

AGENDA:

March 24, 2009

CATEGORY: Consent

DEPT.:

Public Works

TITLE:

Adopt Environmental Sustainability

Action Plan

# **RECOMMENDATION**

Adopt an "Environmental Sustainability Action Plan" (ESAP) as a road map for the City's sustainability initiatives.

### FISCAL IMPACT

There is no fiscal impact to adopting the ESAP as it does not commit the Council to funding any of the underlying actions. If the Council adopts the ESAP, it will be used as a framework for forwarding specific actions to the Council for funding via the budgetary process.

## **BACKGROUND AND ANALYSIS**

The Council reviewed the Environmental Sustainability Action Plan at a Study Session on February 24, 2009, voicing overall support for the ESAP and showing interest in providing financial assistance to the newly formed "Green Mountain View" citizen's group. A Councilmember requested additional details on some of the proposed actions, which staff will be able to provide for any items funded by the Council. Another Councilmember encouraged focus on community outreach, the pedestrian master plan, green transportation and green building standards for private development.

If adopted by the City Council, the attached ESAP (Attachment 1) will be the City's "road map" for strategic investment in environmental sustainability initiatives. It represents "Version 1" of the action plan that will be regularly updated to address additional Task Force recommendations, other City initiatives, new regulatory requirements and to track the City's progress in achieving its greenhouse gas reduction targets and making the City more sustainable overall. It contains both "quick payback" energy-efficiency actions that will reduce the City's operational expenses and bigger, longer-term, community outreach projects that will significantly reduce greenhouse gas emissions. The ESAP also sets forth actions that will establish a policy framework to embed sustainable practices in the community and City organization.

AGENDA: March 24, 2009

PAGE:

2

# **PUBLIC NOTICING**—Agenda posting.

Prepared by:

Stephen P. Attinger

Environmental Sustainability Coordinator

Lori Topley

Solid Waste Program Manager

SPA/8/CAM 916-03-24-09M-E^

Attachment: 1. Environmental Sustainability Action Plan

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Approved by:

Cathy R. Lazarus Public Works Director

Kevin C. Duggan City Manager

# CITY OF MOUNTAIN VIEW MEMORANDUM

DATE:

February 19, 2009

TO:

City Council

FROM:

Council Environmental Sustainability Subcommittee

SUBJECT:

FEBRUARY 24, 2009 STUDY SESSION—PROPOSED ENVIRONMENTAL

SUSTAINABILITY ACTION PLAN

#### **PURPOSE**

The purpose of this Study Session is for the City Council to review and discuss the proposed Environmental Sustainability Action Plan developed by the Council Environmental Sustainability Committee (CESC) for implementation next year, subject to funding and staff capacity.

#### **BACKGROUND AND ANALYSIS**

In October 2008, the City Council accepted the final report of the Environmental Sustainability Task Force containing 89 recommendations outlining policies, strategies and actions to conserve resources and reduce the community's carbon footprint. Then Mayor Tom Means appointed the three-member Council Environmental Sustainability Committee (Margaret Abe-Koga, Ronit Bryant and Chair Jac Siegel) to review the Task Force recommendations and develop an achievable, staged implementation strategy with the first phase to begin immediately and subsequent actions to be considered as part of the Fiscal Year 2009-10 budget process.

Since October 2008, the CESC convened four meetings to review and prioritize Task Force recommendations appropriate for early implementation, evaluate organizational capacity and estimate costs to begin new greenhouse gas (GHG) reduction and sustainability initiatives. Also, CESC considered other greenhouse gas reduction opportunities not addressed in the Task Force report.

The proposed Environmental Sustainability Action Plan (ESAP) is CESC's recommendation for the City's "road map" for strategic investment in environmental sustainability initiatives (see Tables 1 through 3 for a summary of the plan actions, their cost and funding source). This action plan begins implementation of the Environmental Sustainability Task Force recommendations. It represents "Version 1" of an action plan that will be regularly updated to address additional Task Force recommendations, other

City initiatives, new regulatory requirements and to track the City's progress in achieving its greenhouse gas reduction targets and making the City more sustainable overall. Both "quick payback" energy-efficiency actions that will reduce the City's operational expenses and bigger, longer-term projects that will significantly reduce greenhouse gas emissions have been included. The plan also sets forth actions that will establish a policy framework to embed sustainable practices in the community and City organization.

The ESAP is comprised of the following major category areas:

- Policy Framework—Defines City sustainability goals and outlines major areas in which the Council may want to develop a policy strategy. Provides guiding principles that drive how individual actions/projects will be evaluated and implemented.
- Potential Major Goals—Proposes major projects and initiatives to consider as part of City Council goal setting.
- General Plan Update—Describes how environmental sustainability elements will be integrated into the General Plan update process.
- Greenhouse Gas Reduction Targets—Provides the required steps for developing community-wide greenhouse gas reduction goals consistent with State requirements.
- Proposed Sustainability Actions—Outlines specific actions to be implemented in Fiscal Years 2008-09, 2009-10, 2010-11 and beyond.

# Sustainability—Purpose and Benefits

California passed AB 32, the California Global Warming Solutions Act of 2006, establishing a program of regulatory and market mechanisms to achieve comprehensive reductions in greenhouse gas (GHG) emissions. The California Air Resources Board (CARB) is responsible for creating the regulatory program and most major industries and institutions will be required to comply.

The Environmental Sustainability Action Plan presented in this document will help Mountain View meet AB 32 requirements by reducing the City's GHG emissions from government operations and from the community as a whole. A major goal of the ESAP is to increase operational savings through more efficient use of natural resources. The plan will also benefit the environment and the community by preserving water, reducing GHG emissions into the atmosphere, creating renewable energy sources,

improving air quality, reducing waste and educating residents, businesses and employees in how best to minimize their environmental impacts. The plan's vision is a community that enjoys an enhanced quality of life, is more easily accessible by public transportation/bicycle/foot and preserves its resources for future generations.

Many of the actions proposed in this plan will reduce energy/water use and waste generation, producing year-after-year cost savings after a quick payback period. These actions are a win for the City financially, for the environment and for the community. Actions, such as retrofitting existing public buildings with green technologies and implementing AB 811 (financing for property owners to make energy-efficiency and renewable energy upgrades) and AB 2466 (City-owned renewable energy facilities), will also result in direct measurable GHG reductions due to renewable power generation and energy-efficient technologies. Other actions, such as outreach at local events and displays in the Library, foster public education that leads to individual behavior change which is one of the most vital components of reducing community emissions.

Since community emissions account for more than 90 percent of the City's overall emissions, efforts to reduce these emissions will tackle a large part of the problem. Examples of such efforts include reformatting the water bills, increasing water conservation outreach, supporting the Green Citizens Action Team and creating a zero-waste plan. In addition, offering free Arbor Day trees to the community will capture  $CO_2$  already in the air, with the amount of reduction increasing as the tree grows.

To increase operational savings during the current economic challenge, the City should develop a systematic and ongoing outreach effort focused on changing the behavior of City employees, residents, community groups and business people. To further save money each year, the City could use the financial savings realized by current and future sustainability actions to fund additional sustainability actions that will further reduce expenses.

#### **POLICY FRAMEWORK**

A policy framework identifies actions that set the stage for achieving a sustainable community that conserves resources and reduces greenhouse gas emissions. Actions are categorized as Requiring Council Action, In Development or Completed to show the City's progress toward its sustainability efforts.

### Requiring Council Action in FY 2008-09

# 1. Green Building Policy—Public Buildings

Buildings generate 48 percent of the GHG emissions in the U.S. and green building technologies can produce substantial operations and maintenance savings over the life of the facility. New City buildings and renovation projects over 5,000 square feet should achieve a LEED Silver rating with this level increasing to LEED Gold within five years. The approximate additional cost to achieve LEED Silver is 0 percent to 2 percent above normal costs with many additional costs recouped within one to three years. Thereafter, the City will realize ongoing operational savings from the green building technologies.

