

County of Santa Clara Facilities And Fleet Department



FAF02 031406

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DATE: March 14, 2006

TO: Board of Supervisors

FROM:

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Larry Jenkins
Director of Facilities and Fleet Department

SUBJECT: Response to Board Referral from December 6th 2005 – Green Building Program

RECOMMENDED ACTION

Under advisement from December 6, 2005 (Item No. 17): Consider recommendations relating to Board Policy regarding Green Building.

Possible action:

- a. Adopt Board Policy Resolution No. 06-03 adding Board of Supervisors' Policy Manual section 7.14 relating to Green Building Policy. (Roll Call Vote)
- b.

Direct Clerk of the Board to include Policy in Board of Supervisors' Policy Manual.

FISCAL IMPLICATIONS

The proposed Green Building Policy will affect costs in three areas: staff training, construction of new facilities, and renovation of existing facilities.

Green Building practices have been used within the County for some time. Many capital project managers and facility managers have received training in various aspects of 'Green Building' practices. Approval of this policy will formalize this training requirement, and will require a more comprehensive 'Green Building' training program for capital project and facility managers. The additional professional development training costs can be achieved with minimal effects on current budgets.

The Leadership in Energy and Environmental Design (LEED) program is the nation's most widely used and accepted standard for constructing green buildings. This program has four levels of 'green building' performance (Certified, Silver, Gold, and Platinum). The increased construction costs of obtaining each level of certification varies by building type, with the variance ranging from approximately 0.8 % in increased building costs for the Certified level, to 11.5 % for the Platinum level (Market Barometer Survey, Turner, January 2006). These up-front costs can often be recovered during the life-cycle operation of a 'green building' as a result of reduced energy costs. There is a belief that a life-cycle cost savings also occur as a result of increased worker productivity within green buildings due to the healthier green building work environment. There have been limited studies of improved worker productivity resulting from Green Buildings.

The proposed policy recommends that, during the design of each new building, a report will be provided to the Board regarding the costs of achieving applicable LEED certification levels. Certain new building types may not be appropriate for LEED certification. In these situations a report will be provided explaining why LEED certification is not appropriate. Based upon this information, the Board will determine the level of LEED performance to be achieved (if any) for each new building, and will approve the associated costs of achieving that LEED performance standard.

Funding will be needed for each new building project to develop and provide the LEED analysis and recommendation to the Board. The cost of this analysis may vary from \$10,000 for a small building to \$100,000 for a larger, more complex building.

Many green practices included in this policy relating to building renovation and maintenance are currently implemented by County departments. This is particularly true in regards to achieving energy efficiency, reduced water consumption, and in using low-pollutant emitting materials. This policy may increase the usage of sustainable and recyclable materials. The costs and benefits of shifting towards greater usage of sustainable and recyclable materials will have to be evaluated for each renovation project.

Annual capital and renovation projects will continue to be evaluated and proposed for Board of Supervisors consideration during the budget process. As new building construction is considered by the Board of Supervisors, Capital Programs will provide cost information pertaining to achieving LEED certification for each new building.

CONTRACT HISTORY

Not applicable

REASONS FOR RECOMMENDATION

At the December 6, 2005 Board of Supervisors meeting, Supervisor Kniss requested the Planning Department, and Facilities and Fleet Department, to develop a Green Building policy, program and work plan, including costs, using models in other jurisdictions as guides and to report through both the Housing, Land Use, Environment and Transportation Committee and the Finance Government Operations Committee.

The proposed Green Building Policy demonstrates a commitment to environmental, economic, and social stewardship throughout the County facilities and operations. It is anticipated that implementing the Green Building Policy will yield cost savings to the County taxpayers through reduced facility life cycle costs. The proposed policy will provide healthy work environments for staff and visitors, and contribute to the County's goals of protecting, conserving, and enhancing the region's environmental resources. Additionally, the County will demonstrate leadership in furthering a community standard of sustainable building practices.

The Finance and Government Operations Committee discussed the Green Building Policy on March 2nd, 2006 and requested the policy move forward to the March 14th Board of Supervisors meeting. FGOC recommends approval of the Green Building policy.

