



CHICO
CLIMATE ACTION COMMISSION
REGULAR MEETING AGENDA
THURSDAY, JANUARY 14TH, 2021 - 6:00 P.M.
MUNICIPAL CENTER – 421 MAIN STREET – COUNCIL CHAMBERS

Chico

CLIMATE ACTION COMMISSION

Cheri Chastain, Chair
Mark Stemen, Vice Chair
David Donnan
Kirk Monfort
Michael Nelson
Rebekah Casey
Vacant

**Copies of this agenda
available from:**
Community Development Department
411 Main Street, 2nd Floor
Chico, CA 95928
(530) 879-6800

Or

www.chico.ca.us

Posted: January 7, 2021
Prior to: 5:00 p.m.

The Commission appreciates your cooperation in turning off all cell phones during this meeting.

City Staff

Brendan Vieg – Community Development Director
Molly Marcussen – Associate Planner



Please contact the City Clerk at (530) 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.

Information and Procedures Concerning Climate Action Commission Meetings

Public Participation:

All members of the public may address the Climate Action Commission on any item listed on the agenda. Public participation in the hearing process is encouraged.

Please step up to the podium microphone when addressing the Commission.

Each speaker will be asked to voluntarily state his/her name before speaking, and after speaking to voluntarily write his/her name on a record to be maintained by the City Staff.

The Commission and City staff will ensure order and decorum during all Commission meetings. Persons demonstrating rude, boisterous or profane behavior will be called to order by the Chair. If such conduct continues, the Chair may call a recess, requesting the removal of such person(s) from the Council Chamber, adjourn the meeting or take other appropriate action.

Time Limit:

Presentations should be limited to a maximum of three (3) minutes, unless otherwise determined by the Chair.

A speaker may not defer his/her time to other speakers.

Groups or organizations are encouraged to select a spokesperson to speak on their behalf. Each subsequent speaker is encouraged to submit new information, rather than repeating comments made by prior speakers.

Written Material:

The Climate Action Commission may not have sufficient time to fully review written materials presented at the public hearing. Interested parties are encouraged to provide written materials at least eight (8) days prior to the public hearing to allow distribution with the Climate Action Commission's agenda packet to provide adequate time for review by the Climate Action Commission. Written materials submitted in advance of the public hearing must be submitted to the City of Chico, Community Development Department, 411 Main Street, 2nd Floor, or by mail to: P. O. Box 3420, Chico, CA 95927. Materials related to an item on this agenda submitted to the Climate Action Commission after distribution of the agenda packet are available for public inspection in the Community Development Department at 411 Main Street, 2nd Floor, Chico, CA 95928 during normal business hours.

Hearing Impaired:

Anyone who has difficulty hearing the proceedings of a meeting may be provided with a portable listening device by requesting one from the City Staff. The device works directly from the public-address system, and the listener can hear all speakers who are using a microphone.

Special Presentations:

Special presentations which include slides, films, etc. during the course of a meeting will only be allowed with **prior** approval of the Climate Action Commission.

Business from the Floor:

The Chair will invite anyone in the audience wishing to speak to the Climate Action Commission to identify themselves and the matter

they wish to discuss which would involve matters not already on the posted agenda.

The Commission may also be direct that a matter be placed on a future agenda, provide direction to staff, or request that staff research a particular issue. No action may be taken until a subsequent meeting.

Agenda Copies are:

-Available at the meeting.

-May be mailed by subscription, at an annual cost set forth in the City of Chico Fee Schedule.

-May be picked up the Friday prior to the meeting at the Community Development Department without charge.

-Available on the internet at www.chico.ca.us

Copies of Agenda Reports are:

-Available for public inspection at City of Chico Community Development Department the Friday prior to the meeting.

-Copies may be obtained after payment of applicable copy fees.

Agenda Items:

The agenda items will be considered in the order listed unless the Commission requests a change. In order that all items may be considered, any item may be continued to another meeting if it appears there will be insufficient time for full consideration of the item.

Items Not Appearing on Posted Agenda:

This agenda was posted on the Council Chamber bulletin board at least 72 hours in advance of this meeting. For each item not appearing on the posted agenda, upon which the Climate Action Commission wishes to take action, the Commission must make one of the following determinations:

1. Determine by a majority vote that an emergency exists as defined in Government Code Sec. 54956.5.
2. Determine by a two-thirds vote, or by a unanimous vote if less than two-thirds of the Climate Action Commission is present, that need to take immediate action and that the need for action came to the attention of the City subsequent to the agenda being posted.

Use of Cell Phones During Meetings:

The Climate Action Commission appreciates your cooperation in turning off all cell phones.

Appeal of Climate Action Commission Decision:

Any aggrieved person or persons dissatisfied with a Climate Action *Commission* decision may appeal that decision to the City Council within 10 calendar days. In accordance with Government Code Section 65009, if any person(s) challenges the action of the Climate Action *Commission*, said person(s) may be limited to raising only those issues that were raised at the public hearing described in this notice, or in written correspondence delivered to the Climate Action *Commission* at, or prior to, the public hearing.

CITY OF CHICO
CLIMATE ACTION COMMISSION
REGULAR MEETING OF THURSDAY, JANUARY 14TH, 2021
Municipal Center - 421 Main Street - Council Chambers - 6:00 pm

PUBLIC PARTICIPATION: *This meeting is being conducted in accordance with Executive Order N-29-20. Members of the public may virtually attend the meeting using the City’s WebEx platform or by sending an email to the following email address.*

To provide email comments, please submit an email with the subject line “PUBLIC COMMENT ITEM”, sent to climatepubliccomments@chicoca.gov during the meeting, prior to the close of public comment on an item. The public is encouraged not to send more than one email per item and not to comment on numerous items in one email.

WebEx public participants may use the following information to remotely view and participate in the Climate Action Commission meeting online:

Event Name: Climate Action Commission meeting

Date/Time: Thursday, January 14, 2021, at 6:00 PM

Event URL: <https://chico.webex.com/chico/onstage/g.php?MTID=ed1d33afd106d440cb9b65e6246e77c0a>

Event #: 146 299 2132

Password: Climate2021!

Call-in #: 1-214-459-3653 **Call-in Password:** 146 299 2132

1. CALL TO ORDER

1.1. Roll Call

2. CONSENT AGENDA

*All matters listed under the Consent Agenda are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a member of the Climate Action Commission. A member of the public may request that an item be removed, provided the item does not relate to a noticed hearing which has been closed to further public comment. **Items removed from the Consent Agenda will be considered immediately following the approval of the Consent Agenda.***

2.1. Approval of Minutes

December 10, 2020 (Attachment A).

3. ITEMS TO BE DISCUSSED

3.1. Virtual Community Outreach Update

Rincon Consultants will provide an update on the community outreach event that took place from November 19th to December 20th (Attachment B).

3.2. CivicSpark Initiative Update

CivicSpark Fellow Austin Powell will provide the commission with a regular update regarding his effort to develop long-term strategies for mitigating anticipated local impacts of climate change consistent with SB 379.

3.3. Guest Speaker Discussion

The commission will hold a discussion regarding future guest speakers and presentations.

4. BUSINESS FROM THE FLOOR/PUBLIC COMMENT

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

5. REPORTS & COMMUNICATIONS

These items are provided for the Commission 's information. Although the Commission may discuss the items, no action can be taken at this meeting. Should the Commission determine that action is required, the item or items may be included for action on a subsequent posted agenda.

6. ADJOURNMENT

Adjourn to the Adjourned Regular Meeting of Thursday, February 11th, 2021.

CITY OF CHICO
CLIMATE ACTION COMMISSION
REGULAR MEETING OF THURSDAY, DECEMBER 10, 2020
Municipal Center - 421 Main Street - Council Chambers - 6:00 pm

Commissioners Present: Cheri Chastain, Chair
Mark Stemen, Vice Chair
David Donnan
Kirk Monfort
Michael Nelson

Commissioners Absent: Rebekah Casey

Staff Members Present: Brendan Vieg, CDD Director
Molly Marcussen, Associate Planner
Austin Powell, CivicSpark Fellow

1. CALL TO ORDER

1.1. Roll Call:

Commissioners and staff were present as noted above. Commissioner Monfort joined late at 6:29 pm.

2. CONSENT AGENDA

2.1. Approval of Minutes

Commissioner Nelson made motion to approve the minutes. Vice Chair Stemen seconded. **Minutes approved 4/2/0.**

3. ITEMS TO BE DISCUSSED

3.1. Virtual Community Outreach Update

Nicole Porter from AIM Consulting provided an update to the commission on the community outreach event. The outreach event deadline was extended to December 15th, 2020. As of 12/10/20, there have been over 1,800 visits to the online workshop, over 230 comments received, and over 47 individual households participate.

3.2. Measure Quantification Discussion

Rincon Consultants lead a discussion on the Draft Climate Action Plan Update Measure Quantification Appendix (**Attachment B**). The commission was asked to provide any additional comments on the Appendix to Associate Planner Molly Marcussen by Friday December 18th.

3.3. CivicSpark Initiative Update

CivicSpark Fellow Austin Powell provided the commission with an update regarding his effort to develop long-term strategies for mitigating anticipated local impacts of climate change consistent with SB 379. Fellow Powell noted that he is currently working on a stakeholder engagement plan and stakeholder survey, and has reached out to other jurisdictions who have completed SB 379 to learn best practices.

4. **BUSINESS FROM THE FLOOR/PUBLIC COMMENT**

None

5. **REPORTS & COMMUNICATIONS**

Associate Planner Molly Marcussen informed the commission that the deadline for City Board and Commission recruitments has been extended to January 4th. Vice Chair Stemen made a request to discuss potential guest speakers at the next meeting.

6. **ADJOURNMENT**

Meeting adjourned at 6:52 to the Regular Meeting of Thursday, January 14, 2021.

Virtual Community Workshop Summary

Introduction

The City of Chico is developing a Climate Action Plan (CAP), which will provide the basis for prioritizing, budgeting, implementing, and monitoring greenhouse gas reduction strategies. The CAP will be the City’s roadmap for achieving newly established greenhouse gas emission reduction goals for 2030-2050. Based upon an inventory analysis of Chico’s current greenhouse gas emissions, best practices in the environmental science and planning industry, and stakeholder and community input, the City and project team have developed a list of proposed climate action measures.

The City hosted a virtual community workshop in both English and Spanish to build awareness about the CAP effort, present key proposed strategies that will support the City’s goal of reducing greenhouse gas emissions and obtain informed input on these key strategies. The virtual workshop was open for one month, from November 19 through December 20.

Approximately 57 households participated and provided more than 275 comments and responses to the workshop prompts.

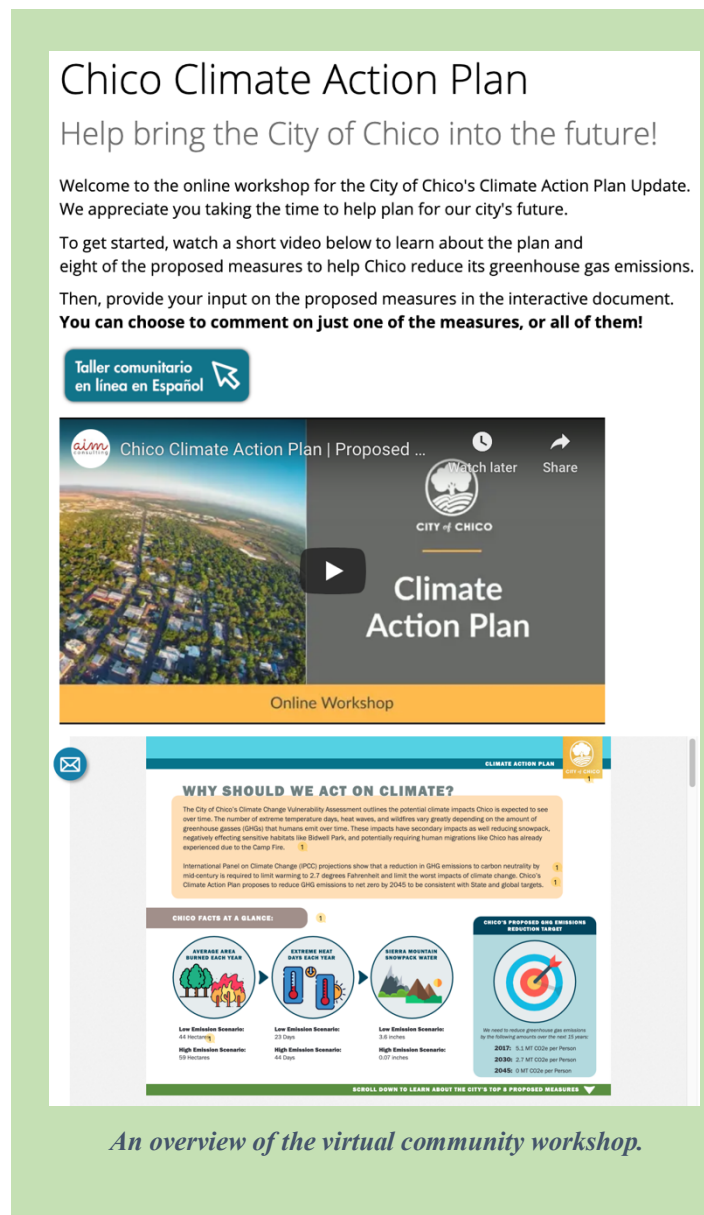
Methodology

The virtual community workshop consisted of a short informational video and nine-page interactive document. The video provided an introduction to the CAP effort and an overview of the eight key proposed strategies, or measures, developed for the plan.

You can watch the video at the following link:
<https://www.youtube.com/watch?v=OQxsRtbqThw>

The interactive document included an introduction page and one page explaining each proposed measure, how it might be implemented, and anticipated associated costs. Each proposed measure page asked participants to respond to a yes or no question, “Do you think this measure could work in Chico?”

Additionally, respondents were able to submit open-ended comments about each measure, view other respondents’ comments, and reply to them.



Chico Climate Action Plan
Help bring the City of Chico into the future!

Welcome to the online workshop for the City of Chico's Climate Action Plan Update. We appreciate you taking the time to help plan for our city's future.

To get started, watch a short video below to learn about the plan and eight of the proposed measures to help Chico reduce its greenhouse gas emissions. Then, provide your input on the proposed measures in the interactive document. **You can choose to comment on just one of the measures, or all of them!**

Taller comunitario en línea en Español

Chico Climate Action Plan | Proposed ...

Climate Action Plan

Online Workshop

WHY SHOULD WE ACT ON CLIMATE?

The City of Chico's Climate Change Vulnerability Assessment outlines the potential climate impacts Chico is expected to see over time. The number of extreme temperature days, heat waves, and wildfires vary greatly depending on the amount of greenhouse gases (GHGs) that humans emit over time. These impacts have secondary impacts as well: reducing snowpack, negatively affecting sensitive habitats like Bidwell Park, and potentially requiring human migrations like Chico has already experienced due to the Camp Fire.

International Panel on Climate Change (IPCC) projections show that a reduction in GHG emissions to carbon neutrality by mid-century is required to limit warming to 2.7 degrees Fahrenheit and limit the worst impacts of climate change. Chico's Climate Action Plan proposes to reduce GHG emissions to net zero by 2040 to be consistent with State and global targets.

CHICO FACTS AT A GLANCE:

Category	Low Emissions Scenario	High Emissions Scenario
Average Area Burned Each Year	44 Acres	49 Acres
Extreme Heat Days Each Year	23 Days	44 Days
Mean Monthly Snowpack Water	3.8 inches	0.07 inches

CHICO'S PROPOSED GHG EMISSIONS REDUCTION TARGET

We need to reduce greenhouse gas emissions by the following amounts over the next 30 years:

- 2030: 1.1 MT CO2e per Person
- 2040: 0.1 MT CO2e per Person
- 2050: 0.1 MT CO2e per Person

SCROLL DOWN TO LEARN ABOUT THE CITY'S TOP 8 PROPOSED MEASURES

An overview of the virtual community workshop.

The proposed measures described in the workshop are as follows:

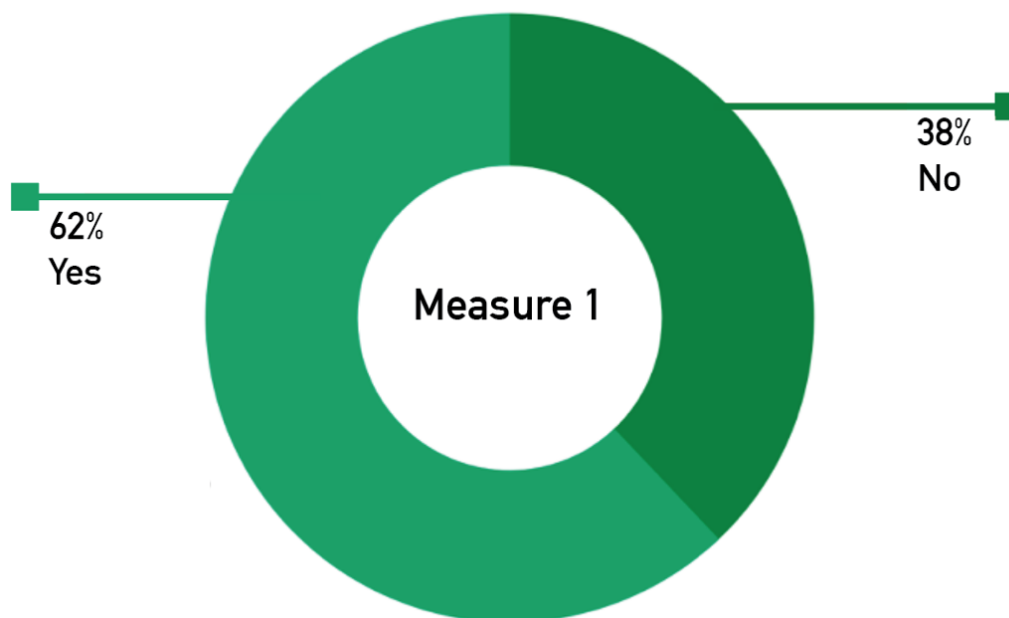
1. Require new construction to be all-electric: Adopt a new building ordinance which bans the installation of natural gas in new construction for building types where electrification is shown to be cost-effective.
2. Electrify existing residential buildings in two phases: first incentivize, and then require, electrification of existing buildings. Adopt an electrification ordinance for existing residential buildings in 2025 to transition natural gas appliances to electric at time-of-replacement.
3. Electrify municipal buildings: Adopt an electrification plan to convert municipal buildings to all-electric.
4. Provide 100% renewable electricity to the community.
5. Continue to implement the Chico Bicycle Master Plan.
6. Improve ZEV (zero emission vehicle) infrastructure to allow for a 25% shift from combustion vehicles to ZEVs by 2030.
7. Work with waste haulers and other stakeholders to meet the goals of SB1383 and divert at least 75% of organic waste from the landfill through an expansion of composting services and edible food diversion.
8. Expand the urban tree canopy by 700 trees by 2022 and 4,500 trees by 2030 to sequester carbon, decrease temperatures, save energy, and improve air quality within Chico.

