

October 1, 2008

<b>Location:</b>	<b>Citywide</b>
<b>Proposal:</b>	Recommendations on a conceptual framework and workplan related to future Green Building requirements for private development projects.
<b>Applicant:</b>	City Planning Commission
<b>Environmental Determination:</b>	Under review
<b>Status:</b>	Recommendations contained within staff report
<b>For Further Information:</b>	Contact case planner <b>Heather Klein</b> at <b>510 238-3659</b> or by e-mail at <b>hklein@oaklandnet.com</b> .

## SUMMARY

The demolition and construction of buildings has an impact on the environment, the economy, and our health. Green buildings reduce energy use, conserve water indoors and out, limit waste during construction, and in urban areas reduce the amount of vehicle miles traveled by residents. All of these benefits have been found to reduce emissions of carbon dioxide, a Green House Gas (GHG) and contributor to Global Warming. In addition, green buildings are constructed from sustainable products that preserve natural resources through the use of local materials and recycled products. Green buildings benefit occupants through the use of healthy building materials, including zero to low Volatile Organic Compound (VOC) and formaldehyde free products. Green buildings encourage the growth of additional businesses and jobs in order to support the needs of the green building industry. They also minimize the strain on local governments by reducing waste to landfills, capacity in the storm drain and sewer systems, and provide GHG savings that benefit climate targets set by the City. In addition, constructing a green building assists the State and the City in achieving its sustainability goals, while protecting the environment and our natural resources for future generations.

The purpose of this report is to provide recommendations to the Planning Commission on a conceptual framework and work plan related to future Green Building requirements for private development projects in the City of Oakland. The recommendations for consideration are based on the policy issues discussed further in this report and include possible incentives, as well as general thresholds for requirements, the steps and a general timeframe of adoption of actual legislation, and compliance.

Staff requests that the Planning Commission review the policy issues and recommendations and provide staff clear direction, with emphasis on the issues discussed in the report, as well as any other issues the Commission or the community may have. These recommendations and comments will be forwarded to the Community and Economic Development (CED) Committee for further action.

## WHY GREEN BUILDING IS IMPORTANT

The generation and use of energy from fossil fuels is the major contributor to air pollution and global climate change. In the United States, buildings account for<sup>1</sup>:

- 36% of total energy use
- 65% of electricity consumption
- 38% of carbon dioxide emissions
- 30% of greenhouse gas emissions
- 30% of raw materials use
- 30% of waste output/136 million tons annually
- 12% of potable water consumption

According to the EPA and surveys conducted in 2002, 107.3 million acres of the 1.983 billion acres of total land area in the US is developed. This represents an increase of 24% in developed land over the past

<sup>1</sup> US Green Building Council website, <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=291&>

10 years. In California, which has a cleaner mix of energy than national averages, buildings are the second largest contributor to California's greenhouse gas emissions. The Air Resources Board, in their AB32 Draft Scoping Plan, estimates that one-quarter of the greenhouse gases emitted in California can be attributed to buildings.<sup>2</sup> This estimate only account for electricity, natural gas, and water use in homes and commercial buildings; if the estimate include emissions savings from recycling waste or fuel savings from transit oriented developments, the number would be far higher.

Given these statistics related to building construction and operation, improving energy efficiency and using renewable energy sources in buildings is fundamental to improving air quality and reducing the impacts of global climate change.

Compelling research now demonstrates that the integration of green building features into development projects can generate substantial energy, water and materials efficiencies, resulting in reduced operating costs of 20-80% over the life of the building. Reduced operating costs generate increased cash flow, which helps free capital for other investments. More recently, research is showing that with proper planning even the first costs of building green can be the same as or less than conventional building techniques.

There is also a growing body of research that indicates that green buildings improve property values and can capture lease premiums. Another significant economic benefit from green building is improved employee or occupant morale and general well being, resulting in quantifiable productivity increases and reductions in liability and health insurance claims.

## **BACKGROUND OF GREEN BUILDING RELATED POLICIES**

### **International and Federal**

#### *Kyoto Protocol*

The United States participated in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It should be noted that although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments.

