

Blueprint for Carbon Neutrality

City Council, April 29, 2024



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What is the Blueprint for Carbon Neutrality?

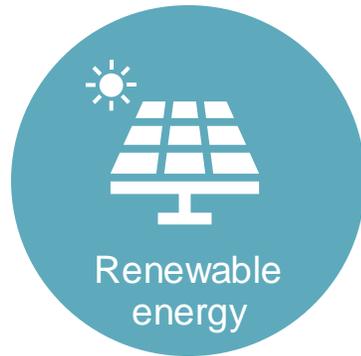
- The city's **Climate Action Plan**
- Refines the **shared vision** for climate action
- **Builds on** City Council priorities, Climate Action Commission Ad Hoc work, and existing plan and program implementation, such as the Climate Emergency Framework, General Plan, and more
- Incorporates **new, innovative practices**
- **Short-range plan** (<10 years) to guide program implementation, with monitoring and adjustment built in
- Released on October 2, 2023 for public review



Mitigation v. Adaptation

Greenhouse Gas Mitigation

Actions that are taken to reduce and curb greenhouse gas emissions



Blueprint for Carbon Neutrality

Climate Adaptation

Actions to reduce vulnerability to the effects of climate change



General Plan Update

Blueprint Process

- Community and Municipal GHG Inventories (early 2021)
- GHG reduction analysis and measure development (Fall 2021 – Spring 2022)
- Develop GHG Action Plans (Spring – Fall 2022)
- Write Admin Draft and Revise (Winter 2022 – Fall 2023)
- Public Draft available for comment, Open House (Fall 2023)
- CAC Review (October, January, and February 2024)
- CCB Review (January 2024)
- Planning Commission Review (February 2024)
- City Council Public Draft Review (April 2024)
- Develop Final Draft
- CAC, Planning Commission and City Council Review (Summer- Fall 2024)



Multiple rounds of review and discussions with Project Team, City Executive Team, and Climate Action Commission (CAC)

Blueprint for Carbon Neutrality



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Scales of Emission Inventories

Consumption-Based Emissions



Activities within *and* outside city limits, including imported goods and services

Activities within city limits, bound by geography

Basis for City of Petaluma inventory

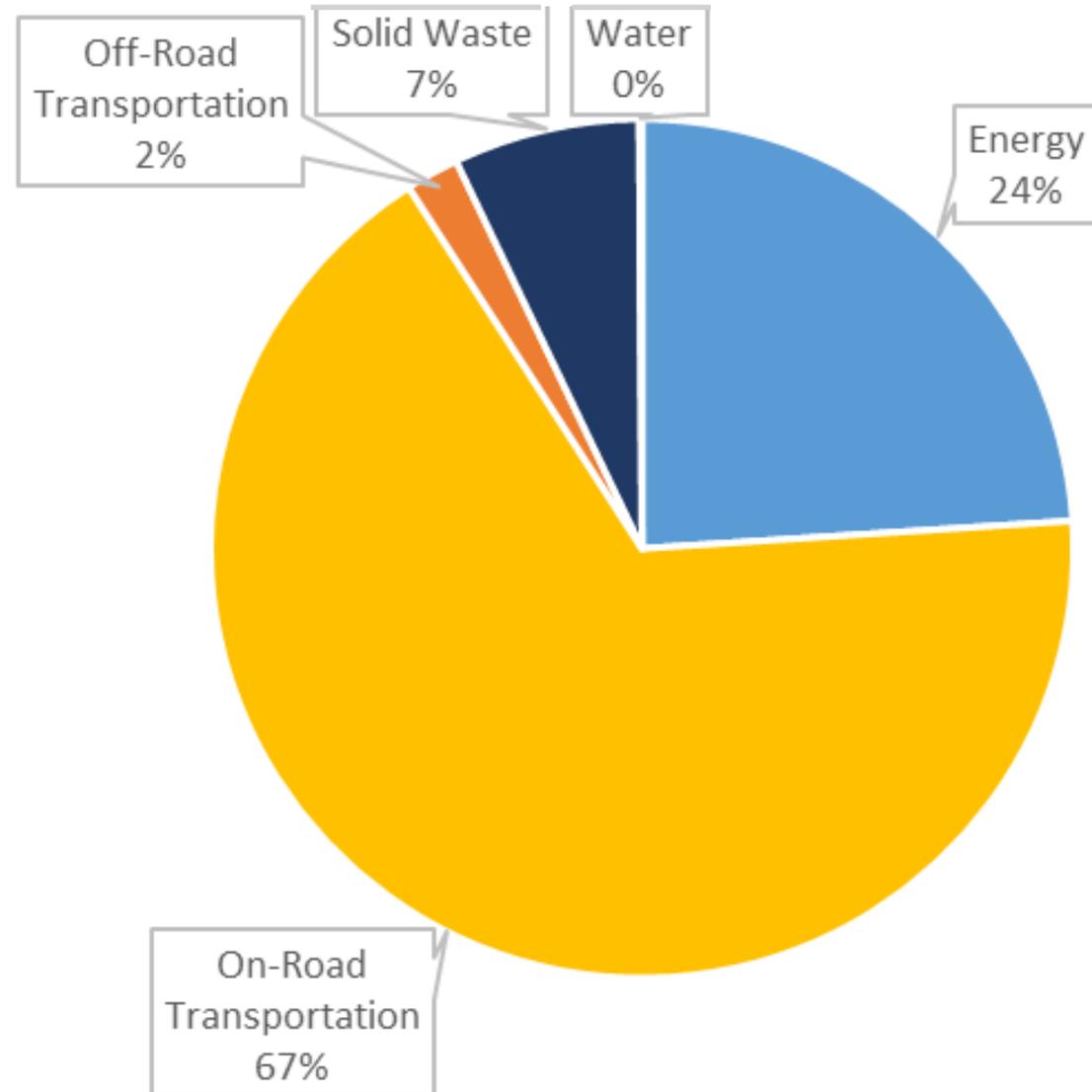
Activities within the City's control (facilities, operations, maintenance)

