



Agenda

Sustainability Task Force

A Committee of the Chico City Council

Meeting of Thursday, October 27, 2016 – 5:30 p.m.

Municipal Center - 421 Main Street, Conference Room No. 1 in the Council Chambers

1. **CALL TO ORDER AND ROLL CALL**

2. **APPROVE SEPTEMBER 8, 2016 MEETING MINUTES**
Draft 09/08/16 minutes attached.

3. **INTRODUCTION OF NEW CIVICSPARK MEMBER BRYCE GOLDSTEIN (Principal Planner Vieg)**

4. **DISCUSSION REGARDING BCAG'S EFFORTS TO REDUCE GHG EMISSIONS AND COLLABORATION ON IMPLEMENTATION OF CAP ACTIONS (BCAG)**

5. **SOLAR AFFORDABLE HOUSING PROGRAM (GRID Alternatives)**
Attached is information regarding the GRID Alternatives Solar Affordable Housing Program.

6. **REPORTS & COMMUNICATIONS** - These items are provided for the STF's information. Although the STF may discuss the items, no action can be taken at the meeting. Should the STF determine that action is required, an item may be included on a subsequent agenda.

7. **BUSINESS FROM THE FLOOR** - Members of the public may address the STF at this time on any matter not already listed on the agenda, with comments being limited to three minutes. The STF cannot take any action at this meeting on requests made under this section of the agenda.

8. **ADJOURNMENT** - Next meeting scheduled for Thursday, December 8, 2016

ATTACHMENTS: 09/08/16 STF Meeting Minutes (Draft)
Information regarding GRID Alternative's Solar Affordable Housing Program

Agenda available from the City's website at www.ci.chico.ca.us under "**Meetings/Agendas**"

Prepared: 10/20/16
Posted: 10/20/16
Prior to: 5:30 pm

Community Development Department
421 Main Street, 2nd Floor, Chico, CA 95928
(530) 879-6800



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.

Sustainability Task Force Members:

Cheri Chastain
Lucas RossMerz

Dave Donnan
Mike Rubio, Vice Chair

William Loker
Mark Stemen, Chair

**CITY OF CHICO SUSTAINABILITY TASK FORCE
MINUTES OF THE MEETING OF
September 8, 2016**

Municipal Center
421 Main Street
Council Chambers, Conference Rm. 1

STF Members Present: Mark Stemen, Chair
Cheri Chastain
Dave Donnan
William Loker
Lucas RossMerz

STF Members Absent: Mike Rubio, Vice Chair

Staff Members Present: Brendan Vieg, Principal Planner
Jessica Henry, Administrative Analyst II

Guests Present: Armando Navarro, PG&E, Community Energy Manager
Kelly Theveos, PG&E
Nathan Aronson, RHA, Technical Director
Michael Reilley, NVPOA
Adam Fedeli, Real Estate Agent
Angela Casler, Chico Chamber
Becky Holden, BEC
Eric Nilsson
Bridgitte Dahrouj
Bruce Smith

1. CALL TO ORDER

Chair Stemen called the meeting to order at 5:35 pm. STF members, City staff, and guests were present as noted.

2. APPROVE JULY 28, 2016 MEETING MINUTES

The 07/28/16 minutes were approved 4-0-1; Rubio absent.

3. DISCUSSION WITH PG&E REGARDING CHICO ENERGY USE DATA, ENERGY EFFICIENCY PROGRAMS, AND COORDINATION WITH CIVICSPARK PUBLIC OUTREACH EFFORT (PG&E)

Principal Planner Vieg provided background on the agenda topic and introduced Armando Navarro, PG&E, Community Energy Manager.

Mr. Navarro gave a presentation to the STF entitled *City of Chico: Energy Use & GHG Emissions*. The presentation included a Community/City energy summary, status of CAP Actions involving PG&E, changes to PG&E's electricity mix and generation sources, and highlights of PG&E's new green initiatives (see attached presentation). Key STF discussion points included:

- A desire for a better understanding of the anomalous, sharp drop-off in community-wide natural gas use the past 3 years.
- Causes for increased energy use – house size, appliances, and people plugging in more stuff.
- PG&E's ability to provide data to support programs/initiatives of the STF.
- PG&E's willingness to assist in developing "benchmark" data to compare Chico's energy use against other similar communities
- A discussion regarding the significant increase in municipal natural gas use in 2013
- The City's efforts to install LED lights City-wide
- A discussion of developing a figure that shows residential energy use in relation to the age of housing stock
- PG&E's program to install E/V fueling stations has been scaled back significantly
- PG&E's commitment to coordinate with City on new programs and initiatives
- Collaboration with PG&E and the CivicSpark member on a community challenge

Nathan Aronson, RHA, Technical Director, shared how his company is promoting and implementing PG&E's many programs locally. They offer both commercial (Regional Direct Installment Program) and residential programs. He provided enrollment and use statistics for the Energy Savings Assistance program and the Residential Energy Fitness Pilot program. Over 2,000 homes have been treated under the pilot program, and there is an approximate 600-700kWh saved per home on average.

RHA also offered to be a partner in the upcoming community challenge and to help coordinate with the CivicSpark member.

4. DISCUSSION OF "TIME-OF-SALE" HOUSING INSPECTION PROGRAMS AND A REVIEW OF THE CITY'S RESIDENTIAL ENERGY CONSERVATION ORDINANCE (RECO) PROGRAM

STF Member Donnan provided background on different types of "time-of-sale" housing inspection programs.

Administrative Analyst Jessica Henry provided a comprehensive overview of the City's Residential Energy Conservation Ordinance (RECO) Program, including how the program works, number of homes retrofitted, what measures are most often installed, etc. Key STF discussion points included:

- Are any changes to the RECO form necessary to bring conformity with the CA Green Building Code – e.g., low flow toilet levels, etc.
- The age of Chico’s housing stock and the number of homes in Chico that were built before 1991
- Whether multi-family residences are being retrofitted at time of sale
- Is the 10-year certification an appropriate time
- Are the exemptions allowed by the program appropriate
- Opportunities to improve the RECO program

The STF requested that Building Official Leo DePaola attend a future meeting to discuss the need for any policy changes with the RECO program.

