

Agenda Report

DATE: DECEMBER 19, 2005

TO: CITY COUNCIL

THROUGH: ED-TECH COMMITTEE

FROM: CITY MANAGER

SUBJECT: GREEN BUILDING ORDINANCE AND PROGRAM

RECOMMENDATION:

It is recommended that the City Council:

- 1) Acknowledge that the Green Building Ordinance is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines General Rule, Section 15061 (b)(3);
- 2) Direct the City Clerk to file a Notice of Exemption with the Los Angeles County Recorder;
- 3) Direct the City Attorney to prepare an ordinance within 60 days amending Title 14 of the Pasadena Municipal Code to implement a Green Building Ordinance as described herein; and
- 4) Establish a construction tax rebate of \$1,000 for each affordable housing unit provided on-site for projects that meet the requirements of the Green Building Ordinance, effective with the adoption of the 2006-2007 Schedule of Taxes, Fees and Charges.

EXECUTIVE SUMMARY:

Pursuing a program that increases the environmental soundness of buildings compliments the City's desire to improve the health of persons living, working and visiting Pasadena, and to cultivate standards that provide for a sustainable future. Furthermore, environmentally sound buildings seek to reduce the impacts

buildings have on the local, regional and global environment including global warming, heat island effect, air pollution, and occupant health.

Staff is recommending a green building program that provides for minimum mandatory requirements, offers incentives, and establishes an outreach and education component. In addition, for the first year of implementation staff recommends offering, at no cost to the applicant, accredited professional services to guide the project through the process; and for residential projects providing on-site affordable housing units a construction tax rebate of \$1,000 per affordable unit.

BACKGROUND:

The goal in creating a green building program is to address and ensure building design and construction integrates sustainable siting, water conservation, energy efficiency, improved occupant health, and conservation of natural resources. To accomplish this goal, staff retained the services of a green building expert (Global Green USA); reviewed existing regulations, ordinances and programs; analyzed building activity for the past three years; examined other jurisdictions' green building programs; and solicited input from the community including development and business groups. As a result, the proposed green building program includes categories and thresholds for mandatory compliance, guidelines, incentives, and outreach and education components.

Categories and Thresholds

Staff recommends mandatory requirements be adopted as a Green Building Ordinance under Pasadena Municipal Code Title 14 Building and Construction and apply to the following building categories and thresholds:

1. City buildings with 5,000 square feet or more of new construction;
2. Non-residential buildings 25,000 square feet or more of new construction;
3. Tenant improvements 25,000 square feet or more of new construction requiring a building permit; and
4. Mixed use and Multi-family residential buildings four stories in height or more.

The thresholds for private projects were chosen as they coincide with the thresholds for a conditional use permit for major projects (25,000 square feet or more), and are subject to design review, construction waste management plan compliance and trip reduction requirements.

Guidelines

The Green Building Ordinance will adopt as the standard for determining a building's "greenness" the Leadership in Energy and Environmental Design (LEED™) green building rating system developed by the U.S. Green Building Council. There are a number of compelling reasons for selecting LEED over other green guidelines and in lieu of creating separate guidelines for Pasadena.

Of critical importance, LEED addresses the goal of providing an integrated approach for reviewing a project's impacts on the environment – from sustainable siting to material conservation. LEED is a proven and nationally recognized standard; it provides flexibility by allowing developers to attain points from a menu of options; it is updated regularly; and it does not prescribe an architectural style. Projects meeting the above categories and thresholds will be required to meet the intent of LEED by providing:

1. Proof of LEED registration; and
2. Submittal of the applicable LEED checklist (Attachment 1) included in the building plan set indicating points to achieve LEED certification at a minimum and prepared and signed by the project LEED Accredited Professional.

Projects that meet progressive point levels in LEED based on the increased environmental soundness of the project can attain recognition as a LEED Certified (for new construction 26 points out of 69), Silver (33 pts), Gold (39 pts) or Platinum (52 pts). Only City buildings will be required to complete the entire LEED certification process. This is accomplished after construction is completed and project documentation is verified by an independent third party. The proposed green building ordinance will exempt projects that have received discretionary entitlements or have submitted complete plans for building plan review by April 1, 2006.

