

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

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

Agenda

Resource Management and Climate Protection Committee (RMCP)

Date: Wednesday, February 15, 2017

Time: 2:00 to 4:00 p.m.

Location: 455 County Center – 4th Floor – Room 405
Redwood City, CA 94063

1. Introductions
2. Public Comment
3. Approval of Minutes from November 16, 2016 Meeting
(Kim Springer – Committee Staff) Action
4. Bay Area Water Supply and Conservation Agency update on current water supply and
conservation (Adrienne Carr, BAWSCA) Presentation, Discussion
5. Update on San Mateo County Energy Watch goals and projects
(Jacki Falconio, County staff) Presentation, Discussion
6. Presentation on greenhouse gas emissions energy data challenges
(Kim Springer – County Staff) Presentation, Discussion
7. Review of San Mateo County Energy Strategy 2012 document
(Kim Springer – County Staff) Presentation Discussion
8. Committee Member Updates
9. Next Regular Meeting Date: March 15, 2017

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Resource Management and Climate Protection Committee (RMCP) Minutes of November 16, 2016 Meeting

In Attendance:

Rick DeGolia, Town of Atherton*
Adrienne Carr, BAWSCA*
Beth Bhatnagar, SSMC Board Member*
Deborah Gordon, Committee Chair, Woodside Town Council*
Pradeep Gupta, South San Francisco City Council*
Maryann Moise Derwin, Committee Vice Chair, Mayor Portola Valley*
Robert Cormia, Professor Foothill-DeAnza*
Diane Papan, Councilmember, San Mateo*
Michael Barber, Supervisor Pine's Office
David Jaeckel, County Office of Sustainability
Kim Springer, County Office of Sustainability
Sandy Wong, C/CAG Executive Director
Charles Ice, County Environmental Health
Heather Forshey, County Environmental Health

Not in attendance:

Dave Pine, County Supervisor*
Don Horsley, County Supervisor*
Bill Chiang, PG&E*
Ortensia Lopez, El Consilio of San Mateo County*

* Committee Member (voting)

1. Introductions
2. Public Comment
3. Approval of Minutes from September 21, 2016 Meeting (Dewin/Gupta) Pass
(Kim Springer – Committee Staff) Action
4. Update on the Bay Area Water Supply and Conservation Agency's Long-Term Reliable Water Supply Strategy (Adrienne Carr, BAWSCA) Presentation, Discussion

Adrienne Carr gave a presentation on BAWSCA's long-term reliable water strategy. Trends show

considerable efforts on the part of customers to reduce water use into and through the drought period. Trends show that there is a dry year one in every 11 years. Climate change could change that trend.

Gordon: are you considering using modeling that is being used in Livermore? Carr: SF has been coordinating with others to help model, but the science is still very young. BAWSCA is waiting for a work plan for the full analysis on the part of the SF water system.

Gordon, some of these type of potential projects can take many years. Carr: Yes, that is true and should be consider.

Gupta: Do the studies and/or model take into account the population rise? Carr: It considers the ABAG 2013 predictions, but not the most recent.

Gupta: Is the 11-year cycle based on historical record? Carr: Yes, and there are other elements being considered in the modeling, including the elevation of the Hetch Hetchy, higher temperatures and related evaporation.

Gordon: Will the gravity feed system be affected by these changes. Carr: not really because there are multiple sources of storage.

BAWSCA looked at a lot of different types of projects that, if developed, would provide a backup supply for dry years, and water transfer was a key type of project, appropriate for reliable supply. Desalination is probably not appropriate, as it is an every-year supply option. Recycled water, non-potable, is another possible project type.

Gupta: When you say water transfer, do you mean year to year or geographical? Carr: Geographical

BAWSCA is working with partners on purified water feasibility studies, SF and others. In general BAWSCA is pursuing all viable options to improve the reliable water supply in San Mateo County.

Gupta: I heard at a Council of Cities meeting that EPA is having issue with development due to lack of potable water. Car: yes, that is correct. EPA is in the process of looking to SF to increase their per capita allocation so that it is more in line with the neighbors. It goes back to when their original allocation was set, back in the 1980s, that they did not request more, as some of their neighbors did. There are negotiations with Mt. View, Palo Alto and others to provide some of their unneeded allocations. It can be transferred, but it has to be permanent. The contract is up for renegotiation in 2035, so trades are encouraged when there is a need like this. The sense is that the process is going well.

Gordon: The story of water transfer of unneeded water from cities is never part of the story when it comes to redevelopment. No growth advocates make a case against development, without an understanding that cities are paying for water that isn't needed.

5. Update on Recent State Water Policy Actions

(Adrienne Carr, BAWSCA)

Presentation, Discussion

Adrienne Carr presented on State Water Policy Actions. The long-term water policy action by the Governor, extension of existing water restrictions, addressing water losses and the Bay Delta plan.

Gupta: does this apply to ground or surface water? Carr: Both.

State will require agencies to establish contingency plans for water supply for their customers. The posted presentation document provides details of the rest of this presentation. Follow up questions

are included below.

Gupta: What do you suppose the outcome of the comments submitted by BAWSCA on the draft would be on the supply situation? Carr: BAWSCA gave detailed comments, especially for those parts of the plan that showed that more analysis needed to be completed to estimate the actual effects of changes in the Bay Delta water supply. They haven't addressed all of the comments, but they are saying that they would sell us water, via a water transfer. So far, BAWSCA has not had any success with this kind of water transfer, especially in dry years.

City managers and other partners are being asked to write letters to the State supporting BAWSCA's comments. There are a lot of issues, including economic, if water supply is unavailable.

6. Update on the California Energy Efficiency Coordinating Council (CAEECC) Program Administrator's Business Plan Development Process and Proposed Comments
(Kim Springer – County Staff) Presentation, Discussion

Kim Springer made a presentation on the CAEECC process for development of programs for CY 2018 and beyond. The process was launched in order to alleviate the slowdown of progress that often happens between program cycles. Part of this process is review and selection of energy efficiency programs plans by Program Administrators (PA's). IOU's are the likely PA's but not the only entities that could become PA's.

C/CAG submitted general comments on the needs of the process and outcomes for programs to be successful. Kim reviewed and will send out the draft comments presented for the committee to review and provide feedback.

Gordon: It will be good to have time to read them through and comment. Springer: That's the plan.

Comments include the need for smooth transitions and launches if there are changes in PA's, technical expertise, need for consistency and inconsistency across programs statewide, and need for market transformation.

Cormia: In order to get the transformation in awareness, you need to look at a common performance metric, like energy use per square foot, but it sounds like there may be issues getting that data. How does energy savings benefit the community: customers are not only saving on their energy bills, but the contractors in the community are also benefitting, which is a twofer.