2018 Community GHG Emissions Profile

Community-wide, Petaluma emitted **472,422** metric tons of carbon dioxide equivalent (MTCO₂e) in 2018

Key Trends:

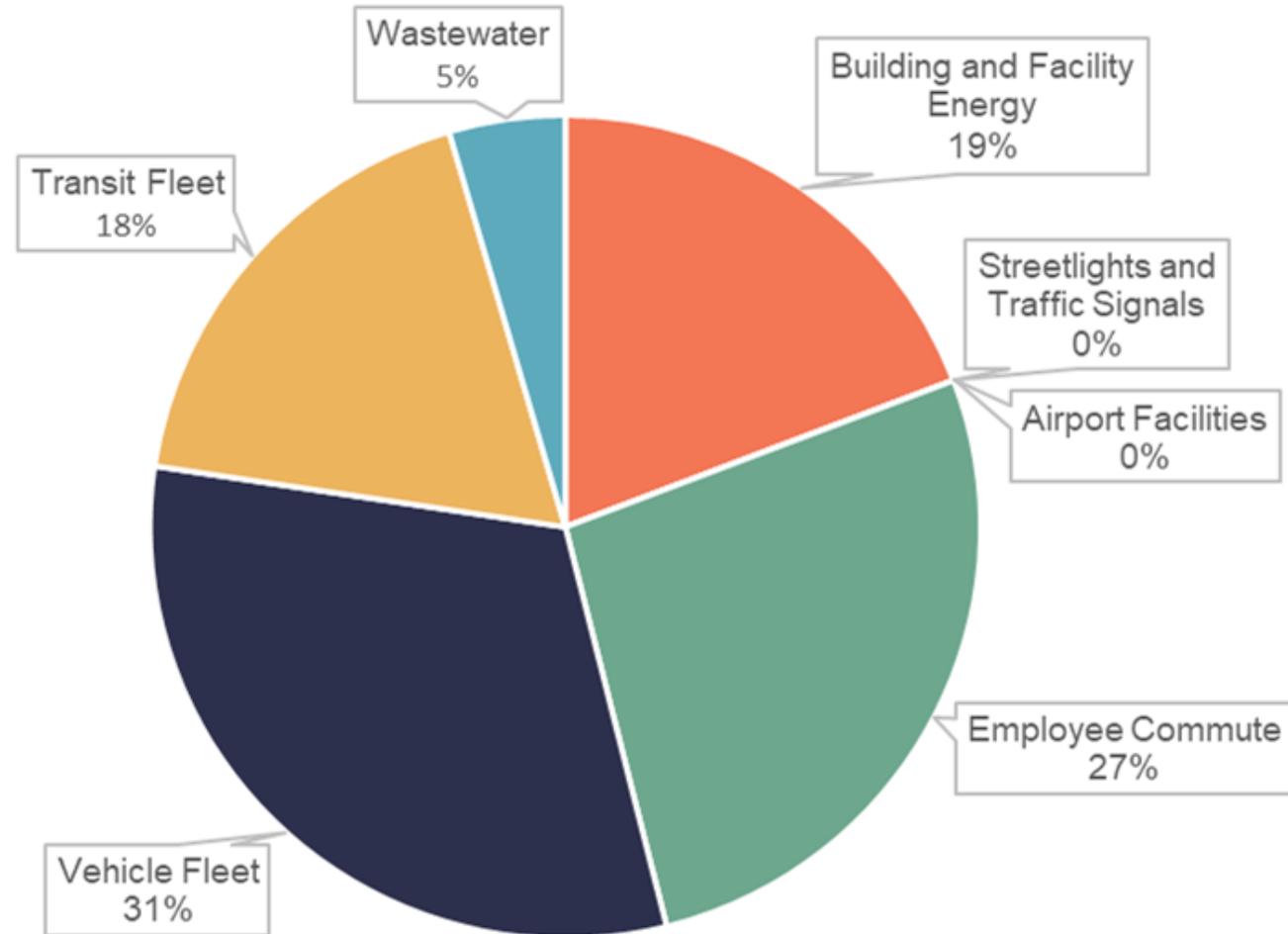
- **-31% in energy/water** emissions due to Sonoma Clean Power
- **+20% in transportation** due to changes in the transportation model to better reflect the employment-related land use in the city



