The Mayor’s Task Force on Green Building
For the City and County of San Francisco

REPORT AND RECOMMENDATIONS
June 2007
COVER RENDERING OF
THE ACADEMY OF SCIENCES
GOLDEN GATE PARK    SAN FRANCISCO
DESIGNED BY

RENZO PIANO BUILDING WORKSHOP ARCHITECTS
CHONG & PARTNERS, ARCHITECTS

THE ACADEMY IS LEED NC PLATINUM REGISTERED
The Mayor's Task Force on Green Building

The Honorable Gavin Newsom, Mayor
San Francisco City Hall
Room 200
1 Carlton B. Goodlet Place
San Francisco, CA 94102

June 2007

Dear Mayor Newsom,

It is with a great sense of anticipation and optimism that, as Chair of the Mayor's Task Force on Green Building, I transmit to you our Report and Recommendations. We believe the recommendations offered in this report, if implemented, will accelerate the growth of sustainable building already underway in San Francisco by recently adopted City policies.

This report represents the combined efforts of the independent group you empanelled, including members from San Francisco's architectural, technical design, development, financial and construction communities. Our effort has focused on opportunities to improve performance of private sector buildings and then recommend new and heightened green building standards in San Francisco, in conjunction with the "Livable City Initiative" and "Climate Action Plan".

We have focused our deliberations on building types where the expertise of the group was greatest. We believe that our recommendations, if adopted, will be the most progressive of any city in the United States. They address the following project types:

- New Large Commercial
- High-Rise Residential
- Mid-Size Commercial
- New Multi-Family Residential
- Major Alterations & Tenant Improvements
- New Small Family Residential

This report calls for a strategy of implementation of building performance standards across a broad range of building uses. The performance requirements gradually increase over a five-year period (2008-2012) to generate the greatest environmental, health, social and economic benefits.

It is important that these proposals can be readily understood and accepted by the public, the building community, and City departments. For that reason we have utilized existing performance measurement systems and will work within the City's current review process.

As part of this set of recommendations, we request that this Task Force now transition into a new "San Francisco Green Building Advisory Committee." In its new form, the group would collaborate with your office and the many City departments, private organizations, stakeholder groups, and other green committees, who can work to transform these recommendations into ordinances and directives that will deliver the anticipated results.

We have appreciated the opportunity to serve and we know that the bulk of the effort still lies ahead.

Respectfully submitted,

[Signature]

Philip Williams
Chair, Mayor's Task Force on Green Building
Webcor Builders
As we in the City of San Francisco look at a broad range of policies and programs to improve our quality of life and reduce our impacts on the environment, we recognize that new building standards can be implemented to reduce energy, CO₂ emissions, construction waste, water usage and other infrastructure requirements.

Who and Why:
The Mayor’s Task Force membership comprises ten members from San Francisco’s ownership, developer, financial, architectural, engineering and construction community. The Task Force was empanelled to look beyond the sustainability requirements for municipal buildings already in place in San Francisco (and virtually every other major US City), and to make recommendations for green building standards applying to the broader and more significant private sector building market.

What and When:
The resulting recommendations of the Task Force comprehensively address all new commercial buildings over 5,000 square feet, major alterations and new residential construction projects. These are not broad-brush policy statements. Significant detail accompanies these recommendations so that they can be thoroughly reviewed, debated, agreed upon, enacted and implemented.

To enable rapid implementation, industry-established means and methods are employed. Leadership in Energy and Environmental Design (LEED)® standards as established by the United States Green Building Council (USGBC) should be the primary means used for commercial building and high-rise residential uses. GreenPoint Rated (GPR) should be referenced for non-high-rise residential uses. These requirements are based upon LEED and GPR standards effective June 2007. Equivalent means to achieve the stated LEED and GPR requirements, including third-party verification, are also allowed.

The commercial sector development, design and construction industries are already familiar with green buildings and are mature enough to implement the new requirements in January 2008 with an entry level requirement to be LEED Certified. Most of the commercial standards would increase to Silver in 2009-2011 and then elevate to LEED Gold level in 2012.

The residential market is less familiar with green practices, and therefore 2008 will be used as an orientation year. Completion of the Green Points checklist would be required, but compliance with any points is entirely voluntary. In 2009, mandatory requirements would begin, with a combination of required and optional green practices/points to achieve 25 Green Points. This requirement increases in 2010-2011 to GreenPoint Rated 50 points, and then to GreenPoint Rated 75 points in 2012, which is comparable to the LEED Silver rating.

Implementation of these new requirements will be difficult without core knowledge of their meaning. Thus, training will be required for City staff, as will funding for process revision (application forms etc), and for public outreach. Impacts on review agency staffing levels are expected to be low. Additional City and industry resources will be necessary to educate the owners and builders and
familiarize the public with these new incentives and requirements, their intent, and their implementation.

**Means and Methods:**

In order for the recommendations to be effective, they must be consistent with existing review and construction processes and be readily understood by permit applicants. At the time of building permit submittal, the project would be mandated to follow the green building requirements designated for that year in the Recommendation Tables A through F. Regardless of changes to the rating systems that occur after adoption of these recommendations, the rating systems in effect at the time of adoption of these recommendations should govern.

The recommendations are divided into six categories of use and size, based upon existing City code and department designations. This allows the City and process stakeholders (owners, developers, architects, designers and contractors) to work within existing systems and norms.

**Benefits and Results:**

Significant benefits can be realized if the recommendations are implemented in accord with the proposed timeline. Some of the cumulative benefits through 2012 include:

- **CO₂ reductions:** 60,000 tons of CO₂ emissions
- **Energy savings:** 220,000 megawatt hours of power
- **Drinking water savings:** 100 million gallons of water
- **Waste and storm water reductions:** 90 million gallons of water
- **Construction and demolition waste reduction:** 700 million pounds
- **Increased recycled materials valuations:** 200 million dollars
- **Reduced auto trips:** 540,000 trips
- **Increased green power generation:** 37 thousand megawatt hours

**Comparisons and Leadership:**

There is significant leadership potential for the City with these recommendations. Our research shows that these proposals are the most progressive in the United States. No other major City addresses both commercial and residential and no City has timetables this aggressive or standards that encompass residential and commercial, large and small, new and alterations.

**SUMMARY OF RECOMMENDED CERTIFICATION LEVELS**

<table>
<thead>
<tr>
<th>Category</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. New Large Commercial</td>
<td>LEED Certified</td>
<td>LEED Silver</td>
<td>LEED Silver</td>
<td>LEED Silver</td>
<td>LEED Gold</td>
</tr>
<tr>
<td>B. New High-Rise Residential</td>
<td>LEED Certified</td>
<td>LEED Certified</td>
<td>LEED Silver</td>
<td>LEED Silver</td>
<td>LEED Silver</td>
</tr>
<tr>
<td>C. Large CTIs &amp; Major Alterations</td>
<td>LEED Certified</td>
<td>LEED Silver</td>
<td>LEED Silver</td>
<td>LEED Silver</td>
<td>LEED Gold</td>
</tr>
<tr>
<td>D. Mid-Size Com’I: New &amp; Alterations</td>
<td>LEED Checklist</td>
<td>LEED Checklist</td>
<td>LEED Checklist</td>
<td>LEED Checklist</td>
<td>LEED Checklist</td>
</tr>
<tr>
<td>E. New Mid-Size Multi-Family</td>
<td>GPR Guidelines</td>
<td>25 points GPR</td>
<td>50 points GPR</td>
<td>75 points GPR</td>
<td>75 points GPR</td>
</tr>
<tr>
<td>F. New Small Residential (1–4 Units)</td>
<td>GPR Guidelines</td>
<td>25 points GPR</td>
<td>50 points GPR</td>
<td>50 points GPR</td>
<td>75 points GPR</td>
</tr>
</tbody>
</table>
MISSION STATEMENT

The mission of the Task Force is to advise the City’s policy makers about mandates, incentives, education and outreach, in order to increase the number and improve the quality of green buildings in San Francisco, and to assess the potential impacts of these recommendations.

CONTENTS

Part 1  Background ....................................................1
Part 2  Task Force Membership ...................................2
Part 3  Objectives and Methodology .............................3
Part 4  Recommendations ...........................................4
Part 5  Expected Results .......................................... 15
Part 6  Future of the Task Force ................................. 18
Appendices
   A  Glossary ..................................................... 20
   B  LEED NC Checklist........................................ 22
   C  Green Points New Home Checklist................... 24
   D  Incentives & Mandates: Other Jurisdictions ..... 29
   E  Summary of Green Building Initiatives .......... 33
   F  West Coast LEED Credit Frequency ............. 34
   G  Roles of City Departments ............................. 35
   H  Draft Building Permit Application Form ............ 37
   I  Green Building Resources ............................. 39
PART 1: BACKGROUND

The citizens, business leaders and government of San Francisco have a proud tradition and well-deserved reputation of addressing tough issues and developing creative solutions. That strong base of commitment to environmental stewardship, technology, innovation, and progressive policies helps us resolve these pressing environmental challenges.

The Task Force proposes the recommendations in this report act as an additional step in the growing series of significant actions sponsored by this City.

1997 - San Francisco Sustainability Plan
Authored to provide and maintain a good quality of life for residents as impacted by the City's environment.

2002 - Climate Action Plan
The City passed a resolution committing to reduce carbon emissions by 25% below 1990 levels by 2012– this goal goes beyond the Kyoto Protocol objectives.

2004 - Chapter 7 of the Environment Code (LEED Silver for municipal buildings)
The City of San Francisco sets the local green building example by requiring all new municipal construction and major renovation projects to achieve a LEED® Silver certification from the US Green Building Council.

2004 - Zero Waste
The City of San Francisco’s twin goals of 75 percent landfill diversion by 2010 and Zero Waste by 2020. (also see “Construction and Demolition Debris Recovery” Ordinance, below).

2005 - Urban Environmental Accords
Mayor Gavin Newsom presented mayors from around the world with a unique opportunity to create and commit to a set of objectives for an urban future. This document has since been signed by more than a hundred mayors who have begun applying Accord principles in their own cities across the globe.