Results

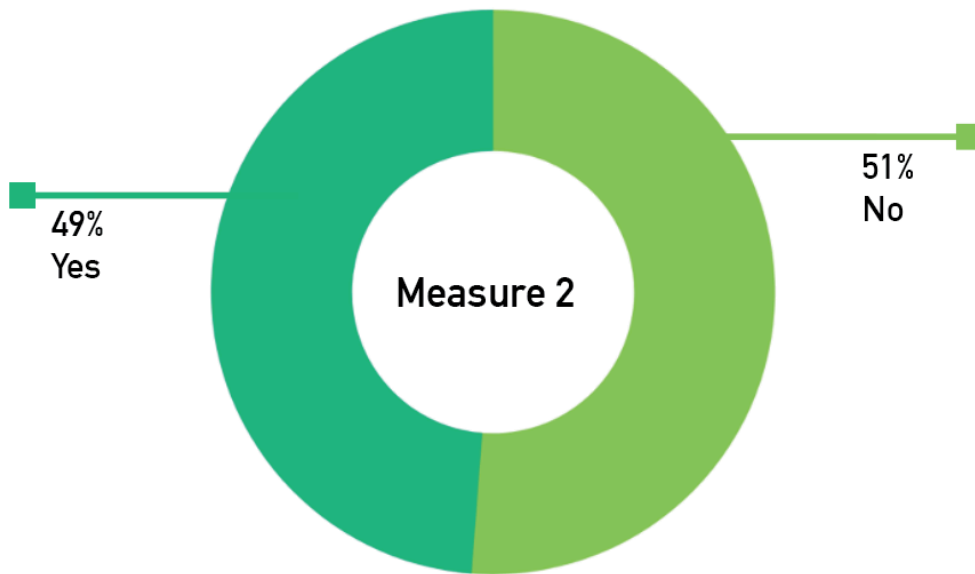
Below is a summary of community responses to the workshop, represented by graphs. A full list of all comments is available in this document's Appendix.

Measure 1: Require new construction to be all-electric

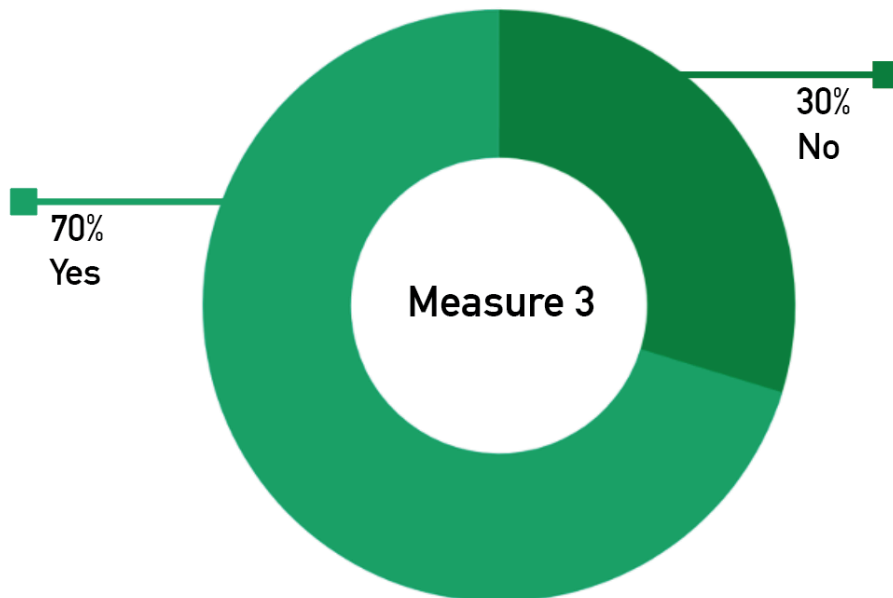
Do you think this measure could work in Chico?



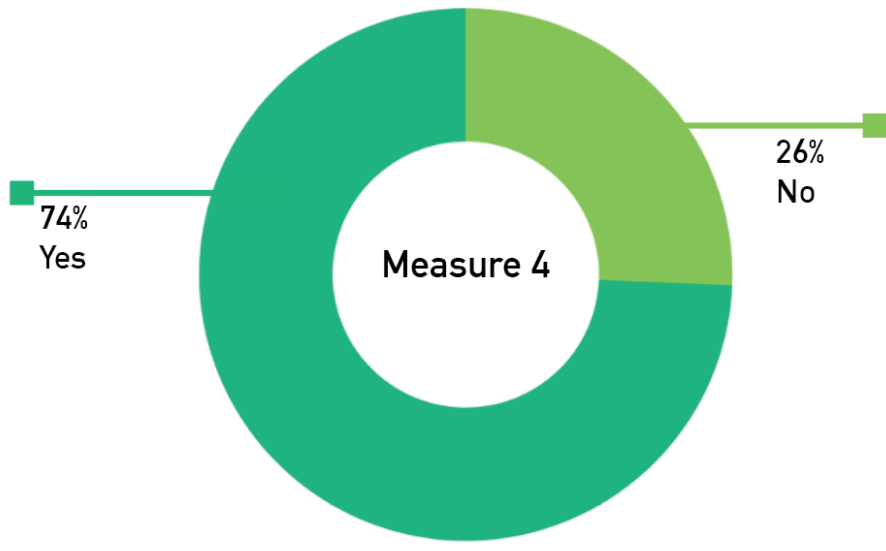
Measure 2: Electrify existing residential buildings
Do you think this measure could work in Chico?



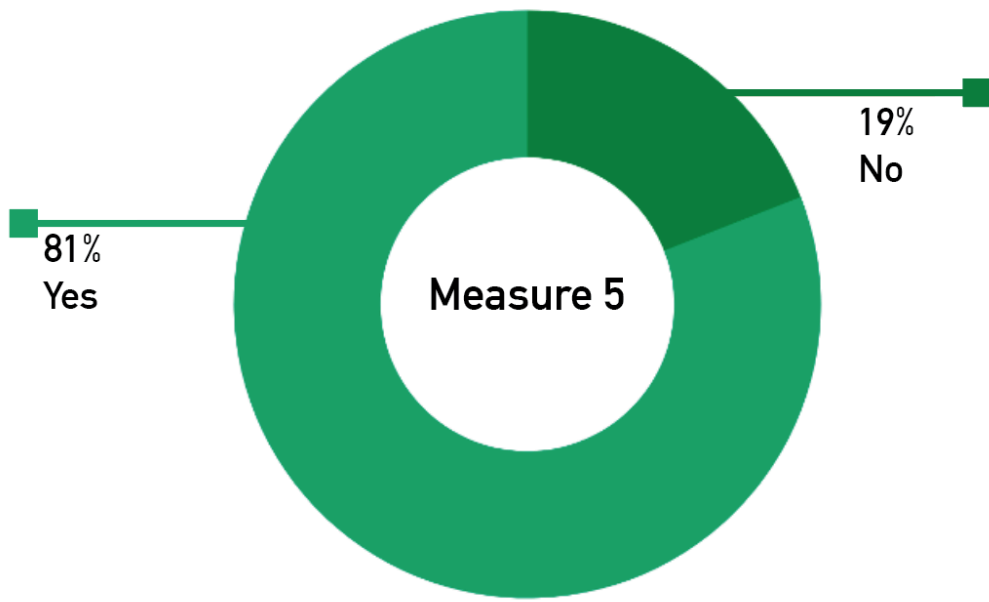
Measure 3: Electrify municipal buildings
Do you think this measure could work in Chico?



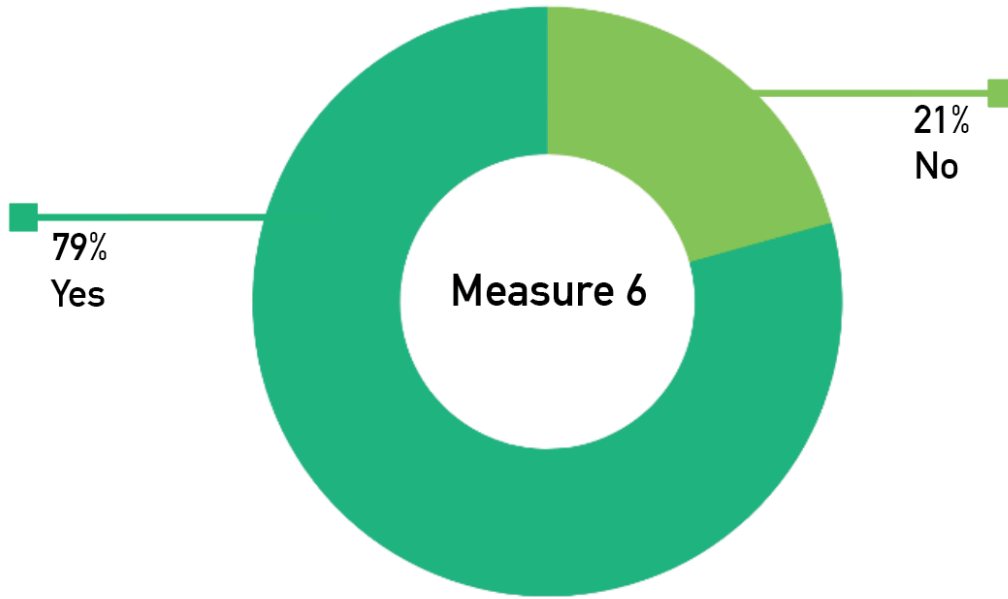
Measure 4: 100% renewable energy
Do you think this measure could work in Chico?



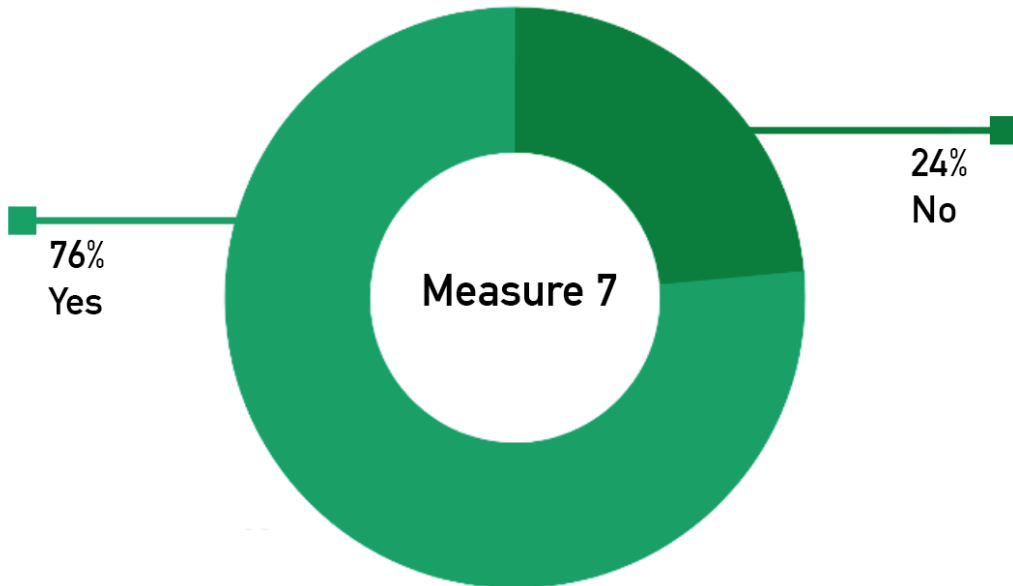
Measure 5: Implement the Chico Bicycle Master Plan
Do you think this measure could work in Chico?



Measure 6: Improve zero-emission vehicle infrastructure
Do you think this measure could work in Chico?

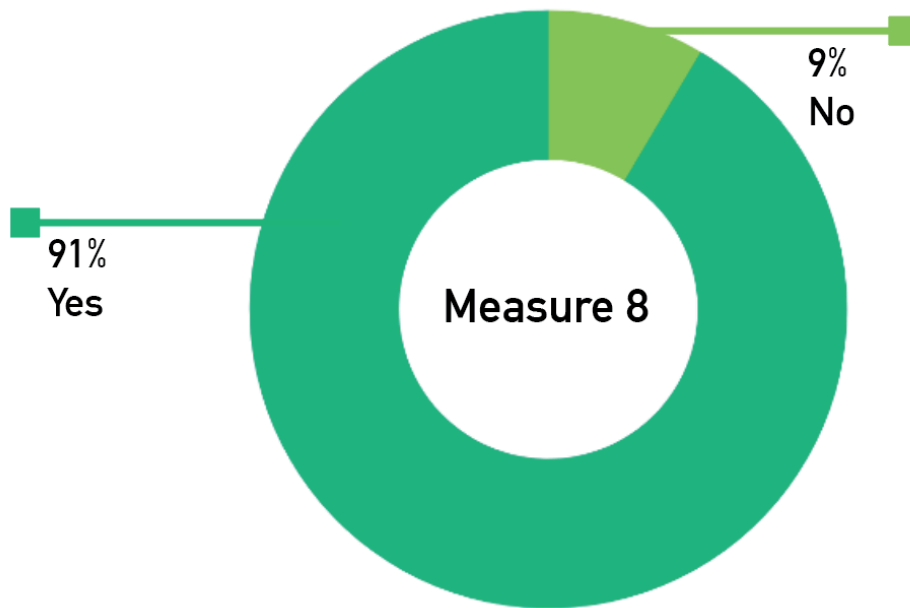


Measure 7: Reduce organic waste
Do you think this measure could work in Chico?



Measure 8: Expand the urban tree canopy

Do you think this measure could work in Chico?



Building Awareness

The overall virtual workshop effort included a public information campaign to build awareness about the project and the City of Chico's goal to reduce greenhouse gas emissions. The project team implemented a variety of strategies to reach the community at large and inform them about the second phase of the Chico Climate Action Plan and the virtual workshop. The project team reached more than 4,490 community members in the Chico area through the strategies described below.

Community Partnerships

Fifty stakeholders received personal calls and emails asking them to share information about the virtual workshop and project with their organization through their existing communication links, including e-newsletters and social media. The following organizations shared information:

- 350 Butte County – social media, email distribution
- Butte County Air Quality Management – email distribution
- Butte Environmental Council – email distribution
- California State University Chico – campus announcement to students / faculty / staff, Green Campus social media, Campus Sustainability Committee
- Chico Builders Association – email newsletter
- Chico Chamber of Commerce – information on their public calendar



- Chico Noon Rotary Club – email distribution
- Chico Unified School District – social media
- Chico Velo Cycling Club- social media
- City of Chico – news release to local and regional media outlets, social media
- Enloe Medical Center – email to staff
- Environmental Coalition of Butte County – email distribution
- Holiday Inn Express and Suites Chico – posted in lobby
- Sierra Club - Yahi Group – email distribution
- Valley Contractors Exchange – email newsletter

Digital Content Distribution

Email notifications were sent to more than 200 community members in the Chico area with information about the virtual workshop and a call to action to participate. The emails received a 39% open rate and 35% click rate.

The City of Chico shared information about the virtual workshop on their website, social media pages, and via a media release to local and regional news outlets.

Social Media Targeted Advertisements

The following social media analytics include reach, post engagement, and link clicks. Reach refers to the total number of people who have viewed the social media advertisement. Post engagement includes all actions that people take involving ads while they are running. Post engagements can include actions such as reacting to, commenting on or sharing the ad, claiming an offer, viewing a photo or video, or clicking on a link.

By Geographic Location

Post #1: Chico (11/20 – 11/25)

- Reach: 1,016
- Engagement: 58

Post #2: Chico (12/8 – 12/15)

- Reach: 622
- Engagement: 50

Post #3: Chico (12/8 – 12/15)

- Reach: 531
- Engagement: 12

By Demographic

Post #2: Spanish-speaking community (11/20 – 11/25)

- Reach: 624
- Engagement: 11



Social media messages were posted on Facebook and Instagram and reached a total of more than 4,490 residents.

Page Views

Based on the virtual community workshop website analytics report, workshop received approximately 2,375 views with more than 950 unique pages views. On average, workshop visitors spent about forty minutes reviewing the workshop's interactive document content.

