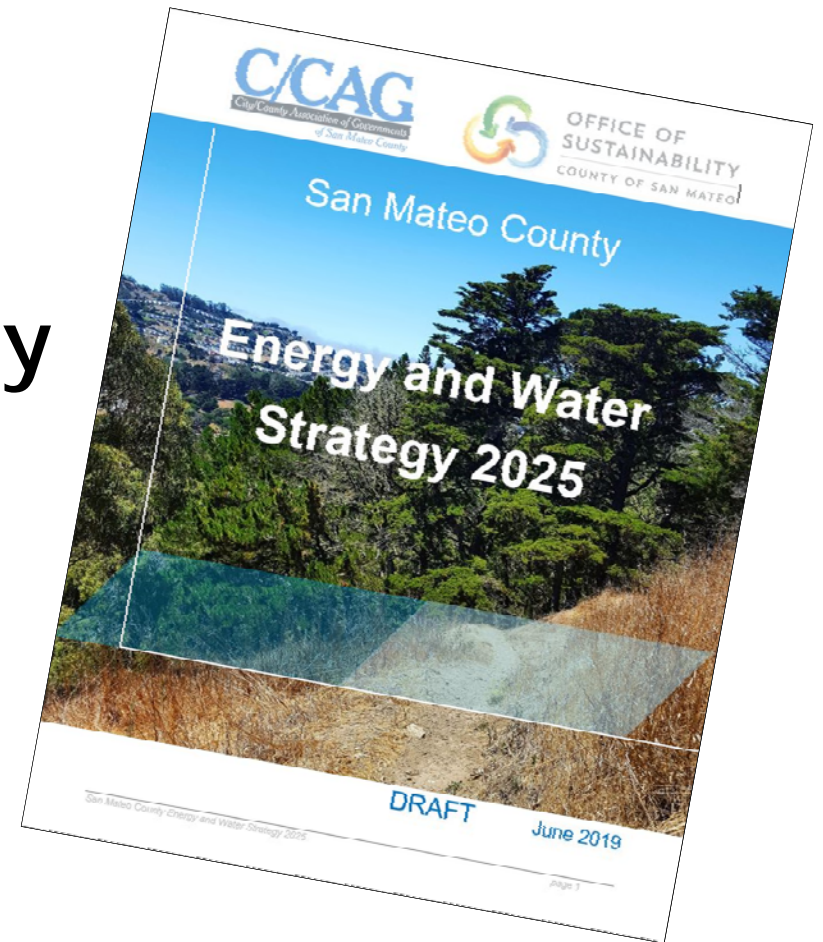


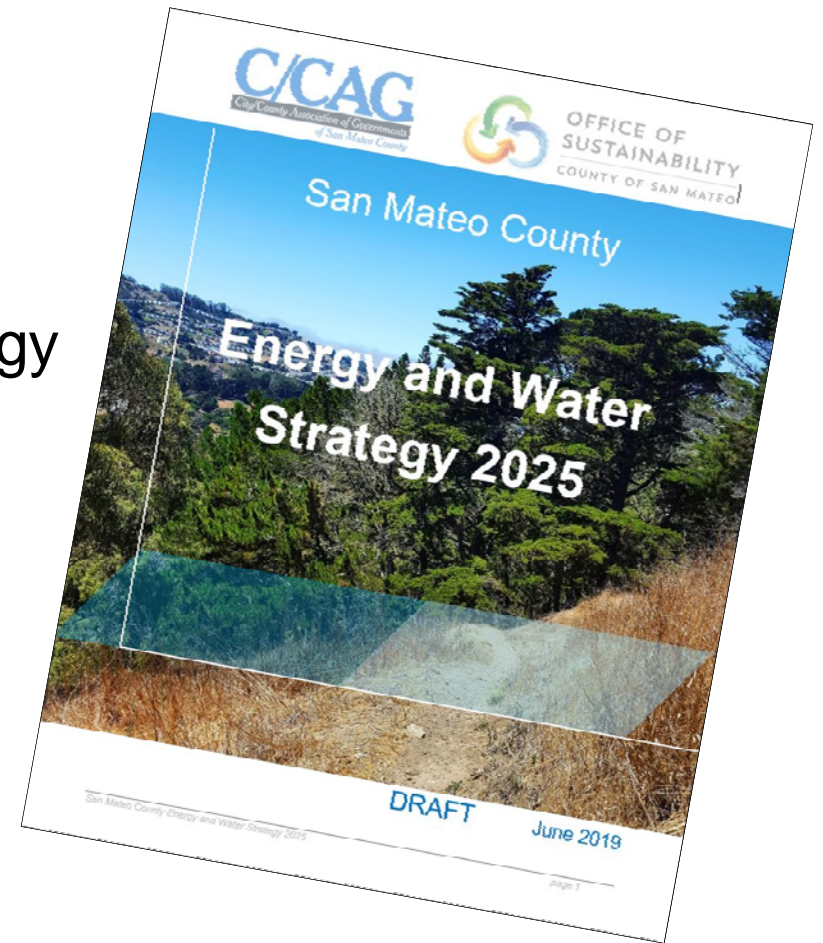
San Mateo County Energy & Water Strategy 2025

