



## **Crested Butte 2030 Climate Action Plan Climate Action Planning Committee Meeting #1**

Meeting Room Jr. (first floor), Crested Butte Town Hall  
507 Maroon Ave, Crested Butte, CO, 81224

**Thursday, February 15  
3 – 5 pm**

*Public Zoom Webinar Link: <https://us02web.zoom.us/j/81542864066>*

*CAPC members will receive their own panelist link ahead of the CAPC meetings that they will use to join the meetings.*

**\*\*Please note that these meetings are public and will be recorded. Members of the public are welcome to join and observe, but we will not be allowing public comment on the 2030 CAP during these committee meetings\*\***

### **Meeting 1 Objectives:**

- Objective 1: Level set on CAP progress, GHG emissions definitions, and planning process
- Objective 2: Define the challenge and set a meaningful and bold goal statement for the 2030 CAP

### **Agenda**

#### **3:00 – 3:45 pm**

#### ***Welcome, introductions, grounding exercise, committee process overview & expectations***

We'll be conducting short introductions to highlight the expertise and minds in the room and have short exercise that will create common ground for the group. We will also provide an overview of the "compass integration" and 2030 CAP committee processes, schedule, and expectations for participation.

#### **3:45 – 4:00 pm**

#### ***2019 Climate Action Plan (CAP) progress***

Staff will provide a brief overview of the progress & programs that developed out of the 2019 CAP to orient the committee on where we are at as a community with climate action. It may be helpful to review the [2019 CAP](#) for this section and [this Nov. 6<sup>th</sup> 2023 staff update to Town Council](#).



**4:00 – 5:00 pm**

**Scope emissions definitions, 2030 GHG emissions high-level results & GHG emissions goals for 2030**

We will define scope emissions, share very high-level 2022 GHG emissions inventory results, and seek group feedback on the framework by which we set 2030 GHG emissions reduction goals. Enclosed you will find Meeting Resources which will be helpful to review ahead of the CAPC meeting.

**Meeting Resources**

**Objective 1: Level set on CAP progress, GHG emissions definitions, and planning process**

**Climate Action Plan 2030 Overview**

The Town of Crested Butte is developing a 2030 Climate Action Plan to:

- Update greenhouse gas (GHG) emissions inventories for the community and local government operations
- Identify 2030 climate action goals
- Identify success measures and climate action alternatives to meet set 2030 goals

**CAP Project Timeline and Progress Update**

The CAP development is scheduled to take place in four phases aligned with the broader [Community Compass](#) strategy:



Plan development is currently in Phase 1: Defining the Challenge & Goal Statement and progress to-date includes:



- Internal project launch on January 8th with Town staff and Brendle Group consultant team.
- Public CAP launch on January 18th.
  - Webinar providing an overview of the Compass Integration process, project and climate change background, and the importance of action planning.
  - The webinar recording and slides are posted to the Town's [Climate Action Plan webpage](#).
- Town Council meeting on February 5th including a project introduction and discussion on:
  - GHG emissions goal setting approach.
  - Approach to including climate resilience in the CAP.
- GHG emissions data collection and preliminary inventory development.

## CAP Planning Process

### 2030 CAP

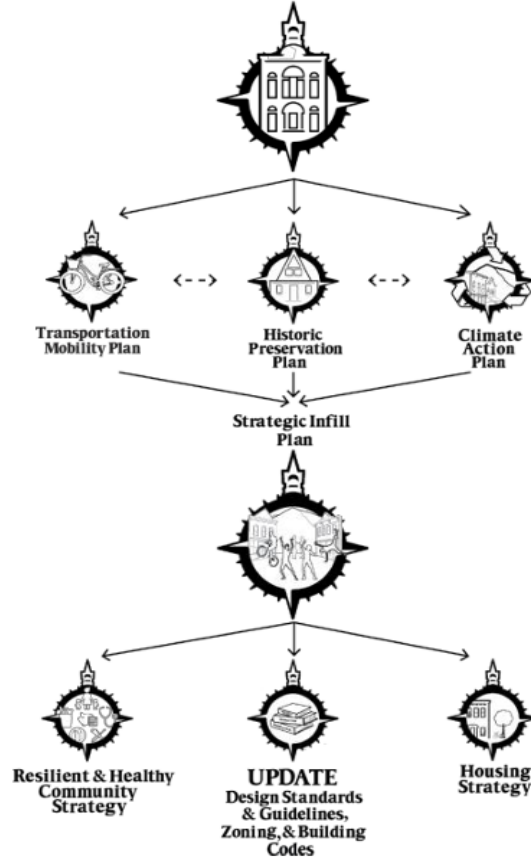
The 2030 CAP is part of a larger, more comprehensive Town planning process, all guided by the [Community Compass](#). The 2030 CAP address the 7<sup>th</sup> Compass objective: “Act on the urgency of climate change and prepare from the changes we expect from it”. This iteration of the climate action plan will set new GHG emissions reduction goals for 2030 and beyond and identify other salient environmental or sustainability topics that the community expresses should be addressed.