2006 - Streamlined Solar Photovoltaic (PV) Permit process
The San Francisco Building and Planning Departments have developed criteria so solar permits now cost less than $90 and can be issued over the counter, without the delays of in-house reviews. DBI estimates that 90 percent of photovoltaic system applications meet the requirements for the streamlined permit process.

2006 - Construction and Demolition Debris Recovery Ordinance
The City of San Francisco adopted Ordinance No. 27-06 mandating the recycling of construction and demolition (C&D) debris.

2006 - Green Building Priority Permitting
The San Francisco Department of Building Inspection, the Planning Department and the Department of Environment, established a priority permitting process for LEED Gold certified, or equivalent, building projects. Eight projects have presently been accepted, with 4 more pending.
PART 2: TASK FORCE MEMBERSHIP

CHAIR:

Mr. Phil Williams
Webcor Builders
Vice President of a large commercial building general contracting firm

MEMBERS:

Mr. Charles Breidinger
BIC Code Advisory Committee, Green Building Subcommittee
Professional Engineer

Mr. Ken Cleaveland
Building Owners and Managers Association
Industry representative for building owners and managers

Mr. Mike Kerwin
Lorax Development
General contractor and developer of small-scale residential projects

Mr. Peter Liu
New Resource Bank
Community banker providing funding for sustainable building projects

Mr. Ezra Mersey
Jackson Pacific Ventures
Developer of high-rise residential buildings

Ms. Margie O’Driscoll, AIA
American Institute of Architects
Executive Director, AIA SF

Ms. Kirsten Ritchie
Gensler
Engineer with certification systems expertise

Mr. Ken Seibel
Tishman Speyer
Real estate owners, developers, and fund managers

Mr. Bill Worthen
Simon and Associates
Architect and green building consultant

EX-OFFICIO MEMBERS:

Mr. Rich Chien
Department of the Environment
Residential Green Building Coordinator

Mr. Laurence Kornfield
Department of Building Inspection
Chief of Technical Services

Mr. Craig Nikitas
Planning Department
Senior Planner, Director’s Office

Ms. Laura Rodormer
Department of the Environment
Commercial Green Building Coordinator

Mr. Daniel Sider
Mayor’s Office of City Greening
Director

SUPPORT:

Mr. Todd Lukesh
Webcor Builders
Sustainability Engineer

Ms. Christy Tao
Department of the Environment
Green Building Staff
PART 3: OBJECTIVES AND METHODOLOGY

The Task Force first met on March 15, 2007, and met every two weeks thereafter, through June 15, 2007. Meetings were open and transparent, with no closed-door sessions. Visitors were allowed access to sessions and meetings, where the members reviewed all ideas and suggestions.

After general principles and parameters for our work were agreed upon, sub-committees comprising Task Force members were formed to focus on specialized areas. The sub-committees, at ad hoc meetings, drafted guidelines for specific building types. Those drafts were then reviewed by the entire group, which formed a consensus for the final recommendations.

City staff acted primarily as technical and logistical support for the Task Force, and also contributed to group discussions by providing expertise about existing review processes, Code requirements, project thresholds, and construction activity.

The task force recognized that there are many areas that require the City’s attention regarding sustainability issues. However, based on the group’s expertise, the scope of recommendations was limited to private projects in two market segments: commercial and residential buildings. These two segments were further divided by building size, new construction and major alterations.

Principles guiding the Task Force’s recommendations are:

1. Incentives should be offered as an immediate and effective means for acceptance and implementation.
2. Incentives supplement requirements, and some transition to requirements, or reduce in scope as time progresses.
3. More aggressive actions yield earlier and higher benefits.
4. Proposed requirements are set for near- and mid-terms (1-5 years) so that immediate impacts can be realized, recorded and analyzed for results and adjustments. Proposals and recommendations that focus on 10-20 year objectives may push the resolution of the issue into the future and transfer the obligation of change to others. In addition, an extended timeline cannot account for technological, environmental, social, or political changes and therefore cannot accurately project the future state.
5. Implementation timelines are progressive (phased) over a five-year span, to allow developers, stakeholders and professionals time to plan for the progressively more stringent requirements.
6. The Task Force should employ existing, recognized metrics for thresholds, requirements, rating systems, etc. It is not the intent of this Task Force to author guidelines or standards that are not already established such as LEED, Title-24, GreenPoint Rated, etc. References to these specific groups or standards are expressly intended to include comparable organizations, guidelines and standards, as approved by the City.
7. Education of the public, training of City staff, and outreach to the development and construction communities are essential for success in implementing heightened green building requirements.
8. Recommendation requirements in effect at the time of Building Permit Applications apply to each project.
9. The effects of implemented recommendations should be monitored.
10. Issues and building types not addressed specifically by this Task Force should be taken up by future committees with the expertise to do so.
PART 4: RECOMMENDATIONS

The City of San Francisco must take a leadership role in addressing environmental impacts to improve our health and economic well-being. These impacts include consumption of natural resources, accelerated effects on climate change, and increased pollution.

As the City looks at a broad range of policies and programs to improve sustainability, it recognizes that buildings are the number one contributor to man-made CO₂ production (greater than transportation and industrial sources), and have significant other impacts on air quality, landfill, transportation, energy consumption, resource use, and occupant health and productivity. It is essential that sustainable practices become standards of the building industry.

These recommendations are intended to be implemented so that project sponsors, owners, and design and construction professionals can easily understand the program, work with the process, and then complete construction and inspection of their projects without undue complication. The Task Force set internal requirements that all recommendations must be:

- Progressive
- Readily implemented
- Introduced in phases
- Increasingly more stringent over time
- Able to create incentives for buildings that exceed requirements
- Of sufficient scope and breadth to provide measurable impacts
- Initiated in 2008 and produce significant results within five (5) years

Recommendations of the Task Force include a range of incentives and requirements, some of which are shown in the abbreviated tables below. These “Baseline Requirements” delineate the graduated mandates for green building ratings. More extensive tables showing the complete range of recommendations appear at the end of this Section.

BASE LINE REQUIREMENTS

A. New Large Commercial Buildings >25,000 sf or over 75 ft in height (offices, hotels, etc.)

<table>
<thead>
<tr>
<th>LEED rating</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certified</td>
<td>Silver</td>
<td>Silver</td>
<td>Silver</td>
<td>Gold</td>
</tr>
</tbody>
</table>

Beginning in the 1st quarter of 2008, new large commercial buildings over 25,000 sf or 75 ft in height will be required to achieve LEED Certification. The requirements will increase over the next five years so that by 2012 these buildings will be LEED NC 2.2 or LEED CS 2.0 Gold certified.

B. New High-Rise Residential Buildings over 75 ft in height

<table>
<thead>
<tr>
<th>LEED rating</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certified</td>
<td>Certified</td>
<td>Silver</td>
<td>Silver</td>
<td>Silver</td>
</tr>
</tbody>
</table>

Beginning in the 1st quarter of 2008 new high-rise residential buildings over 75 ft in height will be required to achieve LEED Certification. The requirements will increase over the next five years so that by 2010 buildings of this type must be LEED NC 2.2 or LEED CS 2.0 Silver certified.
C. Large Commercial Interiors & Major Alterations (25,000 sf and over)

<table>
<thead>
<tr>
<th>LEED rating</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certified</td>
<td>Silver</td>
<td>Silver</td>
<td>Silver</td>
<td>Gold</td>
</tr>
</tbody>
</table>

Beginning in 1st qtr of 2008 new large (25,000 sf or more) commercial interiors & major alterations (where interior finishes are removed and upgrades to structural and M.E.P. systems are proposed) will be required to achieve LEED Certification. The requirements will increase over the next five years so that by 2012 buildings of this type must be LEED EB 2.0 or LEED CI 2.0 Gold certified.

D. New Mid-Size Commercial Buildings 5,000 sf or more and < 25,000 sf & height < 75’

<table>
<thead>
<tr>
<th>LEED Credits</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Beginning in 1st qtr of 2008 new mid-size commercial buildings (over 5,000 and less than 25,000 sf and less than 75” to the highest occupied floor) will complete a LEED checklist but not be required to achieve any points. In 2009, a select list of three LEED credits must be achieved, increasing to seven credits in 2011. The required credits are consistent with the credits required for the new commercial buildings 25,000 sf and over.

E. New Midsize Multifamily (5 units and over and less than 75 ft in height)

<table>
<thead>
<tr>
<th>GreenPoints</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-</td>
<td>25</td>
<td>GPR 50</td>
<td>GPR 75</td>
<td>GPR 75</td>
</tr>
</tbody>
</table>

F. New Small Residential (1-4 units)

<table>
<thead>
<tr>
<th>GreenPoints</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>25</td>
<td>GPR 50</td>
<td>GPR 50</td>
<td>GPR 75</td>
</tr>
</tbody>
</table>

Beginning in the 1st qtr of 2008, a voluntary program requiring a completed GreenPoint checklist will be initiated for all new low-rise residential developments (under 75 ft in height). The year 2008 is proposed as an education and orientation period for residential, so no points will be required. Beginning in 2009, twenty-five GreenPoints must be completed from the checklist. In 2010 projects must be GreenPoint Rated (50 pts.), increasing to GreenPoint Rated (75 pts.) for mid-size multi-family in 2011, and for small residential projects in 2012.

SUPERIOR PERFORMANCE INCENTIVES

All buildings, independent of type and size, which significantly exceed the established baseline requirements, could potentially receive incentives ranging from:

- Development bonuses, such as additional building height or F.A.R.
- Priority permitting, providing expedited assignment of review of applications
- Equalization of green assessment evaluations, to avoid increased taxes for green features
- Rebate or refunds of project fees for green projects exceeding requirements
INVESTING IN GREEN BUILDINGS

It is important to acknowledge that some green building features and systems can result in added design and construction costs. Current industry estimates range from 0-2% cost increase for LEED Certified buildings, 2-3% for LEED Silver buildings and 3-5% for LEED Gold buildings.

The Task Force has purposefully not addressed life cycle costing. Each project has a unique set of factors including size, location, LEED certification level, project credits, timing, architecture and a host of other items that will determine specific project cost.

Trends show that costs for green buildings are decreasing as the market continues to grow and mature. As an industry, we are encouraged to see that these costs decrease as designers, builders, subcontractors and manufactures gain experience in an expanding market.