Gupta: Why do they call it a business plan? Springer: I'm not sure, but the plans have some focus on how to meet the market needs.

Gordon: It's probably how the term is being used.

7. Presentation on Recent Onsite Water Reuse and Water Resiliency Events
(David Jaeckel – County Staff) Presentation Discussion

David Jaeckel spoke about two water events: the ABAG Bay Area Confluence and the WERF/CWEA Onsite Water Reuse Workshop.

The ABAG event was about resilience in the event of an earthquake or other major event. The

Water Reuse Workshop was on how to integrate smaller, decentralized water treatment systems into our current centralized systems, which included a workbook on 10 steps to developing a program wastewater reuse system.

Forshey: County Environmental Health has a program for developing water reuse systems, no blackwater, though SF received permission to explore that approach.

8. Review and Approval of Calendar Year 2017 RMCP Committee Dates (Derwin/Gupta) Pass
(Kim Springer – Committee Staff) Action

Kim Springer presented proposed dates for RMCP committee meetings in the 2017 calendar year for review and approval. The dates were approved. The committee agreed to not have a meeting in December 2016.

9. Committee Member Updates

10. Next Regular Meeting Date: confirm: December 21, 2016

C/CAG AGENDA REPORT

Date: February 15, 2017
To: Resource Management and Climate Protection Committee
From: Adrienne Carr, BAWSCA, RMCP Committee Member
Subject: Bay Area Water Supply and Conservation Agency update on current water supply and conservation

(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Receive an update on current water supply and recent State actions.

FISCAL IMPACT

None

BACKGROUND/DISCUSSION

The Bay Area Water Supply and Conservation Agency (BAWSCA), which represents the 26 wholesale customers of the San Francisco Regional Water System, continues to work with its member agencies to comply with State emergency drought regulations and plan for future water supply reliability.

BAWSCA staff has been providing short updates of water supply conditions to the RCMP Committee. The most recent update was at the July 20, 2016 meeting. Adrienne Carr, Senior Water Resources Specialist, will provide an update again at this meeting on the current water supply outlook, conservation performance, and implications of the recent State actions.

ATTACHMENTS

None

C/CAG AGENDA REPORT

Date: February 15, 2017
To: Resource Management and Climate Protection Committee
From: Kim Springer, County staff to RMCP Committee
Subject: Update on San Mateo County Energy Watch goals and projects
(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Receive an update on the San Mateo County Energy Watch goals and projects.

FISCAL IMPACT

SMCEW program staff costs are paid for by funding under the C/CAG – PG&E Local Government Partnership (LGP) agreement. Additional matching funds, specifically for transportation-related Climate Action Planning efforts, come from C/CAG Congestion Relief Funds.

BACKGROUND/DISCUSSION

The SMCEW launched a new program cycle on January 1, 2016. The new program cycle runs through December 2018, however the program tracks progress yearly on a calendar year basis.

The overall annual goals are a combination of the Direct Install efforts of Ecology Action, contracted directly by PG&E for San Mateo County, and various types of calculated savings projects lead by SMCEW staff. All of the work of the SMCEW program is a team effort coordinated through semi-monthly meetings and regular communication.

Savings through December 2016 are provided in charts attached to this staff report. Calculated goals were met, but Direct Install goals fell short, as many kWh were deferred to 2017.

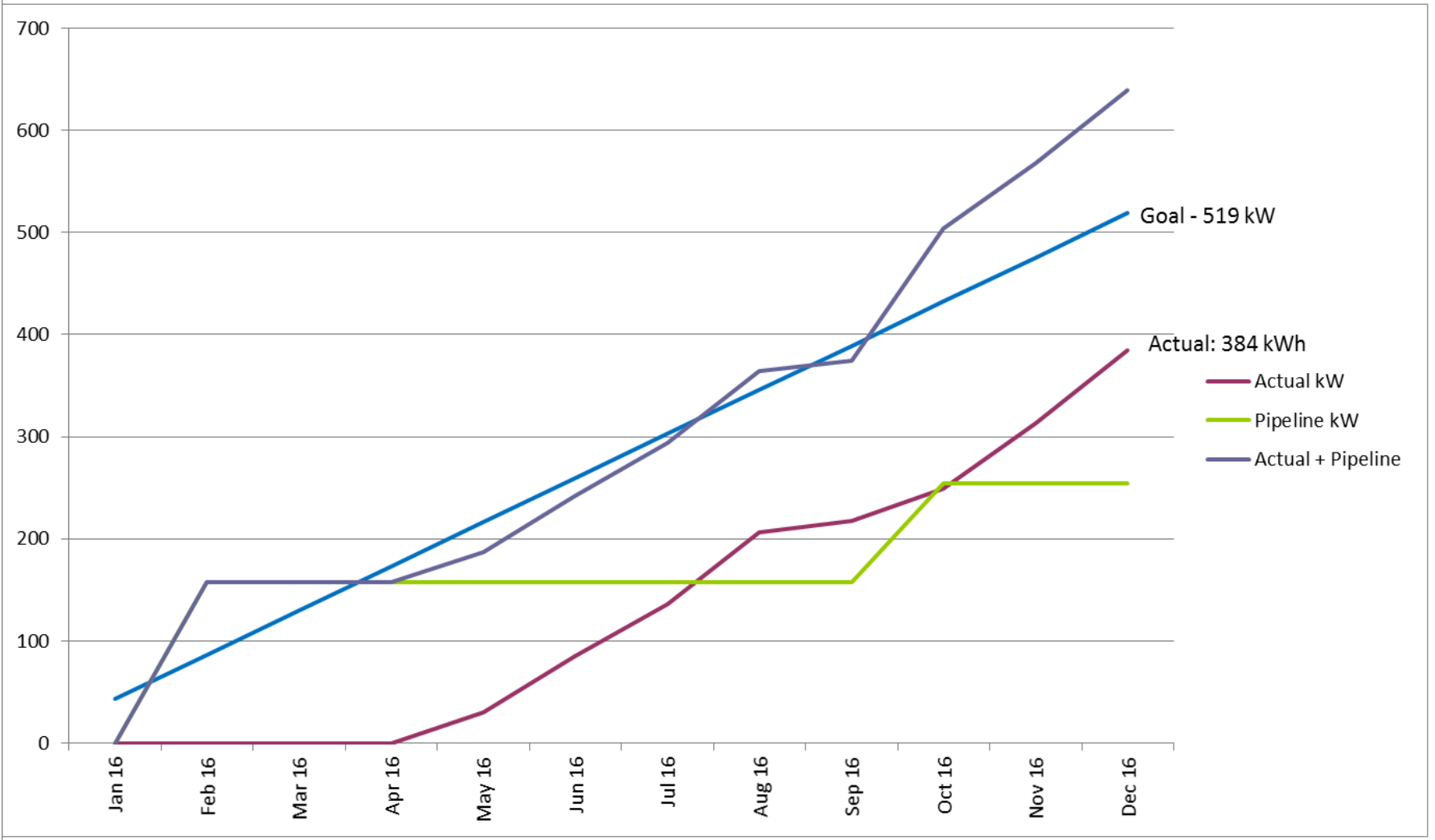
SMCEW staff will provide an update on current and completed SMCEW projects in 2016, current outreach to cities and other customers.