2019 Municipal GHG Emissions Profile

The City of Petaluma emitted **3,653** metric tons of carbon dioxide equivalent (MTCO₂e) in 2019.

City operations account for less than 1% of community-wide GHG emissions.



What Does It Take

to get to zero by 2030?



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WHAT iF?



Climate Action Scenarios

- **Business-as-Usual (BAU):** This GHG emissions forecast considers how Petaluma's emissions would change over time if no action were taken to reduce emissions by the State or at the local level.
- **Adjusted Business-as-Usual (ABAU):** This forecast shows how Petaluma's emissions are anticipated to change accounting for the impacts of adopted State policies without local action.
- **Ambitious Climate Action:** This scenario requires the City and community to take ambitious action within the realistic bounds of current capacity, technology, and State and Federal policy.
- **What Does it Take?:** This scenario requires the City and individuals to make dramatic changes in daily life or operations to meet carbon neutral by 2030 goal.

Key Sectors

Clean Energy

Buildings

Transportation
+ Land Use

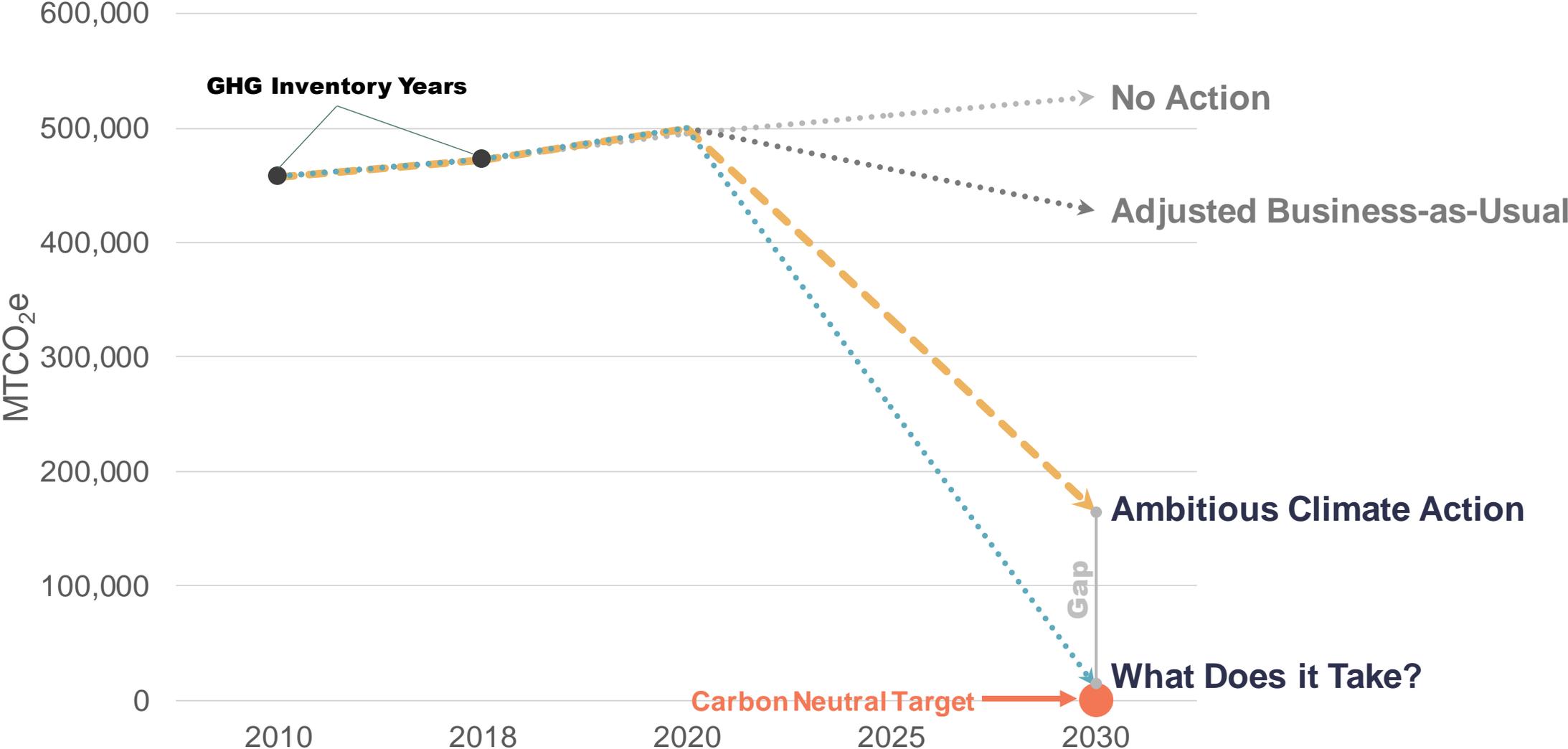
Resource
Consumption

Water

Sequestration
+ Ecosystems

Municipal
Operations

Climate Action Scenarios



What Do These Scenarios Represent by 2030?



Buildings Efficiency and Decarbonization
(% of all buildings)



Electric Vehicles
(% of all vehicles)



Mode Share
(% of all trips by non-auto modes)



Emissions Gap
to 2030 Carbon Neutral Goal (MTCO₂e)

Ambitious Climate Action

40%

25%

50%

-165,280

What Does it Take?

85%

25%

75%

-12,600

What Does It Look Like?



23,000
housing units (2021)

Ambitious Climate Action

1,000
housing units retrofit per year

What Does it Take?

2,400



38,000
vehicles (2021)

