

Blueprint for Carbon Neutrality

January 2024



CLIMATE READY
2030

Prepared by:



Public Review Process

- Public Draft released for comment October 2 - November 17, 2023
- Compiled public comments and recommend Blueprint changes: November 2023 - January 2024
- Presentations to CCBs - January 2024
- CAC Workshop February 8, 2024
- CAC hearing for final draft: March 2024
- Planning Commission Recommendation: Spring 2024
- City Council Consideration: Spring 2024

What is the Blueprint for Carbon Neutrality?

- 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



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

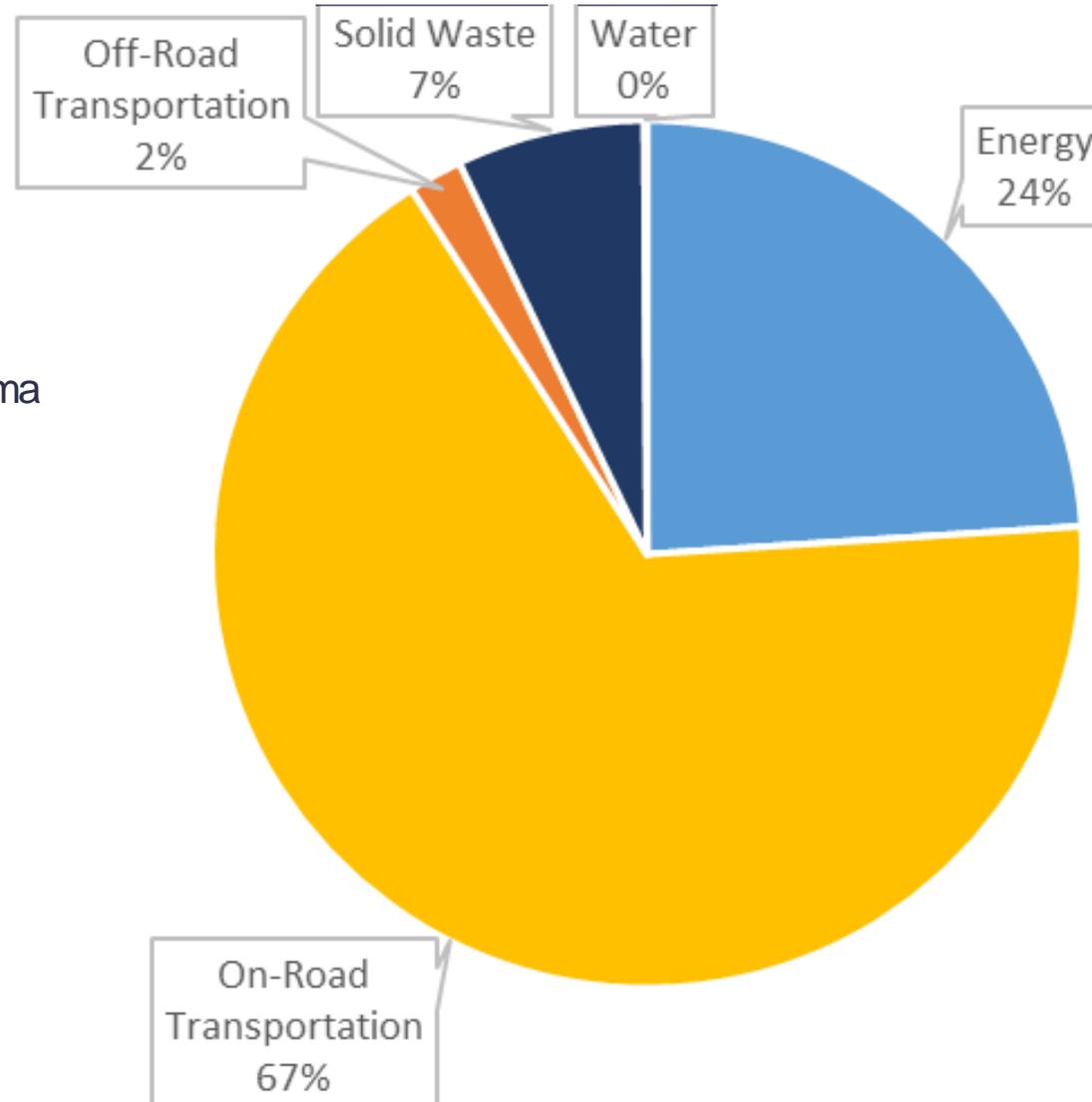
- Community and Municipal GHG Inventories (Summer – Fall 2021)
- GHG reduction analysis and measure development (Fall 2021 – Spring 2022)
- Develop GHG Action Plans (Spring – Fall 2022)
- Write Admin Draft and Revise (Winter 2022 – Fall 2023)
- Public Draft available for comment, Open House (Fall 2023)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



