

### **CHICO**

### **CLIMATE ACTION COMMISSION**

### REGULAR MEETING AGENDA

THURSDAY, JULY 8, 2021 - 6:00 P.M.

MUNICIPAL CENTER – 421 MAIN STREET – COUNCIL CHAMBERS (VIRTUAL MEETING)

# 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, 2<sup>nd</sup> Floor Chico, CA 95928 (530) 879-6800

Or

www.chico.ca.us

**Posted**: July 1, 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



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#### 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, 2<sup>nd</sup> 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, 2<sup>nd</sup> 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.
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#### 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 <u>not</u> 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.
- 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:**

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#### **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, JULY 8<sup>TH</sup>, 2021

Municipal Center - 421 Main Street - Council Chambers - 6:00 pm (Virtual Meeting)

**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 Zoom platform.

Zoom 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, July 8th, 2021, at 6:00 PM

Event URL: https://zoom.us/j/91756379039?pwd=cjh0NTdSbE9FQTVhbENrS01jcHU0QT09

Password: Climate21

**Meeting ID:** 917 5637 9039

Call-in #: 1 408 638 0968 or +1 669 900 6833 Call-in Password: 032960502

#### 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

June 10th, 2021 (Attachment A).

#### 3. <u>ITEMS TO BE DISCUSSED</u>

#### 3.1. <u>CAP Section 4.0, 5.0 and 6.0 Review</u>

The commission will review and provide feedback on the draft Climate Action Plan sections 4.0, 5.0 and 6.0. (Attachment B).

#### 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, August 12<sup>th</sup>, 2021.

#### CITY OF CHICO CLIMATE ACTION COMMISSION MEETING MINUTES REGULAR MEETING OF THURSDAY, JUNE 10, 2021

Municipal Center - 421 Main Street - Council Chambers - 6:00 pm (Virtual Meeting)

Commissioners Present: Cheri Chastain, Chair

Mark Stemen, Vice Chair

Dave Donnan Kirk Monfort Michael Nelson

Commissioners Absent: Rebekah Casey

Staff Members Present: Brendan Vieg, Community Development Director

Molly Marcussen, Associate Planner Austin Powell, CivicSpark Fellow

#### 1. CALL TO ORDER

**1.1.** Commissioners and staff were present as noted above.

#### 2. CONSENT AGENDA

#### 2.1. Approval of Minutes

Commissioner Donnan moved to approve the minutes. Vice Chair Stemen seconded. Minutes approved 4-0-1.

#### 3. <u>ITEMS TO BE DISCUSSED</u>

#### 3.1. CAP Section 2.0 and 3.0 Review

The commission provided feedback on Sections 2.0 and 3.0 of the draft CAP.

#### 3.2. CAP Sustainability and Community Actions Review

The commission provided feedback on the Sustainability and Community Actions section of the draft CAP.

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

None.

#### 5. REPORTS & COMMUNICATIONS

Vice Chair Stemen asked staff when the commission should expect to review the final draft version of the CAP measures. Staff informed the commission that they will be reviewing the measures at the July meeting.

#### 6. ADJOURNMENT

Adjourn at 6:50 to the Regular Meeting of Thursday, July 8th, 2021.

#### **GHG Reduction Framework**

#### How the GHG Reduction Strategies are Organized

The City of Chico has worked with community partners, local businesses, and individual community members to identify strategies for reducing GHG emissions in Chico as part of this CAP's development. The strategies are organized in a support structure with three levels, as shown in Figure 1, as follows:

- 1. **Sector Strategies:** The CAP's GHG emissions targets drive development of focused and cohesive strategies for reductions in each sector. The sectors include Energy, Transportation, Waste, Sequestration, Water, and Outreach and Education.
- 2. **Measures:** Measures define quantitative goals within each sector strategy that will contribute to the overall sector strategy and result in substantial reductions in GHG emissions.
- 3. **Actions:** Actions consist of the specific steps the City and community will take in support of specific measures, which together accomplish the measure goal. Each action concretely identifies the responsible parties and mechanisms required for implementation.

Figure 1



#### Key Pillars for GHG Reduction

The CAP's strategies for reducing GHG emissions are comprehensive and closely tied to the CAP's leading principles, with each sector strategy built to incorporate six key pillars:

- 1. **Collaboration** with local partners
- 2. Socially equitable approaches
- 3. **Cost-effective** for the City and community
- 4. Accountability for progress

- 5. Education and leadership within the community
- 6. **GHG reduction** potential for the City

The measures and actions together ensure that the sector strategies they support meet the criteria of the six key pillars, discussed in more detail below.

#### **Collaboration – Partnering for support**

The City recognizes that effective climate action does not occur in a vacuum and that groups outside of the municipal government may be better positioned to implement specific actions and measures. To successfully implement the CAP, it will take collaboration across City departments, with local non-profits, utility providers, community groups, business associations, local institutions, and the community to achieve the goals of this CAP. The sector strategies incorporate many actions focused on collaborating with the City's extensive list of partners. Collaboration with these groups began before the inception of the CAP, but were expanded through targeted and meaningful outreach, and will continue to grow as the CAP is implemented. A full list of stakeholders engaged with during the CAP update is included in Appendix A but some of the key local partners who will have a role in implementing the Chico CAP include:

- City of Chico Planning Department, Finance Department, Operations and Maintenance, and Public Works
- Build.com
- Butte Choice Energy (BCE)
- Butte County
- Butte County Association of Governments (BCAG)
- Butte Environmental Council
- Butte Regional Transit (BRT)
- California State University, Chico (CSU Chico)
- Chico Unified School District (CUSD)
- Chamber of Commerce
- Chico Builders Association
- Chico Velo
- Enloe Medical Center
- Fifth Sun
- North State Rendering
- Pacific Gas & Electric (PG&E)
- Recology
- Sierra Nevada Brewing Co.
- Valley Contractors Exchange
- Waste Management

#### Social Equity – Prioritizing underserved communities

Chico cannot meaningfully implement a CAP without considering the effects of each sector strategy on underserved communities. Successful climate action in Chico requires an equitable distribution of the benefits and impacts associated with each measure to avoid exacerbating existing inequities. For this

reason, each sector strategy was developed to include equity actions that specifically address how the sector strategies and supporting measures will be implemented to act as guardrails for inequitable climate action impacts and ensure Chico's frontline communities and vulnerable populations equally benefit from this CAP. The groups specifically engaged around this issue during CAP development included the Chico Unified School District and Team Chapman. As the CAP is implemented it will be critical for the City to continue these conversations and adjust based on feedback from the community.

#### Cost Effectiveness - Reducing the burden on individuals and the City

Implementation of Chico's CAP and its sector strategies will carry costs for the community and costs for the City. The City understands that the sector strategies cannot rely on local residents and business owners making changes they can't afford. This understanding was deeply ingrained in the development of the sector strategies. Actions that involve or require community participation were built to be cost-effective, have funding opportunities, and/or have a high return on investment. Local residents and business owners are not expected to face an unavoidable cost burden as a result of implementing the sector strategies.

In order to cover the up-front costs associated with CAP implementation, the CAP includes a comprehensive Climate Action Finance Map (Appendix D) to better facilitate social equity and improve cost effectiveness of the sector strategies. The City recognizes that the limiting factor in climate action is often the high capital cost of implementing changes to infrastructure and has developed the Climate Action Finance Map to highlight funding opportunities and ensure the cost burden is not placed on Chico's taxpayers.

#### Accountability – Holding Chico accountable to its goals

The City developed the CAP's sector strategies to hold the City accountable to its goals and targets. To help keep the City on track for implementation, actions are included to help keep Chico accountable to its GHG reduction targets. This CAP also includes an Implementation and Monitoring Plan (Chapter 8), which directs the implementation and monitoring of the CAP's measures and actions relative to the GHG reduction targets.