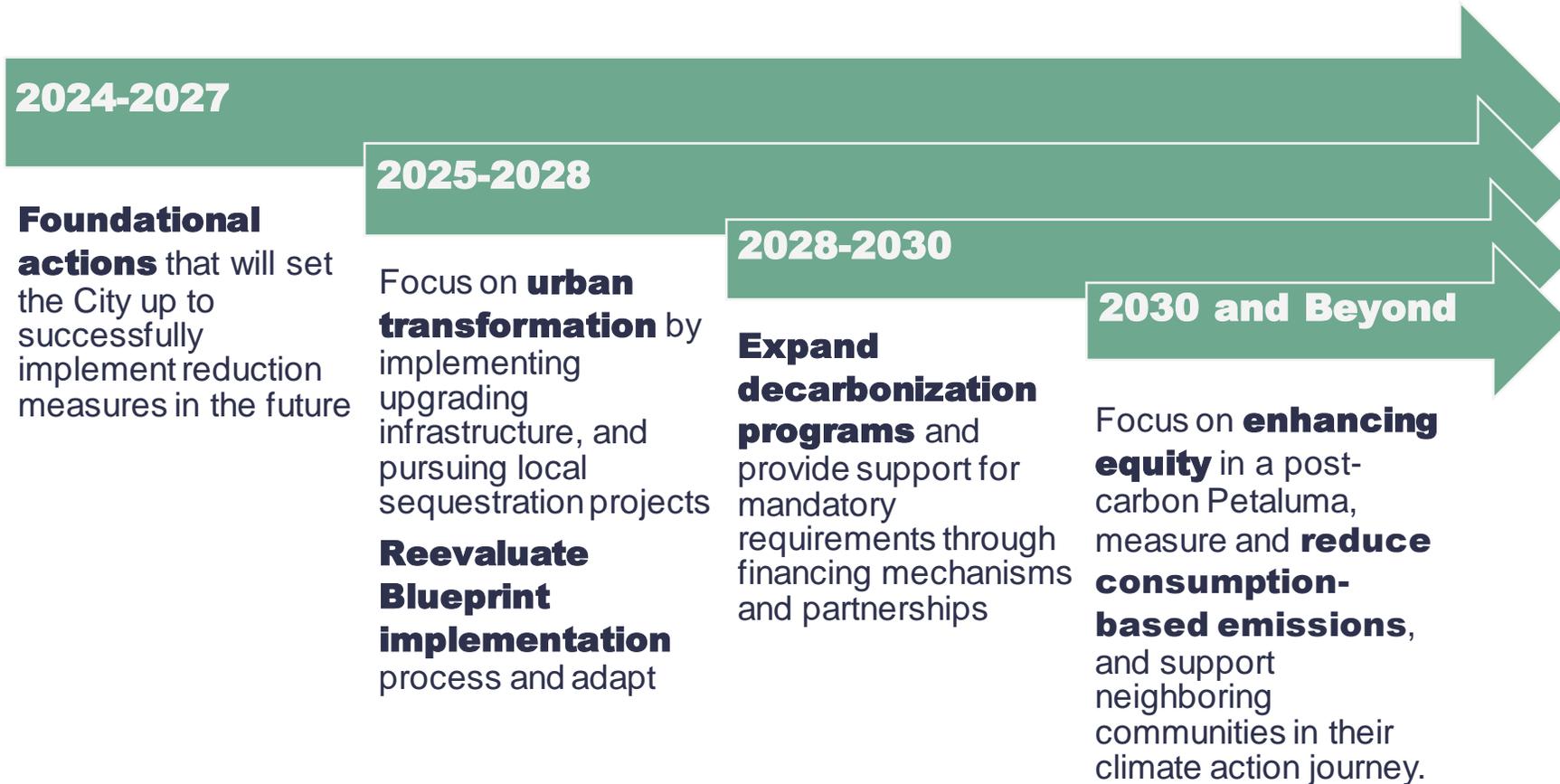
1,000
new electric vehicles per year



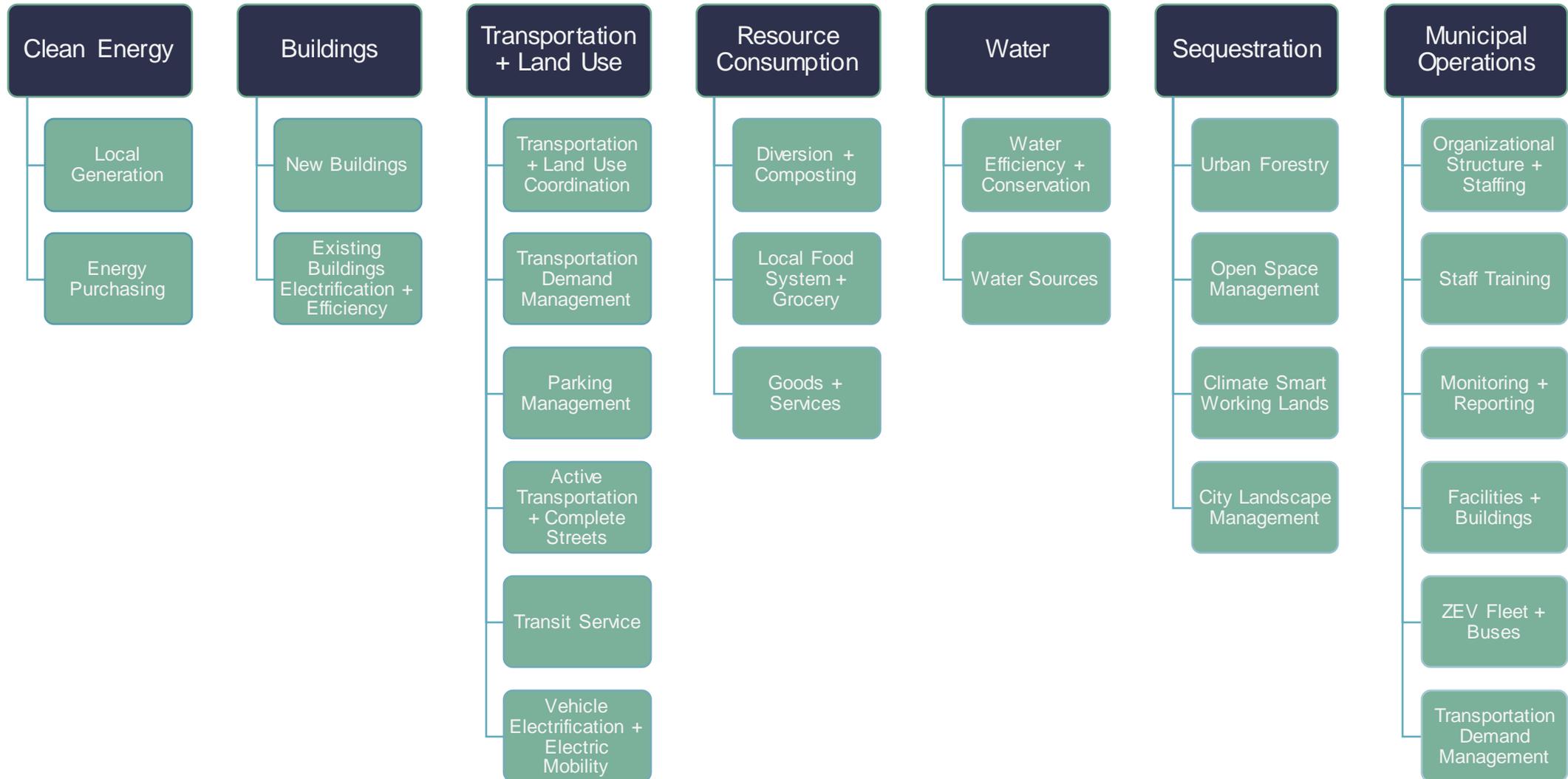
50%
Mode Split

Example: North
Beach/Chinatown

