



# Sustainability Task Force Agenda

A Committee of the Chico City Council  
Mayor Ann Schwab, Chair

Meeting of November 2, 2009 – 3:00 p.m. to 5:00 p.m.  
Council Chamber Building, 421 Main Street, Conference Room No. 1

## 1. UPDATE REGARDING THE CITY TO INSTALL LED STREET LIGHTS

Assistant Civil Engineer Wyatt West and Public Works Manager Kirby White will update the Task Force on the City's plans to use its Energy Efficiency and Conservation Block Grant (EECBG) Funds to conduct a pilot test to replace some of the City's street lights with LED energy efficient models.

## 2. CONSIDERATION OF PROPOSED REVISIONS TO THE CHICO MUNICIPAL CODE REGARDING RESIDENTIAL ENERGY CONSERVATION MEASURES REQUIRED UPON RESALE.

At its 9/21/09 meeting, the Task Force considered recommendations from the City's Building Official to amend the Chico Municipal Code to upgrade the energy conservation measures required to be installed upon the sale, exchange, or transfer of residential properties. The Task Force formed an Ad-Hoc Committee to meet with representatives from the Chico Association of Realtors regarding the proposed revisions and to report back to the Task Force. A report from the Ad-Hoc Committee is attached as Exhibit "A."

## 3. CONSIDERATION OF APPLYING FOR FUNDING FROM PG&E FOR AN ENERGY CONSERVATION OUTREACH PROGRAM

Task Force member Lindsay Buckley is proposing that the Task Force consider applying for funding from PG&E as part of its Innovators Pilot Program to help market energy conservation and efficiency to residents and businesses. Information regarding this program is attached as Exhibit "B".

## 4. REPORTS AND COMMUNICATIONS

- a. Update on the American Recovery and Reinvestment Act (ARRA) State Energy Program Funding - Staff will update the Task Force on the development of a regional collaborative effort to apply for ARRA Department of Energy funding through the California Energy Commission's Residential Building Retrofit and Municipal/Commercial Building Retrofit programs.
- b. Update on Preparation of the Climate Action Plan - Staff will provide an update on the progress in developing a draft Climate Action Plan.

## 5. BUSINESS FROM THE FLOOR

Members of the public may address the Committee at this time on any matter not already listed on the agenda, with comments being limited to three minutes. The Committee cannot take any action at this meeting on requests made under this section of the agenda.

## 4. ADJOURNMENT – The meeting will adjourn no later than 5:00 p.m. to its next meeting scheduled for Monday, December 7, 2009.

### ATTACHMENTS:

- Attachment 1 - Ad-Hoc Committee Report/Proposed Residential Energy Conservation Measures
- Attachment 2 - PG&E Innovators Pilot Program

Distribution available in the office of the City Clerk:

Prepared: 10/30/09  
Posted : 10/30/09  
Prior to: 5:00 p.m.

Chico City Clerk's Office  
411 Main Street, Chico, CA 95928  
(530) 896-7250



Please contact the City Clerk at 896-7250 should you require an agenda in an alternative format or if you need to request a disability-related modification or accommodation in order to participate in a meeting. This request should be received at least three working days prior to the meeting in order to accommodate your request.

### Members:

Lindsay Buckley	BT Chapman	Tom DiGiovanni	Tim Dobbs	Deanna Dottai
Chris Giampaoli	Ken Grossman	Jon Luvaas	Scott McNall	Jim Pushnik
Ann Schwab, Chair	Jon Stallman	Jim Stevens	Scott Wolf	Julian Zener



DATE: September 16, 2009

TO: SUSTAINABILITY TASK FORCE

FROM: AD-HOC COMMITTEE (STF members Buckley, DiGiovanni, Stallman and Wolf)

RE: CONSIDERATION OF PROPOSED REVISIONS TO THE CHICO MUNICIPAL CODE REGARDING RESIDENTIAL ENERGY CONSERVATION MEASURES REQUIRED UPON RESALE.

---

---

## RECOMMENDATION:

The iAd-Hoc Committee recommends that the Task Force review and recommend that the proposed Chico Municipal Code revisions be forwarded to the City Council for consideration.

## BACKGROUND:

Section 16.60 of the Chico Municipal Code (CMC), which was adopted in 1990, requires the installation of certain energy conservation measures upon the sale, transfer, or exchange of existing residential housing. Given the date these requirements were adopted, the City's Building Official felt it was worthy to review and make reasonable adjustments to bring them more in line with current and easily obtainable energy efficiency standards.

At its 7/6/09, 8/3/09 and 9/21/09 meetings, the Task Force considered the following proposed CMC revisions:

1. Changing the applicability of these requirements to duplexes and single-family homes constructed before 1990 instead of 1983, and to multifamily dwellings constructed before June 1991.
2. Upgrading the Ceiling Insulation minimum requirement from a thermal resistance rating of R-19 to R-30.
3. Adding the provision to require under-floor insulation with a minimum rating of R-19 for houses where feasible.
4. Adding the insulation of the hot and cold water lines to water heaters.
5. Adding requiring low-flow ( 2.75 gallons per minute flow) and/or aerators on all sink faucets.
6. Adding requiring low-flow (1.6 gallon/flush) toilets.
7. Adding requiring permanently affixed weather-stripping and door sweeps.
8. Adding requiring duct insulation to a minimum of R-4-2.
9. Requiring re-inspection of all home resales
10. Increasing the \$500 cost limitation in Section 16.60.110, a 1990 figure.
11. Adding that Title companies not close escrow until the energy conservation certification is approved.

