

Climate Action & Resilience: Steps to Become Carbon Neutral by 2030 Virtual Town Hall, April 6, 2021, 5-7 pm

Report Prepared by Dr. B.J. Bischoff and Sarah Stierch Bischoff Consulting, Sonoma, CA April 15, 2021

Summary Report of Public Comment: How Sonoma County should move forward to achieve its vision of becoming carbon neutral by 2030

Overview of community comment methodology

The Sonoma County Board of Supervisors hosted a two-hour Zoom webinar on April 6, 2021, 5-7 pm. The Town Hall was facilitated by Dr. B.J. Bischoff and Sarah Stierch of Bischoff Consulting, Sonoma-based consultants. District 5 Supervisor Lynda Hopkins, Board Chair, and District 1 Supervisor Susan Gorin convened the town hall. The following County of Sonoma employees assisted with implementation of the town hall: Christel Querijero, Deputy County Administrator; Jane Elias, Manager, Energy & Sustainability Division; Maggie Fleming, Communications Specialist, County Administrator's Office; Inez Almaras, Administrative Aide, County Administrator's Office; Terri Wright, Principal Analyst, County Administrator's Office; Lois Hopkins, Administrative Analyst, County Administrator's Office; Ross Walters, Project Coordination Analyst, Information Systems Department.

The purpose of this town hall was to (1) showcase climate work that is being conducted by the County of Sonoma departments, special districts, and a utility and nonprofit community partners in the county and (2) engage the community in identifying what the County's priority projects should be to combat climate change and enable Sonoma County to become carbon neutral by 2030. The leadership of nine County of Sonoma departments, special districts, and a utility and ten nonprofit community partners each provided a four-minute overview of their initiatives related to addressing climate change. The following organizations and individuals presented their initiatives during the town hall:

County of Sonoma departments, special districts, utility

- Sonoma Water, Anne Crealock
- Ag & Open Space, Caryl Hart
- Regional Climate Protection Authority (RCPA), Tanya Narath
- Sonoma County Transportation Authority (SCTA), Suzanne Smith
- Permit Sonoma, Tennis Wick
- University of California Cooperative Extension (UCCE), Stephanie Larson
- Northern Sonoma County Air Pollution Control District, Robert Bamford
- Sonoma Clean Power, Geof Syphers
- Zero Waste Sonoma, Leslie Lukacs

Nonprofit community partners

- The Climate Center, Janina Turner
- Daily Acts, Trathen Heckman
- Sunrise Movement, Paulina Lopez

- Sonoma County Conservation Action, Kimberly Burr
- Coalition Against New Gas Stations (CONGAS), Woody Hastings and Jenny Blaker
- Carbon Cycle Institute, Jeff Creque
- Sonoma County Climate Mobilization, Pete Gang
- Sierra Club, Steve Birdlebough
- Sonoma Ecology Center, Caitlin Cornwall
- North Bay Jobs with Justice, Max Bell Alper

After every two presentations, the facilitators moderated public written comment provided via the Q & A Zoom feature, email, Facebook Live, and a dedicated Spanish language YouTube channel. The town hall yielded a total of 429 participants and 980 comments. Specifically:

- Zoom: 249 total participants; 895 English comments
- Facebook: 68 viewers; 23 comments in English from 14 participants
- YouTube (Spanish language): 50 viewers; no comments
- 62 emails sent to climate@sonoma-county.org
- There were no Spanish language comments or emails

Overview of community comments

This report contains a summary of participant comments across 35 climate-related topics in the 5 general areas of transportation, vegetation management, energy and built environment, zero waste, and adaptation and social resilience. The following is a summary of frequently mentioned comments (by four or more community members) across all platforms. These comments were edited for brevity and clarity.

Transportation

Reducing transportation emissions

- Reduce air traffic in and out of Charles M. Schultz-Sonoma County Airport to reduce greenhouse gas (GHG) emissions.
- Install roundabouts to reduce greenhouse gas (GHG) emissions and dissuade municipalities from banning the building of roundabouts.

Active transportation, including biking and walking

- Build more safe routes and sidewalks to and from schools, including safe bike parking, to increase the number of children walking and biking to and from school.
- Build more (and safer) bike lanes, bike paths, bike parking and sidewalks. This includes connecting these to SMART stations, commercial areas, and parks.

Public transit

- Expand rail transport in the County, including SMART train stations, streetcars, light rail, and Amtrak connections. This includes expanding transport from West County and Sonoma Valley towards the 101 corridor.
- Merge the three transit agencies into one system for a smoother operation that is less costly to manage.
- Make public transit free and reduce headways (amount of time between *transit* vehicle arrivals at a stop).

Electric vehicles

• Make the County's fleet of vehicles electric, including public works, fire, buses, law enforcement, etc. Build the appropriate green power system (wind, solar) to power the fleet.

• Increase number of EV charging stations. Ideas include creating EV charging cafes, replacing gas stations with EV charging stations, and adding more EV charging stations to urban and retail areas.

Vegetation management

General vegetation management

- To improve collaboration and transparency, improve County communication between wildfire resilience, forest health groups, and other relevant organizations.
- Provide more opportunities for teens and young adults to engage in vegetation management work through community colleges, Conservation Corps, and nonprofits.
- Use, incentivize and promote the use of animals (i.e., goats and sheep) to maintain vegetation.
- Work with tribal communities to implement and/or consult on vegetation management projects.

Sequestration

- Incentivize regenerative farming and agricultural projects that support sequestration.
- Require all agriculture in the County to be organic to ensure regenerative soil practices and eliminate/decrease toxic runoff into the river.
- Develop processes to maximize carbon sequestration while minimizing emissions.

Trees

- Implement a moratorium on tree cutting until a complete, realistic, thoughtfully developed climate-oriented tree ordinance is created to regulate cutting.
- Indefinitely ban tree cutting, logging, and/or tree thinning.
- Protect delicate oak woodlands and redwoods from tree cutting and logging through protective ordinances and declarations.
- Promote, incentivize, and implement reforesting and tree planting programs.