#### *Climate Change Technology Program*

The United States has opted for a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol's mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (which is led by the Secretaries of Energy and Commerce) that is charged with carrying out the President's National Climate Change Technology Initiative.<sup>3</sup>

#### *Resource Conservation and Recovery Act*

The Resource Conservation and Recovery Act requires Federal agencies to give preference in their procurement to the purchase of specific US EPA designated recycled content materials. The EPA

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<sup>2</sup> ARB AB32 Draft Scoping Plan Document, page 22,

<http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.htm>

<sup>3</sup> Climate Change Technology Program (CCTP), About the U.S. Climate Change Technology Program (web page), Washington, D.C., last updated April 2006, <http://www.climatechange.gov/about/index.htm>, accessed July 24, 2007.

designates products that are or can be made with recycled materials and also recommends recycled materials content ranges for these products.<sup>4</sup>

#### *Energy Policy Act (EPAAct)*

The EPAAct orders Federal agencies to reduce their energy consumption per square foot of building, install energy and water conservation features, track energy and water consumption and institute systems to facilitate the funding of energy efficiency improvements.

#### *Strengthening Federal Environmental, Energy, and Transportation Management*

This Executive Order requires Federal agencies to reduce greenhouse gases through a reduction in energy intensity of 3% a year or 30% by the end of fiscal year 2015. Federal agencies must ensure that at least half of renewable energy comes from new renewable sources and agencies must reduce water consumption by 2% annually through fiscal year 2015. In addition, new construction/major renovation must comply with the 2006 Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU).

### **State of California**

#### *Assembly Bill (AB) 1493.*

On July 1, 2002, the California Assembly passed Assembly Bill (AB) 1493 (signed into law on July 22, 2002), requiring the California Air Resources Board (CARB) to “adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles.”

#### *Green Building Requirements for State-Owned Facilities*

In December 2004, Governor Schwarzenegger signed an Executive Order requiring all new and renovated state-owned facilities meet LEED silver standards.

#### *Executive Order (EO) S-3-05*

In June 2005, Governor Schwarzenegger signed an Executive Order establishing statewide GHG emissions reduction targets. This EO provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels.

#### *California Assembly Bill 32 (AB 32)*

In August 2006, the California Assembly passed Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 commits California to reduce GHG emissions to 1990 levels and establishes a multi-year regulatory process under the jurisdiction of the CARB to establish regulations to achieve these goals. The regulations shall require monitoring and annual reporting of GHG emissions from selected sectors or categories of emitters of GHGs.

#### *Green Building Code*

In July 2008, the Building Standards Commission adopted a state-wide green building code for all new construction. This is the first of its type in the nation. The code sets targets for site design, energy efficiency, water consumption, framing techniques, diversion of construction waste, material resource conservation, and indoor air quality. The standards are voluntary until 2010. However, only residential construction will have a specific short list of mandatory requirements in 2010 to be implemented in 2011. Commercial construction will have a longer list of measures but those will remain voluntary.

#### *California Assembly Bill 375 (SB 375)*

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<sup>4</sup> Office of the Federal Environmental Executive, Federal Policies related to Green Building, (webpage), <http://www.ofee.gov/>

In August 2008, the State Senate passed SB 375, a platform to implement AB 32 by linking regional transportation plans with State greenhouse gas reduction goals. Under SB 375, CARB is to set targets (by 2010) and MPOs (such as the San Francisco Bay Area's Metropolitan Transportation Commission) are to develop preferred growth scenarios that will cut emissions. SB 375 will tie State transportation funds to projects that conform to that scenario. SB 375 also requires Cities to revise their Housing Elements every eight years in conjunction with the regional transportation plan (and complete any necessary rezonings within three years). Lastly, the SB 375 relaxes CEQA requirements for housing developments that are consistent with a Sustainable Communities Strategy.

#### *California Assembly Bill AB 2939*

This bill will authorize local agencies to adopt and implement green building programs that exceed the green building standards recently established by the Building Standards Commission. Local governments will be able to make findings based on environmental conditions and adopt green building standards that complement the California Green Building Standards Code (Part 11 of Title 24). The bill is currently enrolled and awaiting Governor Schwarzenegger's signature.

#### **City of Oakland**

In December 1998, the Oakland City Council adopted the Sustainable Community Development Initiative (SDI) by Resolution No. 74678 C.M.S. The purpose of the SDI was to prioritize sustainability issues in the City of Oakland. The SDI contained five fundamental policy recommendations with accompanying action steps. Based on the SDI, the City Council adopted in late 2000 thirteen (13) priority areas on which staff should focus.