It is not the intent of the policies embodied in these recommendations to create a hardship for the construction industry. Rather than seeing green building features as an added cost element, it must be recognized green features increase the building’s value for owners and developers by lowering operating costs and providing a more desirable environment for occupants.

The City must invest some funding for staff training, with some additional allocations for process change (new application forms etc). Impacts on review agency staffing are expected to be moderate. City permitting fees could be raised to cover both these additional administrative costs, and possibly to provide fee rebates to those project sponsors producing green projects exceeding sustainability requirements.

TABLES OF RECOMMENDATIONS

Tables A through F contain the Task Force’s recommendations for buildings of various uses (occupancies), project types (new construction vs. alteration), and for various sizes (floor area and height). Columns for each year (from 2008 through 2012) list the recommended incentives and requirements to improve the quality and increase the quantity of green buildings in San Francisco. As the years pass, some incentives become requirements, and requirements become more stringent.

LEED: Leadership in Energy and Environmental Design is a rating system established by the United States Green Building Council (USGBC) as an independent means to verify the sustainable qualities of different building types.

GPR: GreenPoint Rated is a residential green building rating system administered by the non-profit organization Build It Green (BIG).

Whenever LEED or GPR are used, it is understood that an “Equivalent” body, group or standard that is recognized and approved by the City meets the requirement. LEED and GPR are not the exclusive means for buildings to meet the proposed requirements. The satisfaction of their requirements and the 3rd party verification and documentation of completion of the credits or points is the intent of the policy proposals.

Please note that the recommendations that include LEED certification refer to requirements and standards as defined in the relevant LEED rating systems, or approved equivalents. The rating system in effect at the time of Building Permit Application will govern, as defined in Appendix A: Glossary.
## Recommendations for New Large Commercial Buildings (more than 25,000 gsf or over 75 ft. to highest occupied floor)
(e.g. Office, Hotel, other Commercial Uses)

<table>
<thead>
<tr>
<th>Incentives</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 4</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 5</td>
<td>City to implement development bonuses for projects providing Incentive 4 and exceeding Requirements 1 through 7</td>
<td>City to implement development bonuses for projects providing Incentive 4 and exceeding Requirements 1 through 7</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 8</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2.</td>
<td>(See Requirement 7 below)</td>
<td>(See Requirement 7 below)</td>
<td>(See Requirement 7 below)</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Renewable on-site energy or purchase of green energy credits</td>
<td>Renewable on-site energy or purchase of green energy credits</td>
<td>(See Requirement 8 below)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Requirements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>LEED Certified or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Gold or approved third-party-verified equivalent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Water use reduction 20% (LEED WE3.1)</td>
<td>Water use reduction 20% (LEED WE3.1)</td>
<td>Water use reduction 20% (LEED WE3.1)</td>
<td>Water use reduction 30% (LEED WE3.1)</td>
<td>Water use reduction 30% (LEED WE3.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Storm Water Management (LEED SS 6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS 6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS 6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS 6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS 6.1 &amp; 6.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentives</td>
<td>Requirements</td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 5</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 5</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 5</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 5</td>
<td>City to implement development bonuses for projects exceeding Requirements 1 through 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2.</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2.</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2.</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2.</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>LEED Certified or approved third-party-verified equivalent</td>
<td>LEED Certified or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Water use reduction 20% reduction (LEED WE3.1)</td>
<td>Water use reduction 20% reduction (LEED WE3.1)</td>
<td>Water use reduction 20% reduction (LEED WE3.1)</td>
<td>Water use reduction 30% reduction (LEED WE3.1)</td>
<td>Water use reduction 30% reduction (LEED WE3.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Recommendations for New Large (at least 25,000 gsf) Commercial Interiors and Major Alterations (renovations including removal of interior finishes & installation of upgraded structural and/or MEP systems)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCENTIVES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
</tr>
<tr>
<td><strong>REQUIREMENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>LEED Certified or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Silver or approved third-party-verified equivalent</td>
<td>LEED Gold or approved third-party-verified equivalent</td>
</tr>
<tr>
<td>2</td>
<td>Low-emitting materials (LEED EQ4.1, 4.2, &amp; 4.3)</td>
<td>Low-emitting materials (LEED EQ4.1, 4.2, &amp; 4.3)</td>
<td>Low-emitting materials (LEED EQ4.1, 4.2, &amp; 4.3)</td>
<td>Low-emitting materials (LEED EQ4.1, 4.2, &amp; 4.3)</td>
<td>Low-emitting materials (LEED EQ4.1, 4.2, &amp; 4.3)</td>
</tr>
</tbody>
</table>
## Recommendations for New Mid-size Commercial Bldgs (at least 5,000 & under 25,000 gsf & under 75 ft. to highest occupied floor)

<table>
<thead>
<tr>
<th>INCENTIVES</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Submittal of LEED Checklist, with no requirements to achieve points</td>
<td>Submittal of LEED Checklist, with requirement to achieve points listed below</td>
<td>Submittal of LEED Checklist, with requirement to achieve points listed below</td>
<td>Submittal of LEED Checklist, with requirement to achieve points listed below</td>
<td>Submittal of LEED Checklist, with requirement to achieve points listed below</td>
</tr>
<tr>
<td>2</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
<td>Water efficient landscape - 50% water reduction (LEED WE1.1)</td>
</tr>
<tr>
<td>3</td>
<td>Water use reduction 20% reduction (LEED WE3.1)</td>
<td>Water use reduction 20% reduction (LEED WE3.1)</td>
<td>Water use reduction 30% reduction (LEED WE3.1)</td>
<td>Water use reduction 30% reduction (LEED WE3.1)</td>
<td>Water use reduction 30% reduction (LEED WE3.1)</td>
</tr>
<tr>
<td>4</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
<td>Construction waste management divert 75% (LEED MR2.1)</td>
</tr>
<tr>
<td>5</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
<td>On-site space designated for compostable waste (in addition to recycling).</td>
</tr>
<tr>
<td>6</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
<td>Enhanced Commissioning (LEED EA3.0)</td>
</tr>
<tr>
<td>7</td>
<td>Storm Water Management (LEED SS6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS6.1 &amp; 6.2)</td>
<td>Storm Water Management (LEED SS6.1 &amp; 6.2)</td>
</tr>
<tr>
<td>8</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
<td>Renewable on-site energy or purchase of green energy credits (LEED EA2 &amp; EA6)</td>
</tr>
</tbody>
</table>
## Recommendations for New Mid-size Multifamily Residential Buildings
(5 or more Dwelling Units and under 75 ft. to highest occupied floor)

<table>
<thead>
<tr>
<th>INCENTIVES</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
</tr>
<tr>
<td>2</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
</tr>
<tr>
<td>3</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2</td>
<td>City to implement wastewater connection fee incentives for stormwater management resulting in at least a 25% decrease in stormwater runoff and/or a stormwater quality improvement per LEED SS6.2</td>
<td>City to develop &amp; implement policies that do not tax or penalize new green features, scaled to the Requirements</td>
<td></td>
</tr>
</tbody>
</table>

## Requirements

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Submittal of GreenPoints Multifamily Checklist or approved equivalent, with no requirements to achieve points</td>
<td>25 Green Points minimum from Multifamily Guidelines, or approved equivalent (measures TBD by City)</td>
<td>GPR 50 points minimum Multifamily Checklist or approved third-party-verified equivalent</td>
<td>GPR 75 points minimum Multifamily Checklist or approved third-party-verified equivalent</td>
<td>GPR 75 points minimum Multifamily Checklist or approved third-party-verified equivalent</td>
</tr>
</tbody>
</table>
## Recommendations for New Small Residential Buildings (1 - 4 Dwelling Units and under 75 ft. to highest occupied floor)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incentives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td>City to give Priority Application Processing for GPR of 100 points or more, LEED-Homes Gold, or other approved, third-party-verified equivalent</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td>City to implement policies that provide assessment equalization for new green features, scaled to the Requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Submittal of Green Points New Home Construction Checklist, with no requirements to achieve points</td>
<td>25 Green Points minimum from New Home Construction Checklist, or approved equivalent (measures TBD by City)</td>
<td>GPR 50 points minimum New Home Construction Checklist, or approved third-party-verified equivalent</td>
<td>GPR 50 points minimum New Home Construction Checklist, or approved third-party-verified equivalent</td>
<td>GPR 75 points minimum New Home Construction Checklist, or approved third-party-verified equivalent</td>
</tr>
</tbody>
</table>
EDUCATION & OUTREACH

When the Task Force began its work, there was unanimous consensus that more aggressive sustainability measures are needed to improve the environmental, economic, and social qualities of our City. The Task Force recognized that there are many opportunities in the building industry that could have a significant effect in reducing environmental impacts. Education, outreach and training are key tools to achieving those gains.

One focus of this proposal is to develop and implement a comprehensive informational campaign supporting

- Architects
- Engineers
- Contractors
- Suppliers and manufacturers
- Real-estate brokers
- Financial
- Building owners and operators
- Consultants
- Tenants
- Industry trade groups
- City staff (Inspectors, Planners, and Program Management)

It is essential that clear, concise and timely information be available to all stakeholders early in their planning process to increase the effectiveness of the recommendations, and to avoid costly design inefficiencies. An outreach process to disseminate information about the new green building incentives and requirements should start no later than 120 days before their implementation.

We suggest that effective elements of this campaign include a website structured to focus on the end-user (e.g., click here if you are a homeowner, click here if you are opening a retail store, etc…). The ideal website will allow users to link to “how-to” sites for finding an architect, placing solar panels on homes, or fast-tracking commercial permits for projects with high levels of sustainability through priority permitting. These web pages should be readily accessible, multi-lingual, interactive, and rich with links to other useful green building-related sites. Perhaps the City could seek philanthropic support to develop this website by September, 2007 to be operational in time for Green Building Month in San Francisco.

The public outreach campaign should promulgate the ideas that creating a sustainable built environment:

- saves resources
- is morally responsible
- will be in demand by buyers and users of buildings
- is readily achievable
- does not add significant expense if incorporated in project design early in the process.