Water conservation

• Enact a moratorium on new permits and renewals that require significant water consumption until a complete EIR is finished regarding water use and conservation. This includes cannabis, vineyards, and water catchment permitting.

Habitat

- Prohibit new construction next to wildlands.
- Protect kelp forests and support kelp farming.

Energy and built environment

Wildfire preparedness

- Move PG&E powerlines underground.
- Do not allow campfires and barbecues on North Sonoma Mountain to minimize wildfire risk.
- Ban or implement a moratorium on building in fire prone areas, including the wildfire urban interface.

Gas stations

• Implement a Countywide moratorium or ban on building or retrofitting new gas stations and/or fossil fuel infrastructure.

Natural gas

• Prohibit the building/installation of new natural gas projects in construction. *Wind energy*

• Instead of housing, build wind turbines in fire prone and diablo wind zones.

Efficiencies in the built environment

- Incentivize people to use heat pump heating and cooling and induction cooking in new builds and retrofitting in existing building stock.
- Promote, incentivize, use and/or require alternative, eco-friendly building materials in new builds and retrofitting. Examples include implementing a low carbon building code and promoting hemp as a building material.
- Incentivize the building of houses with smaller footprints.

Community microgrids

• Promote, incentivize, and build microgrids throughout the county.

Solar power

- Promote and incentivize (i.e., rebates) back batteries for homeowners who have solar panels.
- Require, promote, and install solar panels to be on top of buildings and homes do not use open space to install them.
- Increase incentives for homeowners and businesses to install solar power.

Batteries and battery storage

• Promote, offer, and incentivize Vehicle-To-Home (V2H) or Vehicle-To-Grid (V2G) capabilities.

Zero waste

Composting

- Encourage or require composting at all schools, including building onsite composting facilities.
- Install public composting facilities across the county.
- Keep compost production in Sonoma County, as opposed to shipping materials out of county to be composted.
- Turn the biomass from cleared brush into compost and woodchips, instead of sending it to the landfill.
- Promote and incentivize at-home composting.

Separation of waste

- Install porous/drainage and water catchment along roads and in developed areas to catch plastics and other waste from going into waterways.
- Improve education about recycling, composting and separation of waste.
- Require recycling and compost bins at all multi-unit dwellings.

Water conservation

• Incentivize and promote water use and reduction programs including water catchment, grey water reuse and the use of composting toilets.

Gardening and farming

- Promote and educate about low-water gardening. This may include events/festivals, websites, social media, pamphlets, workshops, and display gardens. Ensure all materials are in English and Spanish.
- Ban pesticides and herbicides, including Roundup.

Recycling

• Close loopholes for waste and recycling regulations for businesses. Enforce policies and hold businesses accountable for their waste.

Single-use products

- Ban Styrofoam/polystyrene throughout the County.
- Promote programs like Dispatch Goods (<u>www.dispatchgoods.com</u>).

 Require businesses to use compostable products – plastic bags, take out containers, etc.

Food production, insecurity, and waste

- Support, promote and incentivize the growth of more food to diversify the economy, decrease water use, improve soil health, decrease GHG emissions, increase the consumption of vegetables, and support small farmers.
- Promote vegetarianism and veganism with regular events (i.e. Meatless Mondays).
- Create a victory garden program to fight food insecurity.

Adaption & social resilience

General adaptation & social resilience

- Create a climate dashboard where stakeholders/public can monitor progress towards net-zero emissions on an ongoing basis.
- Increase educational programming related to climate change to residents of all ages and backgrounds.

Air pollution

- Support jurisdictions with a dashboard to keep track of the status of recommended local policies alongside local greenhouse gas inventory updates.
- Ban two-stroke engines, including gas-powered leaf blowers. This may include a buyback program and other incentives.

Impacts on underrepresented and economically challenged communities

• Ensure climate change action and strategic planning includes Black, Indigenous, Latinx, and other people of color, as well as youth participants.

The following pages feature comments, ideas, and suggestions, provided by community members, relevant to the County's climate change goals. Comments or ideas that were supported or mentioned by four or more participants (across all platforms, including e-mail) are noted in italics with the note: "Multiple participants supported or suggested the same action."

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TRANSPORTATION

1. Reducing transportation emissions

- A. Curb airline traffic and airport expansion to combat emissions. (Multiple participants supported or suggested the same action.)
- B. Roundabouts are a great alternative to traffic intersections as they greatly reduce emissions and generally improve safety. Let's adopt this for new intersections and convert existing ones. (Multiple participants supported or suggested the same action.)
- C. A major contributor to vehicle emissions in our area is our poorly operating and nonsmart traffic signals. Update County traffic signals to reflect current technology rather than decades old technology.
- D. Transportation is our biggest source of greenhouse gases (GHGs). Let's set goals (Menlo Park's goal is -10% per year) and start tracking gasoline and diesel sales reductions by jurisdiction. Every station is already required to report annually to CEC. Let's also plan for the inevitable cuts in gas sales tax to our cities as we decarbonize.
- E. More school bussing. Incentivize it, if needed.