Blueprint Reduction Approach

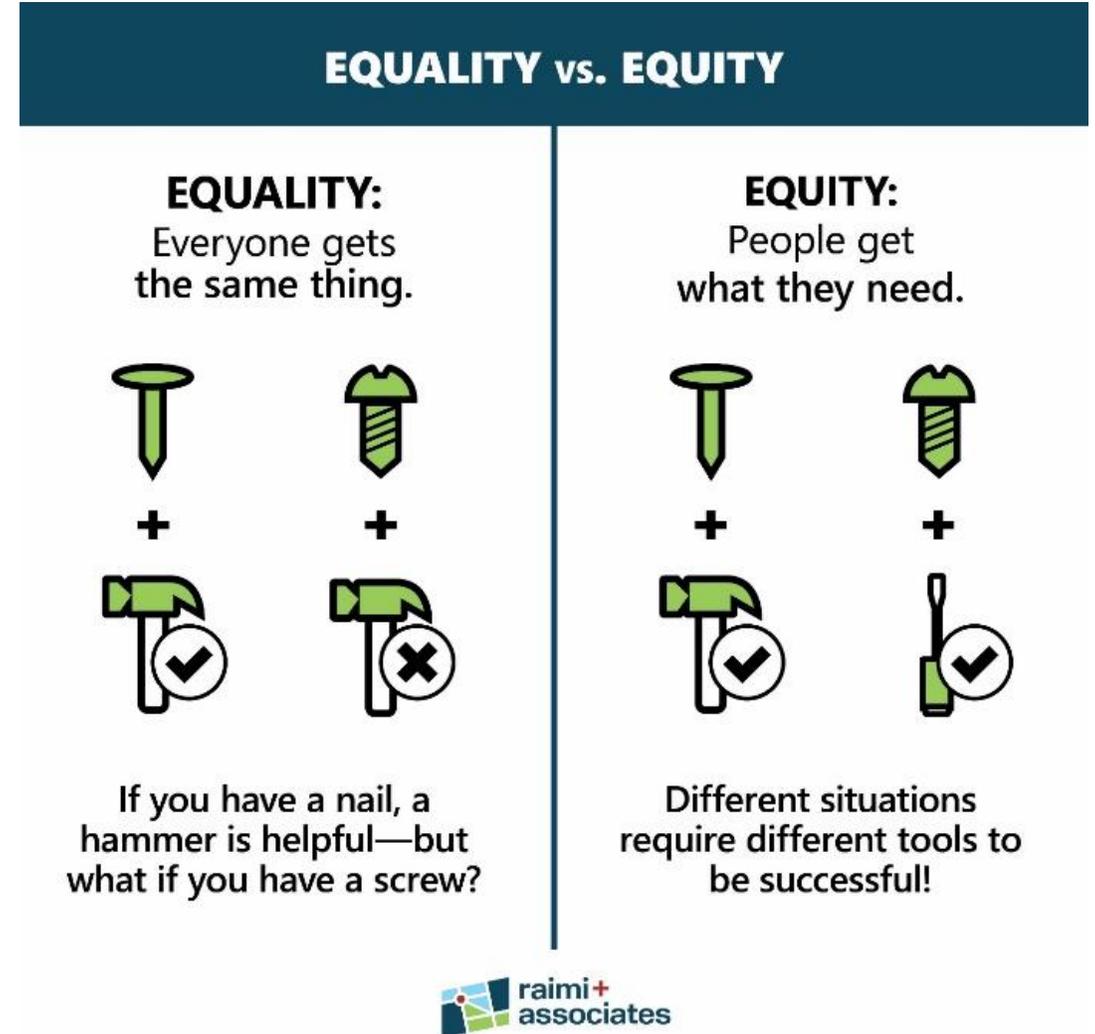


Action Plans



Equity Focused Implementation

- Equitable Implementation Tool is a checklist to help staff consider **procedural, distributional, and structural equity** through every phase of decision making (initiation, program development, and implementation)