In 2005, former Mayor Jerry Brown joined 50 mayors of the world's most visionary cities as an original signatory of the United Nations World Environment Day Urban Environmental Accords. Oakland will aim to achieve the status of a "Four Star City" by 2012 as defined in the Accords, which commits the city to accomplish at least 19 of the 21 Actions stated within the Accords. The seven "theme areas" of the Accords include: Energy, Waste Reduction, Urban Design, Urban Nature, Transportation, Environmental Health and Water. On December 19, 2006 City Council approved Resolution No. 80330 C.M.S. accepting the Urban Accords as part of Oakland's SDI and targeting status of "Four Stars".

Since the SDI and the Urban Accords were adopted, the City of Oakland has been moving forward with its sustainable and green building goals. Below is a list of adopted City policies related to green building. Additional City Ordinances and Resolutions can be found at the following link:

<http://www.oaklandpw.com/Page777.aspx>.

- The Construction & Demolition Recycling Ordinance requires nonresidential or apartment house addition or alteration projects that have a permit valuation of \$50,000 or greater in year 2000 dollars (subject to inflation adjustments) to recycle 100% of all Asphalt & Concrete (A/C) materials and 65% of all other materials.
- The Green Building Ordinance for City Projects mandates that all City facilities over \$2 million meet, at a minimum, the U.S. Green Building Council's LEED-Silver standard.
- The City Council adopted Official City Green Building Reference Documents including the Alameda County Residential Green Building Guidelines, U.S. Green Building Council's LEED Rating Systems and the Bay-Friendly Landscape Guidelines and recommends their use in the City of Oakland.
- Williams Energy Settlement provides funding for the City to promote energy efficiency.

#### **DISCUSSION OF POSSIBLE GREEN BUILDING RATING PROGRAMS**

## Leadership in Energy and Environmental Design

In 2000, the US Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED™) green building rating system for the design, construction, and operation of high performance buildings. This system is the internationally accepted benchmark for green buildings and is typically applied to commercial, civic, and high-rise residential buildings. The USGBC has developed specific rating programs for the following building types.

- New Commercial Construction and Major Renovation Projects
- Commercial Interiors
- Existing Buildings Operations and Maintenance
- Core and Shell Development
- Neighborhood Development
- Schools
- Retail
- Single-family homes and mid-rise residential buildings\*

\* Currently LEED for Homes is in the pilot phase. The Margarido House in the North Oakland Hills is the first test project from this program. The Margarido House is also certified as GreenPoint Rated.

The LEED system is a point based program with third party verification. Projects must prequalify for LEED by meeting several pre-requisites. The project team then designs features into the project to qualify for the points. The points are tallied to achieve a rating. In the LEED for New Construction rating system, LEED certified is 26-32 points, LEED Silver is 33-38 points, LEED Gold is 39-51 points, and LEED platinum is 52-69 points. A certain amount of points must be achieved in each environmental category. At the end of the project, the applicant team must submit documents to verify compliance with the points to the USGBC. The USGBC reviews the documentation and certifies the project as a LEED project.

## GreenPoint Rated

In 2005, Build it Green was created as a result of the merger of the Green Resource Center and Bay Area Build it Green. Build it Green has developed the GreenPoint Rated rating system which has become the standard for new single-family and multi-family projects, although it can also apply to neighborhood and high-rise residential development. This system is solely based in California. GreenPoint Rated is also a point based program with third party certification. There are fewer pre-requisites and no certification tiers in GreenPoint Rated. The minimum point level is 50 and the possible number of points goes up from there. It is difficult to calculate the maximum number of achievable points since points that are awarded for one feature might disqualify the project from achieving points for another feature. A minimum amount of points must be achieved in each category such as Community, Energy, Indoor Air Quality, Resources, and Water. The project team must retain a GreenPoint Rater to verify compliance with the GreenPoint Rated program. Without documentation, a certified rater and submittal of the documentation, a project is not considered to be a GreenPoint Rated project. As a aside, the Home Building Association of Northern California and ABAG have endorsed GreenPoint Rated for use in mandatory policies.

## California Green Builder

The Building Industry Institute (BII) is the research branch of the California Building Industry Association (CBIA). The BII developed the California Green Builder program. The program is not point based with different points in topic areas. There are no levels or minimum points. The project is either certified or it is not. Projects applying for the Green Builder program must meet certain requirements including energy efficiency, indoor air quality, waste reduction, and water and wood conservation. The

program requires verification (though not necessarily third-party) and is appropriate for single-family homes and multi-family subdivisions. The project team must retain a California Green Builder certified inspector. This person is Home Energy Rating System (HERS) rater with additional California Green Builder training. Without documentation submitted and verified by the Building Industry Institute (BII), the project cannot be considered a Green Builder project.