2. Active transportation, including biking and walking

- A. More secure/protected bike lanes, bike paths and pedestrian bridges over Hwy 101. (Multiple participants supported or suggested the same action.)
- B. Complete a bicycle path network connected with SMART stations, commercial areas, and providing access to city, county, and state parks. *(Multiple participants supported or suggested the same action.)*
- C. Do not offer bike sharing programs. These programs are for tourists and do not reduce commuter emissions. The bikes cannot be resold and end up in landfills.
- D. When children don't have safe routes to ride bikes and walk to school, parents will drive them. Need safe routes and more sidewalks for walking to schools. (Multiple participants supported or suggested the same action.)
- E. More separated (Class I) and protected (Class IV) bikeways. (Multiple participants supported or suggested the same action.)
- F. More secure bike parking to make it easier for folks to ride for transportation (Multiple participants supported or suggested the same action.)
- G. Reduce speed limits. This will result in fewer bike/pedestrian fatalities, resulting in more people willing to bike and walk (*Multiple participants supported or suggested the same action.*)
- H. Bike sharing/ renting as in the Netherlands. Rent a bike from one rack, ride to your destination, turn it in at another station.
- I. Dramatically and aggressively expand the Complete Streets program.
- J. To encourage more walkable communities, and safer evacuation routes, please encourage development of pedestrian pathways between rural properties and at the end of cul-de-sacs. If property owners were given a small tax break in exchange for hosting/maintaining the paths it could have a huge mental health and quality life impact.
- K. More connected greenways.
- L. The present plans for Highway 37 will increase vehicle miles traveled. Don't widen 37. It will just increase traffic in the long run.
- M. Implement a moratorium on no new off-street parking, city-owned parking.
- N. Incentivize employers to become certified Bike Friendly Businesses.
- O. Incentivize employers to provide transit passes for employees who typically bike commute for rainy days.

- P. Hoboken, NJ has had ZERO traffic fatalities for THREE YEARS. We need to follow their Vision Zero policy & infrastructure examples.
- Q. Ensure all schools have: sheltered bike parking, creative transit stops, and multiple foot paths onto campus!
- R. Have all Sonoma County children receive bicycle education at least twice like in Europe.
- S. Establish a corps of volunteers to patrol the existing bike paths and walking paths along the Santa Rosa Creek, the Joe Rododa trail, and other bike paths so that more residents feel they are a safe alternative to vehicles. Check out what the Boise ID has done with their river trail. They have volunteer monitors trained by the police and bike rentals along their trails which is used by many, many local residents.
- T. Accelerate the design and installation of protected bike lanes and investing in "quick build" protected bike lane projects to help make cycling safer in the county. We know that the primary reason people don't bicycle more is that they don't feel safe. Adding protected bike lanes will create safer routes for cyclists and help increase the number of people who bicycle, which can most quickly reduce transportation emissions while improving public health and safety. Example: <u>https://mass.streetsblog.org/2020/10/05/cambridge-city-council-enacts-new-cyclingsafety-ordinance-to-fast-track-bike-network-implementation/</u>
- U. Implement parking fees, targeting funds to improved transit, pedestrian/bike safety, and aesthetic enhancements on the same blocks.
- V. Improved town planning that minimizes the need for driving.
- W. For places where a motor vehicle is the only way to get around, incentivize carsharing and van-pool programs.

3. Public transit

- A. Expand public transportation, including transit connections for east and west county to the SMART train. (*Multiple participants supported or suggested the same action.*)
- B. Build an east-west electric, battery powered light rail streetcar from Sebastopol to Oakmont via the Santa Rosa downtown SMART station. Santa Rosa, the County and CalTrans already own the right-of-way. No overhead wires are necessary. (Multiple participants supported or suggested the same action.)
- C. Merge the three transit agencies into one system for a smoother operation that is less costly to manage. (Multiple participants supported or suggested the same action.)
- D. Free public transit with reduced headways is necessary. (Multiple participants supported or suggested the same action.)
- E. Have electric shuttles around urban areas that connect to transit hubs and park & ride lots. (*Multiple participants supported or suggested the same action.*)
- F. Bus/train transportation: focus on ridership over profit. Scale vehicles to ridership, i.e. smaller during time/on routes of low ridership.
- G. Create an attractive electric streetcar line from Sonoma Valley, along Highway 12, from Sebastopol to Santa Rosa.
- H. Make sure that every public transit bus line has a stop adjacent to, or as close as possible, to a SMART station.
- I. Use gondolas and monorails to get traffic up off the street.
- J. The City of Sonoma needs a SMART station.
- K. Sonoma County Supervisors need to start using public transportation to serve as good examples and encourage others to use it.
- L. Expand rail while reducing air travel.
- M. Complete SMART east from Novato to Amtrak and Fairfield.

- N. Bus proximity monitoring integrated into street light operations with public transit having priority to accelerated transit flow and create greater value to the rider of the transit systems. i.e., when the bus approaches a stop light, they get the priority on green light over other vehicles.
- O. Improve public transportation options to reduce vehicle miles traveled (VMTs).

4. Electric vehicles

- A. Make all County owned vehicles electric, including law enforcement, public works, fire, buses, etc. (*Multiple participants supported or suggested the same action.*)
- B. We should be building electric vehicle charging stations. They should feature both Level 2 and DC Fast Charge stations. Amenities like cafes, book sellers and WIFI hotspots could support customers as their vehicles charge. (Multiple participants supported or suggested the same action.)
- C. Install solar and/or wind power to power electric vehicle fleet for County vehicles.
- D. Offer meaningful subsidization for electric cars so that they are actually affordable for all, not just the wealthy.
- E. Put more EV charging stations in the County that aren't just for Teslas.
- F. Offer incentives or subsidies for charging stations at single-family residents (both owner occupied and rentals), condominiums and apartment buildings.
- G. It could be revelatory to estimate the lifecycle GHG associated to support full-size EVs versus walking and lightweight electric utility vehicles. Lifecycle estimates include operational emissions, embedded emissions in vehicles and associated pathway/roadway/parking infrastructure, and heat gain from asphalt, for example (not to mention on social value and affordability).

5. Impacts on underrepresented and economically challenged communities

A. I'd like to make sure our disabled community members are taken into account especially in the sense of public transportation but also for the rest of these suggestions.

