

Local Government Energy Efficiency

Best Practices

GREEN BUILDING

SUMMARY

State law establishes a process that allows local adoption of building energy standards that are more stringent than state-wide standards, sometimes called “reach codes.”

Local governments can adopt and enforce building energy standards before the statewide standards effective date, require additional energy conservation measures, and/or set more stringent energy budgets.

Local governments adopting more stringent standards are required to apply to the California Energy Commission (CEC) for approval.

Once CEC staff has verified that the local standards will require buildings to use no more energy than statewide standards and that cost-effectiveness requirements have been met, the application is brought before the full Energy Commission for approval.

Only those local ordinances that have been approved by the Energy Commission are legally enforceable.

California’s investor owned utilities have completed cost effectiveness studies, which can satisfy the CEC requirements, for all 16 climate zones in the state.

Local Ordinances Exceeding State Building Energy Efficiency Standards

ADOPTED REACH CODES

The California Energy Commission has approved reach codes for the following cities and counties (as of December 2010):

Burlingame	San Anselmo
Chula Vista	San Carlos
Daley City	San Francisco
Goleta	San Jose
Hayward	San Rafael
Los Altos	Santa Clara County
Marin County	Sebastopol
Morgan Hill	Simi Valley
Oakland	Sonoma
Palo Alto	Sonoma County
Portola Valley	Union City
Redwood City	West Sacramento
Richmond	

Reach codes are a strategy in the California Long-term Energy Efficiency Strategic Plan to attain the goal of Zero Net Energy buildings.

Local Reach Codes

PROCESS FOR ORDINANCE ADOPTION

Develop Draft Ordinance

Select and clarify the ordinance scope (i.e., building types included) and the specific energy efficiency and/or green building requirements for each building type.

Establish clear definitions of when the ordinance is triggered.

Include language which states that *all buildings shall meet all applicable requirements of the 2008 Building Energy Efficiency Standards contained in Title 24, Part 6*. This is required for CEC approval.

If the ordinance cites a green building rating system, ensure that the energy requirements directly reference the 2008 Title 24 Standards. The GreenPoint Rated® system refers to the 2008 Title 24 standards directly, but *there is no consistent and simple correlation between LEED® minimum energy performance and the 2008 energy standards*. If an ordinance refers to LEED® requirements, it is extremely important for the ordinance to establish a minimum energy performance based on 2008 Title 24 building energy efficiency standards (e.g., 15% better than Title 24).

Conduct Cost-Effectiveness Study

The completeness, accuracy or relevance of the cost-effectiveness study is the responsibility of the local government.

In the application for approval of the ordinance, the CEC verifies only that a cost-effectiveness study has been performed and that it has been reviewed, publicly vetted and approved by the local city council or board of supervisors.

The cost-effectiveness study must be consistent with the main energy performance features of the ordinance (e.g., 15% better than Title 24) in the California climate zones within the local jurisdiction.

The study should include an analysis of building designs that reflect various building categories covered by the ordinance and be vetted in a publicly noticed meeting.

The study must be submitted to the local City Council or Board of Supervisors for consideration prior to adoption of the ordinance.

California's investor-owned utilities have commissioned cost-effectiveness studies for each of the state's

climate zones that meet the CEC requirement, if considered and adopted by a city council or county board of supervisors. The studies are free to all local governments in California. See the box on the next page.

First Reading of Ordinance

The first reading or introduction of the ordinance and initial approval by the City Council or Board of Supervisors must occur before the CEC will start its review process.

Include the energy cost-effectiveness study in the first reading so the Council or Board can make an informed decision.

Submit Application to the California Energy Commission

Submit an application to the CEC after the first reading, including the cost-effectiveness study, and the language of the ordinance.

Include an executive summary that outlines the scope and policies of the ordinance and makes clear the categories of construction that are affected and to what extent they must exceed the 2008 Title 24 building energy efficiency standards.

See the **Resources** section on the last page for the CEC contact for this process.

Obtain Approval of Ordinance by the California Energy Commission

CEC staff will contact local government staff if there are any problems with the ordinance or application that may delay or prevent Commission approval.

Once the application has met all of the requirements, it is placed on the Commission Consent Calendar of a regular Business Meeting for approval, and the local government is informed of the date. Once approved, the CEC will send a formal notification to the local government.

File the Ordinance with the Building Standards Commission

After the local energy ordinance has been adopted and approved by the CEC, it must be filed with the Building Standards Commission (BSC). The BSC is responsible for administering California's > [more...](#)

Reach Codes

... continued from page 2 > building codes, including adopting, approving, publishing, and implementing codes and standards. However, the BSC does not review the energy ordinance or formally vote on it. The BSC simply receives and files it.

NOTE: A separate finding has to be filed with BSC for mandatory green building standards that are more restrictive than the California Green Building Standards Code. This process is different than the one outlined in this document.

Second Reading and Adoption of Ordinance

Either before or after CEC approval, the local City Council or Board of Supervisors has a second reading of the ordinance and formally adopts it.