#### Education and Leadership - Paving the way for impacts

The City understands that implementation of the CAP will lead to change and that many of these changes will require the adoption of new technologies and behaviors. This change is unlikely to occur without conversations between the City, key stakeholders, and the community. While the community stands to benefit from these changes, the City will need to learn how to better implement them and remove hurdles to adoption. Throughout the CAP's implementation, the City will need to provide the leadership and resources necessary for individuals and businessowners in the community to be a part of this effort.

#### **GHG Reduction Potential – Reducing GHG's in Chico**

To do Chico's fair share towards the State's GHG reduction goals and meet the requirements of a qualified GHG reduction plan, the CAP must demonstrate that its implementation will lead to GHG reductions. The sector strategies were developed based on substantial evidence that the measures and actions would result in quantified GHG reductions through 2030 and 2045. The GHG reductions

expected from each measure and action are shown in the next section, and an in-depth analysis of the substantial evidence for these reductions is provided in Appendix D.

#### Co-Benefits of the GHG Reduction Strategies

In addition to GHG emissions reductions, the sector strategies will produce many co-benefits. Co-benefits refer to the positive effects that a climate action policy will have on other community objectives. For example, incentives for all-electric equipment can lower energy costs for residents and improve local air quality, in addition to reducing GHG emissions in the community. The co-benefits associated with the CAP's actions include:

Improved Public Health – The sector strategies will help ensure cleaner air and more active and livable neighborhoods. In particular, the energy and transportation sector strategies include long-term plans for significantly reducing fossil fuel usage in the community, especially natural gas. Natural gas is responsible for increased levels of nitrogen oxide emissions in homes and other buildings – several times higher than outdoor air quality standards – and is disproportionately linked with respiratory illness, including asthma. Natural gas is also getting more expensive. Without a transition plan, the bill for running a gas furnace could increase 500% by 2050, due to increasing natural gas infrastructure costs coupled with a naturally declining demand for gas as appliances become more energy efficient. <sup>2</sup>

**Resilience** – Actions that address climate change can bolster the ability of local residents and businesses to recover quickly from or reduce the impact of other hazards such as extreme heat days or localized flooding. For example, planting trees for carbon sequestration and increasing tree canopy cover can help keep streets and neighborhoods cooler – covering 40% of a city street can counteract the warming effects from asphalt.<sup>3</sup> Climate actions can also enhance community cohesion—the networks of formal and informal relationships among neighbors that foster a mutually supporting human environment.<sup>4,5</sup>

**Healthier Ecosystems** - Actions to mitigate and adapt to climate change can also support more healthy and functional ecosystems. Healthier ecosystems provide a variety of public benefits including reducing pollutants in local creeks, providing species habitat, improving air and water quality, reducing flood risk, and providing areas for human recreation and respite.

**Reduced Traffic Congestion** - If the transportation measures included in this plan are fully implemented, there will be an added benefit of reduced traffic congestion. Measures designed to increase biking, walking, bicycle and scooter sharing, and use of public transportation have the goal of taking single-occupancy vehicles off the road and providing Chico residents and visitors expanded options besides using personal vehicles.

Another co-benefit of the CAP as a whole will be its facilitation of local development. A key concern throughout the CAP development process has been the promotion of thoughtful development in Chico that will support the local economy, provide for infrastructure upgrades, and ensure affordable housing

<sup>&</sup>lt;sup>1</sup> American Lung Association

<sup>&</sup>lt;sup>2</sup> https://gridworks.org/initiatives/cagas-system-transition/

<sup>&</sup>lt;sup>3</sup> https://www.popsci.com/shade-city-streets-trees-cooling/

<sup>&</sup>lt;sup>4</sup> https://depts.washington.edu/hhwb/Thm Community.html

<sup>&</sup>lt;sup>5</sup> https://www.researchgate.net/publication/328539965\_Climate\_Action\_Cobenefits\_and\_Integrated\_Community\_Planning\_Uncovering\_the\_Synergies\_and\_Trade-Offs

needs are met in alignment with City and State goals. At its core, the CAP provides a clear pathway for new development to align with State climate action requirements and supports local development and investment. The sector strategies are a key component of a CEQA-qualified GHG reduction plan, which will allow new development projects to "tier off" of the CAP, significantly reducing the required CEQA review that new development faces. Many jurisdictions within California recognize the importance of maintaining a CAP for this purpose.

#### **GHG Reduction Strategies and Costs**

GHG reduction strategies have been developed in six sectors: Energy, Transportation, Waste, Sequestration, Water, and Outreach and Education. An overview of each sector strategy is included below. This section also includes an overview of the community and City costs associated with each measure. Community costs are defined as costs that groups or members of the community would bear if each measure and it supporting actions are fully implemented. City costs are defined as costs that the City will have responsibility for. The CAP's Climate Action Finance Map provides funding opportunities and examples solutions to help offset the community costs and mitigate the larger City costs that are identified below. With full implementation of the CAP and the funding and financing pathways from the Climate Action Finance Map, both community costs and City costs will be minimized.

#### Energy

The focusing strategy for the energy sector is electrification coupled with carbon-free electricity. Allelectric buildings are powered 100% by electricity and when coupled with carbon-free electricity, they become carbon-free.

### Measure E-1: Decarbonize electricity by 2024 to reduce electricity emissions 90% by 2030 and maintain these emissions reductions through 2045

The California Renewable Portfolio Standard requires all retail electricity providers in California to provide carbon neutral electricity by 2045. Procuring community-wide carbon-free electricity through a Community Choice Aggregation (CCA) will expedite that timeline and offer significant GHG reductions in the short term with minimal increases to community electricity bills.

- Community Costs: This measure will automatically enroll all community accounts into the CCA's 100% renewable/carbon free electricity option starting in 2024, which will be offered by Butte Choice Energy at a slight price premium.¹ Community members will individually have the opportunity to opt-out or opt-down from the 100% renewable/carbon free option in the event these cost increases are not feasible.
- **City Costs**: The City will incur low administrative costs for measure implementation and outreach.

### Measure E-2: Eliminate natural gas in all new building construction starting in 2025 to reduce natural gas consumption 6% by 2030 and 16% by 2045

New construction built without natural gas is less expensive<sup>2</sup> for most building types and will result in carbon free buildings by 2045 at the latest<sup>3</sup>. Retrofitting existing buildings that rely on natural gas to be

<sup>&</sup>lt;sup>1</sup> While Butte Choice Energy has not yet established rates, many CCA's provide a carbon free energy option that is comparable to PG&E rates and a 100% renewable option that costs approximately 1 cent per kWh more. This results in a 4-5 dollar per month cost increase. <a href="https://www.pge.com/pge\_global/common/pdfs/customer-services/alternative-energy-providers/community-choice-aggregation/ebce\_rateclasscomparison.pdf">https://www.pge.com/pge\_global/common/pdfs/customer-services/alternative-energy-providers/community-choice-aggregation/ebce\_rateclasscomparison.pdf</a>

<sup>&</sup>lt;sup>3</sup> SB100 will provide 100% carbon free electricity by 2045. The City of Chico will also join a CCA which will be able to provide carbon free electricity as early as 2025.

all-electric is a substantial task. To ensure new buildings won't need to be retrofitted later, Measure E-2 will require new buildings and major retrofits to be all-electric through an electrification ordinance starting in 2025 (unless the 2025 California Building Code Update includes all-electric requirements for new buildings). An electrification ordinance will not be implemented until 2025, if necessary, in order to give the community time to better understand the new development requirements.

- Community Costs: This measure will affect costs for local developers for new construction. Building all-electric has been shown to be cost-effective for developers and building owners for all building types in the City of Chico, when combined with additional solar photovoltaics. This measure will not affect existing buildings and is not expected to increase costs to residents. The ordinance is expected to reduce utility bill costs for residents in new all-electric buildings as well as community wide due to decreased natural gas infrastructure deployment.
- **City Costs**: City costs associated with this measure are low and will generally include administrative staff and consultant time for development of an ordinance and outreach to the community.