The Task Force discussed the various components of the proposed revision and the feasibility and costs associated with the under-floor and duct insulation and duct and whether the \$500 cost limitation should be increased based on the increase in the Engineering News Construction Cost Index. The Task Force also discussed whether enforcement of this Code section should be through the disclosure or the title/escrow process, and requested that staff inquire about what other cities are doing.

The Task Force recommended that an Ad-Hoc Committee be formed to meet with members from the Chico Association of Realtors to review the proposed revisions and to bring back recommendations to the Task Force at its 11/2/09 meeting.

**DISCUSSION:**

The Ad-Hoc Committee, which consisted of STF members Buckley, DiGiovanni, Stallman and Wolf, met with staff and several members of the Chico Association of Realtors on September 29, October 19 and October 26, 2009. The Ad-Hoc Committee discussed the costs and benefits of each proposed conservation measure and agreed to not include under-floor or duct insulation due to the high costs involved.

The Committee also discussed in detail whether 1) to increase the maximum cost limitation, 2) to require that ceiling installation and low-flow toilets be installed regardless of the costs, and 3) whether the conservation measures to be installed should be prioritized. The Committee also determined that it would be best if compliance with these CMC provisions was confirmed by the title companies as a condition of escrow.

In summary, the Committee is recommending that the Task Force forward the following proposed CMC revisions to the City Council:

1. Changing the applicability of these requirements for to both single-family and multifamily dwellings constructed before 1991.
2. Prioritizing the conservation measures to be installed, as costs allow, as follows:
  - a. Upgrading the Ceiling Insulation to R-30.
  - b. Weather stripping, caulking and sealing all cracks, doors, window etc.
  - c. Installing low-flow (1.6 gallon/flush) toilets
  - d. Installing low-flow (3 gallon per minute) shower heads or flow restrictors, where feasible.
  - e. Installing low-flow ( 2.75 gallons per minute flow) fixtures and/or aerators on all sink faucets, where feasible.
  - f. Installing R-3 insulation to exposed hot and cold water lines to water heaters that are within 5 feet of a water heater.
  - g. Installing insulation blankets with a thermal resistance of R-6 for all water heaters.
3. Adjusting the maximum cost limitation by the 60% increase in Construction Cost Index since 1990, which increases the single-family dwelling limit from \$500 to \$800, and the cost limit for dwellings with two or more units from \$350 to \$560/unit. These costs limitations include the cost of ceiling insulation, so if the insulation costs more than the limit, than no further conservation measures would be required.
4. Requiring energy conservation inspections every ten years, rather than 20 years.
5. Requiring that title companies not close escrow until the energy conservation certification is approved by the City.

The Committee also made some minor grammatical and clarification changes to the code sections. An annotated copy of CMC Chapter 16.60 with the proposed revisions is attached as Exhibit "B". The Committee is also recommending that the form used to certify compliance with the CMC provisions be revised to be more informative and user-friendly. A matrix of the costs and benefits of these measures, as well as other pertinent information that can be used for public information purposes is attached as Exhibit "B".

**ATTACHMENTS:**

Exhibit "A": Proposed Revisions to Chapter 16.60

Exhibit "B": Cost/Benefit Matrix of Conservation Measures

**Chapter 16.60**

**ENERGY CONSERVATION MEASURES REQUIRED INCIDENT  
TO TRANSFERS OF RESIDENTIAL HOUSING**

**Section:**

- 16.60.010 Purpose.**
- 16.60.020 Administration by building official.**
- 16.60.030 Administrative review of a determination or an action of the building official by the ~~community development~~ director.**
- 16.60.040 Appeal from decision of the ~~community development~~ director.**
- 16.60.050 Administrative review and appeals - Aggrieved person.**
- 16.60.060 Residential housing defined.**
- 16.60.070 Sales, exchanges, and other transfers of residential housing subject to chapter.**
- 16.60.080 Sales, exchanges, and other transfers of residential housing subject to chapter - Exceptions.**
- 16.60.090 Agreements providing for the sale, exchange, or other transfer of residential housing.**
- 16.60.100 Energy conservation standards to be complied with incident to the sale, exchange or other transfer of residential housing.**
- 16.60.110 Cost limitations on compliance with energy conservation standards.**
- 16.60.120 Certification of compliance with energy conservation standards.**
- 16.60.130 Energy conservation inspections conducted by building official.**
- 16.60.140 Authorization of other persons to conduct energy conservation inspections.**
- 16.60.150 Transferee's assumption of obligation to correct noncomplying conditions.**
- 16.60.160 Violations.**

**16.60.010 Purpose.**

This chapter is adopted pursuant to the municipal affairs provisions of Section 201 of the city Charter for the purpose of requiring residential housing sold, exchanged, or otherwise transferred within the city to be provided with ceiling insulation and other energy conservation measures necessary to meet minimum energy conservation standards.

(Ord. 1843 §1 (part))

**16.60.020 Administration by building official.**

The building official shall be primarily responsible for administration of the provisions of this chapter subject to the overall direction and control of the director. In carrying out such responsibilities, the building official, or an authorized representative, shall issue the energy conservation compliance certificates required by this chapter incident to a transfer of residential housing, conduct the inspections of residential housing necessary to issue such compliance certificates, grant authorization to make such

inspections to persons qualified to do so, and enforce all other provisions of this chapter as hereinafter provided for.