### Integrated Planning Process:

The 2030 CAP is developing concurrently with a few other planning efforts in 2024: the [Historic Preservation Plan \(HPP\)](#) and the [Transportation and Mobility Plan \(TMP\)](#), scheduled to be adopted Feb. 2024). The 2030 CAP will identify paths forward to sustain our community, the TMP guides how we move in the community, and the HPP will identify what to preserve about our community’s distinct history and character. While this may seem overwhelming, it is intentional. Each plan informs a separate community strategy and will identify certain trade-offs and complements between each. Ultimately, these three plans will inform the Strategic Infill Plan (SIP). The SIP will provide strategy as to how we continue to structurally build the community, which will finally inform the 2026 building code and zoning guidelines update. See the graphic below for a visual representation of this process:



**Crested Butte  
Community  
Compass**



The 2030 CAP will integrate input from community members received through a consolidated Community Compass engagement strategy. Additionally, the CAPC and Town Council will be engaged at strategic points throughout plan development.

Preliminary Town Council and CAPC meeting schedule:

<b>Description</b>	<b>Date</b>	<b>Tentative Topics</b>
Town Council Work Session #1	2/5/2024	Intro of plan/process, plan goals discussion
Climate Action Planning Committee Meeting #1	2/15/2024	Intro of plan/process, review high-level GHG emissions inventory findings, review CAP goal setting approach
Climate Action Planning Committee Meeting #2	4/25/2024	Review GHG emissions inventory, firm up GHG emissions goals, brainstorm success measures
Climate Action Planning Committee Meeting #3	5/16/2024	Brainstorm and discuss draft alternatives



Council Work Session #2	6/17/2024	Present CAP Success Measures & Alternatives
Climate Action Planning Committee Meeting #4	7/25/2024	Refine alternatives with GHG emissions modeling
Climate Action Planning Committee Meeting #5	9/5/2024	Review Draft CAP
Council Work Session #3	9/16/2024	Present draft CAP to Council
CAP Public Comment	9/25/2024	Release draft CAP for public comment.
Climate Action Planning Committee Meeting #6	11/14/2024	Public comment review & refine draft plan
Council Work Session #3	12/2/2024	Present to council public comment review & final plan
Council Work Session #4	12/16/2024	Anticipated Council adoption of plan

### Role of the Climate Action Planning Committee (CAPC)

Town sees the Climate Action Planning Committee (CAPC) as having a few functions:

1. Identify new 2030 GHG emissions reduction goals
2. Create climate action alternatives based in the newly identified goals
3. Develop success measures by which to measure climate action alternatives
4. Generally advocate for the 2030 CAP to the wider public
5. Represent the objectives of the 2030 CAP at the “Navigation” meetings

### 2019 CAP Achievements

This section provides a high-level overview of the programs and projects that successfully launched from the 2019 CAP and areas where significant progress is lacking. For a more comprehensive summary of the 2019 CAP progress, please review [this Nov. 6<sup>th</sup> 2023 staff update to Town Council](#).