5. REPORTS & COMMUNICATIONS

STF Member Chastain provided an update regarding the August 11, 2016 Sustainable Business Expo/Happy Hour, and plans for next year’s event.

STF Member Chastain shared that SB32 was recently approved, which increases California’s GHG emission goals and extends to the program’s timeframe to 2030.

Principal Planner Vieg provided an update to the STF on the CivicSpark program, including the upcoming schedule for the CivicSpark member coming to Chico.

Principal Planner Vieg provided an update to the STF on the effort to get Chuck Lundgren under contract to update and enhance the City’s Sustainability website, and shared that the City Manager’s has given his approval for the STF to have a Facebook presence for educational purposes.

6. BUSINESS FROM THE FLOOR

Michael Reilley from the North Valley Property Owners Association shared a letter from the NVPOA regarding the Residential Remodel Retrofit program considered by the STF at its last meeting.

7. ADJOURNMENT

There being no further business from the STF, the meeting adjourned at 7:30 pm to the meeting of **Thursday, October 27, 2016.**

Date Approved

Brendan Vieg, Principal Planner

City of Chico:

Energy Use & GHG Emissions



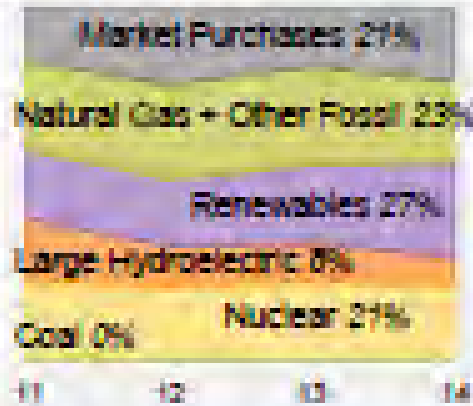
Armando Navarro
Community Energy Manager
September 2016



PG&E's Electric Mix (2003 - 2015)

Where Electricity Comes From

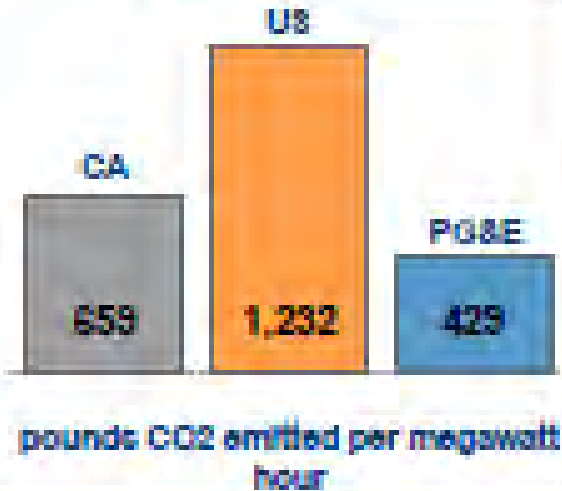
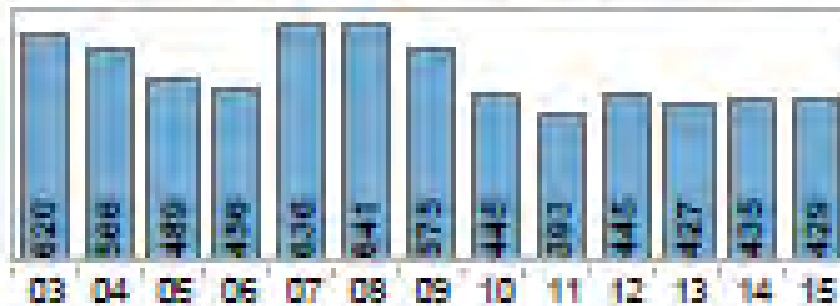
PG&E's delivers some of the cleanest electric power in the nation. Here's how we did it in 2014.



2014 Renewables



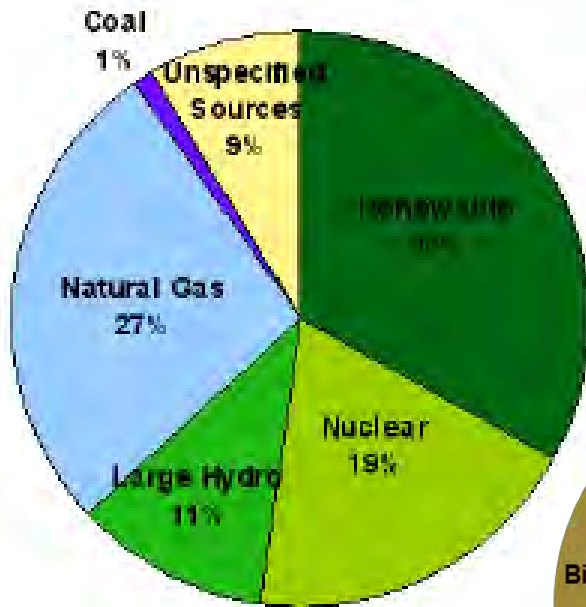
PG&E's 2015 average emissions from delivered electricity were nearly 1/3 the U.S. Average (right) (shown in lbs CO2 per MWh, 2015 estimated)



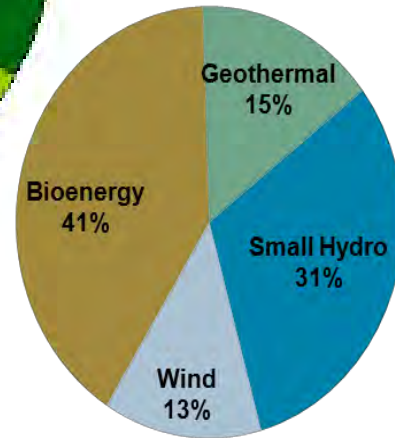


PG&E's Forecast Electric Mix (2020 - 2050)