(Ord. 1843 §1 (part), Ord. 2012 §3 (part), Ord. 2268, Ord. 2364 §332)

**16.60.030 Administrative review of a determination or an action of the building official by the director.**

- A. Right to Administrative Review. Any person aggrieved by a determination made or action taken by the building official pursuant to this chapter may apply to the director for administrative review of such determination or action.
- B. Applications for Administrative Review. Applications for administrative review of a determination made or action taken by the building official shall be made in writing and shall be filed in the office of the director no later than 15 days following the date such determination or action was made or taken, or where a written report is required to be served, the date such report is served; provided that the director may extend the time for filing an application for good cause shown. In addition to setting forth a request for administrative review of a determination made or action taken by the building official, such application shall contain a brief statement of the reasons why the applicant believes that such determination or action does not comply with the provisions of this chapter and the relief requested by the applicant from such determination or action.
- C. Decision on an Application for Administrative Review. Upon the filing of an application for administrative review of a determination made or action taken by the building official, the director shall consider the application and render a decision either affirming the determination or action of the building official, or reversing or modifying such determination or action. Prior to rendering a decision, the director may, with sole discretion, convene an informal hearing for the purpose of reviewing evidence or hearing arguments bearing on such decision, provided notice of the date, time, and place of such hearing is served a reasonable time prior to such hearing on the applicant and on any other person who would be aggrieved by a decision reversing or modifying the determination or action of the building official and who has filed with the director a written request for notice of such decision. After rendering a decision, the director shall promptly inform the building official of the decision and cause a notice of the decision to be served on the applicant and any other person who would be aggrieved by a decision reversing or modifying the determination or action of the building official and who has filed with the director a written request for notice of such decision.

(Ord. 1843 §1 (part), Ord. 2012 §3 (part), Ord. 2268, Ord. 2364 §333)

**16.60.040 Appeal from decision of the director.**

Any person aggrieved by a decision of the director following the filing of an application for the administrative review of a determination made or action taken by the building official, may appeal such decision to the city council within the time and in the manner provided for by Title 2 of this code.

(Ord. 1843 §1 (part), Ord. 2004 §23, Ord. 2012 §3 (part), Ord. 2364 §334)

**16.60.050 Administrative review and appeals - Aggrieved person.**

A person shall be deemed “aggrieved” for purposes of the administrative review of a

determination made or action taken by the building official pursuant to this chapter, or for purposes of the appeal of a decision of the director following the filing of an application for administrative review of such determination or action, if such a person is an owner, transferee or occupant of the building or structure which is the subject of such determination, action or decision.

(Ord. 1843 §1 (part), Ord. 2012 §3 (part), Ord. 2364 §335)

**16.60.060 Residential housing defined.**

The term “residential housing,” as used in this chapter, shall mean any building or structure designed or used as a residence, provided, however, that the term “residential housing” shall not include “mobile homes,” “manufactured housing,” or “factory-built housing” as defined in Division 13 of the California Health and Safety Code (commencing with Section 17000 of the Health and Safety Code).

(Ord. 1843 §1 (part))

**16.60.070 Sales, exchanges, and other transfers of residential housing subject to chapter.**

Except as otherwise provided for herein, this chapter shall apply to any sale, exchange, or other transfer of a legal or equitable interest in and to the fee simple title to real property containing residential housing which entitles the transferee to possession of such housing, or any sale, exchange or other transfer of a separate interest in a “community apartment project,” a “condominium project,” or a “stock cooperative” as defined in Division 2 of the California Civil Code (commencing with Section 761 of the Civil Code), which entitles the transferee to possession of a residential dwelling unit located within such project or cooperative.

(Ord. 1843 §1 (part))

**16.60.080 Sales, exchanges, and other transfers of residential housing subject to chapter - Exceptions.**

This chapter shall not apply to the following transfers of residential housing:

- A. The sale, exchange, or other transfer of residential housing ~~which contains no more than two dwelling units and was constructed pursuant to a building permit issued on or after June July 1, 19831991, or residential housing containing three or more dwelling units which was constructed on or after June 1, 1984;~~
- B. The sale, exchange, or other transfer of residential housing which was previously inspected and certified within ten years from the proposed sale, exchange or transfer as being in compliance with the energy conservation standards adopted by this chapter ~~or included in Ordinance No. 1480 adopted by the city council on October 5, 1982;~~
- C. Sales, exchanges, or other transfers of residential housing pursuant to a court order, including, but not limited to sales, exchanges, or other transfers ordered by a probate court incident to the administration of an estate, sales or other transfers made pursuant to a writ of execution, sales in any judicial foreclosure sale, sales, exchanges, or other transfers by a trustee in bankruptcy, and sales, exchanges, or other transfers resulting from a decree for specific performance;
- D. Sales or other transfers of residential housing to a mortgagee by a mortgagor in default, sales or other transfers to a beneficiary of a deed of trust by a trustor who is

- in default, and sales in any nonjudicial foreclosure sale after a default in the obligations secured by a mortgage, deed of trust, or other instrument containing such power of sale;
- E. ~~Sales or other transfers of residential housing from one co-owner to one or more other co-owners;~~
- F. Sales or other transfers of residential housing made to a spouse, or to a person or persons in the lineal line of consanguinity of one or more of the transferor;
- G. Sales or other transfers of residential housing between spouses resulting from a decree of dissolution of marriage or a decree of legal separation, or from a property settlement agreement incident to such a decree; and
- H. ~~Sales, exchanges, or other transfers of residential housing to or from any governmental entity.~~
- (Ord. 1843 §1 (part))

**16.60.090 Agreements providing for the sale, exchange, or other transfer of residential housing.**

Any agreement providing for the sale, exchange, or other transfer of residential housing subject to the provisions of this chapter, including any agreement granting an option to acquire such housing, shall include a provision which states as follows:

“This agreement and the sale, exchange or other transfer of residential housing provided for by this agreement may be subject to the provisions of Title 16 of the Chico Municipal Code which prohibits the sale, exchange or other transfer of residential housing unless and until the city building official has certified that such housing is in compliance with the energy conservation standards adopted in Title 16 of the Chico Municipal Code.”