### Measure E-3: Electrify existing buildings starting in 2027 to reduce natural gas consumption 12% by 2030 and 43% by 2045

Retrofitting existing buildings to be all-electric requires up-front investments that many community members may not be able to afford. While existing building electrification is likely to have a long-term payback, additional resources will need to be in place before any mandatory electrification measures for existing buildings is put in place. Measure E-3 will provide a framework of updated policies, incentives, rebates, and outreach to drive the electrification of existing buildings in a cost-effective and equitable way.

- Community Costs: Starting in 2027, the Chico community will be expected to replace broken or non-working space heaters and hot water heaters with all-electric models. In general, all-electric models are more expensive than natural-gas fueled counterparts upfront, but provide long-term on-bill savings. A detailed discussion of these costs can be found in Chapter 7. The Climate Action Finance Map identifies multiple pathways to offset these costs through potential City-coordinated rebates, local utility partnerships, on-bill financing, and other methods and would be expanded on by an existing building electrification study prior to implementation of any new requirements. A significant outreach and education effort will also accompany this measure to adequately prepare and educate the community for these changes.
- City Costs: This measure will require the City to invest in all-electric infrastructure for existing
  municipal buildings. In instances where this is not cost-effective, the costs could potentially be offset
  through grant-based or finance-based pathways identified in the Climate Action Finance Map so that
  these costs do not ultimately fall on the Chico taxpayer. This measure is also associated with various
  administrative costs for updating the local building code, tracking electrification progress, and
  working with partners to conduct outreach and develop incentives.

#### Measure E-4: Increase generation and storage of local renewable energy

<sup>&</sup>lt;sup>4</sup> https://explorer.localenergycodes.com/chico-city/forecast/11-PGE/studies/1,2,3

Measures E-2 and E-3 will increase electricity demand on the grid into the future. To compensate for this, and increase Chico's energy resilience overall, Measure E-4 will support local energy generation and storage projects that prioritize low-income communities.

- Community Costs: Community members may choose to invest in solar PV and/or battery storage.
   Many financing options are available for these systems, many of which result in a positive cash flow.<sup>5</sup>
- **City Costs:** Under this measure, the City will work with PG&E through the Sustainable Solutions Turnkey Program to support and develop local energy generation and storage projects, which are generally associated with high construction and maintenance costs. However, several large-scale projects are already funded and underway through the Sustainable Solutions Turnkey Program and the Climate Action Finance Map identifies other potential pathways for financially supporting future projects that will not result in a financial burden for the City or its taxpayers. Costs likely to be incurred by the City and its taxpayers will be low administrative costs for coordinating with partners, supporting financing avenues, and implementing the measure.

#### Transportation

Reducing transportation emissions and becoming a carbon neutral city means reducing the number of miles driven by fossil fuel-powered vehicles. The City's transportation strategy consists of a two-pronged approach: shifting car travel to active transportation (i.e., biking, walking) and public/shared transit; then electrifying to the greatest extent possible the remaining car trips. Chico has set a target of 35% reduction in transportation fuels (diesel and gasoline) by 2030 and will accomplish this through the following measures:

Measure T-1: Improve active transportation infrastructure to achieve greater than 6% mode shift away from passenger vehicles by 2030 and 12% mode shift by 2045

The City will work to provide safe, low stress and convenient biking and pedestrian infrastructure and prioritize active transportation. Infrastructure needs including bikeways, sidewalk improvements, and expansions of both kinds of infrastructure to all areas of the City.

- Community Costs: Community costs are anticipated to be low or no cost, and potential cost savings
  for residents would come from a decreased dependence on driving and better health. Some costs
  could be shared by the community through fees/taxes depending on the funding and financing
  strategies employed by the City.
- City Costs: Construction costs associated with new biking and pedestrian infrastructure is generally high, and can vary widely. Designated bike routes and bike boulevards cost about \$10,000/mile. Onstreet bike lanes, buffered or not, cost about \$100,000/mile. Separated, mixed-use paths cost about \$1M/mile. Separated bikeways cost about \$1.5-3M/mile. In addition to the City collection of bicycle infrastructure impact fees for new development and ongoing pursuit of grant opportunities, the Climate Action Finance Map identifies alternative potential pathways for securing the necessary capital to implement these projects.

<sup>&</sup>lt;sup>5</sup> Positive cash flow means the energy savings are greater than the monthly loan payments.

<sup>6</sup> https://cal.streetsblog.org/2019/08/30/breaking-down-caltrans-cost-estimate-of-the-complete-streets-bill/#:~:text=On%2Dstreet%20bike%20lanes%2C%20buffered,use%20paths%3A%20%241M%2Fmile

### Measure T-2: Improve electric vehicle (EV) infrastructure to achieve greater than 23% shift to EVs by 2030, and 90% by 2045

While Chico cannot require its residents to buy EVs, Measure T-2 will ensure the supporting EV infrastructure is present in the City to begin to remove present barriers to EV adoption. Chico has set a goal to add 942 new chargers to Chico by 2030.

- Community Costs: Costs for local developers to include EV infrastructure (including conduit and panel capacity) in new construction are expected to be less than \$400-\$600 per space, compared to over \$2,000 per space when completing a retrofit. Incorporation of EV infrastructure in new development is quickly becoming a requirement under the California Building Code. Installing ready to use EV chargers in existing parking lots can vary widely depending on infrastructure and technology used from between \$500 to \$7,000 for Level 2 chargers, though a Level 1 charger may be even less expensive. Costs for residents who choose to buy EVs due to increased charging infrastructure in the City are highly dependent on vehicle choice. Many EVs are comparable in cost to gasoline-powered vehicles with lifecycle savings.
- City Costs: City costs associated with this measure are low and will include staff and consultant time for development of an ordinance and outreach to the community, if not already required by the California Building Code. City-funded EV chargers are expected to be between \$2,000 and \$7,000 per charger, assuming Level II chargers are purchased. DC fast chargers can charge significantly more vehicles in less time but can cost up to \$55,000 dollars. The City could leverage partnerships to install these chargers at low to no cost to the City as shown in the Climate Action Finance Map.

#### Measure T-3: Improve shared mobility and transit programs and infrastructure

Improving shared mobility and transit programs and infrastructure will also help to shift mode share to public transit. To do this the City must work with its partners, including BCAG and Butte Regional Transit, to expand service lines, increase route speeds, and reduce wait times.

- **Community Costs:** Community members who elect to shift from personal vehicles to shared transit options are expected to save money.
- **City Costs**: City costs associated with this measure are low and will include staff and consultant time for exploration of partnership opportunities with BCAG and Butte Regional Transit, and implementation of associated studies, surveys, and programs.

### Measure T-4: Implement parking and curb management procedures that support the mode shift goals of the overall transportation strategy

Measure T-4 will help create incentives for biking, walking, or other active transportation modes through dynamic parking pricing, improved curbside management, and overall support for active transportation and EVs, in line with the City's Downtown Access Plan.

<sup>&</sup>lt;sup>7</sup> https://fremont.gov/DocumentCenter/View/31450/PEV-Infrastructure-Cost-Effectiveness-Report\_Energy-Solutions\_July-2016

<sup>8</sup>http://www.bcag.org/documents/PEV%20Readiness%20Plan/Draft%20Butte%20PEV%20Readiness%20Plan%203-9-18.pdf

<sup>&</sup>lt;sup>9</sup> https://www.carboncounter.com/#!/explore

- **Community Costs:** Parking costs in Downtown areas will likely increase during times of high usage and special events, but use of alternative modes of transport provided by improved transportation demand management would be free or low cost.
- **City Costs:** The City will likely incur administrative costs for staff and consultant time to update the municipal and zoning code.