Incentives

When partnered with incentives, rebates and life-cycle savings, employing green methods need not impact a project's economic viability. Nonetheless some community members expressed concerns about costs and developing familiarity with the proposed requirements. Capturing projects early in the design and construction document phase is paramount to the success of achieving environmentally sound buildings and reduces costs.

Therefore, staff recommends offering project applicants the services of a qualified LEED Accredited Professional technical expert for a period of one year after the effective date of the Green Building Ordinance. The expert will work directly with the project design team to verify that green building compliance is evident throughout the design and construction phases and to review the LEED checklist at plan submittal. However, project applicants may elect to use their own LEED AP at their costs. Projects below the thresholds that voluntarily comply with the requirements may also seek the technical services offered by the city.

To encourage on-site affordable housing units and lessen the costs that may be associated with making these units green, staff proposes a construction tax rebate of \$1,000 per affordable unit for on-site inclusionary units. The rebate is proposed to be included in the annual adoption cycle of the Schedule of Taxes, Fees and Charges (early June 2006). Projects receiving discretionary

entitlements and/or have submitted complete building plans during the one year effective period of the waiver will be entitled to this reduction at building permit issuance.

The Pasadena Department of Water and Power will continue to offer significant incentives (Attachment 2) for projects that voluntarily obtain LEED certification after the building is completed; technical energy review and assistance; high performance building rebates; and appliance and energy systems rebates.

Incentives may also be available through various agencies and manufacturers. Keeping current with these incentives and informing project applicants of their availability will be included in the green building program.

Outreach and Education

The proposed green building program not only reflects ideas and comments expressed by the Green Ribbon Committee (Attachment 3), but includes comments received by the community at the program “kick-off” on April 23, 2005 (Earth Day) held at Memorial Park, a community-wide meeting on October 20, 2005, and various meetings attended by local development and business groups. The feedback received indicated a strong desire for opportunities to explain the program and to provide information on green buildings for the entire community - from residents planning additions to commercial property owners seeking increased energy savings.

To keep abreast of evolving trends in sustainability, and to increase public awareness of choices available, staff proposes complimenting the Green Building Ordinance with an outreach and education component. Staff recommends retaining the services of a consultant with pre-requisite green expertise to conduct the outreach efforts. The consultant will be tasked with collating a list of green topics, and implementing a program based on the community’s interests. The list will begin with inviting developers, contractors, architects and business owners to attend meetings at which information can be shared between the various groups and presentations on how to include sustainability in a project will be discussed.

ENVIRONMENTAL DETERMINATION:

The Environmental Administrator has determined that the green building ordinance is exempt from environmental review pursuant to the California Environmental Quality Act (CEQA) Section 15061 (b)(3) wherein it states “the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.”

FISCAL IMPACTS:

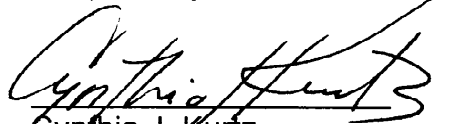
Adoption of the Green Building Ordinance will broaden the scope of work for plan check and inspection staff in the Planning and Development Department. It is anticipated that implementation of the ordinance can be accomplished by contracting with LEED Accredited Professionals and providing additional training of existing staff.

Funds are available in the Building Services Fund Unappropriated Reserve for contracting LEED AP technical experts and for contracting a consultant to develop and implement the Green Building Outreach and Education program for one year. During this initial one year period, staff estimates that an appropriation of \$250,000 will cover these costs. Staff will return with recommendations for this appropriation at the time recommended professional services are contracted. If it is determined that the services should be offered for more than one year and sufficient funds are not available in the Building Services Fund the City may consider increasing fees to support the cost of service.

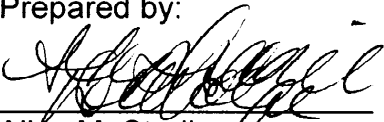
The construction tax rebate for green building projects providing on-site affordable housing units is estimated to be \$100,000 for the initial one year period.

City building construction projects could incur some increased up-front costs, design fees, and construction costs that potentially could be offset by the long-term savings in operating costs.

