

Budget Conscious Climate Actions for American Canyon

Overall Strategy for Climate Actions



Reduce Emissions

Adopt all-electric reach codes for new residential buildings and municipal buildings.

- Reduces reliance on fossil fuels
- Limits methane leakage from natural gas infrastructure
- Lowers building cost
- Improves indoor air quality

All-Electric Reach Codes

Economic benefits

- Construction costs average \$3,000 less/unit¹
- Utility bills lowered by up to \$800 annually²
- Limits natural gas infrastructure (and its repair and maintenance)

¹ Bruceri, M. (2019). "Draft 2019 Energy Efficiency Cost-effectiveness Study: Low Rise Residential." For PG&E Codes & Standards, prepared by Frontier Energy. March 15, 2019

² Synapse Energy Economics, Decarbonization of Heating Energy Use in California Buildings at 2, 39 (Oct. 2018), <http://www.synapseenergy.com/sites/default/files/Decarbonization-Heating-CA-Buildings-17-092-1.pdf>

All-Electric Reach Codes

Environmental benefits

- Limits methane leakage from natural gas infrastructure (leakage rates are 2.7-5.2%¹)
- Improves indoor air quality—gas stoves result in NO₂ emissions up to 10x higher than the EPA outdoor air threshold²

¹ <https://www.fossilfreebuildings.org/ElectricMFGuide.pdf>, 2019

² California Air Resource Board. (2001) Indoor Air Pollution from Cooking. <<https://ww2.arb.ca.gov/resources/documents/indoor-air-pollution-cooking>>

Reduce Emissions

- Prioritize Measure T projects to enhance pedestrian and bicycle use per
 - Napa Countywide Bicycle Plan
 - Napa County Pedestrian Master Plan
- Adopt a goal of Zero Waste by 2030.
 - Implement residential food waste composting
 - Require permitted events to be Zero Waste



Reduce Emissions-Lead by Example

- Incorporate a Climate Change Element into the General Plan update
- Electrify the city fleet as opportunity arises
- Replace gas powered leaf blowers with electric models
- Adopt telework policy for city staff

Restore Carbon Sequestration- Partner with Napa County Resource Conservation District

- Establish a tree replacement in-lieu fee for smaller development projects and use toward plantings in areas more suitable (as designed and implemented by RCD).
- Partner with RCD to obtain grant funding for urban tree planting



Increase Community Resiliency

- Use Community Benefit Agreements to require new development projects to contribute to community resiliency (e.g. grants for rooftop solar in low income neighborhoods, energy efficiency retrofitting, EV charger installations, green infrastructure job training).
- Create countywide Water and Wastewater Agency (as recommended in the LAFCO report, [Napa Countywide Water and Wastewater Municipal Service Review](#)).

Plan of Action

- Get feedback on proposals from City Council members
- Provide more information during Climate Action Committee meeting
- Work with city staff to provide information and contacts

THANK YOU!

Background Info for Budget-Conscious Climate Actions for American Canyon
Contact Chris Benz, Napa Climate NOW!, christinabbenz@gmail.com, (707)492-0089

All-electric Reach Codes

1. Adopt the California Energy Commission's (CEC) cost-effective 2019 T-24 residential all-electric reach codes and natural gas infrastructure regulations for Single-family, Detached Accessory Dwelling Units, and Low-rise Multi-family buildings. Adopt the 2019 T-24 reach ZERO Code (CA-for California) for all municipal building projects. This may be expanded to include all non-residential (commercial) buildings.
2. [Adopted by 30+ cities](#) including San Jose, Santa Rosa, Windsor, Mill Valley
3. Costs less to build and operate
 - [Research from E3](#) (April, 2019) shows the vast majority of homeowners and developers in California can expect considerable financial savings from building and living in all-electric homes - saving between \$130 – \$540 per year compared to homes that burn gas.
 - [Santa Rosa staff presentation](#) (11/19/19) shows savings of \$6,171 per home.
4. All-electric improves air quality and public health
 - A [meta-analysis](#) studying over 40 years of studies on the respiratory impacts of indoor nitrogen dioxide on children found that children who live in a home with a gas stove are 42% more likely to experience asthma symptoms.
 - Gas stoves cause indoor air pollution levels that would be illegal if measured outside. <https://coeh.ph.ucla.edu/effects-residential-gas-appliances-indoor-and-outdoor-air-quality-and-public-health-california>
 - Building new homes with heat pumps to provide both space heating and cooling ensures everyone - regardless of income or housing type – has access to air conditioning.
5. Model ordinance from Santa Rosa:
 - <https://santa-rosa.legistar.com/View.ashx?M=F&ID=7882270&GUID=651B1D7E-7E35-4607-8DAC-797A4641CC3A>

