



**PLANNING AND BUILDING
SERVICES DEPARTMENT**

AGENDA REPORT

DATE: April 7, 2009

TO: Mayor McLaughlin and Members of the City Council

FROM: Richard Mitchell, Director of Planning and Building Regulations

SUBJECT: INTRODUCE GREEN BUILDING ORDINANCE FOR COMMERCIAL AND RESIDENTIAL PROJECTS

STATEMENT OF THE ISSUE:

This agenda item is the first reading of an Ordinance adding Chapter 6.46 to the Richmond Municipal Code, which sets green building standards for certain commercial and residential construction projects.

RECOMMENDED ACTION:

INTRODUCE an ordinance (first reading) adding Chapter 6.46 to the City of Richmond Municipal Code establishing green building standards for the construction and/or renovation of commercial and residential buildings.

FINANCIAL IMPACT OF RECOMMENDATION:

There is no anticipated financial impact.

DISCUSSION:

On July 17, 2007 the City Council adopted Chapter 6.45 of the Richmond Municipal Code, entitled "Green Building Requirements for City Buildings and Traditional Public Works Projects" (the "Municipal Green Building Ordinance"). The Municipal Green Building Ordinance mandates incorporation of "green building" measures for City and City funded construction projects only. After Richmond City Council adopted Chapter 6.45, Council directed staff to prepare another Ordinance extending the program requirements to the private sector. The draft Commercial/Residential Green Building Ordinance (GBO) in Attachment A is in response to that directive.

The proposed Green Building Ordinance applies to:

1. All newly constructed single and multi-family residential buildings,
2. Additions to single-family residential buildings that are subject to design review, and
3. All newly constructed or renovated commercial buildings with over 5,000 square feet of conditioned space.

Residential buildings will be subject to the GreenPoint Rated green building rating system sponsored by Build-It-Green, a locally based green building organization. Commercial projects subject to the Ordinance will be rated using the United States Green Building Council's Leadership in Energy and Environmental Design (LEED[®]) Green Building Rating system. These two systems are the green building standards recognized by most counties and municipalities in the region that have adopted green building ordinances (Attachment 3).

Both the U.S. Green Building Council and Build-It-Green offer training and certification services to users of their systems and provide opportunities for third party inspection to ensure and verify appropriate implementation of a project's green measures. Under the proposed Green Building Ordinance, registration is not required for private builders. Rather, the Planning and Building Services Department will perform plan checks and inspections of all residential projects and small, commercial remodels. New commercial building and larger renovation project sponsors will be required, on the other hand, to retain a LEED[®] Accredited Professional at their expense to verify the green building achievement of their project, but they will not need to take the more difficult step of actually registering the project and receiving certification from the U.S. Green Building Council itself. These requirements will be folded into the existing planning and building permitting process without creating new entitlement steps or requiring dedicated staff. This inclusion in the Department's established permit processing will assist in keeping costs low for applicants and provide further efficiencies in the process. To achieve that capability, all of the employees in Planning and Building Services Department either have or will receive training to become Certified Green Building Professionals in the Build-It-Green system.

Localities that adopt regulations that enhance the State of California's Building Energy Efficiency Standards, such as Richmond's Green Building Ordinance, are required to file feasibility and cost effectiveness findings with the Energy Commission after a first Ordinance reading. StopWaste Organization (a non-profit organization charged with reducing the waste stream in Alameda County) recently conducted a comprehensive analysis of the cost implications of energy saving measures in our climate zone 3 (Attachment 6). The City can base its filing to the Energy Commission on StopWaste's analysis. The City has retained an outside expert (Mike Gabel) to make the filing based upon the State's 2008 energy standards which are anticipated to go into effect on August 1, 2009.

