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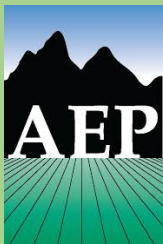
Best Practices in Climate Action Planning



Association of Environmental Professionals

Climate Change Committee

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AEP Climate Change Committee 2018 Final White Paper Best Practices in Implementing Climate Action Plans

Prepared by members of the AEP Climate Change Committee, which consists of leaders of climate action planning practices from consulting firms and agencies that lead many of the local greenhouse gas reduction planning efforts across California. The Committee focuses on advancing the professional practice of local climate action planning through periodic publication of white papers and conference presentations, as well as interaction with state, regional, and local agencies.

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Best Practices in Implementing Climate Action Plans

Introduction

Local agency Climate Action Plans (CAP) are a key mechanism in California to promote local reductions in greenhouse gas emissions (GHG). These CAPs represent a local agency's program to reduce GHG emissions throughout the community; thereby contributing to statewide efforts to address Climate Change.

There is substantial technical and policy guidance regarding the development of a Climate Action Plan. The Association of Environmental Professionals Climate Change Committee (AEP CCC) has authored several best practice White Papers discussing technical elements of a Climate Action Plan including recommendations on how to prepare a GHG inventory. There is also statewide guidance on how to address climate change issues in General Plans and Environmental documents such as Environmental Impact Reports (EIR), developed by agencies such as the Office of Planning & Research (OPR) and the California Air Pollution Control Officer's Association (CAPCOA). Detailed GHG accounting protocols have been developed by ICLEI and WRI. Guidance to CAP preparation has also been developed by ICLEI and the State Energy and Efficiency Collaborative (SEEC). Environmental and planning practitioners regularly share information regarding Climate Action Plans at conferences, workshops, and meetings.

Much of this information is related to the development of a Climate Action Plan itself. Because of this widely available information, there is a relatively high level of standardization between CAPs prepared for different jurisdictions. Common elements usually include:

- A GHG inventory which is an assessment of GHG emissions by sector which reflect current emissions
- GHG reduction measures
- GHG reduction targets
- A forecast of future year GHG emissions
- Some statement regarding implementation of the CAP

Though not required to do so, some agencies may choose to subject their CAP to environmental analysis under the California Environmental Quality Act (CEQA). The benefit of this analysis is that it allows follow-on efforts, such private develop projects, to rely on the CAP to mitigate GHG impacts. CAP's which allow for subsequent tiering under CEQA are known as "Qualified CAP's".

While GHG emissions can be estimated annually, only a few California jurisdictions prepare an annual GHG inventory. As a result, CAP progress in between infrequent GHG inventory updates

must rely on tracking of individual measure implementation. However, only a few California jurisdictions track their CAP implementation on a frequent or annual basis. As a result, the evidence of the effectiveness of CAP's overall is relatively limited.

The purpose of this White Paper to shed light of how Climate Action Plans are being implemented after their completion. This paper first looks at how GHG reduction measures are being implemented at a Statewide level and what type of measurable outcomes have occurred. The second major topic is a survey of 35 completed CAPs selected from a statewide database. This initial survey provides a high-level overview of these CAP's to determine whether additional evaluation would be warranted. This more detailed review is the third major topic of the paper, in which a "deep dive" of each CAP determines how much implementation has occurred over since completion of the CAP. The paper then concludes with a series of recommendations regarding potential best practices for CAP implementation.

Statewide Climate Change Efforts (Rich)

Since passage of AB 32 in 2006, the state has made substantial progress in reducing GHG emissions overall. Since 1990, GHG emissions have reduced in the industrial sector, electricity generation, and commercial and residential fuel use, while they have increased in the transportation, agriculture, high GWP gases, and landfill sectors.

