Overview

The draft policy is written with the intention of creating a "Green Building" policy that is more consistent with State and City guidelines.

Our goal is to two-fold:

1. Prepare the building community for the new State Green Building mandate that will take effect in 2011; and
2. Create a document that will be updated on an every other year basis to gradually increase the green building requirements for both the City as well as the private sector. The purpose is to advance the City toward meeting the 2020 Net-Zero residential and 2030 Net-Zero commercial goals stated in the California Public Utilities Commission Strategic Plan.

Further discussion and Q&A sessions are welcome. Please contact us to set up an appointment for a presentation to your group.

Comments must be received in writing or electronically no later than close of business, March 31, 2009.

Please submit them electronically to Linda Pratt – Lpratt@sandiego.gov

OR mail comments to:

Linda Pratt
City of San Diego-ESD
9601 Ridgehaven Court suite 310
San Diego, CA 92123-1636

Thank you for your review!

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Process thus far:

CCDC-Sustainable Community Advisory Committee- February
AIA-COTE- February
Planning Commission TAC- March
CPC- March
Planning Commission- March or April
City Council Committee- April or May
City Council- May or June

CITY OF SAN DIEGO, CALIFORNIA

COUNCIL POLICY

CP-900-14

SUBJECT: SUSTAINABLE BUILDING POLICY
POLICY NO: 900-14
EFFECTIVE DATE: TBD

BACKGROUND:
Existing buildings and the building development industry consume nearly half of the total energy used in the United States. The City of San Diego is committed to increasing resource efficiency, including energy, water, and materials associated with construction projects Council Policy 900-14 "Sustainable Building Policy" (adopted in 1997; updated and revised in 2001, 2003 and 2009), Council Policy 900-16 "Community Energy Partnership," (adopted in 2000), and the updated "Sustainable Buildings Expedite Program" (adopted in 2001; updated and revised in 2009) The 2003 update of 900-14 requires City projects to achieve the U.S. Green Building Council's LEED silver standard for all new buildings and major renovations over 5,000 square feet. San Diego will build upon these areas by encouraging the use of comprehensive green building rating, as well as offering benefits to specific projects that exceed these green building code elements.

The City of San Diego sees this as an opportunity to prepare the building industry to become increasingly efficient and invest in more renewable generation. Incentives for the City of San Diego to require and/or promote more sustainable buildings include, but are not limited to:

1. City of San Diego General Plan, adopted in 2008; and
2. City of San Diego Climate Protection Action Plan, which targets a reduction of greenhouse gas emissions by 2020 consistent with that of the State as per AB 32.

Incentives for municipalities within California to increase efficiency include, but are not limited to:

1. 2008 updates in the California Green Building Standards Code, Part 11, Title 24, giving authority to State agencies to require specific green building measures and provided a concept list of approaches to five areas of sustainable construction that could be adopted by local enforcement agencies;
2. 2008 CA Public Utilities Commission Strategic Plan, which identifies targets of net-zero energy use in residential buildings by 2020 and for commercial buildings by 2030; and
3. 2006 CA Global Warming Solutions Act (AB 32) that tasked state agencies with reducing greenhouse gas (GHG) emissions by first pursuing all cost-effective energy efficiency options and increasing clean energy generation.

PURPOSE:
The purpose of this policy is to reassert the City's commitment to green and sustainable building practices in facilities that are City owned, occupied, or leased. Additionally, the City of San Diego, in order to promote green and sustainable building practices in the community, offers an incentive program for private sector development projects meeting the requirements of this policy. The Policy will be updated every two years in order to remain current with new State and Federal guidance and local needs.

The Sustainable Buildings Policy shall recognize projects that are designed, constructed and operated using cost-effective innovative strategies and technologies that contribute to achieving the following:
1. Avoid permanent adverse impact on the natural state of the air, land and water;
2. Ensure a healthful indoor environmental quality;
3. Optimize social and economic benefits to the project and the community; and
4. Encourage occupant behavior that maximizes conservation opportunities, reduces resource consumption and minimizes wastes.

CITY BUILDINGS POLICY:

1. City owned, occupied or leased *new construction* and *major renovation* projects shall meet the requirements of the US Green Building Council (*USGBC*) Leadership in Energy and Environmental Design Program® (*LEED®*) for Silver level certification.

2. City owned, occupied or leased *new construction* and *major renovation* projects shall use 15 percent less *total building energy consumption* than the minimally code compliant building as modeled following the Title 24 requirements.

3. City owned *new construction* and *major renovation* projects shall provide a minimum of 15 percent of *total building energy* from onsite self-generation using proven *renewable energy technologies* when site conditions and configuration allow for *reasonable payback* on the significant investment in *renewable energy technologies*.

4. City owned, occupied or leased new construction and facilities replacing plumbing fixture shall use 20 percent less water than the *baseline water consumption profile* for interior non-process water uses.