This filing to the Energy Commission will take place after the first reading of the Ordinance. Per the Energy Commission's recommendations, the second reading of the Ordinance needs to take place after the Energy Commission has reviewed and approved Richmond's submittal to the Energy Commission. Approval from the Energy Commission of Richmond's Green Building Ordinance is expected by June 1, 2009. Therefore, the second reading of the Ordinance is scheduled for the next possible date, June 9, 2009.

The Ordinance has been presented to and reviewed by the Planning Commission and the Design Review Board. Staff has also met with and discussed the proposed Ordinance with the

Council of Industries on several occasions and a number of the Council of Industry's suggestions have been incorporated into the latest version of the proposed Green Building Ordinance.

The Ordinance will go into effect on August 1, 2009 or when the State's 2008 energy standards are implemented.

DOCUMENTS ATTACHED:

- Attachment 1: Draft Green Building Ordinance
- Attachment 2: Design Review Board January 14, 2009 Staff Report
- Attachment 3: Listing of North California Localities with Green Building Programs
- Attachment 4: New Homes Green Point Checklist
- Attachment 5: Draft Green Building Implementation Guidelines
- Attachment 6: Executive Summary, StopWaste Org's Energy Cost Effectiveness Study

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RICHMOND ADDING CHAPTER 6.46 TO THE CITY OF RICHMOND MUNICIPAL CODE ESTABLISHING GREEN BUILDING STANDARDS FOR THE CONSTRUCTION AND/OR RENOVATION OF COMMERCIAL AND RESIDENTIAL BUILDINGS

Now, therefore, the City Council of the City of Richmond does ordain as follows:

SECTION 1

Chapter 6.46 entitled “**COMMERCIAL AND RESIDENTIAL GREEN BUILDING STANDARDS**” is hereby added to the City of Richmond Municipal Code to read as follows:

CHAPTER 6.46

Sections:

6.46.010	Title and Purpose
6.46.020	Findings
6.46.030	Definitions
6.46.040	Applicability
6.46.050	Compliance Tiers, Thresholds and Standards
6.46.060	Compliance Requirements
6.46.070	Infeasibility Exemption
6.46.080	Enforcement

6.46.010 Title and Purpose

The provisions of Sections 6.46.010 through 6.46.070 inclusive, shall be known as the City of Richmond “**COMMERCIAL AND RESIDENTIAL GREEN BUILDING STANDARDS.**” The purpose of this Chapter is to enhance the public welfare and assure that commercial and residential building renovations and construction projects are consistent with the City’s desire to create a more sustainable community by incorporating Green Building techniques and technologies into the design, construction and maintenance of buildings. The Green Building requirements referenced in this section are designed to achieve the following goals:

- a. To encourage resource conservation;
- b. To reduce construction waste;
- c. To increase energy efficiency and conservation; and
- d. To promote the health and productivity of the City’s residents, workers, and visitors.

6.46.020

Findings

The City Council of the City of Richmond finds as follows:

(a) The City of Richmond's General Plan sets forth goals for preserving and improving the City's natural and built environments, protecting the health of its residents and visitors, and fostering its economy; and

(b) The demolition, design, construction, and maintenance of buildings and structures within the City has a significant impact on the City's environmental sustainability, resource usage and efficiency, greenhouse gas emissions, and solid waste generation; and

(c) Green Building refers to a whole systems approach to the location, design, construction, and operation of buildings, the benefits of which are spread throughout the systems and features of the building and environment; and

(d) Green Building can include, among other things, the use of certified sustainable wood products; a substantial increase in the use of high recycled-content products; recycling of waste that occurs during deconstruction, demolition, and construction; enhancement of indoor air quality by selection and use of construction materials that do not have chemical emissions that are toxic or irritating to building occupants; modification of heating, ventilation, and air-conditioning systems to provide energy efficiency and improved indoor air; installation of energy efficient lighting, equipment, and appliances; use of water conserving methods and equipment; and installation of alternative energy methods for supplemental energy production; and

(e) Green Building design and construction decisions made by the City and private builders in the construction and remodeling of buildings can result in significant cost savings and environmental benefits to City residents over the life of the buildings; and

