SUMMARY

On August 1 and August 15, 2007, the Planning Commission requested that staff present an informational Director's Report on sustainable and green building practices in Oakland. The purpose of this report is to provide information to the Planning Commission on legislation adopted by City Council, current practices, and possible recommendations to promote green building that will help the City achieve its broader sustainable goals. With input from the Planning Commission, staff will return with more specific impact and funding analysis in specific topic areas of interest.

BACKGROUND

Nationwide

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 green buildings. This system is the internationally accepted benchmark. LEED™ is typically applied to commercial, civic, and high-rise residential projects. The USGBC has also developed rating programs for the following building types.

- New Commercial Construction and Major Renovation Projects
- Commercial Interiors
- Existing Buildings Operations and Maintenance
- Core and Shell Developments
- Neighborhood Development
- Schools
- Retail

State of California

In 2005, Build It Green was created as the 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 is becoming the standard for new single and multi-family residential projects in the state and is designed to be compatible with the forthcoming LEED™ for Homes Program.

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 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 (Attachment A). 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. The actionable items under each Accord provide a set of metrics against which to measure and report on the progress of the City's efforts in sustainable development. They also provide a common sustainability language and set of commitments that are recognized by cities worldwide, thereby creating consistency among cities in advancing sustainable related goals.

In March 2006, Council adopted Resolution No. 79808 C.M.S., which acknowledged the Accords. A preliminary matrix from the required end of the year sustainability report is included as Attachment B and

provides a rough 2006 baseline for some (although not all) of the action items of the Urban Accords. 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".

KEY ISSUES

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[1]:

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

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. Therefore, the Planning Commission, the Planning and Zoning Division and Building Services Division are in an influential position to promote sustainability in Oakland.

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 impact 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.

WHAT THE CITY OF OAKLAND HAS ACHIEVED

Adopted Legislation

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. Staff has also included, as Attachment C, other programs currently being implemented based on the seven Urban Accord themes.

Construction & Demolition Recycling

In July 2000, the Oakland City Council passed the Construction and Demolition Debris Waste Reduction and Recycling Requirements (Ordinance No. 12253. C.M.S.). The Oakland Municipal Code Chapter 15.34 now requires nonresidential or apartment house addition or alteration projects that have a permit valuation $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.

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

Green Building for City Projects
In May 2005, the City Council adopted the Civic Green Building Ordinance (Ordinance No. 12658 C.M.S.), which mandates that all City facilities meet, at a minimum, the U.S. Green Building Council's LEED-Silver standard.

Adoption of Official City Green Building Reference Documents
On April 12, 2006, the City Council adopted the Green Building Guidelines (Resolution No. 79871 C.M.S.) It provides the Alameda County Residential Green Building Guidelines, U.S. Green Building Council's LEED Rating Systems and the Bay-Friendly Landscape Guidelines as official City reference documents and recommends their use in the City of Oakland. This resolution provides support and incentive to private developers to incorporate green building design elements into their developments. This support augments the City's previously established commitment to greening our own facilities.

Other Programs and Practices

Environmental Lecture Series
In 1999, the City began planning, developing and holding an environmental lecture series for staff. The purpose of Environmental Lecture Series is to provide ongoing cutting edge environmental information and technologies that they can use in their daily work. Topics presented include:

- Green building design and construction
- Sustainable landscape
- Material selection and use
- Indoor air quality
- Storm water management
- Energy and water efficiency,
- Renewable energy facilities (photovoltaics)
- Waste reduction and recycling
- Climate change
- Air quality and pollution prevention
- Land use including brown fields, pedestrians, cyclists, and living communities and open space preservation
- Water quality and conservation
- Environmental legislative update

Green Resource Center
The Green Resource Center, conveniently located next to the Planning & Zoning Counter on the 2nd floor of 250 Frank Ogawa Plaza, was established in 2000 to provide the public with easy access to educational materials about the benefits of sustainable building practices. Over 23,000 people have visited the Center since its opening in 2000. Based on the success of the resource center, additional upgrades and exhibits are being planned.