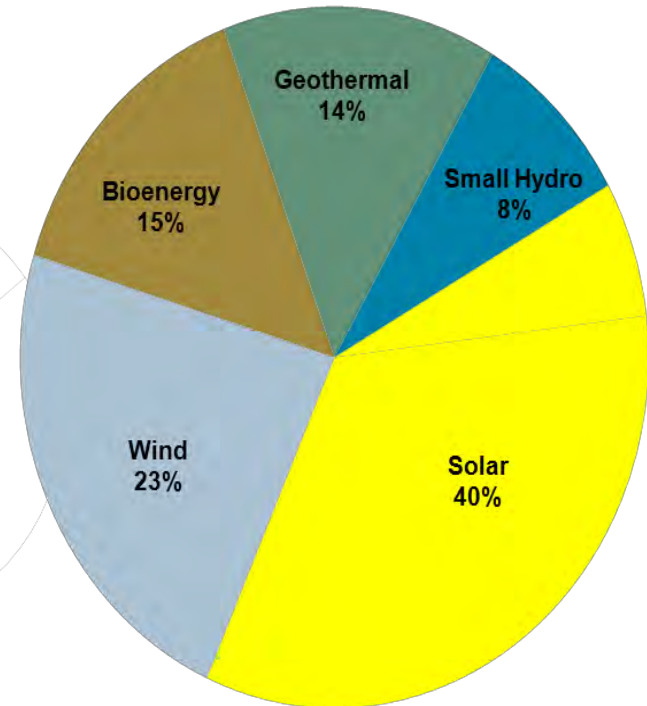
PG&E's Forecast 2020 Power Mix



2002



2020



In 2050 **50%** of electricity will come from renewable sources.



City of Chico Community Energy Summary (2005 - 2015)

Overall energy usage

This is the breakdown between **Non-Residential** and **Residential** energy usage in 2015 for Chico.

3,694,971

million British thermal units
in 2015*

Energy usage has
changed by 0.3% since
2005

This is the Year over Year
change in overall energy
usage from the prior year

*Consumption has been converted
to British thermal units (Btu) to
compare **electricity** and **natural
gas** usage

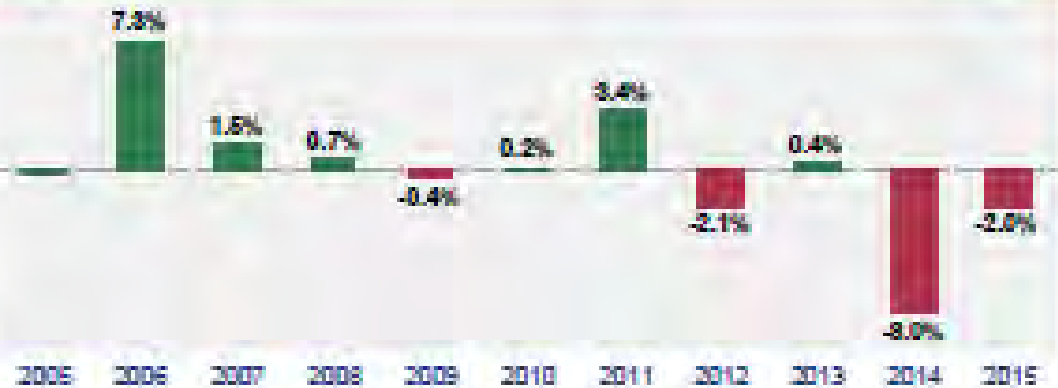
Non-Residential

49%

Residential

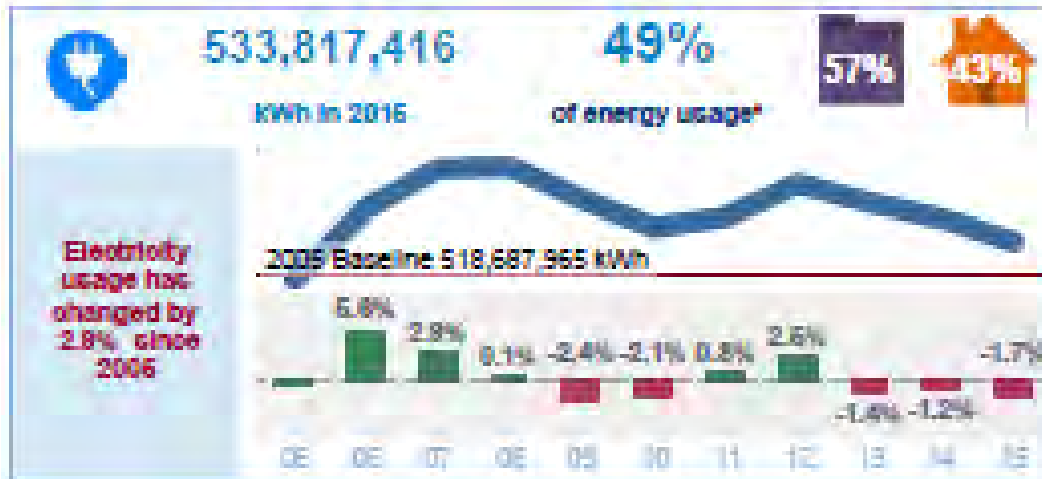
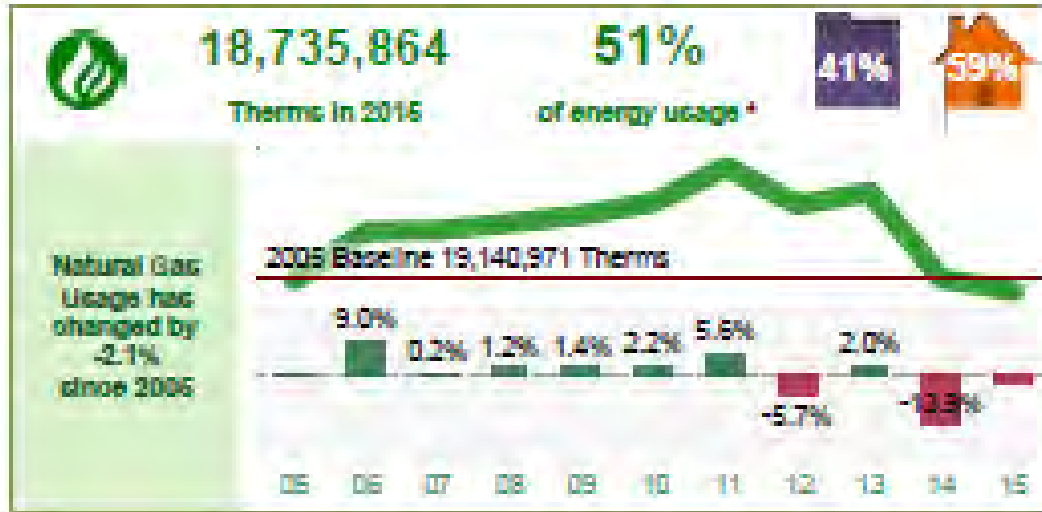
51%