(Ord. 1843 §1 (part))

**16.60.100 Energy conservation standards to be complied with incident to the sale, exchange or other transfer of residential housing.**

No person shall sell, exchange, or otherwise transfer residential housing subject to the provisions of this chapter unless and until the building official has certified that such housing is in compliance with the following energy conservation standards **in order of priority**:

- A. The ceilings of all inhabitable portions of such residential housing shall be overlaid with insulation which has a minimum thermal resistance rating of at least ~~R-19~~ **R-30** except **where the attic of such buildings has a headroom of less than 30 inches at the attic peak.**
1. ~~Where such ceilings are overlaid with insulation having a thermal resistance rating of not less than R-13 which was installed prior to March 23, 1978; or~~
  2. ~~Where the attic of such buildings has a headroom of less than 30 inches at the attic peak.~~
- B All major cracks, joints, and other openings in building exteriors or portions of a building exposed to unheated or uncooled areas, and all openings from heated or air conditioned spaces into an attic or under floors, including but not limited to openings around doors, windows, plumbing vents, pipes, electrical wiring, or furnace flues, shall be caulked, weather stripped, or otherwise sealed to limit air infiltration.**

**C. All toilets shall be fitted with low-flow toilets rated at 1.6 gallons per flush or less.**

- ~~C.D.~~ All shower fixtures shall be fitted with in-line shower restrictors or low flow shower heads which restrict the maximum flow of water to not more than three gallons per minute except:
1. Where the shower head has an existing flow rate of less than three gallons per minute as a result of reduced water pressure behind the shower head; or
  2. Where the shower head and shower arm are of a ball joint type which is connected within a wall.

**E. All sink and lavatory faucets shall be fitted with a low-flow faucet with a maximum flow rate of 2.75 gallons per minute or an aerator where feasible.**

- ~~D.~~ All hinged doors exposed to the exterior or to unheated or uncooled areas shall be fully weather stripped or gasketed in a manner which effectively and reliably limits air infiltration.
- ~~E.~~ All major cracks, joints, and other openings in building exteriors or portions of a building exposed to unheated or uncooled areas, and all openings from heated or air conditioned spaces into an attic, including but not limited to openings around plumbing vents, pipes, electrical wiring, or furnace flues, shall be caulked or otherwise sealed to limit air infiltration.

**F. All exposed hot and cold water lines connected to and within five feet of existing water heaters shall be insulated at a minimum thermal resistance rating of R-3**

- ~~B.G.~~ All electric resistance domestic water heaters, and all natural gas or other fossil fueled domestic water heaters, shall be fitted with external insulation blankets with a minimum thermal resistance rating of R-6 except:
1. Where the thermal resistance rating of insulation within the water heater is at least R-12; or
  2. Where it is impractical to wrap the water heater with an external insulating blanket by reason of the fact that the distance between the heater and an adjoining wall is less than two inches; or
  3. Where the manufacturer's instructions for the water heater would preclude the water heater from being fitted with an external insulation blanket.

(Ord 1843 §1 (part), Ord 1870)

**16.60.110 Cost limitations on compliance with energy conservation standards.**

In order to comply with the ceiling insulation standards set forth in Subpart A of Section 16.60.100 of this chapter, the owner of residential housing subject to the provisions of this chapter shall be required to install all of the insulation necessary to comply with such standards without regard to the cost of such compliance. However, in order to comply with the remaining energy conservation standards set forth in Section 16.60.100 of this chapter, the owner of residential housing subject to the provisions of this chapter shall not be required to make an expenditure in excess of the following sums

during the 18-month period prior to the date the sale, exchange, or other transfer of such residential housing occurs:

- A. In the case of residential housing which consists of a detached single-family dwelling unit, the sum of ~~\$500.00~~ \$800, including the cost of installing ceiling insulation, if necessary; and
- B. In the case of residential housing which consists of two or more multifamily dwelling units, the sum of ~~\$350~~ \$560 per dwelling unit, including the cost of installing ceiling insulation, if necessary.
- C. **If the cost of the installation of the ceiling insulation exceeds \$800 for single-family dwellings or \$560 per dwelling unit for dwellings with two or more units, no further energy conservation measures or expenditures are required at the time of the proposed sale, exchange, or transfer.**

Accordingly, if in complying with all of the remaining energy conservation standards set forth in Section 16.60.100, the owner of residential housing subject to the provisions of this chapter would be required to spend a sum in excess of the amounts set forth in this section, the owner of such housing shall comply with those energy conservation standards set forth in Section 16.60.100, in addition to ceiling insulation, which the owner of the residential housing deems to be cost effective and for which the total cost does not exceed the sums set forth in this section.

