

Memorandum

To: ROBERT P. OGLESBY
Executive Director

Date: November 21, 2012

Telephone: (916) 654-5013

From: **California Energy Commission** - Dave Ashuckian, Deputy Director
1516 Ninth Street
Sacramento CA 95814-5512
Efficiency and Renewable Energy Division

Subject: **POSSIBLE APPROVAL OF THE CITY OF SAN CARLOS'S LOCALLY ADOPTED BUILDING ENERGY STANDARDS TO REQUIRE GREATER ENERGY EFFICIENCY THAN THE 2008 BUILDING ENERGY EFFICIENCY STANDARDS**

Summary of Item

The California Public Resources Code establishes a process that allows cities or counties to adopt and enforce locally adopted energy standards that are more stringent than the statewide standards. This process, described in Section 25402.1(h)(2) and the *2008 Building Energy Efficiency Standards*, Title 24, Part 1, Section 10-106 (Standards), allow cities or counties to adopt new versions of the Standards before their statewide effective date (early adoption), require additional energy efficiency measures, or set more stringent energy budgets. The governing body of the city or county is required to make a determination that the standards are cost effective and adopt the findings at a public meeting. The city or county is required to file this determination of cost effectiveness with the California Energy Commission. The Energy Commission must find that the standards will require the diminution of energy consumption levels permitted by the current Standards. The proposed local ordinance cannot be enforced until it is approved by the Energy Commission.

The Energy Commission approved The City of San Carlos Ordinance Number 1422, which exceeded the *2008 Building Energy Efficiency Standards (Title 24, Part 6 of the California Building Code)* on December 29, 2010. On October 17, 2012, the City of San Carlos submitted a subsequent application to the Energy Commission for the approval of a local ordinance (Ordinance Number 1448) that meets or exceeds Title 24, Part 6 and replaces Ordinance Number 1422. While there are some minor changes such as added definitions, the most significant change is the addition of a compliance matrix and additional compliance triggers for nonresidential buildings.

The Ordinance 1448 requires the enforcement of the Optional Tier I regulations of the *California Green Building Standards Code (Title 24, Part 11 of the California Building Code)* made mandatory by this ordinance. The ordinance also requires various levels of compliance with (but not formal certification of) the GreenPoint Rated (GPR) rating system developed by Build It Green for residential buildings and the Leadership in Energy and Environmental Design (LEED) rating system developed by the U.S. Green Building Council for nonresidential buildings.

Residential Requirements

The ordinance defines the term “residential reconstruction” and uses this term as a trigger for compliance requirements of the ordinance. Residential reconstruction is defined as a residential building that has at any time become uninhabitable including the removal of any or all utilities (water, electrical, natural gas or sewer), or provides no permanent kitchen or bathroom facilities, or provides no shelter or ability to maintain heat, or when more than 50 percent of the foundation is replaced or reinforced other than the repair of a foundation failure, or when over 50 percent of the framing above the foundation is removed or replaced. This definition is only potentially applied to single-family residential building projects. The building official of the City of San Carlos shall make the final determination of whether a residential building meets this definition.

Residential building projects that are classified as Residential Reconstruction (as defined above), newly constructed residential buildings, and additions to residential buildings over 500 square feet shall meet all the following requirements:

1. Shall exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.
2. In addition to item 1 above, shall comply with all the requirements of Title 24, Part 11, Tier I (made mandatory by this ordinance) including, but not limited to:
 - a. Tier I Cool Roof requirement for residential buildings.
 - b. The selection of four additional energy efficiency elective measures from Title 24, Part 11 Appendix A4, which may result in additional energy savings.
3. In addition to items 1 and 2 above, shall comply with the City of San Carlos Compliance Matrix Requirements below:
 - a. Single Family Residential Buildings
 - i. Newly Constructed or Residential Reconstruction (as defined above)
 1. 75 GPR Points, documentation to be prepared by a certified GreenPoint Rater and verified by the Building Division of the City of San Carlos. GPR Certification is not required.
 - ii. Additions that are 500 square feet or more.
 1. 50 GPR Points, documentation must be submitted to the Building Division of the City of San Carlos. GPR Certification is not required.
 - b. Multi-Family Residential Buildings (three or more attached dwelling units)
 - i. Newly Constructed
 1. 75 GPR Points, documentation to be prepared by a certified GreenPoint Rater and verified by the Building Division of the City of San Carlos. GPR Certification is not required.
 - ii. Additions that are 500 square feet or more.

