

Climate Action Plan Update

Environmental Sustainability Board Meeting | November 12, 2024

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Meeting Goals



Provide background and an overview of the Climate Action Plan (CAP) development process.



Provide an overview of the greenhouse gas (GHG) inventories and emission reduction targets.

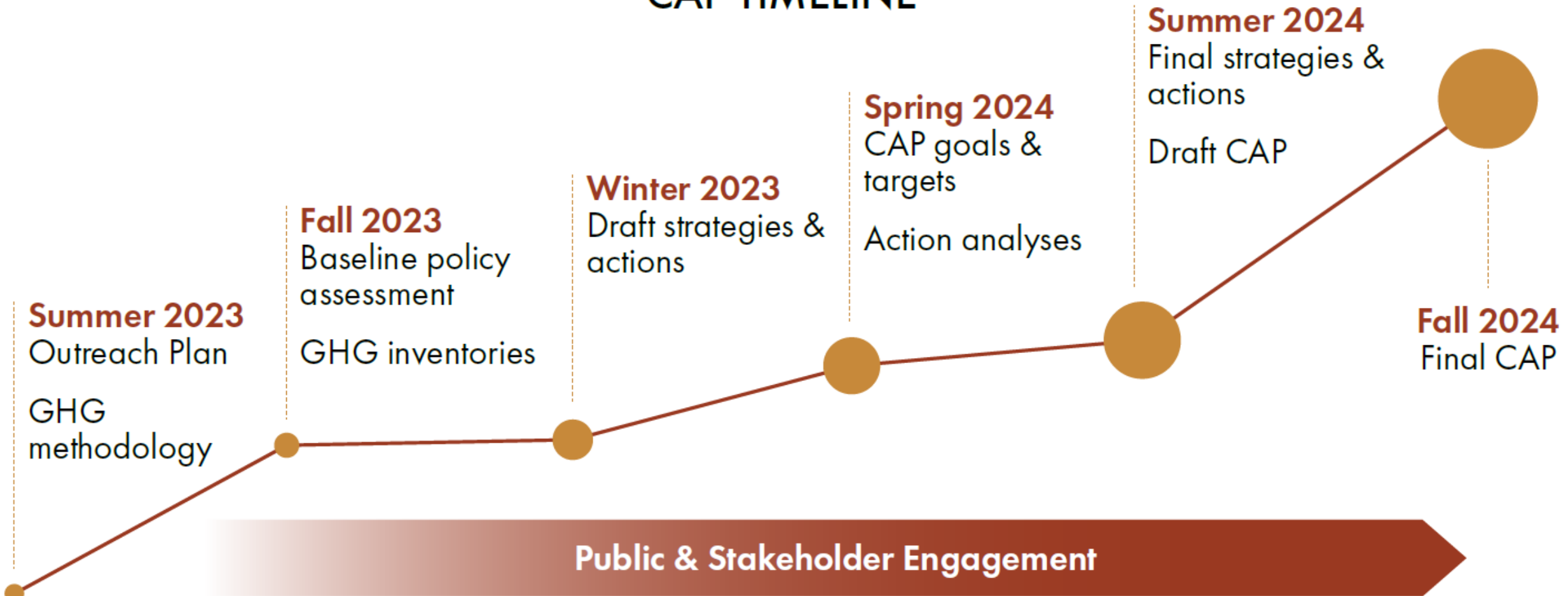


Discuss public comment received and how it shaped the final CAP and outline next steps in the CAP process.

Climate Action Plan Overview

CAP Timeline

CAP TIMELINE



What is a CAP?

- A CAP will provide a **strategic framework** that will offer a suite of actions aimed to **reduce greenhouse gas (GHG) emissions** and identify opportunities to **increase climate resilience**, such as enhancing resource conservation and preparing for impacts like extreme heat, within the community.
- **Focus areas** within a CAP typically include:
 - Mobility/Transportation & Land Use
 - Buildings & Energy
 - Waste & Materials Management
 - Natural Systems & Water
 - Community Resilience