VEGETATION MANAGEMENT

6. General vegetation management

- A. Provide subsidies for good soil management.
- B. Increase and maintain regular communication between wildfire resilience and forest health groups. They are not collaborating enough on a regular basis. (Multiple participants supported or suggested the same action.)
- C. Promote/support efforts to use goats and sheep to clear brush. (Multiple participants supported or suggested the same action.)
- D. Work with tribal communities to implement cultural burning to improve wildland health and prevent wildfires. (*Multiple participants supported or suggested the same action.*)
- E. Can you reach out to people with indigenous ancestry and community ties to participate on planning and decision groups around forest management? There are ancient ways that have not been honored sufficiently. If in doubt, agree to small area pilot projects to test different theories. (Metrics for it working might include thriving fire-resistant species) (Multiple participants supported or suggested the same action.)
- F. Job training for youth to learn skills on vegetation management for wildfire safety. Could you use some PG&E settlement funds to hire community college students? Public service plus vocational job training
- G. Make more work available to Conservation Corps North Bay.

- H. The Sustainable Groundwater Agencies have identified areas where water meters are essential to measure the depletion of the many aquifers which feed the three main ones. Rather than scaring and annoying rural residents by the threat of requiring water meters, the County should fund water level monitors. It's good and necessary research.
- I. Implement a baseline California Natural & Working Lands Inventory (historic, current and potential) before creating a piecemeal plan.
- J. Active land stewardship that uses the best vegetation management tool (Prescribed fire, grazing, thinning, mastication, etc.) for each situation to return our local ecosystems to ones that provide ecosystem services, such as carbon sequestration, in a way that is resilient and sustainable.
- K. Regarding biomass, taking vegetative matter from forests and burning it in biomass facilities would be going the opposite direction as far as climate goals. Biomass is dirtier than coal, inefficient energy source, and costly compared to solar, wind and other renewable energy sources. There are much better solutions to dealing with vegetative matter.
- L. Bring together local experts to develop a strategic plan that both reduces wildfire risks AND helps improve soil & increased carbon sequestration. Organizations such as the Resource Conservation Districts are working with property owners to develop carbon farming plans. Pepperwood Preserve can provide guidance in planting landscapes that are fire resistant AND carbon sequestering, as well as the role of silvopasture in achieving these goals.
- M. Reject any attempts to create a market for biofuels derived from forest woody biomass.

7. Sequestration

- A. Incentivize regenerative farming and agriculture projects. (Multiple participants supported or suggested the same action.)
- B. Require all agriculture to be certified organic to ensure regenerative soil practices and eliminate toxic runoff into the river. (*Multiple participants supported or suggested the same action.*)
- C. We need a comprehensive approach when it comes to organics management of biomass from forests and compost/mulches to maximize carbon sequestration while minimizing emissions. (Multiple participants supported or suggested the same action.)
- D. Recognize that one of the best ways to sequester and store carbon is in existing mature trees and forest soils.
- E. Provide free wood chips to the public.
- F. Promote and subsidize restoration and maintenance of natural areas that especially good at sequestering carbon-- riparian areas, marshes, and grasslands.
- G. Until air travel is decarbonized, lets stack downed trees at the airport A Mitigation and Sequestration twofer.

8. Trees

- A. Support a tree cutting moratorium until we have a clearer picture of the situation and have developed a realistic climate-oriented tree ordinance to regulate cutting in the future. (*Multiple participants supported or suggested the same action.*)
- B. Prohibit forest thinning. Forest "thinning" is not a way to reduce fire danger. It actually increases it. Large conifers are fire resistant. Removing them promotes growth of fire-loving brush like tanoak and bay. It adds slash to the forest floor which dries to make kindling. And it increases wind corridors. *(Multiple participants supported or suggested the same action.)*

- C. Stop cutting down mature trees. (Multiple participants supported or suggested the same action.)
- D. Pass protective legislation to declare redwoods (and several other tree species) the amazing resource that they are, with codes or regulations that slow down their removal. *(Multiple participants supported or suggested the same action.)*
- E. Please, create a Tree Ordinance that protects native Oak ecosystems. (Multiple participants supported or suggested the same action.)
- F. End the salvage logging practices followed at the state level. These logging projects do not produce resilience. Keep the largest most fire resistant trees on the land. (*Multiple participants supported or suggested the same action.*)
- G. The Board of Supervisors should pass an emergency moratorium on tree clearing on private and public land, especially oak lands.
- H. Protect forests by stopping the removal and shipping of woody biomass.
- I. Issue fewer burn permits and provide access to chippers for fire fuel management.
- J. Hold PG&E accountable for their clear cutting of healthy trees. The clear cut approach is being filled in by invasive high fuel plants, which creates increased fire concern.
- K. Stop logging of trees in the name of public safety and fire protection. Vegetation management is, or all too often, leads to large scale logging which destroys the forest ecosystems that protect our watersheds and provide valuable wildlife habitat. Even dead trees provide valuable wildlife habitat, and gradually decompose to enrich forest soils. "Vegetation management" can actually make communities more fire-prone as happened with the Camp Fire in Paradise.
- L. Launch and promote reforesting programs.
- M. Provide subsidies for native tree planting.
- N. Plant more trees.
- O. Implement cultural and prescribed burns and forest thinning.
- P. Have decisions about tree removal or clearing made by people educated in ecology/botany who can read the health and environmental impacts of various tree species. Remove acacia trees—they are woody and take up a lot of precious water. They also produce loads of pollen (allergies). Consider thoughtful revegetation of areas that need to have trees removed. Douglas fir trees are native but are hazardous due to providing easy ladder fuels that create opportunities for canopy fires. They also invade and overtake our native oak woodlands.
- Q. The County should lobby the legislature to reform the Board of Forestry eliminating the conflict of interest (the requirement of having timber industry members on the Board) and requiring expertise in geology, hydrology, biology, forestry and fire science.
- R. Get youth groups such as scouting, Boys & Girls Clubs, childcare centers, after school programs, etc. involved in reforestation programs in the county.
- S. Increase penalties for illegal tree removal.
- T. Prevent the logging of the Gualala river water shed.
- U. Keep existing forests and please slow down on extractions even the burned redwoods are recovering so please keep them in the ground. Same for oak woodlands.
- V. Incentivize people to NOT cut trees.

