C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

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Minutes

Resource Management and Climate Protection Committee (RMCP) Date: Wednesday, February 21, 2018

In Attendance:

Maryann Moise Derwin, Committee Vice Chair, Mayor Portola Valley*
Deborah Gordon, Committee Chair, Woodside Town Council*
Rick DeGolia, Town of Atherton*
Adrianne Carr, BAWSCA*
Don Horsley, County Supervisor*
Beth Bhatnagar, SSMC Board Member*
Kim Springer, County Office of Sustainability
Andrea Chow, County Office of Sustainability
Rachael Londer, County Office of Sustainability
Dave Pine, County Supervisor*
Michael Barber, Supervisor Pine's Office
Diane Papan, Councilmember, San Mateo*
Janet Borgens, City Council of Redwood City
Sandy Wong, C/CAG
Betty Seto, DNV GL

Not in attendance:

Pradeep Gupta, South San Francisco City Council* Ortensia Lopez, El Concilio of San Mateo County* Bill Chiang, PG&E* Robert Cormia, Professor Foothill-DeAnza*

1. Introductions

Committee members and guests made introductions.

2. Public Comment

There were no public comments.

^{*} Committee Member (voting)

3. Approval of Minutes from January 17, 2018 Committee meeting Horsley/Derwin - Passed

4. Presentation on Energy Efficiency Program Updates for Member Agencies in San Mateo County Presentation

Andrea Chow, County Office of Sustainability gave a presentation on the BayREN Energy Home Upgrade program and the San Mateo County Energy Watch, and the customer segments they each serve. The Committee is familiar with the SMCEW program, and Chow presented more details on the Single-family and Multi Family Upgrade programs. She also presented the Codes and Standards, and other elements of the program under BayREN. The presentation included outcomes since FY 2013, and a review of program outcome update reports that will be provided to cities in San Mateo County, served by these two programs.

Gordon: Does this report show the actual savings in kWh as program results? Chow: It's not currently included, but we can provide that information.

Chow explained that the report would be going out to staff at cities shortly.

5. Presentation on DNV GL's Global and Regional Forecast of the Energy Transition to 2050 Presentation

Betty Seto presented global work on the part of researchers, independently at DNV GL, a prediction of likely global energy markets through 2050, The Energy Transition Outlook. The report considers where we were in 2015 and projects into the future. The report is one piece of a total of four reports on different energy markets, the Transition document being one of the four. DNV GL has 13,000 employees worldwide, and so if a large consultant in the energy sector.

Gordon: With 13,000 employees, what markets does DNV GL serve? Seto: Advisory service, due diligence, renewable energy project valuation, independent engineering, climate and energy programs, and some CEQA and environmental compliance.

In contrast to some other studies, this report is about the most likely future of energy worldwide. The prediction is environmentally positive, highlighting population and GDP will continue to increase worldwide, but still, energy and GHG emissions peak around 2030 and begin to decrease. The analysis is based on a model which includes multiple inputs.

A few of the outcomes show that, for instance, EV will reach cost parity around 2020. In the building sector, the energy use per square foot will continue to decrease at about 1.2% per year. World energy demand is predicted to flatten out over time through 2030. There are other indicators that lead to the conclusions in the report.

Gordon: does the model include transition to electric and other alternative fuels. Seto: Yes, it's predicted that there will be a steady transition, and fuel switching in other sectors is also expected, and energy use worldwide is expected to be carbon free by 2050.

DeGolia: Do you consider nuclear and hydro to be carbon free.

Seto: Yes

Gordon: Are you expecting countries, even China to move away from Coal without going through a

long-term phase of nuclear?

Seto: The model says that we will even be moving away from nuclear as a carbon-free energy source by 2050.

Seto shared that all of this is good news, but there is some bad news related to the two-degree C goal under the Paris Agreement. There is a range in the prediction, but the model predicts that there will be an overshoot of that two-degree limit globally.

Seto moved on to explain both the national and state outcomes from the research. The research shows that the duck curve is exacerbated by the addition of additional renewables and the increase use of EVs. This is an issue that will need to be addressed. When DNV GL mapped the existing CA policy energy and climate policy goals to national goals, projected North American outcomes pretty much matched the CA goals.

Gordon: Do you do sensitivity analysis on your results, and have you looked to see if something disruptive changed, how would it change the results?

Seto: I don't have an answer to that, but we did look at learning curves for adoption.

Gordon: It would be good to know because it could greatly affect the time frames in the results. Seto: I believe that change is battery density, for instance, was included in the model, and this is where the scenario analysis is most useful.

The model is set up and the plan is to run the model again in a couple of years.

DeGolia: Battery is a huge issue and where batteries are placed and how they are used has a huge impact. For instance, we want to hold off on the investment of batteries if the density is going to change. The question is where to encourage investment. Also, what are the best DERs and where do we focus on energy generation. We need to understand the costs and benefits.

Gordon: We need to look at what is the best in terms of battery ownership.

DeGolia: We should also look at used auto batteries as a resource for local renewable. We should do some analysis on these topics.

6. Discussion about RMCP Committee priorities for calendar year 2018 Discussion

Kim Springer introduced a discussion on potential projects that the Committee could undertake in 2018. Springer suggested that, regarding the Energy Strategy, it may make sense to update the document in five-year cycles given the uncertainty in energy technologies. Springer also mentioned the Governor's Conference.

Comments were:

Papan: Does the Energy Strategy need to have the same elements?

Springer: Not necessarily.

Papan: I think we should consider exploring the planning and investment in storage.

Gordon: I agree that this should be considered and evaluated with San Mateo County specifically in mind.

Pine: Should we look at developing the next strategy out to five years, or maybe further?

Springer: The baseline has changed so much. The first round was written by a consultant, and we couldn't even mention climate. We should probably involve more stakeholders around grid issues and storage, and DER.

DeGolia: It's a very provocative idea to be considering these topics and building a plan around it.

Gordon: It makes sense to consider the economics in these issues, like DNV GL did in their analysis.

DeGolia: We completed this 8-9 years ago. No doubt we need a good energy strategy and we now have PCE, and there is PG&E. Maybe a first step would be to have a discussion between PG&E and PCE and this Committee.

Springer suggested that at the next meeting, staff come back with a work plan to help move the effort forward.

About the Governor's Climate Summit, the Committee considered the letter and suggested it be send to city council members, city managers, and SAMCEDA staff.

7. Review and approve RMCP Committee meeting dates for calendar year 2018 Action The Committee moved to include all monthly meeting dates for 2018: Derwin/Carr – Passed.

Springer said he would post the 2018 meeting dates and send out calendar dates to the committee.

8. Committee Member Updates

Committee member Pine provided information on the Water Summit scheduled for March 30th at Canada College.

9. Next Meeting Date: March 21, 2018

All presentations have been posted on the C/CAG RMCP website.