Measure T-5: Support implementation of the City's General Plan that promotes sustainable infill development and mixed-use development in new growth areas to reduce vehicle miles travelled (VMT)

Measure T-5 will provide the long-term planning and development framework that will continue to make Chico highly accessible for active transportation and public transit options.

- Community Costs: No costs to the community are anticipated.
- **City Costs:** City costs associated with this measure are low and will include staff time for supporting measure integration with community development.

#### Waste

Emission reductions in the waste sector are driven by compliance with SB 1383, which requires all jurisdictions in California to reduce organic waste disposal 75% and increase edible food recovery 20% relative to 2014 levels by 2025. The main mechanism through which Chico will comply with SB 1383 is by updating waste hauler franchise agreements and identifying and partnering with appropriate stakeholders to ensure requirements for organic waste reduction and edible food recovery are met.

Measure W-1 will update waste hauler franchise agreements to implement requirements of SB 1383 and achieve 75% reduction in organic waste by 2025 and maintain through 2045

- Community Costs: The community may experience increased waste pickup rates. Calrecycle
  estimates \$17 annual costs per household and \$662 annual costs for small businesses in order to
  meet these State requirements.<sup>10</sup>
- **City Costs:** The City will incur costs associated with staff time to coordinate measure implementation and work with local waste haulers and other partners. Finance options for expanding use of the biodigester at North State Rendering are included in the Climate Action Finance Map.

#### Sequestration

A carbon neutral future includes carbon sequestration mechanisms which take carbon out of the atmosphere. The best technology cities have for achieving higher rates of carbon sequestration is through increasing the urban tree canopy by planting more trees and greenscaping. The primary actions under this sector strategy are implementing Chico's Urban Forest Revitalization Program, which establishes tree planting goals for the future, and developing and implementing an Urban Forest Master Plan.

Measure S-1 will increase carbon sequestration by increasing urban canopy cover at least 10% by 2030 through implementation of a new Urban Forest Master Plan.

- **Community Costs:** No costs to the community are anticipated.
- **City Costs:** The City costs will include development of the Urban Forest Master Plan (\$140 thousand) tree planting (\$2 million) and maintenance (\$3 million) costs. Capital needs for implementing this measure can be addressed through existing programs and initiatives, as well as pathways identified in the Climate Action Finance Map.

#### Water

While water emissions are not accounted for separately in the City's inventory, residential and commercial water usage generally accounts for only a small portion of a community's emissions through the use of electricity to pump and distribute water and through water and wastewater treatment. However, water conservation is an important aspect of a community's overall sustainability and resiliency and this CAP Update supports the community's general water conservation goals and work.

Measure WW-1 will promote and support water conservation within the community.

- Community Costs: No costs to the community are anticipated.
- City Costs: City costs will include low administrative costs for associated measure outreach.

#### Outreach and Education

A coordinated outreach and education effort is an important part of any CAP to provide the information and context to the community that is necessary for successful CAP implementation. The many partners identified during the CAP development process will be crucial in the over-arching outreach and education efforts included here.

Measure O-1 will conduct a wholistic community outreach and education program to optimize CAP implementation.

- Community Costs: No costs to the community are anticipated.
- City Costs: City costs will include low administrative costs for associated measure outreach.

#### GHG Reduction Measures and Actions

This CAP includes detailed measures and actions to support the CAP sector strategies and overall GHG emissions targets. The table below includes all the measures and actions organized by sector, with detail on the key pillars supported, co-benefits, and GHG reductions expected from each action.