Key drivers of changes are as follows (See Tables 1 and 2 below):

- **Population:** California population increased by 32% from 1990 to 2015 while GHG emissions overall only increased by 1 % resulting in a 24% decrease in per capita emissions. This per capita decrease accelerated after 2006.
- **Economy:** Due to changes in the method of calculating Gross Domestic Product (GDP) in the late 1990s, an accurate comparison cannot be made between 1990 with 2006 and 2015. Between 2006 and 2015, GDP increased by 14%, while GHG emissions per \$GDP declines by 19% indicating increasing economic GHG efficiency over the period.
- **Transportation:** Overall Vehicle Miles Travelled (VMT) have increased by 30% since 1990, in parallel to a population increase of 32%. Most of this increase was between 1990 and 2006 as overall VMT from 2006 to 2015 only increased by 2%. Due to the Great Recession, VMT declined from 2008 to 2011, but has been increasing by 1% per year since. Onroad GHG emissions only increased by 8% from 1990 to 2015 due to a 16% improvement in vehicle efficiency, most of which occurred after 2006 due to more stringent fuel economy standards and changing vehicle technology.
- **Electricity:** Electricity consumption increased by 24% from 1990 to 2015, but there was no increase between 2006 to 2015 despite population of 8% and GDP growth of 14%

over the same period indicating a substantial increase in electricity efficiency. Electricity generation emissions factors declined by 22% in 2006 and 38% in 2015 compared to 1990 reflecting an increase in non-GHG sources of electricity in the state's electricity portfolio. Of note, in-state generation saw no reduction in GHG emissions from 2006 to 2015 despite increasing in-state renewable power generation, due to the closing of the San Onofre Nuclear Generation Station in 2013.

- **Natural Gas:** Natural Gas consumption declined by 4% from 1990 to 2006, likely due to increasing efficiency improvements in residential and commercial usage.
- **High GWP:** GHG emissions due to High-GWP gases increased by nearly 500% from 1990 to 2015, increasing rapidly from 1990 to 2006 and continuing to increase from 2006 to 2015. This is due to the phasing out of ozone-depleting substances (ODS) with implementation of the Montreal Protocol which resulted in replacements that are potent GHG emitters. While the rate of increase has slowed somewhat from 2010 onward, GHG emissions due to ODS substitutes were still rising by 5 percent annually in 2015.
- **Landfills:** Annual waste generation increased by 76% from 1990 to 2015, but declined by 3% between 2006 and 2015. Waste generation per capita increased by 31% from 1990 to 2015 but declined by 10% from 2006 to 2015. Waste diversion from landfills increased from 17% in 1990 to 63% in 2006 resulting in reduction in waste disposed in landfills by 22% over the same period. Landfill GHG emissions declined by 31% between 1990 and 2006 indicating greater landfill methane capture, with most of the improvement after 2006.

Significant statewide strategies resulting in this reduction in GHG emissions includes:

- **Building Energy:**
 - Building codes related to residential and commercial buildings
 - Greater use of renewable energy sources by public and private utilities
 - Energy retrofit programs (either PACE or incentive programs)
- **Onroad**
 - Vehicle fuel efficiency standard
 - Heavy-duty vehicle initiatives
 - Transit investment
 - SB 375 efforts to limit VMT
 - Cap & Trade
- **Waste**
 - Continued ramp up waste diversion
 - Landfill Methane Controls
- **Industrial Sources**
 - Cap & Trade

Table 1: California GHG Emissions, 1990 to 2015

Year/Period	1990	2006	2015	90-15	90-06	06-15	90-15
Sector	MMTCO ₂ e				% change		
Transportation	150.6	184.5	164.6	14.0	22%	-11%	9%
<i>On Road</i>	137.9	166.9	149.4	11.5	21%	-10%	8%
<i>Other</i>	12.7	17.6	15.2	2.5	39%	-13%	20%
Industrial	97.1	92.9	91.7	-5.4	-4%	-1%	-6%
Electric Power	108.1	104.5	83.7	-24.4	-3%	-20%	-23%
<i>In-State Generation</i>	47.5	49.9	49.9	2.4	5%	0%	5%
<i>Imported Electricity</i>	60.6	54.7	33.7	-26.8	-10%	-38%	-44%
Commercial and Residential	44.2	42.9	37.9	-6.3	-3%	-12%	-14%
Agriculture	25.6	35.7	34.7	9.1	40%	-3%	36%
High GWP	3.2	10.3	19.1	15.8	222%	84%	494%
Landfills	7.5	7.7	8.4	1.0	3%	10%	13%
TOTAL	437.4	478.7	440.4	2.9	9%	-8%	1%

Source: CARB. Note: Excludes carbon sinks; all other sectors included total, but not all subsectors shown above.