2005 Baseline 3,683,880 MBtu



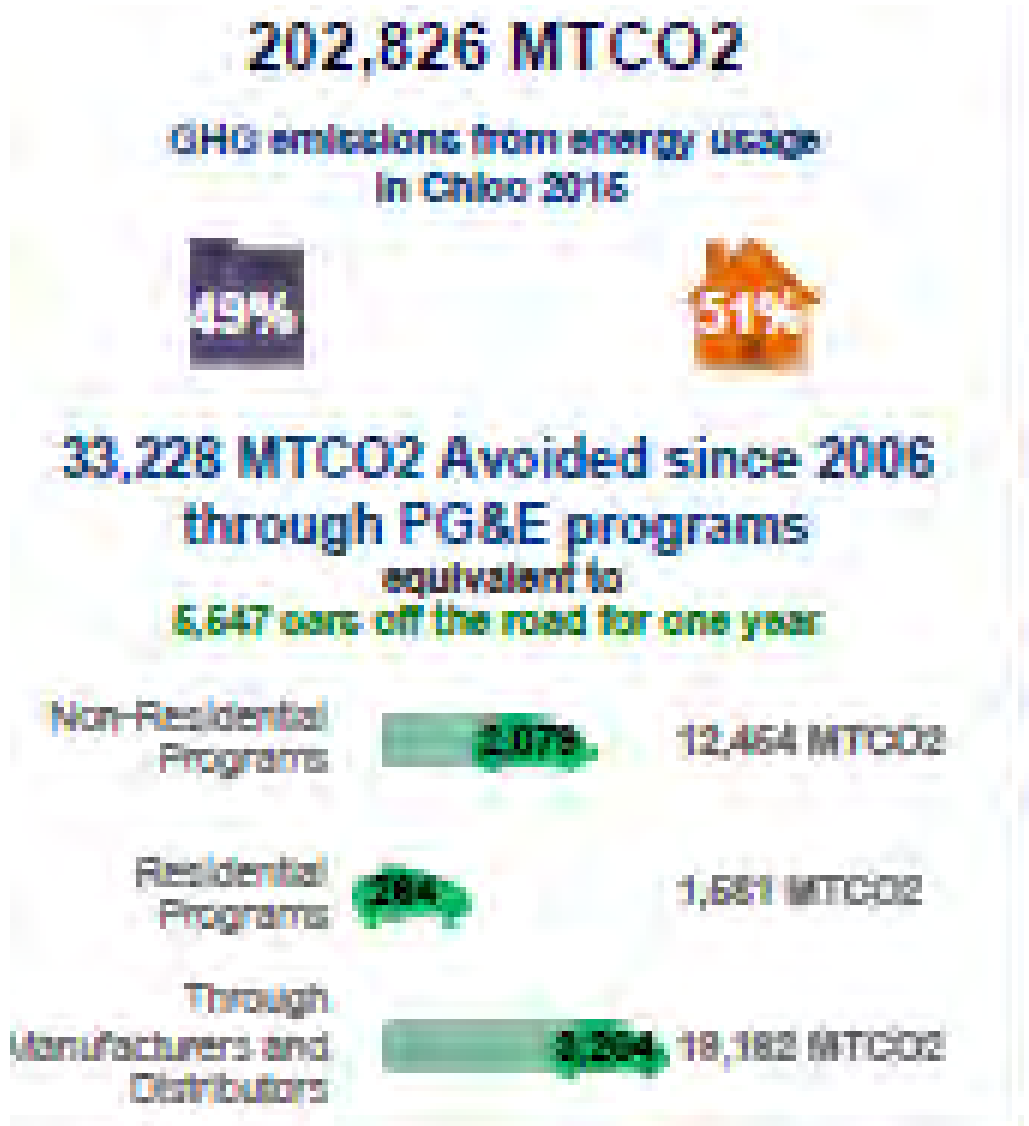


City of Chico Community Energy Summary (2005 - 2015)





