Regional Climate Action Plans: A New Approach to Facilitating Local Government Greenhouse Gas Reductions

Betty Seto, Amy Rider and Amy Jewel, DNV KEMA Energy & Sustainability
Jesse Langley, Southern California Edison

ABSTRACT

Due to a confluence of political climate and favorable funding sources, local governments throughout California are on the forefront of planning efforts to reduce greenhouse gas (GHG) emissions. While multiple cities and counties across the nation have developed climate action plans (CAPs) to measure and reduce greenhouse gas emissions, these efforts have largely been completed by individual local governments. Regional organizations such as metropolitan planning organizations (MPOs) are now stepping in to develop initiatives, tools and templates to ensure that all their member cities develop strategic plans for energy and GHG emissions reductions.

This paper focuses on case studies of regional CAP projects sponsored by the City/County Association of Governments of San Mateo County, Kern Council of Governments and Coachella Valley Association of Governments. Regional CAP projects are found to offer many benefits, including economies of scale, energy resource savings and consistency in regional planning efforts. Regional CAPs are an opportunity to leverage existing programs and resources already available at the regional level. These programs include utility-funded partnership programs for energy efficiency and conservation and transportation planning initiatives.

This paper examines the similarities and differences in project scopes and effective strategies for engaging with diverse communities. As the drivers for climate action planning continues to evolve, regional and sub-regional approaches will remain important resources for local governments.

Introduction

In the absence of federal legislation or an international post-Kyoto Protocol agreement on climate change, sub-national entities are continuing to take the lead on actions to reduce greenhouse gas emissions. Many cities and counties across the nation have developed climate action plans (CAPs) that establish emission reduction goals and associated greenhouse gas (GHG) reduction strategies, many since the late 1990s and early 2000s. However, despite the consensus that such plans promote environmental stewardship and potential community-wide cost savings, many local governments lack the time and resources to complete components of a climate action plan. To address this gap, regional agencies are now taking the lead to develop initiatives, tools and templates that can be used by member agencies. In this paper, we highlight the efforts of county-level actions and examine how regional CAP projects assist local governments to identify and implement GHG reduction programs that complement and build upon existing initiatives.

Background

While many cities and counties developed climate action plan (CAPs) in the late 1990s and early 2000s, these early plans were intended to show that local governments were taking the lead to address climate change in the absence of state or federal legislation. In 2006, California passed Assembly Bill 32 (AB 32) to reduce statewide greenhouse gas emissions to 1990 levels by 2020 and 80 percent below 1990 levels by 2050. The California Environmental Quality Act (CEQA) was subsequently amended to require that public agencies analyze and mitigate the effects of greenhouse gas emissions in environmental review documents. In 2010, the Bay Area Air Quality Management District (BAAQMD) issued the first set of guidelines related to using a qualified GHG Reduction Strategy for the reduction of GHG emissions in a CEQA analysis (BAAQMD 2010). The guidelines outlined requirements for identifying a CAP as a qualified GHG Reduction Strategy. For the first time, local government CAPs had a regulatory compliance value. A qualified GHG Reduction Strategy (also known as a qualified CAP) could now be used as a mitigation strategy for local government projects and programs that must undergo CEQA review prior to adoption.

The BAAQMD guidelines require that a qualified GHG Reduction Strategy include a baseline GHG inventory, set a target emissions reduction level and "specify measures or a group of measures, including performance standards, that substantial evidence demonstrates…would collectively achieve the specified emissions level" compliant with AB 32 (BAAQMD 2010, page 4-8). For local government communities, GHG emissions related to transportation and the built environment are the two largest sources of emissions. As such, measures related to energy efficiency, energy conservation and renewable energy are key strategies to be included in a qualified CAPs.