Multiple rounds of review and discussions with Project Team, City Executive Team, and CAC

2018 Community GHG Emissions Profile

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



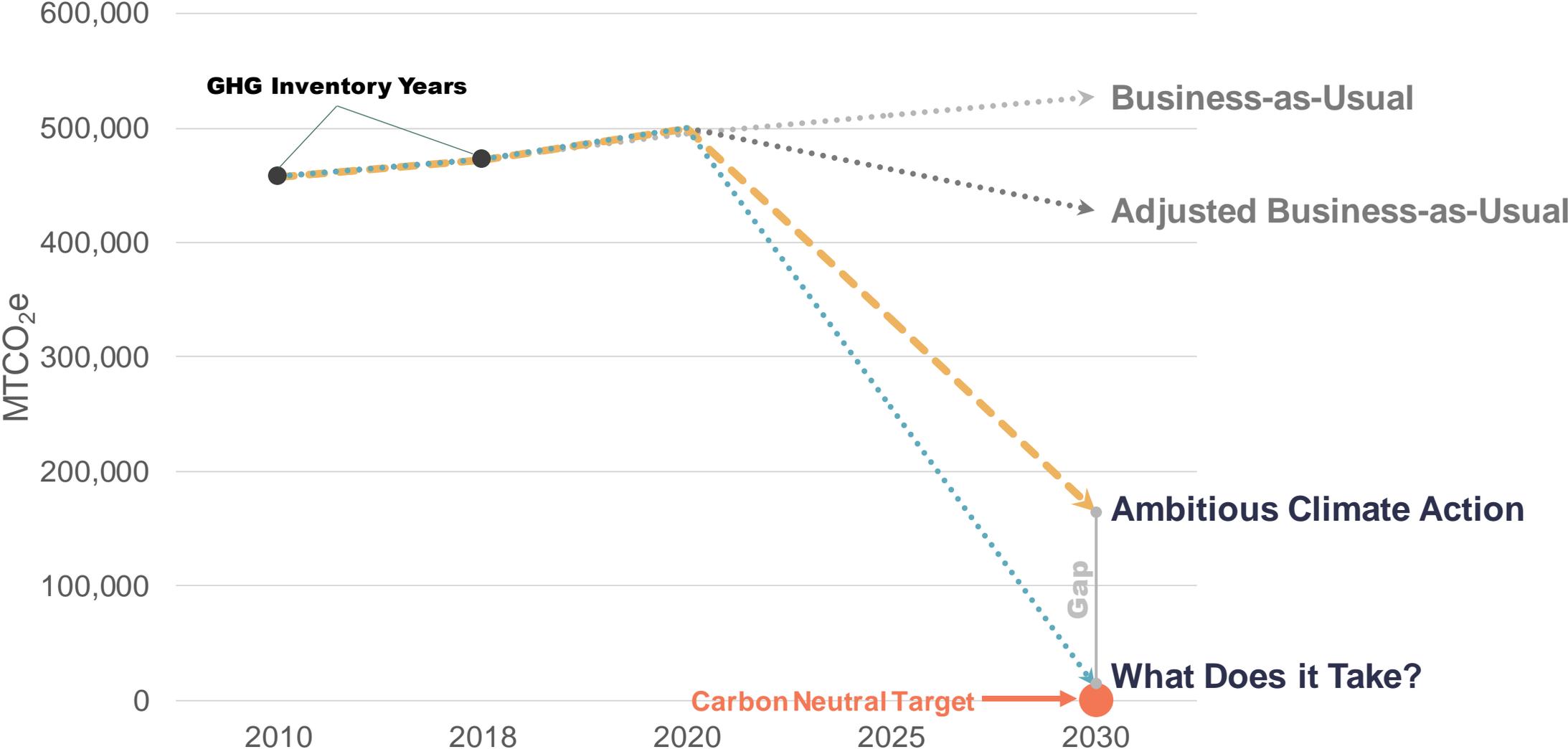
WHAT iF?



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.