**Congestion Management and
Environmental Quality
August 26, 2019**



Background

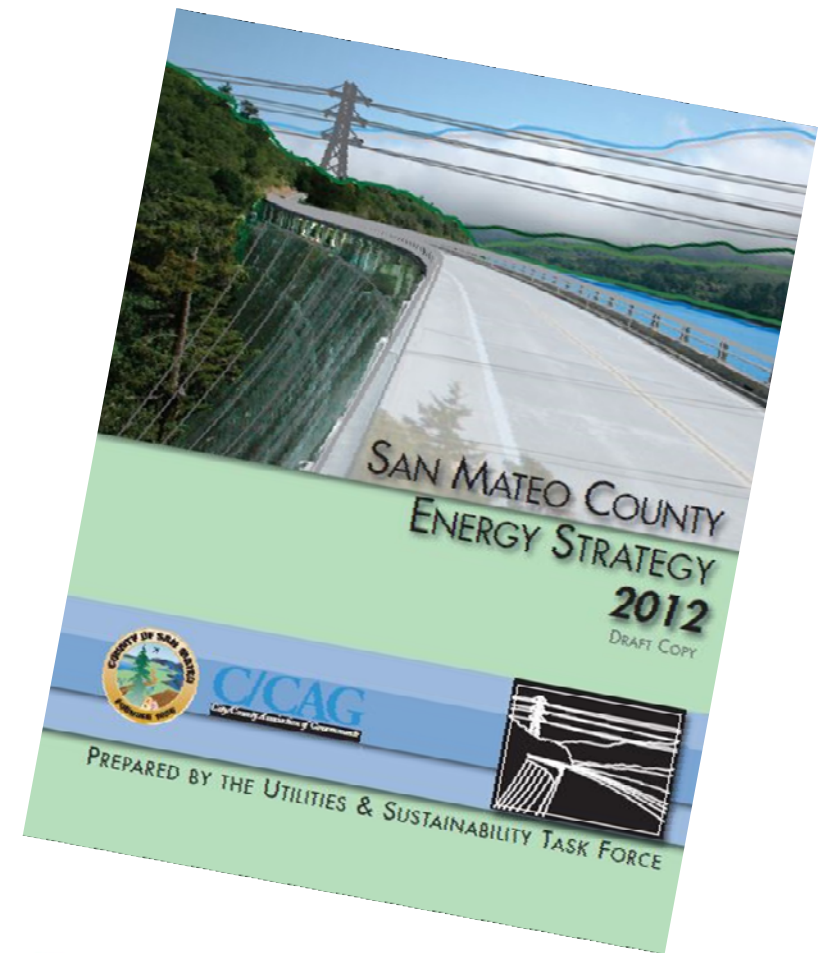
- Update to the San Mateo County Energy Strategy (2008)
- Focused on addressing future energy and water needs in San Mateo County
- Supported by RMCP Committee
- Encourages collaboration among local governments, utility providers, non-profits and the private sector



Background

Original Energy Strategy

- Focused on efficiency and conservation
- Written by USTF committee and consultant
- Final Draft adopted by BOS in December 2008
- Adopted by every city/town in 2009



Background

Need for an update:

Energy:

- New state goals
- PCE established
- Micro and smart grid
- Electrified transportation

Water:

- Drought
- National attention on water quality
- Automated Metering Infrastructure (AMI)
- Water recycling and groundwater sustainability