(f) Given that the purpose of this Ordinance is to adopt stricter local energy efficiency standards for the construction of certain new residences and commercial buildings within the City, the Council finds that the adoption of new standards without additional education and training for City staff responsible for enforcement of the standards could diminish compliance and potentially undermine the efficacy of the Ordinance. In order to ensure greater compliance and enforcement of the applicable energy efficiency standards, to better equip Building Department staff, and to provide a greater resource to the City's building community, the City will seek out additional education and training opportunities for Building Department staff in the areas of energy standards, technology and implementation.

(g) Nothing in this Ordinance is intended to duplicate, infringe or contradict the provisions of the California State Building Code or any other State law. The Ordinance and associated Green Building Guidelines provide many opportunities to attain required credits in manners that do not exceed, alter or contradict standards or provisions in established State building laws; and

(h) This proposed Ordinance will preserve and enhance the environment within the City of Richmond and is exempt from the requirements of the California Environmental Quality

Act (“CEQA”), as amended, pursuant to Guideline 15308, Guideline 15183 and Guideline 15061(b)(3) of the CEQA Guidelines.

6.46.030 Definitions

Definitions used in California Code of Regulations, Title 24, Parts 1 and 6, as amended, shall govern this Chapter. In addition, the following words and phrases whenever used in this Chapter shall be defined as follows:

- (a) “City” means the City of Richmond and all of its Departments and Agencies, the Richmond Housing Authority and the Richmond Community Redevelopment Agency.
- (b) “City Certified” means City of Richmond staff has verified that the project has met the Compliance Threshold as specified in this Chapter. City Certified projects need not be registered with or receive a certificate of evaluation from any Green Building certifying body such as Build-it-Green or the U.S. Green Building Council.
- (c) “City Funded Building Project” means any Construction, Demolition or Renovation of any Commercial, Residential or Mixed-Use Building Project within City limits for which a City Department or Agency grants, donates, lends or provides monies or services over \$300,000 in value, or is located on City-owned land.
- (d) “Commercial Project” means all buildings defined as Non-Residential (including Hotel/Motel and industrial building projects) in California Code of Regulations, Title 24, Part 6.
- (e) “Construction” means the building of any new building or any portion thereof.
- (f) “Covered Project” means all the building projects specified in Section 6.46.040(A).
- (g) “Detached Unit” means a residential dwelling unit built as part of a project containing more than one dwelling unit that does not share a common wall and roof with other units of that project or is situated on an individually recorded parcel.
- (h) “Green Building” means a whole systems approach to the design, construction, and operation of buildings and structures that helps mitigate adverse environmental, economic, and social impacts of the demolition, renovation, construction and operation of buildings.
- (i) “Green Building Checklist” means a checklist or scorecard to calculate a Covered Project’s score on the applicable Green Building Rating System.
- (j) “Green Building Rating System” means the rating system, such as LEED[®] and Green Point Rated, associated with specific Green Building criteria to be used to determine compliance with the Green Building compliance standards and thresholds of this Chapter.