ATTACHMENT

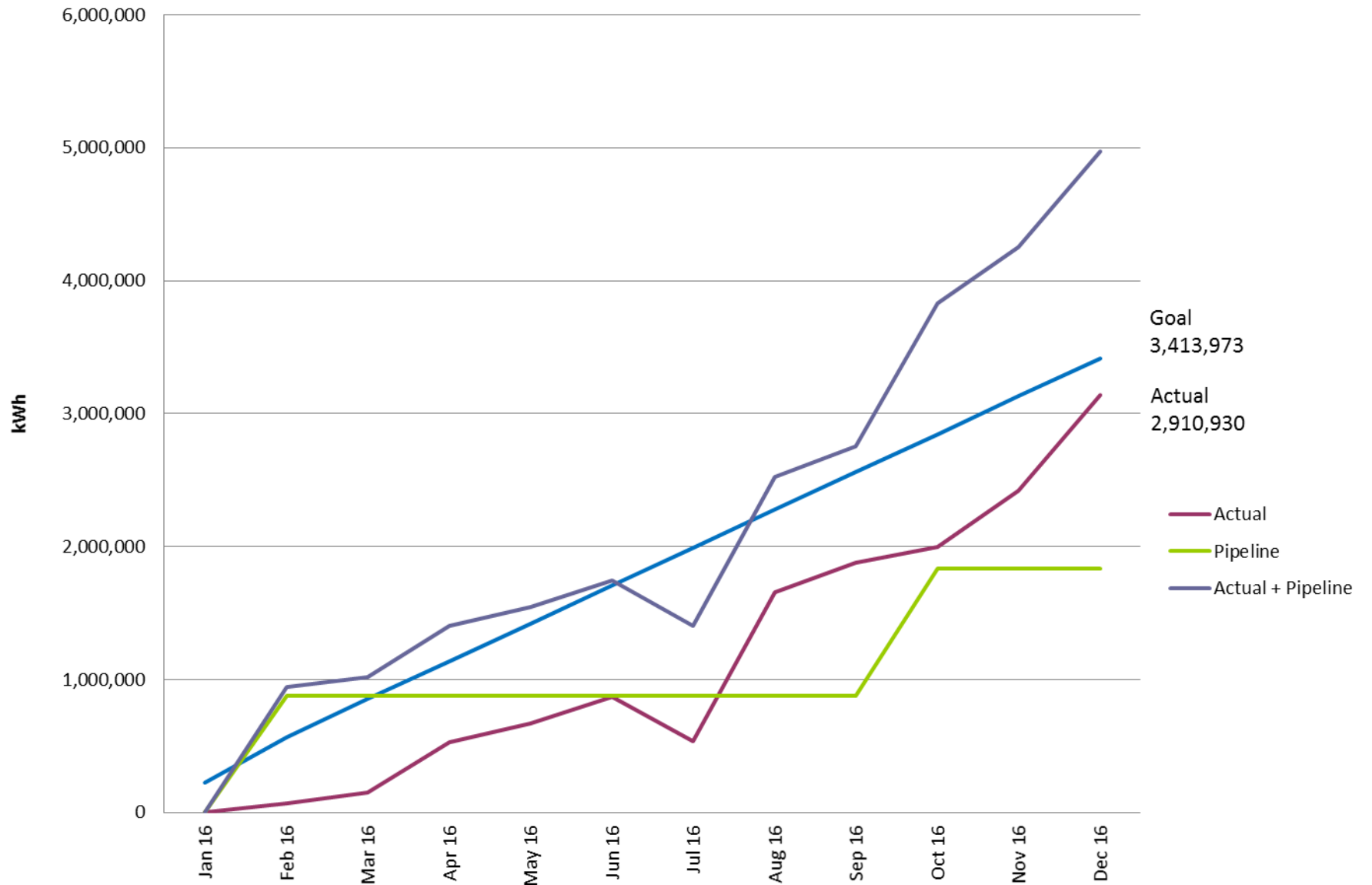
San Mateo County Energy Watch Energy Savings Charts through December 2016