Appendix

- Interactive Workshop Document
- Comprehensive List of Workshop Comments
- Notification Flier

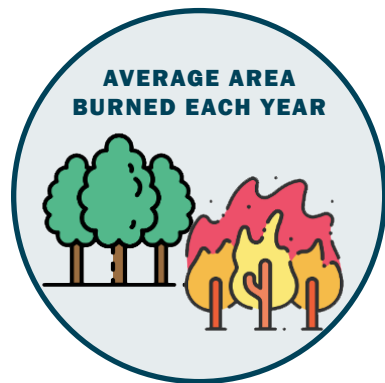
Appendix

WHY SHOULD WE ACT ON CLIMATE?

The City of Chico’s Climate Change Vulnerability Assessment outlines the potential climate impacts Chico is expected to see over time. The number of extreme temperature days, heat waves, and wildfires vary greatly depending on the amount of greenhouse gasses (GHGs) that humans emit over time. These impacts have secondary impacts as well reducing snowpack, negatively effecting sensitive habitats like Bidwell Park, and potentially requiring human migrations like Chico has already experienced due to the Camp Fire.

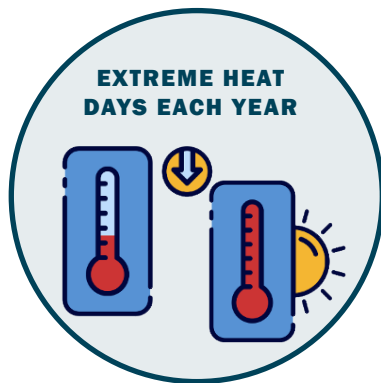
International Panel on Climate Change (IPCC) projections show that a reduction in GHG emissions to carbon neutrality by mid-century is required to limit warming to 2.7 degrees Fahrenheit and limit the worst impacts of climate change. Chico’s Climate Action Plan proposes to reduce GHG emissions to net zero by 2045 to be consistent with State and global targets.

CHICO FACTS AT A GLANCE:



Low Emission Scenario:
44 Hectares

High Emission Scenario:
59 Hectares



Low Emission Scenario:
23 Days

High Emission Scenario:
44 Days



Low Emission Scenario:
3.6 inches

High Emission Scenario:
0.07 inches

CHICO'S PROPOSED GHG EMISSIONS REDUCTION TARGET



We need to reduce greenhouse gas emissions by the following amounts over the next 15 years:

- 2017:** 5.1 MT CO2e per Person
- 2030:** 2.7 MT CO2e per Person
- 2045:** 0 MT CO2e per Person



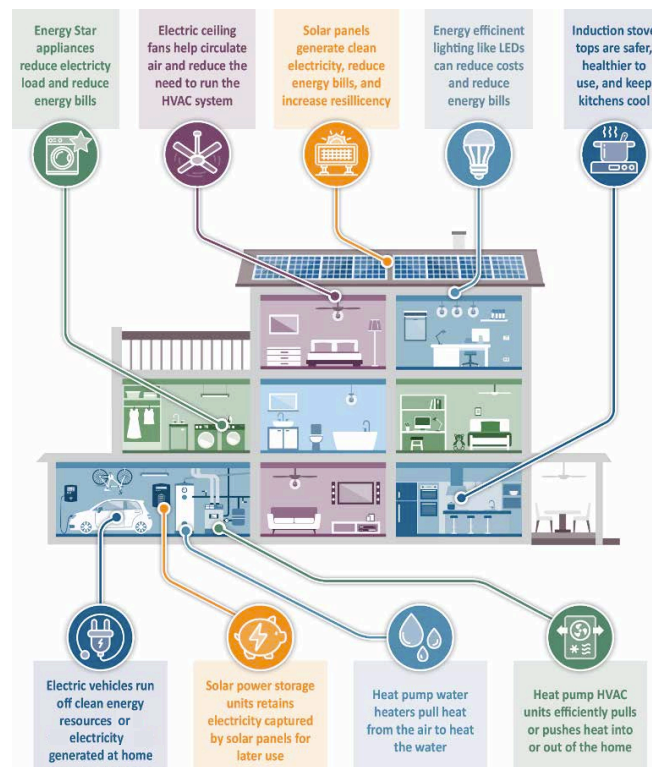


PROPOSED MEASURE

Require new construction to be all-electric: Adopt a new building ordinance which bans the installation of natural gas in new construction for building types where electrification is shown to be cost-effective.

MORE ABOUT THE MEASURE

- This proposed ordinance takes advantage of increasingly renewable electricity in California and prevents future expensive retrofits to new natural gas equipment and infrastructure.
- This proposed ordinance will help support electric vehicle (EV) adoption by providing the necessary infrastructure for home charging in new developments.
- This ordinance would be implemented for new residential construction by 2022 and for new commercial construction by 2025.
- The ordinance would only apply for building types where electrification is shown to be cost-effective.
- Co-benefits of this ordinance include lower home-owner costs, improved air quality, and enhanced building safety.



Chico's 2030 GOAL

Estimated carbon emissions reduced: 8,973 MT CO2e

WONDERING ABOUT COSTS?

- All-electric new construction is typically less expensive for contractors to build and for homeowners to live in when high efficiency appliances and solar are also installed.
- You can review a LocalEnergyCodes feasibility study at the following link: <https://explorer.localenergycodes.com/studies/county-butte/>

1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

Do you think this could work in Chico? Why or why not?

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Electrify existing residential buildings in two phases: first incentivize, and then require, electrification of existing buildings. Adopt an electrification ordinance for existing residential buildings in 2025 to transition natural gas appliances to electric at time-of-replacement.

By adopting reach codes that incentivize energy efficiency & building electrification, cities can lead the way to a healthier and more sustainable future.

BENEFITS

 LOWER UTILITY BILLS Renewable energy is becoming cheaper while natural gas prices are rising rapidly in many states.	 SAFER BUILDINGS In case of building damage (such as after an earthquake or other natural disaster), all-electric buildings are not exposed to fires from gas pipe breaks.	 IMPROVED PUBLIC HEALTH Electrification avoids prolonged exposure to natural gas fumes, which can lead to respiratory issues like asthma.
 CLEANER AIR All-electric buildings mean no natural gas combustion that generates toxic pollutants.	 MORE AFFORDABLE HOUSING All-electric homes cost less to build and operate than homes powered by natural gas.	 LOWER CLIMATE IMPACT Powering buildings with renewable energy is better for the climate.

Reach codes are local codes or ordinances that exceed the state code, providing increased flexibility to achieve local policy objectives. Reach codes must meet a particular set of criteria to be passed.

Chico's 2030 GOAL

Estimated carbon emissions reduced: 20,390 MT CO2e

MORE ABOUT THE MEASURE

- Voluntary adoption would be the focus of the first five years with education, outreach, and linking community to incentives from PG&E and others.
- The ordinance would also be implemented in two steps through the building permit process:
 - o Phase I: Limit expansion of natural gas lines in existing buildings by 2022
 - o Phase II: Starting in 2025, require HVAC systems and hot water heaters to be replaced with all-electric models at time of replacement.
- Starting in 2025, Chico residents would be required to meet building permit requirements by installing electric equipment when their water heaters and HVAC systems need to be replaced. The average life span of a water heater is 10 years and of an HVAC system is 18 years.

WONDERING ABOUT COSTS?

- The biggest barrier to this proposed ordinance is the potentially higher up-front cost for Chico residents. That's why Chico would only require all-electric equipment to be installed in existing buildings at time-of-replacement once funding or financing strategies are in place. While all-electric equipment is usually more expensive than natural gas equipment, this cost increase would be offset by incentives, rebates, and financing programs. In addition, when replacing both an HVAC and air conditioner with a single heat pump (that heats and cools) costs of electrification are actually lower!

1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

Do you think this could work in Chico? Why or why not?

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Electrify municipal buildings: Adopt an electrification plan to convert municipal buildings to all-electric



MORE ABOUT THE MEASURE

- Municipal building electrification would be completed by 2045
- The electrification plan would include a new building electrification policy as well as an existing building natural gas phase-out policy
- Municipal electrification will help the City do its fair share in moving Chico to carbon neutrality by 2045
- When combined with a micro-grid electrification would allow municipal buildings to operate during power shutoffs or other emergencies.

Chico's 2030 GOAL

Estimated carbon emissions reduced:
460 MT CO2e



1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

*Do you think this could work in Chico?
Why or why not?*

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Provide 100% renewable electricity to the community.



CCA PURCHASES / GENERATES POWER



PG&E DELIVERS POWER, MAINTAINS LINES, BILLS CUSTOMERS



RESIDENTS RECEIVE POWER AT COMPETITIVE / LOWER RATES + HAVE MORE LOCAL CONTROL

MORE ABOUT THE MEASURE

- Through this measure, the City of Chico will procure 100% renewable electricity for the community through Butte Choice Energy Community Choice Aggregation (CCA), in accordance with the ordinance authorizing the implementation of a CCA Program through a Joint Powers Agreement with Butte County, amending Title 15 of the Municipal Code. Automatically enroll community and municipal accounts to 100% renewable energy option by 2022 with an opt-out option.
- CCAs use the purchasing power of the community to procure electricity directly from electricity generators. This allows the community to choose its own grid mix, with an option to procure electricity from 100% carbon free generation sources.
- PG&E will continue to deliver power, maintain lines and infrastructure, and coordinate billing.
- To maximize the GHG reduction opportunity this presents, the City will automatically enroll all community accounts in a 100% carbon free option. Customers will have the option to opt-out of the CCA back to PG&E or opt-down to another grid mix option. It is expected that about 5% of residential customers and 15% of commercial customers will choose to opt-out. Municipal accounts will have 0% opt-out.

WONDERING ABOUT COSTS?

- By 2022, BCE is expected to provide three power mix options for community members to choose from:
 - o Base Renewable Portfolio Standards (RPS) option with 33% renewable and 80% GHG free sourcing offered at a 2% rate savings
 - o 50% renewable option with 80% GHG free in 2020 and 95% GHG free in 2030 offered at a 2% rate savings
 - o A 100% renewable option offered at a slight price premium
 - o You can learn more at the following feasibility study link: http://buttecounty.granicus.com/MetaViewer.php?view_id=2&clip_id=512&meta_id=87146

Chico's 2030 GOAL

Estimated carbon emissions reduced: 39,170 MT CO2e



1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

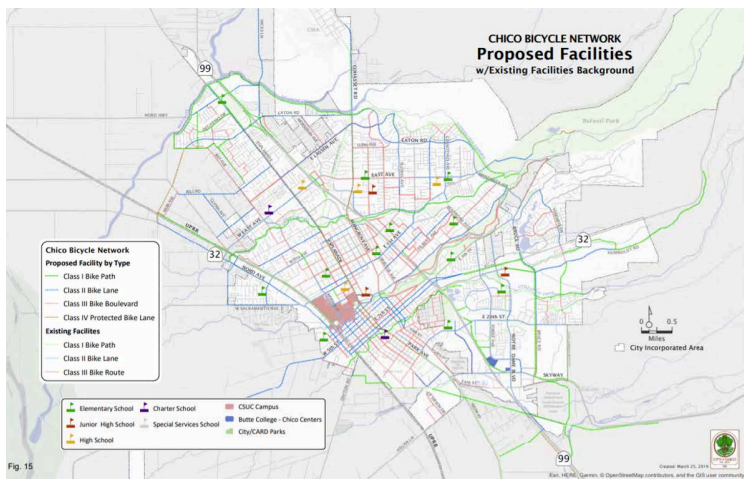
Do you think this could work in Chico? Why or why not?

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Continue to implement the Chico Bicycle Master Plan.



Chico's 2030 GOAL

Estimated carbon emissions reduced:
1,531 MT CO2e

MORE ABOUT THE MEASURE

- The Chico Bicycle Master Plan 2019 Update would be implemented by 2030 in accordance with the Plan's goals, objectives, and policies. Implementation of the Plan will include:
 - o Adding approximately 140 miles to the bikeway network
 - o Improving/expanding wayfinding, trail maintenance, safety, comfort, enforcement, and end-of-trip facilities
 - o Integrating with transit and other transport modes
 - o Conducting promotion and education around biking in Chico
 - o Identifying and competing for funding sources
- The overall goal of the Chico Bicycle Master Plan is to continue making Chico a more bike-friendly community, where people of all ages and abilities feel comfortable and safe choosing bicycles for transportation needs.
- A complete description of the goals, strategy, policy, and implementation framework for expanding and improving Chico's bikeway network is included in the Chico Bicycle Master Plan 2019 Update.

WONDERING ABOUT COSTS?

- Bicycle and pedestrian infrastructure has one of the highest price tags of the proposed measures due to the relatively high cost of infrastructure.
- Costs to cover the bike ped plan could be covered by a green bond (tax measure), grants, or other financing mechanisms.



1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

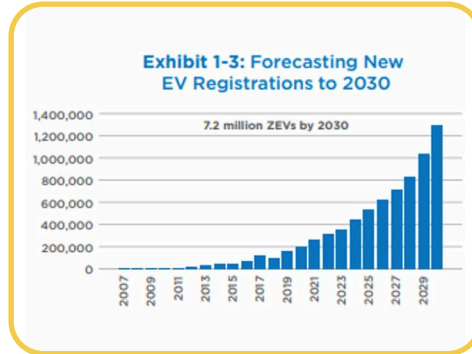
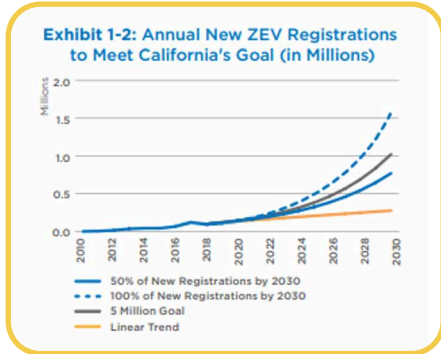
Do you think this could work in Chico? Why or why not?

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Improve ZEV (zero emission vehicle) infrastructure to allow for a 25% shift from combustion vehicles to ZEVs by 2030



Chico's 2030 GOAL

Estimated carbon emissions reduced: 27,338 MT CO2e



MORE ABOUT THE MEASURE

- The City of Chico will encourage the community to increase EV adoption and prepare for an all EV future by providing the infrastructure necessary to support this shift. The state has established a goal of putting 5 million EVs on the road by 2030 and recent regulations require 100% of passenger vehicles sold to be electric by 2030 and 100% of commercial vehicles be electric by 2045.
- The City has established its own goal in line with State targets and aims to reach 23% EV adoption by 2030. Approximately 950 new public chargers are needed to meet the forecasted demand in Chico by 2030.
- Actions under this measure will include:
 - o Amending the City building code, in accordance with the Final Butte PEV (plug in electric vehicle) Readiness Plan, to require new construction and major retrofits to provide between 20%-30% EV capable charging spaces and panel capacity with 1% (at least 1) operable charger.
 - o Continue to work with public and private partners to install additional publicly accessible Direct Current Fast Chargers (DCFC's) and Level 2 EV chargers around the City, with a focus on providing access to low-income households and affordable housing.

WONDERING ABOUT COSTS?

- The cost to install EV ready spaces at time of construction is between \$860 and \$920. That same space costs between \$3,710-\$2,370 to retrofit. Since we know we need this infrastructure, we should do it now at a lower cost.
- Installation and operation of new electric vehicle (EV) chargers in existing spaces can be paid for through public/private partnerships, grants, or through financings.

EV CHARGERS: BY THE HOUR

- LEVEL 1** 4-5 MILES
- LEVEL 2** 12-60 MILES
- LEVEL 3** FULL CHARGE



1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

Do you think this could work in Chico? Why or why not?

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Work with waste haulers and other stakeholders to meet the goals of SB1383 and divert at least 75% of organic waste from the landfill through an expansion of composting services and edible food diversion.

Jurisdiction Responsibilities



MORE ABOUT THE MEASURE

- This measure aligns the City of Chico with state efforts to reduce organic waste statewide 75% by 2025 through Senate Bill 1383
- Require residential and commercial organic waste collection through updated waste hauler contracts
- Pass an ordinance by 2022 requiring residential and commercial organics generators to subscribe to organics collection programs or alternatively report organics self-hauling and/or backhauling. Allow limited waivers and exemptions to generators for minor volumes and physical space constraints and maintain records for waivers/exemptions.
- Both waste haulers in Chico have been working diligently to expand composting services, and Recology is in the process of building their first composting facility. Chico residents are currently able to drop off yard and greenwaste at the composting facility at the airport. This action will capitalize on those efforts and expand them to meet the necessary composting capacity.

WONDERING ABOUT COSTS?

- CALRecycle estimates that full implementation of SB1383 will increase waste cost for households approximately \$17 per year on average, depending on volumes collected. Direct costs to organic waste producing businesses will be approximately \$662 on average.

Chico's 2030 GOAL

Estimated carbon emissions reduced: 7,693 MT CO2e



1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

Do you think this could work in Chico? Why or why not?

2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.



PROPOSED MEASURE

Expand the urban tree canopy by 700 trees by 2022 and 4,500 trees by 2030 to sequester carbon, decrease temperatures, save energy, and improve air quality within Chico.

TREES OFFER MANY BENEFITS...

- REDUCES URBAN HEAT ISLAND EFFECT
- IMPROVES PUBLIC HEALTH
- SAVES ENERGY
- INCREASES BUSINESS
- CAPTURES RAINWATER
- COMBATS CLIMATE CHANGE
- CLEANER AIR & WATER

Chico's Chico reaches 2030 GOAL!