The effective date is either specified in the ordinance or defaults to an automatic date based on the required number of days after adoption (e.g., 30 days or 60 days).

If local adoption will occur before CEC approval, it is strongly recommended that the local government adopt the ordinance only after CEC staff has provided comments, including possible requests for necessary changes in the ordinance.

Prepare for Implementation and Enforcement

Before the effective date of the ordinance:

- Contact your utility to provide free building energy code training to building department staff.
- Prepare a summary of the ordinance requirements to provide to permit applicants and post on the City or County web site.
- Prepare a checklist to ensure all required documentation is submitted.
- Provide a clear method for permit applicants to meet the green building energy requirements based on Title 24 calculations and documentation.
- Provide any additional forms in support of the ordinance to supplement the Title 24 building energy efficiency standards compliance report.

COST-EFFECTIVENESS STUDY TEMPLATES

One of the requirements for CEC approval of a reach code is that it be cost-effective. As this analysis can be expensive to perform, the statewide Codes and Standards Program (C&S), implemented by Pacific Gas and Electric Company, Southern California Edison and Sempra Utilities, hired a Title 24 expert to prepare an analysis in each California climate zone.

Each study shows the impact of exceeding the minimum requirements by 15%, as this level is consistent with utility program eligibility requirements, CALGreen Tier 1, and is generally consistent with the popular green building rating systems used throughout the state.

The report documents three cost-effective alternatives to meet the ordinance requirements for prototypical residential and nonresidential buildings. The C&S Program offers the analysis to any interested local government at no cost.

The C&S Program has also developed *Local Energy Efficiency Ordinance Guidelines* to provide high-level assistance to jurisdictions that are unfamiliar with the process. It outlines the major considerations and basic steps in the local ordinance development, adoption and approval process, and is also available to any interested local government at no cost.

For assistance, contact Jill Marver, JKZ1@pge.com.

SIMI VALLEY ADOPTS REACH CODE

In 2010, Simi Valley received CEC approval for a reach code, part of the first green building ordinance in Ventura County. Staff worked with the Sustainable Simi Valley Committee to develop the ordinance. The main focus was on measures simple to achieve and enforce, and with the greatest influence on community sustainability. Increased performance for new construction and substantial remodels of residential and non-residential structures were included.

Staff used the Cost Effectiveness Study provided by Southern California Edison to demonstrate feasibility to the Council, public and CEC. The Building Official will track permits for this reach code, > [more...](#)

Local Government BEST PRACTICES

... continued from page 3 > which will also be used to track Climate Action Plan implementation.

To learn more, contact:

Cynthia Sabatini, CSabatini@simivalley.org

LEGAL REQUIREMENTS

Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards (Standards) establish a process that allows local adoption of building energy standards that are more stringent than the statewide standards.

This process allows local governments to adopt and enforce building energy standards before the statewide standards effective date, require additional energy conservation measures, and/or set more stringent energy budgets.

Local governments are required to apply to the Energy Commission for approval, documenting the supporting analysis for how the local government has determined that their proposed standards will save more energy than the current statewide Standards and the basis of the local government's determination that the local standards are cost-effective, which must be adopted at a public meeting.

Once the Energy Commission staff has verified that the local standards will require buildings to use no more energy than the current statewide Standards and that the documentation requirements in Section 10-106 are met, the application is brought before the full Energy Commission for approval.

Please note that under the authority of Section 10-106, only those local ordinances that have been approved by the Energy Commission are legally enforceable.

For more information about this case study: Patrick Stoner, Statewide Local Government Energy Efficiency Best Practices Coordinator, pstoner@lgec.org

Funded by California utility ratepayers and administered by California's investor owned utilities under the auspices of the California Public Utilities Commission.

GREEN BUILDING

RESOURCES

■ **The California Energy Commission** contact for reach code approval is Joe Loyer.

jmloyer@energy.state.ca.us

■ **Local reach codes approved by the CEC** are available at:

www.energy.ca.gov/title24/2008standards/ordinances/

■ Contact Jill Marver, Sr. Program Manager of PG&E's **Codes and Standards Compliance Improvement Program** (regardless of which utility service territory you are in), to obtain a copy of the *Local Energy Efficiency Ordinance Guidelines* or Cost Effectiveness Study, or to schedule an energy code training session for your building department.

JKZ1@pge.com

■ **Build It Green** offers assistance to local governments for developing, promoting, and implementing their green building policies and programs; and developed and implements the **GreenPoint Rated** program.

www.builditgreen.org/greenpoint-rated/

■ **The US Green Building Council** developed and implements the **Leadership in Energy and Environmental Design (LEED)** program.

www.usgbc.org/

■ **California's Building Standards Commission** oversees the **CALGreen** program which implements the State's Green Building Standards which are mandatory as of January 1, 2011.

www.bsc.ca.gov/CALGreen/greencode.htm

Note: Much of the content of this fact sheet came from the *Local Energy Efficiency Ordinance Guidelines* developed by the IOUs' Codes and Standards program.