## WORK TO DATE

On September 19, 2007 staff presented an informational Director's Report on sustainable and green building practices in Oakland to the Planning Commission (Attachment A). The report contained possible recommendations regarding staff training, the Green Building Resource Center, voluntary and mandatory requirements, possible consulting opportunities for pre-design savings, and a change in building inspection practices to name a few. The direction from the Planning Commission was to explore the possibilities with the help of a group of stakeholders.

Staff did not organize a task force since that was not the recommendation from the Planning Commission. Instead, staff believed that smaller stakeholders participating in a one-time only meeting would generate more valuable comments than a larger task force. In addition, a lot of data that is relevant to the City of Oakland has been compiled from task forces in other jurisdictions. In March 2008, staff held four stakeholders meetings on an invitation only basis separately with architects; commercial developers, bankers, and real estate agents; multi-family developers and smaller contractors that work on single-family homes, additions, and renovations. These meetings were well attended and staff received valuable input on a wide range of topic questions. The minutes from these meetings are included as Attachment B.

Staff presented the minutes and findings to the Special Projects Committee on March 20, 2008. The Committee reviewed the report, the meeting minutes, and took public testimony. They requested that staff hold another stakeholder meeting that was open to all members of the public. This meeting occurred on August 12, 2008. Approximately 45 people attended. Staff held small group discussions and the minutes from those groups are included as Attachment C. Additional public comments are included as Attachment D.

## KEY ISSUES AND IMPACTS

### Incentives

Incentives were an important topic of discussion at the stakeholder meetings and can be grouped into the following areas.

- Provide expedited project review during the planning and building permit phases.
- Provide monetary incentives. These could take the form of:
  - Rebate on fees
  - Establishment of low level requirements and a reward a higher level of achievement
  - Deferral of fees
  - A fee offset, where if a green feature reduces or eliminates an impact, no fee is collected.
  - An increase on all fees except projects where green features are included.
  - Provide streetscape improvements to add to the curb appeal of the project.
  - Business Tax reduction
  - Reimbursement for third party certification
- Resolution of Building Codes, Planning Codes, and Design Guidelines that conflict with established green building products or systems. In other words "Green the Code".
  - Reduce parking requirements
  - Density bonuses

- Extension of project entitlements
- Distribution of information
  - Website for approved features/systems
  - List of products, consultants used on certified projects
  - Knowledgeable staff or a person dedicated to ease implementation
- City Marketing

\*See Attachment B and C for a complete list.

#### *Expedited Permitting*

With this incentive projects that commit to a green building would be placed ahead of projects that do not commit to a green building. Multiple projects in the queue would diminish this incentive's effectiveness. This incentive also requires adequate staff to handle the amount of work in the queue.

Staff reviewed but ultimately rejected any incentive for expedited project review during the planning and building phases. Expedited review is only a viable option if the City makes the ordinance voluntary and staff is available for the review. At this time the City does not have the funds to hire additional staff.

The other issue associated with expedited permitting is that this is an upfront incentive and there would be no guarantee that the City would have a constructed green building at the end of the process. Staff sees the potential for this type of incentive to be abused with direct effects to staff workloads and other projects. It is for these reasons that staff does not believe that expedited permitting is a viable incentive.

#### *Monetary Incentives*

Although several incentives like streetscape improvements or Business Tax reductions seem like possibilities, the City is in a budget deficit and cannot provide monetary incentives of any kind. These are also upfront incentives with no guarantee that the City would have a constructed green building at the end of the process. Staff does not believe that monetary incentives are viable options at this time. However, there are rebates and grants offered through other agencies and programs. The City could provide information on obtaining this type of funding. For more discussion on this, see the *Distribution of Information* section below.

#### *Density and Floor Area Ratio (FAR) Bonuses*

Within the Zoning Ordinance there is a process that allows developers to apply for a Conditional Use Permit for increased density and FAR due to the inconsistency between the General Plan designation and Planning Code. These inconsistencies are being addressed as part of the Zoning Update process. The new regulations might keep the same process or limit the height and density of a project and provide bonuses for projects in order to reach the General Plan level. A third option would be to limit the height and not allow bonuses to achieve the General Plan density. This incentive is only meaningful if the requirements are voluntary and the Planning Commission and City Council cap the permitted height and density and allow bonuses, such as green building. Because the City is considering a mandatory ordinance, staff does not consider this to be a viable incentive.