In 2008, the Santa Clara County Cities Association asked cities to establish LEED Silver as the standard for all public facilities. The City Council considered this topic in March 2008 but has yet to take formal action. Attached as background is the Council report from 2008 (Attachment 1) and supplemental information (Attachment 2) about LEED previously provided to the City Council. Mountain View is the only City in Santa Clara County that has not adopted LEED Silver as its public facility standard.

# 2. Single-Use, Carry-Out Bag Fee

A County-wide initiative is under way to develop a draft model ordinance to charge a consumer fee of \$0.25 on paper and plastic single-use, carry-out shopping bags. The model ordinance was released by the Recycling and Waste Reduction Commission (RWRC) for review and comment by the cities. The Council commented on the draft ordinance on January 27, 2009, approving the Cities Association resolution supporting a regional approach. Based on the comments from cities and the County, the RWRC may ask cities to adopt the ordinance or amend the draft ordinance as appropriate. The cost of the program may be offset by part of the fee revenue received.

### Requiring Council Action in FY 2009-10

# 3. Greenhouse Gas Reduction Targets

The Global Warming Solutions Act of 2006 (AB 32) sets California State emissions reductions requirements (11 percent by 2010, 25 percent by 2020, 80 percent by 2050). The City will complete its 2005 base year community-wide and City operations GHG inventories by April 2009 and will establish reduction targets by summer/fall 2009 to support AB 32 (see the Setting Reduction Targets section).

# 4. Green Building Standard—Private Buildings

The vast majority of the buildings in Mountain View are privately owned. For the City to reduce its GHG emissions to any significant extent, it will have to require private developers and building owners to build and retrofit to the highest feasible green building standards. Neighboring cities San Jose and Palo Alto have enacted similar measures and the League of California Cities will be making a recommendation soon.

## 5. Zero-Waste Policy

The City should develop a comprehensive, long-term, zero-waste plan with a goal of achieving a 90 percent diversion rate by 2021, as recommended by the Environmental Sustainability Task Force. The City's diversion rate is currently 72 percent. Increasing it to 90 percent would require development of an implementation plan and potentially significant funding over several years. Such a plan would benefit the City, community and environment through increased resource conservation and landfill life and reduced waste toxicity and greenhouse gas emissions. The first step would be a waste characterization study at the SMaRT® Station to determine the City's mix of recyclables and garbage. A zero-waste plan could be developed by a consultant based on the characterization study and may include expansion of the City's pilot food waste composting program. Given the large scope of such an effort, a zero-waste plan could also be a major goal. In addition, through support of extended producer responsibility legislation, the City should encourage manufacturers to design products that can be disassembled, remanufactured or recycled rather than thrown away.

# In Development

# 6. Water Conservation Landscaping Ordinance

A State-mandated water conservation landscaping ordinance must be adopted by all jurisdictions by January 1, 2010. The model ordinance will require major new projects and relandscaping projects to develop irrigation budgets and plans consisting of water-efficient irrigation systems and drought-tolerant plant materials. The Public Works Department—Public Services Division will be taking the lead on this project and coordinating with other affected departments, including Community Development and Community Services. Based on the latest State draft, there will be increases in City operating costs as irrigation and landscaping plans must be reviewed and permitted by the City.

## <u>Completed</u>

# 7. Recycled Water Ordinance

The City passed a Recycled Water Ordinance in October 2004. It mandates use of recycled water for irrigation in the North Bayshore where it is available and feasible. The system is scheduled to be on-line in 2009 and there is potential to expand the system to Moffett Field and other parts of the City in the future.

#### 8. Construction and Demolition Ordinance

The Council passed a Construction and Demolition Ordinance in September 2008, requiring 50 percent of construction and demolition debris to be recycled or reused. As part of a zero-waste plan, the City could increase this diversion rate to 75 percent after experience with the existing 50 percent rate is evaluated for effectiveness in one to two years.

# 9. Environmentally Preferable Purchasing Policy

The Council passed an Environmentally Preferable Purchasing Policy in October 2008, incorporating environmental considerations into purchasing decisions. A handbook is being developed to provide guidance to City staff.

#### POTENTIAL MAJOR GOALS

In conjunction with developing an environmental sustainability policy framework, the City should evaluate recently approved legislation and other important environmental elements for implementation as part of its goal-setting process, including:

# Energy Efficiency and Renewable Energy Generation

As part of a long-term strategic sustainability plan and toward reducing its dependence on fossil fuels, the City should develop a long-range plan for generating as much of its energy as possible from local renewable sources (e.g., solar and wind) when feasible and cost-effective. Doing so would reduce the City's GHG emissions and energy expenditures in the long run. There are a variety of funding strategies available to the City, including bonds, grants or Power Purchase Agreements (PPAs) with a for-profit entity. AB 811 and AB 2466,

recently adopted legislation promoting energy efficiency and alternative power generation, are described below:

- a. AB 811—This law enables a city to offer low-interest loans to property owners who implement energy efficiency and/or renewable energy projects such as insulation, double-pane windows, high-efficiency heating and cooling systems and solar panels. Particularly in today's challenging economic climate, this legislation could provide the needed incentive for property owners to make upgrades to reduce energy use and greenhouse gas emissions. (Proposed as a major goal for implementation for 2009.)
- b. AB 2466—This legislation provides cities the opportunity to generate renewable energy (e.g., solar, wind) at one municipal site and credit the power generated to selected municipal accounts. The energy created would be fed into the power grid. Prior to this law, cities could "zero out" the account where the energy was generated but could not receive PG&E credit for excess power produced. (Proposed for 2009.)
- 2. Water Conservation—Due to the ongoing drought, a State-mandated requirement to reduce landscape water usage 20 percent by 2020 and the San Francisco Public Utility Commission's "Supply Assurance Limitation," the City will need to implement aggressive water conservation measures in conjunction with the Bay Area Water Supply and Conservation Agency (BAWSCA) and the Santa Clara Valley Water District (SCVWD). Although plans are evolving, it is clear the City will need to allocate additional resources to achieve the State and regional requirements.
- 3. Green Building Retrofitting—Overall, existing buildings outnumber new buildings by more than 100 to 1. In order to reduce its operating expenses and meet its AB 32 emissions reduction goals, the City should develop a plan and funding strategy to retrofit one or more City buildings each year with efficient green technologies.
- 4. Zero-Waste Plan—In line with neighboring cities San Jose and Palo Alto and to address the challenges inherent in achieving a 90 percent diversion rate by 2021, the City should develop a zero-waste plan as a major goal.

# **Public Participation**

It is important for the City to continue to encourage and financially support its extraordinarily committed residents, independent of City government, to develop strategies and execute programs to assist residents, employers and community groups

in taking action to reduce carbon emissions. At the suggestion of the CESC, several members of the community have formed a citizen-led action group to continue assisting the City in its ongoing sustainability efforts. The group is formulating a work plan and has submitted a funding request (see Attachment 3).

#### GENERAL PLAN UPDATE

The CESC recognizes that the General Plan process is a critical tool to reshape the City for a more sustainable future. In December 2007, Mountain View was awarded a \$45,000 grant for climate protection planning from the Bay Area Air Quality Management District (BAAQMD) Climate Protection Grant Program to develop Greenhouse Gas (GHG) reduction policies in its General Plan update.

The City used BAAQMD Climate Protection Grant funds to hire EDAW, a planning and environmental consulting firm, to assist the City with this project. EDAW will help develop GHG reduction policies and actions for the General Plan.

The General Plan will also include policies and actions that address broader sustainability issues. Sustainability is a General Plan planning principle that the community identified during the General Plan visioning process. Sustainability issues were also studied previously by the City's Environmental Sustainability Task Force.

The General Plan will weave GHG reduction goals and policies and sustainability principles throughout its various elements and will include a strategy to implement the goals and policies. The strategy will include a separate, complementary Greenhouse Gas Reduction Program with specific estimates of energy/fuel savings, financial savings, GHG reductions and any other co-benefits for each General Plan climate protection policy.

The General Plan is scheduled to be completed in December 2010.