#### Areas of major impact:

1. *Building Use*
  - a. The adoption of the 2021 International Energy Conservation Code (IECC) and above-code standards
  - b. GreenDeed program – a program to provide financial and technical assistance to implement energy efficiency improvements to deed-restricted households
  - c. Investment Grade Audit (IGA) for municipal buildings – the Town of Crested Butte underwent an energy assessment audit in 2020 for



Town-owned buildings and implemented energy efficiency improvement measures

2. *Renewable Energy:*

- a. Increased solar arrays on Town-owned property
- b. Initiation of the construction of a 1.1 MW solar array
- c. For a time, purchased RECs through GCEA's [green power program](#) for all CB consumers
- d. Supported GCEA in the Taylor Reservoir hydroelectric dam, which is now currently under construction
- e. Supported GCEA in pursuits of a community solar garden and removing barriers to solar panel installation

3. *Transportation:*

- a. Installation of public EV charging stations
- b. Continuous conversion of Town fleet to EVs whenever possible

**Areas of minor to little impact:**

1. *Waste reduction:*

- a. Single stream recycling implementation
- b. Composting feasibility study
- c. "Strive for Zero Waste" special events program



## GHG Emissions Inventory

Brendle Group is working with Town Staff to update the 2017 greenhouse gas (GHG) emissions inventory with available data from 2022. An update on GHG inventory progress and a summary of available high-level results will be provided at the February 15, 2024, CAPC meeting.

### Definitions

The GHG inventory will align with current best-practice protocols for community-wide and municipal operations inventories and will classify emissions by sector and scope:

Emissions Sectors	Emissions Scopes (also Figure 1)
Energy Use Transportation Waste & Wastewater	<p><b>Scope 1:</b> GHG emissions from sources located within the Town boundary (e.g., transportation fuel use, natural gas)</p> <p><b>Scope 2:</b> GHG emissions associated with grid-supplied electricity</p>

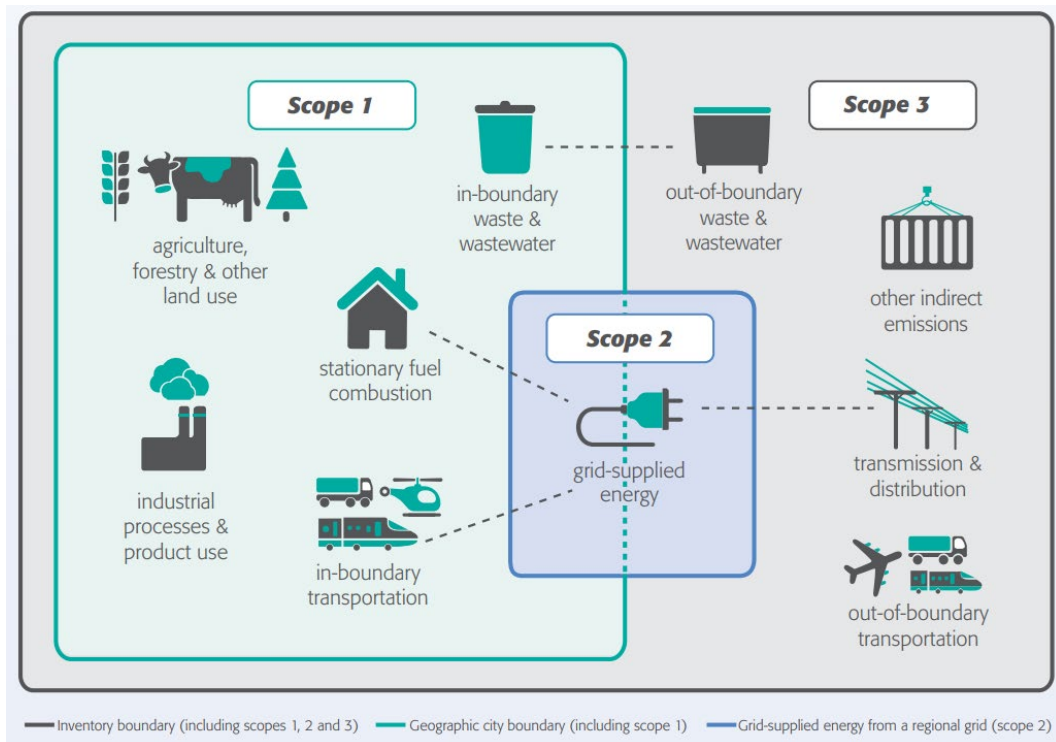


Figure 1. GHG emissions scopes and boundaries ([GHG Protocol for Cities](#))