### **Thresholds**

#### *New or Existing Program*

The first issue to consider is whether to use an existing program or create a City of Oakland program. As noted above there are three different rating systems that are used in California. The stakeholders did not mention the CBIA's program during the stakeholder meetings. It is unlikely that either rating system will be superseded by another program. However, some cities have developed their own versions of the programs based on their specific development issues.

*Applicable Projects*

The second issue, as outlined in the stakeholder meetings, is that there are various ways to determine the applicability of projects under the Green Building Ordinance. The thresholds can be based on project type, size, location, or dollar amount. Project types can take the general form of commercial, residential, or industrial but can also be broken down into new construction, major renovations, additions, tenant improvements, and remodeling to name a few. Several project types such as historic structures, live/work and work/live units, and planned unit developments and mini-lots will require additional consideration. Thresholds based on the size of a project include the categories listed above but could also be further defined based on square footage. Several permits in the Zoning Ordinance use square footage as the threshold. Several permits in the planning code use square footage as the threshold. An example of this would be the Major Design Review Permit which requires Planning Commission approval if the project is over 25,000 sq. ft. or the Bike Parking Ordinance which uses square footage to determine the number of spaces. Another threshold option would be a certain dollar amount per improvement. Although the Planning Code does not use this as a threshold, the Building Services Division does use a dollar amount to determine fees.

Another issue is whether the City should phase the adoption of legislation (such as just starting with residential: new construction) or address each potential project within one ordinance.

The City could also consider requiring certain points within the existing LEED and GreenPoint Rated checklists to be mandatory. In the existing rating systems, how the required points are achieved is up to the project team and based on project type, cost, availability of materials, or other factors. The checklists are heavily weighted to energy resources while there are fewer points available in the water resources section.

**Internal Ratcheting of the Requirements**

Both the LEED and GreenPoint Rated programs are reviewed by their respective Board of Director's frequently to determine the feasibility of the requirements. Build it Green's program will always be based on code in California, and thus will be updated as the codes change. LEED, being a national standard, is not based on California code today, but future revisions may allow for regional updates to local codes. In either case, points available now might be removed from the checklists and replaced with more difficult requirements or based on new information. This constant review maintains the programs' credibility and value in the marketplace. It also means that a building built under future requirements will be considered "greener" than a building built today. This internal ratcheting of the requirements ensures that buildings use the latest technologies and will become even more efficient. Requiring that a building meet a higher level or more points will be more difficult for the development community in future years under these programs.

**Compliance**

A key issue will be compliance with the mandatory green building requirements. Both the LEED and the GreenPoint Rated programs are third party verification systems. This means that an outside party conducts the project review and certification. This is an important part of both rating systems and helps the program maintain its integrity, market value, and uniformity. Neither system will permit a developer to market their product as a LEED building or GreenPoint Rated building without the submission of documentation for review and approval. In essence this is the "teeth" of the programs. However, there is a substantial cost associated with LEED certification of the project and many stakeholders raised this as an

important issue. With the LEED and GreenPoint Rated systems, the building will already be built before the documentation is submitted for certification. This poses a problem for the City to ensure compliance.

Implementation of a green building starts in the pre-planning phase. A building is unlikely to achieve the required number of points in either LEED or Green Point Rated by trying to make the checklist fit the project. Therefore, it is staff's opinion that City personnel would need to track the project from planning to plancheck and through construction to ensure that the project will meet any green building requirements. This will require trained City staff, but the City would be relatively assured that the project would be in compliance. However, it is staff's opinion that the City should not take on full responsibility for the LEED or GreenPoint Rated certification. There are professionals that should handle this solely for the developer. One way to further ensure compliance would be to not permit a project to be approved and/or issued a building permit if the initial City review shows that the project would not meet the requirements. Another way to ensure compliance would be a fee or performance bond due up front that would be returned upon certification of the project. Several stakeholders did not like the idea of an up front fee. However, the City has little to no leverage with the developer after a Certificate of Occupancy has been issued. Staff would not recommend withholding a Certificate of Occupancy if the project did not achieve compliance.

