

Environmental Quality Commission



REGULAR MEETING MINUTES

Date: 4/19/2017
Time: 6:30 p.m.
City Hall/Administration Building
701 Laurel St., Menlo Park, CA 94025

A. Chair Martin called the meeting to order at 6:34 p.m.

B. Roll Call

Present: Allan Bedwell (arrived 6:36 p.m.), Chris DeCardy, Joyce Dickerson, Vice Chair
Janelle London, Chair Deb Martin, Scott Marshall, Christina Smolke
Staff: Clay Curtin, Assistant to the City Manager/Interim Sustainability Manager
Vanessa Marcadejas, Senior Sustainability Specialist

C. Public Comment

Bruce Odrenato stated he supports removing two trees adjacent to his property related to PG&E's Community Pipeline Safety Initiative.

D. Regular Business

D1. Review and acceptance of the PG&E tree removal mitigation plan for the Community Pipeline Safety Initiative

Clay Curtin provided a presentation to the commission.

ACTION: Motion and Second (Martin/Dickerson) to review and accept the PG&E tree removal mitigation plan for the Community Pipeline Safety Initiative with the assurance from the City Attorney that the plan will not set a precedent or limit the City's ability to set penalty and compliance valuations for enforcement of the City's Heritage Tree Ordinance passes unanimously (7-0).

D2. Informational presentation on Peninsula Advanced Energy Community (PAEC) projects

Diane Bailey, Executive Director of Menlo Spark provided a presentation to the commission.

D3. Discuss Arbor Day tree planting event

Clay Curtin provided an update, including potential dates and locations. Based on feedback from the commissioners, late afternoon April 28 was tentatively selected. Staff was directed to confirm with the City Arborist.

D4. Approve the March 15, 2017, Environmental Quality Commission meeting minutes

ACTION: Motion and second (Dickerson/Martin) to approve the March 15, 2017, meeting minutes passes unanimously (7-0).

E. Reports and Announcements

E1. Commissioner reports

Chair Martin reported her April 18 quarterly report to City Council was well received. She reported that City Council offered feedback including interest in more residential outreach, more homeowners off the grid and the installation of more electric vehicle charging stations throughout the city.

Vice Chair London updated the commission on the Middle Plaza at 500 El Camino Real project.

Commissioner Bedwell recused himself from the meeting at 8:41 p.m. to speak as a representative of Friends of Bedwell Bayfront Park.

Vice Chair London provided the commission with an update on the Bedwell Bayfront Park Oversight and Outreach committee meeting held April 8.

Public comment on the item:

Allan Bedwell, representing Friends of Bedwell Bayfront Park, clarified that the one-million dollars from Facebook will be used for docent and park education programs only and will not be used for park maintenance. He also stated that Friends of Bedwell Bayfront Park is opposed to any development of the park (including solar) that may potentially cause negative impacts to wildlife and the aesthetics of the park.

Commissioner Smolke left the meeting at 8:52 p.m.

Allan Bedwell returned to the meeting as a commissioner at 8:54 p.m.

Vice Chair London also updated the commission on “do-it-yourself” energy and water conservation toolkits that will soon be available for checkout at libraries countywide.

E2. Staff updates

Clay Curtin provided the following updates:

Upcoming events

- April 22 – Earth Day at Bedwell Bayfront Park
- April 29 – Tree Care and Maintenance water-efficient landscaping class
- May 4 – Stanford Middle Plaza community meeting
- May 6 – Compost giveaway event at Bedwell Bayfront Park
- May 6 – Water-efficient edible gardening landscaping class
- May 13 – Shredding and electronic waste recycling event
- May 16 – Annual commissioner training (Brown Act and ethics) and appreciation event
- May 31 – City Manager’s budget workshop

Item updates

- The permanent Sustainability Manager recruitment is on hold pending approval of changes to the salary schedule. At its April 4, 2017, meeting, the City Council had some additional questions and staff will return to them with more information, possibly as part of the budget

adoption process.

- The City hosted a household hazardous waste collection event April 8 with over 150 participants. These are held twice annually and the next will be in November 2017.
- At its April 18, 2017, meeting, the City Council authorized the City Manager to enter into an agreement with California Tree and Landscaping (CalTLC) for the heritage tree ordinance update project. Staff is finalizing the contract.