Estimated carbon emissions reduced:
261 MT CO2e

MORE ABOUT THE MEASURE

- Planting trees will help sequester carbon within the City and provide a host of co-benefits like air quality improvements and providing shade and reduced temperatures.

WONDERING ABOUT COSTS?

- City costs associated with planting trees include planting, watering, and maintenance. Chico has received a grant to fund the planting of 700 trees by 2022.
- Additionally, trees provide a positive cost benefit ratio when all of their costs and benefits are summed.

1. CLICK THE SPEECH BUBBLE ICON TO LET US KNOW:

Do you think this could work in Chico? Why or why not?

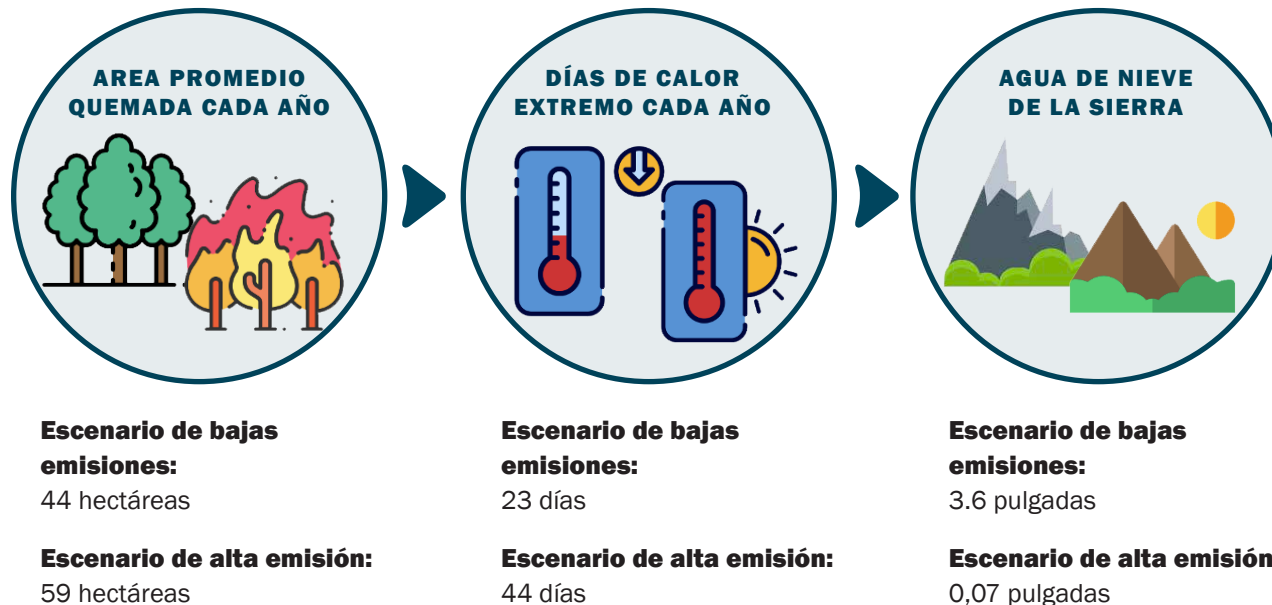
2. SHARE YOUR THOUGHTS ABOUT THIS PROPOSED MEASURE! COMMENT BELOW.

¿POR QUÉ DEBEMOS ACTUAR SOBRE EL CLIMA?

La Evaluación de vulnerabilidad al cambio climático de la ciudad de Chico describe los posibles impactos climáticos que se espera que Chico vea con el tiempo. La cantidad de días de temperaturas extremas, olas de calor e incendios forestales varía mucho según la cantidad de gases de efecto invernadero (GEI) que los humanos emiten con el tiempo. Estos impactos tienen impactos secundarios, además de reducir la capa de nieve, afectar negativamente a hábitats sensibles como Bidwell Park, y potencialmente requerir migraciones humanas como Chico ya ha experimentado debido al Camp Fire.

Las proyecciones del Panel Internacional sobre Cambio Climático (IPCC) muestran que se requiere una reducción en las emisiones de GEI a neutralidad de carbono para mediados de siglo para limitar el calentamiento a 2.7 grados Fahrenheit y limitar los peores impactos del cambio climático. El Plan de Acción Climática de Chico propone reducir las emisiones de GEI a cero neto para 2045 para ser consistente con los objetivos estatales y globales.

HECHOS DE CHICO DE UN VISTAZO:



OBJETIVO DE REDUCCIÓN DE EMISIONES DE GEI PROPUESTO POR CHICO:



Necesitamos reducir las emisiones de gases de efecto invernadero en las siguientes cantidades durante los próximos 15 años:

- 2017:** 5.1 MT CO2e por persona
- 2030:** 2.7 MT CO2e por persona
- 2045:** 0 MT CO2e por persona





MEDIDA PROPUESTA

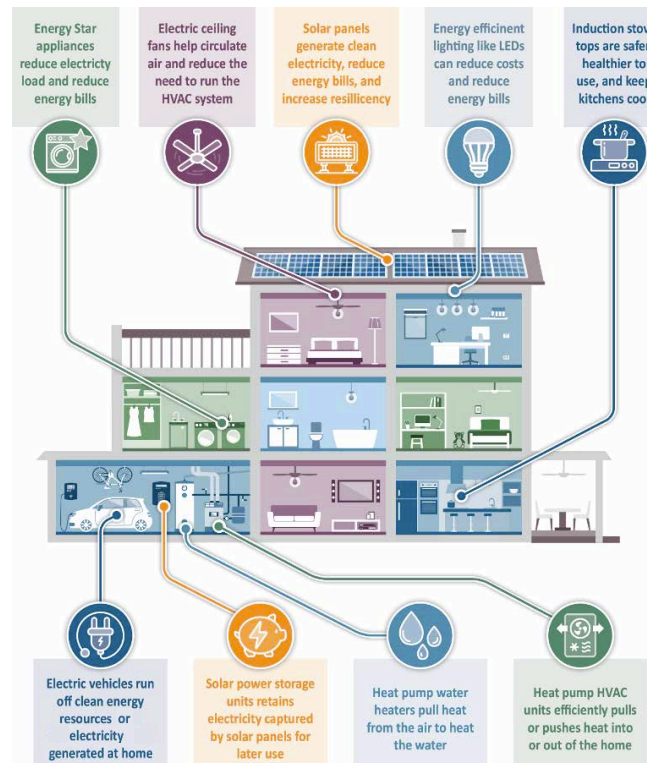
Exigir que las nuevas construcciones sean totalmente eléctricas: Adopte una nueva ordenanza de construcción que prohíba la instalación de gas natural en nuevas construcciones para los tipos de edificios en los que se demuestra que la electrificación es rentable.

OBJETIVO 2030 DE CHICO

Emisiones de carbono estimadas reducidas: 8,973 TM de CO2e

MORE ABOUT THE MEASURE

- Esta ordenanza propuesta aprovecha la electricidad cada vez más renovable en California y previene futuras modificaciones costosas a nuevos equipos e infraestructura de gas natural.
- Esta ordenanza propuesta ayudará a respaldar la adopción de vehículos eléctricos (EV) al proporcionar la infraestructura necesaria para la carga doméstica en nuevos desarrollos.
- Esta ordenanza se implementaría para nuevas construcciones residenciales para 2022 y para nuevas construcciones comerciales para 2025.
- La ordenanza solo se aplicaría a los tipos de edificios donde se demuestre que la electrificación es rentable.
- Los beneficios colaterales de esta ordenanza incluyen menores costos para los propietarios de viviendas, mejor calidad del aire y mayor seguridad en los edificios.



¿SE PREGUNTA SOBRE LOS COSTOS?

- Las construcciones nuevas completamente eléctricas suelen ser menos costosas para los contratistas y para los propietarios de viviendas cuando también se instalan electrodomésticos de alta eficiencia y energía solar.
- Puede revisar un estudio de viabilidad de LocalEnergyCodes en el siguiente enlace: <https://explorer.localenergycodes.com/studies/county-butte/>

1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.

MEDIDA PROPUESTA



Electrificar los edificios residenciales existentes en dos fases: primero incentivar y luego exigir la electrificación de los edificios existentes. Adoptar una ordenanza de electrificación para edificios residenciales existentes en 2025 para hacer la transición de los electrodomésticos de gas natural a eléctricos en el momento del reemplazo.

By adopting reach codes that incentivize energy efficiency & building electrification, cities can lead the way to a healthier and more sustainable future.

BENEFITS

 <p>LOWER UTILITY BILLS Renewable energy is becoming cheaper while natural gas prices are rising rapidly in many states.</p>	 <p>SAFER BUILDINGS In case of building damage (such as after an earthquake or other natural disaster), all-electric buildings are not exposed to fires from gas pipe breaks.</p>	 <p>IMPROVED PUBLIC HEALTH Electrification avoids prolonged exposure to natural gas fumes, which can lead to respiratory issues like asthma.</p>
 <p>CLEANER AIR All-electric buildings mean no natural gas combustion that generates toxic pollutants.</p>	 <p>MORE AFFORDABLE HOUSING All-electric homes cost less to build and operate than homes powered by natural gas.</p>	 <p>LOWER CLIMATE IMPACT Powering buildings with renewable energy is better for the climate.</p>

Los códigos de alcance son códigos u ordenanzas locales que exceden el código estatal, lo que proporciona una mayor flexibilidad para lograr los objetivos de la política local. Los códigos de alcance deben cumplir con un conjunto particular de criterios para ser aprobados.

OBJETIVO 2030 DE CHICO

Emisiones de carbono estimadas reducidas: 20,390 TM de CO2e

MÁS SOBRE LA MEDIDA

- La adopción voluntaria sería el enfoque de los primeros cinco años con educación, alcance y vinculación de la comunidad con incentivos de PG&E y otros.
- La ordenanza también se implementaría en dos pasos a través del proceso del permiso de construcción:
 - o Fase I: Limitar la expansión de las líneas de gas natural en los edificios existentes para 2022
 - o Fase II: a partir de 2025, se requiere que los sistemas de HVAC y los calentadores de agua caliente se reemplacen por modelos totalmente eléctricos al momento del reemplazo.
- A partir de 2025, los residentes de Chico deberán cumplir con los requisitos de permisos de construcción instalando equipos eléctricos cuando sus calentadores de agua y sistemas HVAC necesiten ser reemplazados. La vida útil promedio de un calentador de agua es de 10 años y de un sistema HVAC es de 18 años.

¿SE PREGUNTA SOBRE LOS COSTOS?

- La barrera más grande para esta ordenanza propuesta es el costo inicial potencialmente más alto para los residentes de Chico. Es por eso que Chico solo requeriría que se instalen equipos totalmente eléctricos en los edificios existentes en el momento del reemplazo una vez que se hayan implementado los fondos o las estrategias de financiamiento. Si bien los equipos totalmente eléctricos suelen ser más costosos que los equipos de gas natural, este aumento de costos se compensaría con incentivos, reembolsos y programas de financiamiento. Además, al reemplazar tanto un HVAC como un aire acondicionado con una sola bomba de calor (que calienta y enfría), los costos de electrificación son en realidad más bajos.

1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.



MEDIDA PROPUESTA

Electrificar los edificios municipales: adoptar un plan de electrificación para convertir los edificios municipales en totalmente eléctricos



MÁS SOBRE LA MEDIDA

- La electrificación del edificio municipal se completará en 2045
- El plan de electrificación incluiría una nueva política de electrificación de edificios, así como una política de eliminación de gas natural de edificios existentes.
- La electrificación municipal ayudará a la Ciudad a hacer lo que le corresponde en llevar a Chico a la neutralidad de carbono para 2045
- Cuando se combina con una micro-red, la electrificación permitiría que los edificios municipales funcionen durante cortes de energía u otras emergencias.

OBJETIVO 2030 DE CHICO

Emissiones de carbono estimadas reducidas:
460 MT CO₂e

1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.



MEDIDA PROPUESTA

Proporcionar electricidad 100% renovable a la comunidad.



CCA ADQUIERE / GENERA ENERGÍA



PG&E ENTREGA ENERGÍA, MANTENGA LÍNEAS, FACTURAS A LOS CLIENTES



LOS RESIDENTES RECIBEN ENERGÍA A TARIFAS COMPETITIVAS / MÁS BAJAS Y TIENEN MÁS CONTROL LOCAL

MÁS SOBRE LA MEDIDA

- A través de esta medida, la Ciudad de Chico adquirirá electricidad 100% renovable para la comunidad a través de Butte Choice Energy Community Choice Aggregation (CCA), de acuerdo con la ordenanza que autoriza la implementación de un Programa CCA a través de un Acuerdo de Poderes Conjuntos con el Condado de Butte, enmendando Título 15 del Código Municipal. Inscriba automáticamente las cuentas comunitarias y municipales en la opción de energía 100% renovable para 2022 con una opción de exclusión voluntaria.
- Las CCA utilizan el poder adquisitivo de la comunidad para adquirir electricidad directamente de los generadores de electricidad. Esto permite que la comunidad elija su propia combinación de redes, con la opción de adquirir electricidad de fuentes de generación 100% libres de carbono.
- PG&E continuará entregando energía, manteniendo líneas e infraestructura y coordinando la facturación.
- Para maximizar la oportunidad de reducción de GEI que esto presenta, la Ciudad inscribirá automáticamente todas las cuentas de la comunidad en una opción 100% libre de carbono. Los clientes tendrán la opción de optar por no participar en el CCA de regreso a PG&E o optar por otra opción de combinación de red. Se espera que alrededor del 5% de los clientes residenciales y el 15% de los clientes comerciales opten por no participar. Las cuentas municipales tendrán 0% de exclusión.

¿SE PREGUNTA SOBRE LOS COSTOS?

- Para el 2022, se espera que BCE brinde tres opciones de combinación de energía para que los miembros de la comunidad elijan:
 - o Opción de estándares de cartera renovable básica (RPS) con un 33% de fuentes renovables y un 80% de fuentes libres de gases de efecto invernadero que se ofrecen a una tasa de ahorro del 2%
 - o Opción 50% renovable con 80% libre de GEI en 2020 y 95% libre de GEI en 2030 ofrecida a una tasa de ahorro del 2%
 - o Una opción 100% renovable ofrecida a un precio reducido
- o Puede obtener más información en el siguiente enlace del estudio de viabilidad: http://buttecounty.granicus.com/Viewer.php?view_id=2&clip_id=512&meta_id=87146

OBJETIVO 2030 DE CHICO

Emissiones de carbono estimadas reducidas: 39,170 TM de CO2e



1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

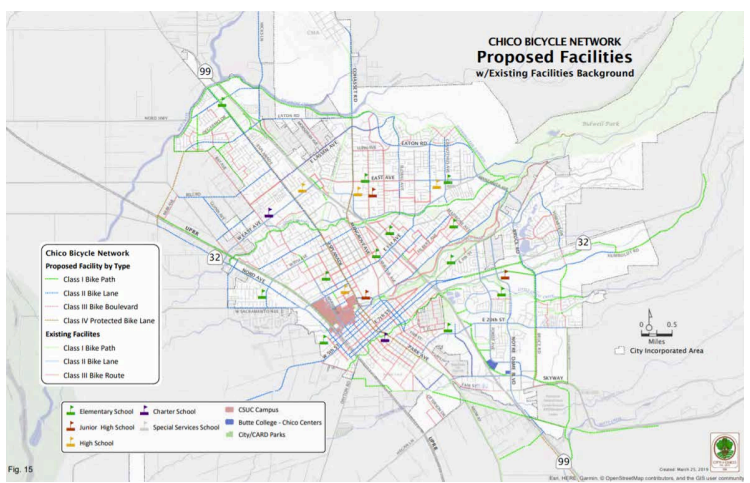
¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.



MEDIDA PROPUESTA

Continuar implementando el Plan Maestro de Bicicletas Chico.



OBJETIVO 2030 DE CHICO

Emisiones de carbono estimadas reducidas: 1,531 TM de CO2e

MÁS SOBRE LA MEDIDA

- La Actualización 2019 del Plan Maestro de Bicicletas Chico se implementaría para 2030 de acuerdo con las metas, objetivos y políticas del Plan. La implementación del Plan incluirá:
 - o Agregar aproximadamente 140 millas a la red de ciclovías
 - o Mejorar / expandir la localización de caminos, el mantenimiento de senderos, la seguridad, la comodidad, el cumplimiento y las instalaciones para el final del viaje.
 - o Integrarse con el tránsito y otros modos de transporte
 - o Realización de promoción y educación en torno al ciclismo en Chico
 - o Identificar y competir por fuentes de financiamiento
- El objetivo general del Plan Maestro de Bicicletas de Chico es continuar haciendo de Chico una comunidad más amigable con las bicicletas, donde las personas de todas las edades y habilidades se sientan cómodas y seguras eligiendo bicicletas para sus necesidades de transporte.
- Se incluye una descripción completa de los objetivos, la estrategia, la política y el marco de implementación para expandir y mejorar la red de ciclovías de Chico en la Actualización del Plan Maestro de Bicicletas de Chico 2019.

¿SE PREGUNTA SOBRE LOS COSTOS?

- La infraestructura para bicicletas y peatones tiene uno de los precios más altos de las medidas propuestas debido al costo relativamente alto de la infraestructura.
- Los costos para cubrir el plan de bicicletas públicas podrían cubrirse con un bono verde (medida tributaria), subvenciones u otros mecanismos de financiamiento.