1. 75 GPR Points, documentation to be prepared by a certified GreenPoint Rater and verified by the Building Division of the City of San Carlos. GPR Certification is not required.

Nonresidential Requirements

Newly constructed nonresidential and mixed-use buildings, additions to nonresidential buildings over 2,000 square feet (in the previous ordinance, this trigger level was set at 5,000 square feet), and alterations to existing buildings (including tenant improvements) valued at \$500,000 or more shall meet all the following requirements:

1. Shall exceed the energy efficiency requirements of Title 24, Part 6 by 15 percent or more.
2. In addition to item 1 above, shall comply with all the requirements of Title 24, Part 11, Tier I (made mandatory by this ordinance) including, but not limited to:
 - a. Tier I Cool Roof requirement for nonresidential buildings.
 - b. The selection of one additional elective measure from Title 24, Part 11 Appendix A5. While additional elective measures are required, they are not specifically intended to affect the energy efficiency of the building. However, many of these measures may incidentally result in additional energy savings.
3. In addition to items 1 and 2 above, shall comply with the City of San Carlos Compliance Matrix Requirements below:
 - a. Newly Constructed Nonresidential Buildings, less than 10,000 square feet
 - i. LEED level Certified, documentation to be prepared by a certified LEED-AP and verified by the Building Division of the City of San Carlos. LEED Certification is not required.
 - b. Newly Constructed Nonresidential Buildings, 10,000 square feet or larger
 - i. LEED level Silver, documentation to be prepared by a certified LEED-AP and verified by the Building Division of the City of San Carlos. LEED Certification is not required.
 - c. Additions that are 2,000 square feet or larger
 - i. No additional requirements.
 - d. Alterations (including tenant improvements) valued at \$500,000 or more
 - i. No additional requirements.
 - e. Newly Constructed Mixed-Use Buildings
 - i. 75 GPR Points for the residential portions and LEED level Silver for the nonresidential portions. Documentation to be prepared by a certified GreenPoint Rater for GPR requirements and a certified LEED-AP for the LEED requirements. Documentation to be verified by the Building Division of the City of San Carlos. LEED or GPR Certification is not required.

The complete application including the full proposed ordinance and cost effectiveness analysis will be made available on the Energy Commission web site upon Energy Commission approval of the proposed ordinance.

Project Manager

Joseph M. Loyer, High Performance Buildings and Standards Development Office.

Summary of Staff Position

Energy Commission staff has found that the application meets all requirements under Public Resources Code Section 25402.1(h)(2) and Section 10-106 of Title 24, Part 1. Energy Commission staff believes that the City of San Carlos is to be commended for seeking to achieve the energy savings that result from their local energy ordinance.

The City of San Carlos has been informed that the approved ordinance will be enforceable while the *2008 Building Energy Efficiency Standards (Title 24, Part 6 of the California Building Code)* is enforced and upon implementation of new adopted State Standards, the City of San Carlos will be required to resubmit an application for local energy standards under Public Resources Code Section 25402.1(h)(2) and Section 10-106 of Title 24, Part 1.

Oral Presentation Outline

Energy Commission staff will provide a brief summary and be available to answer questions if any arise.

Business Meeting Participants

Joseph M. Loyer, High Performance Buildings and Standards Development Office.

Commission Action Requested

Approval of the City of San Carlos's locally adopted energy standards that result in more stringent energy requirements than the *2008 Building Energy Efficiency Standards*.

Dave Ashuckian, Deputy Director
Efficiency and Renewable Energy Division