### **California Environmental Quality Act (CEQA)**

The Green Building Ordinance will need to go through some type of environmental review per CEQA. Staff is currently reviewing what type of documentation will be required.

### **Other State Law Requirements**

Staff has been advised that adoption of mandatory Green Building requirements could trigger certain State law procedural requirements, as discussed below. Staff is investigating the extent to which these may apply. We have been advised by StopWaste.Org that a wholly voluntary ordinance would not trigger these State requirements.

#### *California Energy Commission (CEC)*

According to the State Building Efficiency Standards (2005), Section 10-106 allows local jurisdictions to adopt energy standards more stringent than state standards. Local governments must apply to the CEC for approval of mandatory requirements. The application must include documents supporting the jurisdiction's analysis for how the proposed standards will save more energy than the current statewide standards. The CEC then verifies that local standards will require buildings to use less energy than the current standards. Staff will need to coordinate with the CEC early in this process in order to submit the correct documentation.

#### *State of California Building Standards Commission*

Currently, the state allows local jurisdictions to modify the adopted building codes on the basis of local, climatic, and topological conditions. If the City's Green Building program involves amendments to the Oakland Building Code, staff will need to make these findings and submit them to the State for their review.

## **RECOMMENDATIONS**

### **Incentives**

#### *Increased Fees for Non Green Building Development Projects*

One incentive to start encouraging green building is to increase the application fees for projects that use typical construction methods. The extra revenues from these projects could be used to educate staff and the development community in green building. This incentive is only viable if the Green Building Ordinance is voluntary. However, this incentive could also be used as the requirements are phased in. See the *Phasing* section for further information.

#### *Resolution of Building Codes, Planning Codes, and Design Guidelines Conflicts*

This incentive would mean reviewing the current regulations with the LEED and GreenPoint Rated checklists and resolving any inherent conflicts between the two. This incentive would require staff to review, make recommendations, and possibly write ordinances to change both the Planning Code and the Municipal Code for approval by the Planning Commission and City Council. This incentive provides a benefit for both the City in terms of clarifying which division has jurisdiction and a responsibility to implement the requirement and the development community in faster permit processing. This is an important incentive to consider. One green building feature that has generated a lot of discussion is grey water systems.

#### *Extension of Project Entitlements*

Currently the Planning and Zoning Division's Standard Condition of Approval permits a two year approval timeframe, with one extension granted administratively and additional extensions offered by the approving body. The purpose of limiting the approval timeframe is to 1) strongly encourage the applicant to construct the project and 2) to allow the approving body the discretion to apply requirements that were not in place at the time of project approval by requiring re-approval. While permitting an extension of the entitlements for green buildings would not cost the City additional funds, it would allow these projects to be out of conformance with new regulations if the incentive were allowed and not the green building requirements. This is also an up front incentive with no guarantee that the project would actually be constructed as a green building. For these reasons, staff believes that this incentive should be considered only with a mandatory ordinance.

#### *Distribution of Information*

Rather than an incentive, staff considers this to be a mandatory step in implementing a Green Building Ordinance. Staff will need to create or update a website, guidelines, checklists, process, forms, etc. Staffing the Green Building Resource Center would help in the distribution of the information while keeping staff current and up to date on new products, technologies, and conflicts. The stakeholders have mentioned maintaining a website with approved methods of construction, product listings, contractors, and consultants. The website could also include information on state and federal and agency rebates/grants for green building features.

#### *Training*

Staff would also need to be trained to answer green building questions. Currently there are four staff members in the Planning and Zoning Division and the Building Services Division trained in GreenPoint Rated. Three more are scheduled to complete the training by November 2008. Two staff members are LEED Accredited Professionals, with one more scheduled to take the exam in November 2008. Additional staff should be required to complete the LEED and/or GreenPoint Rated training.

Staff would also recommend that the City of Oakland take an active role in the updates and development of the Build it Green and LEED programs. This involvement could include serving on the boards, hosting conferences, etc. This would ensure that the programs evolve with Oakland input and in a way consistent with the City's policies. One example of this is the Build it Green Public Agencies Council (PAC) which has 100 participating public agencies. The role of the PAC is to share information, create consistent green building standards in their regions, and support each others programs and initiatives. These meetings are held quarterly and staff has sporadically attended in 2005.