WHAT THE CITY OF OAKLAND IS DOING

Williams Energy Settlement

On June 19, 2007 the City Council adopted Resolution No. 80659 C.M.S. (Attachment D) related to the Williams Energy Settlement. This settlement provides funding for the City to promote energy efficiency. Below is a list of the projects that would receive funding.

- Solar power installation at the Municipal Service Center, the Oakland Ice Center, and other City facilities.
- Soliciting rebates, grants, and incentives for various energy efficiency services and construction.
- Greenhouse gas emission assessment and climate action plan
- Pilot carbon credit card program and SmartLights for small business energy efficiency program
- California Youth Energy Services employing youth to install efficiency measures in Oakland homes.
- Promote a green economy through green corps job training
- Energy efficiency upgrades and retrofits for City facilities
- Community choice aggregation or alternative (currently in the business planning stage)
- Promotion of solar power in the community, including private projects
- Climate action lawsuit

Resolution No. 80659 C.M.S. established certain deliverable requirements for the Community and Economic Development Agency, including the Building Services Division and the Planning and Zoning Division to enhance energy efficiency and therefore green building in Oakland. These include the following.

- Establish a multi-agency energy efficiency team to accomplish the following goals:
    - Build a network with stakeholders (such as PG&E, Oakland Chamber of Commerce and Building Owners and Management Association (BOMA) to guide existing building owners and new permit applicants to programs that offer technical assistance and rebates.
    - Create a permanent culture and infrastructure in the City that supports superior green building results throughout the Oakland community, including private development
    - Track greenhouse gas emissions and organize efforts to create and achieve greenhouse emissions targets.
    - Create a training program to educate appropriate City staff on energy efficiency and alternative energy matters.

- Evaluate the feasibility of requiring that applicants for projects over 10,000 square feet obtain an assessment of the project's cost-effective energy efficiency potential (available for free from PG&E's Non-Residential New Construction program).
- Recruit businesses into energy programs that offer building tune-ups and retrofits.
- Collaborate with the Oakland Chamber of Commerce and BOMA
- Recruit small businesses to participate in PG&E programs such as Smart Lights.
- Track results for the above items in terms of energy cost savings, GHG emissions reductions, job creation and other benefits and impacts of these activities in Oakland.

Green Building Group

In early 2007, City staff started a grassroots "Green Group" to organize speakers, educate ourselves in this emerging field, and brainstorm about alternatives for disseminating information to staff and the public. This group spans City departments and agencies and has members from Planning and Zoning, Building Services, and Economic Development in CEDA and Environmental Services in PWA. This group will likely be formalized in the near future into interagency teams that review and analyze

sustainable goals and programs before being forwarded to the City Council for possible adoption. One of the teams will be specifically devoted to green building.

Private Green Buildings in Oakland
Green building features were required in several private projects as part of Disposition and Development Agreements (DDA) and Development Agreements (DA) with the City Council. These projects include the Shorenstein Office Project, the Uptown Project, and the Jack London Redevelopment Project, In the case of Leona Quarry, the developers worked with staff voluntarily on a number of sustainable measures including full photovoltaic power for 70 homes.

Several other private projects have voluntarily included green building features in their development. These projects include:

- Earthjustice National Headquarters; certified LEED™ silver for commercial interiors
- UC Office of the President; certified LEED™ silver for existing buildings
- Uptown Arts Building, certified LEED™ gold for commercial interiors
- GreenCity Lofts; GreenPoint Rated 82
- Gate 48; GreenPoint Rated 76
- 288 3rd Street; GreenPoint Rated 57

Several projects are currently in the process for LEED™ certification
- 2100 Franklin; LEED™ silver for new construction
- Head Royce Upper School Building; LEED™ silver for new construction
- 1100 Broadway; in pre-application phase, but intention is LEED™ silver for new construction

Incentives for Green Building in Private Development
City staff developed an "Oakland is Going Green" (Attachment E) flyer in 2005 which highlighted various incentives available to private developers for incorporating green building design elements into their projects. Such incentives included energy efficiency and green building design assistance resources available to developers in Oakland. In 2007, staff updated the flyer with new incentives. This flyer is included in the Basic Application for Development Review packet that every project applicant must complete and submit to the City. In addition, staff routinely hands out the flyer at pre-application conferences.