5. City owned, occupied or leased facilities shall comply with the stormwater development requirements in the Storm Water Management and Discharge Control Ordinance and the San Diego Municipal Code Land Development Manual Storm Water Standards for all projects (including those under one-acre).

6. City owned, occupied or leased facilities shall use non- potable water for permanent irrigation to the extent possible.

7. City owned, occupied or leased new construction or major renovation facilities shall divert construction and demolition waste from landfills at a minimum of 75 percent.

8. City owned, occupied or leased facilities shall make possible the significant reduction of waste generated by building occupants that is hauled to and disposed of in landfills. Occupant recycling should include paper, corrugated cardboard, glass, plastic and metals at a minimum.

9. Cooling, refrigeration, or fire suppression equipment in new buildings or replacement of equipment in City owned, occupied or leased facilities shall not use CFC-based products.

10. The following sustainable building measures are strongly encouraged for City owned, occupied or leased new construction and major renovation:

- Incorporate enhanced commissioning and measurement and verification procedures for all facilities.
- Improve indoor air quality by reducing contaminates from all occupied spaces through the use of low-emitting materials, including adhesives, paints, coatings carpet systems, composite wood and agrifiber products.
- Limit disruption of natural water flows and minimize storm water runoff by minimizing building footprints and other impervious areas, increasing on-site infiltration, preserving and/or restoring natural drainage systems, and reducing contaminates introduced into San Diego's rivers, bays, beaches and the ocean.
- Incorporate building products that have recycled content reducing the impacts resulting from the extraction of new materials. Newly constructed City facilities shall strive to have a minimum of 25% of building materials that contain in aggregate, a minimum weighted average of 20% post consumer recycled content materials.
- Prioritize the use and purchase of products that are manufactured, extracted, and assembled within the City of San Diego.
- Reduce the use and depletion of finite raw and long-cycle renewable materials by replacing them with rapidly renewable materials. Newly constructed City facilities should consider incorporating rapidly renewable building materials for 5% of the total building materials.
- Establish minimum indoor air quality (IAQ) performance to prevent the development of indoor air quality problems in buildings, maintaining the health and well being of the occupants. Newly constructed City facilities will consider demonstrating compliance with IAQ standards by conforming to the latest published version of ASHRAE 62, Ventilation for Acceptable Indoor Air Quality standard.
- Design and build to take maximum advantage of passive and natural sources of heat, cooling, ventilation and light.

PRIVATE-SECTOR INCENTIVE POLICY:
It shall be the policy of the City Council to expedite the discretionary and ministerial building permit review processes for projects which meet the following criteria:

1. For residential projects including multi-family dwellings, one and two family dwellings and hotels/motels, the following measures shall be satisfied:

    a. Residential projects that provide 50 percent of their projected total building energy consumption with onsite self-generation using proven renewable energy technologies.

    b. Residential projects that perform better than the prevailing edition of the State of California Title 24 energy requirements by 30 percent.
    c. Projects that comply with the water efficiency measures in Section 603 and 604 of the 2007 California Green Building Standards Code.

OR:

d. Residential projects that commit to earning U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system certification at the Silver level or higher.

2. For non-residential projects, including residential buildings classified as hi-rise buildings in the California Building Code, one of the following options shall be satisfied:

    a. Projects that commit to earning U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system certification at the Silver level or higher.
    b. Projects that comply with the 2007 California Green Building Standards Code energy efficiency standards, renewable energy standards, water efficiency and conservation standards, limitations on the use of CFC's , air quality and exhaust standards as well as environmental comfort standards as follows:
        1. **Energy efficiency.** Projects shall comply with Section 503.1 performance method Tier 2 or the prescriptive measures in Section 504.
        2. **Renewable Energy.** Projects shall comply with Section 511.
        3. **Water efficiency and conservation.** Projects shall comply with Section 603.1, 603.2, 603.4, 603.5 and Section 604.1 through 604.4.
        4. **Environmental quality.** Projects shall comply with Section 804.6.
        5. **Environmental comfort.** Projects shall comply with Section 807.1, 807.3 and 807.4.

3. Measures provided above are in addition to compliance with all other applicable local and State building standards, energy efficiency standard and water conservation standards.

OUTREACH / EDUCATION:
It shall be the policy of the City Council to provide resources for the implementation of this policy including, but not limited to:

1. An education and outreach effort will be implemented to make the community aware of the benefits of "Sustainable Building" practices; and

2. A City-sponsored recognition program for innovative sustainable building projects implemented in the public as well as private sector as a means to highlight "best in class" techniques.

IMPLEMENTATION:
1. The City will seek cooperation with other governmental agencies, public interest organizations, and the private sector to promote, facilitate, and implement sustainable building, energy efficiency, and renewable generation in the community.

2. Council will consider additional Private-Sector Incentives and technical assistance , depending on availability.

3. This Policy shall be reviewed and updated at least every three years to align with applicable codes, standards and technologies.