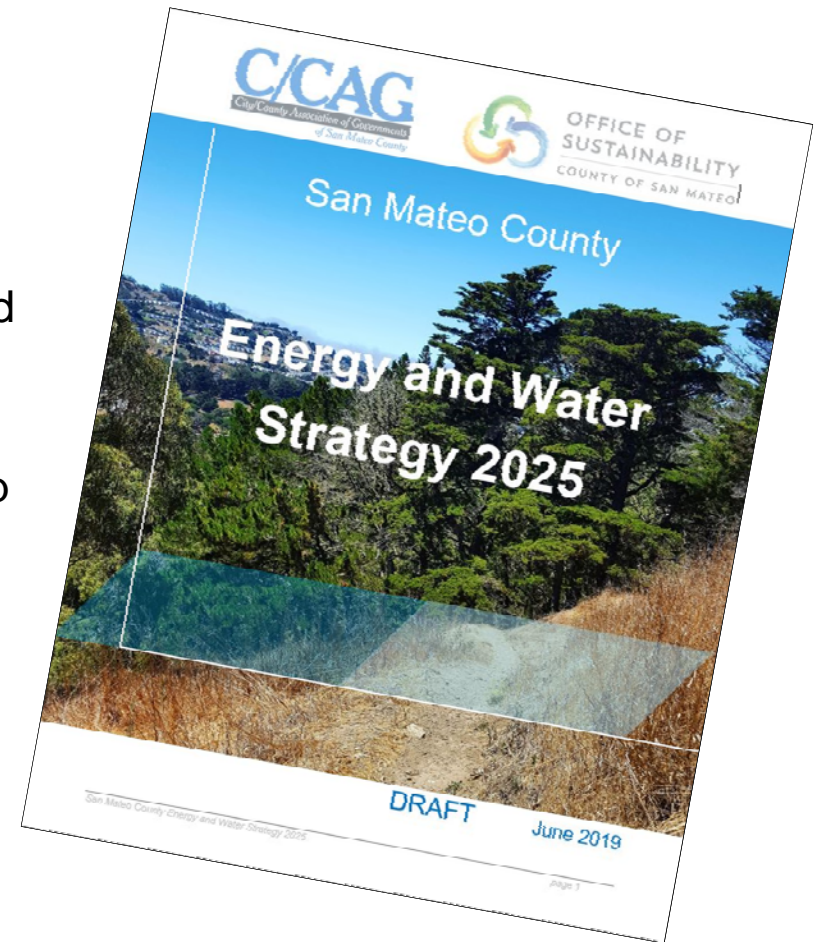
Progress to date

CY 2018

- Draft workplan and timeline for RMCP
- Developed guiding principles, working group list, and draft content
- Selected DNV/GL as consultant
- Developed organizing framework with working group

CY 2019

- Initial draft completed
- Presentations to C/CAG Board and PCE
- Developed public draft and feedback survey
- Currently receiving comments and incorporating feedback



Strategy Development

Stakeholder Working Groups

- Two groups made up of professionals in the energy and water sectors
- Held 5 half day workshops to develop guiding principles and the organizing framework
- Provided detailed technical expertise



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Strategy Development

Energy Stakeholder Group

Seat	Organization
Community Choice Aggregator	Peninsula Clean Energy
County	County - OOS
Nonprofit - Energy/ Microgrid	Clean Coalition
Vehicle/ Bus Manufacturer	Proterra
Public Transportation	SamTrans
Electric Utility	PG&E
Community College	SMC CCD
City/ Town Council	South San Francisco
Energy Code	Consultant
Public Works Staff	City of San Mateo
Health Care District	Kaiser
Equity DAC	El Concilio
Nonprofit - Energy/ Solar	Sunwork



Water Stakeholder Group

Seat	Organization
Countywide Water	BAWSCA
County	County - OOS
Water Agency	Cal Water
Waste Water Treatment	Silicon Valley Clean Water
Health Department	County - EH
RCD/Land	RCD
Water Code	Consultant



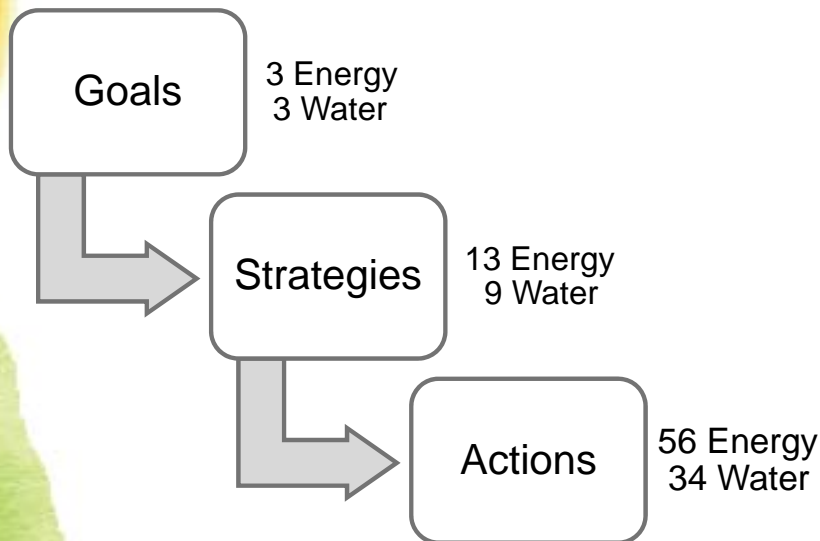
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Guiding Principles