Others TBD

**Scope 3:** Other GHG emissions occurring outside Crested Butte because of activities taking place within the Town (e.g., waste generated inside Crested Butte and disposed of outside Town limits, others TBD)

## Objective 2: Define the challenge and goal statement for the 2030 CAP

The five-year strategic plan of the Community Compass identifies seven goals, including to:

*“Act on the urgency of climate change and prepare for the changes we expect from it”*

In support of this goal, the Community Compass states that the Town plans to:

**A. Do its part to reduce our greenhouse gas emissions (reduce our impact)**

**B. Prepare for the changes we know are coming (become more resilient)**

The CAP will serve as a guiding document and strategic work plan to further define the challenge and identify actions to help the town to move toward these community goals.

### Defining the Challenge: Reducing Our Impact

#### Understanding the scale of the challenge:

An updated 2022 GHG inventory will characterize and quantify existing community and municipal emissions. During the CAPC meeting, the consultant team will present a summary of preliminary GHG emissions inventory results and key takeaways.

#### Understanding potential approaches to GHG goal setting:

Based on input received from Town Council on February 5<sup>th</sup>, a *meaningful and bold* emissions reduction goal statement will be developed in the context of:

- An evaluation of the community’s 2022 emissions and change since 2017.
- Input from Town staff, Town Council, CAPC and broader community input on Crested Butte’s level of ambition.

The approach to goal setting will likely be based on a combination of top-down (what do we need to do) and bottom-up (what do we know we can do) evaluation, such as:

#### *Top-Down: Alignment with Mountain Towns 2030 (MT2030) Net Zero Pact*

<b>Description</b>	MT2030 is a climate accelerator for mountain and outdoor communities, building capacity and empowering them to achieve zero-carbon emissions. MT2030 was launched in Park
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	City in 2019 and invites mountain communities to collaborate and align around ambitious climate goals.
<b>What this would mean for CB</b>	Commitment to <b>net zero carbon emissions by 2030</b>
<b>Example</b>	<a href="#">Park City, UT</a>
<b>More information</b>	<a href="#">MT2030 Website</a>

*Top-Down: Aligning with a Science-Based Target*

<b>Description</b>	<p>Science-based targets (SBT) are climate goals that are in line with the latest climate science. Setting a SBT involves establishing a net-zero emissions goal for 2050 or earlier, along with an interim 2030 goal that represents the community's "fair share" of the reduction in global emissions needed to keep warming below 1.5°C. Per the Intergovernmental Panel on Climate Change (IPCC), limiting global warming to 1.5°C could help avoid the worst impacts of climate change.</p> <p>The Race to Zero global campaign led by the United Nations in partnership with ICLEI, C40, CDP and the World Resources Institute encourages communities to establish science-based targets using an established methodology.</p>
<b>What this would mean for CB</b>	<p>Crested Butte's "<b>fair share</b>" of <b>global emissions reduction</b> needed to keep warming below 1.5°C will depend on the results of the 2022 emissions inventory and Crested Butte's GDP per capita.</p> <ul style="list-style-type: none"> <li>• Likely 55-75% reduction by 2030 and carbon neutral by 2050.</li> </ul>
<b>Example</b>	<p><a href="#">Durango, CO</a>:</p> <ul style="list-style-type: none"> <li>• 54% reduction by 2030</li> <li>• Net-zero by 2050</li> </ul> <p><a href="#">Telluride, CO</a></p> <ul style="list-style-type: none"> <li>• 70% reduction by 2030</li> <li>• Net-zero by 2040</li> </ul> <p><a href="#">Aspen, CO</a></p> <ul style="list-style-type: none"> <li>• 63.4% by 2030</li> <li>• Net-zero by 2050</li> </ul> <p><a href="#">State of Colorado</a>:</p> <ul style="list-style-type: none"> <li>• 26% below 2005 levels by 2025</li> <li>• 50% by 2030</li> <li>• 90% reduction and net-zero by 2050</li> </ul>
<b>More information</b>	<p><a href="#">2020 Science-Based Climate Targets Guide for Cities</a></p> <p><a href="#">ICLEI Race to Zero</a></p> <p><a href="#">IPCC Special Report: Global Warming of 1.5°C</a></p>

