

City of Culver City, California
City Council Agenda Item Report

Meeting Date: 01/22/08		Item Number: <u>A-3</u>	
AGENDA ITEM: Discussion of the Sustainable Community Plan, the United States Conference of Mayors Climate Protection Agreement and Related Green Building Standards			
Contact Person/Dept.: Craig Johnson Catherine Vargas Elaine Gerety Warner		Phone Number: 310-253-5802 310-253-6411 310-253-5777	
Fiscal Impact: Yes ☒ No ☐		General Fund: Yes ☒ No ☐	
Public Hearing: ☐		Action Item: ☒ Attachments: ☒	
Public Notification: Listing of major commercial, industrial and multifamily builders (01/16/08); Master Notification List (01/16/08).			
Department Approval: Charles Herbertson – Sol Blumenfeld (01/03/08)		City Attorney Approval: Carol Schwab (by H. Baker) (01/08/08)	
Fiscal Impact Review: Jeff Muir (by M. Noller) (01/08/08)		City Manager Approval:	

RECOMMENDATION

Staff recommends the City Council discuss the item and provide direction to staff.

BACKGROUND

On November 26, 2007, the City Council directed staff to provide a report summarizing the City's sustainable efforts and new programs for consideration. (Attachment 1 & 2).

In this report, a number of other planning/policy efforts related to sustainability that have been implemented and/or underway will be discussed.

Sustainable Community Plan and the American Institute of Architects

In November 2006, City Council directed Staff to initiate the formation of a **Sustainable Community Plan** ("SCP"). To achieve this, an "Interdepartmental Sustainable Culver City Green Team" was formed consisting of City staff members from several different departments and a Council Subcommittee. The objective of the plan includes addressing five overall goal areas: Resource Conservation, Environmental Pollution and Public Health Protection, Solid Waste Diversion and

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Recycling, Open Space and Land Use, and Community Education and Civic Participation.

In December 2006, Culver City received a grant award from the American Institute of Architects ("AIA") Center for Communities by Design to assess current sustainability efforts and develop a Sustainable Community Plan (SCP).

In May 2007, Culver City was host to the American Institute of Architects "Sustainable Design Assessment Team". Culver City received technical assistance under the Sustainable Design Assessment Team (SDAT) Program and conducted community outreach through charrette style workshops from which a draft final report has recently been received; the final public report is pending. The Interdepartmental Culver City Green Team and the City Council Subcommittee will reconvene to review the results of the final report upon receipt and plan the next steps necessary for the SCP for presentation to the City Council for consideration.

United States Conference of Mayor's Climate Protection Agreement

In August 2007; the City Council approved the Mayor signing the "U.S. Conference of Mayors Climate Protection Agreement," which has a broad goal of reducing greenhouse emissions and global warming; (Attachment 3). The City has continued in its leadership role with respect to implementing local policies and programs to further the overall goals of the Agreement. Examples include, but are not limited to: (1) Re-consideration of the City's mixed use ordinance (Goal 2); (2) Continuation of the City's Rideshare and Public Transit Use Program and support for the Expo Light-Rail Project (Goal 3); (3) continued expansion of the City's alternative energy vehicle fleet (Goal 4); (4) consideration of green building standards (Goal 5); and implementation of a Parks and Recreation Master Planning Process (Goals 3 and 11.

Green Building Standards

Culver City has made considerable efforts at green building measures, including:

- 1.) 2004: two voluntary green building handouts available to the public
- 2.) 2005: a green building tour for the City Council
- 3.) A green building presentation to the Planning Commission
- 4.) "Discussion of Future Green Building Standards in Culver City" City Council item; (Attachment 4)
- 5.) In June 2007 the City Council gave tentative approval to a "Mandatory Solar Photovoltaic Requirement," which was subsequently approved by the California

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Energy Commission; (Attachment 5). The second first reading of the photovoltaic ordinance is scheduled for this evening.

DISCUSSION

In considering future sustainable programs for the City, staff recommends that one of the first considerations be related to developing a green building program. Green buildings are more energy efficient, reduce solid waste during construction, reduce environmental pollution and conserve natural resources. Green buildings create healthier work, learning, and living environments, with more natural light and cleaner air, contributing to improved health, comfort, and productivity.

Best Practices

The following is a brief review of the sustainable City programs of other California cities that the City Council may wish to consider.

Santa Monica

The City of Santa Monica Sustainable City Plan (SMSCP) was initially adopted in 1994, and has been revised twice since inception, most recently in 2006. The SMSCP includes eight overall goal areas; Resource Conservation, Environment and Public Health, Transportation, Economic Development, Open Space and Land Use, Housing, Community Education and Civic Participation, and Human Dignity.