9. Water conservation

A. Enact a moratorium on any new permits and renewals for significant water consuming uses including cannabis and water catchment installs until we study the cumulative impacts and truly understand how much water we can use. (Multiple participants supported or suggested the same action.)

- B. Lake Sonoma's current bottom levels must be tested to learn actual current capacity. Mandatory water restrictions must be implemented, including strict limits on landscape irrigation and building. This drought could continue indefinitely.
- C. Sustainable use of water, both surface and ground waters, should not comprise river flows and the ability to fully recharge aquifers. Ground water is still not being regulated and the water supply and the environment that relies on it continues to be compromised. Over allocation and overconsumption are critical issues and until development is limited based on sustainable water supplies, this resource will continue to be over-exploited.
- D. Resurrect the Sonoma Developmental Center's water system.
- E. Regulate vineyards and their water use. Find an alternative to protect vines from frost, rather than spraying freshwater on vines.
- F. Do not advocate water catchment as a solution for groundwater shortages. That's stealing water from all downstream needs.
- G. Streamline water catchment systems and incentivize them.
- H. Put a moratorium on additional cannabis permits until drought ends.

10. Habitat

- A. Support kelp farming. (Multiple participants supported or suggested the same action.)
- B. Prohibit new construction next to wildlands. (Multiple participants supported or suggested the same action.)
- C. "Healthy forests" and "vegetation management" should include not just upland forests and grasslands but also our critically important riparian forests and wetland habitats to support carbon sequestration, water retention and storage, flood reduction, wildlife habitat, and many other ecosystem services. (Multiple participants supported or suggested the same action.)
- D. I would love to see a big increase in open spaces, land protection (particularly on hilltops around the country) and more trails.
- E. Establish wildlife corridors.
- F. Research how much open space (not used for agriculture) that is needed to support wildlife.
- G. Protect kelp forests from being decimated by warm waters and replaced by sea urchins.

ENERGY AND BUILT ENVIRONMENT

11. General energy and built environment

- A. Consider hydrogen energy and distribution infrastructure. Hydrogen cars are more sustainable than the batteries in electric cars.
- B. Permit Sonoma should create a fast track lane for projects that can demonstrate carbon neutral or carbon negative footprints.
- C. Have all public agencies sign up with <u>https://sonomacleanpower.org/programs/evergreen</u>
- D. Development and projects should be near jobs and transit.
- E. Stop approving home construction outside the urban core and not close to rail transit.
- F. Take responsibility for assuring the responsible energy and natural resources in the composition and production of all of the goods and services coming into the county. Consumer goods, hospital supplies, web page hosting services, everything.
- G. Electrical power independence from local, non-GHG-emitting sources photovoltaic panels, wind turbines, wave and tidal turbines, etc.

12. Wildfire preparedness

- A. Place PG&E powerlines underground. (Multiple participants supported or suggested the same action.)
- B. Do not allow campfires and barbecues on North Sonoma Mountain to minimize fire risk. (*Multiple participants supported or suggested the same action.*)
- C. Stop all development in fire prone areas humans are the cause for majority of fires.
- D. Don't encourage building in the wildfire urban interface. (Multiple participants supported or suggested the same action.)
- E. Create a program to purchase development rights in fire zones.
- F. Sonoma County can advocate with Bay Area Air Quality Management to increase prescribed burns.
- G. Partner with indigenous land managers to develop wildfire reduction plans, for example, as is currently done at Pepperwood Preserve.
- H. We cannot counter the immediate effects of climate change, but stopping development in high fire risk areas would be the most significant action Sonoma County could do to reduce immediate risk of wildfires, reduce carbon emissions and preserve the environment. Yet the County is doing exactly the opposite, reducing regulations to encourage more development in fire-prone areas. This is not driven by housing needs, as County supervisors have concurred these are best addressed in urban-centric locations near public transportation.

13. Structural hardening

- A. Provide physical and monetary support for property owners to implement home hardening projects.
- B. Install automated exterior sprinklers using rainwater storage and independent solar/battery-powered pumps is worth exploring. This approach is not yet mainstream and would require additional study and testing to better understand its role in improving our home defenses. For existing homes in the Wildland Urban Interface (WUI), this added defense could help in securing home insurance and ultimately saving homes in future fires.
- C. The most effective way to protect homes and communities from fire is through home hardening and creating defensible space (up to a maximum of 100 feet) immediately around homes and communities. This would also create more jobs than "vegetation management."

14. Gas stations

- A. Implement a Countywide moratorium or ban on the building or retrofitting of any new fossil fuel infrastructure within Sonoma County. *(Multiple participants supported or suggested the same action.)*
- B. Strongly support ordinance banning gas stations. Every time it approves a new gas station, the County buys itself a brownfield that will be obsolete in 20 years with contaminated soil that will prevent redevelopment of the site for housing. (Multiple participants supported or suggested the same action.)
- C. Convert gas stations into EV charging station cafes.
- D. Set a goal to track and reduce local gas sales by 10% per year (e.g., Menlo Park).
- E. Require point-of-sale climate emergency warning labels on all existing gasoline and diesel pumps (e.g., Cambridge, MA).

15. Natural gas

- A. Pass an all-Electric Reach Code for construction to eliminate natural gas in new construction. (*Multiple participants supported or suggested the same action.*)
- B. Update zoning and codes to prohibit natural gas in new construction. (Multiple participants supported or suggested the same action.)

C. Partner with Sonoma Clean Power, PG&E, and other entities to phase out natural gas space and water heating in existing buildings.

16. Wind energy

A. Instead of building homes in fire prone areas, specifically diablo wind zones, install wind turbines. (*Multiple participants supported or suggested the same action.*)

17. Hydropower

A. Major hydropower projects are not sustainable in the long term due to uncertainties regarding precipitation and gradual siltation. Divest into smaller hydropower projects.