The flyer was staff's initial step in identifying possible private development incentives. Clearly, the biggest incentive the City can offer to developers who wish to incorporate green features is expedited planning and building permit review. Currently the City provides fast tracking of planning permits for projects under 50 units or 50,000 sq. ft. of commercial space if the project applicant commits to a fairly stringent green building standard. At this time City staff cannot commit to an expanded expedited planning or building plancheck review due to funding issues. Therefore, the flyer needs to be revisited and additional incentives offered. Staff has brainstormed about other possible options and incentives. These include the following.

- Provide a survey at the Green Building Resource Center or send out to those that "do business" in Oakland about what incentives or help they need to build green besides expedited plan review.

- Sponsor a drawing or competition for five (5) major LEED™ platinum projects or high level GreenPoint Rated multifamily in Oakland. These projects would receive paid consultation or some other incentive. Such a program has been implemented in Chicago.

- Provide green building assistance that is coordinated with other green building programs such as PG&E; the USGBC; StopWaste, and Build it Green.

Staff will work with stakeholders within the building community to identify other possible incentives and where the greatest impact in green building and energy efficiency can be achieved.

RECOMMENDATIONS

First Contact for Green Building
Among City staff, it is generally agreed that developers contact the Planning and Zoning Division first to obtain information about green building. However, most Planning and Zoning and Building Services staff are not fully conversant in LEED™ or green building techniques and practices. Often only minimal help or information is passed along. By the time planning staff reviews project plans for the first time, the building's program or uses have been vetted and most of the site design work has been developed. Unfortunately, a large number of projects will not qualify for LEED™ or its equivalent at this advanced stage in the development process. This is due to the number of points awarded in the LEED™ Site Design category and an applicant's unwillingness to redesign the site and building program components at this stage. Therefore, it is imperative that applicants are directed to useful green building information during the initial stages of project and program development.

At this time, the Green Building Resource Center and the Going Green flyer account for most of the information that is passed on to project applicants. The Green Group has several possible suggestions to promote green building at the very beginning of the planning process. These include:

- More staff becoming knowledgeable and trained in green building and other sustainable issues. Recommend that a certain number of Building, Planning, and other City staff be LEED™ accredited or equivalent. Currently no Building Services Division or Planning and Zoning Division staff is LEED™ accredited. Only one staff member in the Building Services Division is familiar with the GreenPoint Rated system.

- Provide full-time staff for the Green Building Resource Center similar to the Zoning or Building Permit Counter. In lieu of this, have designated hours to sign up for appointments with an expert in Oakland green policies/procedures.

- Partner with grant writers to pursue funding for a team of consultants to review green building projects during the pre-application phase.

- Continue the work generated by the Green Cluster Groups and other stakeholders in the building community to generate green building and sustainable recommendations in a variety of areas, including economic development and redevelopment initiatives.

Other Potential Policy Recommendations
In previous years, cities around the nation were reluctant to require green building features in private development projects. Cities typically used incentives to encourage developers to build green. Many developers are acknowledging the benefits both short-term and long-term of green building and are moving toward voluntary compliance.

Staff has compiled a list based in part on what other cities in the Bay Area and the nation are doing to address these important issues (Attachment F). Staff has also developed recommendations pertaining to energy use, greenhouse gas emissions, raw materials use, and waste output in construction. These are listed below and start from minimal to very stringent requirements.

- Require an applicant to submit either the LEED™ or Green Point Rated checklist when the submitting for a planning permit. Route the GreenPoint Rated checklist to Build it Green for consultation ; or

- Re-implement and require the "sustainability yardstick" that the City Council adopted as Sustainable Community Development priority number 5 whereby the "3Es" of Sustainable Development (Economy, Environment, and Equity) would be applied to large or publicly assisted development projects in order to provide a "sustainability profile". The profile would be shared with the project development team in order to educate them about sustainable development and technical resources available. The profile would be the basis for staff completing the Sustainable Opportunities section of Planning Commission and City Council reports. This tool has not been applied consistently. If the Commission considers this item of importance, staff would implement the yardstick on a short-term basis and then return to the Commission with an analysis of its effectiveness.