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported  | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility                      |
|----------------------|---|---|----------------------------|-------------------------|---|
| Energy               |   |   |                            |                         |   |
| E-1                  | Decarbonize electricity by 2024 to reduce electricity emissions 90% by 203  | 0 and maintain these en   | nissions reductions        | through 2045            |   |
| E-1-1                | Provide carbon neutral electricity to the community: Procure carbon neutral 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 in the 100% renewable energy option by 2024 (or as market conditions prove favorable) with an opt-out option. | <ul> <li>Collaboration</li> <li>Socially equitable</li> <li>Cost-effective</li> </ul>       | 2030: 39,170<br>2045: 0    | 2024                    | <ul><li>Planning     Division</li><li>Butte Choice     Energy</li></ul> |
| E-1-2                | Partner with Butte Choice Energy to conduct community outreach and track opt-out rates: Work with Butte Choice Energy to conduct targeted community outreach with the aim of maintaining low opt-out rates (5% or less for residential accounts and 15% or less for commercial accounts). Track opt-out rates through Butte Choice Energy and share results publicly on an annual basis.  | <ul> <li>Collaboration</li> <li>Accountability</li> <li>Education and leadership</li> </ul> | Supportive                 | 2024                    | <ul><li>Planning     Division</li><li>Butte Choice     Energy</li></ul> |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported  | GHG Reduction<br>(MT CO2e)  | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility |
|----------------------|--|---|-----------------------------|-------------------------|--|
| E-2                  | Eliminate natural gas in all-new building construction starting in 2025 to re  | duce natural gas consu  | mption 6% by 2030           | and 16% by 2045         |  |
| E-2-1                | Require new construction to be all-electric: Adopt a new ordinance which bans the installation of natural gas in new residential and commercial construction by 2025 if not already required by the State's 2025 cycle update to the Building Energy Efficiency Standards (California Code of Regulations Title 24, Parts 6 and 11). The ordinance will only apply for building types where electrification is shown to be cost-effective. Implementation will consist of the following:  1. Engage and educate the community and stakeholders 2. Conduct a Cost-effectiveness Study 3. Develop and draft the new building ordinance for public process and revisions 4. Formally adopt the new building ordinance 5. Apply to the California Energy Commission for final ordinance approval | <ul> <li>Cost-effective</li> <li>Education and<br/>leadership</li> <li>GHG reduction<br/>potential</li> </ul> | 2030: 6,730<br>2045: 19,560 | 2025                    | > Planning Division                                |
| E-3                  | Electrify existing buildings starting in 2027 to reduce natural gas consumpt   | ion 12% by 2030 and 4   | 3% by 2045                  |                         |  |
| E-3-1                | Electrify existing residential buildings: If not already required by the State's Building Energy Efficiency Standards (California Code of Regulations Title 24, Parts 6 and 11), adopt an electrification ordinance for existing residential buildings to transition natural gas to electric in two phases, to be implemented through the building permit process.   | GHG reduction potential   |                             | 2025                    | Planning<br>Division                               |
|                      | Phase I: Limit expansion of natural gas lines in existing buildings by 2025  |   |                             |                         |  |
|                      | Phase II: Require HVAC system replacements and hot water heaters replacements to be all-electric by 2027   |   | 2030: 13,470                |                         |  |
|                      | <ol> <li>Implementation will consist of the following:         <ol> <li>Engage and educate the community and stakeholders</li> <li>Conduct a Cost-effective study</li> <li>Develop and draft the new building ordinance for public process and revisions</li> </ol> </li> <li>Formally adopt the new building ordinance</li> <li>Apply to the California Energy Commission for final ordinance approval</li> </ol>   |   | 2045: 50,360                |                         |  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported  | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility              |
|----------------------|---|---|----------------------------|-------------------------|---|
| E-3-2                | Update RECO to support electrification: Expand the City's Residential Energy Conservation Ordinance (RECO), Title 16 of the Municipal Code, to cover substantial remodels (over 50%). Amend RECO to require electrification and/or energy conservation improvements for substantial remodels (over 50%) in the same way that RECO currently requires these types of upgrades upon transfer/sale of homes and apartments. The amendment will include electrification options such as installation of a 200 amp panel and/or installation of electric heat pump appliances for HVAC and hot water heaters as well as the option to go beyond the base requirements for energy conservation set forth in the State's Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6). | <ul><li>Accountability</li><li>GHG reduction potential</li></ul>                      |                            | 2021                    | > Planning Division   |
| E-3-3                | Decarbonize municipal buildings: Adopt decarbonization plan to decarbonize municipal buildings by 2045. This plan would include a new building electrification policy as well as an existing building natural gas phase-out policy. Decarbonization of municipal buildings will be driven by the PG&E Sustainable Solutions Turnkey Program, which aims to achieve net neutrality in electricity usage by 2030, and work towards full decarbonization by 2045   | <ul> <li>Education and<br/>Leadership</li> <li>GHG reduction<br/>potential</li> </ul> | 2030: 460<br>2045: 1,150   | 2021                    | <ul><li>➤ Public Works<br/>O&amp;M</li><li>➤ PG&amp;E</li></ul> |
| E-3-4                | Perform an electrification feasibility study: Conduct a feasibility study/existing building analysis to understand the costs associated with electrifying existing residential and commercial buildings in the City of Chico.   | <ul><li>Socially equitable</li><li>Cost-effective</li></ul>                           | Supportive                 | 2022                    | Planning<br>Division  |
| E-3-5                | <b>Track electrification progress:</b> Develop a permit tracking program for existing building electrification to track annual progress in achieving the City's electrification goals.  | > Accountability  | Supportive                 | 2021                    | Planning<br>Division  |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility   |
|----------------------|--|--|----------------------------|-------------------------|--|
| E-3-6                | Identify and partner with stakeholders to conduct electrification outreach, promotion, and education: Leverage partnerships with stakeholders to conduct outreach, promotion, and education around new and existing building electrification, including:   | <ul> <li>Collaboration</li> <li>Education and<br/>Leadership</li> <li>Socially equitable</li> </ul>  | Supportive                 | 2021                    | Planning<br>Division   |
|                      | Induction/electric stove cooking competition to demonstrate the competitiveness of electric stoves for replacing gas stoves  |  |                            |                         |  |
|                      | Information sessions/events that educate the public on safety concerns around gas stoves and health/cost benefits of replacing water heaters and space heaters with electric heat pumps  |  |                            |                         |  |
|                      | Develop financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification and move towards all-electric requirements   |  |                            |                         |  |
|                      | Conduct internal trainings with planners and building officials on state decarbonization goals and incentives available for electric homes   |  |                            |                         |  |
|                      | Establish a comprehensive, coordinated electrification education campaign for property owners and occupants, including an updated list of rebates and incentives available for residents wanting to electrify their homes  |  |                            |                         |  |
| E-3-7                | Identify and partner with stakeholders to develop resident-level funding pathways for implementing electrification ordinance: Leverage partnerships with stakeholders and establish funding pathways to ease community members' costs when complying with an electrification ordinance or meeting State standards, including:  | <ul><li>Collaboration</li><li>Socially equitable</li><li>Cost-effective<br/>Accountability</li></ul> | Supportive                 | 2021                    | <ul> <li>Planning         Division     </li> <li>PG&amp;E</li> <li>Butte Choice         Energy     </li> </ul> |
|                      | Investigation of a transfer tax rebate for electric panels and/or other upgrades   |  |                            |                         |  |
|                      | Partner with PG&E, Butte Choice Energy, and/or other stakeholders to create or expand electrification/retrofit programs and incentives, especially for low-income residents. These could include the PACE program, PG&E's low-income weatherization program, tariffed on-bill financing, metered energy efficiency, or others. |  |                            |                         |  |
| E-4                  | Increase generation and storage of local renewable energy  |  |                            |                         |  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported  | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility          |
|----------------------|---|---|----------------------------|-------------------------|---|
| E-4-1                | Coordinate with stakeholders to provide local energy generation support and incentives for the community: Partner with PG&E and/or other stakeholders to support and incentivize local on-site energy generation and storage resources within the community with a focus on underserved communities. This could include a co-located community solar and storage project.   | <ul><li>Collaboration</li><li>Socially equitable</li><li>Accountability</li></ul> | Supportive                 | 2021                    | <ul><li>Public Works<br/>O&amp;M</li><li>PG&amp;E</li></ul> |
| E-4-2                | <b>Streamline battery storage requirements:</b> Coordinate City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies within the community.   | <ul><li>Cost-effective<br/>Accountability</li></ul>                               | Supportive                 | 2021                    | Planning<br>Division  |
| E-4-3                | Conduct an energy generation feasibility study: Conduct a feasibility study through the PG&E Sustainable Solutions Turnkey (SST) program to assess cost and applicable locations for installation of battery back-up systems, generators, or a micro-grid throughout the City. Engage with the community to determine how local energy generation systems can support community infrastructure as well as critical public infrastructure. | Collaboration<br>Accountability   | Supportive                 | 2021                    | <ul><li>Public Works<br/>O&amp;M</li><li>PG&amp;E</li></ul> |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility          |
|----------------------|---|--------------------------|----------------------------|-------------------------|---|
| E-4-4                | Install renewable energy technology at municipal facilities: Implement the comprehensive PG&E Sustainable Solutions Turnkey Program to install renewable energy technology at municipal facilities. Key energy conservation measures include: | > Collaboration          | Supportive                 | 2021                    | <ul><li>Public Works<br/>O&amp;M</li><li>PG&amp;E</li></ul> |
|                      | Increasing backup generation capacity and adding battery storage at City facilities   |                          |                            |                         |   |
|                      | Upgrading aeration systems at the Wastewater Treatment Plan to reduce energy consumption by 11%   |                          |                            |                         |   |
|                      | Upgrading and automating all City HVAC systems  |                          |                            |                         |   |
|                      | Installing solar PV at the Municipal Services Parking Lot to create 290 kW energy savings   |                          |                            |                         |   |
|                      | Replacing aging 1MW solar PV system at the Wastewater Treatment Plan, and adding an additional 738 kW of solar PV within the existing footprint to create a total of 1.75 MW energy savings   |                          |                            |                         |   |
|                      | Updating City-operated irrigation control system design and development City-wide.  |                          |                            |                         |   |

