



FRONTRUNNER: CITY OF SAN MATEO

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CITY OF SAN MATEO IMPLEMENTS ITS SECOND CYCLE OF REACH CODES WITH NEW ORDINANCE PACKAGE

The San Francisco Bay Area is renowned for its spectacular scenery, innovation, and commitment to sustainability. Demonstrating the latter is the recent adoption of its second cycle of reach codes by the peninsula city of San Mateo. A community of nearly 110,000 residents perched between the western shore of San Francisco Bay and the Pacific Ocean 25 miles south of San Francisco, the city boasts a robust and diverse economy, with jobs in the technology, health care, financial services, government, and retail trade sectors.

Back in 2016, San Mateo had been one of the first cities in the state to adopt a reach code package for the 2016 Building Efficiency Standards cycle. Recognizing that these reach codes would be expiring at the end of 2019, the City pursued a new package of ordinances. "The City wanted to maintain the momentum we achieved during this first code cycle," said Andrea Chow, Sustainability Analyst. "Doing so by adopting new reach ordinances that would take up seamlessly on January 1, 2020 from the previous package was a no-brainer for us."



Photo courtesy of City of San Mateo

To ensure the process would be as cost-effective and streamlined as possible, they collaborated heavily with Peninsula Clean Energy (PCE) and the Statewide Codes & Standards Reach Code Program. PCE had developed model Reach Codes in three focus areas (encouraging building electrification, requiring solar installation, and enhancing EV infrastructure readiness, each of which aligned with the City's overall vision), while the Statewide Codes & Standards Reach Code Program had developed the cost-effectiveness studies that analyzed all-electric and mixed-fuel new construction for both residential and nonresidential sectors. By leveraging both of these resources, City staff was able to quickly develop draft code options to present to local stakeholders and the City Council.

REGIONAL ORGANIZATION OFFERS ADDITIONAL RESOURCES

A trio of energy providers and sustainability champions have created a collaborative regional effort that provided significant support to the City of San Mateo during its reach code implementation process.

Peninsula Clean Energy, Silicon Valley Energy and the San Mateo County Office of Sustainability collaborate to offer a wide range of resources to jurisdictions throughout San Mateo and Santa Clara counties.

These resources include financial grants, technical assistance, tools including model ordinance language, model staff reports, checklists and presentations.

More information can be obtained at peninsulareachcodes.org.

A DETAILED VIEW OF SAN MATEO'S LOCAL ENERGY ORDINANCES

Encouraging Building Electrification (Energy Reach Code)

Building electrification means constructing buildings without any natural gas services. The City's Reach Code will encourage building electrification in single-family, duplex, and office-use buildings by providing two compliance options: 1) constructing an all-electric building at the minimum efficiency as required by the state's new 2019 Building Efficiency Standards; or 2) constructing a mixed-fuel building (electricity and natural gas) at a higher energy efficiency level than these new standards.

The policy intent behind limiting the requirement to a very modest system size was to incentivize the owner or developer to right-size the system based on the site and building requirements to maximize cost effectiveness.

Increasing Electric Vehicle Readiness (Green Building Code Reach Code)

On-road transportation accounts for the majority of greenhouse gas emissions in the City. By encouraging the use of EVs, the City helps reduce emissions from the transportation sector. San Mateo's existing Reach Code required a higher number of electric vehicle capable (EV Capable) parking spaces than what Title 24-2016

Requiring Solar Installation (Energy Reach Code)

One of San Mateo's first reach codes, adopted by the City in 2016, required that all new construction install a minimum size solar photovoltaic (PV) or solar thermal system. At that time, installing a PV system on residential projects was optional in the state code and yielded a compliance credit. In 2019, however, the state code encompassed the advanced performance requirements outlined in San Mateo's earlier reach code; 2019 Title 24 Standards now include a provision requiring solar PV installation in all new residential construction three stories or less to offset annual electricity usage. Consequently, the City team encouraged an additional Reach Code for the 2019-2022 cycle that extended the solar mandate for all other building types, specifically:

- Multifamily (4 stories or more): Minimum 3 kW PV system or solar thermal
- Non-residential (<10,000 SF): Minimum 3 kW PV system or solar thermal
- Non-residential (>10,000 SF): Minimum 5 kW PV system or solar thermal

required for new construction projects. By extending the EV Capable requirement and adding a mandatory EVSE (electric vehicle supply equipment) installation for non-residential (office and retail) projects, the City continues to reach beyond the state code and achieve continued progress toward its overall policy goal.

- 1- and 2-family dwellings & townhomes: Require complete circuit and receptacle (outlet)
- Multifamily: 15% EV Capable spaces
- Non-residential: 10% EV Capable spaces and 5% EVSE installed spaces



Achieving Adoption

Chow notes that the City introduced these ordinances on August 19, 2019, with adoption by the City of San Mateo City Council on September 4, 2019. The ordinances will become effective on January 1, 2020 following approval by the California Energy Commission.

"There are some unique opportunities here in San Mateo," Chow observed. "Because reach codes can be adopted at any time, we can continue to evaluate options that have been of interest to City leadership, including provisions to encourage building electrification in multifamily buildings. We are extremely grateful to the statewide Reach Codes team for the range of resources necessary, as we would rely on the results of the multifamily cost-effectiveness study currently in progress."