*Bottom-Up: Analysis of Potential Action Impacts*

<b>Description</b>	Establishment of a GHG emissions reduction target based on analysis of the emissions reduction potential of actions identified for implementation in the Climate Action Plan.
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<b>What this would mean for CB</b>	TBD based on identification of action alternatives informed by success measures, community engagement and GHG analysis.
<b>Example</b>	<a href="#">Routt County, CO</a> <ul style="list-style-type: none"> <li>"Actions leading to" a reduction in community-wide emissions of 35% by 2030 and 74% by 2050"</li> </ul>

*Defining net zero emissions and the tolerance for carbon offsets and carbon sequestration efforts.*

Net zero carbon emissions goals typically include two components – reducing GHG emissions as close as possible to zero and then balancing the remaining emissions with carbon offsets or sequestration approaches that remove carbon from the atmosphere. Crested Butte may choose to set an emissions reduction goal that defines the maximum amount of remaining carbon emissions and/or the maximum contribution and type of carbon offsets and carbon sequestration efforts.

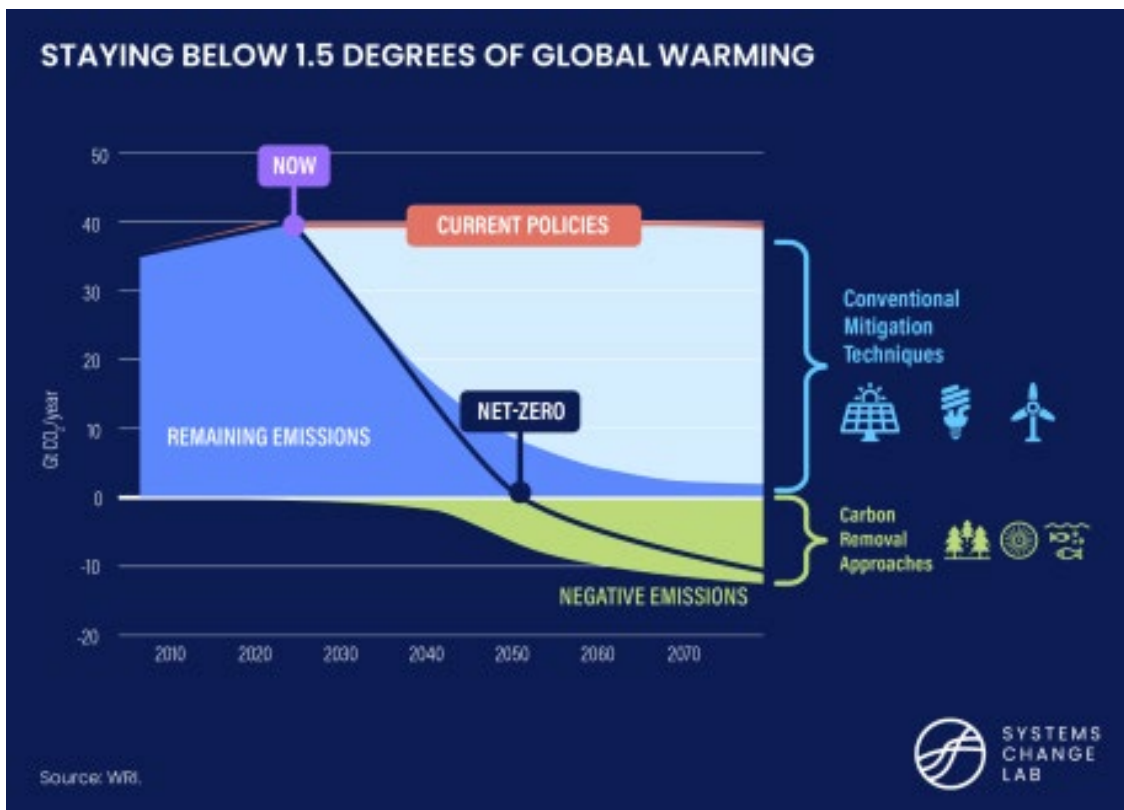


Figure 2. Illustrative pathway to net-zero carbon emissions, including accounting for both carbon reduction and carbon removal approaches (WRI).