| Trans | Transportation   |      |  |                            |                |           |                                      |  |  |
|-------|--|------|--|----------------------------|----------------|-----------|--------------------------------------|--|--|
| T-1   | Improve active transportation infrastructure to achieve greater than 6% n  | node | shift away from pas                              | senger vehicles b          | y 2030 and 12% | mode shif | ft by 2045                           |  |  |
| T-1-1 | Implement Chico Bicycle Master Plan: Implement the Chico Bicycle Plan 2019 Update in accordance with the Plan's goals, objectives, and policies. Implementation of the Plan may include: | >    | Socially equitable<br>GHG reduction<br>potential | 2030: 1,530<br>2045: 1,500 | 2021           | >         | Planning<br>Division<br>Public Works |  |  |
|       | Adding additional miles to the bikeway network   |      |  |                            |                |           | Engineering                          |  |  |
|       | Improving/expanding wayfinding, bike trail maintenance, safety, comfort, enforcement, and end-of-trip facilities   |      |  |                            |                |           |                                      |  |  |
|       | Integrating with transit and other transport modes   |      |  |                            |                |           |                                      |  |  |
|       | Conducting promotion and education around biking in Chico  |      |  |                            |                |           |                                      |  |  |
|       | Identifying and competing for funding sources  |      |  |                            |                |           |                                      |  |  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported                                    | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility                           |
|----------------------|---|---|----------------------------|-------------------------|--|
| T-1-2                | <b>Require shaded and convenient bike parking:</b> Require shaded Park-a-Bike style rack or equivalent when installing bike parking in new development.   | > Accountability  | Supportive                 | 2021                    | Planning<br>Division   |
| T-1-3                | Require major road upgrades to include bicycle infrastructure: Require major road upgrades to include bicycle infrastructure and its maintenance unless a significant cost/feasibility issue is shown. Update Title 18 Standard Details on each roadway section type to include the applicable bikeway modifications such as Type II lanes and buffered bikeway.                          | <ul><li>Cost effectiveness</li><li>Accountability</li></ul> | Supportive                 | 2021                    | Planning<br>Division   |
| T-1-4                | <b>Perform a street/intersection study:</b> Conduct a street/intersection study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.  | > Accountability  | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul> |
| T-1-5                | Complete an Active Transportation Plan: Develop and implement an Active Transportation Plan (consistent with the General Plan) that identifies funding strategies and policies for development of pedestrian, bicycle, and other modes of alternative transportation projects. Work with the City's bike/ped working group to identify high priority areas. Example improvements include: | <ul><li>Socially equitable</li><li>Accountability</li></ul> | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul> |
|                      | Pave shoulders of streets that have high traffic counts   |   |                            |                         |  |
|                      | Separate bike lanes from motor traffic with concrete bumper blocks or better  |   |                            |                         |  |
|                      | Establish a safe east-west connection over highway 99   |   |                            |                         |  |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility                           |
|----------------------|--|--|----------------------------|-------------------------|--|
| T-1-6                | Identify and partner with stakeholders to conduct outreach, promotion, and education: Leverage partnerships with stakeholders to conduct ongoing outreach, promotion, and education around active transportation in Chico. This could include: | <ul><li>Collaboration</li><li>Education and<br/>Leadership</li></ul> | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul> |
|                      | Establishing City-wide events or programs that promote active transportation in the community  |  |                            |                         | Chico Velo   |
|                      | Regularly updating the City's Bicycle and Pedestrian Network Map and sharing through City and stakeholder partnership platforms  |  |                            |                         |  |
|                      | Supporting Chico Velo in hosting workshops and classes on bike riding, safety, and maintenance by certified instructors  |  |                            |                         |  |
|                      | Instituting car-free days downtown, potentially coupled with Farmer's Market or other large and regular events   |  |                            |                         |  |
|                      | Consolidating a list of local employer-provided bicycle parking, lockers, showers, and incentives as a demonstration tool for other interested employers   |  |                            |                         |  |
| T-1-7                | Create a Bike/Ped/Parking Coordinator Position: Create a Bike/Ped/Parking Coordinator position for the City to ensure implementation of active and shared mobility measures.   | > Accountability   | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul> |
| T-2                  | Improve electric vehicle (EV) infrastructure to achieve greater than 23% sl  | hift to EVs by 2030, and   | 90% by 2045                |                         |  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported  | GHG Reduction<br>(MT CO2e)    | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility                           |
|----------------------|---|---|-------------------------------|-------------------------|--|
| T-2-1                | Increase privately owned EV charging infrastructure: If not already required by the State's Building Energy Efficiency Standards, consistent with the Final Butte PEV Readiness Plan, amend the City's Building Code by 2023 to require the following:  | <ul><li>Accountability</li><li>GHG reduction potential</li></ul>                            |                               | 2022                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul> |
|                      | EV capable private garages for new single-family and duplex residential development   |   |                               |                         |  |
|                      | 20% EV capable charging spaces and panel capacity for new multi-family residential development  |   |                               |                         |  |
|                      | 20% EV capable charging spaces for new commercial development   |   |                               |                         |  |
|                      | At least 1% working chargers for all new development and major retrofits  |   |                               |                         |  |
| T-2-2                | Increase publicly accessible EV charging infrastructure: Work with public and private partners to ensure there are at least 942 publicly accessible DCFC and Level 2 EV chargers with the City's Sphere of Influence, with a focus on providing access to low-income households and affordable housing by 2030. Prioritize locations based on analysis in the Final Butte PEV Readiness Plan.                                 | <ul><li>Collaboration</li><li>Socially equitable</li><li>GHG reduction potential</li></ul>  | 2030: 28,616<br>2045: 105,496 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul> |
| T-2-3                | Increase City-owned EV charging infrastructure: Install new publicly accessible EV chargers at City-owned facilities. Develop and implement a fee for use of City-owned chargers to encourage efficient use and turnover, especially for those without home charging capability. Allocate parking fee revenue towards projects that support EV infrastructure, alternative fuel projects, and active transportation projects. | <ul><li>Socially equitable</li><li>Accountability</li><li>GHG reduction potential</li></ul> | -                             | 2021                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul>     |
| T-2-4                | Identify and partner with stakeholders to develop ZEV-related rebates: Investigate partnerships with public and private stakeholders to develop rebates on at-home electric circuits, panel upgrades, and Level 2 chargers.   | <ul><li>Collaboration</li><li>Socially equitable</li><li>Cost effectiveness</li></ul>       | Supportive                    | 2021                    | Planning<br>Division   |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility   |
|----------------------|--|--------------------------|----------------------------|-------------------------|--|
| T-2-5                | outreach, promotion, and education to encourage EV adoption and infrastructure improvements. This could include the following:   | > Accountability         | Supportive                 | 2021                    | <ul> <li>Planning         Division</li> <li>CSUC</li> <li>Fifth Sun</li> <li>Build.com</li> <li>Enloe</li> </ul> |
|                      | Working with major employers (e.g., CSUC, Fifth Sun, Build.com, Enloe) to provide EV charging for employees and encourage EV adoption among employees  |                          |                            |                         |  |
| T-2-6                | <b>Establish electrical and technical standards for EVSE:</b> EVSE standards to be established include construction of equipment, wiring methods, and safety protection, consistent with the California Electrical Code and the Underwriter's Laboratories guidance on EVSE. | ➤ Accountability         | Supportive                 | 2021                    | Planning<br>Division   |
| T-2-7                | <b>Establish universal EV signage:</b> Establish universal signage and marking requirements for EV parking spaces.   | > Accountability         | Supportive                 | 2021                    | Planning<br>Division   |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported                                    | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility |
|----------------------|--|---|----------------------------|-------------------------|--|
| T-2-8                | Streamline the EVSE permitting and inspection processes: Streamline both the EVSE permitting and inspection processes, which may include: Prioritizing EVSE permitting for faster turnaround times Establishing flat fees for standard installations Enabling homeowners and licensed contractors to submit EVSE permit applications online Allowing EVSE across different zoning classifications Considering simple EVSE installations as exempt from CEQA on a case-bycase basis Allowing installation of EVSE as a mitigation measure for large projects Condensing inspections for more complex installations that do not include panel upgrades or underground conduit Establishing a 24-hour flexible inspection request program online Providing shorter inspection windows Removing requirement for electrician to be present during inspection to decrease consumer costs | <ul><li>Cost effectiveness</li><li>Accountability</li></ul> | Supportive                 | 2021                    | > Planning Division                                |
| T-3                  | Improve shared mobility and transit programs and infrastructure  |   |                            |                         |  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|---|--|----------------------------|-------------------------|---|
| T-3-1                | Partner with BCAG and Butte Regional Transit to improve and expand transit within the City: This could include:   | <ul><li>Collaboration</li><li>Socially equitable</li></ul>       | Supportive                 | 2021                    | <ul> <li>Planning         Division</li> <li>BCAG</li> <li>Butte Regional         Transit</li> </ul> |
|                      | Expanded transit service, especially along transit priority corridors, and more frequent and reliable transit service. More frequent transit can begin to act as a shuttle, especially since downtown employees and CSUC students and faculty are eligible for free transit passes  | Education and leadership   |                            |                         |   |
|                      | Improved and/or more efficient transit technology   |  |                            |                         |   |
|                      | Improved service/communication through interactive service maps, app payments, and real time arrival info   |  |                            |                         |   |
|                      | Increased active transportation access to transit stops   |  |                            |                         |   |
|                      | Enhanced, comfortable stops and stations  |  |                            |                         |   |
|                      | Education and outreach to the community on new and existing shared transit options  |  |                            |                         |   |
|                      | Subsidized transit passes   |  |                            |                         |   |
|                      | New electric hop-on hop-off trolley service through major points of interest (e.g., downtown, Bidwell Park, Bidwell Mansion, Sierra Nevada, fair grounds, Chico State)  |  |                            |                         |   |
| T-3-2                | Prepare for shared bike programs: Conduct an active transportation share (e.g., bike-share, scooter-share) feasibility study. Update municipal ordinances to prepare the City for shared mobility programs in accordance with the Bicycle Master Plan and the Downtown Access Plan. Consider starting a bike share pilot program in Downtown, ideally with docked e-bikes.  | <ul><li>Accountability</li><li>GHG reduction potential</li></ul> | Supportive                 | 2021                    | · ·   |
| T-3-3                | New employer trip reduction programs: Implement General Plan Action CIRC 9.1.2 to reduce single occupancy vehicle trips associated with work commutes. As a condition of project approval, require new non-residential projects that will employ more than 100 people to submit a Travel Demand Management Plan that identifies strategies to reduce single-occupancy vehicle trips, including encouraging employers to provide transit subsidies, bicycle facilities, alternative work schedules, telecommuting and preferential parking for carpool/vanpools. | > Accountability   | Supportive                 | 2022                    | Planning<br>Division  |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|--|--|----------------------------|-------------------------|---|
| T-3-4                | Conduct a transportation equity study: Partner with CSUC to conduct a transportation equity study to investigate current barriers for minority, low-income, and senior populations in disadvantaged communities to take transit, walk, bike, use rideshare, or carshare.   | Socially equitable   | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>CSUC</li></ul>  |
| T-3-5                | Conduct a local transportation survey: Support BCAG in conducting local transportation surveys every five years to better understand the community's needs and motivation for travelling by car versus other alternatives such as by bike or bus. Use survey results to inform transit expansion and improvement projects.           | Accountability   | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>BCAG</li></ul>  |
| T-3-6                | <b>Encourage and facilitate carsharing services:</b> Perform ongoing outreach to carsharing companies about the potential to implement a carsharing program in Chico, preferably electric.   | <ul> <li>Socially equitable</li> <li>Education and leadership</li> <li>Cost-effective</li> </ul> | Supportive                 | 2021                    | Planning<br>Division  |
| T-3-7                | <b>Encourage use of local transit:</b> Promote use of B-Line for Downtown transit especially. This could include bus open houses and promotion of DoubleMap app.   | > Cost-effective   | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>BCAG</li></ul>  |
| T-3-8                | Invest in TDM strategies: In accordance with the Downtown Access Plan, designate and use a portion of paid parking revenue to invest in TDM strategies including Actions T-3-1 to T-3-7 that will ensure cost-effective downtown access by improving transit, bicycle facilities, and create incentives for people to avoid driving. | > Accountability   | Supportive                 | 2021                    | <ul> <li>Planning         Division     </li> <li>Public Works         Engineering     </li> </ul> |
| T-4                  | Implement parking and curb management procedures that support the mo   | de shift goals of the ove  | rall transportation        | strategy                |   |
| T-4-1                | <b>Utilize dynamic parking pricing downtown:</b> In accordance with the Downtown Access Plan, utilize dynamic pricing for Downtown area parking, increasing costs of parking during times of high usage and special events.  | > Accountability   | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul>                      |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|---|--|----------------------------|-------------------------|---|
| T-4-2                | Improve curbside management: Improve curbside management in accordance with the Downtown Access Plan. This may include updating the Municipal Code to require active loading only, prohibit double parking, define locations for additional loading zones, and design loading zone signage.   | > Accountability   | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul>  |
| T-4-3                | <b>Encourage parklets Downtown:</b> Identify opportunities for development of parklets throughout the City's Downtown, to replace parking spaces with bike parking or outdoor restaurant seating.   | > Accountability   | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     Engineering</li></ul>  |
| T-4-4                | Establish carpool/vanpool/shuttle minimums: Update the Municipal Code to establish minimums for carpool/vanpool/shuttle parking requirements in new non-residential development.  | > Accountability   | Supportive                 | 2021                    | Planning<br>Division  |
| T-5                  | Support implementation of the City's General Plan that promotes sustaina vehicle miles travelled (VMT)  | ble infill development a   | and mixed-use devel        | opment in new grov      | vth areas to reduce   |
| T-5-1                | <b>Support infill growth:</b> Continue to support infill growth and thoughtful mixed-use development in new growth areas consistent with the Chico 2030 General Plan and the regional Sustainable Communities Strategy.   | > Accountability   | Supportive                 | 2021                    | Planning<br>Division  |
| Waste                |   |  |                            |                         |   |
| W-1                  | Update waste hauler franchise agreements to implement requirements of through 2045  | SB 1383 and achieve 7  | 5% reduction in orga       | nnic waste by 2025 a    | nd maintain   |
| W-1-1                | Require residential and commercial organic waste collection through updated waste hauler contracts: Update waste hauler contracts to include expanded organic waste collection. 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 de minimis volumes and physical space constraints and maintain records for waivers/exemptions. | <ul> <li>Collaboration</li> <li>Accountability</li> <li>GHG reduction potential</li> </ul> | 2030: 7,690<br>2045: 7,690 | 2022                    | <ul> <li>Planning         Division</li> <li>Public Works         O&amp;M</li> <li>Waste         Management</li> <li>Recology</li> </ul> |