Measure T projects

1. [Napa Countywide Bicycle Plan](#)
2. [Napa County Pedestrian Master Plan](#)

Adopt a goal of Zero Waste by 2030 (goal of [Sonoma County Regional Climate Protection Authority](#))

1. As part of California's Short Lived Climate Pollutant Reduction Strategy (AB 1383), CalRecycle will require residential food scrap composting by 2022. This is part of a strategy to reduce organic waste disposal by 75% by 2025.
2. When landfilled, organic waste is one of the largest sources of methane pollution in California. Conversely, the use of this same material to make compost and other byproducts has been proven to not only prevent methane emissions, but also to increase soil health and water retention, and sequester carbon from the atmosphere. <https://www.cawrecycles.org/recycling-news/hnb47xwlcne6dl37r2xsatnk2cwhm>
3. Require all permitted events to be Zero Waste events.
 - [Sebastopol's one page event form](#).

Lead by example

1. Incorporate Climate Change Element into General Plan Update
 - [Governor's Office of Planning and Research Climate Change Element guidelines](#)
 - [St. Helena General Plan Update 2040 Climate Change Element](#), pg 315

2. Electrify the city fleet as opportunity arises
 - [Funding from Bay Area Air Quality Management District](#)
3. Replace gasoline powered leaf blowers with electric models
 - Contact Joe Tagliaboschi, jtagliaboschi@yville.com, (707) 944-8851, Yountville Public Works Director
 - Statewide emissions of SOREs (Small Off Road Engines) expected to surpass those from light-duty passenger cars in early 2020s, so CARB is in the process of updating regulations with the goal of requiring all new SOREs to be zero emission by 2028
<https://ww2.arb.ca.gov/sites/default/files/2020-06/6.8.20%20SORE%20Workshop%20Slides%20ADA.pdf>
4. Adopt telework policy for city staff
 - [Telework policy adopted by Napa County BOS 6/28/20 can serve as template](#)

Partner with Napa County Resource Conservation District

1. Establish a tree replacement in-lieu fee for smaller development projects and pool those fees and direct them toward plantings in areas most suitable for target tree species so that developers don't just haphazardly plant replacement trees. Fees would be used by RCD to develop and implement a planting plan grounded in ecological principles. Ideally create one mitigation strategy across all jurisdictions (County and cities).
 - Contact Lucas Patzek, District Manager, lucas@naparcd.org, (707) 690-3119
2. Partner with RCD to obtain grant funding for urban tree planting through the [California Natural Resources Agency Urban Greening Grant Program](#) (or other grant programs).
 - Contact Frances Knapczyk, frances@naparcd.org

Actions that Improve Resiliency for Climate Disasters

1. Community benefits agreements (CBAs) are legally binding contracts between developers and community groups that set forth benefits the developer is committed to bringing to the community. In exchange for the community's commitment to supporting a proposed development project, developers agree to provide a range of community benefits, commonly in areas of affordable housing, environmental improvements, and workforce development. For example, CBAs could require that a certain number of new housing units be made affordable for low- or moderate-income households, or specify community engagement requirements for new housing projects. Developers may also stipulate to hire residents or local businesses for labor and materials, or offer to adopt certain design practices to improve the project's environmental impact and climate resilience.
<https://www.georgetownclimate.org/adaptation/toolkits/equitable-adaptation-toolkit/community-protections-and-agreements.html>
 - Example: [City of Richmond CBA with Chevron](#)
2. Create countywide Water and Wastewater Agency, as recommended in the LAFCO report, [Napa Countywide Water and Wastewater Municipal Service Review](#).
 - Benefits to forming a county water agency or county water district include:
 - Efficient use of the County's water resources
 - Enhanced water resource management
 - Solidarity amongst Napa water purveyors with greater leveraging power
 - Greater scrutiny of all utility providers
 - Enhanced technical and operational support for local providers
 - Elimination of redundancies and duplication of efforts amongst the smaller systems
 - Improved economies of scale