



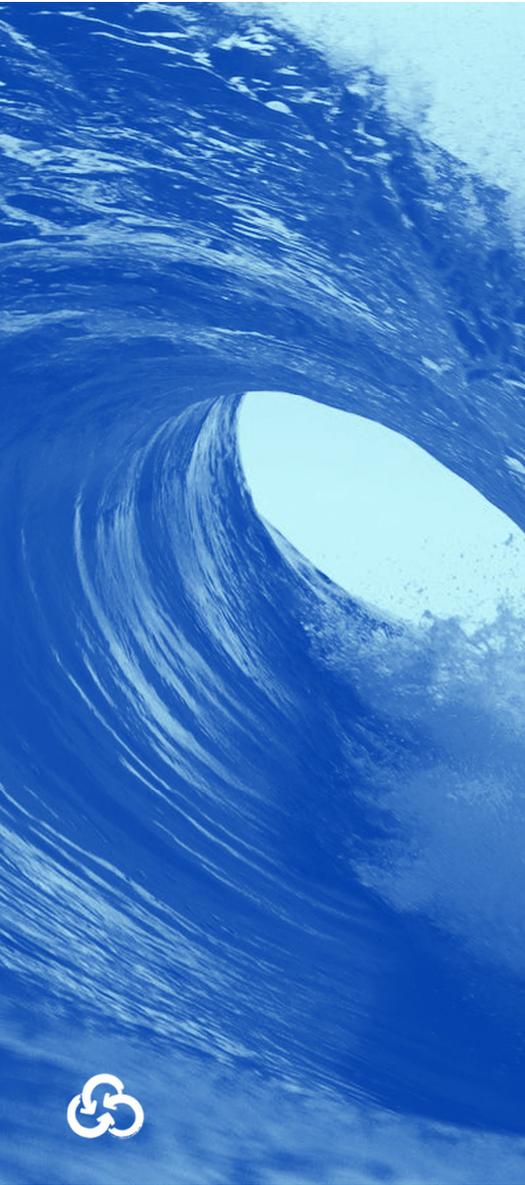
Methane Gas Cataloging

San Mateo County Energy Watch

Alhad Dighe
Sustainability Specialist

Sam Imrisek
Sustainability Fellow





San Mateo County Energy Watch (SMCEW)



Program Funding



- PG&E ratepayer funded
- Utility bill: "Electric Public Purpose Programs"
- No cost to municipalities to participate



Benefit to Municipalities



- Support municipalities in reducing energy use and expenses
- Program referrals
- Methane gas cataloging
- Energy benchmarking



Referral System



- PG&E programs, and others
- Advise municipalities on the best programs to fit their needs
- SMCEW refers municipalities to resource programs + others