Further outreach in mainstream and alternative media could include: San Francisco Chronicle, San Francisco Magazine, the Green Channel (to be launched by Sundance Channel), and local radio, television, and internet facilities.

The City may also consider:

- having an “answer person” for green building issues in the City’s new 3-1-1 answer center
- creating green building educational center at the Permit Center
- training employees of City permitting agencies to be accredited green building professionals
RECOMMENDATIONS FOR CITY AGENCIES

The Task Force recommends that:

1. Planning & DBI should have staff dedicated to green building promotion and application review;

2. Other City agencies should follow the lead of the MOH and the SF Redevelopment Agency, which require very high levels of sustainability in the residential projects they review and sponsor;

3. The Assessor, Planning Department, and DBI should implement computer systems with property and project information fields, so that use, occupancy, and green building features are tracked in searchable and quantifiable databases;

4. DBI should explore raising permit application fees to cover both the additional administrative costs of green building review, and to provide fee rebates to those project sponsors producing green projects exceeding sustainability requirements;

5. SFE and DBI to amend RECO requirements to expand energy-conservation measures for existing homes.

PROPOSED TIMELINE FOR IMPLEMENTATION

- Task Force Recommendations: 90 days
- City Review and Policy Approval: 100 days
- Legislation and Funding: 120 days
- Education, Outreach and Communication: 180 days

Task Force Recommendations are completed June 2007.

City Review and Policy Approval: The Mayor’s Office, the Board of Supervisors, the Planning and Building Inspection Commissions, and other agencies should proceed to review, modify and approve the Recommendations.

Legislation and Funding will be required to implement certain of these Recommendations. The legislation may be in the form of interim and permanent controls. Funding may be required for drafting and adoption of the legislation and directives, and for the following:

Education, Outreach, and Communication should commence during Review and Approval, to train City employees, educate the public, and inform design professionals, developers, and builders.


Active participation by key City departments in the form of education, staffing, and other resources will be needed to ensure the success of the Task Force’s recommendations. Inter-departmental coordination has been essential to the success of the current Priority Application Processing program for LEED Gold projects, and is a model for coordinating implementation of the recommendations among those agencies involved in managing the city’s built environment.
PART 5: EXPECTED RESULTS

The recommendations propose increasingly higher performance building standards, beginning in 2008 for commercial uses and in 2009 for residential. In 2012, new large commercial buildings (>25,000 sf and over 75 feet high) will be required to achieve a LEED Gold certification (or equivalent) and new residential buildings will be required to achieve the equivalent of LEED Silver.

Assuming construction rates based on recent building trends, about 800 thousand square feet of new offices, 1.2 million square feet of new high-rise residential units, and about 1 million square feet of new non high-rise residential could be built annually in the next few years in San Francisco. Should all of the recommendations of the Task Force be implemented, the resulting green buildings will translate into tremendous environmental benefits.

Coupling those assumptions with an information summary from the USGBC on 110 west coast LEED projects, the following benefits could accrue cumulatively over the five-year span of the recommendations:

**Cumulative Effect Of Proposed Green Building Measures: 2008-2012**

- Electrical saving 220,000 megawatts power
- CO2 reduction 60,000 tons (120 million lbs)
- Drinking Water savings 100 million gallons
- Waste/storm Water Reduction 90 million gallons
- Construction C&D waste reduction 700 million lbs
- Recycled Material value 200 million dollars
- Car Trips Avoided (Alt. transport) 540,000 auto trips
- Green Power Generation 37 thousand megawatt-hours

Note that Mid-Size (5,000-24,999 gross square feet) New Commercial, Commercial Interiors, and Major Alterations are not included in the benefits values. For 2008 ONLY new large commercial and high-rise residential (2 million square feet) was used. Non-high-rise residential projects (1 million square feet annually) have requirements starting in 2009. The Task Force attempted to use conservative numbers that are meant to state (if not understate) possible benefits, which the following charts delineate on an annual basis.
220,000 Megawatt-hours Power Savings

60,000 Tons of CO2 Reduction

100+ Million Gals. Potable Water Saved

Waste Water Reduced by 90+ Million Gals.
700+ Million lbs Waste Reduction

$200 Million Recycled Content Utilized

540,000 Car Trips Avoided With Alternative Transportation

37 Thousand Megawatt-hours Generated Green Alternative Power
PART 6: FUTURE OF THE TASK FORCE

It is recognized that other building types (municipal, schools, medical, condominium conversions, churches, institutional, etc) also play a significant role in the San Francisco built environment. The Task Force determined that these building types were beyond the scope of our work or the particular expertise of our members. It is recommended that these uses be addressed by a future advisory group more familiar with specific building characteristics. While the City has an ordinance requiring that municipal structures certify as LEED Silver, we are confident that the City will meet, in its own projects, the guidelines recommended for commercial projects.

Possible issues for future consideration include:

- Churches
- Schools (public and private)
- Hospitals (medical care)
- Other non-municipal institutional uses
- Special needs of low-income housing projects
- Condominium conversion (post-lottery)
- Industrial
- Work in the public realm
- Transportation
- Renovation and retrofit, time phased standards, some of which are mandatory and some elective now triggered by RECO, in future triggered by renovation

As part of its recommendations, the Task Force suggests a transition from The Mayor's Task Force on Green Building to “The San Francisco Green Building Advisory Committee.” In its new form the group would collaborate with the Mayor’s Office and the many City Departments, private organizations, and stakeholder groups that will be required to transform these recommendations into the codes and directives that will deliver the desired environmental results.

As implementation of the recommendation proceeds, drafters of the ordinances and policies should recognize that some projects, due to special circumstances, (e.g., buildings that are historic resources, or projects where there is demonstrable hardship or infeasibility imposed by new green building requirements) that should be allowed appropriate exemptions.

As these recommendations are presented to the City’s policy makers, it is clear that much work remains to be done before our citizens and our environment can reap the benefits of expanded sustainability requirements promoted herein.
A: GLOSSARY

Organizations

AIA American Institute of Architects
BIG Build It Green
DBI Department of Building Inspection (San Francisco)
SFE San Francisco Department of the Environment
SFPUC San Francisco Public Utilities Commission
USGBC United States Green Building Council

Rating Systems and Standards

GreenPoint Rated (GPR) – GPR v2007 (March 2007)
Administered by Build It Green (www.builditgreen.org), a professional non-profit membership organization promoting healthy, energy-and resource-efficient buildings in California, GreenPoint Rated assesses how environmentally friendly or "green" a home is. GreenPoint Rated assigns point values to recommended practices based on their benefits to the homeowner and the environment. The following guidelines provide the framework for the system:

- New Home Construction Green Building Guidelines
- Home Remodeling Green Building Guidelines
- Multifamily Green Building Guidelines

If the home meets minimum point requirements in each category and scores more than 50 total points, it earns the right to bear the GreenPoint Rated label. Because GPR homes are evaluated by independent, certified raters, building professionals and homeowners can feel confident that the rating has integrity and value. Green Points has been formally adopted by multiple Bay Area local governments as the basis for their residential green building programs. GPR is compatible with other statewide and national green building and energy efficiency programs, including: Title 24 Energy Code, LEED-Homes, ENERGYSTAR, and EPA Indoor Air Package. The standard will be continually improved, timed to match the State energy code revision cycle.

LEED® (Leadership in Energy and Environmental Design)
The LEED Green Building Rating System is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED provides a complete framework for assessing building performance and meeting sustainability goals. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED provides a roadmap for measuring and documenting success for every building type and phase of a building lifecycle. The following LEED standards are used as the basis for all of the proposed report recommendations.

- **LEED AP** Leadership in Energy and Environmental Design Accredited Professional, a building industry professional who has successfully passed the LEED Accreditation exam demonstrating knowledge of green building and the LEED certification process.
- **LEED-CI v2.0** LEED for Commercial Interiors (June 2005) - addresses commercial tenant improvement projects.
• **LEED-CS v2.0** LEED for Core and Shell (July 2006) - designed for use on speculative commercial developments where tenant Improvements follow the shell construction under separate permits

• **LEED-EB v2.0** LEED for Existing Building (January 2006) - addresses building upgrades, and the ongoing operations and maintenance of buildings

• **LEED-H Pilot** LEED for homes (February 2007) – applies to single-family and small multifamily housing projects

• **LEED-NC v2.2** LEED for New Construction (January 2006) - addresses new construction projects and major renovations, as well as K-12 schools, multi-unit residential buildings, manufacturing plants, laboratories, and other building types over forty feet in height

• **LEED-R v1.0** LEED for Retail (April 2007)

**Units of Measure**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Unit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>GALS</td>
<td>gallons</td>
</tr>
<tr>
<td>GPM</td>
<td>gallons per minute</td>
</tr>
<tr>
<td>gsf</td>
<td>gross square feet</td>
</tr>
<tr>
<td>ft</td>
<td>foot or feet</td>
</tr>
<tr>
<td>kW</td>
<td>kilowatt</td>
</tr>
<tr>
<td>kWh</td>
<td>kilowatt hours</td>
</tr>
<tr>
<td>lbs</td>
<td>pounds</td>
</tr>
<tr>
<td>sf</td>
<td>square feet</td>
</tr>
<tr>
<td>SRI</td>
<td>solar reflectance index</td>
</tr>
</tbody>
</table>

**Other Terminology**

**Assessment Equalization** – refers to the concept that capitalized costs to achieve high-performance green buildings are not viewed as an increase in assessable value of the building.

**CTI** – Commercial Tenant Improvements – interior build-out or remodeling of commercial lease space.

**F.A.R.** – Floor Area Ratio, the amount of developable area permitted on a lot.

**Major Alterations** – renovations at least 25,000 square feet in gross area, comprising removal of interior finishes to the structure, and the installation of upgraded structural and/or MEP systems.

**MEP** – Mechanical, Electrical, and Plumbing design consulting services and construction that are often performed by a single firm.