The SMSCP incorporates a Santa Monica Green Building Program (SMGBP) to help meet some of the goals set by the SMSCP and to raise the bar of excellence for building practices in the City.

Santa Monica's green building requirements were designed to increase sustainability without putting excessive burdens on builders or developers. Many of the measures have some associated initial cost, though others can actually reduce first costs and operating costs, and all of them increase the overall value of the building. The basis for the green building requirements lies in two different Santa Monica Ordinances as well as in the Santa Monica [Municipal Code](#). Most green building requirements apply to all commercial construction and major renovation projects, as well as to all multi-family residential projects with more than 3 units. There are also a number of requirements that apply only to specific types of projects. The SMGBP includes an Energy Conservation Ordinance requiring buildings to exceed the State of California Energy Code by 10 to 15%, depending on the type of building, a Stormwater Management Performance Ordinance requiring projected urban runoff to be reduced 20%, a set of Required Practices

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applying to building construction materials and construction practices, and a set of Suggested Practices. The SMGBP has 3 to 4 full time City staff members to administer the program and the support of other City staff members in other City Divisions.

The City of Santa Monica also has a "Solar Santa Monica" Program; a City sponsored effort to make it easier for people to design, buy, and install solar photovoltaic systems. The Solar Santa Monica Program includes a partnership with "preferred providers"; installers of solar photovoltaic systems, in an effort to collectively reduce solar system costs and streamline permitting.

For the Solar Santa Monica Program, Santa Monica hired an environmental consulting firm to manage the program and perform on site assessments, recommend specific actions for individual properties; based on the overall energy use of the property. The Program recommends one of several "packages," one of which is the residential "Solar Standard Package," which includes upgrades to a house's appliances, building envelope, lighting, and a 2 kw solar photovoltaic system.

See Attachment 6 for further information on the City of Santa Monica's sustainable City programs.

Manhattan Beach

In November 2007, the City of Manhattan Beach City Council considered a "Working Toward a Greater, Greener Manhattan Beach" report (WTGGMB). The report summarized the past Manhattan Beach sustainable city efforts, noted the formation of a Manhattan Beach "Green Team" consisting of several City Department Heads, and established eleven "Environmental Sections"; Energy Use at City Facilities, Vehicle Fleet and Fuel Usage, Traffic Controls and Streetlights, Sustainable Development, Transportation and Parking, Water Usage and Conservation, Urban Forests and Beaches, Solid Waste and Recyclables, Storm Water Management, and Procurement Policies. The report summarized future considerations and estimated the difficulty of implementing the Sections. Manhattan Beach Council is scheduled to return to this item in late January to discuss staff additions.(See Attachment 7 for the complete WTGGMB)

Pasadena

In September 2006, the City of Pasadena City Council approved a "Green City Action Plan" (PGCAP); based on the United Nations Green Cities Declaration and Urban Environmental Accords. Pasadena established an "Environmental Advisory Commission" in January 2007. The PGCAP has seven overall areas; Energy,

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Waste Reduction, Urban Design, Urban Nature, Transportation, Environmental Health, and Water.

In December 2005 the City of Pasadena approved a Green Building Program (GBP). The Pasadena GBP applies to municipal buildings of 5,000 square feet or more of new construction, non-residential buildings of 25,000 square feet or more of new construction, tenant improvements of 25,000 square feet or more, and mixed use and multi-family buildings of four stories or more.

The Pasadena GBP aligns itself with the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (Leed) Ratings System. (The USGBC is the foremost "green" building practices organization in the U.S., and is internationally recognized.)

The Pasadena GBP requires qualifying projects to: hire a Leed Accredited consultant as part of the initial planning of the project, requires the Leed checklist indicating a minimum Leed "certified" status (The lowest Leed level – The Leed certification levels, from least to most demanding are: certified, silver, gold, and platinum.) as part of the permit application documents, City staff Leed review and approval, construction verification during the normal construction inspection process.

The Pasadena GBP offers incentives in the form of Leed qualified City staff to guide projects, a \$1,000 rebate for each affordable housing unit part of a green building, and various incentives from the Pasadena Water and Power Department. Please see Attachment 8 for further information on the PGCAP and the Pasadena GBP.

West Hollywood

In October 2007, the City of West Hollywood implemented a Mandatory Green Building Program for private construction (WHMGBP).

The WHMGBP established development standards that apply to all development, a point system for new construction with incentives for projects that achieve "exemplary" status, implements a green building education and outreach program, and also establishes that any new public building will at a minimum have a Leed "certified" status. The WHMGBP categories will be monitored and enforced by the West Hollywood Planning and Building Safety Divisions.