18. Efficiencies in the built environment

- A. Low-carbon building code (like in Marin County), including low-carbon concrete. (See: <u>https://www.marincounty.org/depts/cd/divisions/sustainability/low-carbon-concrete-project</u>) (*Multiple participants supported or suggested the same action.*)
- B. Incentivize building smaller houses. (Multiple participants supported or suggested the same action.)
- C. Incentives to retrofit existing building stock with heat pump heating and cooling; heat pump water heaters and induction cooking to reduce use of natural gas. (Multiple participants supported or suggested the same action.)
- D. Consider hemp as a building material to lower water use. (Multiple participants supported or suggested the same action.)
- E. Eliminate parking minimums.
- F. More education for contractors and auto repair shops. These professionals often discourage electrification of homes and vehicles.
- G. Make using alternative building materials and alternative wastewater processes more accessible via permitting process.
- H. Composting toilets, grey water systems, and slow down the approval of projects that require high water usage.
- I. Partner with BayREN to receive a Zero-Net Energy evaluation of all county buildings.

19. Community microgrids

- A. Incentivize microgrids. (Multiple participants supported or suggested the same action.)
- B. Develop microgrids so we don't need the big transmission lines running through the high fire danger areas.
- C. Use Sonoma Clean Power to create a resilient grid with alternative distributed generation based on the RESCO study.
- D. Create a grid and make sure it is owned by "the public" and not a private corporation.
- E. Create a countywide microgrid.
- F. Working on legislation to require telecom network providers to power their towers and equipment with appropriately sized solar and battery microgrid systems. Rather than spend the limited settlement funds on solarizing the cell networks, invest in a team that will continue work on policy or securing additional funding to achieve that goal.

20. Solar power

- A. Create incentives and rebates for back up batteries for homeowners who already have solar panels. (Multiple participants supported or suggested the same action.)
- B. Solar farms should be on top of buildings and homes—no need to waste open space.
- C. Large solar installations should be on top of large buildings and over parking lots, close to electric demand. Not covering soil that could be capturing carbon. (Multiple participants supported or suggested the same action.)
- D. Build more solar power sources over existing parking spaces all over the county.

- E. There should be incentives for businesses and residents to apply solar panels to their roof tops. Perhaps a tax break?
- F. End electric rate structures. They are making a huge hit to those of us who got solar over 15 years ago. It seems to be a corporatization of the issue. As a homeowner with older solar, I'm struggling.
- G. To incentivize solar homes, please go back to paying more generously when excess power is produced. Sonoma Clean Power has backed down from its original promise.

21. Batteries and battery storage

- A. Please make Vehicle-to-Home (or Grid) capability an option as soon as possible. There are many folks that are shopping for, and buying, stationary batteries for their homes, to weather power outages that have become norm during the fire seasons. By utilizing the battery in your EV instead of for these functions, the value of the EV increases, providing increased home resiliency, and increasing the ability of gridbased renewable energy to be stored for later use. V2G is being implemented in Japan, UK, Australia, etc., but doesn't seem to have any urgency here in the US. Home EV chargers, within a few years, should all be bidirectional to allow for V2G. (Multiple participants supported or suggested the same action.)
- B. For homes still being rebuilt after the fires, a V2G bidirectional charger should be standard item, and an EV.

22. Retrofitting

A. Establish robust services for homeowners and landlords that wish to complete electrification retrofits to their properties. (Connecting property owners to the contractors with expertise and offering incentives for electrifying.)

23. Impacts on underrepresented and economically challenged communities

- A. Change the number of acres planted or livestock head to qualify for farmworker housing. Allowing people who live on agricultural land to build houses will help maintain agricultural land.
- B. Many more affluent residents can set up their homes with residential solar. Meanwhile, those impacted the most by power shutdowns have little recourse. Community microgrids that serve systematically disadvantaged communities are essential for resilience and affordable, stable electricity rates. Start with Roseland area, add Memorial Hospital area (lots of essential services), and go from there.

ZERO WASTE

24. General zero waste

- A. Methane is a potent GHG and Sonoma County is recognized statewide as a leader in Zero Waste. Let's not let League of CA Cities slow us down in implementing SB 1383... let's get our Tier 1 organic waste generators on board diverting more food waste to feed the hungry and make good quality compost for our organic food and wine growers.
- B. Has anyone considered employing the homeless to clean up waterways by removing trash and invasive species? It would be a great way to help people contribute.
- C. Raise waste hauler rates to fund Tier 1 business education and outreach programs as needed to comply with SB 1383.
- D. Hire staff dedicated to SB 1383 implementation.

25. Composting

A. Bring compost facilities back to Sonoma County schools. (Multiple participants supported or suggested the same action.)

- B. Encourage home composting vermicomposting. So easy-peasy, fun and practical—creating the best fertilizer for soil/plant health! (*Multiple participants supported or suggested the same action.*)
- C. We should turn the biomass from cleared brush into compost for farms and woodchips, instead of sending it to the landfill. (*Multiple participants supported or suggested the same action.*)
- D. Keep compost production in Sonoma County, instead of trucking out materials which may be composted locally. (*Multiple participants supported or suggested the same action.*)
- E. Put composting sites in public spaces. (Multiple participants supported or suggested the same action.)
- F. Use compost to support carbon farming.
- G. Get restaurants to compost.
- H. Bring back the compost facility at the Mecham Road dump.
- I. Sonoma County should require food composting from all residents, including both single family homes and higher densities residences.
- J. Provide incentives for all Sonoma County schools to collect all acceptable food waste for compost to be picked up by a county agency.
- K. We need to create systems to compost as much as we can onsite.
- L. Might it be better to process organic waste via anaerobic digestion instead of composting? (the latter can release methane).
- M. Encourage the schools to have compost bins on campus, make soil, and use it to raise gardens on the school grounds—we did years ago at some local schools.
- N. Increase compost use for soil health and carbon sequestration. Support and accelerate the construction of a new county compost facility and provide grants for small, shared community compost makers (for example, in community gardens).