Table 2: GHG Emissions, Comparison Metrics, 1990 - 2015

Metrics	1990	2006	2015	90-15	90-06	06-15	90-15	Source
Population	29,558,000	36,116,202	38,912,464	9,354,464	22%	8%	32%	CDOF
GHG Emissions per Capita	14.8	13.3	11.3	-3.5	-10%	-15%	-24%	Calculated
GSP (\$2009 million) (NOTE 1)		1,975,457	2,249,711			14%		CDOF
GHG Emissions (MT per \$1,000 GSP)		0.02	0.02			-19%		Calculated
VMT (annual million miles)	258,926	327,478	335,539	76,613	26%	2%	30%	USDOT
On-road Vehicle Efficiency (MT GHG/mile)	0.000533	0.000510	0.000445	-0.000087	-4%	-13%	-16%	Calculated
Electricity Consumption (GWh)	457,941	566,701	568,010	110,069	24%	0%	24%	CEC
Electricity Emissions Factor (MT/GWh)	235.95	184.45	147.30	-88.6	-22%	-20%	-38%	Calculated
Natural Gas Consumption (Million Therms)	12,724	13,074	12,253	-471	3%	-6%	-4%	CEC
Waste Generation (million tons)	50.9	92.2	89.73	38.8	81%	-3%	76%	Calrecycle
Waste Disposed (million tons)	42.4	42.2	33.2	-9.2	0%	-21%	-22%	Calrecycle
Waste Generation per capita (tons/cap)	1.7	2.6	2.3	0.6	48%	-10%	34%	Calculated
Landfill GHG (MTCO ₂ e/waste disposed)	5.7	5.5	4.0	-1.7	-3%	-28%	-31%	Calculated

NOTE 1: GDP was converted from SIC to NAICS in 1997 and thus 1990 GDP cannot be directly compared to 2006 or 2015.

Initial CAP Survey

While there has been significant statewide progress towards reducing GHG emissions, the picture regarding local initiatives related to climate change is less clear. To get a more complete idea of local climate action, members of the Climate Change Committee determined that it would be appropriate to conduct detailed reviews of various Climate Action Plans throughout the state to gauge progress made towards implementation. Given that there are over 500 municipalities in California, it would not be feasible to survey each Climate Action Plan individually. Therefore, some type of sampling was needed. To determine which CAPs would be surveyed, several options were considered.

The first option would be to simply select those CAPs members of the Climate Change Committee worked on previously. This approach would have the advantage of allowing Committee members to complete the surveys easily as they would have the greatest familiarity with their own work. However; this approach could introduce bias in the selection process and may not be fully reflective of conditions in different geographic areas of the state.

The second option would be to randomly select CAPs and survey those. The advantage of this approach is that it is an unbiased effort; however, members of the Committee had concerns that a truly random sample could produce anomalous results if a random sample yielded more CAPs from one area of the state versus another.

In the end, the Committee adopted a hybrid approach in which an initial sample of CAPs were obtained through a random sample and Committee members made additional recommendations on further CAPs to review. The Committee further recommended that this initial survey focus on helping to refine the list of CAP for a more detailed review.

The random sample was selected from a statewide database of CAPs maintained by Cal Poly San Luis Obispo. Faculty, staff, and students compiled this database through extensive research and outreach throughout California over a multi-year period. The database currently contains references to over 500 municipal CAPs in California.

From that list, the follow CAP’s were randomly selected:

Emeryville	Newark	Oroville	Walnut Creek
Moraga	Palmdale	Pomona	Duarte
Lawndale	San Anselmo	Belvedere	Sausalito
Merced	Calistoga	Laguna Beach	La Habra
Laguna Woods	Corona	Murrieta	Citrus Heights
Hesperia	Redlands	National City	Lodi
Tracy	Paso Robles	San Luis Obispo	Hillsborough

Hillsborough	Colma	Santa Barbara	Tulare County
Marin County	San Mateo County	Yolo County	Riverside County
Mono County			

This initial random sample yielded CAPs for a diverse group of municipalities throughout the state, including those in Southern California, the Central Valley, the Central Coast, the Bay Area, and Northern California. Both small (less than 25,000 population) and medium sized cities (25,000 to 100,000) were well represented.

Members of the Committee reviewed this initial list and made three additions to the list, which were the City/County of San Francisco, the City of San Diego, and the City of Fresno. These additions ensured that the larger jurisdictions were included in this effort as the initial random sample had not included any City larger than 200,000 people.