GHG Inventories

GHG Inventories Methodology

Protocols

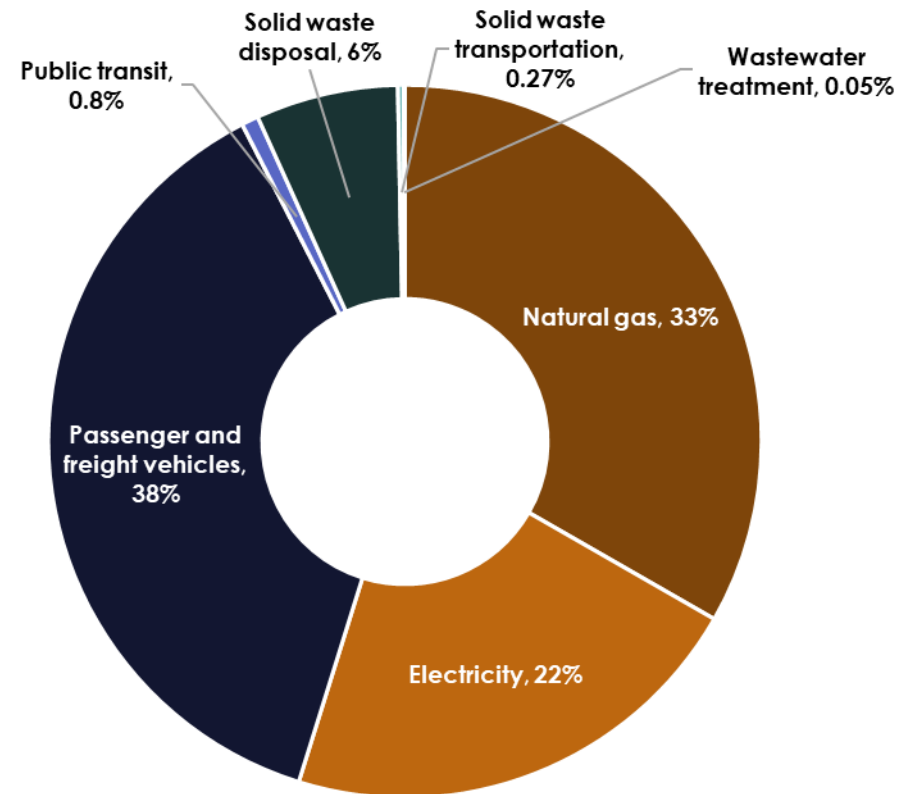
- Geographic Communitywide
 - U.S. Community Protocol (USCP)
- CBEI
 - EcoDataLab/CoolClimate approach
- County Operations
 - Local Government Operations Protocol (LGOP)

Data Collection & Analysis

- Uses a combination of available real-world consumption data with predictions based upon demographic, regional, and national averages
- Community & County Operations
 - Inventory year: 2022
 - Inventory platform: ClearPath
- CBEI
 - Inventory years: 2007-2021

Community-Wide Emissions Overview

- Community-wide emissions were an estimated 137,670 MTCO₂e in 2022.
- The community's largest emissions sources in 2022 were from combining **building energy (55%)** and **transportation (38%)**.
- Los Alamos National Laboratory's (LANL) emissions are not included due to data limitations.