Revised Cornerstone Actions

- 29 priority actions
- Foundational actions that support deep reductions and education
- Aligns with several current City Council priorities
- Include previous priority actions
- **Revised over two meetings with the CAC**



Cornerstone Actions: Municipal Operations

1. **Staffing strategy** to drive climate action implementation and accountability
2. **Cost estimate** of Blueprint implementation, sources of funding sources, stakeholder engagement
3. Ongoing **training program** about the City's climate programs
4. **Climate Team** with departmental Blueprint Coordinators
5. City's existing **cross-departmental task force** tracks pending State standards consistent with goal of carbon neutrality
6. Monitor the progress of the Blueprint implementation, including **dashboard development**
7. **Offset policy** that prioritizes local and regional carbon sequestration



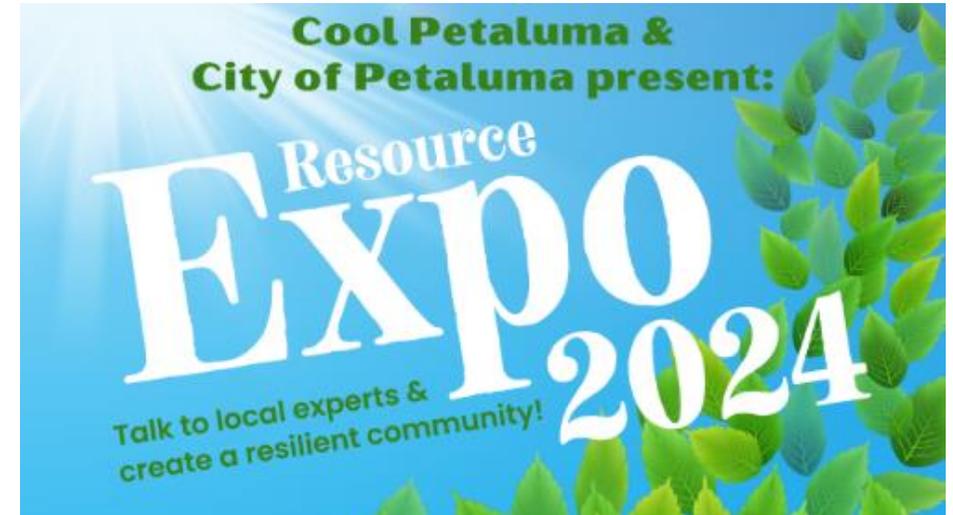
Cornerstone Actions: Municipal Operations

7. Align the **Capital Improvement Plan** with the City's carbon neutral goal, including
 - **Asset and facilities management**
 - Infrastructure upgrades to the Corporation Yard and Petaluma Transit
 - Electrification of transit fleet
 - Facility electrification



Cornerstone Actions: Engagement

8. **Partnership with stakeholder groups, utilities, and other partners**, provide resources so that Petaluma residents, businesses, and contractors can access climate information and solutions.
9. Robust, ongoing **climate awareness and action program**, focused on reduction of consumption-based emissions by residents, businesses, and contractors



Cornerstone Actions: Transportation and Land Use

10. **General Plan** that defines transit-oriented communities, complete 15-minute neighborhoods
11. Revised **Zoning Code** based on the updated General Plan
12. Incorporate **complete streets improvements** into all roadway and development projects:
 - Speed limit reductions where appropriate
 - Local Road Safety Plan
 - Active Transportation Plan
 - Adoption of the General Plan, revised mobility policy, and complete street guidelines



Cornerstone Actions: Transportation and Land Use

13. Expand and improve **Petaluma Transit**
14. **EV charging infrastructure strategy** focusing on workplace and multi-unit dwellings focused initially on disadvantaged populations.
15. A **Transportation Demand Management policy**
16. A **parking pricing policy** to reduce demand for parking