#### **SETTING REDUCTION TARGETS**

Based on the following previously funded prerequisite actions the City will establish operations and community-wide GHG reduction targets, as well as conduct audits of City facilities to minimize use of energy and water and the production of waste.

1. City Operations GHG Emissions Inventory (February-March 2009)

Staff is collecting City facilities and operations data and, in conjunction with the International Council for Local Environmental Initiatives (ICLEI), will complete the inventory by February-March 2009.

2. Community-Wide GHG Emissions Inventory (April-May 2009)

The City began working with ICLEI in fall 2007, producing a community-wide GHG inventory in spring 2008. One portion of the inventory, the landfill CO<sub>2</sub>e<sup>1</sup> emissions, seemed high, so the City Council authorized staff to conduct a landfill "leak test" to get actual emissions data (Quarter 1—2009) and finalize the inventory with ICLEI. The final emissions inventory should be completed in Quarter 2—2009.

3. City Facilities Energy and Water Audits (Ongoing)

The City will continue to conduct energy and water audits of public facilities to identify employee actions to reduce usage of these resources and corresponding operational expenses.

4. Greenhouse Gas Reduction Targets (Summer/Fall 2009)

Following completion of Items 1 through 3, the City will establish appropriate greenhouse gas-reduction targets. This will enable the City to reduce operational expenses and meet the State's reduction requirements.

#### PROPOSED SUSTAINABILITY ACTIONS

This Environmental Sustainability Action Plan proposes 25 initiatives for completion during Fiscal Years 2008-09, 2009-10 and 2010-11 and beyond. The focus in the short term is on "low-hanging fruit" actions, particularly energy efficiency and community outreach and education. Descriptions of each action can be found in the Appendix (Attachment 4).

<sup>&</sup>lt;sup>1</sup> CO<sub>2</sub>e = Carbon dioxide equivalent.

TABLE 1—FISCAL YEAR 2008-09 PROPOSED ACTIONS

	<u>Action</u>	Lead <u>Department</u>	Funding <u>Source</u>	Cost
1.	Adopt CO <sub>2</sub> e <sup>1</sup> Emissions Goals	PWD	General Fund	Previously funded
2.	Redesign Water Billing Format	FASD	Water Fund	Previously funded
3.	Recruit and Train Water Conservation Advocates	PWD	Salary Savings	\$30,000
4.	Participate in the Single-Use Bag Ordinance	PWD	Solid Waste Fund	TBD
5.	Install Labeling on Trash Containers in Public Areas	PWD	Solid Waste Fund	\$750
6.	Establish LEED Silver as the Standard for New City Facilities	PWD	Various CIP	The cost of LEED Silver standard is estimated at 0% to 2% over conventional building costs
7.	Support a Community-Led Green Citizens Action Team	PWD	General Fund	<ul> <li>\$0 through         June 2009</li> <li>Approximately         5% ESC² position         beyond         June 2009</li> </ul>
8.	Sponsor Sustainability Tabling and Outreach at Local Events	PWD	General Fund	<ul> <li>\$0 through June 2009</li> <li>Approximately 3% to 5% ESC position beyond June 2009</li> </ul>

<sup>&</sup>lt;sup>1</sup> CO<sub>2</sub>e = Carbon dioxide equivalent. <sup>2</sup> ESC = Environmental Sustainability Coordinator.

<u>Action</u>	Lead <u>Department</u>	Funding <u>Source</u>	Cost
9. Work with VTA to Redesign Community Bus Route 34	PWD	VTA	-0-
10. Incorporate Climate Change Elements into General Plan Update	CDD	Grant	\$45,000

# TABLE 2—FISCAL YEAR 2009-10 PROPOSED ACTIONS

	<u>Action</u>	Lead <u>Department</u>	Funding <u>Source</u>	Cost
1.	Continue the Environmental Sustainability Coordinator Position for One Year	PWD	One-Time Funds	\$140,000
2.	Secure Technical Assistance to Establish an AB 811 Benefit Assessment	PWD	CIP Reserve	\$100,000
3.	Evaluate Feasibility of Implementing a Municipal Renewable Energy Facility (AB 2466)	PWD	50% North Bayshore and 50% CIP Reserve	\$150,000
4.	Create a Zero-Waste Action Plan (including waste characterization study and food waste composting program expansion)	PWD	Solid Waste Fund	\$160,000 to \$230,000
5.	Fully Implement Bicycle Boulevards	PWD	CIP Reserve	\$155,000 to \$250,000
6.	Participate in a Regional Effort to Study Feasibility of Automated Bicycle Rentals	PWD	VTA	\$0
7.	Prepare, Adopt and Implement a Pedestrian Master Plan	PWD	Grant Funds	\$150,000 applied for

<u>Action</u>	Lead <u>Department</u>	Funding <u>Source</u>	Cost
8. Increase Free Arbor Day Trees	CSD	Add to Existing CIP	\$7,000 to \$10,000 annually
9. Create Environmental Displays at the Library	Library	One-Time Funds	\$4,000 to \$8,000
10. Implement State-Mandated Landscape Water Conservation Program	PWD	Water Fund and General Fund	TBD based on final ordinance language
11. Retrofit City Facilities with Green Technologies/Green the Library	PWD	CIP Reserves	\$140,000 for Library; each building will vary
12. Enhance Expertise of CDD and PWD Staff Members in Green Building Practices	CDD	One-Time Funds	\$10,000
13. Establish Green Building Standards for Private Buildings	CDD	One-Time Funds	TBD

# TABLE 3—FISCAL YEAR 2010-11 AND BEYOND PROPOSED ACTIONS

	Action	Lead Department	Funding <u>Source</u>	Cost
1.	Participate in Regional Efforts to Ban Polystyrene Take-Out Food Containers	PWD	Solid Waste Fund	TBD
2.	Retrofit City Facilities with Green Technologies/Building TBD	PWD	CIP Reserves	\$100,000

#### COST/RESOURCE IMPLICATIONS

Sustainability actions in the current fiscal year are funded. The total cost for Fiscal Year 2009-10 ranges between about \$866,750 and \$1,038,750, including continuation of the Environmental Sustainability Coordinator position with one-time funds for one full year to lead many of the initiatives. As proposed, the 2009-10 fiscal year will require additional funding in several areas, as follows. (Grant funds received or pending are not shown.)

One-Time Funds \$154,000 to \$158,000

North Bayshore \$ 75,000

Solid Waste Fund \$160,750 to \$230,750

Water Fund TBD

CIP Reserves \$477,000 to \$575,000

Total \$866,750 to \$1,038,750

### **Additional Funding Sources**

Given the current economic climate, it will be important to leverage City resources by participating in regional sustainability initiatives for water conservation, solid waste reduction, transportation, green building and other efforts. The City is continually evaluating grant funding opportunities and public-private partnerships as a way of implementing sustainability actions at no or low cost. In addition, the City is actively seeking opportunities to implement projects through Federal stimulus funding and will propose projects once stimulus opportunities and requirements are known.

# **Funding Approaches**

It will be difficult for the City to make meaningful progress in implementing greenhouse gas reduction and environmental sustainability strategies without investment in additional capital initiatives and staff resources. Therefore, the CESC is recommending a program that balances participation in regional initiatives with investment in projects funded by City special funds (Water Fund and the Shoreline Community), grants and strategic infusions of one-time and capital funds. In facing the environmental and financial challenge, the City Council could pursue different funding approaches, among them:

 Fund the environmental sustainability initiative on a year-to-year, project-byproject basis; or

 Adopt a two-year view and set aside a fixed amount of one-time discretionary funds (capital, General Fund, one-time), if available, focusing on the programs recommended by the CESC in this report.

#### **CONCLUSION**

In summer 2007, the City Council funded an environmental sustainability program focused on reducing the City's greenhouse gas emissions and operational expenses as well as improving the overall sustainability of the City. This Environmental Sustainability Action Plan provides leadership and a framework for achieving the City's short- and long-term sustainability goals.