- Require a Sustainability section in all Planning Commission staff reports, as is already required in the City Council reports.

- Attendance of an energy engineer or other consultant at the Development Technical Review Advisory Committee (DTRAC) meetings to provide comments on sustainability. These comments would be forwarded along to applicants and "green" revisions to project requested.

- Require all projects of a certain type to complete an energy efficiency assessment (available for free from PG&E through 2008, and anticipated through 2011). The recommendations would not necessarily be required but encouraged. Staff would then track which portions were implemented and why.

- Consider making a certain part of the energy efficiency assessment a project requirement.

- Include LEED™ or Green Point Rated Policies in the High Density Design Guidelines.

- Include sustainable policies in the standard Conditions of Approval which apply to all projects. Examples would include reduced water use, native landscaping, energy efficient appliances, transportation demand, etc.

- Substitute a new Title 24 inspection for the current single-family Sheetrock Inspection as a baseline for energy efficiency standards, if acceptable to the building official.

- In 2001 City Council adopted the Renewable Energy Production Facilities Ordinance which fostered expanded renewable energy production (solar, thermal and wind) in the City of Oakland by waiving existing design review requirements. However, this policy was only for two years. Since then, the state has enacted a law that does not permit the City to require design review for solar facilities (Government Code Section **§** 65850.5). Encourage the City Council to adopt a similar permanent Ordinance (and changes to the Planning Code) for thermal and wind power installations. San Francisco has a residential wind turbine pilot program in certain neighborhoods.

- Institute a process where the conditions and requirements are increased over time (following the example of Title 24 energy codes that get more stringent each cycle). This process would need to be accompanied by a cost effectiveness analysis.

- Recommend that the Planning Commission adopt the SDI and the Urban Accords. Additional findings would be added to the Planning Code for certain discretionary actions and would be used as a baseline for project approvals or denials to the greatest extent feasible.

- Encourage the City Council to adopt changes to the Planning Code for a maximum car requirement for projects near transit. San Francisco has implemented this requirement. This could be combined with a requirement to participate in a car share program and increased level of affordability given the potential significance in the cost of building less structured parking.

- Encourage the City Council to adopt changes to the Planning Code that encourage green roofs as a percentage of the required open space despite the fact that most green roofs are not considered "useable" open space.

- Encourage the City Council to adopt an Ordinance requiring all projects with City funding (Development Agreements, etc) obtain the LEED™ silver standard consistent with City projects.

- Encourage the City Council to develop a green building area where developers could locate or consider adoption of an Ordinance adding a "sunshined" Green Building Zone to the Planning Code. (This zone would become obsolete if the City Council went on to adopt the next recommendation.)

- After implementing other techniques and thoroughly analyzing the cost effectiveness and feasibility, ultimately encourage the City Council to adopt an Ordinance mandating a basic level of green building for all private development projects. This is being done in San Francisco.

In most of these recommendations, monitoring the level of compliance and overall reduction in carbon emissions would be an important component.

CONCLUSION

As stated earlier in the report, new construction has serious effects on the environment in terms of energy consumption, material resources, overall waste, and air quality. Oakland is at the forefront of these issues with the adoption of the SDI and the Urban Accords. The Planning and Zoning Division can be instrumental in implementing these policies and furthering Oakland's reputation as a leader in sustainability. Staff requests that the Planning Commission review the possible recommendations in the report and attachments and provide direction to staff on items of specific interest to the Commission. This direction will inform the internal teams, mentioned earlier in the report, as to which items should be

analyzed in more detail and within the context of the other existing programs and policies After the Commission's suggestions have been properly vetted, staff will return with specific items for consideration.

Respectfully submitted:

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Attachments:

A: United Nations World Environment Day Urban Environmental Accords
B: Environmental Accords Preliminary Matrix
C: Current programs based on the seven Urban Accord themes
D: Williams Energy Settlement Resolution
E: Going Green Flyer 2007
F: Sustainability and Green Building Programs in other Cities