Cornerstone Actions: Buildings and Energy

17. **Partnership with Sonoma Clean Power and PG&E** to identify barriers to participate at the 100% renewable tier; robust awareness and education campaign
18. Phased-in **Existing Building Efficiency and Electrification** strategy to retrofit 85% of existing homes and businesses to all-electric by 2030:
 - Financing mechanisms to fund municipal incentive programs
 - Early natural gas equipment buyout program
 - Partner with BayREN, utilities, and other partners to implement a direct install program for disadvantaged populations
 - Partner with BayREN to establish a pilot program to reduce refrigeration-related emissions
19. Increasing **water conservation** utilizing and expanding existing incentive programs



Cornerstone Actions: Sequestration

21. **Natural systems policy** that prioritizes natural-based solutions
22. A **Petaluma Urban Forest Management Plan** in partnership with community organizations
23. A comprehensive **Land Management Plan** and maintenance procedures for City properties
24. **Open Space Management framework** to increase carbon sequestration, biodiversity, and public access
25. Creation of a **carbon gardening campaign** in schools and neighborhoods



Cornerstone Actions: Resource Consumption

25. Partnership with Recology and Zero Waste Sonoma JPA to implement and enforce an **edible food recovery** program
 - Special event permitting process update to include zero waste requirements for events
 - Zero Waste Sonoma model disposable foodware ordinance
26. **Gas-powered lawn and garden equipment ban**
27. Minimize the use of **synthetic herbicides, pesticides, and fertilizers** on City-owned property
28. **Integrated Pest Management Plan** for HOAs



Comments on the Blueprint and Next Steps



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Comments on the Blueprint

- Received over **1,000 comments** on the Blueprint
- Opportunities to participate included online form, in person meetings, and public review process with CCB's, Climate Action Commission, Planning Commission, and City Council
- Comments also collected by Cool Petaluma and the Chamber of Commerce

BLUEPRINT FOR CARBON NEUTRALITY COMMENT FORM

We want to hear your thoughts on the draft Blueprint and look forward to working with the Petaluma community to ensure that the final draft of the Blueprint for Carbon Neutrality carries the voice of Petaluma and ensures the success of meeting our climate goals. Submit your comments on the draft Blueprint using the form linked below. Community feedback will be incorporated into the edits for the final Blueprint for Carbon Neutrality. The comment period ends **October 28, 2023**.

Draft Blueprint for Carbon Neutrality Comment Form

The Blueprint provides an overview of the greatest challenge that we, as a community, have ever had to face: climate change. Petalumans have already begun to address this challenge through progressive actions that have established Petaluma as both a Regional and National climate leader. As a demonstration of this leadership, Petaluma has set a very ambitious goal to be carbon neutral by 2030—this document is the pathway to achieving this goal.

There will be two opportunities for the public to provide feedback on this document before it is brought to the City Council as a final draft. This online survey will be available for the public to provide feedback from **October 2nd-28th**. Additionally, there will be a public open house on October 12th from 4:30pm-6pm held at City Hall. Food trucks will be available as well as childcare sponsored in partnership with Cool Petaluma.

City staff look forward to working with the Petaluma community to ensure that the final draft of the Blueprint for Carbon Neutrality carries the voice of Petaluma and ensures the success of meeting our shared climate goals.

Please use this form to provide your feedback on the draft Blueprint. Type your comments in the boxes that correspond to the relevant GHG action plan or chapter. **The comment period ends October 28, 2023.**

* Required

1. Email address *

Enter your answer

General Themes

General Themes

- Equity-focused implementation
- Emphasis on multi-benefit strategies
- Adequate sources of funding for program implementation
- More community engagement as programs are implemented
- Technology is rapidly changing

Specific Recommendations

- Add measures related to non-residential building decarbonization
- Better coordination with architects, contractors, and trades
- Ban on gas-powered lawn and garden equipment
- Better coordination with the school district
- Fare free transit and trolleys, with more transit service
- Strengthen the tree ordinances and sequestration on regional projects

Municipal Operations

- **Accelerate municipal GHG reductions to affirm and illustrate leadership**
- Align resources and staff; organization structure and work plans; training; and management of facilities and assets to drive implementation towards carbon neutrality
 - Speed of delivery is essential
 - Staff training
 - Need for political support to devote capital and staffing to City programs
- Provide transparency and information through monitoring and reporting

Next Steps

- Compile public comments and recommend Blueprint changes: November 2023 - April 2024
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- Release a **Proposed Final Draft Blueprint**
- CAC hearing for final draft: Summer 2024
- Planning Commission Recommendation: Summer 2024
- City Council Consideration: Fall 2024
- Implementation!

Thank You!



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