Each Climate Change Committee member then conducted a survey of the CAP through review of the actual CAP documents and other publicly available information. This survey considered the following questions:

1. Was the Climate Action Plan completed and formally adopted?
2. Was an environmental document completed for the CAP?
3. Is the CAP an update of the previous CAP?
4. Which target years does the CAP include?
5. Does the CAP include a list of mitigation measures?
6. Does the CAP include both voluntary and mandatory measures?
7. Do the GHG mitigation measures describe the party responsible for implementation?
8. Do the GHG mitigation measures include ones which are the responsibility of the jurisdiction to implement?
9. Are there quantifiable outcomes tied to the mitigation measures?
10. Does the CAP describe any monitoring or feedback process?
11. Does the CAP contain any information regarding a monitoring tool?
12. IS there a recommendation for regular updates of the GHG inventory, measures, or both?
13. Has the jurisdiction completed any implementation reports?
14. Is there a specific department or person who is described as being responsible for the implementation of the CAP?
15. Are there any notations about the CAP being completed with the use of outside non-profit resources including ICELI or Civic Spark?
16. Was the CAP completed using any kind of grant resources?
17. Was the CAP completed using any consultant assistance?

A copy of the survey results is provided in Appendix A for reference. Some highlights of this initial survey are described below in terms of six key observations.

Observation #1- Broad range of documents addressing GHG reductions

The majority of the documents surveyed were traditional Climate Action Plans and referred to as such. However; other documents were included in the survey which addressed GHG reductions including several documents which were focused on the broader topic of sustainability (Tracy and Redlands) while others which were targeted towards energy usage (Arcata, Palmdale, Pomona, Duarte, and Lawndale). The Mono County Plan touches on the very broad issue of resource usage on a countywide basis. However; nearly all of the documents surveyed addressed Climate Change in a meaningful way (32 out of 35).

Observation #2- Formal Adoption of the CAP was common

The survey determined nearly 70 percent of the CAPs were formally adopted by the Agency's legislative body (24 out of 35), based on a review of available records such as the Agency's website. Where available, reviewers looked through posted meeting agendas and minutes to determine whether a CAP had been formally adopted or not. In some instances, the adoption of the CAP was concurrent with other actions taken by the Agency, such as the adoption of a CAP as part of a General Plan update.

Observation #3- Formal Environmental Analysis of the CAP was not common

However; the level of environmental analysis associated with the Climate Action Plan was far less frequent. Only 15 of the 35 CAP's conducted any type of environmental review (43 percent). In some instances, this environmental review was a standalone document like an Environmental Impact Report (EIR) or Negative Declaration (ND). In other instances, the environmental analysis occurred in conjunction with another action, such as the bundling of a CAP with a General Plan Update and an EIR which addressed both documents. Whether a CAP has been subject to some type of environmental analysis is an important element to determine whether follow-on projects can rely on the CAP to mitigate GHG impacts.

Observation #4- Almost All CAP's Have Robust GHG Mitigation Measures

A key element of a CAP are GHG reduction measures, which outline the specific policies and actions which will be implemented to reduce GHG emissions associated with the jurisdiction. This review found that nearly every document contained some mitigation measures. 91 percent of the CAP's included some form of measures to reduced GHG emissions associated with the jurisdiction (32 out of 35). 29 out of the 35 CAP's had a mix of voluntary and mandatory GHG reduction measures, which meant that the local agency was accepting some responsibility for the mitigation measure. 25 out of the 35 CAP's even described which party would be implementing the specific mitigation measure. Many of the CAP's reviewed contained detailed descriptions of which element of the local government would implement the measure. For example, the CAP might assign responsibility to the Public Works Department, the Planning Department, or other Departments within the agency.

Observation #5- Many CAP's Address Implementation

The majority of the CAP's (27 out of 35 or 77 percent) included some description of a proposed monitoring, reporting, or feedback process. These same 27 CAP documents also contained some recommendation regarding regular updates to the CAP.

Observation #6- Few Agencies Report Progress

However, the experience with regular reporting was much less common. Reviewers were only able to locate monitoring or implementation reports on 7 out of the 35 documents reviewed (20 percent). What this means is that reviewers were only able to find published reports on implementation for a fraction of the CAP's reviewed.

Once this initial review was completed, the reviewers were left with a partial picture on CAP implementation.