*City Marketing*

The former Sustainability Manager and the Planning and Zoning Division created a “Going Green” flyer. One green building incentive states that projects attaining a LEED Silver rating or GreenPoint Rated score of at least 75, will receive a framed certificate and publicly released Proclamation of Commendation from the City of Oakland as well as a publicized case study on the City of Oakland’s sustainability website page ([www.sustainableoakland.com](http://www.sustainableoakland.com)). As of this date, the developers of grebe building projects have not actively requested this incentive. However, several Oakland case study posters being completed for the Green Building Resource Center. We have heard from the stakeholders that this would be a meaningful incentive. The added City publicity would increase the marketability of both commercial and residential projects. Several stakeholders mentioned the idea of a Green Project of the Year Award. This type of incentive would require nominal City resources and funding, but it would also show our commitment to green buildings within the City. This incentive should be explored further.

**Thresholds***Existing Program versus Creation of a City of Oakland version*

It would be time consuming and difficult to develop our own program when there exist recognized programs with credibility and market value. Therefore, staff recommends that the City of Oakland use either LEED or both GreenPoint Rated as the basis for the ordinance. If project types do not fall under either category or for some reason the existing programs are not appropriate, only then should the City develop its own its own checklists. A strong argument for not developing an Oakland-specific green building rating system, or substantially modifying existing rating systems, is to maintain regional consistency. Builders and the building community are in favor of consistent standards for green building, as evidenced by the Home Building Association of Northern California and ABAG endorsing the GreenPoint Rated program for mandatory ordinances.

*Applicable Projects*

Staff recommends that the City address each project type (new construction, renovations, remodeling, historic buildings, etc) in one ordinance. One reason for this recommendation is that staff will further vet the thresholds when we return to the Zoning Update Committee. Additional stakeholder meetings will likely be necessary to achieve consensus. This process will take longer if only one project type is reviewed. Staff believes that these meetings and recommendations could be accomplished concurrently for each project type.

*Alternative:* The CED Committee could recommend only focusing on one project type and phase in the other project types at a later date.

*Mandatory Points*

Staff recommends further consideration of possible mandatory point requirements. Staff will review existing ordinances and policies to determine these points. In addition, staff will look at the City’s microclimate and other areas of general concern to residents that can be achieved through green building techniques.

*Alternative:* The CED Committee could recommend that all points be voluntary and only a certain level is achieved.

**Phasing Requirements**

Staff recommends that the requirements be voluntary for a period of one year as staff is trained and the necessary information is finalized. However, staff would recommend that all projects be required to

complete the green building checklists and include them with the permit application submittals. Staff would not require verification, either by the City or by a third party. This would allow the development community to become familiar with the green building requirements and try out certain construction methods and products. Staff will have time to work out any conflicts and to provide the public information.

*Alternative:* Another option would be to require a less than minimum amount of points and not require certification. With this option, staff would need to consider what minimal number of points would encourage green building but not be cumbersome to development in this initial phase.

After the initial education period, staff would recommend the minimum number of points to achieve a green building certification through either LEED or GreenPoint Rated for a period of one year. At this point the development community would be familiar with the checklists and the requirements. They will have knowledge of green building techniques and products. Staff will be ready to implement to supply the necessary information and assistance to meet the requirements. This is similar to the newly adopted green building standards for Notice of Funding Applications (NOFA) for affordable housing projects. The 2008 applicants are required to fill out the GreenPoint Rated scorecard but verification is not required. Applicants can get bonus points for official certification. It is anticipated that GreenPoint Rated will be a requirement for funding for projects starting in 2009.

*Alternative:* Another option would be require less than the minimum number of points and no certification of the project. With this option, the development community would have one more year to become knowledgeable with green building.

#### *Ratcheting if the Requirements in Future Years*

After this period, the ordinance would be considered fully in effect. Staff recommends maintaining the same minimum level of points in order to achieve certification. Staff believes that the construction market will dictate a higher level of green without additional City requirements.

*Alternative:* The City could require that projects meet a higher level over time.

*Alternative:* The City could freeze the thresholds at one year and require additional points within that year's checklists as opposed to requiring that they meet the new guidelines every year. With this last option, certification under that checklist will become an issue.

## **Compliance**

Staff recommends that City personnel track the project from planning through plancheck and construction to ensure that the project will meet any green building requirements. The project would not be approved, a building permit issued or inspections granted if the initial City review shows that the project would not meet the requirements. Staff does not recommend within holding a certificate of occupancy if the project seemed in conformance during the planning and plancheck phase and did not finally meet the requirements.