Chair Martin left the meeting at 9:07 p.m.

E3. Future agenda items

- Selection of new Chair and Vice Chair
- Discuss and make a recommendation to the City Council to approve the community zero waste plan
- Discuss and make a recommendation to the City Council on environmental issues related to the Middle Plaza at 500 El Camino Real project
- Update on Climate Action Plan

F. Adjournment

ACTION: Motion and second (Marshall/Bedwell) to adjourn the Environmental Quality Commission until the June 21, 2017, regular meeting passes (5-0-2, Absent: Martin, Smolke)

Vice Chair London adjourned the meeting at 9:10 p.m.

Minutes prepared by Vanessa Marcadejas.



Peninsula Advanced Energy Communities

Clean Energy Measures for Cities

Menlo Park, EQC
April 19, 2017

Diane Bailey, Menlo Spark



What is PAEC?

Peninsula Advanced Energy Communities (PAEC) Project

Peninsula Advanced Energy Community (PAEC) Project Partners



- CA Energy Commission funded collaboration to create a replicable model leveraging energy efficiency, local renewables, EV charging stations, and energy storage to provide more affordable, cleaner, and resilient power.
- Focused on Mid-Peninsula Cities

PAEC Project Components

- ◉ **Streamlining permits, codes, and ordinances** to ease implementation of clean energy measures
- ◉ **Financial and business models** to help make Advanced Energy Communities affordable and attractive investments.
- ◉ **Streamlining grid connections** working with PG&E and PCE to reduce the time, cost, and uncertainty associated with connecting local energy resources to the grid.
- ◉ **EV Charging Infrastructure Master Plan**
- ◉ **Atherton Civic Center: A Sustainable Model.**
- ◉ **Solar Siting Survey** to identify commercial-scale sites capable of solar installations > 100 kW.
- ◉ **Solar Emergency Microgrids** to provide renewables-driven power backup to a critical facility.

City Clean Energy Measures

- Clean Energy Categories:
 - Renewables (RE),
 - Energy Efficiency (EE),
 - Zero Net Energy (ZNE)
 - Electric Vehicle Charging Infrastructure (EVCI)
- **General Survey** of Best Practices that have been successful in **U.S. Cities & Abroad.**



Helping solve urgent social problems.



April 30, 2014

Achieving Climate Neutrality in Menlo Park

A communitywide strategy for Menlo Park

Best Practices

- Measures include:
 - Policies
 - Ordinances
 - Initiatives
 - Reach codes, zoning, building & energy codes
 - permitting processes
 - Advanced energy technology programs
- Summary of Local Policies:** in Atherton, East Palo Alto, Menlo Park, Redwood City, & San Mateo County (PAEC Corridor)
- Gap Analysis:** Where are good areas for improvement on RE, EE, ZNE, and EVCI within the Region?



Renewable Energy



- **Solar Rooftops (mandatory ordinance examples)**
 - Many Cities now have requirements for *new or renovated* buildings
 - Blanket Solar PV on all rooftops, e.g. 0.5 – 1.5 kW in Lancaster
 - Larger buildings, > 10,000 square feet in Culver City
 - Rooftop PV or solar water heaters, SF & San Mateo
 - “Cool Roofs” (> 0.70), San Mateo
 - PV or Vegetative Cover, Paris
- **Solar Carports** covering surface parking, Palo Alto
 - Could be coupled with energy storage and/or EV Charging (e.g. Green Charge)

Renewable Energy (Continued)

- ◉ **Financing:** Rebates, PACE, on-bill financing etc.
- ◉ **Zoning or Building Codes** requiring 100% Renewable Energy (Menlo Park; covers electricity & gas)
- ◉ **New technology** – in-pipe hydro, Pressure Relieving Valve (PRV)/Turbine technology, Portland – Lucid project
- ◉ *Not considering **Permitting** guidelines because mandatory streamlining per CA state law.*



Energy Efficiency

New Buildings & Renovations:

- **Reach Codes** – Palo Alto & Santa Monica (e.g. 15% efficiency improvement over title 24)
- **Incentives**
 - **Permitting**
 - **Fees** waived for energy efficiency improvements, Culver City
 - **Expedited**, San Diego



Energy Efficiency

Existing Buildings:

- ◉ **Audit programs** – Green @ Home, Green House Calls, PG&E, etc.
 - ◉ For example, **Retrofit Accelerator** in NYC, combines benchmarking, audits, & data, offering free technical assistance to owners of buildings in low- & moderate-income neighborhoods → EE upgrades.
- ◉ **Point of Sale** energy audits & disclosure – Berkeley, Austin
- ◉ Existing Commercial Building Benchmarking Ordinance (**ECBO**) - San Francisco Property owners must report total energy use annually & do an energy audit **or** conduct retro-commissioning every 5 years → *Equity improvement resulting in lower energy bills for renters.*



A Novel Energy Efficiency Program in Lithuania

- **Mapping building energy use:** Vilnius, Lithuania is encouraging energy efficiency upgrades in its aging apartment buildings through an interactive, user-friendly online energy map enabling residents to see the benefits of undertaking renovations.



* It's possible that privacy concerns could prevent this here.

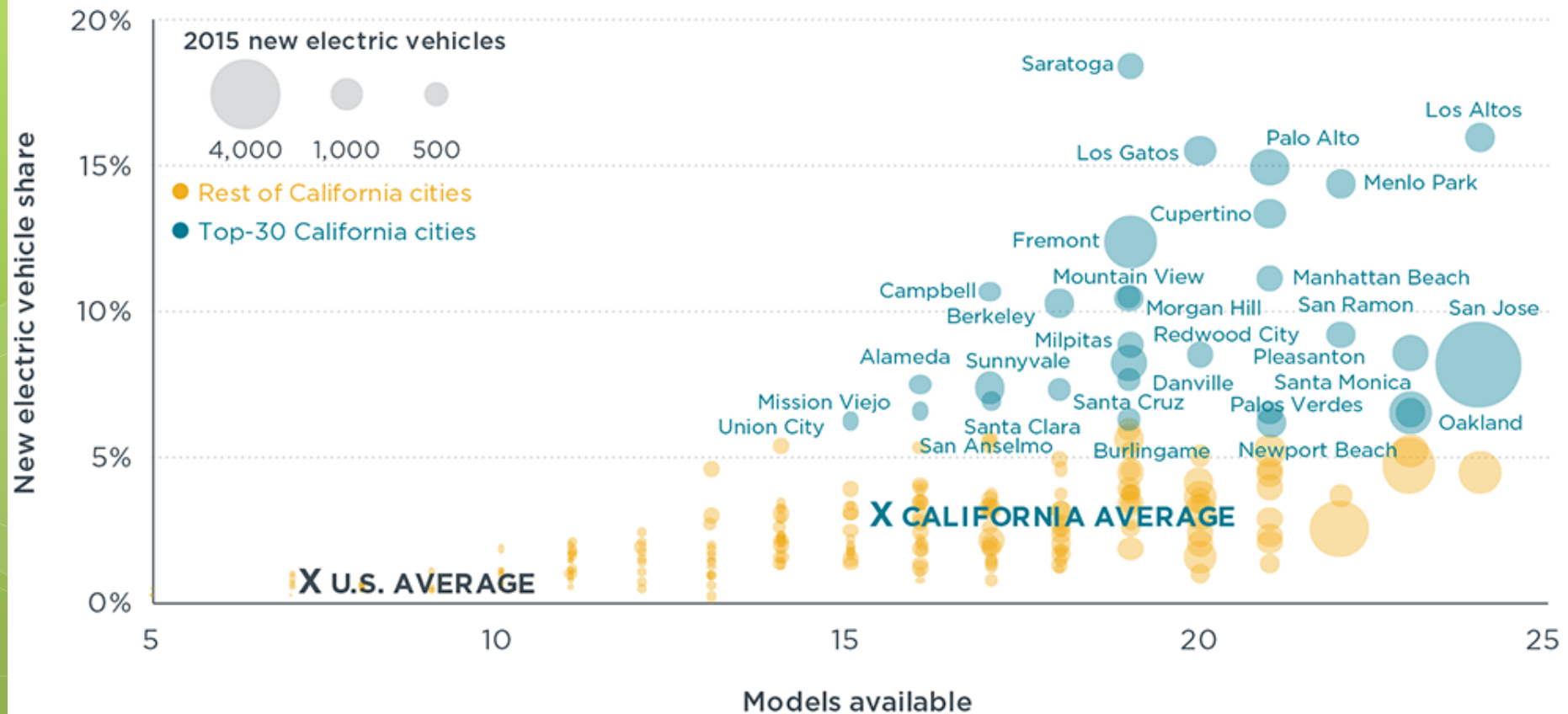
Zero Net Energy

- **Reach Codes** for CA ZNE, Santa
- **District Approaches**
 - 2030 Districts (Architecture 2030; Reduction by 2030)
 - Fort ZED, Fort Collins, CO;
 - Cambridge, MA
- **RFP & Lease Language**
 - zero-energy consumption and carbon-neutral buildings for Community Colleges in LA
- **Financial Incentives:** New Climate Impact Fee, fully refunded for ZNE, City of Watsonville
- **Existing Building Retrofits** - Energiesprong, ZNE overhauls with modular lego-like components, the Netherlands



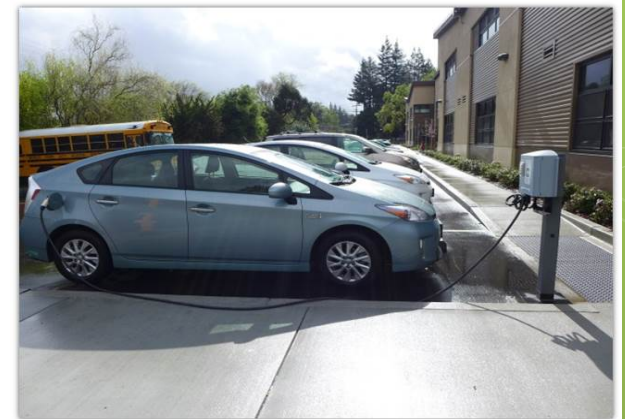
EV Deployment

Highest EV Uptake: Local Promotion Activities boost the EV market.



Electric Vehicle Charging Infrastructure

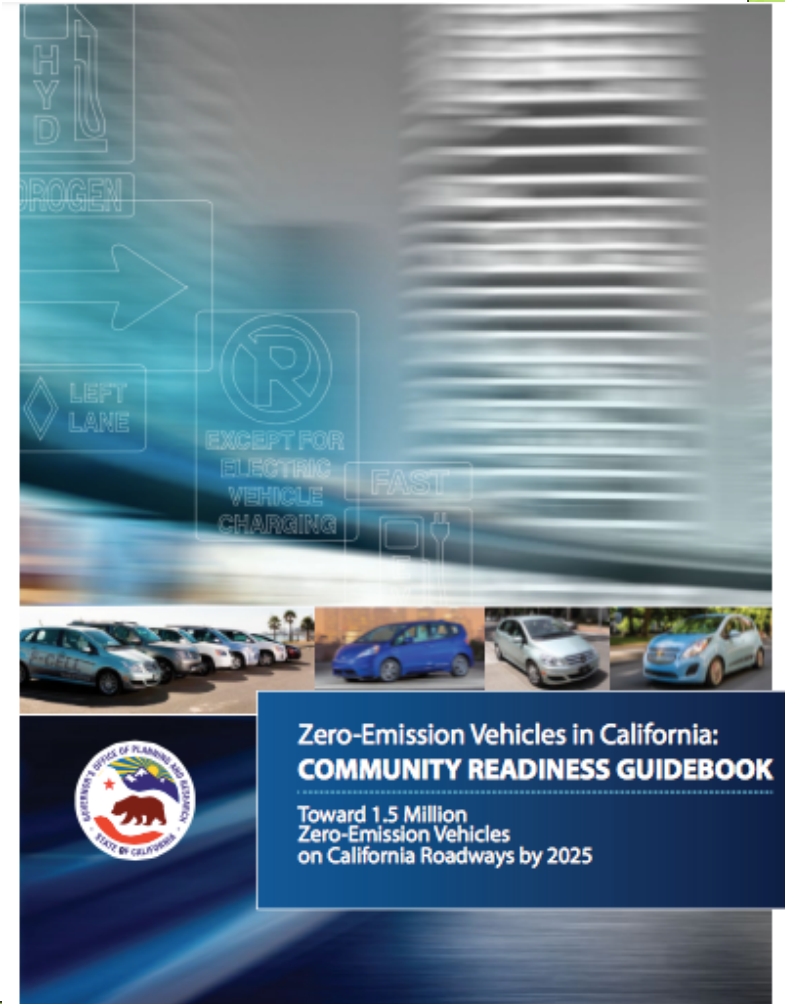
- ◉ **City Ordinance & Zoning:** Minimum parking spaces required with pre-wiring or EV Chargers for **new** homes, multi-family, commercial or parking → Many Cities have requirements surpassing CA
- ◉ **City Charging Stations**
 - ◉ No Cost Infrastructure - Ads, PPAs or other financing
 - ◉ Coupling with street lights – *easy electrical access but potential conflicts with bike lanes*
- ◉ **Incentives**
 - ◉ Preferred Parking
 - ◉ Free Charging or free parking
- ◉ **Streamlined Permitting**