- (l) “LEED®” means the “Leadership in Energy and Environmental Design” Green Building Rating System, which provides a suite of standards for environmentally sustainable construction. Refer to the City’s *Implementation Guidelines* to determine the latest version of LEED®.
- (m) “LEED® AP” means a LEED® accredited professional, an individual trained and accredited by the U.S. Green Building Council to verify a Building’s compliance with the standards of the LEED® Green Building Rating System.
- (n) “LEED® AP Verified” means verified by a LEED® accredited professional certifying that each LEED® checklist point listed was completed.
- (o) “Mixed-Use Building Project” refers to any building within City limits that combines the uses of a Commercial Project and a Residential Project.
- (p) “Multi-Family Residential Project” means any Residential Project containing more than one dwelling unit, including, but not limited to, duplexes, apartments, condominiums, townhouses and developments of multiple single-family homes.
- (q) “Non-Covered Project” means the building projects specified in Section 6.46.040(A).
- (r) “Residential Project” refers to any building within City limits used for living, sleeping, eating and cooking, including assisted living facilities and senior housing. For purposes of this Chapter, a Residential Project includes Multi-Family Residential Projects and single-family residential projects. A Residential Project does not include hotels, motels, inns or similar commercial enterprises wherein rooms or suites of rooms are rented for transient occupancy and are considered Commercial Projects.
- (s) “Single-Family Addition” means any Residential Project that increases conditioned floor area and conditioned volume to an existing residence. Single-family residential additions may be attached or detached. For the purposes of this Chapter, Single-Family Addition shall include the floor area of an existing Single-Family Dwelling removed and replaced as part of an addition but shall not include portions of an existing dwelling that are retained and remodeled.
- (t) “Single-Family Dwelling” means a Residential Project on a single parcel containing one dwelling unit, a duplex or one dwelling unit with a legal second unit as defined in Section 15.04.810 of the Richmond Municipal Code. For the purposes of this Chapter, townhouses may be considered single-family residential projects provided there are recorded property lines between each unit and the occupancy group, and division of each unit is designated as an R-3 as defined in the California Building Code.
- (u) “Structure” means an edifice or building of any kind or any piece of work artificially built or composed of parts joined together in some definite manner and permanently

attached to the ground, as defined in the California Building Code.

- (v) “Threshold” means the minimum number of points or rating level of a Green Building Rating System that must be attained for a particular Covered Project type and Tier.
- (w) “Tier” means the required levels for which a Covered Project must meet the minimum Thresholds established in this Chapter. Tier levels may be determined by various project characteristics, including housing size, number or density for single-family projects, number of dwelling units for multi-family residential projects and/or gross building area as defined in Section 15.04.810.011, Definitions (Zoning) of the Richmond Municipal Code for all other Covered Project types.

6.46.040 Applicability

- A. This Chapter shall apply to all Construction and Renovation projects *except* the following:
 - 1. Renovation of Residential Projects not done in conjunction with a building Addition;
 - 2. Single-family Dwelling Additions not subject to design or administrative design review;
 - 3. New commercial buildings or commercial renovation projects less than 5,000 square feet of conditioned space as defined by the California Code of Regulations, Title 24;
 - 4. Renovation or restoration of structures specifically listed on a national, state or local register of historical resources not including contributing structures;
 - 5. Project applications submitted to and deemed complete by the Planning or Building Divisions on or before the effective date of this Chapter;
 - 6. Any project below the minimum Compliance Tiers as listed in 6.46.050;
 - 7. City Building Projects, which are subject to the Green Building Requirements for City Buildings and Traditional Public Works Projects (Richmond Municipal Code 6.45).
- B. Neither this Chapter, nor any of its implementing regulations shall affect in any manner the permissible use of property, density/intensity of development, design and improvement standards, or other applicable standards or requirements, all of which shall remain in full force and effect without limitation. Moreover, green measures required by this Chapter shall not supersede any applicable design guideline established by the City of Richmond and/or in the case of structures over 50 years in age, the State of California Historical Building Code and/or U.S. Secretary of Interior’s Standards for the Treatment or Rehabilitation of Historic Structures. In all instances where there is a conflict between the Commercial and Residential Green Building Standards and Richmond’s Architectural Guidelines, the City’s Architectural Design Guidelines shall take precedent and the Commercial and Residential Green Building Standards shall be adapted to conform to the design standards.
- C. All buildings subject to the provisions of this Chapter shall meet or exceed the energy

requirements contained in the 2008 California Building Energy Efficiency Standards, including California Code of Regulations, Title 24, Parts 1 and 6. Should any provisions of this Chapter conflict with the laws of the State of California, State law shall govern.