San Mateo County Energy Watch 2016

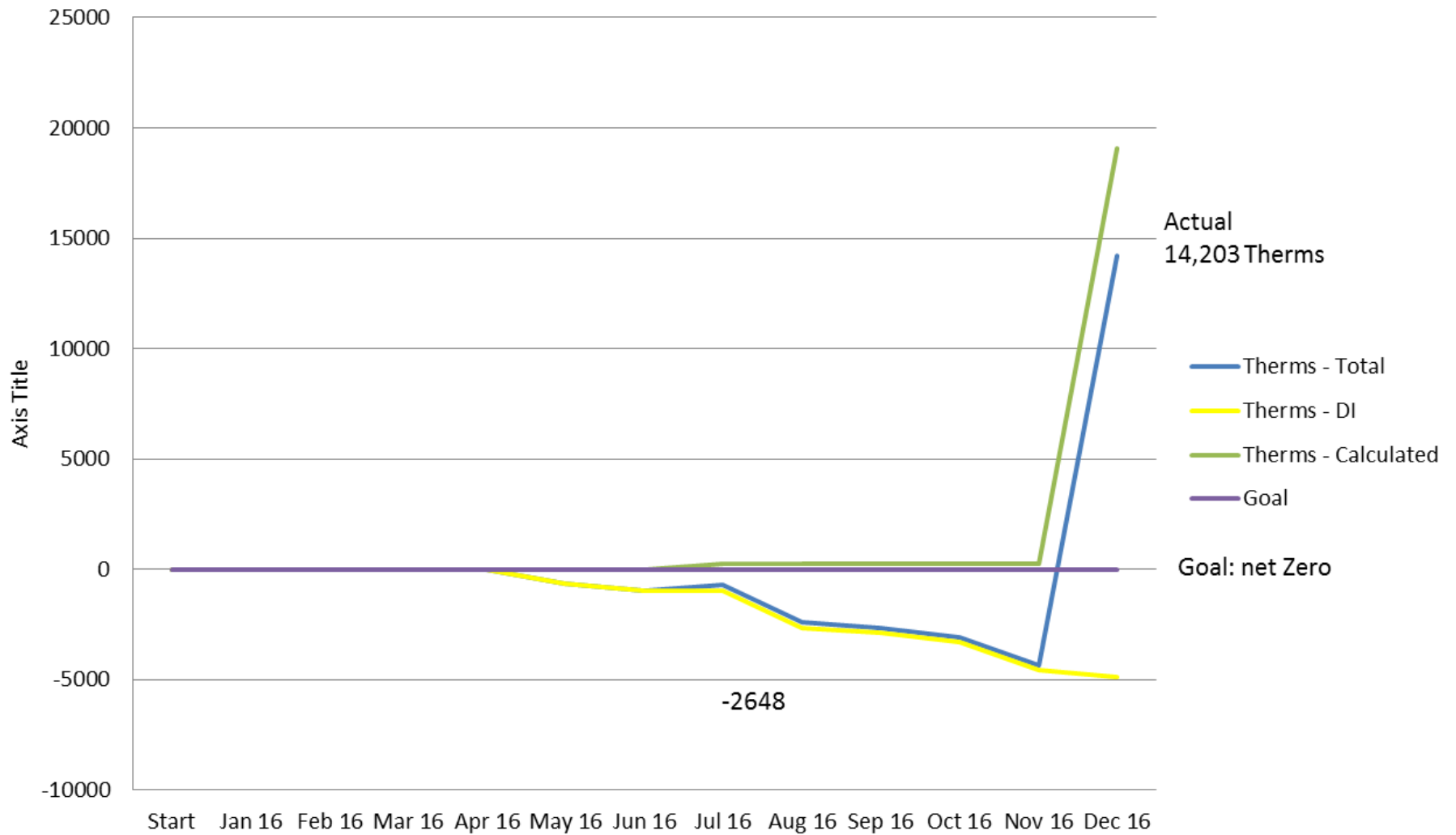
Energy Savings - kW Goal vs. Achieved



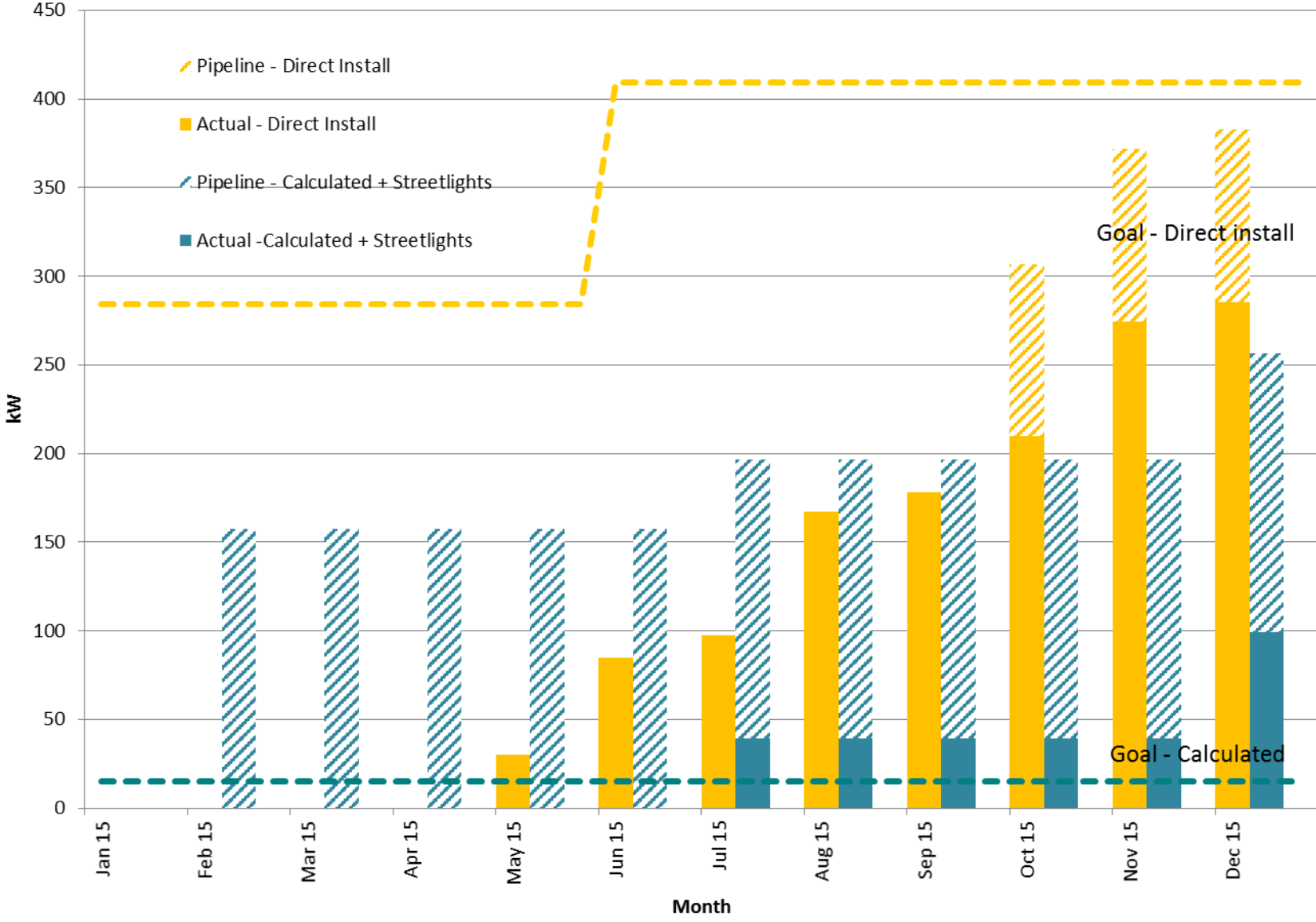
San Mateo County Energy Watch 2016 Energy Savings- kWh Goal vs. Achieved