BACKGROUND

What are Green or Sustainable Building Policies?

Green or sustainable building is the practice of creating healthier and more resource-efficient models of construction, renovation, operation, maintenance, and demolition. A sustainable, green building approach takes into consideration not only the building but also the building's site, the development density, transportation access and additional factors such as storm water retention. Research and experience increasingly demonstrate that when buildings are designed and operated with their life-cycle impacts in mind, they can provide environmental, economic, and social benefits. Elements of green building include high energy efficiency and use of renewable energy sources, water stewardship, use of 'sustainable' building materials that are derived from renewable resources, reduction of waste through recycling efforts, indoor environment, and smart growth and sustainable development.

Who is going Green?

Many jurisdictions have approved Green Building policies that incorporate Green Building practices in the design, construction, and operations of government facilities, and capital projects. These policies, while they may have greater 'up-front' costs, are generally anticipated to yield long term cost savings associated with improved life-cycle performance and reduced life-cycle costs. In addition, these policies result from the recognition that ecological degradation of habitat, air, soils, and water occurs during construction but these impacts can be mitigated through appropriate construction stewardship, and through the use of sustainable construction design and practices. Furthermore, there is recognition that Green Building policies can stimulate the economy by creating new local industries and jobs. Finally, it is widely understood that in the United States, buildings consume one-third of total energy, two thirds of all electricity, and one-eight of fresh water annually. Over 30% of U.S. greenhouse gas emissions are generated by buildings.

For these reasons, local governments, such as the cities of Seattle, San Francisco, San Diego, Santa Monica, Berkeley, Scottsdale, Atlanta, Dallas, Houston, Kansas City, and the County of Alameda have all recently adopted Green Building policies.

The Green Building movement has created an entire industry of manufacturers, consultants, contractors, and governmental and non-profit entities created to assist public and private sector firms that want to engage in environmentally sustainable practices.

What is LEED and how does it apply to existing or new construction?

Most green policies follow the LEED Green Building Rating System standards for new construction. LEED is a voluntary national standard for developing sustainable buildings. Members of the U.S. Green Building Council, a consortium of government and private industry groups, developed LEED. LEED was created to define 'green building' by establishing a common standard of measurement, promoting integrated, whole building design practices, recognizing environmental leadership in the building industry, stimulating green building competition, raising consumer awareness of green building benefits, and transforming the building market.

LEED for Existing Buildings

LEED for existing buildings (LEED-EB) provides a recognized, performance based benchmark for building owners and operators to measure operations, building improvements and maintenance on a consistent scale. The LEED rating system for existing buildings addresses building and maintenance issues including chemical use, ongoing indoor air quality, energy efficiency, water efficiency, recycling programs and facilities, exterior maintenance programs, and systems upgrades to meet green building energy, water, and lighting performance standards.

Existing Santa Clara County Policies and Ordinances

The Board of Supervisors has many existing policies that promote environmentally sustainable practices. Santa Clara County has for over ten years maintained a commitment to environmental stewardship in procurement practices, recycling and waste reduction, roads construction practices, and energy efficiency. These Board policies include:

3.12 Policy on Purchase of Recycled Products (adopted 3-16-93)

3.13 Procurement Policy on Degradable Plastic Products (adopted 4-24-90)

3.14 Policy on Waste Reduction and Recycling in County Facilities (adopted 5-9-95)

7.9 Policy on Rubberized Asphalt Paving (adopted 9-29-98; Amended 8-31-99)

7.10 Policy on Energy Efficiency Standards for new building designs, facility leases, equipment and exploration of solar energy and other renewable resources (adopted 12-10-02)

7.11 Policy on Vehicle Procurement Low Emission Vehicles (adopted 2-10-04)

Policy on E-waste (pending approval)

These policies are already incorporated within design, construction and maintenance practices for new facility construction and renovations of existing facilities. The proposed Green Building Policy references these existing policies.

CONSEQUENCES OF NEGATIVE ACTION

If the report is not accepted the County will not move forward with consideration and implementation of a Green Building policy at this time.

ATTACHMENTS

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- Proposed Resolution