Some of the positive elements included:

- The initial survey found a broad range of documents which were addressing Climate Change including standalone Climate Action Plans, Climate Actions Plans incorporated into General Plan updates, and plans addressing general sustainability topics. Only three of the documents reviewed by the Committee failed to address Climate Change in a meaningful way.
- Many of the CAP's were formally adopted by the decision-making body of the local agency such as a City Council or Board of Supervisors. Sometimes, the CAP was adopted in conjunction with other documents such as a General Plan. Other times, the CAP was adopted as a stand-alone document.
- The vast majority of the CAP's had well defined GHG reduction measures, including a mix of mandatory and voluntary measures. The vast majority of the CAP documents also identified which party would be responsible for implementing the measure in question.
- The majority of the CAP documents (77 percent) included some discussion regarding implementation, including recommendations for regular updates and monitoring.

The reviewers also noted some potential challenges:

- Only 15 of the 35 CAP's reviewed conducted any kind of environmental analysis, meaning that a majority of the CAP's were not considered to be "Qualified CAP's." This lack of environmental analysis limits the ability of other projects to use the CAP to streamline GHG analysis for any follow-on projects.
- Seven of the jurisdictions surveyed (20 percent) prepared any kind of regular monitoring or reporting document.

After this initial review, the Committee was left with an incomplete picture regarding CAP implementation. Three possible scenarios were identified:

- Scenario #1- Implementation is more frequently than initially thought and jurisdictions are simply not reporting their progress. Under this scenario, there are GHG reductions occurring but not being reported
- Scenario #2- Jurisdictions are not actively implementing their GHG reduction measures, however, GHG reductions are occurring because of other effects such as state/regional GHG reduction measures or actions of private entities.
- Scenario #3- Jurisdictions are making limited progress regarding implementation and limited GHG reductions are occurring because of the lack of progress by the local agency

The Committee felt that it did not have enough information to determine which of these three scenarios were the most common and required further study. The reason for obtaining additional information is to inform policy makes, jurisdictional staff and consultants on how to develop and implement Climate Action Plans that produce meaningful results. Each of the scenarios above represent a different possible response.

For example, if many jurisdictions are making meaningful progress with GHG reduction but lack the resources to prepare regular reports, then perhaps efforts should focus on making it easier for local agencies to report on their progress. Otherwise, if local agencies are simply not implementing their GHG reduction measures, then perhaps it would be appropriate to reconsider how CAP's are developed.

CAP Deep Dive

To gain greater clarity regarding the status of any CAP implementation, the Committee members identified a subset of CAP documents to review in further detail. This subset included the following documents:

- City of San Diego
- Marin County
- City of Emeryville
- City of Murrieta
- Mono County
- City/County of San Francisco
- City of Hesperia
- City of Paso Robles

The eight CAP's above were selected to reflect a broad cross-section of CAP documents across varying agencies. The list above includes both large and small agencies throughout Northern and Southern California.

The mechanism for this more detailed review was an interview of the jurisdictional staff to get a better understanding of what elements of the CAP had and had not been implemented. The following questions were touched on as part of this interview survey:

1. Was the CAP adopted and if so, please describe the process?
2. Was any environmental analysis completed for the CAP?
3. Did the CAP lead to any staffing changes in the jurisdiction?
4. Are there staff who are assigned to oversee the CAP?
5. Does the City work with any outside parties (consultants, others) to oversee the CAP implementation?
6. Did the adoption of the CAP lead to any significant changes in the jurisdiction's budgets?
7. Does the jurisdiction have any dedicated funding sources related to the CAP implementation?
8. Can you identify three significant policies that the jurisdiction implemented because of the CAP?
9. Can you identify three significant programs implemented by the jurisdiction based on the CAP?
10. What would you say is the most noteworthy action taken by the jurisdiction related to the CAP?
11. Is the jurisdiction tracking policy or programmatic changes based on the CAP?
12. Is the jurisdiction tracking changes in outcomes based on the CAP?
13. Has the jurisdiction updated the inventory since the completion of the previous CAP?
14. Has the jurisdiction completed any additional analysis of implementation actions?
15. Does the jurisdiction prepare any regular reporting regarding CAP implementation?
16. If the CAP is an update of a previous CAP, how has that process affected implementation of any CAP measures?
17. Does staff provide regular reports to elected officials on the CAP?
18. Are there any external champions for the CAP who are not City Staff or elected officials?
19. What are three main factors that have led to implementation of the CAP strategies?
20. If limited implementation has occurred, what are the three main factors associated with this lack of implementation?