- **Safe:** Ensure energy and water is safe to consume for all, cybersecure, and does not pose a hazard for any community
- **Sustainable:** Support positive environmental impact with the lowest possible carbon footprint for delivered and consumed energy and water
- **Equitable:** Ensure energy and water is accessible to all, regardless of socioeconomic status and considering existing inequities
- **Abundant:** Provide water and energy at a capacity to serve current and future needs
- **Reliable:** Build and maintain infrastructure so energy and water are available to all when needed
- **Resilient:** Prepare for the effects of climate change or other potential disasters to ensure that energy and water is there when you need it, especially for vulnerable communities
- **Affordable:** Provide energy and water at a cost that is competitive and economically stable



Organizing Framework



Energy Goals:

- E.1 - Optimize and Reduce
- E.2 - Decarbonize and Shift to Clean Energy
- E.3 - Modernize for Resilience

Water Goals:

- W.1 - Enhance Efficiency
- W.2 - Expand to Alternative Sources
- W.3 - Support Systemic Improvements

Strategy E2.1: Support rapid community shift to 100% GHG-free electricity









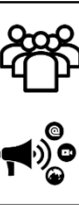









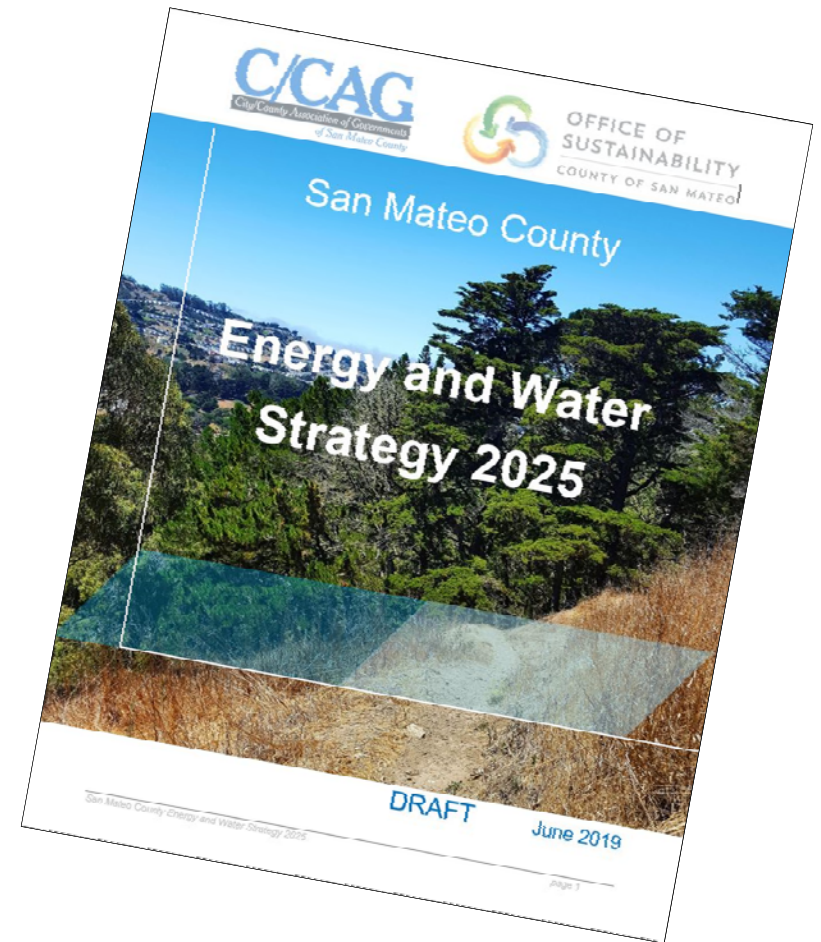
	Actions	SMC	City	PCE	PG&E	Other
1.	Create partnerships, awareness campaigns and incentives to maximize opportunities for local rooftop PV and carport PV systems combined with energy storage for residential and commercial buildings. For the agricultural sector, promote solar-powered pumps (for water).					
2.	Enhance building reach codes to support community scale smart solar projects with energy storage, and multifamily dwelling units' electric vehicle charging infrastructure.					
3.	Encourage all consumers to move towards 100% renewable energy, through PCE's ECO100 supply option and its 100% renewable energy by 2025, as well as regional power purchase agreements and bulk buy programs.					
4.	Partner with a local university or national lab to research and develop appropriate response plans to ensure seasonal and time dependent impacts on grid are addressed.					
5.	Plan for regional or municipal emergency centers to site battery storage, and/or use renewable energy microgrids, especially in vulnerable communities.					