#### **NEXT STEPS**

Based on the discussion at the Study Session, the next step would be for Council to further refine its desired environmental sustainability strategy in the upcoming goal-setting process, so a program will be ready for formal action as part of the budget discussion/consideration scheduled for later this spring.

Prepared by:

ac Siegel, Chair

Council Environmental Sustainability Subcommittee

JS/SA/9/CAM 916-02-24-09M-E^

Attachments: 1.

- March 2008 City Council Report on Green Buildings
- 2. Supplemental Information on LEED Standards
- 3. Green Citizens Action Team Funding Request
- 4. Appendix



AGENDA:

March 25, 2008

CATEGORY:

Items Initiated by Council

DEPT .:

City Council

TITLE:

Green Building Standards

Attachment 1

# **RECOMMENDATION**

Approve the following actions recommended by the Santa Clara County Cities Association (SCCCA):

- Recognize and adopt the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system and Build It Green's (BIG) GreenPoint Rated system as the official building standards for the City of Mountain View.
- 2. Require all development application submittals to include a completed LEED or GreenPoint Rated checklist.
- 3. Adopt a policy of LEED Silver certification or better for all new public construction and renovation projects over 5,000 square feet.

# **FISCAL IMPACT**

The fiscal impact to the development community is limited to completing the LEED or GreenPoint Rated checklist. Incorporating green building practices into project design and construction remains optional.

The fiscal impact to the City from a policy of LEED Silver certification or better for all new public construction and renovation projects over 5,000 square feet is likely to be an additional cost of about 2 percent. Experience shows that the higher initial cost is recovered by savings in maintenance and operations over the building life cycle (life cycle savings of 20 percent of total construction costs have been reported). Higher levels of LEED certification (gold and platinum) add more cost than the lower certification levels (certified and silver) but also go further in reducing CO<sub>2</sub> emissions and other pollutants.

# **BACKGROUND AND ANALYSIS**

A work component of the Environmental Sustainability Program adopted by the City Council in September 2007 is to investigate green building standards for possible Council action. However, in November 2007, the SCCCA approved a green building recommendation and

**AGENDA:** March 25, 2008

PAGE:

requested all local jurisdictions adopt it as soon as feasible. It includes three elements as follows:

- Recognizing and adopting LEED and GreenPoint Rated (BIG) as the official green 1. building standards;
- Requiring completion of the LEED or GreenPoint Rated checklist as part of the planning 2. application; and
- Requiring new public buildings or renovations over 5,000 square feet be LEED Silver or 3. higher.

See Attachment 1 for the full SCCCA recommendation. The SCCCA recommendation is characterized by them as near-term and a first step to pursue immediately. The approach does not include mandatory green buildings for private developments, however, the SCCCA expects to provide more comprehensive policy recommendations in the future. The SCCCA reports the following cities have adopted the recommendations: Campbell, Cupertino, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, Palo Alto, Santa Clara, Saratoga and Sunnyvale.

The City of San Jose has set LEED Gold for City projects and is developing private development requirements. The Home Builders Association of Northern California (HBANC) recently announced its support for mandatory sustainable green building standards in all Bay Area cities and counties and a new partnership with Build It Green.

#### LEED and GreenPoint Rated

The SCCCA selected the USGBC and BIG because they are recognized as leaders in the green building industry. Both organizations have developed industry standards for construction and commissioning (initializing building operations) of green buildings. Green buildings use resource-efficient techniques and materials, are durable and easy to maintain, save water and energy, are integrated into their environment and improve interior air quality and worker productivity.

The LEED standards and the GreenPoint Rated system are widely recognized and consensusbased. They have consistent and quantifiable rating criteria and provide a menu of options/choices (making possible many different routes for achieving a specific rating). They are based on independent third-party verification to ensure standard of performance.

The LEED certification standards range from certified (lowest number of points based on incorporated green elements) through silver and gold to platinum (highest). LEED standards apply to commercial and residential (mainly high density) facilities. The GreenPoint Rated

AGENDA: March 25, 2008

PAGE:

standards apply to residential buildings and also use a point system. See Attachments 2 and 3 for building facts about a LEED project and a GreenPoint Rated project.

# Costs of Green Building

Initially, because builders were not familiar with green building techniques and because green elements were added to designs at very late stages of development, costs of green building were relatively high. With increased implementation and familiarity, the cost of green building has decreased. A review of LEED costs by Davis Langdon for the State of California in "Cost of Green Revisited: Reexamining the Feasibility and Cost Impact of Sustainable Design in the Light of Increased Market Adoption" states, "There is no significant difference in average costs for green buildings as compared to non-green buildings...in many areas of the country, the contracting community has embraced sustainable design, and no longer sees sustainable design as additional burdens to be priced in their bids." The study further explains that careful selection of lower cost green elements in a project helps control costs while still achieving certification. "The most successful [projects] are those which had clear goals established from the start, and which integrated the sustainable elements into the project at an early stage. Projects that viewed the elements as added scope, tended to experience the greater budget difficulties." Langdon concludes, "A majority of the buildings we studied were able to achieve their goals for LEED certification without any additional funding."

It is important to note that the upfront investments in green building practices result in significantly lower costs for maintenance and operations over the building life cycle (life cycle savings of 20 percent of total construction costs have been reported). At the Adobe Systems LEED Platinum towers in San Jose, cost savings are \$1.2 million annually and return on investment both quick and significant.

#### **LEED Certification Costs**

To participate in LEED certification, the City would be required to join the USGBC and each new building certification process requires a separate fee. There are also costs for design and construction review, a building simulation model to ensure all systems are operating efficiently and, finally, building commissioning, the last step before occupancy. While these requirements are unique to LEED certification, the rationale behind them is sound and every building, green or not, would benefit from such a process to verify mechanical and other systems operate properly. For a \$5 million building, these costs are about \$30,000 to \$40,000.

#### **CONCLUSION**

Increasingly, both residential and commercial developers are incorporating green building practices into their projects as features that set them apart from competitors. The development community is seeking consistency and predictability in green building

AGENDA: March 25, 2008

PAGE:

4

standards. The SCCCA recommendation provides those factors and facilitates implementation locally. For City facilities, the SCCCA recommendation is consistent with what City staff advises they intended to recommend. Adoption of the SCCCA recommendations will help reduce energy usage and maintenance costs City-wide and create a level playing field for future development.

# PUBLIC NOTICING—Agenda posting.

Prepared by:

Ronit Bryant

Councilmember

RB/JJ/7/CAM 907-03-25-08M-E^

Attachments: 1. Santa Clara County Cities Association Recommendation

2. Adobe Systems Building Facts

3. SummerHill and Parkwood Building Facts

cc: CM, PWD, TPM, APWD—Fuller, ESC, CPE, DPWD, CDD, BO(A), EDM, PM—Shrivastava, PP, F

# Santa Clara County Cities Association (SCCCA) Recommendation

1. Recognize and Adopt Leadership in Energy and Environmental Design (LEED) and GreenPoint Rated—Local governments should formally recognize and adopt the United States Green Building Council's (USGBC) LEED rating system and Build It Green's (BIG) GreenPoint Rated system (residential) as the official green building standards for their jurisdictions.

Rationale: Adoption of the same sets of standards will create a green building program that is easier to understand and more consistent across jurisdictions. These two sets of standards have been selected because they are:

- Nationally recognized and familiar to a large and growing number of design and building professionals.
- Consensus-based and easy to use.
- Consist of a set of realistic yet robust standards.
- Target quantifiable achievements based on recognized standards with clear performance benchmarks.
- Incorporate independent, third-party verification
- 2. Complete Green Checklist as a Part of the Planning Application—Require completion of the LEED or GreenPoint Rated checklist as part of the planning application. This recommendation does not require the applicant to adopt green building practices, but requires a completed checklist for the project (data collection).