Staff from the City of Paso Robles was unable to participate in an interview for the survey, which removed them from the analysis.

After the surveys were conducted, five key conclusions were noted as described below.

Conclusion #1- All of the Agencies Surveyed Are Implementing Some Climate Change Strategies

Questions #9 and #10 related to key programs and initiatives which each jurisdiction had completed because of the CAP. Regardless of the size of the agency or its resources, every agency has implemented some tangible strategy to address Climate Change. The range of strategies includes:

- Zoning code amendments to allow more rooftop solar installations (City of Hesperia)
- Reducing energy use in municipal buildings (Mono County)
- Facilitating EV chargers in new development (City of Emeryville)
- Using 100 percent renewable energy for municipalities (Marin County)
- Conducting a Community Choice Aggregation Feasibility Study (City of San Diego)

Many of the strategies identified by the local agencies related to municipal operations, local building requirements, and transportation. Based on these responses, we would be able to conclude that there is likely to be action through many agencies which further the Climate Reduction Goals of the CAP.

Conclusion #2- Larger Agencies Were Able to Achieve Higher Levels of Implementation

As noted above, Questions #9 and #10 related to CAP implementation actions. It was apparent that the larger agencies surveyed (City of San Diego, Marin County, and City of San Francisco) had a greater track record of completed actions, as compared to the smaller jurisdictions. It was apparent that both the breadth and depth of accomplishment was greater.

For the City of San Diego, City Staff was able to cite a number of tangible accomplishments such as the completion of a Citywide Transportation Master Plan, an Urban Forestry strategy, and a new resource recovery center at the Miramar landfill. GHG emissions in San Diego dropped 3.4% in the first full year since CAP adoption in 2015 and GHG emissions in 2016 were 19% below 2010.

Marin County demonstrated a significant level of accomplishment related to the use of renewable energy. Marin County also has a joint effort with Pacific Gas & Energy (PG&E) to offer energy retrofit incentives. Marin County even evaluated the effectiveness of their Climate Change strategies by noting that 2015 emissions were 15 percent below 1990 levels based on their most recent Climate Action Plan.

One outlier to this finding is the City of Emeryville, which noted some level of implementation related to the CAP. One key accomplishment for the City was to commit the City to use 100 percent renewable energy for City buildings, which was done by enrolling the City in a local Community Choice Aggregation (East Bay Community Energy).

Conclusion #3- Dedicated Staff is Key

The City of San Diego has a Sustainability Manager and is in the process of hiring a Sustainability Director. The City also indicated that it is in the process of hiring several additional staff members related to key initiatives such as the effort to implement the use of 100 percent renewable energy in the City. Marin County has a three-member Sustainability Team including two Planners and a Marketing and Outreach Specialist.

Other agencies with more limited implementation often had no dedicated staff. In most instances, existing staff were tasked with implementation of the CAP. For example, the Mono County Resource Efficiency Plan is the responsibility of the Community Development Department. However; the Community Development Department is also tasked with many other activities such as short-range and long-range planning, development review, and other activities.

Similar to Mono County, other agencies tasked existing staff and departments with implementing the Climate Action Plan. One example is the City of Hesperia where no staff was hired to oversee the implementation of the City's CAP.

Again, the City of Emeryville is the outlier in this analysis. The City hired no new staff but has been able to implement some of the CAP Strategies.

Based on the information above, we can generally conclude that hiring new staff or making additional resources available to implement the CAP is a key factor in whether the jurisdiction is able to succeed in this effort or not.

Conclusion #4- Funding and Political Support is a Key Challenge CAP Implementation

Question #20 asked agencies what where the main barriers they faced in implementing their CAP's. The main issues cited were funding, political support, and staffing (previously addressed above).

Most of the agencies surveyed noted funding as one of the main reasons why implementation had been limited. Even the City of Emeryville, which has been able to implement some of its CAP measures, said that there is currently no dedicated funding in their community for CAP implementation. Both Mono County and Hesperia noted this issue as well. The City of Hesperia did specifically mention that there have been some efforts to secure funding for specific projects, such as grants for bicycle and pedestrian projects. However, there was a consistent overtone of funding being a significant challenge for these agencies. Those agencies which have achieved a high level of CAP implementation did not note funding as a challenge.