**New Building** – A new, stand-alone building or a new addition to a building that is over the specified size thresholds.
# LEED for New Construction v2.2
## Registered Project Checklist

### Sustainable Sites

<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction Activity Pollution Prevention Required</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Site Selection</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Development Density &amp; Community Connectivity</td>
<td>1</td>
</tr>
<tr>
<td>4.1</td>
<td>Brownfield Redevelopment</td>
<td>1</td>
</tr>
<tr>
<td>4.2</td>
<td>Alternative Transportation, Public Transportation Access</td>
<td>1</td>
</tr>
<tr>
<td>4.3</td>
<td>Alternative Transportation, Bicycle Storage &amp; Changing Rooms</td>
<td>1</td>
</tr>
<tr>
<td>4.4</td>
<td>Alternative Transportation, Low-Emitting &amp; Fuel-Efficient Vehicles</td>
<td>1</td>
</tr>
<tr>
<td>5.1</td>
<td>Alternative Transportation, Parking Capacity</td>
<td>1</td>
</tr>
<tr>
<td>5.2</td>
<td>Site Development, Protect of Restore Habitat</td>
<td>1</td>
</tr>
<tr>
<td>6.1</td>
<td>Site Development, Maximize Open Space</td>
<td>1</td>
</tr>
<tr>
<td>6.2</td>
<td>Stormwater Design, Quantity Control</td>
<td>1</td>
</tr>
<tr>
<td>6.3</td>
<td>Stormwater Design, Quality Control</td>
<td>1</td>
</tr>
<tr>
<td>7.1</td>
<td>Heat Island Effect, Non-Roof</td>
<td>1</td>
</tr>
<tr>
<td>7.2</td>
<td>Heat Island Effect, Roof</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Light Pollution Reduction</td>
<td>1</td>
</tr>
</tbody>
</table>

### Water Efficiency

<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Water Efficient Landscaping, Reduce by 50%</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Water Efficient Landscaping, No Potable Use or No Irrigation</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Innovative Wastewater Technologies</td>
<td>1</td>
</tr>
<tr>
<td>3.1</td>
<td>Water Use Reduction, 20% Reduction</td>
<td>1</td>
</tr>
<tr>
<td>3.2</td>
<td>Water Use Reduction, 30% Reduction</td>
<td>1</td>
</tr>
</tbody>
</table>

### Energy & Atmosphere

<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fundamental Commissioning of the Building Energy Systems Required</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Minimum Energy Performance Required</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Fundamental Refrigerant Management Required</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Optimize Energy Performance</td>
<td>1 to 10</td>
</tr>
<tr>
<td>2</td>
<td>On-Site Renewable Energy</td>
<td>1 to 10</td>
</tr>
<tr>
<td>3</td>
<td>Enhanced Commissioning</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Enhanced Refrigerant Management</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Measurement &amp; Verification</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Green Power</td>
<td>1</td>
</tr>
</tbody>
</table>
### Materials & Resources

<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Storage &amp; Collection of Recyclables</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Building Reuse, Maintain 75% of Existing Walls, Floors &amp; Roof</td>
<td>1</td>
</tr>
<tr>
<td>1.3</td>
<td>Building Reuse, Maintain 100% of Existing Walls, Floors &amp; Roof</td>
<td>1</td>
</tr>
<tr>
<td>1.4</td>
<td>Building Reuse, Maintain 50% of Interior Non-Structural Elements</td>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
<td>Construction Waste Management, Divert 50% from Disposal</td>
<td>1</td>
</tr>
<tr>
<td>1.6</td>
<td>Construction Waste Management, Divert 75% from Disposal</td>
<td>1</td>
</tr>
<tr>
<td>1.7</td>
<td>Materials Reuse, 5%</td>
<td>1</td>
</tr>
<tr>
<td>1.8</td>
<td>Materials Reuse, 10%</td>
<td>1</td>
</tr>
<tr>
<td>1.9</td>
<td>Recycled Content, 10% (post-consumer + 25% pre-consumer)</td>
<td>1</td>
</tr>
<tr>
<td>1.10</td>
<td>Recycled Content, 20% (post-consumer + 25% pre-consumer)</td>
<td>1</td>
</tr>
<tr>
<td>1.11</td>
<td>Regional Materials, 10% Extracted, Processed &amp; Manufactured Regional</td>
<td>1</td>
</tr>
<tr>
<td>1.12</td>
<td>Regional Materials, 20% Extracted, Processed &amp; Manufactured Regional</td>
<td>1</td>
</tr>
<tr>
<td>1.13</td>
<td>Rapidly Renewable Materials</td>
<td>1</td>
</tr>
<tr>
<td>1.14</td>
<td>Certified Wood</td>
<td>1</td>
</tr>
</tbody>
</table>

### Indoor Environmental Quality

<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Minimum IAQ Performance</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Environmental Tobacco Smoke (ETS) Control</td>
<td>1</td>
</tr>
<tr>
<td>1.3</td>
<td>Outdoor Air Delivery Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>1.4</td>
<td>Increased Ventilation</td>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
<td>Construction IAQ Management Plan, During Construction</td>
<td>1</td>
</tr>
<tr>
<td>1.6</td>
<td>Construction IAQ Management Plan, Before Occupancy</td>
<td>1</td>
</tr>
<tr>
<td>1.7</td>
<td>Low-Emitting Materials, Adhesives &amp; Sealants</td>
<td>1</td>
</tr>
<tr>
<td>1.8</td>
<td>Low-Emitting Materials, Paints &amp; Coatings</td>
<td>1</td>
</tr>
<tr>
<td>1.9</td>
<td>Low-Emitting Materials, Carpet Systems</td>
<td>1</td>
</tr>
<tr>
<td>1.10</td>
<td>Low-Emitting Materials, Composite Wood &amp; Agrifiber Products</td>
<td>1</td>
</tr>
<tr>
<td>1.11</td>
<td>Indoor Chemical &amp; Pollutant Source Control</td>
<td>1</td>
</tr>
<tr>
<td>1.12</td>
<td>Controllability of Systems, Lighting</td>
<td>1</td>
</tr>
<tr>
<td>1.13</td>
<td>Controllability of Systems, Thermal Comfort</td>
<td>1</td>
</tr>
<tr>
<td>1.14</td>
<td>Thermal Comfort, Design</td>
<td>1</td>
</tr>
<tr>
<td>1.15</td>
<td>Thermal Comfort, Verification</td>
<td>1</td>
</tr>
<tr>
<td>1.16</td>
<td>Daylight &amp; Views, Daylight 75% of Spaces</td>
<td>1</td>
</tr>
<tr>
<td>1.17</td>
<td>Daylight &amp; Views, Views for 90% of Spaces</td>
<td>1</td>
</tr>
</tbody>
</table>

### Innovation & Design Process

<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Innovation in Design: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Innovation in Design: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>1.3</td>
<td>Innovation in Design: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>1.4</td>
<td>Innovation in Design: Provide Specific Title</td>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
<td>LEED® Accredited Professional</td>
<td>1</td>
</tr>
</tbody>
</table>

### Project Totals (pre-certification estimates)

<table>
<thead>
<tr>
<th>Certification Level</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified</td>
<td>26-32</td>
</tr>
<tr>
<td>Silver</td>
<td>33-38</td>
</tr>
<tr>
<td>Gold</td>
<td>39-51</td>
</tr>
<tr>
<td>Platinum</td>
<td>52-69</td>
</tr>
</tbody>
</table>
C: GREEN POINTS NEW HOME CHECKLIST

New Home Green Points Checklist

The Green Points checklist tracks green features incorporated into the home. The recommended minimum requirements for a green home are: Earn a total of 50 points or more; obtain the following minimum points per category: Energy (11), Indoor Air Quality/Health (5), Resources (6), and Water (3); and meet the prerequisites A.3.a (50% construction waste diversion) and N.1 (Incorporate Green Points checklist in blueprints).


### ENTER PROJECT NAME

<table>
<thead>
<tr>
<th>Category</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>1</td>
</tr>
<tr>
<td>Energy</td>
<td>1</td>
</tr>
<tr>
<td>IAQ/Health</td>
<td>1</td>
</tr>
<tr>
<td>Resources</td>
<td>1</td>
</tr>
<tr>
<td>Water</td>
<td>1</td>
</tr>
</tbody>
</table>

### A. SITE

1. Protect Native Soil and Minimize Disruption of Existing Plants & Trees
   - Protect Native Topsoil from Erosion and Remove after Construction
   - Limit and Delimit Construction Footprint for Maximum Protection
   - Score: 1 1

2. Deconstruct Instead of Demolishing Existing Buildings On Site
   - Score: 3

3. Recycle Job Site Construction Waste (Including Green Waste)
   - Minimum 50% Waste Diversion by Weight (Recycling or Reuse) - Required
   - Minimum 60% Diversion by Weight (Recycling or Reuse)
   - Minimum 80% Diversion by Weight (Recycling or Reuse)
   - Score: R 2 2

4. Use Recycled Content Aggregate (Minimum 20%)  
   - Score: 1 1

### B. LANDSCAPING

1. Construct Resource-Efficient Landscapes
   - No Invasive Species Listed by Cal-Irrigation Are Planted
   - No Plant Species Will Require Hedging
   - 75% of Plants Are California Natives or Mediterranean Species
   - Score: 1

2. Use Fire-Safe Landscaping Techniques
   - Minimize Turf Areas in Landscape Installed by Builder
   - All Turf Will Have A Water Requirement Less than or Equal to Tall Fescue
   - Turf Shall Not Be Installed on Slopes Exceeding 10% or in Areas Less than 8 Feet Wide
   - Turf is <33% of Landscaped Area
   - Turf is <10% of Turf Area
   - Score: 2 2 2 2 2

4. Plant Shade Trees
   - Score: 1 1

5. Implement Hydorizing: Group Plants by Water Needs

6. Install High-Efficiency Irrigation Systems
   - System Uses Only Low-Flow Drip, Bubblers, or Low-Flow Sprinklers
   - System Has Smart (Weather-Based) Controls
   - Score: 1 2