As stated in the California Long-Term Energy Efficiency Strategic Plan, local governments are well positioned to set ever-increasing goals for reducing energy use in their communities and sharing leading-edge ideas, implementation strategies, and leveraging local lessons learned to inform broader policy changes related to energy efficiency. Unfortunately, these leadership activities can result in a complicated hodgepodge of results. The California Long-Term Energy Efficiency Strategic Plan acknowledges this and identifies a series of specific strategies aimed at the local government sector:

> "As requirements [for green building policies and ordinances] become more varied across geography, developers and particularly production home builders may have difficulty designing and building major developments consistent with both State and local codes. Accordingly, Strategy 2 requires coordination of local government building codes and development policies to facilitate common approaches to the adoption and rapid evolution of highly energy efficient technologies and techniques in new construction statewide." (p. 15)

To alleviate some of the challenges associated with different city policies and strategies, especially regarding transportation infrastructure, regional Metropolitan Planning Organizations (MPOs) have been established to make collective decisions while representing the interests of various stakeholders within the region. This trend has paved the way for MPOs to also

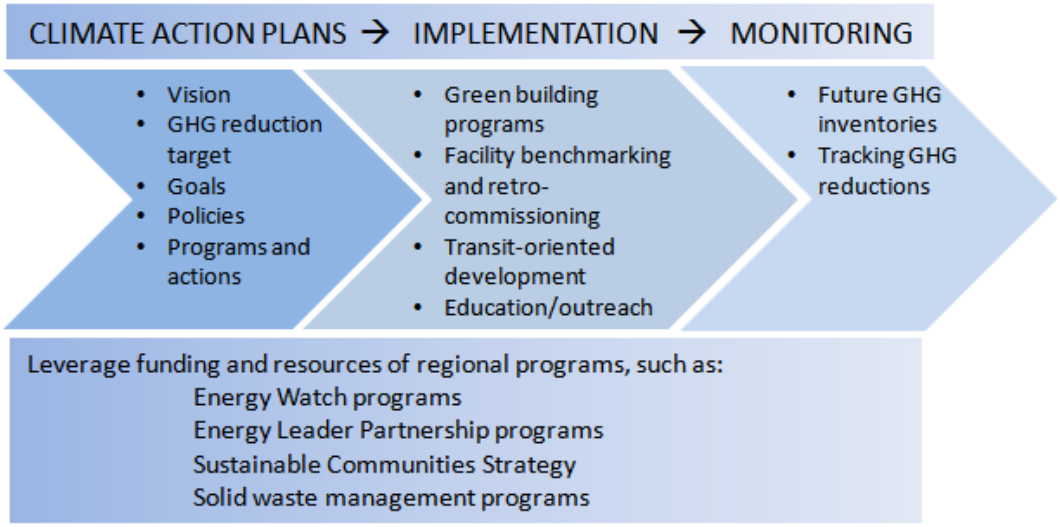
implement energy efficiency programs (such as Energy Upgrade California) for their regions that have collective marketing, certification, and verification efforts to better reach broad social awareness, consistent adoption and wide-ranging acceptance while supporting many of the existing local programs in a more cost-effective way.

Since county-level MPOs already have responsibility for coordinating regional issues such as transportation and energy efficiency programs,[1] regional CAPs are a logical and important area for MPOs to facilitate. However, the CAP projects are a relatively new area for MPOs as these plans have traditionally been led by individual cities without much involvement or facilitation from MPOs. In the following sections, this paper examines a framework for regional CAP efforts, and how three MPOs have approached regional CAPs and the benefits to a regional approach to climate action planning.

Framework for Regional Climate Action Planning Efforts

Climate action plans are an important first step for cities and counties on the path towards meaningful GHG reductions. **Error! Reference source not found.** illustrates how climate action plans provide a roadmap of policies and programs that must be implemented and then monitored for effectiveness. Many MPOs in California are already taking the lead on resource conservation programs, through local government partnerships with the investor-owned utilities for energy efficiency. The GHG reduction strategies outlined CAPs could potentially be quite onerous on city and county staff with limited time and resources. Therefore, the existing sources of funding and technical support for energy efficiency and renewable energy offered by utilities, regional and state programs must serve as the foundation for the planning and implementation of CAPs to ensure that the plans represent realistic efforts for local governments.

Figure 1. Bringing Regions Together Around Climate Action Planning



[1] MPOs are a specific type of joint powers authorities, whereby two or more local governments operate collectively and have separate operating boards of directors.