6.46.050 Compliance Tiers, Thresholds and Standards

- A. Covered Project Tiers, compliance Thresholds and compliance standards shall be defined in Tables 1 through 5 below. During any 24-month period, new construction or renovations on any single lot shall be considered a single project.

Table 1 – New Single-Family Dwellings including Habitable Accessory Structures & Duplexes					
Covered Project Tiers		Compliance Thresholds	Verification	Rating System*	Publishing Agency
Tier 1	≤ 1750 SF	50 points	City Certified	New Home Construction Green Building Guidelines	Build It Green
Tier 2	> 1750 SF	55 points + 2 for every additional 100 SF	City Certified		

Table 2 – Single-Family Dwelling & Duplex Additions					
Covered Project Tier		Compliance Thresholds	Verification	Rating System*	Publishing Agency
Tier 1	Subject to Design or Admin. Design Review	50 Points + 2 for every 100 SF over 1,200 SF	City Certified	Home Remodeling Green Building Guidelines	Build it Green

Table 3 – New Multi-Family Dwellings					
Covered Project Tier		Compliance Thresholds	Verification	Rating System*	Publishing Agency
Tier 1	All Projects	60 Points	City Certified	Multi-family Green Building Guidelines	Build It Green

Table 4 – New Commercial Buildings					
Covered Project Tiers		Compliance Thresholds	Verification	Rating System*	Publishing Agency
Tier 1	5,000 – 20,000 SF	LEED® Certified	LEED® AP Verified	LEED® – NC New Construction -or- LEED® for Schools -or- LEED® – CS Core and Shell	U.S. Green Building Council
Tier 2	> 20,000 SF	LEED® Certified through 6/30/10 LEED® Silver beginning 7/1/10	LEED® AP Verified		

Table 5 – Commercial Renovations					
Covered Project Tiers		Compliance Thresholds	Verification	Rating System*	Publishing Agency
Tier 1	5,000 – 20,000 SF	35% of possible LEED® Points**	City Certified	LEED® – NC New Construction -or- LEED® for Schools -or- LEED® – CS Core and Shell -or- LEED® – EB Existing Buildings	U.S. Green Building Council
Tier 2	> 20,000 SF	45% of possible LEED® Points**	LEED® AP Verified		

* The most recently published versions of each required checklist should be used. The Director of Planning and Building Services may accept alternate Green Building Rating Systems found to be equally or more rigorous, such as, but not limited to LEED® for Homes or Passive House Institute US systems.

** No minimum energy efficiency requirements are required beyond the State Building Code.

1. For those Project Types listed in Table 1 that list multiple LEED® required Green Building rating systems, the project shall be completed using the most appropriate rating system, as specified by the U.S. Green Building Council (“USGBC”) descriptions and instructions or, in the absence of a determination by the USGBC, as interpreted by the Director of Planning and Building Services.
2. Mixed-use projects in which commercial space occupies less than 15% of the gross floor area of a building shall be considered a residential project and be required to use the latest version of the *Multi-family Green Building Guidelines* and corresponding checklist as listed in Table 1. Mixed-use projects in which

commercial space occupies more than 15% of the gross floor area of the building shall be treated as both independent residential and commercial projects and be required to meet the appropriate multi-family and commercial green building requirements as detailed in Table 3, depending on the project tier.

3. All residential projects with 30 or more detached units shall also submit a LEED®-ND (Neighborhood Development) checklist for information purposes only.
- B. The Director of Planning and Building Services shall promulgate any rules and regulations necessary or appropriate, including third-party verification, to achieve and verify compliance with the requirements of this Chapter. These rules and regulations shall be entitled "Implementation Guidelines." The *Implementation Guidelines* shall, at a minimum, provide for the incorporation of the appropriate green building checklist into all planning entitlement submittals and building permit applications for Covered Projects as well as the provision of supporting design, construction, or development documents to demonstrate compliance with this Chapter.
- C. Wherever LEED® or Build It Green rating systems include a minimum energy or other performance requirement, the permit applicant may choose to meet the minimum performance requirements with an alternative equivalent method approved by the Director of Planning and Building Services or his or her designee.
- D. Compliance with the provisions of this Chapter shall be considered a condition of any design review, zoning, subdivision, or other use approvals as well as any building permit that is necessary for a Covered Project. Failure to comply with these requirements shall be subject to penalties as described in Section 6.46.080 of this Chapter.