7. Apply Two Inches of Compost in the Top 6 to 12 Inches of Soil
   - Score: 2

8. Mulch All Planting Beds to the Greater of 2 Inches or Local Water Ordinance Requirement
   - Score: 1

9. Use 50% Salvaged or Recycled-Content Materials for 50% of Non-Plant Landscape Elements
   - Score: 1

10. Reduce Light Pollution by Shielding Fixtures and/or Directing Light Downward
    - Score: 1

### C. FOUNDATION

1. Incorporate Recycled Flyash in Concrete
   - Minimum 20% Flyash
   - Minimum 20% Flyash
   - Score: 1 1

2. Use Frost-Protected Shallow Foundation in Cold Areas (C.E.C. Climate Zone 18)
   - Score: 3

3. Use Radon-Resistant Construction (In All-Risk Locations Only)
   - Score: 1

### D. STRUCTURAL FRAME & BUILDING ENVELOPE

1. Apply Optimal Value Engineering
   - 2x4 Studs at 24-inch On Center Framing
   - Door and Window Headers Sized for Load
   - Use Only Jack and Chord Sticks Required for Load
   - Score: 1 1 1
# ENTER PROJECT NAME

<table>
<thead>
<tr>
<th>Category</th>
<th>Energy</th>
<th>AG/Birth</th>
<th>Resources</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Use Engineered Lumber</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Beams and Headers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Insulated Engineered Headers</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Wood-Joists or Web Trusses for Floors</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Wood-Joists or Rafter</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Engineered or Finger-Jointed Studs for Vertical Applications</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3. Use FSC-Certified Wood</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>a. Dimensional Studs: Minimum 40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dimensional Studs: Minimum 70%</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Panel Products: Minimum 40%</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>d. Panel Products: Minimum 70%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Design Energy Wells on Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5. Design Trusses to Accommodate Ductwork</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6. Use Oriented Strand Board (OSB)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>a. Subfloor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Sheathing</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Use Recycled-Content Steel Studs for 50% of Interior Wall Framing</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>8. Use Solid Wall Systems (Includes SIPs, ICFs, &amp; Any Non-Stick Frame Assembly)</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>a. Floors</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Walls</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Roofs</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Thermal Mass Walls: 5/8-Inch Drywall on All Interior Walls or Walls Weigh more than 40 lbs./ft²</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10. Design and Build Structural Pest Controls</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>a. Install Termite Shields &amp; Separate All Exterior Wood-to-Concrete Connections by Metal or Plastic Fasteners/Dividers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. All New Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11. Reduce Pollution Entering the Homes from the Garage</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>a. Tighten Seal the Air Barrier between Garage and Living Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Install Separate Garage Exhaust Fan</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12. Install Overhangs and Gutters</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>a. Minimum 16-Inch Overhangs and Gutters</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>b. Minimum 24-Inch Overhangs and Gutters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## F. EXTERIOR FINISH

<table>
<thead>
<tr>
<th>Possible Points</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use Recycled-Content (No Virgin Plastic) or FSC-Certified Wood Decking</td>
<td>2</td>
</tr>
<tr>
<td>2. Install a Drainage Plane (RainScreen Wall System)</td>
<td>2</td>
</tr>
<tr>
<td>3. Use Durably and Non-Combustible Siding Materials</td>
<td>1</td>
</tr>
<tr>
<td>4. Select Durably and Non-Combustible Roofing Materials</td>
<td>2</td>
</tr>
</tbody>
</table>

## F. PLUMBING

<table>
<thead>
<tr>
<th>Possible Points</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distribute Domestic Hot Water Efficiently</td>
<td>1</td>
</tr>
<tr>
<td>a. Insulate Hot Water Pipes from Water Heater to Kitchen</td>
<td>1</td>
</tr>
<tr>
<td>b. Insulate All Hot Water Pipes or Install On-Demand Hot Water Circulation System in conjunction with F.1.a Insulate Hot Water Pipes from Water Heater to Kitchen</td>
<td>1</td>
</tr>
<tr>
<td>c. Locate the Water Heater within 25 feet of All Hot Water Fixtures and Appliances</td>
<td>1</td>
</tr>
<tr>
<td>d. Use Engineered Parallel Piping</td>
<td>1</td>
</tr>
<tr>
<td>2. Install Only High Efficiency Toilets (Dual Flush or &lt;=1.3 gpf)</td>
<td>3</td>
</tr>
</tbody>
</table>

## F. APPLIANCES

<table>
<thead>
<tr>
<th>Possible Points</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Install ENERGY STAR Dishwasher</td>
<td>1</td>
</tr>
<tr>
<td>a. ENERGY STAR</td>
<td>1</td>
</tr>
<tr>
<td>b. Dishwasher Uses No More than 6.5 Gallons/Cycle</td>
<td>1</td>
</tr>
<tr>
<td>2. Install ENERGY STAR Clothes Washing Machine with Water Factor of 6 or Less</td>
<td>3</td>
</tr>
<tr>
<td>3. Install ENERGY STAR Refrigerator</td>
<td>1</td>
</tr>
<tr>
<td>a. ENERGY STAR: 15% above Federal Minimum</td>
<td>1</td>
</tr>
<tr>
<td>b. Super-Efficient Home Appliance Tier 2: 25% above Federal Minimum</td>
<td>1</td>
</tr>
<tr>
<td>4. Install Built-in Recycling Center</td>
<td>2</td>
</tr>
</tbody>
</table>
## II. Insulation

1. Install insulation with 75% recycled content
   - Walls and/or Fibers: 1 Possible Point
   - Ceilings: 1 Possible Point

2. Install insulation that is low-emitting (Certified Section 01300)
   - Walls and/or Fibers: 1 Possible Point
   - Ceilings: 1 Possible Point

3. Pre-Drywall Inspection Shows Quality Installation of Insulation: 1 Possible Point

## I. Heating, Ventilation & Air Conditioning

1. Design and Install HVAC System to ACCA Manual J, D, and B Recommendations: 4 Possible Points

2. Install sealed combustion units
   - Furnaces: 2 Possible Points
   - Water Heaters: 1 Possible Point

3. No fireplace or sealed gas fireplace with efficiency rating not less than 60%: 1 Possible Point

4. Install ENERGY STAR Ceiling Fans with CFLs in living areas and bedrooms: 1 Possible Point

5. Install Mechanical Ventilation System for Nighttime Cooling (Points are cumulative up to 3)
   - Whole House Fan: 1 Possible Point
   - Automatically Controlled Integrated System: 2 Possible Points
   - Integrated System with Variable Speed Control: 3 Possible Points

6. Install Air Conditioning with Non-HCFC Refrigerants: 1 Possible Point

7. Design and Install Effective Ductwork
   - Install HVAC Unit and Ductwork within conditioned space: 3 Possible Points
   - Use Duct Mask on all Duct Joints and Seams: 1 Possible Point
   - Install Ductwork under attic Insulation (Buried Ducts): 1 Possible Point
   - Pressure Balance the Ductwork System for Master Bedrooms: 1 Possible Point
   - Prevent Ducts during Construction and Clean All Ducts before Occupancy: 1 Possible Point

8. Install High Efficiency HVAC Filter (MERV 13): 1 Possible Point

9. Install Zoned, Hydronic Radiant Heating with Slab Edge Insulation: 1 Possible Point

10. Install Mechanical Ventilation System
    - Any Whole House Ventilation System that meets ASHRAE 62.2: 1 Possible Point
    - Install ENERGY STAR Bathroom Fan: 1 Possible Point
    - All Bathroom Fans Are on Timer or Humidistat: 1 Possible Point

11. Use Low-Flow Range Hood Vent to the Outside: 1 Possible Point

12. Install Carbon Monoxide Alarm(s): 1 Possible Point

## III. Building Performance

1. Design and Build High Performance Homes (2 points for each 1% above T-34, up to 39 pts)
   - Enter the percent above T-34 in the cell at left. Any value over 1% will automatically earn 39 points.

2. Home Obtains ENERGY STAR with Indoor Air Package Certification: 5 Possible Points

3. Inspection and Diagnostic Evaluations
   - Third Party Energy and Green Building Review of Home Plans: 1 Possible Point
   - Blower Door Test Performed: 1 Possible Point
   - House Passes Combustion Safety/Backdraft Test: 1 Possible Point

## K. Renewable Energy

1. Pre-Plumb for Solar Hot Water Heating: 4 Possible Points

2. Install Solar Water Heating System: 10 Possible Points

3. Install Wiring Conduit for Future Photovoltaic Installation & Provide 260 ft² of south-facing roof: 2 Possible Points

4. Install Photovoltaic (PV) Panels
   - 1.2 kW System: 6 Possible Points
   - 2.4 kW System: 6 Possible Points
   - 3.6 kW or more: 6 Possible Points
## ENTER PROJECT NAME

### 1. FINISHES

<table>
<thead>
<tr>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

- 1. Provide permanent walk-off mats and shoe storage at home entrances
- 2. Use Low-VOC Paint
  - a. Low-VOC Interior Wall/Ceiling Paint (<50 g/l VOCs (Flat)) and <150 g/l VOCs (Non-Fat)
  - b. Zero-VOC Interior Wall/Ceiling Paint (<50 g/l VOCs (Flat))
  - 3. Use Low-VOC Water-Based Wood Finishes (<190 g/l VOCs)
  - 4. Use Low-VOC Construction Adhesives (<70 g/l VOCs) for All Adhesives
- 5. Use Recycled Content Paint
- 6. Use Environmentally Preferable Materials for Interior Finishes: A) FSC-Certified Wood, B) Reclaimed Lumber,
  - C) Rapidly Renewable D) Recycled Content or E) Finger-Jointed
  - At Least 50% of Each Material (1 pt each):
    - a. Cabinets
    - b. Interior Trim
    - c. Shelving
    - d. Doors
    - e. Countertops
- 7. Reduce Formaldehyde in Interior Finishes (Section 9.1350) for At Least 50% of Each Material Below:
  - a. Cabinets
  - b. Interior Trim
  - c. Shelving
  - d. Doors
  - e. Subfloor
  - f. Sheathing
- 8. After Installation of Finishes, Test of Indoor Air Quality Standard Formaldehyde Level <27ppb

### M. FLOORING

<table>
<thead>
<tr>
<th>Possible Points</th>
<th>1</th>
</tr>
</thead>
</table>

- 1. Use Environmentally Preferable Flooring: A) FSC-Certified or Reclaimed Wood, B) Rapidly Renewable
  - Flooring Materials, C) Recycled Content Ceramic Tiles, D) Exposed Concrete as Finished Floor or E) Recycled
  - Content Carpet. Note: Flooring Adhesives Must Have <30 g/l VOCs.
  - a. Minimum 15% of Floor Area
  - b. Minimum 25% of Floor Area
  - c. Minimum 50% of Floor Area
  - d. Minimum 75% of Floor Area
- 2. Thermal Mass Floors: Floor Covering Other than Carpet on 50% or More of Concrete Floors
  - 3. Flooring Meets Section 9.1350 or CRI Green Label Plus Requirements (50% Minimum)

### N. OTHER

<table>
<thead>
<tr>
<th>Possible Points</th>
<th>R</th>
</tr>
</thead>
</table>

- 1. Incorporate Green Points Checklist in Blueprints - Required
- 2. Develop Homeowner Manual of Green Features/Benefits
  - a. Enter description here
  - b. Enter description here
  - c. Enter description here
  - d. Enter description here
- 3. Community Design Measures & Local Priorities; See the Community Planning & Design section in Chapter 4 of the New Home Guidelines for measures.
  - Maximum of 20 points for suggested measures. Local requirements may also be listed here.