1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

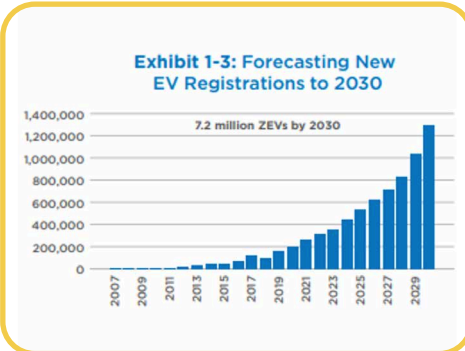
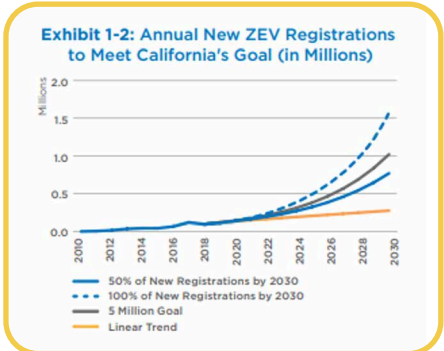
¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.



MEDIDA PROPUESTA

Mejorar la infraestructura ZEV (vehículo de emisión cero) para permitir un cambio del 25% de vehículos de combustión a ZEV para 2030.



MÁS SOBRE LA MEDIDA

- La ciudad de Chico alentará a la comunidad a aumentar la adopción de vehículos eléctricos y prepararse para un futuro de vehículos eléctricos proporcionando la infraestructura necesaria para respaldar este cambio. El estado ha establecido el objetivo de poner 5 millones de vehículos eléctricos en las carreteras para 2030 y las regulaciones recientes requieren que el 100% de los vehículos de pasajeros vendidos sean eléctricos para 2030 y el 100% de los vehículos comerciales sean eléctricos para 2045.
- La ciudad ha establecido su propia meta en línea con los objetivos estatales y apunta a alcanzar una adopción de vehículos eléctricos del 23% para 2030.
- Se necesitan aproximadamente 950 nuevos cargadores públicos para satisfacer la demanda prevista en Chico para 2030.
- Las acciones bajo esta medida incluirán:
 - o Modificar el código de construcción de la ciudad, de acuerdo con el PEV Final Butte (enchufe en vehículo eléctrico) Plan de preparación, para requerir nuevas construcciones y reformas importantes para proporcionar entre 20% y 30%
 - o Espacios de carga con capacidad para vehículos eléctricos y capacidad del panel con un 1% (al menos 1) de cargador operativo.
 - o Continuar trabajando con socios públicos y privados para instalar adicionales accesibles al público
- Cargadores rápidos de corriente continua (DCFC) y cargadores de EV de nivel 2 en la ciudad, con un enfoque en brindar acceso a hogares de bajos ingresos y viviendas asequibles.

¿SE PREGUNTA SOBRE LOS COSTOS?

- El costo de instalar espacios preparados para vehículos eléctricos en el momento de la construcción es de entre \$ 860 y \$ 920. Ese mismo espacio cuesta entre \$ 3,710 y \$ 2,370 para modernizar. Como sabemos que necesitamos esta infraestructura, deberíamos hacerlo ahora a un costo menor.
- La instalación y operación de nuevos cargadores de vehículos eléctricos (EV) en espacios existentes se puede pagar a través de asociaciones públicas / privadas, subvenciones o financiamiento.

CARGADORES EV: POR LA HORA

NIVEL 1	4-5 MILLAS
NIVEL 2	12-60 MILLAS
NIVEL 3	CARGA COMPLETA

OBJETIVO 2030 DE CHICO

Emisiones de carbono estimadas reducidas: 27,338 TM de CO₂e



1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.



MEDIDA PROPUESTA

Trabajar con los transportistas de desechos y otras partes interesadas para cumplir con los objetivos de SB1383 y desviar al menos el 75% de los desechos orgánicos del vertedero a través de una expansión de los servicios de compostaje y la desviación de alimentos comestibles.

Jurisdiction Responsibilities



MÁS SOBRE LA MEDIDA

- Esta medida alinea a la Ciudad de Chico con los esfuerzos estatales para reducir los desechos orgánicos en todo el estado en un 75% para 2025 a través del Proyecto de Ley del Senado 1383.
- Exigir la recolección de desechos orgánicos residenciales y comerciales a través de contratos actualizados de transportistas de desechos.
- Aprobar una ordenanza para el 2022 que requiera que los generadores de productos orgánicos residenciales y comerciales se suscriban a programas de recolección de productos orgánicos o, alternativamente, informen sobre el transporte y / o retroceso de productos orgánicos. Permitir exenciones y exenciones limitadas a los generadores para volúmenes menores y limitaciones de espacio físico y mantener registros de exenciones / exenciones.
- Ambos transportistas de desechos en Chico han estado trabajando diligentemente para expandir los servicios de compostaje y Recology está en el proceso de construir su primera instalación de compostaje. Actualmente, los residentes de Chico pueden depositar los desechos verdes y los jardines en las instalaciones de compostaje del aeropuerto. Esta acción capitalizará esos esfuerzos y los ampliará para alcanzar la capacidad de compostaje necesaria.

¿SE PREGUNTA SOBRE LOS COSTOS?

- CALRecycle estima que la implementación completa de SB1383 aumentará el costo de desechos para los hogares aproximadamente \$ 17 por año en promedio, dependiendo de los volúmenes recolectados. Los costos directos para las empresas productoras de desechos orgánicos serán de aproximadamente \$662 en promedio.

OBJETIVO 2030 DE CHICO

Emissiones de carbono estimadas reducidas:
7693 TM de CO₂e

1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.



MEDIDA PROPUESTA

Expandir el dosel de árboles urbanos en 700 árboles para 2022 y 4.500 árboles para 2030 para secuestrar carbono, disminuir las temperaturas, ahorrar energía y mejorar la calidad del aire dentro de Chico.

LOS ÁRBOLES OFRECEN MUCHOS BENEFICIOS...



- AUMENTA EL NEGOCIO** (Icon: Bar chart with upward arrow)
- CAPTURA DE AGUA DE LLUVIA** (Icon: Cloud with raindrops)
- COMBATE EL CAMBIO CLIMÁTICO** (Icon: Thermometer with circular arrows)
- AIRE Y AGUA MÁS LIMPIOS** (Icon: Water drop with leaf)
- REDUCE EL EFECTO DE ISLA DE CALOR URBANO** (Icon: Buildings with sun)
- MEJORA LA SALUD PÚBLICA** (Icon: Heart with cross)
- AHORRA ENERGÍA** (Icon: Lightbulb with leaf)

MÁS SOBRE LA MEDIDA

- La plantación de árboles ayudará a secuestrar carbono dentro de la ciudad y proporcionará una serie de beneficios colaterales como mejoras en la calidad del aire y proporcionar sombra y temperaturas reducidas.

¿SE PREGUNTA SOBRE LOS COSTOS?

- Los costos de la ciudad asociados con la plantación de árboles incluyen la plantación, el riego y el mantenimiento. Chico ha recibido una subvención para financiar la plantación de 700 árboles para 2022.
- Además, los árboles proporcionan una relación costo-beneficio positiva cuando se suman todos sus costos y beneficios.

OBJETIVO 2030 DE CHICO

Emisiones de carbono estimadas reducidas:
261 MT CO2e



1. HAGA CLIC EN EL ICONO DE BURBUJA DE DISCURSO PARA HACERLO SABER:

¿Crees que esto podría funcionar en Chico? ¿Por qué o por qué no?

2. ¡COMPARTA SUS PENSAMIENTOS SOBRE ESTA MEDIDA PROPUESTA! COMENTA ABAJO.

Appendix of Comments

Table of Contents

Measure 1: Require new construction to be all-electric	1
Measure 2: Electrify existing residential buildings	2
Measure 3: Electrify municipal buildings	7
Measure 4: 100% renewable energy	10
Measure 5: Implement the Chico Bicycle Master Plan	14
Measure 6: Improve zero-emission vehicle infrastructure	19
Measure 7: Reduce organic waste	21
Measure 8: Expand the urban tree canopy	22

Measure 1: Require new construction to be all-electric

- I have an electric car and do not usually charge in town but have noted how hard it is to locate and sort out what entity controls the chargers and how to pay, what type they are... Cities that are most successful have clear, frequent signage and they locate chargers in comfortable, shaded places that are not hidden. They also keep the chargers maintained and do not allow nonelectric cars to park in the EV charger slots. There are apps for EV chargers-- Plug Share and Charge Point are the two I use. I noted that in Fort Bragg some chargers are free for an hour or two in tourist areas. Obviously, you need some chargers near Hwy 99, but you need others downtown and at both malls... if electric cars finally do dominate it will be important to have rapid chargers, regular chargers... many more parking spots for chargers! The simplest is to allow just a debit card for payment rather than proprietary chargers. It is very overwhelming to have Blink, plug share, Charge Point etc. cards as one moves across the west. Standardization would be fantastic within California or at least on the 99 corridor. Public parking is critical. In many towns they are only linked to motels! Please don't put them at gas stations in the sun... which is miserable! Thanks
- I am grateful to live in a town that seems to be taking the impacts of climate change seriously.
- This plan is packed! So much information in such a small, but readable package. We must act on multiple fronts, in multiple ways. This plan gives us a visual guide to what those actions should be or could be for Chico. We often think of the costs of acting on these plans in terms of dollars. We should be thinking instead of the impact to the quality of life with inaction. I am curious about the type of building, size, placement and the impact on climate change (e.g., sprawl into the Wildland-Urban Interface). I also am curious if this

plan needs to address the future of water for Chico. Maybe both of these questions are answered, but as I said earlier...there's a lot packed into this plan.

- What about a climate resilience plan? Does Chico have a climate disaster plan to ensure economic-social-cultural-basic needs are met during these times? What are the systems that can be created for community resilience, which is the local equitable access to healthy food, clean water, clean air, comfortable shelter, mental and physical health care, and cultural/artistic expression? What about supporting local projects focused on mutual aid, skill sharing programs, etc.
- I appreciate your putting this interactive document together and offering opportunities for public input on this important matter of policy and action.
- Great info, and thanks for providing it. One suggestion: The average Chico citizen doesn't know what hectares are. Let's be sure, moving forward, that we're speaking a language most people understand. Educating and communicating clearly about the situation will be vital to galvanizing grassroots support!

Measure 2: Electrify existing residential buildings

- Incentivizing construction of smaller housing units would be a great addition to this (it's often more affordable to live in too!). Smaller housing units use less energy for heating, cooling, water, and lights. Not to mention reducing the high up-front energy involved in construction. Allowing for "alternative" sustainable building materials is also a way to reduce the initial GHG impacts of construction.
 - Yes, small affordable housing why don't we start thinking apartment complexes or multi-family units bring the duplex back.
- Trying to install solar panels on existing and new construction will be difficult unless we can figure out how do protect a dwelling's sunlight. We may have to do this off-site.
- We couldn't do even a burning firewood ban in this city or even require EPA stoves since some people's only source of heating is wood burning.'
- Electric homes with power supplied by renewable energy are a must for the future. However affordable renewable energy must be made available to the public either via regional solar or wind generation. Also, storage facilities must be part of the plan so that when PG&E's power grid goes down people still have power available.
- The ordinance might also encourage the installation of residential natural gas-powered backup generators to provide electricity during power outages. This will be especially important for vulnerable populations harmed by temperature extremes.
 - Yes, and maybe in the future, we can have cooling or warming buildings for the most vulnerable to extreme heat and cold. A building with snacks and movie nights when it is too hot or too cold. Kind of like a community center.
- I like having the choice of gas or electric. The power lines are unsightly and when the grid goes down my gas hot water heater and stove still work. A better solution would be to require fewer houses per acre, quit packing them so close to each other and encourage the planting of trees and other native species of plants in everybody's yard.
- Yes, and it needs to work in order for Chico to survive and thrive in the future.

- Great Work thank you.
- I would expand on this to include electric charging stations in multifamily housing and even new construction of homes. Electric vehicles are key to climate resilience.
 - I would add that the actual construction of the house could be improved with thicker walls, so the design would reduce the need for heating and cooling. Why are houses still being built with designs that don't work for our hot, dry climate?
- Does this conflict with the desire to build more affordable housing? How do we do this with "Tiny Houses"?
 - Well affordable housing should be sustainable for future needs I don't think they are separate issues. Tiny Houses are not my forte so I can't comment on those but affordable housing complexes that are sustainable do exist and we need large-scale affordable houses, not individual tiny homes. There is not enough land for individual tiny homes in Chico. We need to build up not out because of the constraints of the city.
- It seems that most developers are stuck in the old ways of doing things - how are you going to get them to buy into this without giving them money or letting them get away with not adhering to environmental protections?
 - Chico has held educational training in the past explaining that electrical is cheaper and most developers were happy to go cheaper. If we wanted to do something like Colorado, we could implement a list of materials that developers are allowed to use. But most people pay Chico to build here and hopefully we will get some permanently affordable housing coming our way with all the housing stock taken from the fires.
- While I think that this will work the timeline for requiring compliance is too short. There are already projects well into the planning stage that could not meet the 2022 deadline.
 - I think 2030 will be too late. The world has only a handful of years left, and the past years have been kind of squandered.
- On April 2, 2019 we at Chico 350 Butte County organized a broad local coalition and got the Chico City Council to pass our Declaration of Climate Emergency Resolutions - which proved along with our draft Implementation Plan that Chico can and must go 100% Zero Carbon Emissions by 2030. It passed by 5-1, with one abstention - Kasey Reynolds left mid-hailstorm because her sweets shop store was flooding! We worked hard to get the Sustainability Task Force upgraded to the first new commission in 20 years, the Climate Action Commission. We are disappointed that the city agencies have defaulted to the state's lower standards and deadline of 2045. We worked to get that SB100 bill passed, but it was just a placeholder benchmark for us to improve upon. Your video also sounds like happy talk not based in the real world where our Butte county is home to four climate-accelerated disasters in less than 3 years. 1) 2017 Oroville Dam Collapse 2) 2018 Camp firestorms killed 86 people, mostly elderly. 3) 20210 Bear Fires which morphed into gigantic 4) North Complex firestorms, which I read yesterday in the local news are not 100% contained yet.
- For all of the eight priorities, it seems critical to develop a plan to inform the public is critical, a plan that includes action steps with time deadlines. We also need an

educational component in the schools, one that provides factual information to young people and the kinds of actions they can choose to take to make a difference.

- Individual action and most of the young people are on board with that information. Today though we are talking about a citywide action. Schools don't have to comply with city plans so a teaching issue would have to be taken up with the school district.
- Chico must have better access to renewable electricity to achieve this. Are you considering creating a SUMD type power resource?
 - I think that would be an awesome idea and it should be considered if and when PG and E berries power lines or Butte decides to make a SMUD because Chico is only 75 thousand plus people. Sacramento the city alone housing 500 hundred thousand people. SMUD covers 900 square miles for the entire district. Not everyone would be on board with that, but it could be something to discuss as a county or multi-county thing who knows.
- Nothing should be implemented at a local level that is stricter than the state building codes. Additionally, it has proven that electricity with solar, depending on the system, in the case of power outages can leave you without the ability to heat and cook. If you have a gas fireplace and gas stove, you can at least keep yourself warm and eat. Many solar users believed they would have power when there was an outage only to find themselves in the dark without heat, the ability to cook, and a warm fridge.
- If solar power isn't mandatory on new construction, it should be! ("Solar-ready" is good, but far better is actual solar paneling) The future of power generation will be distributed, as opposed to central massive powerplant/solar farm, because it's more efficient.
 - Right?? If there is anything, we have in abundance here in the north state, it's sunshine!
- Additionally, we have to start looking at the carbon footprint of building materials. Such assessments should be public information, easily attainable, so people not only start thinking that way but also don't have to do tons of research to make good choices.
- We don't have enough electrical power available right now (i.e., rolling blackouts.) And, while solar power is great during the day, we can't readily store any extra production at night (or it is very expensive to do so.) So, banning a clean-burning source of power like natural gas makes no sense, and places ANOTHER burden on business, and creates more regulation. This proposal is another example of the type of thinking that is driving good and productive citizens out of California.
 - The blackouts had as much to do with poor planning and management of the grid as having too much renewable energy. For example, the power plants actually exported electricity out of state at the same time that they needed it. While the shift away from fossil fuels may not be going perfectly, we still need to figure out how to do it, rather than just say we can't. I wonder why the power companies can't invest in batteries to store solar power for use at night, but I don't know much about that.
 - Natural gas is a marketing term that covers (and obscures) many forms of petroleum gas. In California it is methane gas, and it is far from "clean." The

emissions from leaky production facilities make this fuel source dirtier to use than coal.

- Yeah, I was highly motivated to get an induction stove in our new house, but the reasonably priced model was not being manufactured any longer, which meant we would have had to pay at least \$500 more to get induction. Hopefully these come down in price.
- These are very expensive - not all families have \$\$ laying around to replace current stove/oven.
 - The average electric oven costs \$400 or something. That's about my rent but my electric bill has gone down because the gas was more expensive.
- May want to consider electric dryers replacing gas dryers
- Requiring new construction to be all electric and contain solar panels is a good path forward to slowly transition away from fossil fuels and when coupled with statewide investment/shifts to more renewable electricity, storage, and power management. Replacing existing natural gas infrastructure could/should be incentivized but not required.
- For solar power to be viable - most trees would need to be removed to allow for needed sunlight. Thus, causing additional global warming (trees are critical to reduce global warming); follow the science.
 - "Most trees" would not "need to be removed". Some may need to be removed or simply trimmed. Full removal can be mitigated by planting other trees where they will not interfere with current or future solar collection or other alternative energy generation plans.
 - The city is planning on planting more trees and pruning companies will obviously be employed to help.
 - Another measure in the CAP is a "share the sun" provision that "encourage architects to design rooftops that can maximize solar TOF and minimize conflict with future street trees."
- New residential construction is already required to be all electric or Net Zero with Title 24. What about non-res construction? This needs to be addressed specifically for those building types, which I'm sure the Energy Commission is doing.
- Additional \$\$\$, will require most to refinance homes to pay for it. City needs to reduce fee's, permits to allow homeowners and builders to be able to have/build affordable housing.
 - Let's not kid ourselves: addressing climate change is going to cost money. The question is where will it come from--and can something like a Green New Deal create jobs and economic wealth as well, helping to finance this shift?
- Ceiling fans are all you need on all but the very hottest days! We need to encourage people to kick the AC habit!
- What clean energy resources are available? We currently can't even cool our homes. How do you charge with solar? This would require additional \$\$\$\$ of solar panels to charge vehicles - at night (since you'll be at work during the day). No practical storage exists for common consumer at this time. Years away.