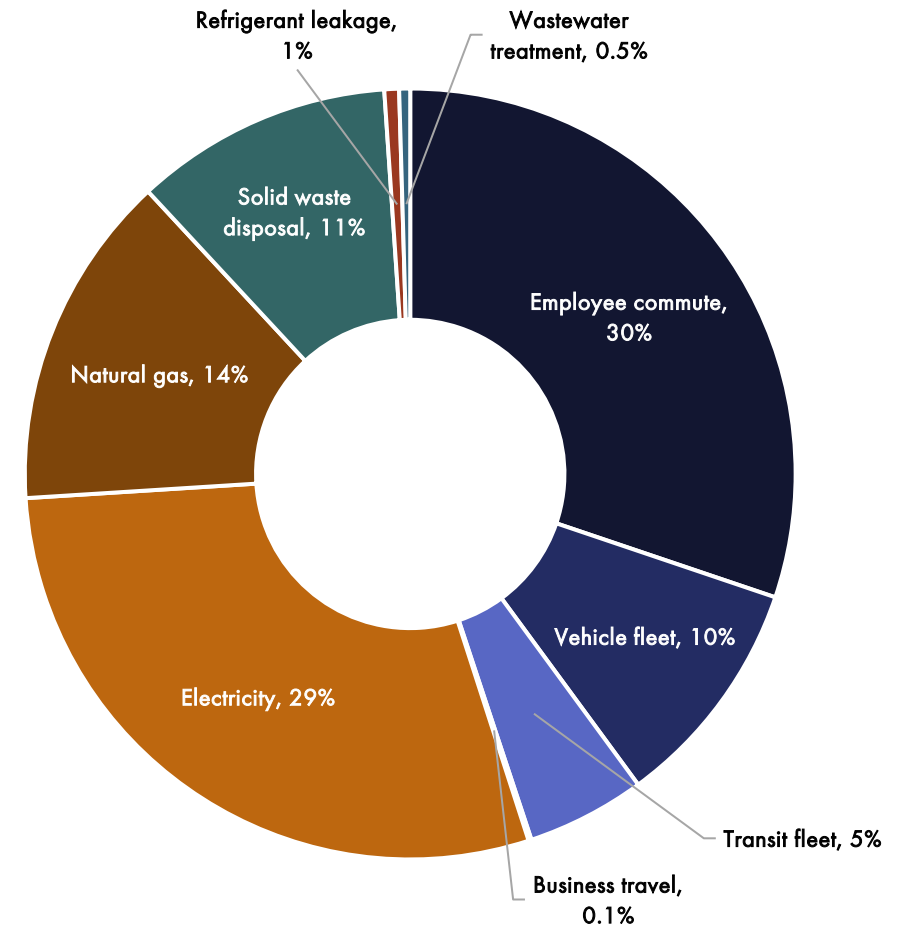


Takeaways & Recommendations

- The community's largest sources of emissions in 2022 were **passenger and freight transportation (38%)**, **natural gas consumption (33%)**, and **electricity consumption (22%)**.
- Emissions reductions actions should aim to:
 - Expand sustainable transportation options, such as biking, walking, and public transportation.
 - Expand electric vehicle infrastructure and adoption.
 - Increase building energy efficiency.
 - Increase renewable energy sources.
 - Promote building electrification.

Government Operations Emissions Overview

- County operations emissions were estimated at 15,031 MTCO₂e in 2022.
 - This is equivalent to ~11% of community-wide emissions.
- The County's largest emissions sources in 2022 were from the **transportation** (55%) and **building energy** (31%) sectors.
- The County's largest emissions sub-sources were **employee commute** (37%), followed by **electricity** (20%).

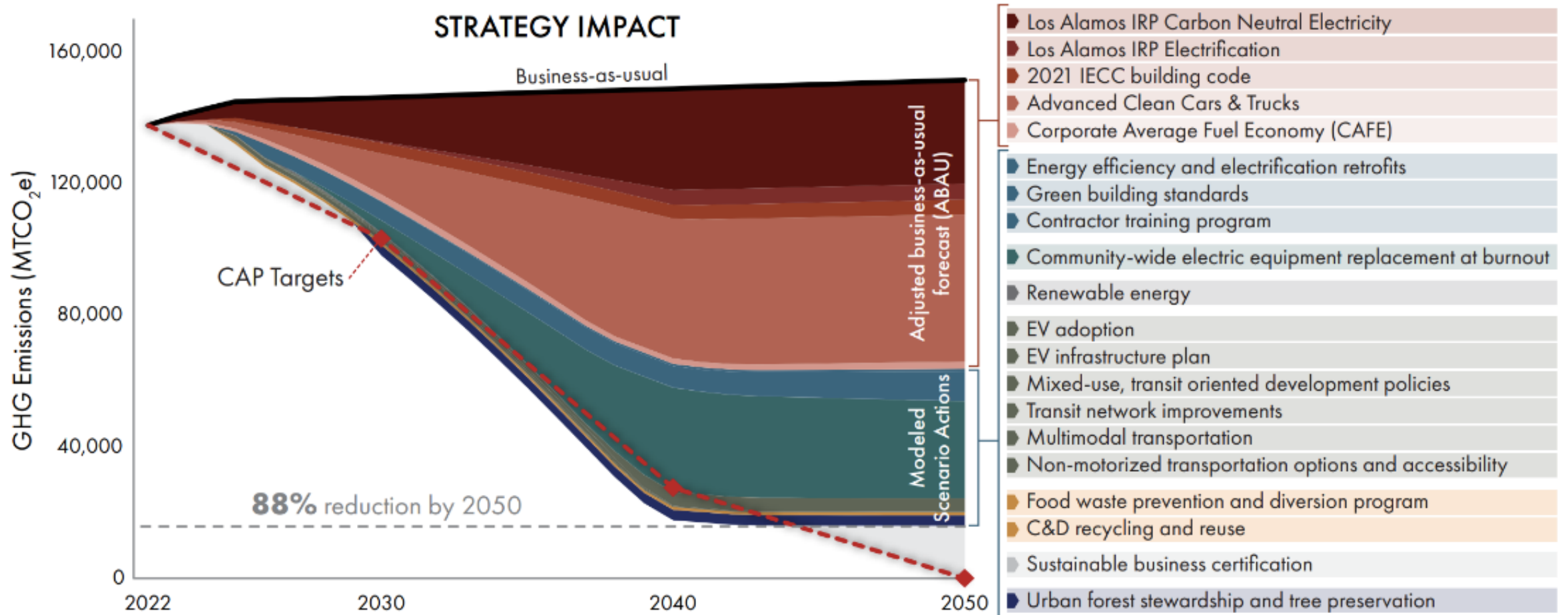


Takeaways & Recommendations

- Los Alamos County's operations largest sources of emissions in 2022 were **employee commute (30%), electricity consumption (29%), natural gas consumption (14%), solid waste disposal (11%), and vehicle fleet (10%)**.
- Emissions reductions actions should aim to:
 - Increase commute-trip reduction strategies for County employees.
 - Decarbonize buildings & enhance energy efficiency.
 - Reduce waste generation and increase waste diversion.
 - Shift to lower-carbon vehicle fleet and equipment.