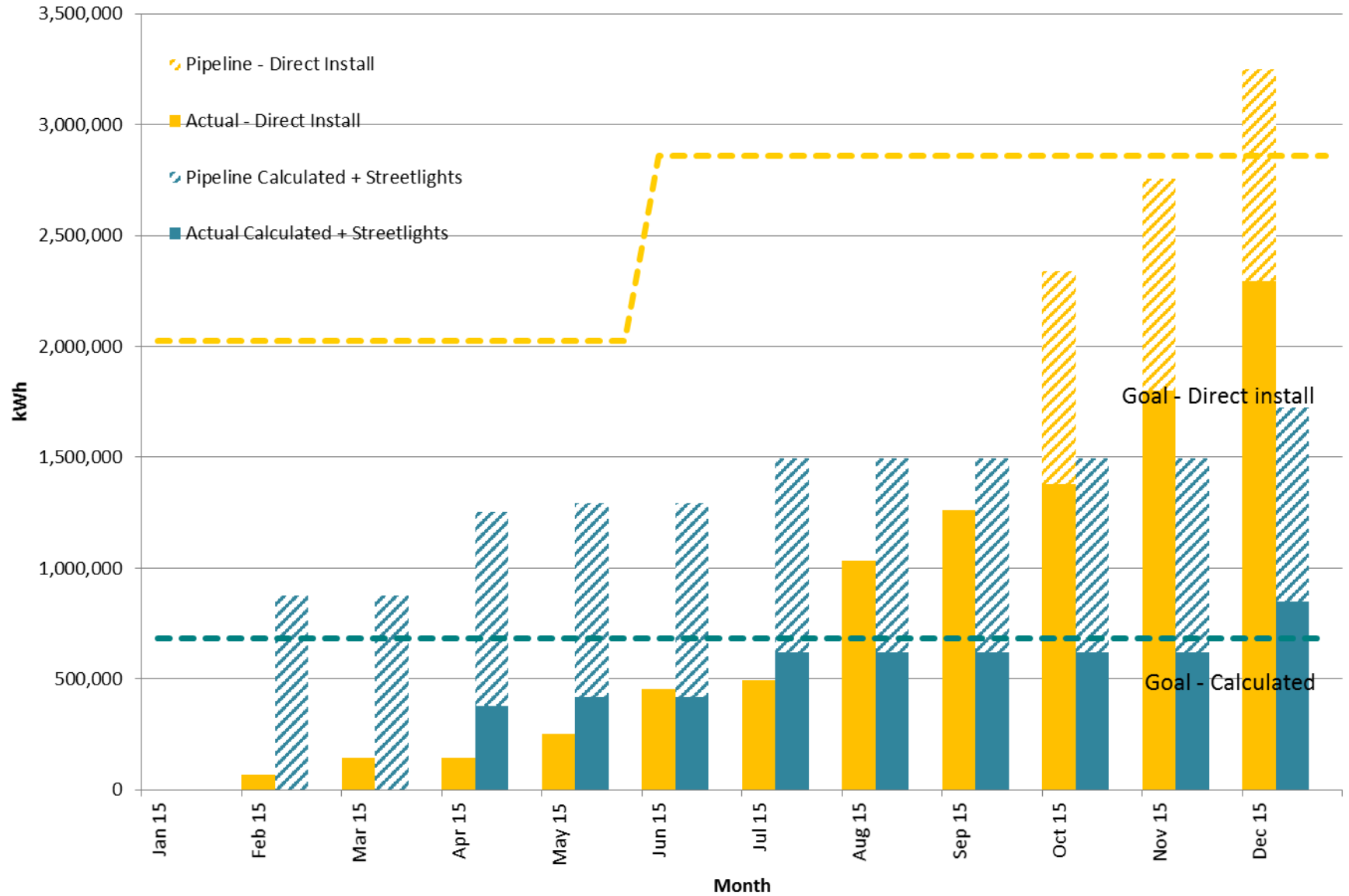
San Mateo County Energy Watch 2016 Energy Savings - Therms Goal vs. Achieved



San Mateo County Energy Watch 2016 kW Savings - Calculated vs. Direct Install



San Mateo County Energy Watch 2016 kWh Savings - Calculated vs. Direct Install



C/CAG AGENDA REPORT

Date: February 15, 2017
To: Resource Management and Climate Protection Committee
From: Kim Springer, County staff to RMCP Committee
Subject: Presentation on greenhouse gas emissions energy data challenges
(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Receive a presentation on greenhouse gas emissions energy data challenges

FISCAL IMPACT

This is an effort under the SMCEW program, for which staff costs are paid for by funding under the C/CAG – PG&E Local Government Partnership (LGP) agreement. Additional matching funds, specifically for transportation-related Climate Action Planning efforts, come from C/CAG Congestion Relief Funds.

BACKGROUND/DISCUSSION

C/CAG contracts with consultant, DNV GL, to provide climate action planning technical assistance to the County and cities and towns in San Mateo County. Part of the technical assistance is complete community-scale greenhouse gas emission (GHG) inventories for each local governments, annually.

Most cities in San Mateo County (and many others across the state) are affected by CPUC rules which went into effect in 2014. Generally, the rules do not allow access to sector data (industrial, commercial, residential) if any one user uses 20% or more of the total sector consumption. Lack of sector data affects the ability of the program to provide comprehensive GHG emission inventories for cities for 2014, 2015, and beyond.

Staff will explain the current data privacy rules, discuss the data rule fail chart provided as an attachment to this staff report, and what steps are being taken to address the issue.

