

**Resource Management and Climate Protection Committee (RMCP)  
Minutes of January 16, 2019 Meeting**

**In Attendance:**

Kim Springer, County Office of Sustainability  
Sandy Wong, C/CAG  
Maryann Moise Derwin, Committee Vice Chair, Mayor Portola Valley\*  
Rick DeGolia, Town of Atherton\*  
Michael Barber, Supervisor Pine's Office  
Adrienne Carr, BAWSCA\*  
Diane Papan, Councilmember, San Mateo\*  
John Allan, County Office of Sustainability  
Doug Silverstein, Public  
John Sarter, Clean Coalition

**Not in attendance:**

Dave Pine, County Supervisor\*  
Robert Cormia, Professor Foothill-DeAnza\*  
Don Horsley, County Supervisor\*  
Beth Bhatnagar, SSMC Board Member\*  
Bill Chiang, PG&E\*  
Ortensia Lopez, El Concilio of San Mateo County\*

**\*Committee Member (voting)**

**1. Introductions**

**2. Public Comment**

- None

**3. Approval of Minutes from October 17, 2018 and November 28, 2018 RMCP Committee Meetings**

- No quorum to approve minutes at this time in the meeting.

**4. Discussion on recruitment of open seats on the RMCP Committee and Election of Committee Chair and/or Co-Chair**

Springer: There are no current applicants, we will be conducting outreach to fill vacant seats.

- Committee offered suggestions of potential members:
  - Emily Beach, City of Burlingame
  - Ned Fluett, Woodside
  - Daniel Yost, Woodside
  - Craig Hughes, Portola Valley
  - Drew Combs, Menlo Park
  - New Councilmembers at City of San Carlos
- No quorum to elect Committee Chair and/or Co-Chair

## 5. Update on San Mateo County Energy and Water Strategy 2025 project and draft document review

John Allan and Kim Springer provide an update on progress with the stakeholder workgroup for the update to the San Mateo County Energy and Water Strategy. Allan shared an overview of the stakeholder workgroup, which includes PG&E, PCE, city staff, water agencies, special districts and private sector professionals, and provided details of the final stakeholder workgroup meeting where RMCP committee feedback to explore equity and prioritization were the focus. Stakeholders were given the opportunity to vote on specific actions and strategies by placing stickers on a series of posters displaying the organizing framework. Key actions and strategies were further refined through identification of “foundational actions” which may preempt other actions. Springer described the status of the document which is going through an additional round of internal review before being distributed to a larger group of stakeholders. Springer outlined a roadmap for adoption of the document by all 20 cities and the county which will include future presentations to the C/CAG Board and PCE Board.

Committee comments included:

- General agreement with the approach to adoption and anticipates little resistance
- Cities have Sustainability and Infrastructure Committees that may want to review or be briefed on the document
- Feedback from local non-profits could be beneficial
- BAWSCA will be providing further edits but would not take it to their board for adoption

## 6. Presentation on Smart Grid technologies currently being deployed, new technologies soon to be available, and how these will improve our building and vehicle connection to grid

*This item was postponed to after item #7*

John Sarter from Clean Coalition delivered a presentation providing an overview of how smart grid technologies, such as EVs, PV systems, and battery storage, function together to create microgrids that allow for renewable energy generation, storage, backup power, islanding, and energy arbitrage which can all create benefits to the community in terms of cost-savings and resilience while helping the microgrid deal with issues related to peak usage and the duck curve. Clean Coalition provides support for adoption of new technologies and assistance in navigating regulatory barriers to prove microgrid technology through pilot projects.

- Papan: Clarification on smart appliances
- Springer: Some heat pump water heaters have an add-on option to be connected using the one of the common protocols identified
- Papan: Could this apply to WWTPs?
  - Sarter: Yes Absolutely

Clean Coalition recently completed a pilot project in San Francisco which consisted of a 4-story ZNE building with 4 units on individual microgrids. This project was completed in April and is the first passive house certified multi-unit “nanogrid”. Each unit is separately islandable which added to the cost but was required by PG&E.