Rationale: Many policy proposals suggest a green threshold. However, in the absence of good information about current green building practices, determining threshold can be difficult. Requiring the submittal of a checklist without asking for any changes in the project is a first step that serves to:

- Educate the private sector about green building; and
- Benchmark conventional building practices to inform policy-makers at a later date.
- Require Public Buildings to be LEED Silver—Local governments should adopt a
  policy for achieving LEED Silver certification or better for all public new
  construction and renovation projects over 5,000 square feet.

Rationale: To ready the private sector and develop the green building industry, government should help by leading the way. Government adoption of green building practices will further spur the green building market, including the development of professional expertise, products and ultimately serve to bring down costs.

In addition to the environmental and public health benefits, green building is a financially responsible path for local governments to follow. Independent studies show green building costs are the same or slightly higher to those of standard buildings. Increased costs are often dependent upon how and when the decision to build green is built into the process.

The average premium for green buildings is slightly less than 2 percent, or \$3 to \$5 per square foot. The 2 percent increase can result in a life-cycle saving of 20 percent of total construction costs. For example, an initial upfront investment of up to \$100,000 to incorporate green building features into a \$5 million project would result in a savings of \$1 million in today's dollars over the life of the building.<sup>1</sup>

RB/JJ/7/PWK 907-03-25-08A-E^

<sup>&</sup>lt;sup>1</sup> Davis Langdon Report and State of California Report http://www.davislangdon.com

Attention

OWNER ADOBE SYSTEMS INC

WESTTOWER 1996 EAST TOWER 1998 ALMADEN 2003

ARCHITECT
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SQUARE FOOTAGE 989,000

COST SAVINGS
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LEED CERTIFICATION
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CONSTRUCTION TYPE
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MOTIVATING FACTORS: ENERGY SAVINGS MONEY SAVINGS & REBATES

CHALLENGES:
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BUILDER SUMMERHILL HOMES

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SQUARE FOOTAGE 1,399-2,079

SITE SIZE 13.4 GROSS ACRES

GREEN POINT RATED 80 Points

CONSTRUCTION TYPE NEW CONSTRUCTION

MGS AND COMPORT

ERCOLLENDATIONS; FINANCIAL INCIDENTIALS FOR GREEN RATED PROJECTS RELATIVE TO CITY FEES; STREAMLINE T-24 PROCESS; FORMAL PUBLIC PROCESS FOR ACHIEVING GREEN CERTIFICATION

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# Commercial Green Buildings: Costs and Savings

# LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN (LEED) COSTS

#### HARD COSTS

US Green Building Council (USGBC) Membership (State/Local Govts):

\$500 annually

Project Registration Fees:

\$450

**Project Certification Fees** 

\$1,750

New Construction Existing Buildings

\$1,250

SOFT COSTS

#### **Incremental Construction Costs for LEED**

According to the USGBC, the average cost premium to build an office or school to LEED standards ranges from 0.66% (Certified), 2.11% (Silver) to 6.5% (Platinum). Other studies suggest that incremental construction-related capital costs for LEED-certified projects typically range from 0 to 10% of the total construction cost. In some cases LEED-certified projects can be constructed for low or no additional construction-related cost. The magnitude of additional cost depends primarily on the design elements chosen and the degree to which LEED design elements are integrated to achieve cost savings. For example, raised floor design for air delivery achieves LEED credit while creating the opportunity to reduce floor to floor heights and specify smaller HVAC equipment.

The table below<sup>1</sup> presents a range of possible incremental capital costs of constructing a LEED-certified project vs. a non-LEED-certified project, as a percentage of total construction costs.

Note: these incremental costs assume that the project is identified as a LEED-certified project in the planning stage, that a LEED AP is assigned to the project, and that the AP, working in conjunction with the design team and key stakeholders, identifies the LEED credits that will be obtained prior to commencing any design work. The range percentage is primarily due to the variance in the total construction costs of the project, i.e. as the total construction cost increases, the percentage cost increase for LEED decreases.

Phase	Incremental Capital Cost — TYPICAL	Incremental Capital Cost — RANGE
Design <sup>2</sup>	1.5%	1.0 – 2.0%
Energy Modeling 3	0.2%	0.05 - 0.5%
Construction	2.0%	0 – 10.0%
Commissioning	0.5%	0.1% - 1.0%
TOTAL	4.2%	1.15 13.5%

#### **Key Cost Savings Considerations**

Operating and maintenance (O&M) cost savings that result from a LEED project are <u>not</u> accounted for in the above table. *Over time these savings will offset the incremental capital design/consulting costs of LEED and the additional construction costs of LEED, if any*. Thus, in evaluating whether or not to certify a project according to LEED standards, these O&M savings must be considered.

<sup>&</sup>lt;sup>1</sup> "Analyzing the Cost of Obtaining LEED Certification", with additional input from Sean Rose, City of Mountain View Senior Civil Engineer and LEED accredited professional (AP).

<sup>&</sup>lt;sup>2</sup> Includes LEED documentation and fees

<sup>&</sup>lt;sup>3</sup> Assumes mechanical and electrical systems modeling

#### **RECENT STUDIES / ARTICLES**

Going Green Receives a Boost from Home Builders: Group Pushes For Standards in Bay Area — 2008 (PDF) http://docs.cpuc.ca.gov/eeworkshop/CPUC-new/summit/docs/SJMercNews.pdf (excerpts)

Faced with one of the worst housing markets in decades, the Bay Area home-building industry - long opposed to mandatory environmental standards - has decided to give up and go green. In a move believed to be a first in the country, the Home Builders Association of Northern California today will ask the region's 101 cities and nine counties to impose green building standards that would reduce energy usage by 15 percent for every home built in the Bay Area. It's not just about the planet. With home sales sinking to historic lows, many builders have discovered that in the environmentally conscious Bay Area, green sells.

"This is not a fad, this is where things are going," said Joseph Perkins, president of the home builders association, which represents 100 publicly traded and private builders, including major developers such as KB Home. Pulte and Centex.

"Buyers and residents are totally embracing green. They understand the issues facing us with global warming," said Cheryl O'Connor, who as vice president for marketing of Warmington Homes pushed to make its Vantage housing development in Palo Alto one of the greenest in the region. She found that building the 76-townhome community with solar panels on every roof and a dual-flush toilet in every bathroom resulted in twice as many sales as non-green developments. "People are willing to pay extra for a new home that has green features as opposed to an older home that uses more energy."

And not all builders are convinced that green sells homes. "Buyers in the community at large are very interested in green products and going green," said Chris Apostolopoulos, division president for KB Home, one of the region's biggest builders. "However, they're not willing to pay for it." Nevertheless, he's willing to support mandatory standards if only because it promises fewer headaches by offering consistency.

Warmington's O'Connor, who also is the new chairwoman of the builders association, acknowledged that the timing of the proposal during a stagnant housing market is not the best. **Building green adds as much as \$2 a square foot, and sometimes more**, to a home's price. In the Bay Area, where the median price of a home is \$678,000 and the average size is 2,000 square feet, the added cost would be \$4,000. "**Adding one or two dollars per square foot is not a whole lot**. But in a slow market where we've had to reduce prices and we're working with little or no profit margin, that's the hard part. The timing for us to embrace additional costs is difficult, **but we all know it's inevitable**."

Quantifying Sustainability: A Study of Three Sustainable Building Rating Systems and the AIA Position Statement — 2008 (PDF)

http://www.aia.org/SiteObjects/files/Quantifying%20Sustainability.pdf

Energy Performance of LEED® for New Construction Buildings — 2008 (PDF) <a href="https://www.usgbc.org/ShowFile.aspx?DocumentID=3930">https://www.usgbc.org/ShowFile.aspx?DocumentID=3930</a>

"On average, LEED buildings are delivering anticipated savings. Each of three views of building performance show average LEED energy use 25-30% better than the national average, a level similar to that anticipated by LEED modeling. Average savings increase for the higher LEED levels, with Gold/Platinum buildings approaching the interim goal of Architecture 2030."