ATTACHMENT

Chart of CPUC Data Rule Failure for San Mateo County

TOTCITY	YEAR	RES_E_151	COM_E_1515	IND_E_1515	AGR_E_1515	DA_ELEC_1515	RES_G_1515	COM_G_1515	IND_G_1515	RES/COM/IND ELEC AGGREGATION	RES/COM/IND GAS AGGREGATION
City 1	2014	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	FAIL	NONE	N/A	N/A
City 1	2015	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	FAIL	NONE	N/A	N/A
City 2	2014	PASS	PASS+IND	IN COM	PASS	FAIL	PASS	FAIL	FAIL-DROPPED	N/A	N/A
City 2	2015	PASS	PASS+IND	IN COM	PASS	FAIL	PASS	FAIL	FAIL-DROPPED	N/A	N/A
City 3	2014	PASS	PASS+IND,AGR	IN COM	IN COM	FAIL	PASS	FAIL	FAIL-DROPPED	N/A	PASS
City 3	2015	PASS	PASS+IND,AGR	IN COM	IN COM	FAIL	PASS	FAIL	FAIL-DROPPED	N/A	PASS
City 4	2014	PASS	PASS+IND	IN COM	NONE	PASS	PASS	PASS+IND	IN COM	N/A	N/A
City 4	2015	PASS	PASS+IND	IN COM	NONE	PASS	PASS	PASS+IND	IN COM	N/A	N/A
City 5	2014	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	FAIL	NONE	N/A	FAIL
City 5	2015	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS	NONE	N/A	FAIL
City 6	2014	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS	NONE	N/A	N/A
City 6	2015	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS	NONE	N/A	N/A
City 7	2014	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS+IND	IN COM	N/A	N/A
City 7	2015	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS+IND	IN COM	N/A	N/A
City 8	2014	PASS	FAIL	NONE	NONE	FAIL	PASS	FAIL	NONE	N/A	PASS
City 8	2015	PASS	FAIL	NONE	NONE	FAIL	PASS	FAIL	NONE	N/A	PASS
City 9	2014	PASS	PASS+IND,AGR	IN COM	IN COM	FAIL	PASS	PASS	NONE	N/A	PASS
City 9	2015	PASS	PASS+IND,AGR	IN COM	IN COM	FAIL	PASS	PASS	NONE	N/A	PASS
City 10	2014	PASS	PASS	NONE	NONE	FAIL	PASS	FAIL	NONE	N/A	PASS
City 10	2015	PASS	PASS	NONE	NONE	FAIL	PASS	FAIL	NONE	N/A	PASS
City 11	2014	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS-COM ONLY	FAIL-DROPPED	N/A	FAIL
City 11	2015	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS-COM ONLY	FAIL-DROPPED	N/A	FAIL
City 12	2014	PASS	FAIL	NONE	FAIL-DROPPED	FAIL	PASS	FAIL	NONE	N/A	FAIL
City 12	2015	PASS	FAIL	NONE	FAIL-DROPPED	FAIL	PASS	FAIL	NONE	N/A	FAIL
City 13	2014	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	PASS-COM ONLY	FAIL-DROPPED	N/A	N/A
City 13	2015	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	PASS-COM ONLY	FAIL-DROPPED	N/A	N/A
City 14	2014	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS	NONE	PASS	PASS
City 14	2015	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS	NONE	PASS	PASS
City 15	2014	PASS	FAIL	FAIL-DROPPED	FAIL-DROPPED	FAIL	PASS	FAIL	NONE	N/A	N/A
City 15	2015	PASS	FAIL	FAIL-DROPPED	FAIL-DROPPED	FAIL	PASS	FAIL	NONE	N/A	N/A
City 16	2014	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	PASS+IND	IN COM	N/A	N/A
City 16	2015	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	PASS+IND	IN COM	N/A	N/A
City 17	2014	PASS	PASS+AGR	NONE	IN COM	FAIL	FAIL	FAIL	NONE	N/A	N/A
City 17	2015	PASS	PASS+AGR	NONE	IN COM	FAIL	FAIL	FAIL	NONE	N/A	N/A
City 18	2014	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS+IND	IN COM	N/A	N/A
City 18	2015	PASS	PASS+IND	IN COM	NONE	FAIL	PASS	PASS-COM ONLY	FAIL-DROPPED	N/A	N/A
City 19	2014	PASS	PASS	NONE	NONE	FAIL	PASS	FAIL	NONE	N/A	PASS
City 19	2015	PASS	PASS	NONE	NONE	FAIL	PASS	FAIL	NONE	N/A	PASS
City 20	2014	PASS	PASS	NONE	NONE	FAIL	PASS	PASS	NONE	N/A	FAIL
City 20	2015	PASS	PASS	NONE	NONE	FAIL	PASS	PASS	NONE	N/A	FAIL
City 21	2014	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	PASS	NONE	N/A	PASS
City 21	2015	PASS	PASS+AGR	NONE	IN COM	FAIL	PASS	PASS	NONE	N/A	PASS

RED	Failed 20% threshold (Res, Comm) or 25% threshold (Ind)
YELLOW	Failed 15% (Res, Comm, Ind) threshold but passed 20% threshold (Res, Comm) or 25% threshold (Ind.)
GREEN	Initially failed 15% threshold (Res, Comm, Ind) but pass when combined with another sector (e.g. combine Comm and Ind)
GREY	City has no accounts in this group

C/CAG AGENDA REPORT

Date: February 15, 2017
To: Resource Management and Climate Protection Committee
From: Kim Springer, County staff to RMCP Committee
Subject: Review of San Mateo County Energy Strategy 2012 document
(For further information contact Kim Springer at 650-599-1412)

RECOMMENDATION

Participate in a general review of the San Mateo County Energy Strategy 2012 document.

FISCAL IMPACT

None

BACKGROUND/DISCUSSION

The Resource Management and Climate protection committee began as C/CAG's Utilities Sustainability Task Force in early calendar year 2016, as an ad hoc committee under the CMEQ committee. The committee was tasked with development of a strategy to address issues related to energy and water in San Mateo County. The executive summary of the report is attached to this staff report. The full report can be accessed at: <http://ccag.ca.gov/wp-content/uploads/2014/05/Energy-Strategy-Complete.pdf>. The strategy was complete in 2008, adopted by the County Board of Supervisors in December 2008, and was eventually adopted by every city in San Mateo County by December 2009. It has been the guiding document in San Mateo County for energy, water and climate action since that time.

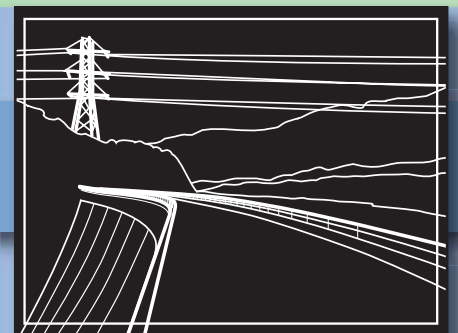
Because of the age of the Strategy, and with the advent and success of new programs, and the progress made in the State, region and in San Mateo County, staff believes that the RMCP Committee should assess whether this document should be updated. In general, many changes in approaches to clean energy supply and energy efficiency, emissions inventories and climate action planning, and how water is sourced and conserved, have taken place and are expected in the future.

ATTACHMENT

Executive Summary – San Mateo County Energy Strategy



SAN MATEO COUNTY ENERGY STRATEGY 2012



PREPARED BY THE UTILITIES & SUSTAINABILITY TASK FORCE



EXECUTIVE SUMMARY

ACKNOWLEDGMENTS

We appreciate the participation, input and feedback of all the task force members and other interested parties.

COUNTY OF SAN MATEO – PROJECT ORIGINATORS:

Jerry Hill
Board of Supervisors

Jill Boone
Initial Project Manager

UTILITIES AND SUSTAINABILITY TASK FORCE MEMBERS, AUGUST 2006:

ELECTED OFFICIALS

Bill Dickenson
2006 Vice Mayor, Belmont

Barbara Pierce, USTF Chairwoman
2006 Mayor, Redwood City

Terry Nagel
2006 Mayor, Burlingame

Jerry Hill
Supervisor, County of San Mateo

Deborah Gordon
2006 Mayor, Woodside

Sepi Richardson
2006 Mayor Protem, Brisbane

UTILITY

Kathy Lavezzo
Account Manager
Pacific Gas and Electric Company

ENERGY

Bruce Chamberlain
Energy Solutions, ABAG Energy Watch

WATER

Nicole Sandkulla
Senior Water Resource Engineer
Bay Area Water Supply
and Conservation Agency

BUSINESS

Lori Duvall
Eco Responsibility Program Manager
Sun Microsystems, Inc.