Climate Action Plan Target

CAP Targets



CAP Actions

Developed 41 climate actions, refined using:

- GHG studies
- Community survey and community engagement
- Baseline policy assessment
- Climate action best practices
- Feedback and revisions identified by County staff and ESB
- Public input received on the draft CAP

Focus Areas & Strategies



Buildings & Energy

- Increase building efficiency and decarbonization
- Increase renewable energy generation



Transportation & Land Use

- Expand EV infrastructure and adoption
- Expand and promote multi-modal connectivity and sustainable land use planning



Materials & Consumption

- Maximize waste diversion
- Implement Zero Waste Strategy



Natural Systems & Water

- Increase urban green space
- Conserve water resources



Community Resilience, Adaptation, & Wellbeing





- Enhance community understanding of climate change
- Prepare the community for climate impacts



Cross-cutting

- Encourage sustainable businesses
- Promote climate education outreach

Implementation Matrix

Timeframe	Lead	Funding	Relative Cost & Impact	Scope	Immediate Next Steps & Other Considerations
BE2.2: Expand electric energy resiliency					
	DPU	<ul style="list-style-type: none"> IRA IIJA House Bill 233, Energy Grid Modernization Roadmap 	 		<ul style="list-style-type: none"> Identify staff time and capacity needed to implement action Continue to expand electric energy resiliency by investing in a diverse set of renewable energy sources such as wind, solar, geothermal, and nuclear, as well as energy storage Work with DPU staff to align with existing initiatives and increase energy resiliency for the community through the Integrated Resource Plan (IRP) and by providing redundancies within the circuit systems Research options, steps, and potential challenges to increase battery storage usage so that energy from renewables can be stored and used during peak hours Explore establishment of microgrids within the systems for energy redundancy and security

Public Comment on Draft CAP

Public Comment Responses

There were a total of 520 comments received via Konveio, email, social media, and local media op eds, and ESB and BPU meeting were consolidated

~75 individual commenters

What We Heard

We need dedicated, isolated, safe bike lanes.

This is an excellent plan, developed over years with input from the community. I support it fully. Thank you County Staff and Government, all the Boards and volunteers, for developing our Climate Action Plan.

This "climate action" plan is arrogant. To think we have a significant effect on the climate is absurd.

No mandates.
None.

While I'm 120% in favor of electrification and very strong climate action, this will run into issues with homes already having maxed out service panels

This will be a large expense to homeowners due to the cost associated with running additional electrical circuits and potentially sub panels in order to implement these changes. We already struggle to get contractors to work in Los Alamos county for reasonable prices. All these suggested changes just add cost to the residents.

Key Themes and Sentiments



Support for Climate Action



Concerns about Feasibility



Skepticism and Opposition



Request for Clarity and Detail



Concern about Local Infrastructure and Practical Solutions



Health and Equity Concerns



Support for Community Engagement and Education



Concerns regarding Technical and Policy Challenges

How we addressed the comments

- **Consolidated comments:** All comments received via Konveio, email to Council and staff, social media, and local media op eds, and ESB and BPU meeting were consolidated
- **Comment review period:** Over a period of two weeks, County staff reviewed ~500 comments and addressed each one individually.
- There were 2 basic categories of comments:
 - 1) Comments that didn't require a revision - either the comment was already addressed in the CAP or the comment was more of a statement
 - 2) Comments that required/suggested edit - staff made the revision request based on the comment
- **Integration of comments:** Cascadia took the revisions and integrated them into the Final CAP

Some Key Changes...

- Commenters expressed strong opposition to mandates
 - The County maintained mandates for County operations but removed mandates, as they applied to the community.
- Commenters expressed the need for more information on cost analysis
 - A more detailed cost analysis is outside the scope of the agreement. However, as projects are pursued, ROI will be evaluated.
- Commenters expressed the need for more clarification on terms, graphs, acronyms
 - Clarification was provided
- Commenters expressed the need for GHG emission calculation data to be included in appendices
 - Calculations will be included as part of the appendices in the final report
- Commenters expressed concern to include adaptation strategies as part of the CAP plan
 - The County dedicated an entire page to highlight the County's current adaptation strategies and have also added a new strategy that will "Embed climate adaptation and resilience in County operations (County)"

Next Steps

Next Steps

- Seek ESB support from the ESB
- Present the final CAP to County Council for CAP adoption, target adoption and alignment with BPU 2070 goal to phase out natural gas.
- Continue to implement the CAP Strategies and Actions

Thank you! Questions?

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