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|----------------------|--|---|----------------------------|-------------------------|---|
| W-1-2                | <b>Require edible food recovery:</b> Adopt an edible food recovery ordinance or similarly enforceable mechanism to ensure edible food generators, food recovery services, and food recovery organizations comply with requirements to increase recovery rates  | <ul><li>Collaboration</li><li>Socially equitable</li></ul>      | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul>  |
| W-1-3                | Increase the City's recycled product procurement: Ensure that at least 75% of the City's annual purchase of paper products contains at least 30% certified post-consumer fiber paper and increase procurement and use of compost to meet California Model Water Efficient Landscape Ordinance requirement for incorporating compost into new and renovated permitted landscapes. | > Accountability  | Supportive                 | 2021                    | <ul><li>Planning<br/>Division</li></ul>   |
| W-1-4                | Partner with North State Rendering to expand use of the digester: Work with North State Rendering to expand use of organics in the digester. Conduct a pilot to demonstrate effectiveness and identify funding sources for a larger expansion.   | <ul><li>Collaboration</li><li>GHG reduction potential</li></ul> | Supportive                 | 2021                    | <ul> <li>Planning         Division     </li> <li>Public Works         O&amp;M     </li> <li>North State         Rendering     </li> </ul> |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|---|--------------------------|----------------------------|-------------------------|---|
| W-1-5                | Conduct capacity planning for organic waste collection: Engage in organic waste collection capacity planning by executing the following:  Estimate Chico's disposal of organic waste in tons  Identify and verify amount of available organics waste recycling infrastructure  Estimate the amount of new or expanded capacity needed to process organic waste  Work with the City of Chico's Recycling and Solid Waste Division and waste haulers to coordinate organic waste delivery to Recology's Oroville Transfer Station and Ostrom Road organics facility  Develop and submit an implementation schedule highlighting planning effort to provide enough new or expanded organics capacity, including timelines and relevant milestones by the end of the report period  Identify proposed new or expanded facilities that could be used for additional capacity | > Accountability         | Supportive                 | 2021                    | <ul> <li>Planning         Division</li> <li>Public Works         O&amp;M</li> <li>Recycling and         Solid Waste         Division</li> <li>Recology</li> </ul> |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility                       |
|----------------------|---|--------------------------|----------------------------|-------------------------|--|
| W-1-6                | Conduct capacity planning for edible food recovery: Engage in edible food recovery capacity planning by executing the following actions:  Estimate the amount of edible food that will be disposed by organics generators in Chico  | > Accountability         | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul> |
|                      | Work with commercial food generators to reduce excess edible food generation  |                          |                            |                         |  |
|                      | Work regionally to establish a full list of food recovery organizations that can receive edible food from Chico businesses  |                          |                            |                         |  |
|                      | Identify proposed new or expanded food recovery capacity  |                          |                            |                         |  |
|                      | Identify the minimum capacity required to recover 20% of edible food that is estimated to be disposed   |                          |                            |                         |  |
|                      | If existing and planned capacity is insufficient based on the above process, the City of Chico must develop and submit an implementation schedule highlighting the planning effort to provide enough new or expanded capacity for increasing edible food donations and identify proposed new or expanded facilities to be used to for additional capacity |                          |                            |                         |  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported  | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|---|---|----------------------------|-------------------------|---|
| W-1-7                | Develop and implement a partnered education and outreach program:  Update waste hauler contracts and partner with stakeholders (e.g., Recology, CUSC, Chico State, BEC) to develop and implement an education and outreach program around SB 1383:  Coordinate with Recology's education and outreach personnel to expand on existing community outreach  Conduct outreach and education at schools on composting, recycling, and waste reduction  Provide education to the community on home composting techniques  Inform organics generators/edible food generators on requirements to properly separate materials, organic waste prevention and on-site recycling, methane reduction benefits of composting, and information related to edible food donation  Hold a compost give-away event for Chico residents  Identify percentage of organics generators who are "limited English-Speaking households" or "linguistically isolated." If more than five percent (5%) of Chico's organics generators are defined as "limited English-speaking households" or linguistically isolated," provide education and outreach in a language or languages that will assure the information is understood by that community | <ul> <li>Collaboration</li> <li>Education and leadership</li> </ul> | Supportive                 | 2021                    | <ul> <li>Planning         Division</li> <li>Public Works         O&amp;M</li> <li>Recology</li> <li>CUSC</li> <li>Chico State</li> <li>BEC</li> </ul> |
| W-1-8                | <b>Develop and implement an inspection and compliance program:</b> Update waste hauler contracts to implement an inspection and compliance program for the edible food recovery program and organics procurement program with defined enforcement mechanisms and penalties, to begin prior to 2024. Maintain records of compliance in accordance with SB 1383.  | > Accountability  | Supportive                 | 2022                    | <ul> <li>Planning         Division     </li> <li>Public Works         O&amp;M     </li> </ul>   |