Table of Contents

1. Executive Summary/Introduction
2. Background & Context
3. Energy Sector
4. Water Sector
5. Energy-Water Nexus
6. Foundational Actions
7. Monitoring & Tracking
8. Conclusion



Current Status

- Receiving feedback from wider stakeholder audience
 - Local government staff
 - Sustainability councils
 - Community groups
 - Environmental groups
 - Regulatory agencies
- Analyzing feedback and identifying common themes
 - Compiling survey data
 - Mapping comments to Strategy
 - Following up with clarification questions

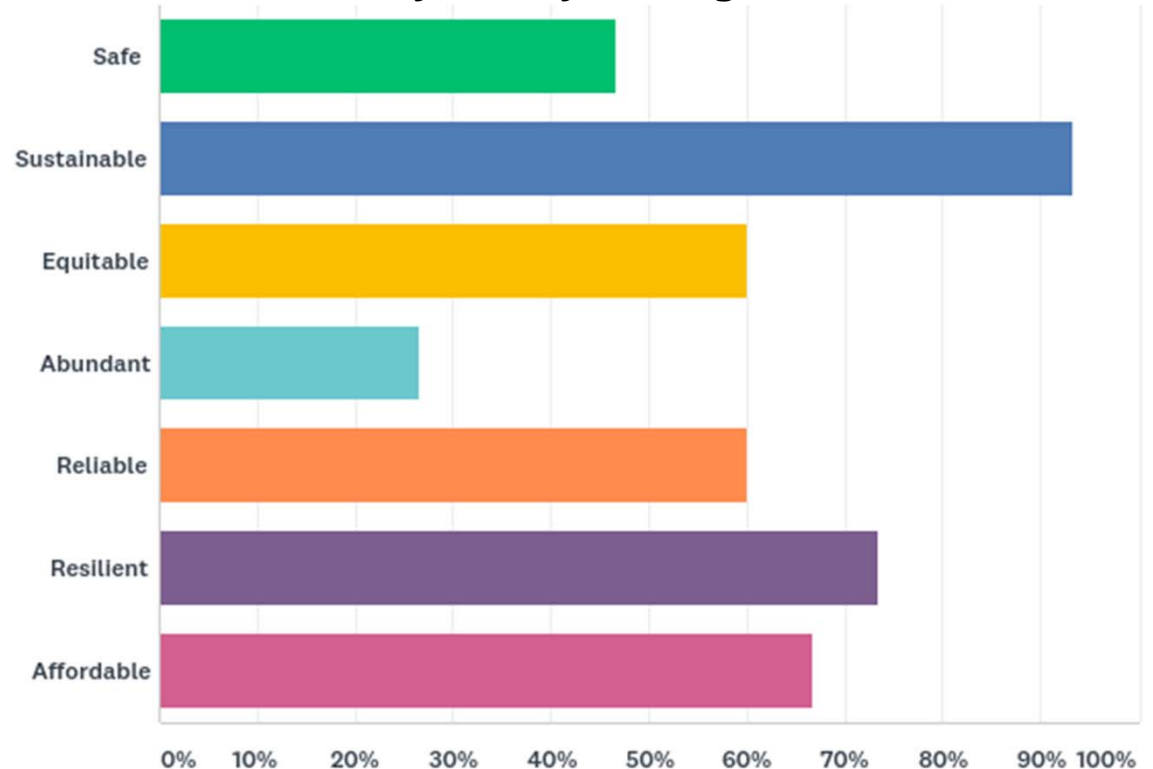


Feedback Insights

“We appreciate and support the overall bold vision that [the Strategy] lays out.”
– *PG&E Grid Edge*

“Overall, this is very exciting and looks detailed and comprehensive across the policy areas.”
- *SMCWPPP*

Which principles are most important to you or your organization?



Feedback Insights

- Gaps

- Resilience

- Sea level rise and flood risk
- Fire risk
- High heat
- Urgency



- Criticism

- Groundwater recharge

- Actions that include taxes can create equity issues



Next Steps

- Continue to receive feedback – *including CMEQ*
- Incorporate feedback/comments into document
- Send to elected officials for further review
- Incorporate feedback and copy edit
- Bring to C/CAG & PCE for adoption
- Bring to BOS for adoption
- Bring presentation to each city/town asking for adoption



Questions?

San Mateo County Energy & Water Strategy 2025

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