NONPROFIT

Robert Cormia
Professor
Foothill-De Anza Community College District

EMERITUS

Mukesh Khattar
Director of Energy
Oracle Corporation

Mario Panoringan
2006 Chief Executive Officer
Daly City/Colma
Chamber of Commerce

ENERGY STRATEGY DEVELOPMENT, WRITING AND RESEARCH

Gina Blus
Sustainability Consultant
EcoAdvantage Network

Brandi de Garneau
Graduate Student/Intern

C/CAG AND COUNTY STAFF

Richard Napier
Executive Director
City/County Association of Governments

Kim Springer
Resource Conservation Program Manager
County of San Mateo, RecycleWorks

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

FUNDED, IN PART, BY A GRANT FROM THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

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EXECUTIVE SUMMARY

SAN MATEO COUNTY ENERGY STRATEGY

San Mateo County, its cities, residents and businesses have three critical reasons to develop an energy strategy, 1) the ever-increasing financial costs of energy and water, 2) the impact that creating additional energy related infrastructure will have on local communities, and 3) the increasing concern about climate change and its effects. As the State Legislature continues to develop new climate protection legislation, it is in our joint best interest to implement a strategy that puts us in control of the situation rather than being controlled by it.

The Utilities Sustainability Task Force (USTF), an ad hoc energy working group of the Congestion Management and Environmental Quality Committee (CMEQ), is composed of six elected officials and six stakeholder representatives, a project consultant, county staff and others. In February of 2006, the USTF was chartered to consider the future needs of San Mateo County in regards to both energy and infrastructure.

At a time when the cities and the County find themselves under pressure to adopt initiatives to protect the environment, the Energy Strategy shows that energy efficiency and water conservation are still the most effective ways to save money as well as both our precious resources and the environment.

The objective of the San Mateo County Energy Strategy is to frame the discussion and to define practical actions for the cities and the County about energy, water, alternative generation, and climate protection. It will also recommend a countywide effort including goals, strategies, actions and resources. Energy usage as it relates to transportation is not in the scope of this report or its recommendations and it will be addressed separately.

*...ENERGY EFFICIENCY
AND WATER
CONSERVATION ARE STILL
THE MOST EFFECTIVE
WAYS TO SAVE MONEY AS
WELL AS OUR PRECIOUS
RESOURCES AND THE
ENVIRONMENT.*

This Executive Summary emphasizes the need for the county and the individual cities, as a whole, to act on issues related to Energy, Water, and Climate Change.

ENERGY:

Overall, energy use is increasing.

Pacific Gas and Electric Company (PG&E) estimates that a one percent annual increase in overall electricity use for the Peninsula area (which includes San Mateo County) is expected for each of the next five years. This extra one percent annually represents an additional 9.8 megawatts of energy that must be generated and delivered to the region every year. Meeting this demand would require approximately one small new power plant every five years. Additionally, PG&E expects the Peninsula's peak demand to grow by 11 percent in the next decade and San Francisco's peak demand to increase by 12 percent in the next decade.

TRANSMISSION AND GENERATION:

Additional transmission and generation infrastructure will impact cities and the county physically and environmentally.

Keeping in mind that power lines to San Francisco run through San Mateo County, if both counties continue to use more energy every year as expected, the state may require PG&E to develop new power sources and to add new transmission lines through San Mateo County. Some portion of the increased demand may be offset by alternative energy systems such as solar and wind, but the remainder will likely come from natural gas power plants causing potential environmental impact. Meeting peak demands generally requires the use of Peaking Power Plants, which generate higher emissions.

...AN ADDITIONAL 9.8
MEGAWATTS OF
ENERGY...WOULD REQUIRE
APPROXIMATELY ONE
SMALL NEW POWER
PLANT EVERY FIVE YEARS.

WATER:

The demand for water is increasing.

The demand for water is increasing. The communities in San Mateo County support the efficient use of water to meet its current and future water needs. At the same time, these communities are highly dependent upon a single water supply, the Hetch Hetchy regional water system. The system is vulnerable to shortages due to drought and changing weather patterns. A countywide effort is required, as with energy, to ensure a safe, reliable and affordable water supply.

USING LESS WATER,
ESPECIALLY HOT WATER,
SAVES A LOT OF ENERGY.

Water and energy use are closely related. A significant amount of energy is used in the county to pump, heat and treat water. Using less water, especially hot water, saves a lot of energy. This and other factors, especially the potential of drought conditions, favor water conservation.

ECONOMIC IMPACTS:

The costs of energy and water are rising.

The rising cost of energy and water to residential, commercial and industrial consumers and their resulting economic implications cannot be ignored. Energy and water costs continue to increase as the need for greater infrastructure and demand increases. On the other hand, conservation and efficiency can reduce demand, and save current and future economic, social and environmental costs while providing opportunities for other conservation investment.



CLIMATE CHANGE:

There is increasing concern and awareness of climate change.

As carbon dioxide and other greenhouse gases are released into the atmosphere from the burning of fossil fuels such as natural gas, coal and petroleum in the production of energy, the gases trap solar rays inside the earth's atmosphere and cause the temperature of the air, land and oceans to rise. Energy and water consumption are directly tied to greenhouse gas emission.

ENERGY AND WATER CONSUMPTION ARE DIRECTLY TIED TO GREENHOUSE GAS EMISSIONS.

LEGISLATION:

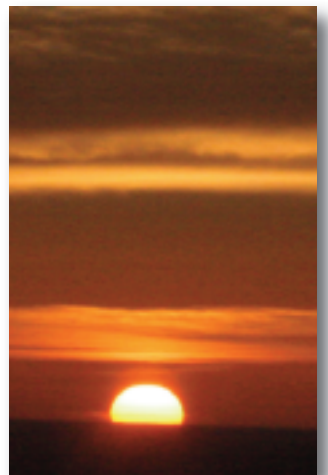
State legislation such as AB32 will impact city and county governments.

California legislation, AB32, calls for a return to 1990 greenhouse gas levels by the year 2020, which represents a 25 percent drop from today's emission rates. Long-term, the law calls for emissions to be reduced to 80 percent below 1990 levels by 2050.

THE STRATEGY:

A countywide strategy, involving the cities and the County, is the most effective approach to guaranteeing sufficient utility infrastructure, to preserve natural resources and to achieve greenhouse gas emission reduction goals.

The following general outline provides the Goals and Strategies contained in the San Mateo County Energy Strategy document. In the document, actions are divided into categories of Easy/Short-term, Intermediate/Medium-term, and Advanced/Long-term.





ENERGY

GOAL - To support the state’s greenhouse gas emission reduction targets, San Mateo County will reduce the amount of power it purchases from utilities to 25 percent below 2005 levels through conservation, efficiency and increased local production of clean energy.

STRATEGY - Make energy efficiency standard practice.

POTENTIAL ACTIONS:

Assess, and where feasible, implement energy-saving opportunities with the latest energy-efficient technologies in government facilities.

Assign staff, hire consultants, a climate action coordinator, and/or enlist the aid of volunteers to create an inventory of government operations emissions and develop a plan to save energy and conserve water.