A related item is also one of political support. Several of the agencies which have faced challenges implementing their CAP's noted that there is a lack of political support and acceptance in their community (Mono County and Hesperia). The City of Emeryville noted that there was broad community support but few specific champions. Both Marin County and City of San Diego indicated that there was both broad community support and support within their agency to implement the Climate Action Plan. The City of San Diego has a specific sustainability budget adopted annually and annual funding of CAP and related initiatives has ranged from \$127 million to \$158 million in the three years since CAP adoption.

Conclusion #5- Those Agencies that Have Something Significant to Report are Reporting Regularly

At the beginning of the Deep Dive process, members of the Committee were uncertain whether the lack of reporting was due to a lack of progress or they simply were not reporting their progress. Based on the interviews, we determined that the agencies which are implementing their CAP's at a high level are also regularly reporting on their progress. Those that aren't making significant progress are not preparing regular reports.

As an example, Marin County noted that regular reports are submitted to the Board of Supervisors and the staff has been tracking progress both on measures and overall GHG emissions on an on-going basis. The City of San Diego has been making similar reports.

Mono County indicated that there are some reports on a project-specific basis but limited comprehensive reporting. In addition, both Emeryville and Hesperia indicated that there was no regular reporting.

Recommendations

The findings of the survey paint a mixed picture regarding the implementation of Climate Change activities and programs at the local government level. Based on the results, there would appear to be mainly two groups of agencies.

First, you have larger agencies which are well funded and staffed. These agencies have dedicated staff to implement the CAP and are able to regularly report on their progress. These agencies also have a high level of political and community support. These agencies also have the resources to integrate their CAP strategies into their ongoing activities and also to pursue additional outside projects.

Second, you have smaller agencies which lack the funding and staffing to achieve considerable progress. In many instances, the agency staff does what it can within their constraints but have to juggle their work on any CAP implementation with other on-going demands on their time. In addition, these agencies lack the resources to report on what progress they have made.

Based on these findings, we would therefore offer the following recommendations.

1. The State should consider providing on-going resources to agencies to assist with their CAP implementation. These resources could be offered in terms of money or staffing assistance. We can not expect agency staff to be proactive in implementing their CAP strategies if they are also being asked to perform other functions within the agency. We would note that many of the agencies which completed CAP's did so with funding from the State through grants or received staffing assistance from programs like CivicSpark.
2. Air Districts, regional governments, or other regional entities could help with CAP monitoring by providing GHG inventory assistance. Several notable examples: the Los

Angeles Regional Collaborative (LARC) supported the preparation of GHG inventories for all 88 cities in Los Angeles County. San Bernardino Council of Governments (SBCOG), formerly San Bernardino Associated Governments (SANBAG) supported regional GHG planning in the past including inventories for 21 cities in San Bernardino County and is initiating a new effort to include updated GHG inventories for most of the cities in the next year. Preparation of multiple GHG inventories at the same time is much more efficient than one by one preparation. In concept, a regional entity could prepare GHG inventories for local jurisdictions on a more frequent (every 2 years? Every 3 year?) basis than individual cities, in particular, smaller cities. This would help with tracking and implementation.

3. Consultants preparing CAP's should also consider agency resources when preparing CAP's. If an agency is not able to provide dedicated staffing for the CAP, it may be appropriate to craft the measures in such a way that they are more easily implemented by the local agency staff with their available resources.
4. Given the various challenges which these local agencies face, there may be opportunities for some of the regular activities associated with reporting or implementation to be done in a centralized fashion. For example, Air Districts, MPO's, COG's, or other regional agencies could assist with reporting and monitoring. Performing such functions at a regional level could provide a cost-effective way to do so, particularly if the State were to allocate funding to this activity, which would allow these agencies to hire additional staff to focus on this issue.
5. We noted a wide disparity in political attitudes towards Climate Change. Several of the survey responses noted a lack of support regarding the CAP. We would recommend that the State and other agencies consider whether resources should be invested to support local entities engaging with their constituents about the dangers of Climate Change, the co-benefits of actions to reduce GHGs for local economic development and health, and the need for policies to address the issue. Another education campaign from the top-down is not what is needed – that has already reached the supportive. Instead, this needs to be locally led engagement that promotes a locally appropriate dialogue. In some areas, addressing Climate Change for the sake of Climate Change may not be politically viable, but every part of California wants a thriving economy and a healthy environment. The health and economic benefits if many of the measures used to lower GHGs may be more important to some communities than the global climate change benefits.