S-1

Increase carbon sequestration by increasing urban canopy cover at least 10% by 2030 through new greenscaping programs

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|---|--|----------------------------|-------------------------|---|
| S-1-1                | Implement Chico's Urban Forest Revitalization Program: Implement the Urban Forest Revitalization Program to plant 700 trees by March 2022 (adopted) and 4,500 trees by 2030 (new goal). Focus on areas of the City with low tree canopy cover based on canopy map and optimize carbon sequestration through management of the existing urban forest.                  | <ul><li>Socially equitable</li><li>GHG reduction potential</li></ul> | 2030: 260<br>2045: 260     | 2022                    | Public Works<br>O&M   |
| S-1-3                | Increase greenspace in Chico: Identify and participate in partnership opportunities necessary to convert public and private spaces into greenspace and increase the City's carbon sequestering greenspace by 2030.  | Collaboration  | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul>                      |
| S-1-4                | Improve greenspace management to maximize carbon sequestration: Improve management of public open space and park lands to maximize carbon sequestration. Through permit review, evaluate and ensure that landscaping plans utilize native species identified in the Urban Forest Management Plan where feasible.  | > Accountability   | Supportive                 | 2021                    | <ul> <li>Planning         Division     </li> <li>Public Works         O&amp;M     </li> </ul> |
| S-1-5                | <b>Promote local wood use:</b> Develop protocols to promote local wood use to keep biomass out of the landfill and to extend the carbon sequestration benefits of trees in long-term wood products.   | > Accountability   | Supportive                 | 2021                    | Planning<br>Division  |
| S-1-6                | Require shade trees in new major developments: Require new development to include shade trees for enhanced energy savings, provided it would not interfere with solar installation. Tree species and location would be determined in coordination with the City's Urban Forester. Street tree planting shall also be required for all new single-family subdivisions. | > Accountability   | Supportive                 | 2021                    | Planning<br>Division  |
| S-2                  | Develop and Implement the Urban Forest Master Plan  |  |                            |                         |   |

| Measure/<br>Action # | Measure/Action Description   | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility  |
|----------------------|--|--|----------------------------|-------------------------|---|
| S-2-1                | Develop, adopt and implement the Urban Forest Master Plan: Create an actionable strategic plan for the City's urban forest that will guide it to its vision of a healthy, robust and resilient urban forest over the next 40 years. The plan shall include sections on work programs, policies, ordinances, sustainable urban forest management, design, planting, staffing, stewardship, carbon offset, storm water management, creek, open space and natural resource management, public tree inventory, and community participation and education.                                  | <ul><li>Socially equitable</li><li>GHG Reduction<br/>Potential</li></ul> | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul>                      |
| S-2-2                | Conduct a canopy cover analysis: Conduct a tree canopy coverage analysis that includes all trees within the city limits, including public and private property trees, open space, natural resources area, creek and riparian areas, and golf courses. The resulting study should provide information on the number of trees and tree density on all identified areas and provide analysis if trees are equitably distributed throughout the city and present a clear picture on where city should strategically invest resources.  | > Accountability   | Supportive                 | 2022                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul>                      |
| S-2-3                | Conduct citywide tree planting analysis: Conduct a tree planting analysis to gain a better understanding of the urban forest's overall condition. The resulting information should be used to develop management recommendations associated with tree removal, tree planting, trimming cycle adjustments and related maintenance activities. Additionally, the results of this analysis should be used to develop a list of recommended tree species that will be suitable for the city's current environmental conditions as well as anticipated conditions caused by climate change. | ➤ Accountability   | Supportive                 | 2022                    | <ul> <li>Planning         Division     </li> <li>Public Works         O&amp;M     </li> </ul> |
| Water                |  |  |                            |                         |   |
| WW-1                 | Promote and support water conservation within the community  |  |                            |                         |   |
| WW-1-1               | Educate the community on the benefits of greywater and rainwater systems: Encourage residential use of greywater and rainwater systems by providing informational materials to residents and businesses on the advantages of these systems.  | > Cost-effective   | Supportive                 | 2021                    | Planning<br>Division  |

| Measure/<br>Action # | Measure/Action Description  | Key Pillars<br>Supported   | GHG Reduction<br>(MT CO2e) | Implementation<br>Start | Monitoring and<br>Implementation<br>Responsibility                       |
|----------------------|---|--|----------------------------|-------------------------|--|
| WW-1-2               | <b>Educate and promote the benefits of permeable surfaces:</b> Encourage installation of permeable surfaces for new development hardscapes and for major retrofits. Promote alternatives driveways, sidewalk materials, and greenscaping through education programs.  | Accountability   | Supportive                 | 2021                    | Planning<br>Division   |
| WW-1-3               | Implement and enforce WELO standards: Continue to implement the California's Water Efficient Landscape Ordinance (WELO).  | > Accountability   | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>Public Works     O&amp;M</li></ul> |
| ww-1-4               | Develop a water supply plan: Work with CalWater to develop a water supply plan that incorporates CalWater programs around rebates, smart landscaping, water conservation, and education  ach and Education  | <ul><li>Collaboration</li><li>Education and leadership</li></ul> | Supportive                 | 2021                    | <ul><li>Planning<br/>Division</li><li>CalWater</li></ul>                 |
| 0-1                  | Conduct a wholistic community outreach and education program to optim   | ize CAP implementation   | n                          |                         |  |
| 1                    | Conduct partnered community outreach and education: Develop a plan for ongoing community outreach strategies to maintain education and promotion of the CAP. This includes regular maintenance of the City's CAP webpage and ongoing PR, working with CUSD to create K-12 lesson plans, and partnering with CSUC and non-profits. | <ul><li>Collaboration</li><li>Education and leadership</li></ul> | Supportive                 | 2021                    | <ul><li>Planning     Division</li><li>CUSD</li><li>CSUC</li></ul>        |