LEGISLATION:
The City supports State and Federal legislation that promotes or allows sustainable development, conservation of natural resources, energy efficiency, and renewable technology.

REFERENCES:
Related existing Council Policies:
400-11, Water Conservation Techniques
400-12, Water Reclamation/Reuse
900-02, Energy Conservation and Management
900-06, Solid Waste Recycling
Ordinance Number O–19420 N.S., Construction and Demolition Debris Diversion Deposit Program
Ordinance Number O–19694 N.S
General Plan Update, Conservation Element

HISTORY:
Adopted by Resolution R-289457 11/18/1997
Amended by Resolution R-295074 06/19/2001
Amended by Resolution R-298000 05/20/2003

Definitions Used In This Policy:

Build It Green: Build It Green (BIG) is a professional non-profit membership organization whose mission is to promote healthy, energy- and resource-efficient buildings in California. Supported by a solid foundation of outreach and education, Build It Green connects consumers and building professionals with the tools and technical expertise they need to build quality green homes. (Definition source: Build It Green)

Baseline Water Consumption Profile: Baseline water consumption profile represents the average State of California water usage for commercial and residential buildings, as provided by the Department of Water Resources.

Energy Consumption, Total Building: Total Building Energy Consumption is used for calculating a building's annual energy use as specified in the Alternative Calculation Methods Manuals for Title 24 compliance and is equivalent to the Energy Budget that is the maximum amount of Time Dependent Valuation (TDV) energy that a proposed building, or portion of a building, can be designed to consume. (Definition source: Title 24)

Expedite: The permit will be reviewed by appropriate City staff in 75% of the standard time it takes for permit review.

GreenPoint Rated: GreenPoint Rated is a third party rating system for homes and multi-family buildings based on a set of green building measures pulled from the Green Building Guidelines developed by Build It Green and used to evaluate a residence's environmental performance. (Definition source: Build It Green)

LEED: The LEED (Leadership in Energy and Environmental Design) Green Building Rating System is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council, representing all segments of the building industry, developed LEED and continue to contribute to its evolution using their guiding principles that provide the clarity and continuity, while also giving the system the flexibility to grow and respond to a rapidly changing market. (Definition source: USGBC)

Major Renovation- City Owned, Occupied or Leased Buildings: Alterations or renovations to existing conditioned spaces that are 5,000 gross square feet or larger in area and require at least two energy building system changes. The site boundary for the scope of this Policy is the contract limit line of the work included in the *Major Renovation* project.

Major Renovation- Private Sector Residential And Commercial Buildings: Alterations or renovations to existing conditioned spaces in residential buildings with more than 1,500 gross square feet or larger and require at least two energy building system changes, **OR** commercial buildings with more than 5,000 gross square feet or larger and require at least two energy building system changes.

New Construction- City Owned, Occupied or Leased Buildings: New Construction includes newly constructed buildings that have never been used or occupied for any purpose. (Definition source: Title 24). For purposes of this

policy, *New Construction* is expanded to mean projects that are 5,000 gross square feet or larger in area. The site boundary for the scope of this Policy is the contract limit line of the work included in the *New Construction* project.

New Construction- Private Sector Residential and Commercial Buildings: New Construction includes newly constructed buildings that have never been used or occupied for any purpose. (Definition source: Title 24). For purposes of this policy, *New Construction* is expanded to mean residential projects that are 3,000 gross square feet or larger in area **OR** commercial buildings that are 10,000 gross square feet or larger in area. The site boundary for the scope of this Policy is the contract limit line of the work included in the *New Construction* project.

Renewable Energy Technologies: Renewable energy potential technologies include solar, wind, geothermal, low-impact hydro, biomass, bio-gas technologies, and fuel cell technologies that do not use fossil fuels. (Definition source: USGBC). Other technologies that do not use refined fossil fuels may be considered on a project-by-project basis.

Reasonable Payback: Fiscal analysis using life cycle cost estimating to determine the valuation of renewable energy technology. Approved life-cycle cost estimating measures can be used to first-cost, incentives, operating expenses, and utility savings for proposed technology. This policy shall implement renewable energy strategies that provide a payback of less than 10 years.

Title 24: Title 24, Part 6, of the California Code of Regulations is the Energy Efficiency Standards for Residential and Nonresidential Buildings in California. Established in 1978 in response to a legislative mandate to reduce California's energy consumption, the standards are updated periodically (usually every three years, at minimum) to allow consideration and possible incorporation of new energy efficiency technologies and methods. Energy efficiency reduces energy costs for owners, increases reliability and availability of electricity for the State, improves building occupant comfort, and reduces environmental impact. (Definition source: California Energy Commission)

USGBC: The U.S. Green Building Council (USGBC) is a non-profit organization committed to expanding sustainable building practices. USGBC is composed of more than 15,000 organizations from across the building industry that are working to advance structures that are environmentally responsible, profitable, and healthy places to live and work. (Definition source: USGBC)