### Summary

<table>
<thead>
<tr>
<th>Points Achieved from Specific Categories</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
</table>

Project has not yet met the recommended minimum requirements
- Total Project Score of At Least 50 Points
- Minimum points in specific categories: Energy (11), IAQ/Health (5), Resources (6), Water (3)
- Required measures A.3.a and/or N.1

TAX INCENTIVES

Baltimore County, MD
On June 5, 2006, the County Council passed bill # 85-06 that gives a county property tax credit to any commercial building that achieves LEED-NC Silver certification. The duration of the tax credit is for ten consecutive years.
http://www.baltimorecountycouncil.org/b08506.pdf

Chatham County, GA
May, 2006: The Board of Commissioners of Chatham County passed an ordinance that gives full property state and county tax abatement for any building achieving LEED Gold certification for the first five years, then tapering off by 20% each year until the tenth year.

Cincinnati, OH
On September 20, 2006, the City of Cincinnati passed an amendment to Ordinance #342-2002 that gives an automatic tax exemption and 100% exemption of the assessed property value for construction of new, private commercial buildings and residential units that achieve LEED certification. Residential units include new or rehabilitated apartment structures with four or more units but do not include detached residential structures. The ordinance also sets aside funds from the Community Development Block Grant to provide financial assistance for builders of new residential or rehabilitated low-income or mixed-income structures and homes that meet LEED standards. Funds would be used to offset any increased costs from building to LEED standards. Also on September 20, 2006, the City of Cincinnati passed an ordinance requiring new municipal buildings to be LEED certified. Renovated municipal buildings should incorporate LEED elements during construction.

Maryland
October 2001: Maryland’s governor issued an Executive Order calling for all capital projects greater than 5,000 gsf to earn LEED certification.
April 2005: The House and Senate passed legislation in requiring a green building standard, such as LEED (Silver), be used for state capital projects. The state also approved a green building tax credit for commercial developers.
Nevada
June 17, 2005: Governor Guinn signed AB3 requiring all state funded buildings be LEED Certified or higher in accordance with LEED or an equivalent standard. During each biennium, at least two occupied public buildings whose construction will be sponsored or financed by the State of Nevada must be designated as a demonstration project and be equivalent to a LEED Silver or higher certification, or an equivalent standard. The bill also provides tax abatements for property which has an eligible LEED Silver building and tax exemptions for products or materials used in the construction of a LEED Silver building.
www.leg.state.nv.us/22ndSpecial/Reports/history.cfm?ID=2546

New York
June 2001: New York Governor Pataki issued Executive Order #111 encouraging but not requiring state projects to seek LEED Certification. New York State Energy Research and Development Authority will be offering an incentive for design teams of any New York State building that achieves a LEED rating. NYSERDA's New Construction Program offers a 10% increase on incentives for energy efficiency measures that reduce the use of electricity. NYSERDA provides low interest loans (4% below market rate) for energy efficiency measures and building materials that meet LEED or other generally accepted green building standards. The New York State Green Building Tax Credit Program provides a tax incentive to commercial developments incorporating specific green strategies informed by LEED.
http://www.dec.state.ny.us/website/ppu/grnbldg/index.html

Oregon
Oregon's 35% Business Energy Tax Credit for sustainable buildings is tied to the LEED certification level achieved. A LEED Silver rating is the minimum standard to obtain the tax credit for sustainable buildings and applies to LEED NC, CI, and CS certified buildings.
Examples:
100,000 sf. LEED-NC Silver bldg. eligible for $140,000 tax credit
100,000 sf. LEED-NC Gold bldg. eligible for $177,485 tax credit
http://oregon.gov/ENERGY/CONS/BUS/tax/sustain.shtml

Pasadena, CA
December 19, 2005: The City Council passed an ordinance requiring all new commercial and residential construction to achieve the LEED Certified level at a minimum. This includes commercial construction of 25,000 square feet or more, residential buildings at least four stories high, and city buildings of 5,000 square feet or more. Developers who exceed the minimum certification will qualify for a rebate from Pasadena Water and Power. Additionally, developers who include affordable housing will earn a construction tax rebate of $1000 per unit. The ordinance is effective beginning in April 2006.

DENSITY BONUS

Acton, MA
April 5, 2004: A new zoning by-law (section 5.5B.2.2.d) unanimously adopted at the Annual Town Meeting gives a density bonus for buildings achieving LEED certification.

Arlington, VA
Arlington County allows commercial projects and private developments earning LEED Silver certification to develop sites at a higher density than conventional projects.
All site plan applications for commercial projects are required to include a LEED Scorecard and have a LEED Accredited Professional on the project team regardless of whether or not the project intends to seek LEED certification. All projects must contribute to a green building fund for countywide education and outreach activities. The contribution is refunded if projects earn LEED certification.

Arlington sponsors a voluntary green home program that encourages builders of new single-family homes to incorporate energy efficient and other green building components in their projects. The County offers "front-of-the-line" plan review, site signs, and publicity to program participants who achieve a given number of points as outlined by Arlington's Green Home Choice program.

EXPEDITED PERMIT REVIEW

Gainesville, FL
2002: The City of Gainesville passed Ordinance # 1835 requiring all government county buildings be LEED certified. Additionally, the county is providing a fast-track building permit incentive and a 50% reduction in the cost of building permit fees for private contractors who use LEED.

Issaquah, WA
Developers intending to use LEED may receive free professional consultation and projects achieving LEED certification are placed at the head of the building permit review line. http://www.ci.issaquah.wa.us/Page.asp?NavID=326

San Francisco, CA
On September 28, 2006, Mayor Gavin Newsom announced that the Department of Building Inspection (DBI), working with the Department of Environment (DOE) and the Department of Planning, will finalize a policy that gives priority permit review to all new and renovated buildings that achieve LEED Gold certification. Press release: http://sfgov.org/site/mayor_page.asp?id=46866

Santa Monica, CA
2000: The City Council adopted an ordinance requiring all new city projects to achieve LEED Silver certification.
August 2005: The city passed an ordinance allowing LEED registered projects to receive expedited permitting. This includes all LEED for New Construction, Homes, Core and Shell. http://www.smgreen.org/mainpages/whatsnew.htm

Sarasota County, FL
March 18, 2005: The county passed a resolution mandating that all government county buildings be LEED certified. Additionally, the county is providing a fast-track building permit incentive and a 50% reduction in the cost of building permit fees for private contractors who use LEED.
On August 22, 2006, the county approved a Green Development Incentive Resolution (#2006-174) that provides fast-track permitting for residential and commercial green developments. Incentives apply to projects pursuing LEED for Neighborhood Developments (ND) or FGBC Green Development Standards.

GRANTS

Cincinnati, OH
On September 20, 2006, the City of Cincinnati passed an amendment to Ordinance #342-2002 that gives an automatic tax exemption and 100% exemption of the assessed property value for
construction of new, private commercial buildings and residential units that achieve LEED certification. Residential units include new or rehabilitated apartment structures with four or more units but do not include detached residential structures. The ordinance also sets aside funds from the Community Development Block Grant to provide financial assistance for builders of new residential or rehabilitated low-income or mixed-income structures and homes that meet LEED standards. Funds would be used to offset any increased costs from building to LEED standards. Also on September 20, 2006, the City of Cincinnati passed an ordinance requiring new municipal buildings to be LEED certified. Renovated municipal buildings should incorporate LEED elements during construction.

Pennsylvania Public Schools
In July 2005, the Pennsylvania legislature passed House Bill 628, amending the Public School Code to provide a financial incentive to public school districts that achieve LEED Silver certification.

Santa Monica, CA
2000: The City Council adopted an ordinance requiring all new city projects to achieve LEED Silver certification.
August 2005: The city passed an ordinance allowing LEED registered projects to receive expedited permitting. This includes all LEED for New Construction, Homes, Core and Shell. http://www.smgreen.org/mainpages/whatsnew.htm

INCENTIVES BY REQUEST

Cranford, NJ
November 15, 2005: The Township of Cranford adopted Ordinance No. 2005-46 requiring all township-funded facilities projects and township-owned facilities to meet LEED Silver certification. The Township also adopted LEED-EB for its existing facilities. The township also has an incentive program whereby redevelopers may request an incentive, such as a density bonus, for achieving LEED certification.

