government Buildings – revised September 2009

7.14.1 Background

“Green building” is the practice of siting, designing, constructing, operating, maintaining and removing buildings in such a way as to increase the efficiency of resource use – energy, water and materials – while reducing building impacts on human health and the environment.

The Leadership in Energy and Environmental Design (LEED) program, as developed by the United States Green Building Council (USGBC) is the most extensive, authoritative and well-recognized standard that distinguishes green buildings from other buildings. A more recent approach, the GreenPoint Rated (GPR) program was developed locally by Build It Green, a collaborative nonprofit that is focused on residential projects including multi-family structures. The County’s Green Building Ordinance for private sector buildings in the unincorporated County uses both sets of guidelines.

The County intends for this policy to correlate with the Green Building Ordinance for the Unincorporated County and to hold itself to the same or higher standards than those required of the private sector.

This builds on the Board Policy 4.11 (Planning, Reporting and Financing Capital Projects) which states that one of the criteria to be used in putting a project forward to the Board for approval is environmental sustainability.

The Board recognizes that benefits from green buildings and building spaces can be realized in savings from reduced energy and water consumption, reduced costs related to sewage and solid waste, reduced absenteeism, increased employee retention, better health and wellbeing of occupants, and an overall decrease in environmental impacts.

7.14.2 Policy

It is the policy of the Board of Supervisors that all county facility projects incorporate green building standards, as defined by the USGBC in their Leadership in Energy and Environmental Design (LEED) program and achieve the LEED ratings described below. County facility projects affected by this policy include new buildings, renovations, and adaptive re-use of an existing facility, whether owned or leased. During negotiations for leased buildings and space, administration will strive for LEED EBOM and/or LEED CI as appropriate. Historical buildings are expected to be as green as possible without impacting the historical fabric of the structure. GreenPoint Rated guidelines, developed

locally by Build It Green, may be used for residential buildings of any kind instead of LEED.

Furthermore, recognizing the need to both mitigate and plan for the consequences of climate change, future facility projects will be designed to be as efficient as possible in energy and potable water consumption. The County will continue to reduce water consumption in existing buildings and landscaping to ensure that new buildings do not increase the net potable water demand of County operations and facilities.

7.14.3 Specific Requirements

The LEED program has four levels of green building performance (Certified, Silver, Gold, and Platinum) which apply to different kinds of projects, such as commercial new construction, commercial interiors, core and shell and existing buildings.

The USGBC updates the LEED guidelines and adds new categories of buildings on a regular basis. LEED requirements will evolve and become increasingly stringent. This policy requires that buildings meet LEED Silver using guidelines that are current at the time the design is approved.

The following requirements shall be met for new buildings:

- A. New buildings over 5,000 SF will be designed and constructed to meet LEED Silver standards.
- B. Buildings between 5,000 and 25,000 SF can meet these requirements by having the building design and the LEED checklist reviewed by a LEED Accredited Professional (AP) or LEED Green Associate who is also a registered engineer or architect and has previously worked on a minimum of one LEED certified building. This LEED AP may be an employee of the County or the architectural firm, but should not be associated with the project that is under review.
- C. Requirements for buildings over 25,000 SF shall be met by registering and officially certifying the building with the USGBC. Capital Projects are encouraged to strive for higher than Silver standards when possible.
- D. Alternative Means of achieving a green building are acceptable according to the same standards as required of private developers in the Green Building Ordinance.
- E. Capital Project Managers may submit a request for exemption to the Board of Supervisors. A list of energy and water efficiency measures, waste reduction actions and other green building features shall be submitted at

the time of the exemption request. It is expected that exempted buildings be designed and constructed to reach as high a green standard as practicable for that building type. Specific building types that are exempt from the Green Building Ordinance are automatically exempt from this policy.