(Ord. 1843 §1 (part))

#### **16.60.120 Certification of compliance with energy conservation standards.**

**Prior to the sale, exchange, or transfer of residential housing subject to the provisions of this chapter**, the building official shall issue a certificate evidencing that residential such housing subject to the provisions of this chapter is in compliance with the energy conservation standards adopted by this chapter if:

- A. The building official, **or designee**, has inspected such housing and found it to be in compliance with such standards; or
- B. A person authorized to make energy conservation inspections in the manner hereinafter provided by this chapter has filed a declaration with the building official, in a form prescribed by the building official, stating that such person has inspected such housing and found it to be in compliance with such standards.

(Ord. 1843 §1 (part))

- B. **The title or escrow company has provided the building official with a certificate of compliance, in a form prescribed by the building official, completed by a person authorized to make energy conservation inspections in the manner provided by this chapter stating that such person has inspected such housing and found it to be in compliance with these standards.**

#### **16.60.130 Energy conservation inspections conducted by building official.**

The building official shall conduct inspection of residential housing in order to determine whether such housing is in compliance with the energy conservation standards adopted by this chapter whenever an application for such inspection is filed with the building division by an owner of such housing or such owner's authorized representative. Such application shall be in a form prescribed by the building official and shall be accompanied by an inspection fee in an amount established by resolution of the city council.

If, as a result of such inspection, the building official determines that the residential housing being inspected is in compliance with the energy conservation standards adopted by this chapter, the building official shall promptly issue a certificate evidencing such compliance and cause a copy of such certificate to be served on the owner of such housing or such owner's authorized representative. However, if, as a result of such inspection, the building official determines that the residential housing being inspected is not in compliance with the energy conservation standards adopted by this chapter, the building official shall promptly cause a report to be prepared which identifies, with particularity, all noncomplying conditions and cause a copy of such report to be served on the owner of such housing or such owner's authorized representative.

Any certificate of compliance or inspection report issued or prepared by the building official pursuant to this section shall be deemed to have been served on the owner of residential housing or such owner's authorized representative when a copy of such certificate or report is personally delivered to such owner or representative, or when a copy of such certificate or report is placed in the United States mail, registered and postage prepaid, addressed to such owner or authorized representative at the address appearing on the inspection application.

(Ord. 1843 §1 (part))

#### **16.60.140 Authorization of other persons to conduct energy conservation inspections.**

The building official shall authorize other persons to conduct the energy conservation inspections which are necessary in order to certify compliance with the energy conservation standards adopted by this chapter if such person is certified as a building inspector ~~by the International Conference of Building Officials~~, holds a license as a general contractor or insulation contractor issued by the Contractors' State License Board, holds a license as a structural pest control operator issued by the Structural Pest Control Board, or is otherwise determined by the building official, on the basis of education and/or experience, to be qualified to conduct such inspections. Applications for such authorization shall be filed with the building division, shall be in a form and contain the information prescribed by the building official, and shall be accompanied by a fee in an amount established by resolution of the council.

If, after authorizing a person to conduct energy conservation inspections necessary in order to certify compliance with the energy conservation standards adopted by this chapter, the building official determines that such person misrepresented such person's qualifications for such authorization, no longer holds the certification or license relied upon by the building official as the basis for granting such authorization, or filed a declaration certifying that such residential housing is in compliance with such energy conservation standards without having inspected such housing or when it is clear that the housing did not comply with such standards, the building official shall revoke the

authorization granted to such person. However, the building official shall not revoke an authorization to conduct energy conservation inspections unless the building official has given reasonable prior notice of the building official's proposed action to the person granted such authorization and given to such person an opportunity to appear before the building official and be heard on the proposed revocation.

(Ord. 1843 §1 (part), Ord. 2268)

**16.60.150 Transferee's assumption of obligation to correct noncomplying conditions.**

When residential housing has been inspected in the manner provided for by this chapter and been found to be not in compliance with the energy conservation standards adopted by this chapter, the owner of such housing, notwithstanding any provisions of this chapter to the contrary, may nevertheless sell, exchange or otherwise transfer the housing without a certification that the housing complies with such energy conservation standards, if prior to such transfer, the transferee enters into an agreement with the city, in a form approved by the city attorney, by which the transferee acknowledges the existence of the noncomplying conditions and agrees to correct same within 180 days following the date such transfer occurs, or such later date as may be approved by the building official for good cause shown.

(Ord. 1843 §1 (part))

**16.60.160 Violations.**

A violation of the provisions of this chapter shall constitute an infraction which is punishable by a fine in an amount provided for by Section 1505 of the Charter of the City of Chico.

(Ord. 1843 §1 (part), Ord. 2136 §8)

## COST/BENEFIT INFORMATION FOR ENERGY AND WATER CONSERVATION MEASURES

	Cost			Energy Savings Impact	Pay Back Period		
	Low (<\$50)	Moderate (\$50-\$100)	High (>\$150)		< Year	1 to 3 yrs	3-15 Years
<b>Energy Conservation Measures</b>							
Insulation of the hot and cold water lines to/from water heaters	X				X		
Permanently fixed weather stripping and door sweeps to all operable exterior doors	X			up to 20%	X		
Ceiling insulation		X		up to 20%		X	
Programmable Wall Thermostat		X		Up to \$160/yr if used properly	X		
Sealing major cracks, joints, and openings- sealed to limit air infiltration		X		up to 20%	X		
Duct Sealing			X	20% up to \$150/year	X	X	
<b>Water Conservation Measures</b>							
Low flow (2.5 gpm flow) and/or aerators on all sink faucets and shower heads	X				X		
Low flow (1.3 gallons per flush) toilets		X				X	

### FREE THINGS TO DO THAT SAVE MONEY (AND ENERGY)

Turn down water heater thermostat to 120°F.