6.46.060 Compliance Requirements

- A. Discretionary Planning Entitlements. Application materials for all Covered Projects subject to discretionary planning entitlement shall include the completed Green Building Checklist appropriate to the Covered Project type demonstrating compliance with the minimum achievement Thresholds set for the Covered Project Tier.
- B. Building Permit Application. The Building permit application for a Covered Project must include a copy of the Green Building Checklist appropriate to the Covered Project type printed on the plan set that shows that the requisite achievement thresholds have been met. An index locating each detailed drawings, specification or general note that demonstrates means of adherence with each checklist measure claimed shall also be included with the checklist.
- C. Certificate of Occupancy. In no instance shall a Certificate of Occupancy be issued to a Covered Project that fails to meet the requisite achievement threshold for its type and tier.

6.46.070 Infeasibility Exemption

- A. Exemption. If the Applicant for a Covered Project believes that unique circumstances exist

that make it infeasible to fully meet the requirements of this Chapter, the Applicant may apply to the Building Official for an Infeasibility Exemption. The burden is on the Applicant to demonstrate infeasibility.

- B. Application. If an applicant for a Covered Project believes such circumstances exist, the applicant may apply for an exemption. The application for an Infeasibility Exemption shall be made on a form provided by the Planning and Building Services Department. The applicant shall indicate the maximum threshold of compliance he or she believes is feasible for the Covered Project and the circumstances that he or she believes make it infeasible to fully comply with this Chapter. Such circumstances may include an unavailability of technologies for specific measures and a lack of Green Building measures that are compatible with the scope of the project.
- C. Timing of Decision. The Building Official shall render a decision on the application within 30 days from the time that the application is deemed complete.
- D. Granting of Exemption. If an exemption is granted, the Applicant must still comply with this Chapter in all other respects and shall be required to achieve the applicable compliance threshold, less the credits or points that would have been achieved for the exempted items.
- E. Appeal. The applicant may appeal the Building Official's denial of an infeasibility exemption. Any appeal must be made to the Board of Appeals in accordance with Richmond Municipal Code section 6.02.130 within fifteen (15) days of the denial by the Building Official.

6.46.080 Enforcement

- A. Administrative Citations. In accordance with Chapter 2.62 of the Richmond Municipal Code, the City shall have the authority to issue an administrative citation for violating any provision of this Chapter.
- B. Civil Penalties. In addition to an administrative citation, any person who violates any part of this Chapter shall be subject to the civil penalties provided by Section 1.04.150 of this Municipal Code and any other penalties provided by law.

SECTION 2

If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Ordinance. The City Council hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid or unconstitutional.

SECTION 3

This Ordinance shall become effective on August 1, 2009 and shall remain in effect until the expiration of the 2008 State of California Building Energy Efficiency Standards.

All buildings within the scope of this Chapter must meet or exceed the energy requirements contained in the 2008 California Building Energy Efficiency Standards, including California Code of Regulations, Title 24, Parts 1 and 6. This Ordinance shall expire concurrent with the expirations of the 2008 California Building Energy Efficiency Standards and shall be replaced with an Ordinance reflecting the most recently enacted State Building Code.

First introduced at a regular meeting of the City Council of the City of Richmond held on ____, 2009 and finally passed and adopted at a regular meeting held on ____, 2009 by the following vote:

AYES:

NOES:

ABSTENTIONS:

ABSENT:

CLERK OF THE CITY OF RICHMOND

(SEAL)

Approved:

Mayor

Approved as to form:

City Attorney