Climate Action Plan goals across the County



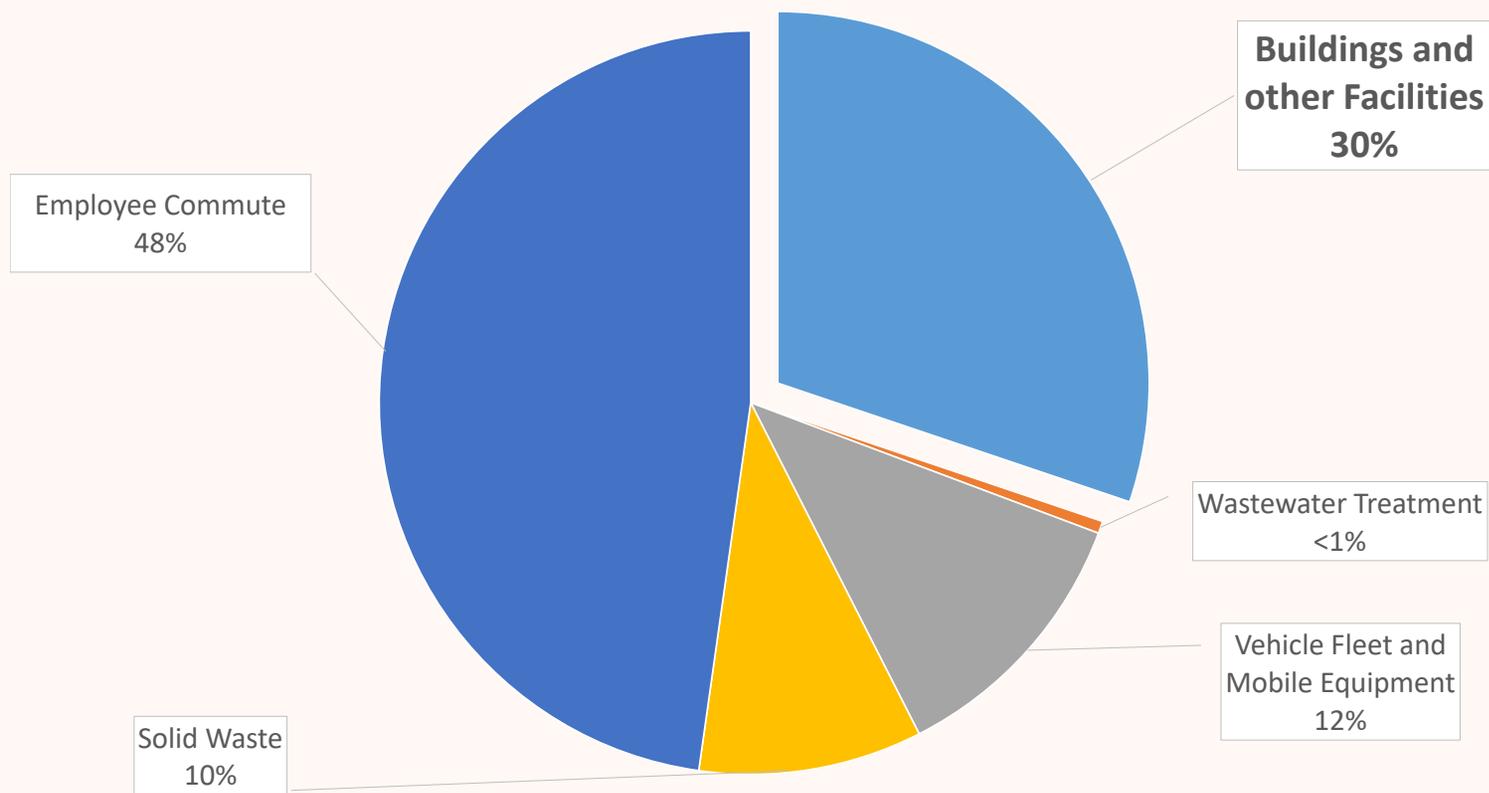
City	Year Adopted	CAP Goals Summary
Atherton	2016	49% reduction below 2005 levels by 2030
Belmont	2017	50% reduction below 2005 levels by 2035
Burlingame	2009, Updated 2019	40% reduction in 2030, 60% reduction by 2040, and 80% by 2050
Brisbane	Adopted September 2015	Plan targets 15% reduction by 2020
Colma	2013, Updated periodically	49% reduction below 2005 levels by 2030, 80% reduction by 2045
Daly City	Latest plan was 2011 - 2020	Meet or exceed goals of AB32, new commercial buildings sustainable
East Palo Alto	2023	55% reduction in per capita emissions by 2030
Foster City	11/18/2024: CAP Plan adopted	20% below 2005 levels by 2025, 80% below by 2050
Half Moon Bay	Latest version from 2023	40% below 1990 levels by 2030, carbon neutrality by 2045
Hillsborough	2010, 2020 was target year	Cited AB32 emission reduction targets
Menlo Park	Initially 2009, Latest in 2022	Achieve carbon neutrality by 2030
Millbrae	October 2020	49% reduction below 2005 levels by 2030, interim targets included
Pacifica	-/-	CAP in development
Portola Valley		No specified targets, focuses on sustainability practices
Redwood City	2030 plan adopted November 2020	Carbon Neutrality before 2045. 50% reduction by 2030 targeted
San Bruno	-/-	CAP in development
San Carlos	September 2021	Reduce GHG emissions 40% by 2030 and 80% by 2050
San Mateo	Update March 2024, Adopted April 2024	40% reduction below 1990 levels by 2030, aiming for neutrality by 2045
South SF	October 2022	Achieve carbon neutrality by 2045
Woodside	Adopted September 2015	15% reduction below 2005 levels by 2020, advancing towards 2030 goals