Turn off lights when leaving a room.

Set thermostats to 68°F in winter when you're home, and down to 55°F when you go to bed or when you're away (Programmable thermostats do this automatically.)

Use energy-saving settings on washing machines, clothes dryers, dishwashers, and refrigerators.

Don't waste water, hot or cold, inside or outside your home.

Clean your refrigerator's condenser coils once a year.

Air-dry your clothes.

Close heating vents in unused rooms.

Repair leaky faucets and toilets (5 percent of water "use" is leakage).

Close drapes (and windows) during sunny summer days and after sunset in the winter.

## **Things That Will Pay for Themselves in Lower Energy Bills in Less Than a Year**

- 1 Install a water-saving 2.5-gallon-per-minute showerhead.
- 2 Install water-efficient faucet heads for your kitchen and bathroom sinks.
- 3 Install a programmable thermostat.
- 4 In the attic and basement, seal the air leaks a cat could crawl through, and replace and reputty broken windowpanes.
- 5 Clean or change the air filter on your warm-air heating system during winter and on air conditioning units in the summer.
- 6 Install an R-7 or R-11 water heater wrap.
- 7 Insulate the first three feet of hot and inlet cold water pipes.
- 8 Install compact fluorescent light bulbs in the fixtures you use most.

## **Measures That Collectively Will Cost Up to \$500 and Have Paybacks of One to Three Years**

- 1 Get a comprehensive energy audit, including a blower door test, to identify sources of air leaks.  
Rope-caulk and weatherize all leaks identified by the test. Start with the attic and basement first (especially around plumbing and electrical penetrations, and around the framing that rests on the foundation), then weatherize windows and doors.
- 2 Seal and insulate warm-air heating (or cooling) ducts.
- 3 Have heating and cooling systems tuned up every year or two and determine if a replacement is needed.
- 4 Install additional faucet aerators, efficient showerheads, and programmable thermostats.
- 5 storm windows (or, in a southern climate, shade sunny windows or add solar gain control films).
- 6 Insulate hot water pipes in unheated basements or crawlspaces.

## **Measures That Will Save a Lot of Energy and Money, but Will Take 3–15 Years to Pay for Themselves**

- Foundation: insulate inside rim joist and down the foundation wall to below frostline to at least R-19 in cold climates and to R-11 or better in moderate climates. Remember to caulk first.
- Basement: insulate the ceiling above crawlspaces or unheated basements to at least R-19 in cold climates. If your basement is heated, insulate the inside of basement walls instead to R-19 or more above grade and to R-11 or more below grade. Basement or foundation insulation is usually not needed in hot climates.
- 3 Attic: increase attic insulation to R-50 in cold climates, R-38 in milder climates, and R-30 plus a radiant barrier in hot climates.
  - 4 Walls: adding wall insulation is more difficult and expensive, but may be cost-effective if your house is uncomfortable.

October 14, 2009

## REQUEST FOR IDEAS

### PACIFIC GAS AND ELECTRIC COMPANY'S INNOVATOR PILOTS PROGRAM

#### Overview

Half of the cities and counties in Pacific Gas and Electric Company's (PG&E) service area are engaged in climate action, and many progressive local communities have an innovative vision for meeting new energy savings, greenhouse gas (GHG) reduction and renewable energy goals that align with the California Energy Efficiency Strategic Plan (Strategic Plan), which can be found at the following website:

<http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>. However, these communities may lack the financing and technical know-how to transform their vision into successful projects that provide the desired benefits. Moreover, even the most successful project or initiative cannot serve as a model for other communities without a mechanism in place for sharing best practices and lessons learned.

PG&E's new Innovator Pilots program ("Program") is intended to help communities achieve real and measurable results associated with their GHG reduction strategies. The Program will help progressive communities overcome existing barriers by empowering their creativity to demonstrate new approaches to energy use that align with the longer-term elements of the Strategic Plan and Assembly Bill 32 (AB32). Ultimately, the goal is to share these approaches with other communities in California in order to reach our shared goal of GHG reduction across the state.

#### Innovator Pilots Program Approval by the California Public Utilities Commission

The California Public Utilities Commission (CPUC) issued Decision 09-09-047 ("Decision") on September 24, 2009, which approved PG&E's Energy Efficiency program portfolio for the 2010 to 2012 program cycle and is made available for viewing at [http://docs.cpuc.ca.gov/PUBLISHED/FINAL\\_DECISION/107829.htm](http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/107829.htm)

The Decision conditionally approves PG&E's Innovator Pilots program. The CPUC has directed PG&E to file an advice letter within 120 days of the release of the decision detailing how the selected pilot partners will comply with the criteria for pilot programs outlined in Section 4.3 and Ordering Paragraph 20 of the Decision. This advice letter will identify the selected pilot partners, the proposed budget for each partner, and the specific activities to be implemented by each partner that will advance and measure progress towards meeting or exceeding pilot goals and objectives. No contracts may be awarded by PG&E prior to the approval of this advice letter.

PG&E is seeking projects that can be fully executed for \$1 million or less, excluding any supplemental funding provided by others. For funding requests that exceed \$1 million, applicants will be required to describe how each \$500,000 increment would be spent and the associated benefits.

## Objectives

The Program will provide funding for projects that will test, demonstrate and measure innovative ways to deliver energy savings. These projects may include, but will not be limited to, strategic resource management planning, social marketing and community outreach programs, a network of regional experts, behavior-based energy demand-side management, bundled incentives to promote integration of demand-side management incentives, integrated audits, cooperative green procurement initiatives, and green energy careers.