# Studies Confirm Energy Savings Significant in LEED, ENERGY STAR Buildings — 2008

http://www.usgbc.org/Docs/News/NBI%20and%20CoStar%20Group%20Release%20040108.pdf (excerpts)

"In the NBI study, the results indicate that new buildings certified under the U.S. Green Building Council's (USGBC) LEED certification system are, on average, **performing 25-30% better than non-LEED certified buildings in terms of energy use**. The study also demonstrates that there is a correlation between increasing levels of LEED certification and increased energy savings. Gold and Platinum LEED certified buildings have average energy savings approaching 50%.

But beyond the obvious implications of reduced energy use and reduced carbon emissions, the results from both studies strengthen the "business case" for green buildings as financially sound investments. According to the CoStar study, LEED buildings command rent premiums of \$11.24 per square foot over their non-LEED peers and have 3.8 percent higher occupancy.

And, in a trend that could signal greater attention from institutional investors, ENERGY STAR buildings are selling for an average of \$61 per square foot more than their peers, while **LEED buildings command a remarkable \$171 more per square foot**. The group analyzed more than 1,300 LEED Certified and ENERGY STAR buildings representing about 351 million square feet in CoStar's commercial property database of roughly 44 billion square feet, and assessed those buildings against non-green properties with similar size, location, class, tenancy and year-built characteristics to generate the results.

The NBI study was funded by USGBC with support from the U.S. Environmental Protection Agency and can be accessed at: <a href="http://www.usgbc.org/DisplayPage.aspx?CMSPageID=77#usgbc">http://www.usgbc.org/DisplayPage.aspx?CMSPageID=77#usgbc</a> publications
For more information on the CoStar study:

http://www.costar.com/Partners/CoStar-Green-Study.pdf (PDF)

http://www.costar.com/News/Article.aspx?id=D968F1E0DCF73712B03A099E0E99C679

# The Cost of Green Revisited — Davis Langdon — 2007 (PDF)

http://www.davislangdon.com/USA/Research/ResearchFinder/2007-The-Cost-of-Green-Revisited/

"The 2006 study shows essentially the same results as 2004: **there is no significant difference in average costs for green buildings as compared to non-green buildings**. Many project teams are building green buildings with little or no added cost, and with budgets well within the cost range of non-green buildings with similar programs."

# Greening America's Schools: Costs and Benefits — 2006 (PDF)

http://www.usgbc.org/ShowFile.aspx?DocumentID=2908

"This carefully documented study conclusively demonstrates the financial, environmental, and other benefits of using green technologies in schools. In fact, failure to invest in green technologies is not financially responsible for school systems; the study uses conservative accounting practices to show that investments in green technologies significantly reduce the life-cycle cost of operating school buildings. And the public benefits of green schools are even larger than those that work directly to the financial advantage of schools. These include reductions in water pollution, improved environmental quality, and increased productivity of learning in an improved school environment."

#### Mayors Adopt AIA Position on Sustainability — 2006

http://www.aia.org/aiarchitect/thisweek06/0609/0609thurs mayors.cfm

The U.S. Conference of Mayors voted unanimously to approve a resolution prompted by the AIA position statement that calls for the immediate energy reduction of all new and renovated buildings to half the national average for that building type, with increased reductions of 10 percent every five years so that all buildings designed by the year 2030 will be carbon neutral—meaning that they will use no fossil fuel energy.

#### AIA Launches Green Building Tool Kit for Mayors — 2006

http://www.aia.org/aiarchitect/thisweek06/1110/1110n\_mayors.cfm http://www.aia.org/toolkit2030/ (Toolkit)

The AIA and the United States Conference of Mayors (USCM) are working together to encourage city leaders to take a strong stance in favor of promoting integrated and high-performance building design with a goal of reaching a 50 percent fossil fuel reduction by 2010 and carbon neutral buildings by 2030. To that end, the AIA launched a toolkit that offers an overview of green building issues, sample ordinance language that has already been used effectively, and real-world examples of what communities are already doing to pursue green building programs.

#### US G.S.A. LEED Cost Study — 2004 (PDF)

http://www.wbdg.org/ccb/GSAMAN/gsaleed.pdf

"Overall, the study illustrates that when GSA projects take advantage of many "no cost" or "low cost" credit opportunities, the overall construction cost premium can be surprisingly limited, even at the higher rating levels. Under certain conditions, it is even possible for projects to show a slight cost decrease. However, when few low-cost credits are available to a project, the premiums increase significantly. The level of variability is most clearly illustrated in the Gold rating scenarios of the Courthouse model, which ranged from only a 1.4% premium in the "low cost" case (approximately \$3.00/GSF) to an 8.1 percent premium (almost \$18/GSF) in the "high cost" case.

GSA's P100 requires all new construction and major modernization projects to be certified through the LEED program, with an emphasis on obtaining Silver ratings."

Costing Green: A Comprehensive Cost Database and Budgeting Methodology — Davis Langdon — 2004 (PDF)

http://www.usgbc.org/Docs/Resources/Cost of Green Full.pdf

# Green Building Costs and Financial Benefits — 2003 (PDF)

#### Summary of Findings (per ft2)

Category 20-year Net Present Value

Energy Savings \$5.80
Emissions Savings \$1.20
Water Savings \$0.50
Operations and Maintenance Savings \$8.50

Productivity and Health Benefits \$36.90 to \$55.30 Subtotal \$52.90 to \$71.30 Average Extra Cost of Building Green (-3.00 to -\$5.00) Total 20-year Net Benefit \$50 to \$65

Source: Capital E Analysis

#### ADDITIONAL INFORMATION SOURCES

Cost Analysis of LEED Credits – **Palo Alto** – KEMA (XLS)
Green Building - GreenPoint Rated & Local Govt Policies - **Palo Alto** - Aug 2007 (PPT)
LEED Green Bldg Rating System - **Palo Alto** - Apr 2008 (PPT)

**USGBC Economic Analysis** 

**USGBC Case Studies** 

**USGBC Publications** 

**LEED Resources for Governments** 

Side-by-Side Comparison of LEED and New California Building Standards

# Types of Buildings by Certification Level

There are buildings of all types at all levels, from fire stations to schools to libraries to community centers. For an easy-to-search list of buildings by certification level, <u>click here</u>.

Following is a sample of city or county LEED projects by certification level.

#### **LEED Certified**

Project Name	Owner	City	State	Country	LEED
1 rojekt manie	Owne:	City	State	Country	Rating
Apache Junction City Hall	City of Apache Junction	Apache Junction	AZ	US	Certified
Utoy Creek WRC Administration &	City of Atlanta	Atlanta	GA	US	Certified
Laboratory		12.1.4	et a		
Berkeley Hills Fire Station	City of Berkeley	Berkeley	CA	US	Certified
West Englewood Public Library	City of Chicago Public Library	Chicago	IL	US	Certified
Chicago Marine Safety Station	City of Chicago, DGS	Chicago	IL	US	Certified
Cotati Police Facility	City of Cotati	Cotati	CA	US	Certified
East Grand Rapids Community Center	City of East Grand Rapids	East Grand Rapids	MI	us	Certified
Gaithersburg Youth Center	City of Gaithersburg	Gaithersburg	MD	US	Certified
City of Los Angeles Fire Station 36	City of Los Angeles	San Pedro	CA	US	Certified
Fire Station No. 89	City of Los Angeles	North Hollywood	CA	US	Certified
City of Los Angeles Fire Station 5	City of Los Angeles	Westchester	CA	US	Certified
North Adams Public Library	City of North Adams	North Adams	MA	US	Certified
Municipal Service Center	City of Olathe, Kansas	Olathe	KS	US	Certified
1328 Desert View Public Library (Broom)	City of Phoenix	Phoenix	AZ	US	Certified
City of Phoenix Fire Station 50	City of Phoenix Fire Department	Phoenix	AZ	US	Certified
RANCHO CORDOVA CITY HALL	CITY OF RANCHO CORDOVA	Rancho Cordova	CA	US	Certified
West Valley Branch Library	City of San Jose	San Jose	CA	US	Certified
High Point Community Center Addition	City of Seattle - PARKS	Seattle	WA	US	Certified
Fisher Pavilion	City of Seattle - SC	Seattle	WA	US	Certified
City of Tacoma Police/Fleet Warehouse	City of Tacoma	Tacoma	WA	US	Certified
Vancouver Conference Center & Hotel	City of Vancouver	Vancouver	WA	US	Certified
Woodland Police Station	City of Woodland	Woodland	CA	US	Certified
Clark County Public Service Center	Clark County, Washington	Vancouver	WA	US	Certified