Electric Vehicle Charging Permitting

Streamlined Permitting

- Clear and regionally consistent website information
- Permitting guide (*Oceanside*)
- Specific and fillable permit application (*Over the counter permits, Chula Vista*)
- Permit fee incentives (*City of Encenitas waives fees*)
- Plan review and inspection corrections lists
- Online permitting and inspection services (*City of San Diego*)



Additional Clean Energy Measures

- ◉ Solar Emergency Microgrids
- ◉ Energy Storage (other)
 - ◉ RWC Green Charge Project
- ◉ Building Electrification / Natural Gas Replacement
- ◉ Innovations through CCEs
 - ◉ Aggregated solar
 - ◉ EV Deployment
- ◉ New Technology
- ◉ Fees: Adder for Natural Gas offsets, Palo Alto → *Fee could also reduce use*



Criteria for Best Practices Selection

- Maximize GHG reductions
- Minimize Fossil Fuel Use
- Innovate on technology or deployment
- Community Co-Benefits
 - Economic/Local Jobs
 - Air Quality
 - Community Resiliency/Adaptation
 - Social & Environmental Justice / Assistance for Low-income families



Other Issues

- Overlap of measures
 - ZNE covers RE & EE
- Stacking/Phasing
 - Some measures soon to be required (e.g. ZNE)
 - As PCE nears a 5 year goal to provide zero carbon power, should emphasis shift more to natural gas?
- Anticipating Future Needs
 - How Much Public EV Charging is needed in 10-20 years?
- Aiming for Net Positive?



RICAPS Survey

SurveyMonkey Results

- Top scoring criteria: Maximize GHG reductions and community resiliency
- Top scoring measures:
 - RE3 – requiring 100% renewable energy
 - EE3 – Existing building benchmarking requirement
 - ZNE1 – Reach codes for new construction
 - EVC11 – Requiring EV chargers
 - RE4 – Solar or zero carbon water heaters
- Top scoring measures for GHG reductions:
 - RE1 – Mandatory solar rooftops
 - RE3 – requiring 100% renewable energy



Model Policies Analysis

- Analysis by DNV-GL for PAEC

Electric vehicles and solar carports

- EVCI1 a: Require EV charger cost-share for existing multi-family building owners
- EVCI1 b: Require DC fast charger on new retail buildings
- RE2: Require solar carports on new surface-level parking



Model Policies Analysis 2

Electrification

- RE4a: Require or incentivize electric heat pumps (or FF Alternatives) in new multi-family buildings
- RE4b: Require or incentivize electric heat pumps (or FF Alternatives) in new commercial buildings



Model Policies Analysis 3

Energy efficiency

- EE2A: Require energy audit and use disclosure at time-of-sale for commercial buildings
- EE2B: Require energy audit and use disclosure at time-of-sale for homes
- EE3: Adopt outcome-based reach code requiring energy benchmarking after building is constructed





What is Next?