The California investor-owned utility (IOU) local government partnership programs recognize the importance of local government involvement in regional strategies for energy efficiency. The Pacific Gas & Electric (PG&E) Government Partnership program is complex and multi-dimensional to reflect the varied and distinct roles that local governments play in energy management. (PG&E 2011) The flagship PG&E Local Government partnership program consists of Energy Watch Partnerships with 18 different regions in its service territory. The Energy Watch programs provide incentives and technical support for energy upgrades in municipal facilities, coordination with PG&E core energy efficiency programs, and strategic planning for energy efficiency (i.e., reach codes, energy efficiency action plans). When cities include these types of IOU-supported energy efficiency programs in their CAPs, it highlights the importance of IOU programs and forces local governments to articulate ways to leverage the programs for their community. MPOs can play an important role in working closely with cities in their region to coordinate their participation and outreach activities.

Further, the Statewide Energy Efficiency Collaborative (SEEC) is funded by all four California IOUs and implemented by ICLEI, a non-profit membership organization of local governments to provide tools to support cities and counties to conduct GHG inventories and develop qualified CAPs. Regional CAP projects are able to take these resources further and customize them on a county-level. For example, MPOs can provide region specific energy use assumptions based on climate zone and utility service territory, by leveraging statewide studies such as the California Commercial End Use Survey or Residential Appliance Saturation Surveys. This approach promotes consistency within the region for energy and GHG savings estimations for different types of energy upgrades in the community and reduces the burden on city staff time or consultant costs to developing the CAP.

Case Studies on Regional Climate Action Planning Projects

In this section, we provide case studies of three different regional climate action planning projects and examine the development of the CAP measures, as well as advantages and challenges encountered. The climate action planning efforts of the following MPO organizations are highlighted: the City/County Association of Governments of San Mateo County, Kern County Council of Governments and Coachella Valley Association of Governments. While all are located within the State of California, they encompass a range of geographic, political economic and demographic characteristics. Table 1 provides an overview of the three climate action planning projects' key characteristics, similarities and differences.

Table 1. Comparison of Regional Climate Action Plan Projects

	C/CAG San Mateo	Kern County COG	Coachella Valley AG
Number of participating cities and member agencies	21	11[2]	7
Geographic scope	San Mateo County	Kern County	Eastern Riverside County
Key agency functions	• Congestion management agency • Solid waste management • Stormwater runoff • Land use near airports • Energy Watch Program administrator	• Regional transportation • Congestion Management Agency • Air quality compliance for transportation projects • Energy Partnership program administrator	• Regional transportation and land use planning • Air quality • Congestion management agency • Solid waste management • Energy Partnership program administrator
Full GHG inventory?	Yes, municipal and community	Yes, municipal only, although some municipalities received separate funding for a community inventory and CAP	Yes, municipal and community
Common baseline year for GHG inventory?	Yes, 2005	Yes, 2005	Yes, 2010
Utility service territory	PG&E	PG&E and SCE	SCE, Imperial Irrigation District
Climate action plan scope	• All GHG emissions • Municipal/Community • No implementation	• Electricity GHG • Municipal only • No implementation	• Electricity GHG • Municipal/Community • Implementation of programs
Funding source	BAAQMD, PG&E	SCE, PG&E, American Recovery and Reinvestment Act, Strategic Growth Council[3]	SCE, Riverside County

City/County Association of Governments of San Mateo County (C/CAG)

Located on the peninsula of the San Francisco Bay Area, C/CAG consists of twenty-one member agencies encompassing the twenty cities within the county and the county itself. C/CAG's responsibilities are focused on county-wide initiatives related to resource conservation, especially around transportation, solid waste and energy. Specifically, C/CAG has received ratepayer funds from Pacific Gas & Electric to administer the San Mateo County Energy Watch program and previously developed the San Mateo County Energy Strategy (SMC 2012).

[2] Five cities and Kern County are participating in the Kern COG Regional Energy Action Plan (REAP) project funded by SCE, and five cities are participating in a separate but similar Green Communities project funded by PG&E. Three special districts might also participate in the Kern COG Regional Energy Action Plan Project.

[3] Kern County is using funds from the American Recovery and Reinvestment Act of 2009 to develop a community-wide GHG inventory. The City of Delano has an allocation from the Smart Valley Places project (funded by the California Strategic Growth Council) to help cover a portion of the costs of their community-wide CAP.