PG&E, in collaboration with the selected Innovator Pilot partners, will monitor and document best practices and lessons learned from the selected projects and will disseminate this information in fact sheets available on PG&E's web site. Applicants that are selected by PG&E will be required to share their project results with entities such as the League of California Cities, the Local Government Commission, ICLEI - Local Governments for Sustainability, Councils of Governments, and other public sector entities to enable replication and/or modification by other governments.

## Who May Apply

Applications will be accepted from local government customers, including PG&E Local Government Partners, city and county governments, groups of local governments, local government associations, and quasi-government groups (including non-profit multi-stakeholder organizations that support energy efficiency programs and/or GHG reduction efforts at the local government level). PG&E will consider project proposals that involve public sector partnerships with private entities; however, the submission of the project proposal must clearly come from or be supported by a local government or similar organization as described above. Once project proposals are selected by PG&E to participate in the Program, PG&E will execute a written agreement with each selected applicant. If an applicant chooses to partner with a private entity or entities that will be responsible for implementing the proposed projects on the applicant's behalf, PG&E will execute a written agreement with the applicable private entity or entities.

This solicitation process is intended to generate innovative ideas; therefore, proposals may be selected that include activities and/or technologies that are not specifically stated in this document.

## Required Elements of the Project Proposal Submission

Project proposals shall not exceed fifteen (15) pages in length, excluding the metrics discussion. Each proposal should contain the following elements:

1. A specific statement of the concern, gap, or problem that the applicant seeks to address and the likelihood that the issue can be addressed cost-effectively through future utility programs that would be developed as a result of the Innovator Pilot program;

2. Whether and how the project will address a Strategic Plan goal or strategy and market transformation;
3. Specific goals, objectives and end points for the proposed project;
4. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed;
5. A clear budget and timeframe (including milestones) to complete the project and obtain results before December 2012;
6. Information on relevant baseline metrics or a plan to develop baseline information against which the project outcomes can be measured. Project performance metrics shall be described in accordance with Appendix 2 of the CPUC's Decision, provided below as Attachment A, which provides direction to the investor owned utilities (IOUs) regarding program performance metrics;
7. Methodologies to test the cost-effectiveness of the project;
8. A proposed evaluation, measurement and verification (EM&V) plan;
9. A concrete strategy, including schedule, to identify and disseminate best practices and lessons learned from the project to all California cities and to transfer those practices to energy savings programs to be offered by energy utilities.

#### Evaluation Elements for Project Proposal Consideration

All proposals will be evaluated based on the following criteria:

- **Innovation:** The project addresses the Strategic Plan, is innovative, comprehensive and integrated, addresses lost opportunities and is expected to catalyze change. Projects address priority early actions for affected market segments (including government buildings, agriculture, commercial, residential, multifamily) or big bold strategies or integrated solutions.
- **Broad Applicability and Transferability:** The proposed project will create a model that can be replicated by, or transferred to, other parties. In other words, applicants selected will not ultimately be unique in their ability to implement this type of project. Applicants must agree to assist PG&E in documenting pre- and post-Pilot knowledge, behaviors, and activities.
- **Feasibility:** The project has a high likelihood of success.
- **Skill and Experience:** The applicant has adequate infrastructure and ability to implement the proposed scope.

- **Fills Gaps:** The project addresses areas that are not currently being addressed by identifying and resolving barriers to energy efficiency; developing long-term relationships in the community; creating regional approaches; focusing on long-term solutions and savings; and/or piloting effective project evaluation that is in sync with Strategic Plan goals.
- **Leveraging:** Innovator Pilot funds should be used as a source of matching funds to leverage California Energy Commission (CEC) and/or other funding sources, where possible.
- **Demonstrated Commitment to Climate Action Planning:** Applicants must demonstrate commitment to energy management and/or climate action planning through previous participation in utility energy programs; partnerships with PG&E or other entities enabling resource management or climate planning; an established energy reduction plan; establishment of GHG targets; or other similar actions. Proposals should address statewide GHG reduction goals and be coordinated with the objectives of the Strategic Plan and AB32.
- **Diversity:** If sufficient applications are submitted, and as funding permits, the Program will fund a variety of geographic areas and community types (urban, suburban, rural, low income) in order to inspire all governments in California to engage in energy efficiency.

### Questions

PG&E has set up the following email address to receive all proposals and questions related to this program: **innovation@pge.com**. PG&E will routinely monitor this mailbox and send interested parties a list of the questions and answers on a periodic basis. Please submit all questions to **innovation@pge.com** no later than December 1, 2009.

### Schedule

**1 December: Deadline for Submittal of Questions**

**14 December: Deadline for Application Submittals**

Late January: Estimated timeframe for PG&E to file advice letter with the CPUC

Late February: Estimated timeframe for CPUC approval of advice letter

March: Estimated timeframe to execute contracts with approved program participants, pending CPUC approval of advice letter

An electronic copy must be submitted to **innovation@pge.com** and be received by **Monday, December 14, 2010 5:00 PM Pacific Time**.

## ATTACHMENT A

### APPENDIX 2 (of CPUC Decision 09-09-047) Program Performance Metrics

#### Appendix 2.1.

#### ED (Energy Division) Recommended Process for IOU Development of Program Performance Metrics

There are different kinds of performance indicators:

- Metrics that trend against known standards that come from internal and external sources and may include benchmarks.
- Metrics that trend with standards to be established when establishing a baseline.
- Metrics that track how close milestones are to being achieved
- Yes/No Metrics track whether short-term objectives are being met (ex: establishing and implementing a system, completing an analysis, etc.)