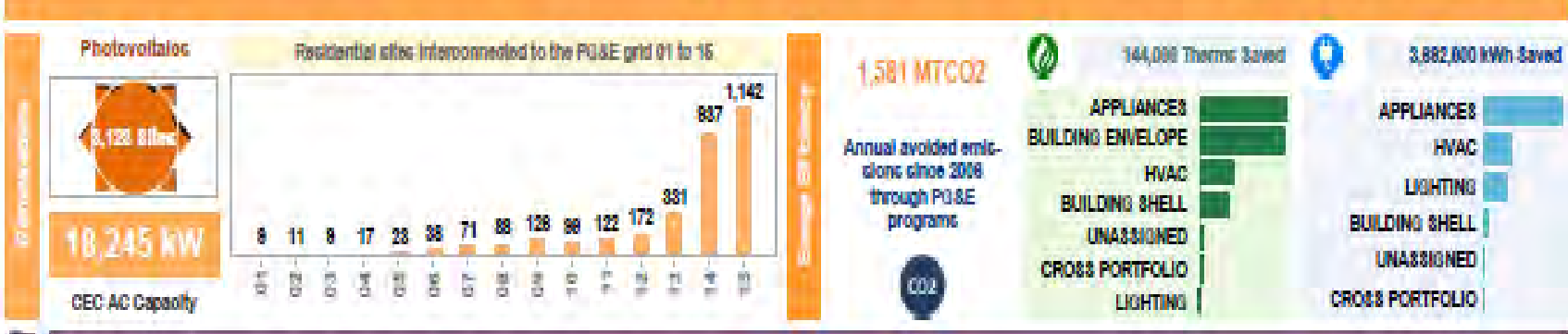
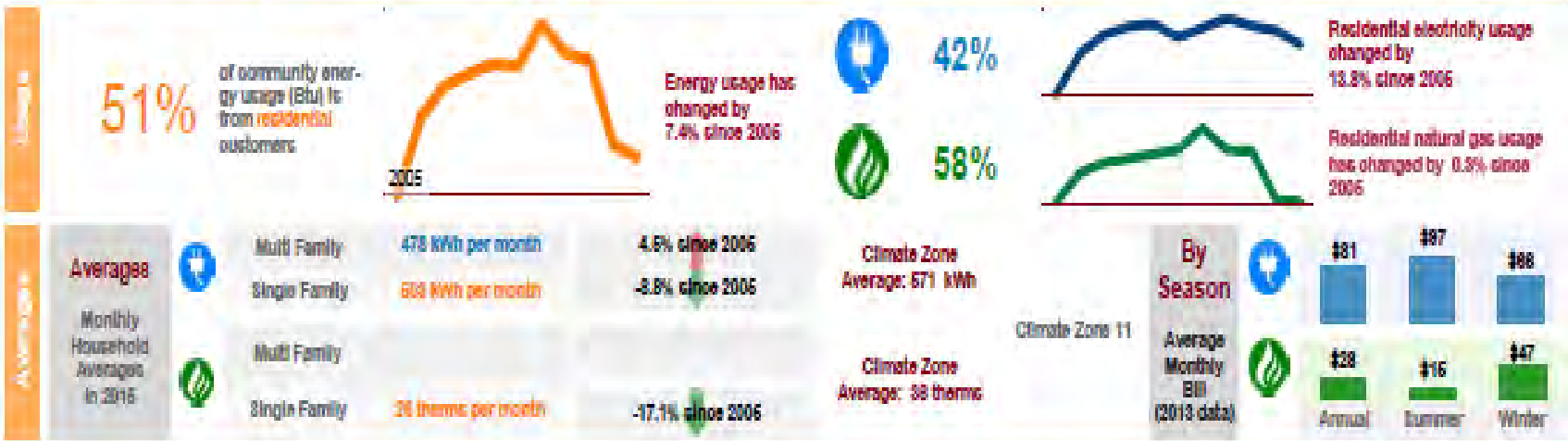
City of Chico Community GHG Emissions (2015)





City of Chico Community Energy Summary (2005 - 2015)

Residential Energy





City of Chico Community Energy Summary (2005 - 2015)

Non-Residential Energy Usage

49%

of Chico energy usage (Btu) is from non-residential customers



Non-residential energy usage has changed by -4.8% since 2005



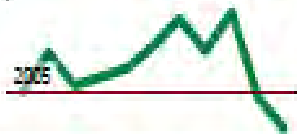
57%



Electricity usage has changed by -4.4% since 2005

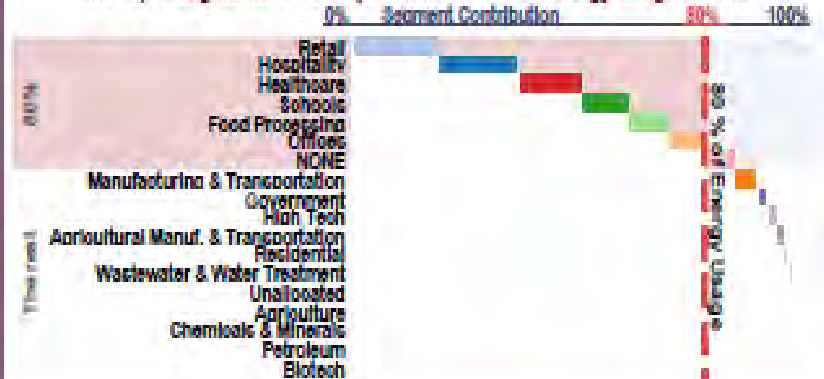


43%



Non-residential natural gas usage has changed by -5.4% since 2005

The top 7 segments were responsible for 80% of energy usage in 2015



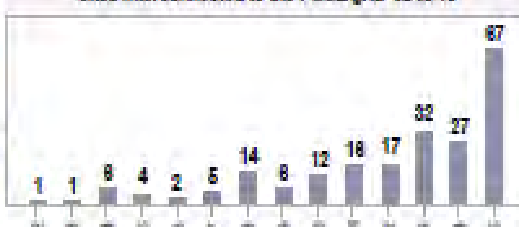
Photovoltaics



15,126 kW

CEC AC Capacity

Sites Interconnected to the PG&E grid 02 to 15



12,454 MTCO₂

Annual avoided emissions since 2008 through PG&E programs

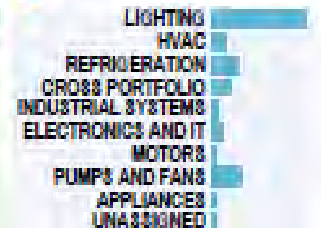
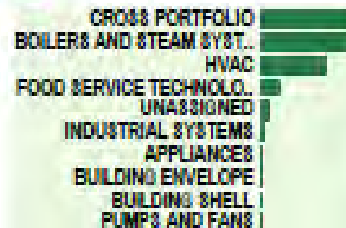
CO₂