Respectfully submitted,


Cynthia J. Kurtz
City Manager

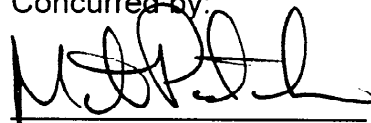
Prepared by:


Alice M. Sterling
Senior Project Manager

Approved by:


Richard J. Bruckner
Director of Planning and Development

Concurred by:


Martin Pastucha
Director of Public Works

Attachment 1 LEED NC Checklist
Attachment 2 Pasadena Water and Power LEED Incentives
Attachment 3 Green Ribbon Committee Roster

ATTACHMENT 1 LEED NEW CONSTRUCTION CHECKLIST (SAMPLE)

LEED-NC Version 2.1 Registered Project Checklist

Project Name _____

Yes ? No

Sustainable Sites

			Prereq 1 Erosion & Sedimentation Control	Required
			Credit 1 Site Selection	1
			Credit 2 Development Density	1
			Credit 3 Brownfield Redevelopment	1
			Credit 4.1 Alternative Transportation, Public Transportation Access	1
			Credit 4.2 Alternative Transportation, Bicycle Storage & Changing Rooms	1
			Credit 4.3 Alternative Transportation, Alternative Fuel Vehicles	1
			Credit 4.4 Alternative Transportation, Parking Capacity and Carpooling	1
			Credit 5.1 Reduced Site Disturbance, Protect or Restore Open Space	1
			Credit 5.2 Reduced Site Disturbance, Development Footprint	1
			Credit 6.1 Stormwater Management, Rate and Quantity	1
			Credit 6.2 Stormwater Management, Treatment	1
			Credit 7.1 Landscape & Exterior Design to Reduce Heat Islands, Non-Roof	1
			Credit 7.2 Landscape & Exterior Design to Reduce Heat Islands, Roof	1
			Credit 8 Light Pollution Reduction	1
Yes	?	No		

Water Efficiency

			Credit 1.1 Water Efficient Landscaping, Reduce by 50%	1
			Credit 1.2 Water Efficient Landscaping, No Potable Use or No Irrigation	1
			Credit 2 Innovative Wastewater Technologies	1
			Credit 3.1 Water Use Reduction, 20% Reduction	1
			Credit 3.2 Water Use Reduction, 30% Reduction	1
Yes	?	No		

Energy Efficiency

			Prereq 1 Fundamental Building Systems Commissioning	Required
			Prereq 2 Minimum Energy Performance	Required
			Prereq 3 CFC Reduction in HVAC&R Equipment	Required
			Credit 1 Optimize Energy Performance	1 to 10
			Credit 2.1 Renewable Energy, 5%	1
			Credit 2.2 Renewable Energy, 10%	1

- Credit 2.3 **Renewable Energy, 20%** 1
- Credit 3 **Additional Commissioning** 1
- Credit 4 **Ozone Depletion** 1
- Credit 5 **Measurement & Verification** 1
- Credit 6 **Green Power** 1

Yes ? No

Water Efficiency

- Prereq 1 **Storage & Collection of Recyclables** Required
- Credit 1.1 **Building Reuse, Maintain 75% of Existing Shell** 1
- Credit 1.2 **Building Reuse, Maintain 100% of Shell** 1
- Credit 1.3 **Building Reuse, Maintain 100% Shell & 50% Non-Shell** 1
- Credit 2.1 **Construction Waste Management, Divert 50%** 1
- Credit 2.2 **Construction Waste Management, Divert 75%** 1
- Credit 3.1 **Resource Reuse, Specify 5%** 1
- Credit 3.2 **Resource Reuse, Specify 10%** 1
- Credit 4.1 **Recycled Content, Specify 5% (post-consumer + 1/2 post-industrial)** 1
- Credit 4.2 **Recycled Content, Specify 10% (post-consumer + 1/2 post-industrial)** 1
- Credit 5.1 **Local/Regional Materials, 20% Manufactured Locally** 1
- Credit 5.2 **Local/Regional Materials, of 20% Above, 50% Harvested Locally** 1
- Credit 6 **Rapidly Renewable Materials** 1
- Credit 7 **Certified Wood** 1