In the effort to build upon these existing programs that reduce GHG emissions, C/CAG, the San Mateo County Energy Watch, and the cities of Cupertino, Millbrae, Pacifica, Portola Valley and San Bruno developed the concept for a CAP template project that would provide user-friendly tools and boilerplate language that cities could customize. C/CAG subsequently received grant funding from the Bay Area Air Quality Management District to initiate the project. The CAP template project, subsequently named the Regional Integrated Climate Action Plan System (RICAPS), provides a prescriptive approach for completing the necessary components of a climate action plan to serve as a qualified GHG Reduction Strategy, per guidelines released by the Bay Area Air Quality Management District (BAAQMD 2010). RICAPS encompasses the following components:

- Software tool for tracking greenhouse gas emissions both municipal and community-wide
- Climate action plan template
- Pre-set list of greenhouse gas reduction measures tailored to San Mateo County
- Calculation methodologies for estimating costs and benefits associated with each greenhouse gas reduction measure
- Recommended approach to prioritize measures for implementation
- Estimation of greenhouse gas reductions associated with state measures

Although there are other tools available to local governments in identifying and choosing GHG reduction measures, C/CAG's objective for the project was to customize these resources and identify county-level default assumptions to be used in the GHG calculations. For instance RICAPS provides boilerplate language in the climate action plan template document focused on climate change impacts to the San Mateo County region. County-level default assumptions include transportation forecast values, building energy use characteristics and waste disposal rates. Furthermore, RICAPS supports PG&E's energy efficiency programs by including CAP measures that explicitly require cities to engage with PG&E on marketing and outreach. PG&E data is provided to each city detailing the relative energy intensity and overall energy use of different sectors in the community to assist cities in identifying which of PG&E's core programs are most applicable to the jurisdiction.

Advantages and benefits. One of the innovative aspects of the RICAPS project is the use of the template documents to shepherd cities through the climate action plan process. C/CAG has developed essentially a climate action planning course for cities who have not yet completed plans. The course consists of nine meetings covering several key steps, including initial planning, GHG measure selection, prioritization of GHG reduction measures, and finalization of the CAP document. Each meeting helps city representatives to complete each step, by first reviewing what needs to be done and how (e.g., identifying existing initiatives, or estimating the GHG emissions reduction) and then assigning the activity as a "homework" prior to the next meeting.

This approach has been highly successful by imposing a schedule of climate action plan meetings, which applies pressure on cities to complete each step or risk falling behind. Much like a regular classroom, the RICAPS course enabled cities to work together and learn from each other's experiences. Furthermore, in addition to providing a regionally consistent approach to climate action planning, RICAPS saves cities money because they can leverage the templates and technical assistance provided by C/CAG, rather than each city contracting separately with consultants to create their own CAPs. Prior to the RICAPS project, approximately five cities in

the region had CAPs in-progress or completed. With the conclusion of the RICAPS project, it is expected that the majority of the 21 jurisdictions will have completed CAPs that serve as a roadmap for cities to reduce energy consumption and GHG emissions in their communities.

Challenges. San Mateo County has an especially diverse set of cities within the region. There are small coastal communities along the Pacific Ocean, as well as large and densely built-out cities along the San Francisco Bay. Some communities are extremely wealthy, and some are mostly low-income. This posed some challenges to developing a pre-set list of GHG reduction measures for the project as the cities needed to agree upon a finite list of measures to be included in the template. To overcome this, the measures included guidance on applicability. For instance, measures focused on new developments and new construction were identified as more applicable to fast-growing communities.

Another challenge to the project was how the local government climate action plans could leverage a yet-to-be-developed county-wide CAP. Since C/CAG is responsible for county-wide transportation strategies, these emissions reductions could potentially be included in city-level climate action plans along with the state-wide actions. However, the county-wide climate action plan is currently in progress, and the methodology for incorporating any county-level GHG emissions reductions into city specific CAPs has not yet been addressed.

Kern Council of Governments (Kern COG)

Kern County encompasses a large area that is nearly the size of the state of New Jersey and is located in the inland central California region. The municipalities in the county are mostly small and relatively remote, with the exception of the City of Bakersfield, which is the 9th largest city in California. Three different IOUs serve areas in Kern County, including PG&E, Southern California Edison (SCE), and The Southern California Gas Company.