267,000 Therms Saved

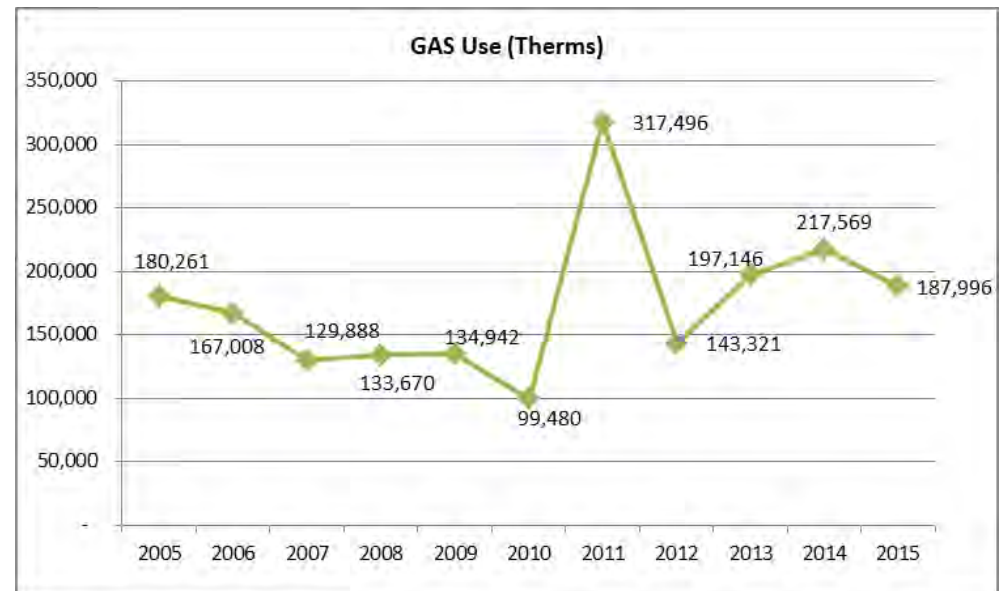
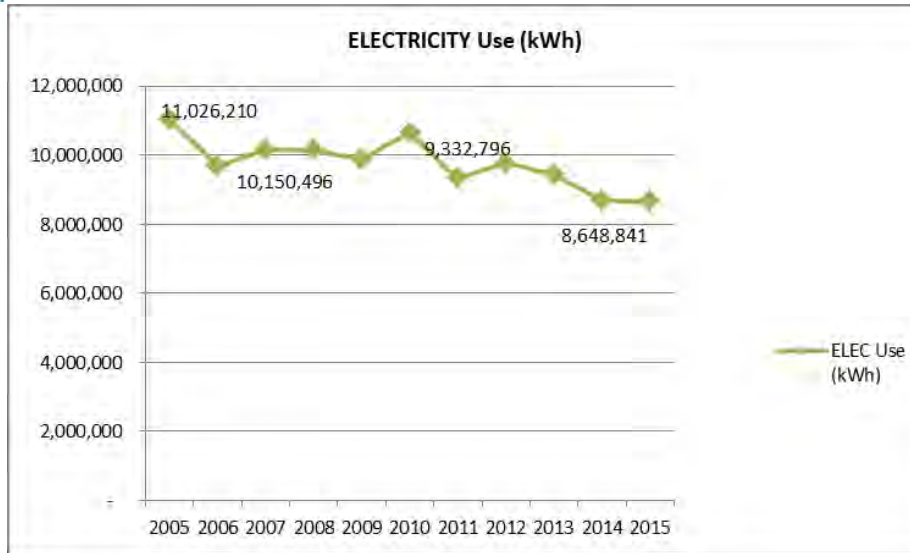