# **LEED Silver**

Project Name	Owner	City	State	Country	LEED Rating
City of Los Angeles Fire Station 81	Bureau of Engineering	Arleta	CA	us	Silver
Chicago Public Library, Logan Square Branch	Chicago Public Library	Chicago	IL	US	Silver
Harold C. Schott Education Center	Cincinnati Zoo and Botanical Garden	Cincinnati	ОН	US	Silver
Combined Transportation Emergency & Comm	City of Austin	Austin	TX	us	Silver
North Boulder Recreation Center	City of Boulder	Boulder	CO	US	Silver
BOZEMAN PUBLIC LIBRARY	CITY OF BOZEMAN	Bozeman	MT	US	Silver
22nd District Police Station	City of Chicago	Chicago	IL.	US	Silver
4th Ward Yard Building	City of Chicago, Dept. of General Service	Chicago	IL	US	Silver
Jack Evans Police Headquarters	City of Dallas	Dallas	TX.	US	Silver
McCommas ECO Training Center	City of Dallas	Dallas	TX	US	Silver
New Community Center, City of Dunedin	City of Dunedin	Dunedin	FL	US	Silver
City of Fort Collins Vehicle Storage Building	City of Ft. Collins	Fort Collins	со	US	Silver
Homer Public Library	City of Homer	Anchorage	AK	US	Silver
Issaquah Highlands Fire Station #73	City of Issaquah	Issaquah	WA	US	Silver
Morgan Hill Aquatics Center	City of Morgan Hill	Morgan Hill	CA	us	Silver
Port Townsend City Hall	City of Port Townsend	Port Townsend	WA	us	Silver
East End Elementary School	City of Portland, School Department	Portland	ME	US	<u>Silver</u>
Portsmouth Public Library	City of Portsmouth	Portsmouth	NH	US	Silver
Sammamish Commons	City of Sammamish	Sammamish	WA	US	Silver
Northwestern Division Police Station	CITY OF SAN DIEGO	San Diego	CA	US	Silver
Virginia Avenue Park	City of Santa Monica	Santa Monica	CA	US	Silver
Santa Monica Public Safety Facility	City of Santa Monica	Santa Monica	CA	US	Silver
Park 90/5 A	City of Seattle - FFD	Seattle	WA	US	Silver
City of Seattle Justice Center	City of Seattle - FFD	Seattle	WA	US	Silver
Seattle Central Library	City of Seattle - SPL	Seattle	WA	US	Silver
Clackamas County Public Services Building	Clackamas County	Oregon City	OR	US	Silver

# **LEED Gold**

Project Name	Owner	City	State	Country	LEED
Chicago Transit Authority					Rating
Headquarters	Chicago Transit Authority	Chicago	IL	US	Gold
The Wellington E. Webb Building	City and County of Denver	Denver	CO	US	Gold
Austin City Hall Cafe and Store	City of Austin	Austin	TX	US	Gold
0192 Cambridge City Hall Annex	City of Cambridge	Cambridge	MA	US	Gold
HENSLEY FIELD OPERATIONS CENTER	City of Dallas	Dallas	TX	US	Gold
City of Dallas Northwest Service Center	City of Dallas Equipment & Building Serv	Dallas	TX	US	Gold
CSU Transit Center	CITY OF FORT COLLINS	Ft. Collins	CO	US	Gold
Hillsboro Civic Center	City of Hillsboro, OR	Hillsboro	OR	US	Gold
Michigan Alternative and Renewable Energy	City of Muskegon	Muskegon	MI	US	Gold
Fire Station No. 29	City of San Diego	San Diego	CA	US	Gold
GEORGE L. STEVENS SENIOR CENTER MARTIN L	CITY OF SAN DIEGO	San Diego	CA	US	Gold
Santa Clarita Transit Maintenance Facility	City of Santa Clarita	Santa Clarita	CA	US	Gold
Santa Monica Main Library	City of Santa Monica	Santa Monica	CA	US	Gold
Scottsdale Senior Center at Granite Reef	City of Scottsdale	Scottsdale	AZ	US	<u>Gold</u>
Park 90/5 C	City of Seattle - FFD	Seattle	WA	US	Gold
Seattle City Hall	City of Seattle - FFD	Seattle	WA	US	<u>Gold</u>
Carkeek Park Environmental Learning Center	City of Seattle - PARKS	Seattle	WA	US	Gold
Yesler Community Center	City of Seattle - PARKS	Seattle	WA	US	Gold

# **LEED Platinum**

Project Name	Owner	City	State	Country	LEED Rating
Chartwell School	Chartwell School	Seaside	CA	US	Platinum
The Chicago Center for Green Technology	City of Chicago Department of the Environment	Chicago	IL	US 2	Platinum
Joe Serna Jr Cal/EPA Headquarters Bui	City of Sacramento	Sacramento	CA	us	Platinum

City of Mountain View Council Environmental Sustainability Committee 500 Castro Street Mountain View, CA 94041

Re: Funding Request

Dear Council Environmental Sustainability Committee,

Per your suggestion at the January 26<sup>th</sup> CESC meeting, the newly-formed citizen-led sustainability action group would respectfully like to request from the City of Mountain View a \$10,000 grant out of the \$29,000 remaining from the Environmental Sustainability Task Force budget. This request supports at least two of the actions in the Environmental Sustainability Action Plan and would assist us in performing the following tasks, among others:

- Producing and distributing outreach and public education materials such as flyers, quick-reference materials, etc.
- Managing publicity and marketing, including producing and distributing announcements and other collateral materials, etc.
- Developing and hosting a comprehensive web site with interactive and collaborative functions (e.g. a wiki).
- Tabling and hosting events (including speakers, etc.).
- Hosting team meetings and procuring materials (e.g. flip charts, markers).

Our group is comprised of many members from the former Environmental Sustainability Task Force, which managed its budget conservatively, leaving a positive balance. We would manage the \$10,000 in an equally judicious manner.

We have held several meetings to date, including collaborating with similar citizen-led groups from Los Altos, Palo Alto and Menlo Park. Having met with these groups to discuss group structure, what was or was not working, and their ongoing efforts, it became very clear that a lack of funding was considered to be a significant obstacle in their effectiveness.

While we are in the early stages of our efforts, our individual action teams are brainstorming broad-reaching and comprehensive public engagement opportunities, and we already have a group investigating the staging of an environmental film festival.

Your consideration and assistance in this matter would be greatly beneficial and sincerely appreciated.

Best regards,

Aileen La Bouff Pro-Tem Co-Chair

Bruce England Pro-Tem Co Chair

Mountain View Green Citizens Action Team (136 members currently)

#### **APPENDIX**

#### FISCAL YEAR 2008-09 CONTINUING AND PROPOSED ACTIONS

The action items below are proposed to continue through the end of this fiscal year and some will no doubt extend into the next fiscal year. Existing staff resources are generally sufficient to continue working on these initiatives, assuming the Environmental Sustainability Coordinator (ESC) position is continued for at least an additional year through June 2010. Associated implementation costs will be identified as staff begins working on the individual initiatives.