- The city wants to add chargers in the city. They also want to add transport like busses, better bike routes, and electric trolleys service. So maybe people would not need a car except in a few cases.
- You are incorrect, all electric homes cost hundreds of dollars a month more than homes using clean natural gas. Electric appliances require additional source of power generation, that currently doesn't exist
 - Natural Gas is just methane that's not clean
- Today.... neither the grid nor electrical storage nor appliances nor consumers are ready for such a dramatic and sweeping change. Incrementally, water heaters for example, might be more acceptable to consumers who otherwise demand gas stoves and fireplaces. Regulations such as these, when implemented by a municipality rather than the state, force consumers to outlying areas worsening the commute. 100% electrification in Chico translates to more driving and more propane. neither are good for climate change.
 - Bill's idea of starting with Water Heaters is a good first step. If you take away people's ability to have a fireplace or a foodie's desire to have a gas cooktop, you are going to turn-people off and sabotage the effort. However, water heaters are a neutral space - something that would make big difference. If you want less gas usage beyond water heaters, put in an incentive, such as a break on permit fees in order to incentivize the change you want to see.
- What about initial costs? Buyers rarely look at long-term costs; they want to know how much it costs to get the dwelling.
- What are "future expensive retrofits to new gas infrastructure and equipment"? Statement doesn't make sense out of context. First, the utilities need to maintain existing gas lines to prevent gas loss and explosions, those need to be retrofitted. You don't retrofit "new" things.
- The first goal maybe should be to power our transportation system with renewable energy produce on our homes. Fossil fuel powered vehicles are the number one source of GHGs, not houses. Can a zero net energy home produce enough electricity for both transportation and residential needs without utility back-up systems? Now you are talking about a huge solar footprint on a lot. Tiny homes with huge solar doesn't work.
- How do you define "cost effective"? Is it for the equipment purchases or running the equipment? It is more cost effective to burn natural gas to heat water than use electricity. Electric equipment is typically less costly than natural gas (ranges, dryers, heaters, etc.) but cost more to operate. What is the cost of solar power PV? Construction cost, operational costs, and replacement cost and how does that compare?
- This can only work for the consumer if they produce their own electricity. Purchasing electricity from a utility or CCA is very expensive and still comes from natural gas fired power-plants. To actually reduce GHGs the home would have to be off grid from a utility unless that utility was 100% renewable including storage. This means homes will have to be built with adequate solar electric and solar thermal and have a battery back-up system to support the home over night and during long periods of cloudiness. We are not there yet for most homes and people.

Measure 3: Electrify municipal buildings

- In case of power outages, is it possible for homeowners to use the electricity generated by their solar panels? Also, could they direct the electricity stored in their electric car batteries to power electric appliances?
 - So, if they are YOUR solar panels you would be using the solar as long as the sun shines. Any energy that is produced is not being used by the grid. That means any extra if you don't have extra you are using all the power.
- PG&E is the problem, not part of the solution. For example, recently they introduced micro grids to Magalia to offset all the power shut offs - and these are still gas-powered. Solar powered micro grids are the way forward, not fossil fuels.
- These measures are only directed at domestic changes. Where is the City's plan for larger-scale change, with business, manufacturing, government agencies, agriculture, and the university, etc.?
 - Please keep scrolling. There are other measures including the microgrid where power is spread over the town's solar panels. We are one town in the North State we should be able to take care of our own power needs. Enloe Hospital, Chico State, and schools don't follow the general plan.
- This addresses residential systems but how about big users, governmental, commercial and industrial in Chico? Will they be held to the same standard?
- We have just replaced our HVAC unit; it is gas with a 2-stage unit. It is very a very effective unit and cheaper to use. The previous one lasted 25 years. We also just replaced our gas water heater it has built in insulation, so it does not need the blanket. It too is a much more efficient unit. The previous unit also lasted 25 years. I believe your numbers are off. Implementing stricter codes locally than state building codes can lead the local jurisdiction to potential liability.
 - You have an anecdote. Here is my anecdote: My parent's latest HVAC replacement from gas to another two-stage unit lasted 8 years. The infographic is just an average please remember that folks.
- Incentives sound good, but there is no free lunch. P G & E incentives are paid for by charging everyone higher rates. Government incentives are paid for by the taxpayer. We must first ensure that electricity generation in California is adequate. Last summer there were some hot days when PG&E could not supply the north state and needed to shut down power to residences. I don't think that generation can be up to the necessary level in the stated time frame. Before mandates are made, we need to be sure that these premises are correct, I don't think the numbers are realistic.
- How about focusing on large buildings that use far more power (commercial, industrial, university, hospital, etc.) and new construction before requiring substantial investment to retrofit small homes?
 - Well Universities and Hospitals are exempt from following the cities plan regardless of that Enloe Hospital and Chico State have done retrofitting and sustainable energy changes. Industry is required to follows the general plan and

the climate plan so as you read on you will see the industry has to follow these guidelines to.

- I don't like that there is only a yes or no option. All with qualifications. I think it may be possible but not in the timeline you are talking about. Seems like the people aren't going to want to put out this big outlay. Should be done in increments- first the City do it with all their buildings, then the University, the hospital etc. - - to prove that it works to the little guy
 - Chico State, Enloe Hospital and schools do not have to comply with city plans. Regardless though Chico State is writing up a plan to replace HVACs already in the year 2020. Page 17 then just follow the chart for the 5 buildings they are replacing HVAC and other units.
https://www.csuchico.edu/sustainability/_assets/documents/chico-state-climateaction-plan-2011.pdf
- For all of these remedies, it is unrealistic to believe in every case the changes must be "cost effective." In the long run, of course, they are, but in the short run, which is crucial, they may not be. We still must share the cost. More flexibility in homeowners' use of solar panels and car batteries [Baldy] is possible and a good step.
- What about all this fireplace inserts that have been replaced with natural gas inserts? And then there are the outside propane heaters.
- Ugh, I hate electric stoves. Our gas range is less than one year old. We also have gas heat. We have solar panels but that would mean also adding panels which we cannot afford. Where is all the money coming from? We are senior citizens.
- Does this mean that by 2045 even if one has e.g., a HVAC that is working fine it will have to be replaced with an electric heat pump?
 - Nope, the operative words were "NEEDS REPLACING" if it's working fine, I don't think you would need to replace it.
- What kind of incentive, rebate, and financing programs are you considering or is that an after-the-fact to be worked out later? It is best to have this information or program developed up front. Will it be funded with city dollars? Where will those come from? I would suggest Chico's utility users' tax as a source of funds, even though it is the City's third largest revenue source after property taxes and sales taxes, and they don't like giving up revenue. Will the CCA use their sales revenue to provide rebates and incentives? Probably not. PG&E will certainly not provide incentives to reduce their energy sales without being compensated like they are now. Where are these incentives to come from? Making it a requirement in the future is a great idea but people will balk if it costs them more.
- Would like to see your information to support this claim. Currently all appliances in the State have to conform to the State's appliance efficiency standards, and they are pretty good, as far as efficiency goes. Purchasing equipment that is more efficient always costs more, not less, than the current efficient standard equipment. Solar PV also adds to the cost of a home by what \$5,000 per kW, so a 10-kW system, which is probably a low-end system in terms of electricity needed to run a Net Zero home with a car charging station, ok maybe 15 kW, so an addition \$50 - 75,000 to the price of a home is not less expensive.

- The cost to change over to just electric water heating is and will be prohibitive. Besides putting in the electric water heater it would cost big bucks to upgrade the wiring including an upgrade of the main panel to be able to cover the extra electricity. Then an upgrade of existing solar systems to cover the extra power would cost a fortune. This is a poor town with high housing prices. You will put local people out of the local real estate market. Seniors will not be able to afford it. Gas prices are a lot lower than electric. PGE can't provide us now with enough electricity. They will never put in enough money to cover the infrastructure to create this power. And then to think about new electric only heating/cooling units is just crazy. Your nuts and autocratic. Get rid of the Carl Roy crazies. And yes, I am a progressive voting Democrat. I'll vote no on anything that will destroy me.
 - What place do you live in that would require upgrades too so much wiring? It sounds like a historical house. Maybe the water heater is not your thing what about an on-demand water switch.
 - Gas rates are rising faster than electricity rates because of infrastructure repair cost and the price difference is expected to grow due to the age of the pipes. As more (affluent) people move to solar electric, the remaining (less affluent) customers will bear a greater financial burden for upkeep of the aging infrastructure. All electric is cheaper for seniors and it will leave a better planet for their children and grandchildren.
 - Switching over to electric water heating is not prohibitive. An electric water heater runs about \$500-600 v. a gas water heater \$600-900, while a hybrid electric, the best way to go, are around \$1,500 and will payback in 4-5 years when compared to a standard electric water heater. Panel upgrades are typically not necessary. Most homes are wired for electric dryers and water heaters even though they might not have them because the builder doesn't know what appliances the homeowner will install.
- Gas prices will remain lower on a cost/BTU basis than electric, it is counter to the laws of physics to be other.
- What does “limit expansion natural gas lines in existing buildings” mean? Existing buildings have natural gas lines, how does one plan on limiting them? What incentives is the City of Chico planning? This is a costly proposal for residents, they aren't going to do by regulation - will never happen. It has to be incentivized and I don't see the incentivization plan anywhere in this document. Can this plan guarantee that by 2025 all the electricity available in Chico will be renewable? How is a CCA going to do that? The sun doesn't shine all the time. Wind don't blow all the time. The back-up power will come from what renewable source? If this becomes a requirement people will install what they want without getting building permits. Despite what Stemen asserts in his comments electrical prices are not going down, they are going up and they will not go down anytime soon. Large-scale renewable electricity is not cheap you have to pay a premium to get this from PG&E now and from your CCA. Your CCA savings is 5%? Wow that will really make someone tear out their gas appliances and go electric. Here is the problem with that. Once a home converts to all electric, and doesn't have a solar electric system on it, a homeowner's utility bill will go sky hi. If I use \$100 in electricity now and \$100 in natural

gas to heat space, water, and to cook with my bill will go to \$500 - \$600 a month in the winter without a significant solar system. For this program to work it will have to incentivize the replacement appliances (Natural gas water heaters cost about \$600, electric about \$500, heat pump water heaters cost about \$1,500. If I install a heat pump water heater to replace my natural gas one my water heating costs go up too. A solar water heating system is a much better way to go, then you can use your solar electric for cooling and heating. BTW - HVAC is heating and air conditioning you don't replace both of them because it is one system. I keep seeing the statements that the cost of "electrification is actually lower" - where is your proof? If you rely on incentives to offset the addition costs where are those incentives coming from? The local tax base? PG&E? (Not if you have a CCA, PG&E won't incentivize electrical consumption because they aren't selling it.) You might want to think about a power co-op that could do all of that.

- Currently the cost equivalence between electricity and natural gas is almost 5 to 1 on a \$/BTU basis, electricity cost 5 times more per BTU than natural gas, when used for space or water heating. An electrification requirement only works with home generated electricity and battery storage and that is at a higher than normal cost to install and use

Measure 4: 100% renewable energy

- We have far better ways to spend taxpayer money than to convert buildings that were designed to use natural gas, to electricity only. The carbon savings would be teeny tiny in the whole scheme of things. These proposals are "feel good" measures, when compared to natural carbon pollution created by forest fires and organic decomposition.
 - Due to leaky gas pipes, the carbon saving would be substantial.
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2019GL082635>
 - I don't think these are feel good measures. I think the city is making substantial changes to help our ecosystem have cleaner air and water by removing methane (natural gas) and replacing it with renewable energy like solar.
- Not just municipal buildings need to be all electric. Clean Green Union Jobs can create \$Millions to boost our economy - retrofitting every housing unit.
- Yes, and I think when Chico gets electrified people will do it more. Most people get solar panels when their neighbor gets solar.
- It appears that something was left out of the thought process. Currently a little less than half of the electricity generated in California is from natural gas. If we vastly increase our electricity consumption, we will be using natural gas to generate the power needed for our all-electric homes and municipal buildings. This may make Chico air cleaner, but not the entire state. Before this is logical, we must further develop renewable power generation. The obvious answer is nuclear fusion, not viable yet. We need to wait until the power is there for it to make sense.
 - Why not use solar in the meantime. Why not because what if by the time you're waiting has ended the world has already gone up too many degrees.
 - State law requires that 60% of all electricity come from renewable sources by 2030, and 100% by 2045, at which point no natural gas (methane in CA) will be used to create electricity.

- Plus, California doesn't have a large natural gas supply so California would have to rely on different states or different countries to supply methane. Do you know the biggest suppliers of methane?
- Energy self-sufficiency for municipal buildings can work and would provide experience beneficial to policymakers when making policy decisions re: energy systems for residents of Chico. Also, Sierra Nevada Brewery already generates a large portion of their own power, so a model already exists.
- Good place to test ideas such as microgrid electrification as a strategy to deal with power outages
 - This is part of the proposed microgrid the next step would be combining this measure with the next measure.
- Municipal building should all have electric charging stations for city and citizen vehicles.
 - That would be a good idea I am just wondering how many electric vehicles are in the city. Like the comment, if you have an electric vehicle. Dislike the comment if you have gas or diesel vehicle. Anecdote evidence.
 - There is some circularity to this exchange-- one purpose of installing more charging stations is to make it more inviting and practical for folks to purchase electric cars. Let's do that. I have an electric car.
- Look, we HAVE to move away from fossil fuels if we want to stave off climate disaster. Electrification, powered by renewables, is the best answer. I thought we had committed to doing this in Chico by 2030. Yes, it's going to cost money at first, but if we don't prioritize this transition, we're going to have a lot more costly problems to deal with. Paradise and Berry Creek are early warnings, as were last winter's floods. Even without such disasters hitting Chico, going electric will be cost effective in the long run.
- Same concern as above.
- This is crazy stuff.
- This would be a good idea ONLY if the solar was set up to be accessible when the grid goes down. To be totally dependent on one single system like PG&E's power grid is totally foolish.
- Most office and commercial buildings, like municipal buildings, are pretty much electric utilizing. The only thing that currently requires natural gas is space and water heating. Water heating is a minor use in a municipal building and can be retrofitted easily. Space heating can also be modified for heat pumps depending on a building layout. So this isn't that big of a deal or hard to do, especially for small municipalities.
- Is there a plan for a municipal renewable plant or just purchasing it from sources via a CCA?
- Micro-grids are a great way to go, but remember if they are solar electric powered exclusively, they won't provide much if there are more than a few days of cloudy weather.
- Who's paying for it? Spend our money on better things like health and safety.
 - If a longer-term view is considered, we have all been deferring the costs of climate change for quite some time. No one wants to pay for the heedlessness of the past, but if there is to be a future that includes clean air and water among

other things many have for too long taken for granted, then we have to pay something now and for quite some time to come. It may also be the case that doing so now will also contribute to health and safety as well.

- I have a sleeping problem that requires a machine to run and give me oxygen. This is for my health and safety that a renewable energy system is working in the future. I need clean air and clean water for my health and safety.
- If the city doesn't do this, no one will so it's a must!
- Why should the taxpayers pay for this? One of the HVAC units on top of city hall was just replaced with in the last year. Are you now going to replace it again because of this plan?
 - They would replace it when it needs replacing there is nothing in this measure that says a working HVAC is replaced by 2025. The city might replace the HVAC with an electric one or maybe it is electric I don't know this particular HVAC that you talk about. I am not part of the city or the installation team that replaced the old broken HVAC. The city might replace it to be a model for the citizens they might not. Do you want them to replace it?
- Again, another expensive idea that will not work because there is not enough renewable electricity in the state to utilize. Now, if you want to talk about building some current generation nuclear plants to provide clean electricity, you might actually have something.
 - Since September 2019, California has added 659 megawatts (MW) of utility-scale solar-powered generation capacity, increasing total solar capacity by 5.3% to more than 13,000 MW as of June 2020.
 - Norm there is an option to opt-out, but I think you are going to stay in the renewable energy program. I think Chico does not have enough room to put a nuclear power plant where would we store the rods? Nuclear power is not the answer.
- This has already passed Chico City Council and Butte County Board of Supervisors. "There are 19 CCAs statewide, and the Public Utilities Commission believes they will serve 80 percent of the residents in the state by 2020. Butte Choice Energy wouldn't begin operations until Jan. 1, 2021." <https://www.chicoer.com/2019/10/24/butte-county-finalizes-formation-of-power-buyingagency/> Evidently this has now been pushed back a year? PG&E's antiquated and decrepit infrastructure is the problem. Green Public Banks could solve that problem by funding clean green infrastructure capital investment.
- Yes
- A municipal power purchasing program will likely save Chico residents money. However, if we purchase only renewable power, somewhere else they will be purchasing more power from natural gas production. It does not make sense until the state can get to 100% renewable power generation. The timeline is too aggressive.
 - The state is going towards complete renewables, but a city needs to spread its power over a city, not just one city. Think of other cities that are already moving toward renewables? The cities are doing something, and we make up the city. It's like this cell-tissue-Organ-system-body = Person-families-neighborhoods-cities-county-State. WE must start small with us our little town.
- Is there a possibility of building a solar farm as SMUD has done for its community?