48,862,000 kWh Saved



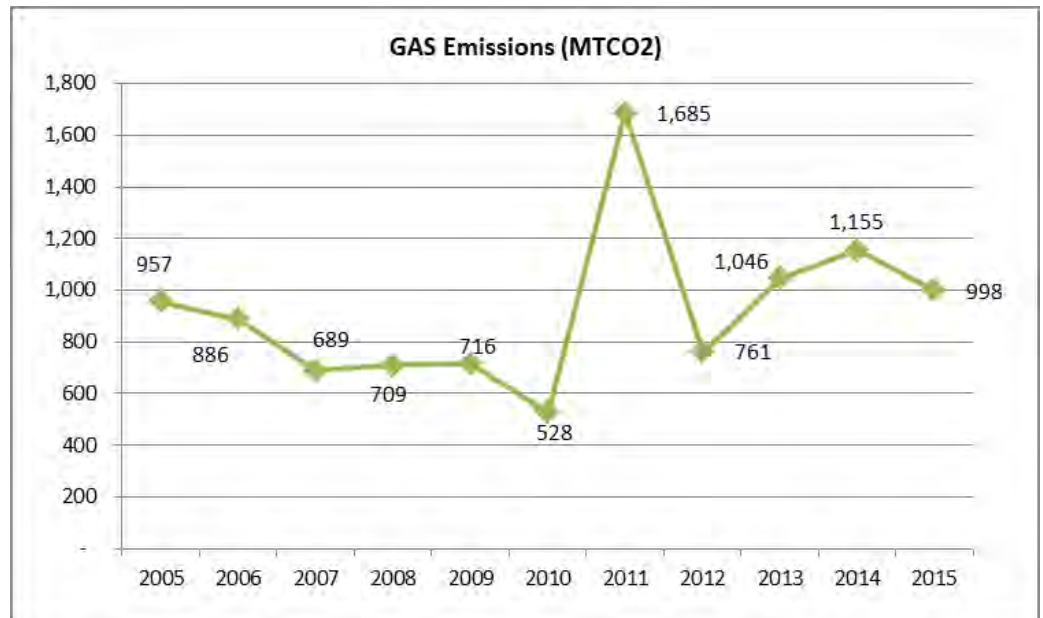
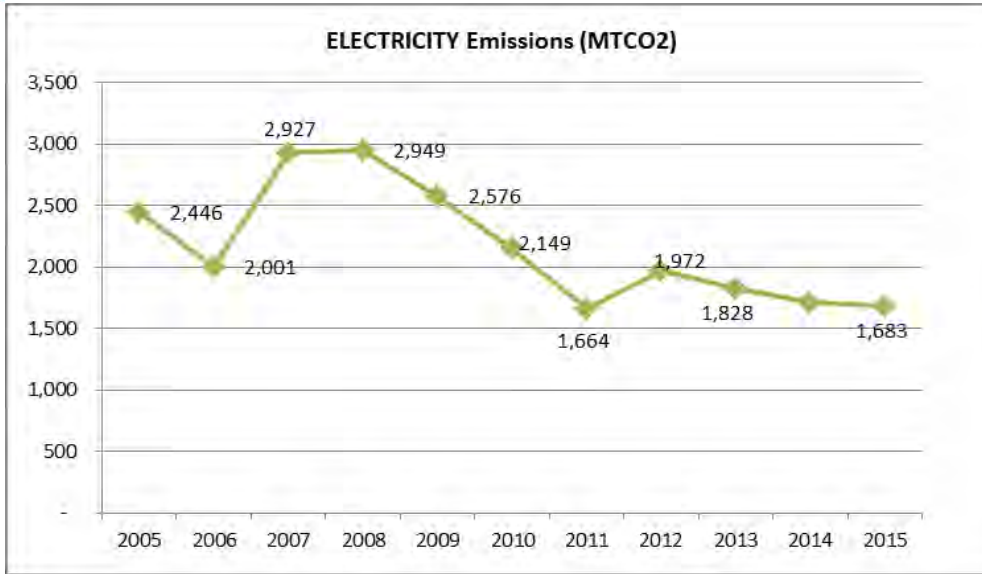


City of Chico Municipal Operations (2005 - 2015)





City of Chico Municipal Operations (2005 - 2015)





Chico Climate Plan – Phase 1 (2012 - 2015)

Energy Objectives 1: Upgrade & Tune Up Equipment

- 1.1 Energy Star Equipment and Appliances
- 1.3 HVAC Retrofits

Energy Objectives 2: Green Building & Energy Efficiency

- 2.1 Green Building Standards
- 2.2 Low Income Weatherization
- 2.5 Innovator Pilot

Energy Objectives 3: Improve Lighting Efficiency

- 3.1 LED Streetlights
- 3.2 Commercial Lighting Upgrades
- 3.3 Energy Fitness Program



Chico Climate Plan – Phase 2 (2016 – 2020)

Energy Objectives 1: Upgrade & Tune Up Equipment

1.2 Encourage Solar Hot Water Systems

1.3 Variable Speed Pumps & Solar Water Systems for Pools

Energy Objectives 2: Green Building & Energy Efficiency

2.3 Residential Energy Efficiency Challenge

Energy Objectives 4: Renewable Energy Generation

3.1 Increase City's Use of Renewables

PG&E Green Initiatives





Community Solar

- ❑ California Public Utilities Commission approved PG&E Community Solar program.
- ❑ PG&E began signing customers in 2016.

A way to buy up to 100% solar power that...

- ❑ Ensures new incremental solar will be developed
- ❑ Requires minimal effort on the part of the customer
- ❑ Enables the customer to benefit from the generally declining costs of solar



Other Green Initiatives

- **Climate Planning Support**
- **Electric Vehicle Infrastructure**
- **Zero Net Energy Pilots**

Thank You



Armando Navarro
Community Energy Manager
arn2@pge.com

Low Income Homeowner Solar Program



Start powering your home from the sun!

Program Services

GRID Alternatives provides solar electric systems for qualifying homeowners, including:

- Energy efficiency education.
- Design and installation of the system.
- Supervision and training of volunteers before and during the installation.
- 20-year guarantee, including maintenance and performance monitoring.
- Renewable energy and solar equipment education.

Program Benefits

- Save money - on average 80% of electric bill
- Safe, clean energy from the SUN.
- Long-term energy cost savings.
- Hands-on installation experience for volunteers, job trainees, and clients.

Eligibility Requirements

- You must own and live in your home.
- Your roof must be suitable for a solar electric system.
- Your total household income must be at or below 80% of the county's median income.
- You must reside in an area we serve.

Contact today to find out if you qualify: Call 866.921.4696 or visit www.gridsolar.org/nv-en

GRID Alternatives is a nonprofit organization and a licensed electrical and solar contractor, CA license number 867533.



EQUAL HOUSING
OPPORTUNITY
We Do Business in Accordance With the
Federal Fair Housing Law

About GRID Alternatives

GRID Alternatives is a nonprofit organization that brings the benefits of solar technology to families that need the financial savings most, while giving volunteers and job trainees hands-on solar installation experience. GRID Alternatives is a fully licensed solar contractor.

How Does Solar Work?