Yes ? No

Indoor Environmental Quality

- Prereq 1 **Minimum IAQ Performance** Required
- Prereq 2 **Environmental Tobacco Smoke (ETS) Control** Required
- Credit 1 **Carbon Dioxide (CO₂) Monitoring** 1
- Credit 2 **Ventilation Effectiveness** 1
- Credit 3.1 **Construction IAQ Management Plan, During Construction** 1
- Credit 3.2 **Construction IAQ Management Plan, Before Occupancy** 1
- Credit 4.1 **Low-Emitting Materials, Adhesives & Sealants** 1
- Credit 4.2 **Low-Emitting Materials, Paints** 1
- Credit 4.3 **Low-Emitting Materials, Carpet** 1
- Credit 4.4 **Low-Emitting Materials, Composite Wood & Agrifiber** 1
- Credit 5 **Indoor Chemical & Pollutant Source Control** 1
- Credit 6.1 **Controllability of Systems, Perimeter** 1
- Credit 6.2 **Controllability of Systems, Non-Perimeter** 1
- Credit 7.1 **Thermal Comfort, Comply with ASHRAE 55-1992** 1
- Credit 7.2 **Thermal Comfort, Permanent Monitoring System** 1

Yes	?	No

- Credit 8.1 **Daylight & Views**, Daylight 75% of Spaces 1
- Credit 8.2 **Daylight & Views**, Views for 90% of Spaces 1



Yes	?	No

- Credit 1.1 **Innovation in Design**: Provide Specific Title 1
- Credit 1.2 **Innovation in Design**: Provide Specific Title 1
- Credit 1.3 **Innovation in Design**: Provide Specific Title 1
- Credit 1.4 **Innovation in Design**: Provide Specific Title 1
- Credit 2 **LEED™ Accredited Professional** 1

--	--	--

Project Totals (pre-certification estimates) 69 Points

Certified 26-32 points **Silver** 33-38 points **Gold** 39-51 points **Platinum** 52-69 points

**ATTACHMENT 2
PASADENA DEPARTMENT OF WATER AND POWER LEED INCENTIVES**

Pasadena Green Building Program

Pasadena Green Building Program promotes the design and construction of environmentally responsible buildings. Green buildings, also called sustainable design or environmental construction, is a method of building that has a low impact on the environment, uses resources efficiently, is healthy for the occupants, and can bring economic and social benefits to the surrounding community.

The goal of the Pasadena Green Building Program is to encourage private sector builders to construct sustainable buildings that will serve as examples for future projects to emulate. Providing incentives for the design of buildings certified by the U.S. Green Building Council's LEED™ Rating System underscores the City of Pasadena's principle of Stewardship of the Natural Environment: "To encourage and promote the stewardship of Pasadena's natural environment, including energy and water conservation, clean air, natural open space protection, and recycling."

Green Building Incentives will be awarded to successful applicants as follows:

LEED™ Certified	\$15,000
LEED™ Silver	\$20,000
LEED™ Gold	\$25,000
LEED™ Platinum	\$30,000

Incentives will be approved on a first-come, first-served basis. Applicants will be required to provide verification of LEED™ registration, execute a Letter of Agreement with Pasadena Water and Power, and receive their City building permit before any incentive funds are reserved.

For more information, please contact:

Mauricio Mejia
Program Manager
Pasadena Water & Power
(626) 744-4529
mmejia@cityofpasadena.net

**ATTACHMENT 3
GREEN RIBBON COMMITTEE ROSTER**

Scott Gaudineer	Architect Flewelling and Moody
Stan Kiernicki	Architect Miralles Associates
Brian Lee	Assistant Building Official City of Whittier
Sean Magee	Pasadena Territory Manager Garland Roofing & Flooring Company
Lisa Fay Matthiessen	LEED AP, Architect, Senior Associate Davis Langsdon & Seah International
Adolfo Miralles	Architect Miralles Associates
Jaylene Moseley	Developer J.L. Moseley Company
Tim Piasky	Director of Environmental Affairs (Former) Building Industry Association
Darren Pynn	LEED AP, Architect Miralles Associates
Katrina Rosa	LEED AP, Architect Greenworks Studio
Tracy Stone	LEED AP, Architect/Professor Art Center College of Design
Emily Williamson	Sustainability Designer E.W. Consulting
Joan Woodward	Landscape Architect, Professor California Polytechnic University, Pomona