- F. To the extent that is practicable, each new building shall not increase the overall potable water demand of the County. County water use will be tracked and savings from water conservation projects may be used to offset any increased demand caused by the new building.
- G. New County owned buildings will be designed to control storm water runoff in accordance with the requirements and procedures set forth in the Santa Clara Valley Urban Runoff Pollution Prevention Program.
- H. County-owned residential buildings of any kind may use GreenPoint Rated Guidelines instead of LEED. In this case the buildings should meet or exceed the minimum requirements for similar buildings as covered by the Green Building Ordinance.
- I. Within a reasonable distance of existing or planned recycled water infrastructure (purple pipes), new buildings shall be plumbed and landscaping shall be planned to utilize recycled water.
- J. The design of new facilities and parking lots shall consider the incorporation of renewable energy systems to the maximum extent practicable, e.g. fuel cells, photovoltaic arrays and solar hot water. Provided the systems are economically feasible, project managers will incorporate renewable energy systems into the project. If the budget for the renewable energy systems is not specifically approved as part of the project, project managers will at a minimum include the installation of wiring and plumbing conduits to allow easy installation of renewable systems at a later time.
- K. Capital project managers shall program budget and time for building operations and maintenance personnel to participate in the design and development phases to ensure optimal operations and maintenance of the building. Designers will be required to specify materials and systems that simplify and reduce maintenance requirements; require less water, energy, and toxic chemicals and cleaners to maintain; efficiently remove collected trash and recycling; and are cost-effective and reduce life-cycle costs.
- L. All new staff parking areas should offer preferential parking for carpools, provide sufficient bicycle lockers and have electric recharging stations available, if electrical service is available. The design of the building shall consider options that will reduce greenhouse gas impacts related to

commuting and client travel to the facility and encourage alternative commute choices.

The following requirements shall be met for retrofits, remodels and renovations:

- M. The same standards will be applied to each County building retrofit, remodel and renovation project as are required of private sector projects.
- N. Energy and water efficiency upgrades and the potential for utilizing recycled water shall be considered in any renovation project greater than 5000 sf.

The following requirements apply to all building projects, regardless of size:

- O. Green building expertise will be a criterion in selecting architectural and engineering firms. This may be shown through direct experience designing green buildings that meet LEED standards and familiarity with the certification process.
- P. The construction design for each new building will include installation of individual power meters that are compatible with and can be incorporated into the Building Operations Enterprise Energy Management System for energy data collection, analysis and building energy management. Additional meters will be included in the facility and on site, as necessary, to track the progress of sustainability initiatives, including reductions in energy and water use and waste generation.
- Q. Building materials that support the greenhouse gas emissions goals of the County and support good indoor air quality shall be identified and to the greatest extent practicable shall be utilized in building projects. Products that have significant impacts on greenhouse gas emissions or indoor air quality shall be identified and avoided, used minimally or mitigated to the greatest extent possible.
- R. To the extent possible, buildings should be designed for passive survivability, which allows them to be utilized in the event of a disaster that may make one or more systems or public utility inoperable.

7.14.4 Operation and Maintenance

The County shall establish a LEED for Existing Buildings Operations and Maintenance (LEED EBOM) Initiative to integrate a green building approach into ongoing maintenance and to guide the County's efforts in making buildings more

energy and water efficient, more environmentally friendly and healthier for visitors and employees.

7.14.5 Commercial Interiors

LEED for Commercial Interiors (LEED CI) is the green benchmark for the tenant improvement market. It is the recognized system for certifying high-performance green interiors that are healthy, productive places to work; are less costly to operate and maintain; and have a reduced environmental footprint. LEED for Commercial Interiors gives the power to make sustainable choices to tenants and designers, who do not always have control over whole building operations.

The County will strive to achieve a LEED Silver for commercial interior installation in leased space, as practicable. Length of lease, size of project and County's potential operational and utility costs will be considered to determine practicability.

7.14.6 Education

The County shall support and/or provide green building training to project managers, maintenance or facility managers and all members of any design team for new buildings and shall encourage ongoing participation in green building professional organizations, conferences, trainings and other opportunities in order to expand expertise in green building, energy and water efficiency and innovative approaches to addressing environmental issues within facilities and operations.