Develop your city’s plan to reach these energy reduction goals; this may include the creation of an Energy Element, updating General and Strategic Plans, and a climate action plan.

REDUCE THE AMOUNT OF
POWER PURCHASES TO
25 PERCENT BELOW
2005 LEVELS

STRATEGY - Research, promote and invest in cleaner and greener sources of energy.

POTENTIAL ACTIONS:

Install solar electric panels, wind turbine and solar hot water systems, develop cogeneration and alternative fuels at city facilities.

Encourage investment in clean energy systems such as solar electric, wind and solar hot water by providing rebates and either reducing or eliminating permit fees altogether.

Adopt green building standards and ordinances. (The State adopted a statewide Green Building Standards Code, which is voluntary starting in 2009 and becomes mandatory in 2011. The code establishes a minimum level of green building standards and does not preempt local governments from adopting and enforcing their own more stringent policies.)



WATER

GOAL - The San Francisco Public Utilities Commission estimates that San Mateo County will need an additional 5 million gallons of water per day by 2018 to meet projected demands. In order to meet this demand, San Mateo County will need to implement cost-effective and feasible water conservation and recycling programs and develop other local water supplies. San Mateo County will also need to strongly support local water utilities' efforts towards the goal of meeting local water demand.

STRATEGY - Through BAWSCA, support activities in the lower Tuolumne River basin (e.g. additional agricultural conservation) such that projected water needs for San Mateo County in 2030 can be met with no net increase in water diversions from the lower Tuolumne River.

POTENTIAL ACTIONS:

Establish ongoing communication with BAWSCA and promote dissemination of information related to legislation and other efforts to encourage agricultural conservation in the lower Tuolumne River basin.

STRATEGY - Make water conservation and reuse of water standard practices.

POTENTIAL ACTIONS:

Recommend that city facilities and businesses use drought-tolerant plants and appropriate water conserving infrastructure through drip irrigation, intelligent water controllers and high efficiency toilets.

Develop a recycled water system for city facilities and adopt tougher water conservation ordinances including a water-conserving rate structure. Also increase public awareness of the value of water and the importance of water conservation and landscape water use efficiency.

Offer financial incentives and rebates to offset the purchase price of water conserving products such as high-efficiency washing machines and low flow water fixtures.

Update General Plans, (land use, circulation, housing, conservation, open space, noise and safety), and municipal codes to include water conservation policies and support the new state-mandated landscape guidelines.

CONSERVE WATER BY
14 GALLONS PER CAPITA
 PER DAY



COLLABORATION

GOAL - San Mateo County will partner with the public utilities and work across city boundaries to address environmental challenges more effectively and efficiently.

STRATEGY - Collaborate with public utilities for mutual benefit.

POTENTIAL ACTIONS:

- Review quarterly updates from PG&E about future utility projects and take action as required.
- Support passage of net-metering legislation to allow cities to “sell” their excess self-generated energy to the utility and apply the credits to other government accounts. (In 2008, the Governor signed AB2466 which authorizes net metering. Cities and the County will follow the implementation of this bill).
- Establish a San Mateo County Energy Watch program through a Local Government Partnership with PG&E.

STRATEGY - Collaborate with other jurisdictions to save time and resources.

POTENTIAL ACTIONS:

- Collaborate with other jurisdictions that have similar results from their baseline inventories.

PARTNER WITH THE PUBLIC UTILITIES AND WORK ACROSS CITY BOUNDARIES

ECONOMIC OPPORTUNITIES

GOAL - Support the clean technology sector to strengthen the long-term economic health of San Mateo County.

STRATEGY - Encourage clean technology businesses to locate in San Mateo County.

POTENTIAL ACTIONS:

- Invite venture capitalists to speak at local forums to educate the broader community about the importance of the clean and green technology sectors.
- When in the market for alternative energy or energy-saving products, buy from local companies and take advantage of technical evaluations and group discounts.



STRATEGY - Help accelerate the adoption of clean technologies, both locally and globally.

POTENTIAL ACTIONS:

- Recognize or feature local green businesses at City Council meetings or other public venues.
- Consider incentives if businesses achieve Green Business Certification.
- Initiate competition among different retail districts or office parks to encourage businesses to become certified as a Green Business. Urge consumers to patronize local green businesses.

ACCELERATE THE ADOPTION OF CLEAN TECHNOLOGIES TO SUPPORT ECONOMIC GROWTH

LEADERSHIP FROM THE TOP

GOAL - San Mateo County will encourage environmental leadership from the top in the public sector, the business community and with its residents to achieve the goals of the Energy Strategy.

STRATEGY - Invest in environmental expertise in local government.

POTENTIAL ACTIONS:

- Identify and train a point person for environmental issues on City Council and on staff. Take advantage of free or low-cost training opportunities offered by Energy Watch, the Pacific Energy Center, RecycleWorks, Build It Green and other organizations.
- Share resources among several cities with a similar energy profile.
- Establish a staff task force to identify, analyze, plan, prioritize, and implement energy-saving measures in civic facilities. Consider convening a citizen’s committee to work on issues in the community.
- Secure resources for additional staff rather than making this part of existing staff responsibilities. (From energy savings, grants, and collaboration).

ENCOURAGE LEADERSHIP FROM THE TOP IN ALL SECTORS

STRATEGY - Recruit and support community leaders at every level.

POTENTIAL ACTIONS:

- Partner with residents, businesses, local Chambers of Commerce, nonprofits, schools and other groups to influence resource-efficient behavior in all parts of the community.
- Leverage and support state and regional public outreach and education programs.
- Post energy efficiency information and materials available through all venues and encourage a competition between neighborhoods for the most innovative energy and water saving ideas.

NEXT STEPS:

The City/County Association of Governments (C/CAG) proposes the following next steps to move this important project forward:

C/CAG will provide presentations to the cities, asking that they adopt this document, commit to working collaboratively with the cities and the County, and release energy use information to support these goals.

C/CAG will work with County staff to fund a position to support the cities in this effort.

C/CAG will schedule quarterly, relevant educational presentations, bi-monthly information sharing meetings, and an annual progress report to the C/CAG board of directors.

C/CAG will provide incentives to promote the completion of government operation inventories for all cities in the County by the end of March 2009.

CONCLUSION:

The San Mateo County Energy Strategy recommends immediate action to promote energy efficiency and water conservation measures. Working collaboratively, we can do a lot to reduce costs, save our resources and the environment. Critical to achieving the goals set forth in the San Mateo County Energy Strategy is to engage all the cities and the County in adopting and implementing the proposed strategies. The San Mateo County Energy Strategy also strongly urges the creation of new sources of alternative energy generation and the exploration of new water sources including recycled water.