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

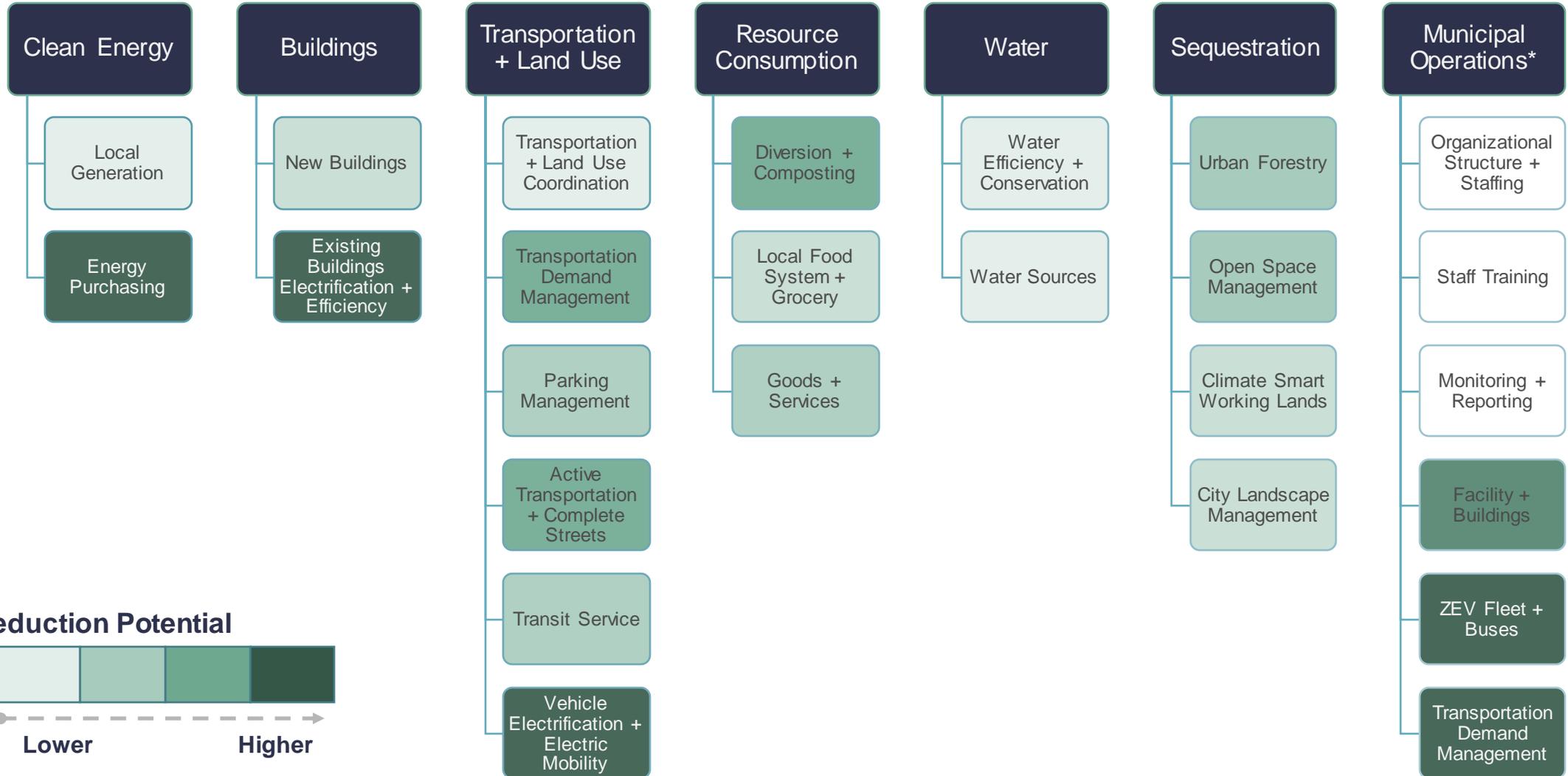
Summary of Action Plans

Sector	# of Action Plans	# of City Actions	# of Partnership Actions	# of Cornerstone Actions	Reduction Potential* (MTCO ₂ e)
Clean Energy	2	9	4	0	4,000
Buildings	2	21	18	4	66,000
Transportation + Land Use	6	30	21	7	185,000
Resource Consumption	3	16	18	3	4,000
Water	1	12	6	0	1,000
Sequestration + Natural Systems	4	30	25	3	400
Municipal Operations	6	40	17	5	N/A**