Solar electric systems, also called PV systems, use sunlight to produce electricity. Most rooftop PV systems are connected to the traditional electric grid to provide stable, uninterrupted access to electricity. During the day, when the system produces more than you use, you'll get credit for energy drawn from the grid at night. With a solar system connected to the grid, your electric meter can actually spin backwards!

HOUSEHOLD SIZE	ANNUAL GROSS INCOME
1	\$33,000
2	\$37,700
3	\$42,400
4	\$47,100
5	\$50,900
6	\$54,650
7	\$58,450
8	\$62,200

2015 HUD Income Limits for
Butte County



CHECK US OUT! ¡MIRE!

We're installing **Solar** for families in your Neighborhood!

¡Estamos Instalando Energía **Solar** en su Vecindario!

Come by our community meeting to see if you qualify for solar! Venga a nuestra instalación para saber si su hogar cumple los requisitos para tener energía solar.

WHEN/CUÁNDO:

November 9, 2016 6:00pm — 7:00pm

WHERE/DÓNDE:

City of Chico Council Chambers

421 Main Street, Room 1 Chico, CA 95927





Go Solar with GRID!
Cámbiese a la Energía Solar con GRID!



Sanja Cerni, Project Manager
3860 Morrow Lane Ste A
Chico, CA 95926
(530) 217-6116
infony@gridalternatives
www.gridalternatives.org

Save 50-90% on your electric bills!

GRID Alternatives, the only nonprofit solar provider, is partnering with City of Chico to provide low income homeowners with solar!

¡Ahorre entre el 50% y el 90% en sus facturas de electricidad!

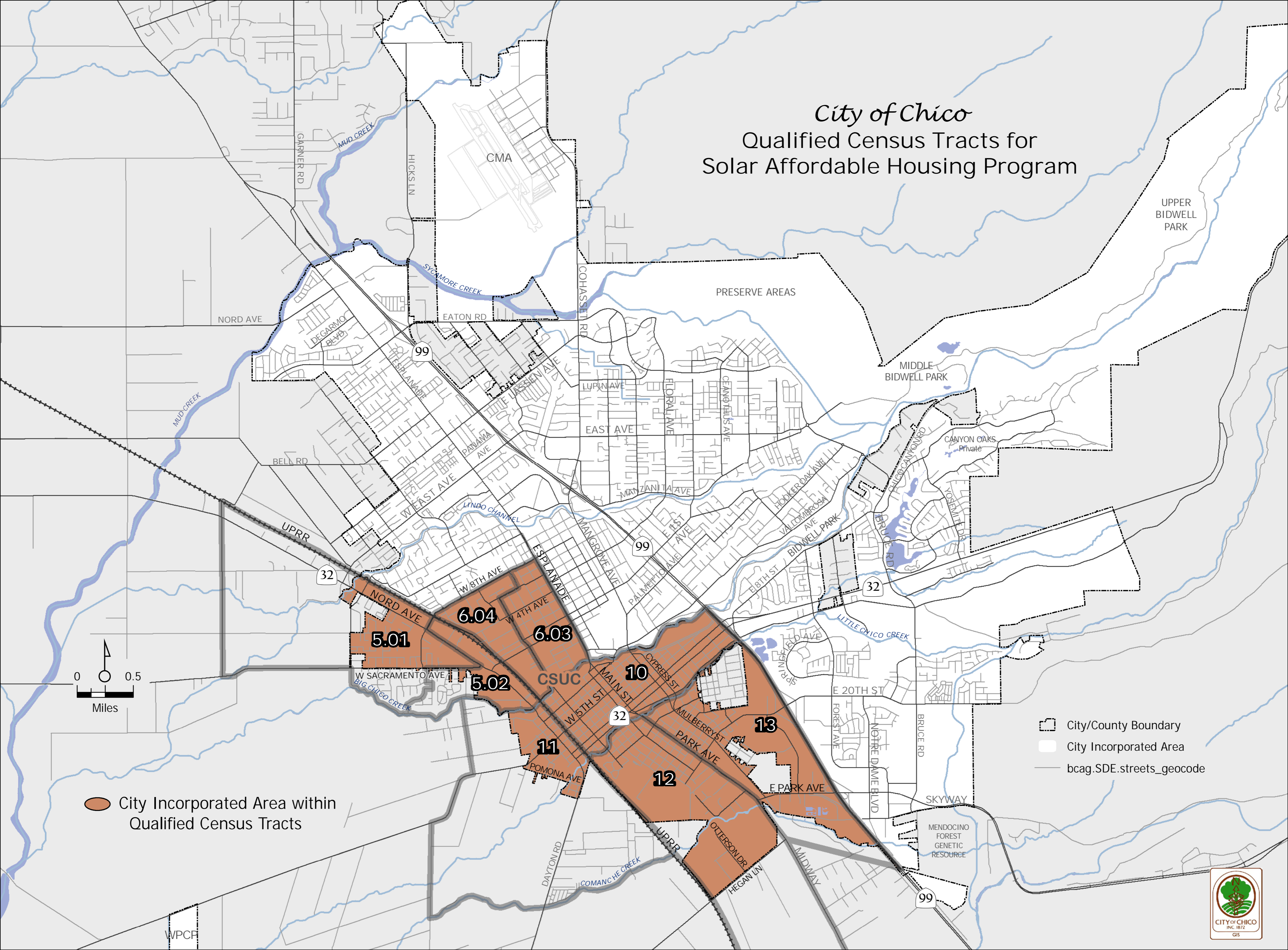
GRID Alternatives es el único proveedor de energía solar gratuito para la comunidad. Llame hoy para saber si cumple los requisitos para nuestro programa.


CONTRACTOR LICENSE # 867533




LICENCIA DE CONTRATISTA # 867533

City of Chico

Qualified Census Tracts for Solar Affordable Housing Program



 City Incorporated Area within Qualified Census Tracts

-  City/County Boundary
-  City Incorporated Area
-  bcag.SDE.streets_geocode