- This measure should say something about supporting underground electric utilities in Code and financial support to property owners. Considering the carbon from human caused wildfires and the electrical grid, this would be key.
- 100% renewable has to be done; we all need to make it happen.... citizen to Fed
 - Well said it needs to start with us and go to the big honchos. City to the district, to the state, to the federal
- Don't really understand how this works - so hard to conclude viability. Don't trust PG&E - given their past practices and current difficulties. What about the City having its own?
 - To tell you the truth I am not sure but here is what I do know. I lived in a house powered by solar and when everyone else has no power we had power even though everyone else had a scheduled power outage. It worked great during the day.
 - Why not press for subsidies so that decentralized alternative energy production can be scaled down to individual dwellings?
 - Subsidies happen at the state and federal level. A CCA is something a City can do.
- Here is a list of other CCAs in California: Valley Clean Energy (Yolo County and Davis), Pioneer Community Energy (Placer County), Redwood Coast Energy Authority (Humboldt County), Apple Valley Clean Energy (San Bernardino County), CleanPowerSF East Bay, Community Energy (Alameda County), King City Community Power Lancaster Choice Energy Marin Clean Energy (Marin and Napa County), Monterey Bay Community Power (Monterey Bay, San Benito, and Santa Cruz), Peninsula Clean Energy (San Mateo), Pico Rivera Municipal Energy San Jacinto Power San Jose Clean Energy Silicon Valley Clean Energy (Campbell, Cupertino, Los Gatos, Saratoga and others), Solana Energy Alliance Sonoma Clean Power (Sonoma and Mendocino County), Rancho Mirage Energy Authority
 - When I moved to Chico or soon after we had this "green power" option on our power bills. It is a simple way of contributing a small increase in charge for becoming a supporter of this shift. People want to do that but don't have the option right now
- Since there is the opt-out, why yes or no? The City of Biggs runs their own power. Why does the City of Chico have to join with Butte County on anything? Of course, this would ultimately have the potential of allowing city staff to create another high paying department head position.
- Seems like a worthy pursuit.
- It seems like a shell game. Unless the country figures out a way to actually produce more green energy, then just shuffling around where we procure our energy from doesn't do any good.
- Nuclear power generation does not emit greenhouse gases. Might nuclear power be part of the "renewable" mix?
 - Well, that might be possible I am not sure people would be happy to live near the nuclear power station. Also, we have no way of disposing of the rods. Nuclear fuel remains dangerously radioactive for thousands of years after it is no longer useful in a commercial reactor. Even though the power is Carbon-free it might be hard to sell nuclear power here in a fire-prone and flood-plain place.

- Here come five words for you: Three Mile Island, Chernobyl, Fukushima.
- It will never maintain its paltry 2% rate savings as it adds more and more renewable energy to their portfolio as they will need storage and storage is not cheap.
- All good, but I think 2045 will be too late. It's compounded every year...!
- A 100% renewable portfolio will cost customers more! PERIOD. You say it right here and you also say electrification will be cheaper. You can't have it both ways. Electrification only make sense if it is all renewable! Solar electric will need huge battery storage systems to provide evening, night, and morning electricity. The cost will be enormous even with a distributed energy system.
- I pay something like \$5/month to a company called Arcadia to provide me with all wind-powered energy, which they do by paying my PG&E bill in Renewable Energy Certificates. I'd much rather have an arrangement like this with a local source of renewables. CCAs seem like the answer.
- The city and unified school district managed to put solar collection infrastructure over school parking lots to generate electricity and provide shade for parked cars, just like Sierra Nevada Brewery. Why not do the same for our roadways where there is no shade from trees? Highway 99 could be made much more pleasant if it were shaded by solar panels, so could other streets like Eaton Road, Bruce Road, Highway 32, etc.
 - The Highway is not the cities to take care of, but I like the idea.
- What are the options for the city to generate its own renewable electricity? Wind turbines? Solar panels? Could the city build its own hydroelectric power plant on Big Chico Creek?
- I live in a 1981 home with solar panels, all electric except my stove and oven. I like to cook with gas stovetop. I don't plan on buying an electric stovetop.

Measure 5: Implement the Chico Bicycle Master Plan

- Lower Bidwell Park could be an outstanding bike corridor from the east side residential communities to the downtown business district, but the park roads are in disrepair. It is an uncomfortable ride along either the north or south park roads.
- I bike and use the bike paths. I live near East Ave on the north side of town where many seniors like me live. It is unsafe to use the bike lanes there, and many other busy streets. Dividers with Native Plants could provide extra safety. Once again Public Green Banks can provide the funding infrastructure.
- For this to really work, and it might be able to, Chico has to stop sprawl and start high density transit-oriented developments. We need to develop villages throughout the city that are high density, walking/biking, cores to house people.
- I hope "end of trip facilities" includes bike lockers. Also, if work facilities have showers and changing rooms, more people would commute to work. Encourage school children to bike to school. Perhaps, charge for car parking at schools
 - I am not sure about the showers, but lockers and bike lock facilities sound amazing! The bike master plan is shaping up to be pretty good.
 - Bike lockers and other secure forms of bicycle storage are critical. Showers not so much. Holland and Denmark (and Vietnam) have some of the world's highest

numbers of bicycle commuters, and they seem to do just fine - better in fact than many in the US - without showers etc.

- Secure bike parking is a key missing link in Chico's bicycle infrastructure, especially downtown and around the university. There are dozens of car parking lots but not one truly secure space for cyclists to park their bikes. Central and secure bike parking facilities are 21st century necessities! Redding is way ahead of us with their new Shasta Bike Depot at the nexus of cycling in their downtown. Let's get serious in making bike commuting and shopping truly safe and secure by filling in this gap in our cycling infrastructure. Such a facility along 2nd Street between Cherry and the RR tracks, for example, would be a game-changer for thousands of potential university and downtown commuters.
- Secure bike parking at destinations is important especially for businesses to thrive. The university and city have expanded bike parking capacity recently, but bicycle theft levels remain high in Chico. This deters commuters and shoppers, and bike parking facilities with more security than open racks could make an enormous contribution. Potential solutions abound and have been demonstrated here and worldwide – bike lockers (as at Meriam Library), bike cages (as on 5th Avenue by Enloe Hospital), supervised bike lots (as at the Sacramento State campus), video-surveilled racks, differently-priced tiers of bike parking, and prioritized bike parking by business and office windows – all of which are cheaper and use far less physical room than parking spaces for cars. Where such secure bike parking can be integrated into carpark structures, further economies of scale can be achieved
- One bike locker put in place of a parking space would probably work great for downtown. Think about how many bikes could be put in one parking space per street.
- As a high-price-tag item, bike infrastructure should be matched by high-priority funding and actual behavioral civic goals and benchmarks for community change into a biking community. Is there a study (or plan for ongoing study) of citizen behavior in the biking area? Who rides bikes, who would if they had access to one, where in the city is biking most probable? "Promotion and education" need to be higher on the priority list, and study and benchmarks should precede infrastructure planning. Study other communities that have successfully transitioned to bike culture. What is use now, and how specifically will the city improve use of the expensive infrastructure it is planning to install?
 - That has already been done but the city has lagged behind putting in the infrastructure. What is the ham in fixing streets? I mean add bike trails will entice people to come and use the trails if nothing else it will add to tourism if none of the locals use the trails. BUT people do use the trails as evidenced by the cities comment page on improving the streets lots of people requested sidewalks and bike lanes of the many comments. People are asking and the city is promising.
 - I would add to Rina's good observations: increase in biking must be supported by the discouragement of car travel-- which itself must be provided the alternative of efficient public transportation. How will the city provide a genuine system wide plan that will result in more bikes and-- the real point-- fewer cars?

- I find biking dangerous in Chico. The pathways have too many questionable characters on them. My daughter and I have been attacked. I no longer ride my bike because of that. My bike is for sale. If routes can be made safer from vagrants, they might work for some, but now most of my driving is for 10-mile round trips from the north to the south end of town and back and I can't use my bike for that type of shopping, anyway. Maybe it works for those living downtown?
- Chico is flat and has many clear days that are good for using a bicycle for transportation. I support this plan.
- In a recent study of more than sixty first-year CSU Chico students, their reported car travel near the campus was about *three times* that of bicycle travel. Car parking alone was more than twice as frequent as cycling, although few students reported paying any significant charge for such parking. More students reported owning a car or truck than a bicycle, despite the former being roughly 20 to 50 times more costly (!). Of those owning bicycles, less than half reported owning a helmet or front light, and only about a third a rear light, with reflective tape and/or clothing rarely reported. We can see in this data that there is great potential for increased bicycling in Chico's core, as well as enhancement of pedestrian safety and convenience, and a corresponding reduction in dependence on cars and in land and street use for car parking. A large majority of respondents said they would bicycle more if there were protected pleasant bike lanes and more secure bike parking. Our wide streets can accommodate 'complete street' enhancements, with what could be landmark bicycle- and pedestrian-friendly boulevards. Bicycle commuting and shopping can be made safer and cheaper by more secure bike parking. New facilities and development can be focused on abundant open space presently used for car parking lots. Not only have student respondents overwhelmingly supported these priorities, but these goals are also fully consonant with recent legislation, reports, guidelines, and revised standards across the state of California, including those in City of Chico, Butte County, and CSU Chico official statements, positions, and commitments.
- Yes, it can work. As long as citizens do not park their cars or pile their leaves in the bike lanes and the bike riders actually use the lanes it can work. But now the Grand Jury has found that the C of C roads need to be improved perhaps some actual dollars and energy will be allocated to fixing the streets with resurfacing such as seal coating, and restriping. Especially around the schools and other well-traveled routes.
- As we know, Chico is ideal for bicycling, as it is flat, and warm and dry most of the year, and the city has its own important histories and thriving subcultures of cycling. Yet our 'mode share' of cycling trips seems to remain below the 7% achieved in Portland, Oregon, with its cooler climate and its nine months of rain. But in the U.S., we all have much to learn from the cities and towns in northwestern Europe that achieve cycling mode share of above 35% for all trips, despite their own windy, wet, and chilly weather much of the year. Access there is broad and deep, with Dutch elderly, for example, logging a bike mode share about 60 times higher than the US average. At the same time safety has been sharply improved, with the Netherlands, for example, achieving an 81% decline in cyclist deaths in the period from 1981 to 2006, and Denmark having a rate of non-fatal cyclist injury roughly 1/30th of that in the US overall (Pucher & Buehler 2008).

Necessary for such numbers are protected bikeways and secure bike parking, among other things, but also smart growth plans that de-incentivize automobile use as they provide comprehensive alternatives. See the 16-minute online video 'Groningen: the world's cycling city' (Streetfilms 2013), for one university city example in Holland. See Pucher & Buehler's 'Making cycling irresistible' (2008), for a comprehensive review of exactly how the Netherlands, Denmark, and Germany have achieved these results.

- Yes, please! We need better infrastructure to get more people biking and walking. The city has lagged on this for too long, so now has substantial work to do, but it will benefit everyone. (more biking = less driving, so car drivers encounter less car traffic) Repaving our deteriorating streets is important for all users, not just cars -- though cars and trucks cause almost all the wear and tear.
- This could help, but it will take a very long time for the culture to change. Currently with the bicycle theft high in Chico, there is no safe place to secure a bike while the rider goes into a store. And if the bike is worth \$950 or less, stealing it is only a misdemeanor, so no real penalty. Fix the security issue first.
 - Yes, the city should get to the root cause as to why someone steals a bike. In the meantime, maybe we can have more bikes that are rentable as well. Not just rent from a store but maybe rental from the city or like the CHASE bikes in San Francisco.
- I have bike I don't ride...sure I am not alone. Putting head together to figure out WHAT in/dis-incentives could change behavior?
 - I don't ride because the bike paths seem so disconnected and there are so many cars. I prefer to walk most of the time and commute to the grocery store with my roommate who has a car. I don't own a car a crash and then just don't have the money to fix it.
- The bicycle master plan should be given priority over all other projects. They say it comes at a high dollar cost, but they are not factoring in all the other benefits like, less air pollution from combustion engines and healthier lifestyles for the citizens. Bicycle lanes should take precedence over automobile roads.
- Even with such extensive trails, the roads in Chico are not safe for bikers. Making it safe to ride outside is critical
- The Bicycle Plan is a good start, but we need a larger focus on sustainable, multimodal transportation. A better bikeway network will encourage many people to bike instead of drive for some trips, especially if we install protected bikeways on major roads instead of just labeling side streets "bike routes". To really shift away from single-occupancy vehicle trips we also need reliable, frequent local transit and at least some intercity transit.
- On a trip to Victoria, BC last year we saw people of all ages bicycling as a means of transportation. We were told 10% of the people bicycle there. Improving bicycling safety and providing safe bicycle parking are important pieces of needed infrastructure. Reduced emissions and improved health care benefits. Chico is flat and easy to ride in so let's get more people out of their cars!
- yes yes yes--lots of additional benefits, including health, less traffic, and increased appreciation of natural surroundings!

- Yes, let's make Chico a more bike-friendly town we already have bike shops. That is local economy that should be supported.
- Resounding YES.
- We've got to fix the streets. It is unpleasant and unsafe to ride them as rotten as they currently are. Also, as E-bikes become more popular there has to be more secure bike parking since these bikes cost a lot. Can we get a public bike share program in here that uses E-bikes?
- YES, to the importance of the Chico Bicycle Master Plan. The rise of new urbanism and smart growth in the 1990s (Duany et al. 2000, 2010b) spurred an urban walkability and bicycling renaissance that has now transformed countless cities in the US and worldwide (Leinberger 2008; Shoup 2011; Speck 2012; Abbasi 2016; Mapes 2009; Pucher and Buehler 2008 and 2011; NACTO 2014). Results include reduced energy consumption, reduced noise, lower carbon emissions, lower air pollution, increased fitness and health, increased street safety, and reduced death and injury incidence from car crashes with cyclists and pedestrians (with protection especially of children and elderly). This revisioning of urban life also brings increased equality of transport options, lower costs of transport (especially important for households with lower incomes) and of engineering (crucial for financially constrained government entities like ours), increased vitality of urban businesses, and durably higher property values. I hope our city will continue to evolve with the times, and further invest in smart growth to reap the huge benefits that come with more walkable and bikeable urban spaces.
- Yes!! The City's 2020 Climate Action Plan (CAP) calls for coordination with the Butte County Association of Governments (BCAG) in provision of bicycle facilities and infrastructure, including bicycle parking. The CAP's prioritized measures to reduce vehicle miles traveled and fuel consumed include: expanded and enhanced bicycling and pedestrian infrastructure (1.11), 'complete streets' as indicated in the 2030 General Plan (1.12), traffic calming, including landscape medians and street corner bulb outs (1.13), new bike paths (1.14), and safe routes to schools (1.16). Updated city parking standards aim to reduce surface parking areas, require bicycle parking at higher ratios, and support convenient pedestrian pathways through parking areas (1.17). The CAP makes clear that effective actions in the transportation sector are 'critical' to reducing greenhouse gas emissions. Estimated emissions from transportation in Chico are roughly double those from all other energy uses, and fifteen times greater than those of solid waste processing (CAP 2.22). The low-hanging fruit offered by cost-effective and safe bicycle infrastructure has yet to be harvested.
- Re costs: effective bicycle plans SAVE MONEY for cities and their universities, while enhancing health and safety, increasing neighborhood quality and property values, and invigorating local businesses. Recent university leaders in the US in cost-saving collaborative projects with city governments have been MIT, CU Boulder, Portland State University, UC San Diego and of course UC Davis. Stanford University, for example, has saved close to \$100 million overall through a combination of strategies to reduce private car commuting rates, allowing campus size to increase 20% without increasing car traffic. Among other things, Stanford raised car parking prices 15% and invested \$4 million in

bicycle facilities, thereby motivating an estimated 900 people from cars onto bicycles – instead of spending \$18 million for more car parking for them.

- I they can do it in Paris we can certainly do this in Chico!
- This town pays too much money for bicycle infrastructure. This not a bicycle rooted town. Some ride but the majority don't. Repair the roads. Charge a bike tax for them to use the roads that car users must pay for in gas taxes.
 - Why would a pedestrian or bicyclist pay to use roads? A walker and biker are not emitting GHG's and they are more likely to spend money on shops downtown than someone in a car. A car rides by shops but when a person walks downtown, they stop at more than one place most times. I do see the need to repair the roads but then again, I don't use the roads I use the sidewalks and those sidewalks have been eaten up by roots.
 - Cyclists do pay to use the roads. They too buy gas (gas tax) and they do pay all the taxes everyone else pays.
 - I forgot that I don't own a car anymore most cyclists or pedestrians have a car for certain trips or grocery runs. I think Barry's main concern would be when people stop buying gas. In which case most countries would transfer taxes currently on gas vehicles to batteries or electric charge stations or hydrogen taxes.