## Defining the Challenge: Becoming More Resilient

### Understanding the scale of the challenge:

Projected climate change impacts for Crested Butte include:

- Rising temperatures
  - Increased average temperatures: the recent [Climate Change in Colorado report](#) (Colorado State University, 2024) found that statewide temperatures have warmed by 2.3°F from 1980 to 2022 and are projected to warm by another 1°F to 5°F by 2050.
  - Increased number of very hot days: Crested Butte may see an increase in the number of extreme heat days and heat waves, with an increase in the number of days over 90°F from zero in the modeled history to 17 by the end of this century ([Climate Mapping for Resilience and Adaptation](#)).
  - Increased frequency and severity of heat waves: in addition to an increase in very hot days, an increase in the number of heat waves (defined as 4-days or more with above average temperatures) is anticipated.
  - Reduced number of very cold nights: the number of very cold nights has generally been below average since 1990 and is projected to reduce further as the climate warms according to the [Colorado State Climate Summary](#) (NOAA, 2022).
- Increased risk of wildfire and related flooding
  - Ongoing occurrence of wildland fire activity: [2020 Gunnison County Hazard Mitigation Plan Update](#) rated the frequency of occurrence of wildland fire activity in Gunnison County as highly likely, and states it is “a virtual certainty that wildland fires will occur in the Gunnison County response area every year” (Gunnison County, 2020).
  - According to the [Colorado Climate Preparedness Roadmap](#), (the wildfire season has expanded beyond May to September, posing a year-round threat (State of Colorado, 2023). The occurrence and behavior of wildfires in the western U.S. are strongly influenced by weather, climate, and especially drought.
  - Compound hazards, like post-fire flooding projects, are an emerging area of research and modeling. Burn scar flash flooding has occurred with various recent large-scale wildfire events in Colorado.
- Increased frequency and severity of drought
  - Increased number of days with no precipitation: Crested Butte may see an increase in the number of dry days per year with no precipitation (dry days) from 199 in the modeled history to as many as 207 by the end of this century ([Climate Mapping for Resilience and Adaptation](#)).



- While the direction of future change in annual statewide precipitation for Colorado is much less clear than for temperature, managing water demands and available supply is an ongoing climate consideration.

The scale of the challenge associated with being resilient to climate change impacts depends not only on the physical risks faced but also on the level of vulnerability to those risks.

The [2020 Gunnison County Hazard Mitigation Plan Update](#) identified 1,507 buildings valued at more than \$829 million with a total exposure of more than \$1.3 billion. It also identified and categorized various populations, natural and cultural resources, critical and essential facilities within Crested Butte and the greater Gunnison County area that should be considered from a risk and vulnerability standpoint.

Furthermore, the Hazard Mitigation Action Plan Update identifies various goals including:

- Reduce the potential impacts of hazards on the safety of the County's citizens and guests.
- Reduce the potential impact of hazards on critical facilities, local government assets, infrastructure, private property, and critical support services.
- Reduce the potential impact of hazards on the County's economy, natural resources, historic treasures and interests, and other characteristics which add to the quality of life of the citizens and guests of the County.

It also identifies various mitigation activities that can be explored for integration and alignment in the Climate Action Plan. For example, one priority action is to "acquire alternate sources of heat/power for Crested Butte Town Hall, Fire Department, and Marshal's Office" which could if implemented strategically, could also support the Town's GHG emissions reduction goals.

In addition to this existing work, the Town is finalizing a Source Water Protection Plan (SWPP) and will develop a Resilient Community plan that will address specific, tactical actions for adaptation and resilience strategies to climate change impacts, such as emergency preparedness for wildfires, impacts to the Coal Creek watershed prescribed measures to the Wildland-Urban Interface (WUI) code.

#### Understanding potential approaches to incorporating resilience into the CAP:

- Using the CAP to "set the stage" for the Community Resilience Strategy by defining the challenge, goal statement, and community priorities.
- Including resilience as a co-benefit or "measure of success" by which to evaluate and prioritize potential climate action alternatives.