- Benefits of the project for tenants include:
  - Lower operations costs
  - Revenue from energy export
  - Potentially free transportation energy
  - Health benefits through better building envelope in ZNE buildings

- Resilient for self and community
  - Reduced GHG emissions
- Springer: Clarification on how this affects property values (reminder of Mynt Systems presentation)
- Springer: Question regarding how battery storage can reduce payback of PV systems
- Committee questions regarding market value of home, size, current occupancy and sale process
  - Sarter: described that the bottom units have been sold and the top units are still on the market for between \$2.2 and \$2.75 million. They want to hold out for a strong offer as the point of this project was to prove to developers that adding these technologies into the design will be a good investment for the developer and will add to property value. Sarter also discussed benefits of the rooftop bidirectional solar panels which are transparent and capture incidental sunlight from surrounding buildings. This system provides low albedo in rooftop areas and provides a comfortable space for activities on the rooftop common area. Rainwater harvesting systems were also designed but ultimately cost-engineered out.
  - Committee discussed opportunities for a tour

John Sarter provided more detail on how microgrid benefits can extend to the entire community rather than individual property owners. In the North Bay, there are microgrids installed in critical facilities such as hospitals, fire stations and places of refuge.

- Papan: WWTPs should also be included in this list
  - Sarter: Yes, and schools could also work well for this

While facility microgrids benefit single entity, community microgrids provide community benefits where energy can be truly mobile and shared between different buildings and vehicles as deemed necessary. However, the regulations are not in place necessarily for community microgrids where energy can be shared between different buildings with different utility meters. The vision is an Advanced Smart City with centralized grid operations that can manage behind the meter energy storage, hydrogen energy storage, and is islandable.

- Springer: Clarification on what makes net energy metering difficult

Clean Coalition is developing an “Electrification/Microgrid Ready” document to provide guidance for new and existing buildings to participate in community microgrids. The goal is to present this as an adoptable resolution for local, state and federal government.

- Sarter: Would like RMCP to review
- Derwin: Please send to Springer for circulation
  1. Would like RMCP to review
  2. John Sarter will send draft to Kim
- Derwin: Notice to wrap up presentation to allow for final items

Sarter provided brief overview of Vehicle to Building and Vehicle to Grid Technology. This technology is already deployed in Nissan vehicles and other manufacturers are integrating it ahead of regulatory adoption. Vehicle to building is a possible way of circumventing building to building

grids until the regulatory hurdles are resolved. There is already a community in Japan using all these microgrid technologies, including V2G and V2B, together. Volkswagen is taking an aggressive approach to EV integration with the grid through their Elli program.

## **7. Update on 2050 Partners, Inc. Job Order Contracting feasibility study and final report**

*This item was moved to #6*

Kim Springer to provide update on JOC and summary of project. The process was initiated to explore whether time and cost saving benefits experienced by other jurisdictions could be achieved in San Mateo County. The contractor conducted a series of interviews to determine familiarity with the JOC process as well as the viability and usefulness of JOCs in individual jurisdictions. Half of the cities were available for an interview. The study found that many cities were already familiar with JOC and a common use of this was to purchase fleet vehicles

- DeGolia: Clarification on how cities would use this, and does it allow them to avoid public bidding requirement?
- Springer: Referenced 4217 and that it may be a possibility
- DeGolia: Atherton would want to use this for solar/microgrid, especially given that north bay is doing this after fires.
- DeGolia: Atherton has seen trouble with procurement for projects without a timeline since materials and technology prices are changing so rapidly
- Springer: This was discussed in the study and may be explored further

Additional findings were that cities were focused much more on mechanical projects rather than lighting since most lighting projects had been completed relatively recently. We are also looking at the opportunity access to design and engineering services through JOC as recent changes to the Energy Watch program have resulted in the loss of Ecology Action as a partner for engineering services. Cities were also very focused on EV infrastructure but JOC isn't very feasible for this. The final version of the study is posted on RMCP committee website.

## **8. Review and approval of RMCP Committee meeting dates for calendar year 2019**

- No quorum to approve 2019 meeting dates at this time

## **9. Committee Member Updates**

- Adrienne Carr: DWR Prioritization, all San Mateo County Basins are low priority, no need to establish groundwater sustainability agency. There is still ongoing activity in these basins however. We may participate in a voluntary water monitoring program (CASGEM).
  - Recognition of the work County Office of Sustainability and Environmental Health and Charles Ice have done.
- Michael Barber: Recognition of OOS/PCE Reach Code efforts.
  - Kim Springer: Summary of 3 PCE Community Pilot Program grants awarded to OOS.
    1. Toolkit for local government EV fleets
    2. Reach Codes
      - a. Electrification
      - b. EV Infrastructure

3. Enhancement of RICAPS tools

- DeGolia: PCE Board just approved \$16 million program to deploy EV infrastructure

**10. Adjourned – Next Meeting Date: February 20, 2019**