**Estimated annual reductions in 2030*

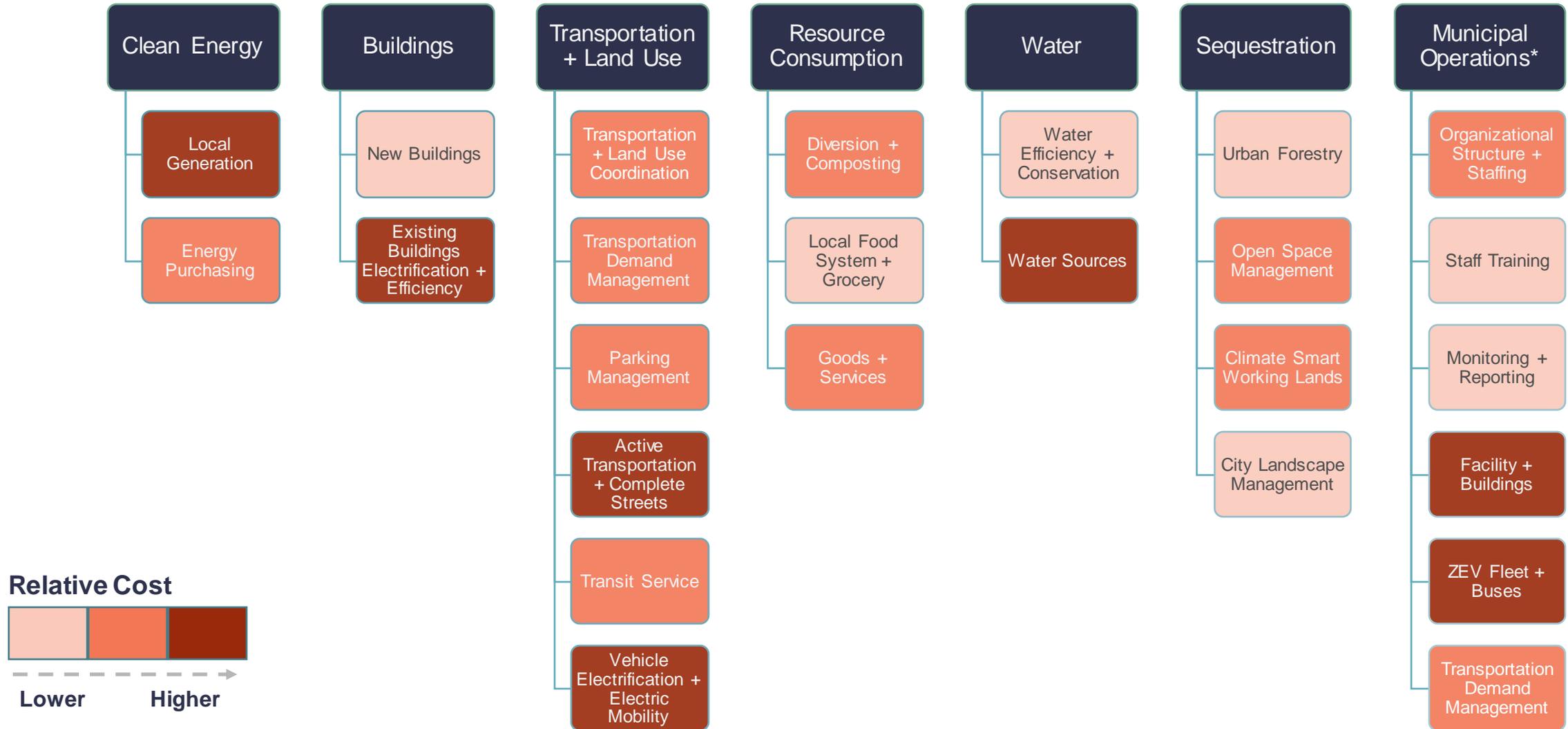
***Emission reduction incorporated into communitywide reductions*

Action Plans – GHG Reduction Potential



**Relative to municipal operations only.*

Action Plans – Relative Cost



**Relative to municipal operations only.*

Cornerstone Actions: **Sequestration**

By 2025



Revised Tree
Preservation Ordinance

By 2026



Revised Urban Forest
Plan, with detailed
implementation strategy

By 2027



Comprehensive Land
Management Plan and
maintenance procedures
for City properties that
center regenerative
management