Measure 6: Improve zero-emission vehicle infrastructure

- EV use is inevitable and it makes sense to adapt by installing more charging stations. These charging stations will need to use renewable energy, and we also need to plan a safer community for those who don't drive or would prefer to travel by walking, biking, or transit.
- Given the relatively high price of electric vehicles, it is absurd that the regulation suggests, "a focus on providing access to low-income households and affordable housing." Does that really make any sense?
- Replacing fossil fueled individual vehicles with individual EV's misses the point - we need mass people movers. For example, Neighborhood EV's, shared vehicles. Butte County bought "clean diesel" buses because electric buses are expensive is an obsolete mindset. Those vehicles are throwing away public tax dollars. There is no such thing as "clean gas" or "clean diesel."
- New technologies in energy storage are making this more and more attainable. It's happening regardless of Chico's Muni Code. Let the ZEV industry create products that consumers choose to buy rather than regulating what consumers can buy.
- ZEVs are certainly part of the answer, but one size does not fit all. To make access to clean transportation equitable, we also need to prioritize improved bicycle infrastructure, pedestrian improvements and transit enhancements to encourage safe active and public transportation usage.
- "lower cost now" sounds great, especially looking at the higher costs later. Make sure it's cost-effective for both consumers and the City -- but I would vote for charging stations to charge for service. There might also be the ability to provide free or lower cost charging in low-income neighborhoods.

- The C of C has installed numerous charging stations at City Hall already and some private companies have too in partnership with Tesla. But the C of C should not implement any codes on developers stricter than what is at the state level.
- EV cars obviously use batteries. The only place I've seen that makes batteries was in Canada and the city looked like a post nuclear disaster. No life, everything black, dead and apocalyptic looking. Until I find out what is different about battery making and the use of those precious metals to make batteries, I am staying away from EV. Does anyone have good info that might change my mind?
- I think requiring new construction to provide EV charging space is smart, but I am not for publicly funded charging stations. Keep charging stations a private enterprise so it can grow naturally in the private sector. That way it won't grow up relying on government subsidies.
- Charging stations need to be a private venture. It is wise to start mandating parking spaces that can be easily converted to charging stations. Again, I see a problem with power generation. It makes no sense to use natural gas to generate electricity for an electric car.
 - WE should definitely share the sun then and invest in solar panels
- Like all the proposals that impact residential customers, those of middle and lower income will need either incentives or grants to help make their participation possible. Equity is critical as we move into a clean energy economy. Will incentives and grants be available?
 - Great idea--and it will require subsidies, as many commenters are pointing out that we don't want to make living here anymore prohibitive to low-income folks than it already is.
- A high priority if we want to reduce tail-pipe emissions of GHG's
- We need a local gas tax.
- Why not reintroduce electric light rail and thereby reduce internal combustion vehicle traffic even further? Every European town of any significance has light rail, why can't we?
- It would be great to have an incentive for homeowners to purchase at least one electric vehicle per household and provide the charging systems which will require infrastructure modifications for the local power structure to handle the great increase in load and that isn't the CCA's problem it will be PG&E's
- With the trend of U.S. auto manufacturers working toward more affordable electric vehicles we can do this.
- Another cost to homeowners. This is not San Francisco. This requirement to have to upgrade a remodeled home to have to also add charging systems will add thousands to a remodeled job. It makes it too hard to live in Chico. It's no wonder that businesses won't come to this town. Workers for their businesses can't afford to live here. In Santa Barbara they can't get police or fire people to work there because the housing is too expensive. We are getting close to the same problem. Who else won't be able to live here, nurses, teachers, doctors? Get real and look at the overall picture. We can't house the people who live here now.
 - Are you planning on building something with parking?

- All aspects of our lives are under strain. We have to adapt or die. The cost of a charging feature is trivial and could be zero if intelligently subsidized. Farmers who grow export crops with public water (thereby exporting water) for private profit are subsidized; why not assist homeowners and small businesses the same way?
- Ooh I like the way you think
- The Master Bike Plan should have "stub outs" in mind to connect to regional bike plans and other cities. i.e., what route do you take to get to Oroville or Gridley.

Measure 7: Reduce organic waste

- Creative and assertive landfill management and edible food recovery programs city-wide and regionally are essential. <https://www.epa.gov/sustainable-management-food/reduce-wasted-food-feeding-hungry-people>
- Every time we asked our recycling service companies about providing an extra bin to each household for organic waste composting - like other cities already do - we heard no plans to do so because so expensive. Even though the state will fine them \$10K/day soon for not complying with state law. Last we heard was that there is vague plan to maybe have some congregate bin for larger complexes?
- There definitely needs to be more education about organic waste in our community. Leaves should be left for mulch and a simple home composter should be required.
- Yes
- Employ worms!
- It's so easy to compost regular household waste that an education program might be all that's needed. But we still need the larger yard waste that Waste Management provides for leaves and branches and stuff.
- You'll need to watch the movie Pollyanna.
 - Pollyanna: A young girl comes to an embittered town and confronts its attitude with her determination to see the best in life. That one? From 1960?
- Who gets to be the trash police? For months the Green Waste Facility at the Airport has been closed. These ideas are all great at the council, board, and commission levels but when it gets to implementation and actually following through with these feel-good ideas... some just fall through the cracks.
- We need to keep the green waste facility open, even if it requires a subsidy from the city or county. The waste can be made into mulch and the larger wood items could be burned in a cogeneration facility to generate renewable electricity.
- I would love to see community composting not relying solely on CAL Recycle.
- We definitely need food waste diversion and composting in our region and our way behind on this front.
- Seems to make sense.
- Yes! We can divert so much more from landfills (restaurants alone is a huge source). But the composting needs to happen locally -- not waste energy hauling it far away, plus provide local jobs.

- Yes, let's provide some local waste hauling jobs and that can create more jobs from the money those jobs spending locally on our economy.
- Other cities like Berkeley are already doing this so we can learn from their practices and experiences.
- We need a compost solution that will employ local people and not be sent out miles away. Reducing organic waste will be a great solution and maybe bring 20 renewable jobs for the site. I hope you pass this measure we only have so many years left to slow down climate change.
 - Absolutely, and I could not agree more.
- In addition to the larger companies like Recology, have opportunities for smaller businesses been considered? "Drop in the Bucket Bicycled Powered Compost Service" is an excellent model.
- Would the fee schedule for composting and food waste be based on volume? A cafeteria e.g., has to be charged more than a very small cafe.
- Now we are going to have trash can police. Who's going to pay for this. Another fine on a poor town. Who is going to pay the extra fees for food garbage pick-up? We already pay the highest fees in the U.S. for power and trash removal. One of the local trash haulers in actuality is the MOB. What else can they bully out of us?
 - It does not seem very bully-like to help the Chico residents compost organic waste. If everyone composts at home, we will not need to do this. But not everyone has a yard. I don't have a yard I live in an apartment. I understand the high fees for trash removal and the high fees for electricity are not accessible to most people. I am on an unstable income myself, but I also recognize that trash needs to go somewhere. No one wants to live a zero-waste lifestyle. I can't. I don't think it's possible for someone in my income bracket, but I think composting is possible.
 - I have lived in places where people are fined for not separating recyclable waste - such fines could pay for monitoring. As for corrupt trash hauling, this is a serious problem that could be addressed by better regulation - and why not a municipal waste hauler not incentivized to cut costs and break laws to save money, rather than a private business that is notorious for doing so?
- WASTE-by Organics, I assume you mean organic material from the ground, not organically grown without pesticides, etc.

Measure 8: Expand the urban tree canopy

- TREES- as long as an urban forester is maintained on staff, plus other crew as needed. Consult with arborists and CNPS as to which trees are best for each location.
- Planting trees is important. Also, greener plans for drainage capture are essential.
- Collaboration with Tribal leaders who have the generational knowledge to be caretakers of the land is crucial in this proposed measure.
- Yes. Trees are good. Let's plant more trees.
 - Yes, and let's help the wetlands store more carbon and water.

- Planting native and diversity of trees and land management could be placed under Indigenous tribal leadership, such as <https://tekchico.org/> If we have learned anything from our firestorms' devastation, it's that we have failed land management in ways that only going full circle to #LandBack and land management led by the Indigenous people of the territory that they successfully managed for tens of thousands of years is the best practice.
- Yes, totally support this, for reasons of beauty, shade, habitat, and sequestration. But remember these trees are carbon banks, they don't eliminate the stuff and eventually it will return to the atmosphere. We need to stop adding CO2 to the place.
- I think resources on forest management are better spent than diverting organic waste - if we have to choose. Otherwise do it all.
- This is very important to the overall health of our eco system, water shed, and air quality. But the City of Chico also needs to do a better job of maintaining the street trees and the trees in parks that we have. Some CARD is managing now but the tree police need to be more active. Such as Bidwell Fire Trap, this needs to be cleaned of dead wood. It is in the middle of town and a fire could spread very quickly.
 - I think the goats eating the detritus is helping but CAL-Fire really helped. But yes, I agree there should be more help in Bidwell to clear dead trees that are fire hazards. But the dead trees that are returning nutrients need to stay. I mean there is one tree in lower Bidwell that is a beehive now I don't think that tree should be removed.
- While any tree is better than none, it is extremely important that the majority of new trees planted be native to this area. Native trees, especially oaks, are keystone plants for local habitat - insects and birds, in particular.
- This is absolutely essential for the City of Trees. So many trees have been cut down in recent years--the Downtown Park, the orange trees, so many others, not to mention what's happening up on the Ridge. Planting trees is something everybody can do.
- Since a grant covers the cost moving forward makes sense. And to keep the trees alive we need a healthy aquifer. That requires diligence and preventing down state entities from transferring water out of our area.
- A city tree planner came by my house and wanted to know if I wanted the city to plant a tree next to my driveway and the sidewalk. We already have a 40' + eastern oak in our small front yard and a total of at least 20 trees on our 1/4 acre. Of course, I don't want another tree to maintain (we already pay about 2k per year for pruning services) and have sidewalks/driveway with root-lift issues. I hope that is taken in consideration when planting trees near concrete, as my husband and I have both tripped on neighborhood sidewalks and required months of medical attention as a result. The city has not been helpful on this. Some of the neighbors are painting the lifted walkways to warn of the danger. Trees away from walk/driveways are great and I would love to see more. No liquid ambers with gum/sticker balls, please.
- Planting trees is good, but Chico needs to do a better job reducing undergrowth that can fuel wildfires.

- Yes! We need more trees in Chico and they are indeed important in Carbon sequestration! It is CRITICAL however that these trees are native, however! Non-native trees do not provide the necessary habitat for native insects which in turn support small mammals and birds, etc. Some species, like Pistache, are beautiful in the fall, but are also invasive. Biodiversity declines are at all time low, and NOTHING is sustainable without biodiversity! Thank you for your environmental work in Chico!
 - I agree - trees that are native are suited to our environment, so they don't need as much water, and as mentioned above support the local ecosystem. I hope the city sticks to native trees.
- Yes, this is extremely important for long-term health of the city. Every new construction area needs to protect existing trees plus set aside area for a higher concentration of new, diverse plant life. Our entire ecosystem, including groundwater, depends on it.
- Planting more trees is a wonderful way to reduce CO2. I think the goal should be closer to 7000 than 700. Reforestation throughout the state and nation is also a wonderful idea. The negative is that trees in the wrong spots will reduce the ability of solar arrays to generate power. We need to be thoughtful in selecting the locations for more trees.
 - I agree and the city will probably be thoughtful about placement once the plan is passed. There will be more comment periods and transparency about selecting areas. Keep coming back and encouraging trees the ecosystem like the wetlands that hold the Butte County Meadowfoam. The plant is found nowhere else in the world. I had no idea that was the case when I moved here for school. I am glad I have seen it though and learned about the Fairy Shrimp.
 - Conflict with solar arrays is an important factor in determining placement of trees, especially adjacent to single story homes. One of the many other suggestions made for this Climate Action Plan include codifying the requirement to plan for smarter street and roof layouts. This will enable community tree canopy and rooftop solar to co-exist. The City has identified over 8000 vacant tree planting locations. 700 is just the start.
- There is no reason all of these proposed measures would work in Chico, and every reason why they need to be implemented. Whether they will go or not will depend on the enthusiasm and commitment of the City leaders and the people of the community - that's what will make them go. There is NO reason they should not be implemented. In the case cost is an issue, GROW UP, people! You want a healthy environment - you might have to pay something for it!!
- If the trees are for home yards rather than street trees, then provide homeowners siting help, so the trees cast shade in the summer but do not block the warming sun in the winter and do not shade solar panels
 - I really like this idea it would not be that hard to factor in growth rate, solar map a home, then prune based on the home shape. I would just need a satellite image from winter and summer and some math.
- Just wondering where all these trees will be downtown has so many. Will it be along Deer Creek Highway or Along 99? Will it just be 700 spread out over the City? Like Town hall

gets 5 more? Downtown each street gets 20 more? Then the Highway gets 10 each mile? Or does the town make a forest each time new affordable housing comes in?

- When grants become available, this is another area where paying attention to equity is important. Lower income neighborhoods can't afford trees like middle- and higher-income neighborhoods and should be prioritized for tree planting. The cost of water, depending upon the tree, is minimal but could get higher as the climate warms. Is equity a consideration in the planning of tree planting?
 - Good question I don't know how the city is determining the placement of trees for the urban forest. Equity is important though and low-income neighborhoods should be considered. Not to mention how many trees should be added with affordable housing that will need to be built through time. Trees that are native to the area and can tolerate some dryness should be considered as well. I am low-income thank you for thinking of me.
 - The City is currently in a Climate Change Investments Greenhouse Reduction Fund grant. The grant project is called "City of Chico Urban Forest Revitalization Project" Part of the grant commitment includes focusing tree planting in Low-income and Disadvantaged. neighborhoods. The City is committed to addressing disparities in urban greening and intends to continue focusing efforts where the benefits to citizens will be the greatest.
- The city needs to plan for expanding the urban tree canopy by 700 trees per year. This city has gone too long without a fully funded tree program and we are only beginning to see the damage this has done. Over the next several years I think we are going to see the canopy decline as there are more trees being removed than planted. Just talk to any tree service company in Chico and you will hear how busy they are.
- In a CSU Chico report to the City Council in 2016 that surveyed some sixty undergraduates who had studied carefully and first-hand the South Campus neighborhood, the most-liked aspect of the neighborhood was overwhelmingly the beautiful TREES for which Chico has long been known. This mature urban forest adds profoundly to the quality of experience throughout the town and has been cultivated as a highly valued attribute throughout its history. Where tree cover is lacking, streetscapes can feel bleak and blasted even where design is good, especially in summer heat. Where tree crowns and canopies shade sidewalks and streets, even mediocre settings are pleasant for residents and passersby. Drought, climate change, and budget challenges threaten this vital resource going forward. For our future, YES to expanding our forest canopy, investment, and maintenance!!
 - Thank you for sharing your thoughts on the south campus neighborhood. I do enjoy walking under the trees on my way to class. I have enjoyed walking because of the mature urban forest. Those trees won't block the solar panels either because they are mature, they won't grow that much taller and the houses in the south campus neighborhood will probably enjoy solar when it becomes cheaper and rental companies realize the affordability of renewable energy once the houses are properly insulated. The south campus neighborhood is one of the oldest neighborhoods the houses are predominantly rented by students and don't have much say in what a company does to the building. BUT I think the Greek

Houses will adopt renewable energies if they haven't already. Sigma Chi at a UC installed solar panels in 2016 with a green initiative fund. I think some of the students could do it out here with a similar grant.

- I think it's going to be/ is vitally important that we also recognize SOIL as the massive carbon sequestration/ giver of life that it is. It should be a huge consideration when deciding where we build moving forward. As much, in my opinion, as a consideration such as the urban/forest interface in other parts of our county. Chico and its surroundings are home to some of the best soil around, and it is getting more and more painful to see huge apartment complexes, subdivisions and development, and the infrastructure that currently exists, covering it all up and taking out of biological play. I know we need places for people to live...I understand that this is obviously a huge challenge.
- Fantastic a grant will help pay for the trees watering, maintenance, and planting
- Who is going to pay for the maintenance of the new trees? The property owners. It can cost a fortune to take care of trees.
 - It has "cost a fortune" to trash the life support system we call the environment; time to pay the piper.
 - The city said it was going to get a grant. So yes, we are all going to pay the piper by hiring a grant writer and get that grant. The environment has been hurt and Chico is just trying to reduce the pain.
 - If the trees are on City property or in the City's right-of-way, the City will maintain them. If a landowner accepts a tree from the City for their personal property, the landowner is responsible. The cost to water a tree for the summer (15 gallons a week for 16 weeks) is about \$1.
 - And of course, pruning trees the landowner can do it or employees some tree service to help maintain the trees to ensure solar panels are not blocked. Another job created or kept employed for the local economy. Win!
- Only if low-water, native trees are planted. All the ornamentals do not provide habitat and can be difficult to maintain with a reduced water supply.
- How does this work when people now are cutting down their shade trees to put on solar electric systems on their homes? Is there a balance or a preference for one or the other?
 - There is a balance between shade trees and solar panels. Sharing the sun is all about planning where the solar panels can get the most sun and the trees can get light. One day people will realize like my dad did that trees and panels can both share the sun.

HELP TAKE THE City of Chico INTO THE Future!



CHICO CLIMATE ACTION

The City of Chico is updating their Climate Action Plan. A climate action plan provides a comprehensive roadmap for how we can reduce our greenhouse gas emissions to help address climate change and make our City more resilient. You can help by participating in this self-directed online workshop. Go to the link below and share your thoughts on proposed strategies for this update.



CITY of CHICO

Share your input [▶ www.ChicoClimate.com](https://www.ChicoClimate.com)

Participate in an Online Workshop: Nov. 19 - Dec. 3

Learn more about the top eight proposed strategies and provide your feedback!