26. Separation of waste

- **A.** Implement porous/drainage and catchment for roads and development areas to avoid washing plastics and/or waste into waterways. (*Multiple participants supported or suggested the same action.*)
- B. Ensure all apartment buildings have green compost bins.
- C. We need education big time. People cannot even grasp separating recycling from trash. Let alone the compostable. My neighbors are a nightmare, and my vacation renters are, too. No matter how many signs I put up, I am constantly digging through the trash to put it in the correct bins.
- D. Use drought resistant native plants in public parks and building to reduce water usage.

27. Water conservation

- A. What are we doing to reduce the water waste of flush toilets? Composting toilets should enter into public places in order to familiarize the public with their use. (*Multiple participants supported or suggested the same action.*)
- B. Implement porous/drainage and catchment for roads and development areas to capture rain fall for reuse. (*Multiple participants supported or suggested the same action.*)
- C. If the county could streamline and subsidize the installation of gray water systems for existing homes and businesses, we could stop wasting water to water plants and flush toilets. Find a company or two that makes these systems and partner with them to roll it out to the county.
- D. Subsidize rain catchment systems for roofs (See Bermuda: <u>https://www.thebermudaroof.com/rain-water</u>)
- E. Provide incentives for reduction of water use.

- F. Ensure any water restrictions take into consider number of people in each household and if people also have edible gardens.
- G. I feel the Board of Supervisors will need to come to grips with the fact that water rationing will be required for both residential and agricultural users if net zero is to become a reality.
- H. The County should require underground water storage filled by runoff from roofs and hardscape for homes built and/or on lots over 2 acres.
- I. Encourage water independence, decentralize our water supply and resurrect cisterns Aussie style.

28. Gardening and farming

- A. Host workshops on how to remove a lawn and how to replace it with water-friendly gardening. Provide workshops and materials in Spanish and English. (Multiple participants supported or suggested the same action.)
- B. Highlight beautiful and resilient water-smart landscaping that already exists. Include budgets (to set expansions) and share what people can do at all budget levels.
- C. Limit the amount of water people can use in their gardens.
- D. Provide residents free woodchips.
- E. Provide spaces in county and city parks for community gardens for people to grow their own food who don't have places to do so in the housing they live in.
- F. I'd like to see help for farmers and individual gardeners to avoid Roundup and also fungicides, which destroy the soil microbiome and directly harm ag workers.
- G. Ban Roundup county-wide.
- H. Community gardens and other demonstration gardens that utilize no-till and other sequestering practices would be a start. California Department of Food and Agriculture (CDFA) has a list of best practices in its Healthy Soils Program.
- I. Diversify agriculture Currently 60,000 acres are planted in wine grapes and 800 acres are planted in vegetables.
- J. Have all schools have community gardens.
- K. Check out the school garden at San Miguel Elementary for inspiration on how to eliminate lawn while maintaining active-use space for kids.
- L. So much food is produced in the county, but so much is still imported from outside the county and state—we could do a lot more for local farmers with subsidies to improve soil and water health, while helping smaller farmers succeed.
- M. Don't allow the use of pesticides and herbicides—green control.
- N. Carbon farming needs support very significant potential for sequestering carbon on a large scale.
- O. Work with Santa Rosa Junior College to create and promote regenerative agriculture programs.

29. Recycling

- A. Close loopholes for waste and recycling regulations for businesses. Hold businesses accountable for their waste. (Multiple participants supported or suggested the same action.)
- B. Streamline recycling
- C. Increase the number of recycling facilities in the County.
- D. Find out how to recycle more products why can I recycle a Starbucks coffee cup in San Francisco, but not in Sonoma County?
- E. Why don't we pay recycling by the weight of waste produced? This would be an incentive to decrease waste.
- F. Require multi-unit dwellings supply recycling for waste.
- G. My former residence, city of Palo Alto, adopted an ordinance July 2020 to ban the dumping of reusable building materials into landfill during a building renovation or

rebuild. This ordinance is enforced through the city Planning Department and provides a financial incentive to reuse rather than dispose as a step to reduce climate change.

30. Single-use products

- A. With several municipalities in the county banning non-recyclable containers and restaurants reeling from the effects of the pandemic on their businesses, wouldn't this be a good time to investigate a program like Dispatch Goods (www.dispatchgoods.com) to eliminate all single use items involved in delivering food? (Multiple participants supported or suggested the same action.)
- B. Pass the Disposable Food Service Ware and Polystyrene Foam Ban Ordinance
- C. Do not ban plastic straws. Straw bans are "super ableist."
- D. Ban Styrofoam from all county restaurants.
- E. Require use of the right type of "compostable" take-out containers that can be accepted by our local composting services.
- F. We need to reduce single use plastic packaging, including plastic bags, tubs, Styrofoam, etc., on a county basis
- G. Make it mandatory for all grocery stores to use green/compostable produce bags instead of plastic ones.
- H. Make planned obsolescence illegal, with significant fines and incentives for consumer whistle-blowing on the scofflaws. In the meantime, encourage the public to buy quality products that have proven longevity and back that education up with data on the economics of wise consumerism.
- I. Compostable take out containers and make sure people know they ARE Compostable. The ones at the Sebastopol Farmer's Market aren't marked and get thrown in garbage—with leftovers in them.