Please see Attachment #9 for the WHMGBP and a complete list of the points system.

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Pending California Green Building Code

Over the past 15 to 20 years the former 4 separate, different regional codes in use in the United States have been promulgated into one set of national building codes; the International Codes, published by the International Code Council (ICC). The California Building Standards Commission (CBSC) has adopted the 2007 California Building Codes; based on the International Codes, which went into effect January 1st, 2008.

The 2007 California Building Code has Chapter 11 "reserved", or blank. Chapter 11 will eventually be the California Green Building Code (CGBC).

The CGBC has been a joint effort throughout 2007 of the CBSC, the California Housing and Community Development Department (HCD), the California Division of the State Architect (DSA), and the California Office of Statewide Health Planning and Development (OSHPD). Work on the CGBC is continuing, there is no published final edition date yet set, and in any case adoption of the CBGC will probably be voluntary.

The draft CGBC includes planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality standards, and is roughly similar to standards published by the USGBC.

Potential Culver City Green Building Program

One component for Culver City's Green Building Program would be City incentives for green construction in the form of City construction permit fee refunds for any project which obtains Leed certification.

The advantage of such a program is that it puts the majority of the effort on the project developer. A project developer would obtain their own Leed consultant, or use an architectural firm that is already Leed accredited, pay all typical City construction permit fees, obtain construction permits, complete the project construction, file documents with the USGBC and obtain USGBC Leed certification, and submit the Leed certification to Culver City to obtain a refund of a portion of their construction permit fees.

A 2004 United States General Services Administration report titled "GSA Leed Cost Study" estimated Leed construction and certification costs. One example of the report was based on a new mid rise federal courthouse, 5 stories, 262,000 square feet, base construction cost \$220 per square foot Leed construction cost impacts were estimated to be from \$.76 per square foot (.4% of the construction

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costs, \$199,120 overall) for a Leed Certified rating, to \$17.76 per square foot (8.1% of the construction costs, \$4,653,120 overall) for a Leed Gold rating.

Leed consultant and Leed review costs for the above project were estimated to be from \$.41 per square foot (.2% of construction costs, \$90,200 overall) for a Leed Certified rating, to \$.80 per square foot (.4% of construction costs, \$176,000 overall) for a Leed Gold rating. Overall Leed costs including additional construction costs and additional soft costs were estimated to be from \$1.20 per square foot (.6% of construction costs, \$110,120 overall) for a Leed certified rating, to \$18.56 per square foot (8.5% of construction costs, \$4,829,120 overall) for a Leed Gold rating.

As an exercise, the above estimates may be extrapolated to a current pending Culver City project; the Sony 4th Avenue shell building permit.

The Sony 4th Avenue project overall building permit, with an estimated construction valuation of \$4,700,000 if eventually issued will pay a total of \$574,288 in permit fees, \$89,547 of which is the building permit fee. (This does not include the mechanical, electrical, plumbing, Fire Prevention, or Public Works engineering permit fees.) Using the GSA report as an guideline; the cost for the Sony 4th Avenue shell building to obtain a Leed Certified rating may be an additional .6% of construction costs; \$28,200, or to obtain a Leed Gold rating may be an additional 8.5% of construction costs; \$399,500.

Culver City cannot refund the majority of the building permit fees, nor refund more than the permit fees collected. Instead the City might refund approximately 25% of the building permit fee for a completed project verified to be Leed Certified, increasing the refund to 45% of the building permit fee for a verified Leed Gold certified project. It would have to be determined if the amounts of the refunds would be enough to increase the likelihood of Culver City projects obtaining Leed certification.

Other Sustainable Considerations

Development of a Preferred Vendor List

Such a program may be similar to the Solar Santa Monica Program, or possibly could even be a partnership with the existing Santa Monica Program, which uses an environmental consulting firm to perform on site assessments, partnering with a preferred solar system vendor list, to reduce solar system costs. The Santa Monica "Solar Standard Package" for example has a gross cost of \$22,800, discounted to \$14,900, and includes an \$800 allowance for a new, more efficient refrigerator, upgrades to a house's exterior envelope, lighting, and a 2 kw solar system.

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This program could also be further enhanced beyond solar to include other vendors that can retrofit existing buildings with more energy efficient alternatives.

Landscaping Guidelines and Tree Programs

A basic part of the West Hollywood Green Building program is to preserve existing canopy trees, and promote new deciduous canopy trees. Culver City has an existing Street Tree Master Plan (STMP) dating from 2002, and landscaping requirements for new projects as part of the City Zoning Code.