OTHER

Babylon, NY:
On November 29, 2006, the Town of Babylon passed a resolution adopting a local law that requires LEED certification for any new construction of commercial buildings, office buildings, industrial buildings, multiple residence, or senior citizen multiple residence over 4,000 square feet. If certification is achieved, the Town will refund the certification fees paid to USGBC by the developer. http://www.usgbc.org/ShowFile.aspx?DocumentID=2164

San Antonio, TX
On June 15, 2006, the San Antonio City Council adopted Ordinance #2006-06-15-0722 that approves Phase II of the City’s Incentive Scorecard System and authorizes administrative waiver or reduction of certain development fees for projects reaching specified scores from the scorecard. Points are awarded for projects achieving LEED-NC or LEED for Homes certification. Ordinance: http://www.sanantonio.gov/clerk/minutes/2006/20060616.mht Scorecard and incentives: www.sanantonio.gov/incentives
Pasedena, CA
On December 19, 2005, the City Council passed an ordinance requiring all new commercial and residential construction to achieve the LEED Certified level at a minimum. This includes commercial construction of 25,000 square feet or more, residential buildings at least four stories high, and city buildings of 5,000 square feet or more. Developers who exceed the minimum certification will qualify for a rebate from Pasadena Water and Power. Additionally, developers who include affordable housing will earn a construction tax rebate of $1000 per unit. The ordinance is effective beginning April 2006.
http://www.ci.pasadena.ca.us/waterandpower/LEED%20Cert.pdf (rebates for LEED certification)

San Diego, CA
San Diego Mayor Dick Murphy included requiring LEED Silver certification of all municipal projects among his 10 goals for the year in his 2002 State of the City Address. The city subsequently adopted LEED for all public projects over 5,000 sq ft in April, 2002. The city has also developed a sustainable building expedite program that uses LEED criteria and provides significant plan review and construction incentives.
Private sector buildings registering for LEED certification may be eligible to receive technical green building training, support, and education. Commercial projects achieving LEED Silver certification will benefit from expedited discretionary processes.
http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800a609a

Seattle, WA
In February, 2002, the City of Seattle passed a policy requiring LEED Silver certification of all city-owned projects and renovations over 5,000 gsf. The city is encouraging the private construction sector to incorporate LEED design standards into new and existing buildings by providing economic incentives.
On April 12, 2006, Mayor Nickels signed zoning legislation that gives a height or density bonus to commercial or residential projects that achieve at least LEED Silver certification and contribute to affordable housing.

Sustainable Building Policy
Washington, DC
The mayor will establish an incentive program for private residential and commercial buildings. Incentives will include an expedited permit review and may also include grants. The mayor will also establish a Green Building Fund for technical assistance and monitoring of green buildings, education, and incentive funding for private buildings.
# NATIONAL COMMERCIAL AND RESIDENTIAL COMPARISONS

<table>
<thead>
<tr>
<th>CITY</th>
<th>Commercial</th>
<th>Residential</th>
<th>Alteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>YES 25,000 sf</td>
<td>YES ALL</td>
<td>YES</td>
</tr>
<tr>
<td>Austin</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Utility Incentives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston</td>
<td>YES 50,000 sf</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>LEED Cert-2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicago</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>New York</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Tax Incentives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasedena</td>
<td>YES 25,000 sf</td>
<td>YES 4 + stories</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Non-LEED Cert</td>
<td>Non-LEED Cert</td>
<td></td>
</tr>
<tr>
<td>Pleasanton</td>
<td>YES 20,000 sf</td>
<td>YES 2,000+ sf</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Non-LEED Cert</td>
<td>Alamenda Cty</td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>State Tax Credits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seattle</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Zoning Bonuses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington DC</td>
<td>YES 50,000 sf</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>LEED Cert-2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All cities on this list have City and/or Municipal LEED requirements.
The information reflects Private commercial and residential requirements and standards.
This analysis of West Coast LEED Certified projects in California, Washington, and Oregon, was commissioned by the Alameda County Waste Management Authority Green Building Program and performed by KEMA.

This information was used in part to formulate the benefit analysis presented in this report.
G: ROLES OF CITY DEPARTMENTS

Active participation by key City departments in the form of education, staffing, and other resources will be needed to ensure the success of the Task Force’s recommendations. Inter-departmental coordination has been critical to the success of the current Priority Permitting program for LEED Gold projects; expanding coordination efforts will be required from all agencies that help to manage the City’s built environment.

- **Planning Department.** As the first stop for building projects, the Planning Department will play a critical role in providing information and resources to applicants and the community of design professionals regarding green building requirements and incentives.

  Planning management and staff should increase their understanding of general green building principles, referenced third-party rating systems, and become expert communicators of requirements and or incentives to the public, and should promote green building principles in new Code amendments and area plan formulation.

  The Department has demonstrated a commitment to green building and is one of the lead agencies in administering the Priority Application Processing program, offering expedited project review for buildings that will certify as LEED Gold or better.

- **Department of Building Inspection (DBI).** As the primary public interface and enforcement body of the City’s Building, Housing, Plumbing, Electrical, and Mechanical Codes, DBI will also play an important role in overseeing any new green building measures for private sector development. DBI should provide adequate funding for staff training and other resources in order to both review and verify compliance with green building requirements and/or incentive programs. Leverage resources from other building agencies such as California Energy Commission, CA Public Utilities Commission, CALBO, and third-party organizations such as USGBC, Build it Green, CalCERTS, etc. for continued training opportunities.

- **SF Environment (SFE).** SFE’s green building and energy programs and staff provide policy direction, technical support, outreach networks, and key private sector partnership opportunities for advancing green building in the City. Staff will continue to advise key City departments and provide programmatic support to ensure that policies and procedures remain consistent with current developments in the green building industry.

- **Public Utilities Commission (SFPUC).** As the City’s provider of water, wastewater, and municipal electricity, SFPUC plays an integral role in promoting green development strategies such as energy efficiency, on-site stormwater management, and water use reduction in buildings, all key environmental priorities for the City. SFPUC should continue to develop policies that provide additional incentives or requirements that support the task Force’s recommendations in these areas, and help to ensure ongoing implementation.

- **City Attorney’s Office.** The government branch of the City Attorney’s office acts as the City’s general counsel. Attorneys in this division review all municipal ordinances and city contracts, and advise officials and agencies on legal issues. As the Task Force’s recommendations evolve to become ordinances and regulations, legislators and City staff will depend on the City Attorney to develop green building policies.

- **Assessor’s Office.** The Assessor’s Office has offered advice to the Task Force, and should continue to provide guidance as the City seeks to identify additional incentives for private builders and developers to build green.

There are also other agencies that may be able to assist to identify further opportunities for private sector green building projects.
• **San Francisco Redevelopment Agency (SFRA).** Although bound by State redevelopment law, SFRA is an increasingly important entity regarding land use development and public infrastructure issues in the City. They have also taken a growing interest in green building for the projects they administer, including participation in both the LEED and Green Communities programs for their affordable housing projects.

• **Mayor's Office of Housing (MOH).** MOH helps to fund and develop affordable housing projects in San Francisco. Like SFRA, MOH has demonstrated strong support of green building practices for their projects, including participation in the Green Communities program as well as drafting their own internal green building guidelines.
H: BUILDING PERMIT APPLICATION GREEN FORM

SEE ENLARGEMENT ON FOLLOWING PAGE
San Francisco Department of Building Inspection introduces the Green Point Rated system for Residential building and remodeling projects

☐ I INTEND to incorporate Green materials and/or technologies in this project

See page 2 for the attached list of possible points from the Green Points Rated checklist

☐ I DO NOT INTEND to incorporate Green materials and/or technologies in this project

For more information on the Green Points Rated building program go to: www.builditgreen.org/index.cfm?fuseaction=greenpoint

For more information on the new San Francisco DBI programs and education go to: http://www.sfgov.org/site/dbi_index.asp/GreenBuildingProgram

NOTICE TO APPLICANT

OLD HARMLESS CLAUSE. The permittee(s) by acceptance of the permit, agree(s) to indemnify and hold harmless the City and County of San Francisco from and against any and all claim, demands and actions for damages resulting from operations under this permit, regardless of negligence of the City.
I: GREEN BUILDING RESOURCES

Links

- Alameda County Waste Management Authority  [www.stopwaste.org](http://www.stopwaste.org)
- Build it Green  [www.builditgreen.org](http://www.builditgreen.org)
- California Integrated Waste Management Board  [www.ciwmb.org](http://www.ciwmb.org)
- Center for the Built Environment  [www.cbe.berkeley.edu](http://www.cbe.berkeley.edu)
- ENERGYSTAR  [www.energystar.gov](http://www.energystar.gov)
- Environmental Building News  [www.buildinggreen.com/](http://www.buildinggreen.com/)
- Global Green USA  [www.globalgreen.org/](http://www.globalgreen.org/)
- US Green Building Council  [www.usgbc.org](http://www.usgbc.org)

Reports on the Costs and Benefits of Green Building


EcoLabels for Products and Materials Certifications

- BuildingGreen provides detailed listings for more than 2,000 environmentally preferable building products with descriptions, manufacturer information, and links to additional resources.  [http://www.buildinggreen.com](http://www.buildinggreen.com)
- Carpet and Rug Institute (CRI) updates a list of carpets and cleaning products containing low amounts of VOC’s (volatile organic compounds) and other compounds that may off-gas. Green Label Plus identifies the highest performers that meet or exceed California’s stringent section 1350 emissions testing protocols. The CRI Indoor Air Quality Carpet Testing Program green and white logo displayed on carpet samples in showrooms informs the consumer that the product type has been tested by an independent laboratory and has met the criteria for very low emissions.  [http://www.carpet-rug.org/index.cfm](http://www.carpet-rug.org/index.cfm)
- ENERGY STAR® for energy efficient appliances and incentives. ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping to save money and protect the environment through energy efficient products and practices  [http://www.energystar.gov/index.cfm?c=about_ab_index](http://www.energystar.gov/index.cfm?c=about_ab_index)
- FloorScore. The FloorScore program, developed by the Resilient Floor Covering Institute (RFCl) in conjunction with Scientific Certification Systems (SCS), tests and certifies flooring products for compliance with indoor air quality emission requirements adopted in California.  [http://www.rfci.com/int_FloorScore.htm](http://www.rfci.com/int_FloorScore.htm)
• **Forest Stewardship Council (FSC)** for wood products. FSC is an international not-for-profit membership-based organization that brings people together to find solutions to the problems created by bad forestry practices and to reward good forest management. [http://www.fsc.org/en/](http://www.fsc.org/en/)

• **GreenGuard** for a list of low-emitting interior use products. GEI [Greenguard Environmental Institute] is an industry independent, non-profit organization with mission to improve public health and the quality of life through programs that improve indoor air. [http://www.greenguard.org/](http://www.greenguard.org/)

• **GreenSeal** for a variety of building and maintenance-related products. Green Seal is an independent non-profit organization dedicated to safeguarding the environment and transforming the marketplace by promoting the manufacture, purchase, ad use of environmentally responsible products and services. [http://www.greenseal.org/](http://www.greenseal.org/)