These metrics should be based on program activities, program outcomes and the program's contribution to market transformation as applicable. They should also be identified with program outputs (what a program does such as volume of widgets installed) and / or program outcomes (the results a program produces such as external influences). While there are different kinds of metrics that measure different kinds of data, they should have common success criteria such as being:

- Valid and Reliable
- Meaningful and Understandable
- Balanced and Comprehensive
- Clear regarding preferred direction of movement
- Timely and Actionable
- Resistant to goal displacement
- Cost-Sensitive and non-redundant

#### Developing Program Performance Metrics

**Step 1:** The first step the IOUs should undertake when developing performance metrics is to involve the people who are responsible for the work to be measured because they are the most knowledgeable about the work including upper management who will need to buy-in to the finished outcome. Once these people are involved:

- identify critical work processes and program requirements
- Identify critical results desired and align them to program design and requirements and define the program mission.
  - o The program mission is the basic purpose of a program, its reason for being, and the general means through which it will accomplish its purpose in view of overarching goals and objectives (CEESP, BBES, CPUC EE Goals).

- Establish performance goals, standards, or benchmarks.
  - o Program goals should be developed to support the Program's mission. Program goals are general statements about the results to be produced by the program.
- Develop measurements for the critical work processes or critical results
  - o Program Objectives are the specific milestones / targets to be achieved in order to accomplish the program goals. These objectives should be specific, measurable, ambitious, realistic, and time-bound.

**Step 2:** Once program mission, goals, and objectives, are clearly defined the IOUs will need to develop program logic models that support the outcome of Step 1 above. The logic models will need to show the flow between program activities, their outputs, and subsequent short-term, intermediate, and long-term outcomes as well as how program elements are linked and the influence of external influences. See below for an example of a logic model.

**Step 3:** Once initial program logic models are developed identification of appropriate program performance indicators will need to be overlaid within the program logic model showing what program activities and outcomes will be measured both internal and external to the program.

The IOUs should follow these guidelines for defining program performance indicators:

- Work directly from PT/LM, goals, objectives, program activities, outputs, outcomes to define performance indicators
- Attempt to develop a balanced set of performance indicators per program while avoiding redundancy or only tangentially related measures
- Reject proposed indicators that will not be meaningful to managers, policy makers and other relevant stakeholders
- Define indicators with high degree of face validity to intended users and external audience
- Examine the validity and reliability of proposed measures
- Define indicators for which a clear "data trail" will be available in order to allow for effective quality assurance procedures
- Provide clear definition of data sources and data collection procedures to facilitate uniform reporting from decentralized procedures
- Consider the trade-offs between the quality of performance indicators versus the cost of collecting the data

**Step 4:** Develop a system to implement collection, tracking, and reporting of program performance metrics.

- Organize and Clarify the system development process
- Define, evaluate, and select indicators

- Develop data collection procedure and tracking tools to be incorporated into EEGA.
- Provide quality assurance
- Specify the system design
- Identify reporting frequency and channels
- Determine the analytical and reporting formats
- Develop software applications
- Assign responsibilities for maintaining the system
- Implement full-scale system
- Use, evaluate, and modify the system as appropriate

### **Program Performance Indicator Worksheet**

1. Include a list of the utility and program administrator staff directly involved in deriving the program performance indicator metric. Include their title and contact information.

2. Describe each program performance indicator being proposed for this program. Indicate in a description for each, what type of performance indicator it is (see attached above). If the program indicator is being changed from an already approved program indicator indicate why the change is necessary. Provide additional analysis that adequately justifies the need to revise the metric as an attachment to this worksheet.

3. For each program performance metric being proposed indicate why you have selected them including how the metric meets the SMART convention (Specific, Measurable, Ambitious, Realistic, Time-bound)

4. State the program mission. The program mission is the basic purpose of a program, its reason for existing, and the general means through which it will accomplish its purpose in view of overarching goals and objectives (CEESP, BBEES, CPUC EE Goals).

5. Describe the program performance goals (both internal and external), standards, and / or benchmarks. Program goals should support the programs' overall mission and are general statements about the results to be produced by the program. If program goals are being revised from previous program goals indicate why the change is necessary providing additional analysis to justify the change.

6. Describe the critical work processes, program requirements, and critical results desired (both internal and external) linked to promotion of the program mission and goals above.

7. Describe how the proposed program performance metrics are a measure of the critical work processes or critical results identified above.

8. Describe what the program objectives are. Program objectives are the specific milestones and targets to be achieved to which the proposed program performance

metrics seek to measure. Program objectives should be chosen that promote accomplishment of the program goals and should meet the SMART convention described above. If the program objectives are being revised from previous program objectives indicate why the change is necessary. Provide additional analysis to justify this change.

9. Describe how the metrics will be collected, what data source they will come from, and how they will be tracked and reported.

10. Attach a program logic model that graphically represents what has been described in this worksheet. Logic models should depict the flow between program activities, their outputs, and subsequent short-term, intermediate, and long-term outcomes as well as how program elements are linked and the influence of external influences. Proposed program performance indicators should be incorporated at the appropriate locations within the logic model indicating what program activities and outcomes within the model will be measured both internal and external to the program (see example above).

11. Include a completed Program Performance Indicator Table as an attachment to this worksheet (see example below).



Metrics Appx  
2.3.pdf (109 KB)



Metrics Appx  
2.4.pdf (263 KB)