

CARBON SEQUESTRATION

Carbon sequestration means capturing carbon so it doesn't add to climate change.

The process of capturing and storing carbon dioxide from the atmosphere has taken place for over three billion years through plants. Nowadays there are many methods of carbon sequestration.

Natural methods include forest protection, composting, no-till farming, and urban tree planting. As long as a plant is growing, or is kept from decomposing, the absorbed carbon remains stable and locked away. More technological methods include new approaches like direct air capture.

Carbon dioxide that is captured and stored using technological methods can be injected into underground reservoirs, or be processed into stable materials that provide long-term storage such as concrete building blocks or sidewalk pavers.

There are existing efforts on rural lands to increase sequestration, with the potential to increase it in the urban areas of the county as well. Sonoma County's forestlands, soils, and wetlands (especially the Sonoma Baylands) provide additional capacity to sequester carbon. We will need to commit to removing carbon that is already in our atmosphere if we want to move fast enough to become carbon neutral by 2030.

You can find more information about strategies to sequester carbon locally in the Sonoma Climate Mobilization Strategy available at: rcpa.ca.gov/scm

RCPA STRATEGIES

Protect and increase carbon stored in plants and soils
Scale Up Infrastructure for Sequestration

RESOURCES

[Carbon Cycle Institute](#)
[Sonoma Resource Conservation District](#)
[Gold Ridge Resource Conservation District](#)

DECARBONIZATION

Decarbonization is the rapid transition away from all use of fossil fuels. Achieving this goal will require a careful reworking of many of our systems.

The CO₂ we emit today will stay in the atmosphere and influence the climate for the next 100 years, so decarbonizing is part of the “don’t dig the hole any deeper” principle.

There are many proven solutions to decarbonize most of the activities that produce the majority of our greenhouse gas (GHG) emissions, whether it’s from transportation (60% of Sonoma County emissions in 2018), building energy (22%), livestock (11%), solid waste (6%), or water (1%).

Many decarbonization strategies rely on a transition to clean electricity for transportation, heating, and

other activities traditionally powered by fossil fuels. This will mean achieving 100% carbon-free energy sooner than 2045, which is the existing requirement established by Senate Bill 100.

Equitable decarbonization will require investment in solutions that include all people and help mend the existing inequalities in our current systems.

You can find more information about strategies to decarbonize in the Sonoma Climate Mobilization Strategy available at: rcpa.ca.gov/scm

RCPA STRATEGIES

All-Electric Buildings Campaign
Carbon-Free Electricity
Drive Less Sonoma County Campaign
EV Access for All Partnership
Sonoma County Vehicle Miles Traveled Mitigation Bank
Zero Waste by 2030

RESOURCES

[Bay Area Clean Air Plan](#)
[Shift Sonoma County](#)
[SCP Advanced Energy Center](#)
[Drawdown](#)



RESILIENCE

Resilience means moving forward from disasters and applying lessons learned to create stronger and more vibrant communities.

The County of Sonoma defines resilience as the ability to prepare for and adapt to changing conditions and to withstand and recover rapidly from a disaster.

Climate risks create wide-spread impacts across communities; multiplying weaknesses in existing financial, healthcare, and economic systems that disproportionately affect vulnerable communities.

The risks from climate change are emerging gradually and have cumulative effects that multiply a range of economic, social, and environmental risks. Whether the risk is fire, flood or pandemic, the answer to all of these risks is the same: Prioritize long-term resilience in addition to short-term action;

and mobilize large-scale solutions with new levels of cooperation.

Resilience is also related to equity issues. Addressing resilience benefits all residents because it helps decrease vulnerabilities in both our social fabric and built environment.

You can find more information about resilience strategies in the Sonoma Climate Mobilization Strategy available at: rcpa.ca.gov/scm

RCPA STRATEGIES

Energy Grid for the Future
Climate Resilient Sonoma County
Engage, Educate, Empower for Equitable
Climate Action
Equity and Climate in All Policies

RESOURCES

[Pepperwood Preserve](#)
[Sonoma Agricultural Preservation and Open Space District](#)
[SCP Advanced Energy Center](#)