Buildings are a large portion of your emissions



ex. San Mateo County Municipal Emissions (2023)



Bay Area Air District Appliance Rules

- Upcoming Bay Area Air Districts Appliance Rule Specifics
 - 2027: only zero-NOx water heaters can be sold or installed (<75,000 Btu/hr)
 - Attempting to align with widespread availability of “plug-in” heat pump water heaters (110V units)
 - 2029: only zero-NOx furnaces can be sold or installed (<175,000 Btu/hr)
 - 2031: only zero-NOx large commercial water heaters can be sold or installed (75,000 Btu/hr to 2 million Btu/hr)
- The rules do not say equipment has to be electrically powered, only that it cannot emit NOx while operating.
 - However – there are no gas-fired technologies that emit zero NOx in existence today!



- Comprehensive information page:
<https://www.baaqmd.gov/rules-and-compliance/rule-development/building-appliances>



Context: Data Collection Done for Schools

...

- **All SMC schools have been cataloged**
 - Comprehensive understanding of what equipment is out there
- How this helps
 - Currently in the process of applying bond funding + PCE funds + PG&E program dollars, to layer in school CIP's
- **Early results**
 - 4 districts saved \$360k+ in capital costs
 - Savings from program incentives (free water heater replacements)

	Replacement Priority (5 is highest priority)					
	Blank	1	2	3	4	5
Gas Fired Rooftop Air Conditioning	21	0	0	161	92	2
Gas Fired Furnaces	0	0	50	141	486	0
Gas Fired Water Heaters (Storage Ty	7	0	11	18	2	0
Gas Fired Kitchen Equipment	3	0	4	17	0	0
Gas Fired Boilers	0	0	4	17	7	0

Municipal Catalog Status



Complete	In Progress	Opportunity
Atherton Brisbane Burlingame Colma East Palo Alto Half Moon Bay Menlo Park Millbrae San Carlos Woodside	Belmont Daly City Hillsborough Pacifica South San Francisco San Bruno	Foster City Portola Valley Redwood City San Mateo



Special District Catalog Status



Complete	In Progress	Opportunity	
<p>Coastside Fire Protection District</p> <p>Colma Fire Protection District</p>	<p>Broadmoor Police Protection District</p> <p>Woodside Fire Protection District</p>	<p>Bayshore Sanitary District</p> <p>Belmont Fire Protection District</p> <p>Coastside County Water District</p> <p>Granada Community Services District</p> <p>Highlands Recreation District</p> <p>Ladera Recreation District</p> <p>Menlo Park Fire Protection District</p>	<p>Mid Peninsula Water District</p> <p>North Coast County Water District</p> <p>Peninsula Health Care District</p> <p>San Mateo Resource Conservation District</p> <p>Sequoia Healthcare District</p> <p>West Bay Sanitary District</p> <p>Westborough Water District</p>



Let's catalog all municipal buildings!

- Schedule a brief 15-minute meeting with SMCEW to discuss facilities and plan visits
- SMCEW conducts on-site walkthroughs to catalog equipment (lighting, HVAC, water heating, etc.) and gather baseline data → Identify best funding opportunities
- **Goal:**
 - Catalog the entire county and all methane gas equipment by June 2026
 - Identify funding and financing opportunities to maximize benefits in front of compliance





BayREN Energy Roadmapping

Free technical assistance for long-term energy & resilience planning



- Baseline energy, cost & GHG analysis
- Phased measures: efficiency, electrification, solar + storage
- Project financials and emissions savings
- Electrification readiness assessments
- Community Resilience Center (CRC) analysis

Why consider it?

Moves from equipment inventory to prioritized, fundable implementation plan (3-year horizon)

Eligibility Highlights

- Bay Area jurisdictions (PG&E-served buildings)
- Up to 3 buildings per year
- ~20 staff hours commitment

Limited funding (~10 roadmaps/year)

Thank you.

Alhad Dighe

adighe@smcgov.org

Sam Imrisek

c_simrisek@smcgov.org