*Alternative:* Payment of an upfront performance bond which is returned if the developer completes a green building.

*Alternative:* An in lieu fee for noncompliance.

Staff does not recommend that the City undertake full responsibility for the LEED or GreenPoint Rated certification. There are professionals that should handle this solely for the developer.

### **Time frame for Adoption of an Ordinance**

Staff anticipates an aggressive schedule in order to implement a Green Building Ordinance. Below are the proposed steps and timeframes that staff believes would be necessary to complete the Ordinance.

- In early December 2008, staff will return to the Zoning Update Committee (ZUC) with specific thresholds, possible mandatory point requirements, and ratcheting timeframes for discussion.
- If necessary, staff will hold smaller stakeholder meetings to discuss certain areas of controversy.
- In late January 2009, staff will return to the ZUC with outcomes of stakeholder meetings and present recommendations.
- Staff will hold additional meetings with the stakeholders if necessary.
- In late February, staff will return to the ZUC to finalize thresholds and mandatory point requirements.
- In late March, staff will present recommendations for implementation and compliance requirements to the ZUC.
- In April, staff will proceed to full Planning Commission with final recommendations and for approval of the environmental review.
- In May, staff will present the Ordinance to the CED Committee, a subcommittee of the City Council.
- July 2009, City Council will vote on the Green Building Ordinance.

### **CONCLUSION**

The City and the State have set targets to reduce California's energy and water consumption, as well as the amount GHG emissions. These thresholds will likely become mandatory in the future. The implementation of green building requirements citywide will reduce energy and water consumption and GHG emissions. The ordinance will also help the City implement its sustainable policies. In one GreenPoint Rated multi-family project with a rating of 107, the project:<sup>5</sup>

- Avoided 306 tons/yr of CO<sub>2</sub>e which amounts to 3,672 tons by the year 2020
- Saved 192,734 kWh/yr of energy
- Diverted 971 tons of waste from a landfill
- Conserved 1,287,946 gal/yr of water

Therefore, staff recommends that the Planning Commission forward the following recommendations to the City Council:

These recommendations include:

1. Direct staff to review the full cost of review of current codes against the green building checklists as a possible incentive.
2. Direct staff to implement an extension of project entitlements for green building as an incentive only with mandatory requirements.
3. Direct staff to review the full cost of providing information to the development community including a green building website, forms, checklists, materials and exhibits in the Green Building Resource Center, and counter hours at the Green Building Resource Center as an incentive.

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<sup>5</sup> GreenPoint Rated Climate Calculator: June 2008. Based on the limited number of projects that have been analyzed and the type of points achieved it is difficult to fully determine a total savings if a Green Building Ordinance were implemented.

4. Encourage additional staff to apply for the StopWaste.Org's scholarships and become knowledgeable in green building.
5. Direct staff to review the full cost of City marketing for green buildings in City literature as an incentive.
6. Direct staff to develop the ordinance using the existing LEED and GreenPoint Rated systems without modification or alteration.
7. Direct staff to develop one Ordinance that addresses all project types and sizes.
8. Direct staff to pursue further consideration of a limited number of mandatory points within the LEED and GreenPoint Rated programs to address specific issues or strengthen current adopted City policies.
9. Direct staff to develop the Ordinance with a one (1) year voluntary program, a one (1) year with the minimum number of points, and maintenance of the minimum number of points.
10. Direct staff to return to the Zoning Update Committee with further details on these recommendations and that the final recommendations be submitted to the Planning Commission by April 2009 based on the timeframes presented.
11. Direct staff to include the third party certification in the ordinance as a requirement.
12. Direct staff to require that the project team retain an appropriate independent green building professional in the ordinance.
13. Direct staff to require that the project is in compliance with the ordinance at all stages of the permitting process.
14. Require that staff comply with CEQA and the findings required by State law.

Approved for forwarding to the  
City Planning Commission:

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Major Projects Manager  
Deputy Planning Director

Prepared by:

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Planner III, Major Development Projects

- Attachments:
- A. September 19, 2007 Director's Report
  - B. Meeting minutes from March 2008 Stakeholder Groups
  - C. Meeting minutes from August 12, 2008 Stakeholder Group
  - D. Public comments

***CONDITIONS OF APPROVAL***