Existing Culver City trees may be removed with Planning division approval; new street trees are required if applicable for all new developments, and the City landscaping standards for new developments are enforced.

Culver City could upgrade the requirements of the STMP, or could require additional canopy trees or additional drought tolerant landscaping for all new developments.

Metropolitan Water District ("MWD") has included Culver City in an Accelerated Audit Program that will report the cover irrigation systems, valve by valve, to show how efficient the system is and where repairs should be made to improve efficiency to the target range suggested by MWD. This audit will also give a suggested maintenance schedule. Auditors will note the types of plants, their locations, and the soil they are situated in, then advise on how much water those plants should be receiving to avoid overwatering. This report will help establish a water use benchmark assessment. Locations include city facilities, parks and some medians.

Energy Efficiency Programs for Housing Rehabilitation Projects

Another program to consider would be developing an Energy Efficiency Program for our current Housing Rehabilitation Program. This program would work to install/retrofit energy efficient appliances such as lighting, furnaces, low flow water toilets, windows, building envelope improvements, irrigations systems in future housing rehabilitation projects. Such a program would provide several benefits to our community reflected in energy use reduction and water conservation. The Denver Housing Authority, though an Energy Performance Contract with Honeywell, is currently working to install energy savings in 3,700 public Housing Units through a phased approach (See Attachment 11).

FISCAL ANALYSIS

Costs may be divided into one time program set up costs, annual costs, or costs per individual project. The following are cost estimate comparisons of several potential

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program models. Please note that the numbers are estimates only based on preliminary projections:

	One Time Set up Cost	Annual Cost (to the City)	Cost per Project (to the City)
The City of Santa Monica model; a full green building program for all major private construction	\$200k consultant, \$25k for an additional inspection vehicle	\$200k for two additional full time permanent employees	none (new City projects may cost an additional 1 - 9%)
The City of Pasadena or City of West Hollywood model; a partial green building program for most private construction	\$110k consultant, \$25k for an additional inspection vehicle	\$100k for one additional full time permanent employees	none (new City projects may cost an additional 1 - 9 %)
Partial permit fee refund as an incentive to obtain Leed certification	none	\$25k - \$100k	\$10k - \$20k, depending on the size of the project
Adoption of a future California Green Building Code	\$25k for an additional inspection vehicle	\$100k for one additional full time permanent employee	none (new City projects may cost an additional 1 - 5 %)

Costs related to developing the preferred vendor list, updating street tree program and energy efficiency program for Housing would be absorbed through City Staff. The scope of the programs would indicate the total time required implementing and subsequent staff time costs.

SUMMARY

A green building program may be considered part of an overall Culver City Sustainable Community City Plan.

There is consensus among cities that green building/sustainable design plan review and inspection processes must be integrated with the typical discretionary review and subsequent building permit and field inspection processes.

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Green building plan review and field inspection processes involve many different City staff; the Planning Division staff, the Building Safety building, mechanical, plumbing, and electrical staff, the Engineering Division staff and the Environmental Programs Division staff, among others.

There is also consensus among Cities that most green building projects are better served when there is a central City staff member guiding and watching over the project from initial project concept to field inspection; working in coordination with the various City experts noted above.

Staff recommends that any new Green Building staff split their time between plan review and project coordination in the office and field inspections to verify compliance.

In addition to the Green Building Program, there are several other sustainable initiatives that the City could consider at this time. A preferred vendor list for solar and other energy efficient alternatives could be developed and provided to the community to increase cost savings to individual consumers, enhancement of current street tree programs could focus on utilizing more drought resistant species, and an Energy efficiency program could be developed for future Housing Rehabilitation projects.

These suggestions reflect a few of the options that Culver City could implement, however, is not representative of all of the sustainable initiatives that could be developed. Several attachments have been included to provide a broad view of other environmental programs that have been implemented in other local cities.

ATTACHMENTS

1. Current Culver City Sustainable Efforts
2. Culver City Council Discussion of Green Building and Related Issues, November 26th, 2007
3. U.S Conference of Mayors Climate Protection Agreement
4. Culver City Council Discussion of Green Building Standards February 2005
5. Culver City Local Energy Plan approved by the California Energy Commission
6. City of Santa Monica Green Building and Solar Santa Monica excerpts
7. City of Manhattan Beach "Working Toward a Greener Manhattan Beach"
8. City of Pasadena Green City Action Plan excerpts.
9. City of West Hollywood Mandatory Green Building Plan
10. City of Santa Cruz, Environmental Specialist Recruitment
11. "Going Green in Denver"

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MOTION:

That the City Council:

Provide direction to staff relating to a potential Green Building Program and other sustainable initiatives that could be implemented in Culver City.