31. Food production, insecurity, and waste

- A. Promote vegetarian and vegan eating to reduce food waste and greenhouse gasses. (Multiple participants supported or suggested the same action.)
- B. Promote Meatless Mondays and Meatless March like other counties and cities throughout California. (*Multiple participants supported or suggested the same action.*)
- C. Create a victory garden program to fight food insecurity. (Multiple participants supported or suggested the same action.)
- D. Implement a county-wide educational program to educate people on food waste.
- E. Create a local food production goal and track it.
- F. We seem to take our food supply so much for granted, but it's very much at risk, and we need to also explore adaptations to grow food in a changing climate. Farmers need funding and training opportunities. New markets need to be developed, such as food hubs.
- G. We're fortunate to have family farms in our county, though we could support existing farmers better and explore creative ways to encourage new farmers to start. Explore options for increasing farming acreage with creative land sharing strategies, such as leasing private property to new or existing farmers for no to low cost.
- H. Explore ways that vineyards can integrate regenerative practices and add food and cover crops to their operations.
- From a food waste perspective, our society wastes a lot of food over 45,000 tons goes to the landfill in Sonoma County each year. We recommend funding a regional food coordinator for the Sonoma County Food Recovery Coalition, working with a network of volunteers, to reduce waste by connecting excess supply with those in need.

ADAPTATION & SOCIAL RESILIENCE

32. General adaptation & social resilience

- A. Create a County climate dashboard where stakeholders can monitor progress toward net-zero emissions on an ongoing basis. (*Multiple participants supported or suggested the same action.*)
- B. Finish implementation of all local measures the County agreed to in the Climate Action 2020 "vision" from 2016.
- C. Have the county get into Public Banking, have our money serve social and enviro goods on Main Street and not inequity and a 6th Great Extinction on Wall Street.
- D. Support and incentives for landlords to implement sustainable measures in their rentals.
- E. Be completely open, honest and transparent about the existing sources of carbon pollution including from air travel, tourism; wine growing, export and tourism; cannabis growing, export and tourism; and logging. Unless these are included, we aren't being honest about the baseline.
- F. Create one centralized place to get the latest developments, projects to support, education for citizens, and progress/achievements. Going to 5 or 6 county department websites is tedious and time consuming, though important and interesting. Need an efficient way to keep citizens informed and engaged.
- G. Help the SRJC Sustainability Committee work to educate the community about how to mitigate, sequester, and adapt to climate change.
- H. Encourage all Sonoma County High Schools to adopt Climate Solvers curriculum.
- I. Develop an ongoing educational arm that educates about the need for and promotes and shares methods for achieving carbon drawdown. We have local people trained with this knowledge who can deliver webinars and contribute written materials to this effort.
- J. Climate crisis awareness and response should have daily lesson plans and projects in every K-12 classroom curriculum.
- K. Highly visible coverage of successful sustainable practices, inventions, materials in the rest of the world. Newspaper columns. Presence on TV and radio news. Everyone in the county needs to be exposed to new information daily.
- L. Promote public screening of climate emergency films, perhaps host a film festival.
- M. Endorse the Climate Safe California Plan.
- N. Endorse the RCPA countywide Climate Mobilization Strategy
- O. Form a Climate Emergency Response Task Force
- P. Hire a designated staff person to oversee climate action planning and implementation (i.e., Sustainability Director, GHG Czar).
- Q. Join the Urban Sustainability Directors Network.
- R. Conduct a countywide GHG inventory, including county-owned fleet vehicles, employee commutes, water pumping, streetlights, etc.
- S. Establish active liaison relations with other local governments working toward the same goals.

33. Air pollution

- A. Support jurisdictions with a dashboard to keep track of the status of recommended local policies alongside local greenhouse gas inventory updates. (Multiple participants supported or suggested the same action.)
- B. Perhaps start a buyback program for gas powered leaf blowers. Or some other such incentives to move away from fossil fuel engines no matter how small. (Multiple participants supported or suggested the same action.)

- C. Ban two-stroke engines. (Multiple participants supported or suggested the same action.)
- D. Renew the County's commitment to the federal carbon fee and dividend program.
- E. Rejected attempts to create a market for biofuels derived from forest wood biomass. Burning biomass is more carbon polluting than burning coal.
- F. Ban leaf blowers.
- G. Teach farmers not to turn the soil so as not to release gasses into the atmosphere.
- H. On a national level, carbon pricing has been shown to be the most effective single policy to reduce GHG emissions. Endorse the Energy Innovation and Carbon Dividend Act.
- I. Invest in electric/low emission tools for homeowners and businesses to utilize in the annual clearing routines, so as to reduce use of gas-fueled emissions from tools and tractors. More electric tool options are on the market today including electric tractors. Explore different models of investment, including a tool share model, where residents can borrow or rent rather than purchase. Perhaps team with others to co-fund grants for purchase of electric landscaping tools or other incentives for businesses to adopt these tools.

34. Resilient infrastructure

- A. Integrate regenerative farming and affordable climate-friendly housing in places like Sonoma Developmental Center, etc.
- B. Bring back/incentivize corner stores, with healthy food options, to keep people shopping in their neighborhoods.

35. Climate justice

- A. If the RCPA and other climate entities push the creation of deed-restricted affordable housing projects as climate justice, that will force city and county planning departments to address housing as a climate justice issue. Affordable housing is a critical sustainability aggregating indicator; let's get this on the table. If we can't change the economy to pay a just and living wage to workers, at least we can provide housing that is guaranteed to stay at 30% of lower annual incomes through deed-restricted projects.
- B. To ensure climate justice for lower income residents, the provision of adequate and proportionate-to-need, deed-restricted, public, affordable housing is called for. 50% of new housing needs to serve the lower area median income cohort. Existing deed-restricted units need preservation and protection. IMHO, the creation and protection of secure, affordable low-income housing, is the biggest step to climate justice that can be made. To help pay for public housing, stiff fees on luxury housing and wealthy lifestyles is justified. A portion of county tourism money can be devoted to the essential workers who make it all happen. When the Sonoma Tourism Improvement District is up for reauthorization, divert 40% of the assessment to the city housing fund.

36. Impacts on underrepresented and economically challenged communities

- A. Please make sure climate justice/equity and inclusion for our Indigenous, Black, and Latinx community members is emphasized in every level of the county's plans.
- B. All community planning efforts should include at least 2 youth board members with equal standing to adults.