- 1. Adopt CO<sub>2</sub> Emissions Goals—The International Council for Local Environmental Initiatives—Local Governments for Sustainability (ICLEI) is contracted to calculate greenhouse gas emissions for the entire community and for City operations; the results will be available this spring. GHG reduction targets will be recommended based on the outcome. This effort is already funded.
- 2. Redesign Water Billing Format—The Finance and Administrative Services Department is currently working with the Public Works Department on redesigning the utility bill format and expects to be finished by the end of the calendar year. The new format will display water usage and conservation information for residential and commercial properties. This is already funded.
- 3. Recruit and Train Water Conservation Advocates—The Public Works Department initiated this program by hiring an hourly employee to conduct water conservation outreach. This year, costs for two hourly positions are estimated at approximately \$30,000 and are funded by salary savings in the Water Fund.
- 4. Participate in the Single-Use, Carry-Out Bag Ordinance—The Santa Clara County Recycling and Waste Reduction Commission (RWRC) is leading a regional effort with a draft model ordinance requiring merchants to charge customers for single-use paper or plastic carry-out bags. On January 27, 2009, the Council approved the Cities Association resolution supporting a regional approach. Each city would act independently to adopt the ordinance if the RWRC proceeds. Costs to implement have not been determined but would be borne by the Solid Waste Fund; they may be covered by the proposed fee.
- 5. Install Labeling on Trash Containers in Public Areas—Place signs on trash receptacles downtown and in City parks stating "trash is sorted for recycling offsite" to inform users all materials are sorted for recycling. Cost is about \$750 from the Solid Waste Fund and can be funded in the current year budget.

- 6. Establish LEED Silver as the Standard for New City Facilities—The Council referred the Santa Clara County Cities Association request that all cities establish LEED Silver as the standard for public facilities to the Environmental Sustainability Task Force. The Task Force recommended LEED Silver as the standard for public buildings. The approximate additional cost to achieve LEED Silver is 0 percent to 2 percent over conventional building design and construction costs and would be included in the Capital Improvement Program (CIP) project budget for the individual projects. Additional design and construction costs are offset over time by reduced operating expenses. All cities in the County except Mountain View have adopted LEED Silver or similar green building policies for public buildings.
- 7. Support a Community-Led Green Citizens Action Team—Composed of volunteers from the Environmental Sustainability Task Force and others, the new group would be independent of City government and further the community's sustainability goals. The ESC would be the City liaison to the group. The cost is about 5 percent of the Environmental Sustainability Coordinator's time, currently funded from one-time funds.
- 8. Sponsor Sustainability Tabling and Outreach at Local Events—The volunteer Green Citizens Action Team can create educational materials and coordinate table staffing at local events. About 1 percent to 3 percent of the ESC's time is needed, and there may be some cost to develop or purchase educational materials.
- 9. Work with the Valley Transportation Authority (VTA) to Redesign Community Bus Route 34—City and VTA would work together to determine if there is a feasible alternative route to be implemented in the next fiscal year. VTA to fund; cost unknown.
- 10. Incorporate Climate Change Elements into the General Plan Update—A major climate change component, including strategies to reduce greenhouse gases, will be incorporated into the General Plan update, which is being led by the Community Development Department. A \$45,000 grant funded this item previously.

# FISCAL YEAR 2009-10 PROPOSED ACTIONS

- 1. Continue the Environmental Sustainability Coordinator Position for One Year—Currently, the position is funded with one-time funds and is due to expire at the end of June 2009. The cost to continue the position for one year is \$140,000 from one-time funds.
- 2. Secure Technical Assistance to Establish an AB 811 Benefit Assessment District and Develop a Financing Strategy—This legislation allows cities and counties to

finance energy-efficiency and renewable energy installations on residential and commercial properties at the owner's request. It would be a potential major goal for next fiscal year with a \$100,000 CIP for technical assistance to develop financing options and establish a benefit assessment district.

- 3. Evaluate the Feasibility of Implementing a Municipal Renewable Energy Facility (AB 2466)—This legislation permits public agencies to install renewable energy generation facilities (wind, solar) of up to one megawatt per site to offset the cost of energy usage at other agency facilities. This item is a potential major City Council goal for next fiscal year; cost to be split 50 percent CIP Reserve and 50 percent North Bayshore for a total of \$150,000.
- 4. Create a Zero-Waste Action Plan—Following completion of a waste characterization study (\$90,000 to \$130,000), a consultant would be hired to prepare a zero-waste plan (\$70,000 to \$100,000) funded from the Solid Waste Fund. Part of the plan may include expanding the City's food waste composting program City-wide which would require an analysis to determine demand, operations and rate impacts. Expansion of the program would be funded by the users.
- 5. Fully Implement Bicycle Boulevards—The Council previously approved a system of bike boulevards for future implementation. Cost is about \$155,000 to \$250,000 for consultant assistance, including data gathering, design and installation and would come from the CIP reserves.
- 6. Participate in a Regional Effort to Study Feasibility of Automated Bicycle Rentals— The City will join in a regional study effort led by the VTA. Study cost is borne by the VTA.
- 7. Prepare, Adopt and Implement a Pedestrian Master Plan—City staff applied for a \$150,000 grant with a required City match of 20 percent (\$30,000) in staff time. The master plan would be prepared by a consultant and should take about 20 months to complete. It will be coordinated with the General Plan update.
- 8. Increase Free Arbor Day Trees—The CESC proposes to increase the total number of trees distributed per year from 100 to 300. The cost is about \$7,000 to \$10,000 for 200 additional trees, including administrative and delivery costs. Funds would come from the CIP Reserve and be placed in an existing CIP, forestry maintenance program and street tree replanting.
- 9. Create Environmental Displays at the Library—This action can be completed with \$4,000 to \$8,000 in one-time funding next year. Approximately 160 to 300 books and other materials can be purchased for this amount. One-time General Funds or a potential grant from the Friends of the Library would be needed.

- 10. Implement State-Mandated Landscape Water Conservation Program—When available, begin implementation of the State-mandated water landscaping conservation ordinance. Cost to be determined based on final language; funds will come from the Water and General Funds and may be partially offset by fees.
- 11. Retrofit City Facilities with Green Technologies/Green the Library—Retrofitting City facilities for energy efficiency and water conservation will be an ongoing process requiring sustained investment of capital funds. At the direction of the CESC, City staff began evaluating potential actions to green the Library as the first facility in this process. A Pacific Gas and Electric energy audit has been requested and a Santa Clara Valley Water District water audit has been completed. Specific actions based on the two audits can be taken. Approximately \$140,000 in capital funds should be set aside as seed money for the Library for Fiscal Year 2009-10. This amount, which includes landscape changes on Franklin Street, should be sufficient unless one or more major building system improvements are required. This year, about \$85,000 will be spent installing a new lighting control system for the Library and relamping the underground parking garage with energy-efficient lights.
- 12. Enhance the Expertise of Community Development Department and Public Works Department Staff Members in Green Building Practices—The Community Development and Public Works Departments are evaluating options for jointly training staff. Training will begin early next fiscal year and the cost is estimated at \$10,000 from one-time funds.
- 13. Establish Green Building Standards for Private Buildings—The City would develop green standards for residential, commercial and industrial buildings to meet the State-mandated GHG reduction requirements, given that the vast majority of buildings in Mountain View are privately owned. Residential units would need to achieve a minimum number of points under Build It Green's GreenPoint-Rated checklist, while commercial and industrial units would be required to attain one of the four LEED levels. (Building permit applicants today are required to complete a GreenPoint-Rated or LEED checklist without having to meet a minimum standard.)

# FISCAL YEAR 2010-11 AND BEYOND PROPOSED ACTIONS

- 1. Participate in Regional Efforts to Ban Polystyrene Take-Out Food Containers— This effort would be undertaken following completion and evaluation of the ordinance to charge for single-use, carry-out bags. Cost to be determined from the Solid Waste Fund.
- 2. Retrofit City Facilities with Green Technologies—The City will select one or more buildings each fiscal year for energy efficiency and water conservation improve-

ments, depending on the extent and cost of the improvements. A Pacific Gas and Electric (PG&E) energy audit and a Santa Clara Valley Water District water audit will be performed. Specific actions based on the two audits can be taken. Potential energy-saving measures the City can take include, but are not limited to, improvements to lighting, refrigeration, hot water and/or other systems, optimizing the operation of existing mechanical equipment and landscape watering and plant selection improvements. Each facility's costs will vary depending on the age and condition of the building and landscape plan.

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