Kern COG is an association of city and county governments; member agencies include the County of Kern and the 11 incorporated cities in the county. The primary purpose of Kern COG is to address regional transportation issues and conduct transportation planning.

Additionally, Kern COG provides a number of other functions, such as:

- Administering Kern Energy Watch, the IOU-funded Energy Partnership Program
- Serving as the Congestion Management Agency
- Serving as the state-designated Census Data Center Affiliate for the Kern Region
- Conducting air quality planning and implementation in regards to transportation projects
- Preparing the Regional Housing Allocation Plan
- Managing the call-box program and the 511 program as the Kern Motorist Aid Authority

Kern COG is currently conducting two related projects: the Region Energy Action Plans (Kern REAP) project and the development of GHG inventories. Both projects are funded by SCE. Of the eleven incorporated cities in Kern County, only the five that are in the SCE region are eligible to participate.. Portions of Kern County are also located in the SCE territory and the County is also a participating municipality.[4] The objective of the program is to provide a policy framework for decision making regarding long-term energy efficiency measures that result in

[4] Since the County provides services and is the local government of unincorporated areas, it is considered a municipality like a city or town.

reducing GHG emissions. A key driver of the project is the California Public Utilities Commission's (CPUC's) California Long-Term Energy Efficiency Strategic Plan (CEESP), which seeks to move beyond short-term solutions and to foster long-term transformation of the energy market. The CPUC authorized SCE to conduct planning activities related to the strategies in the CEESP, and through a solicitation Kern COG was selected to receive funding for developing energy action plans (EAPs) for the participating municipalities. The scope of work for both projects includes the following deliverables:

- A complete GHG inventory for municipal operations
- A Regional Energy Action Plan Template focusing on municipal operations
- Tools for conducting cost/benefit analysis of energy efficiency opportunities
- Municipal EAPs for each participating jurisdiction
- Municipal Energy Efficiency Savings Analysis for Annual GHG Inventories
- Regional Information Sharing Plan

Because the project is funded by SCE, the final EAPs only focus on energy efficiency and GHG reduction related to electricity use. The final EAPs will include concrete, actionable policies (e.g., green building ordinance, retro-commissioning policies), as well as specific energy conservation measures that are appropriate for municipal facilities. Furthermore, the final EAPs will highlight the SCE Energy Leader Program and how cities are accomplishing program goals for resource savings and demand response participation. The final deliverables from this project provide key portions of a fully inclusive climate action plan, and participating municipalities may choose to develop a full climate action plan covering all fuels and energy sources in the future. Such work would need to be funded by other sources.

One unique aspect of the Kern COG project is that the public outreach and stakeholder education for both projects have been combined with outreach being conducted in the development of the regional SCS for the municipalities participating in the Kern REAP and GHG projects. One key outcome of the outreach is to gain insight into the communities' preferences regarding various energy efficiency strategies. Such insight will be valuable as the EAPs are drafted, and could contribute towards the development of community-wide and comprehensive climate action plans for each of the participating municipalities.

Advantages and benefits. Many of the smaller cities in Kern County have limited resources and expertise and might not have been able to develop an EAP on their own. The Kern COG leveraged its funding from each individual city to acquire additional funds from SCE to enable the COG facilitate the EAP process. Thus, the cities and the County participating in the Kern COG REAP and GHG projects take advantage of shared resources as well as the templates that have been developed specifically for the Kern COG region. All of the templates are designed with the limited resources of the cities in mind, so that completing the EAPs and conducting future monitoring and tracking of GHG emissions and energy use will require minimal time and effort.

In addition, the project builds upon work conducted through the Kern Energy Watch program. Specifically, most of the participating municipalities have recently conducted energy benchmarking of their larger facilities, which provides valuable data for identifying energy efficiency opportunities and continued monitoring of building performance. Prior to the Kern COG EAP project, no cities had completed CAPs or EAPs. At the conclusion of the project, all

five participating cities will have EAPs that identify energy efficiency opportunities in municipal facilities and how to continue leveraging the financial and technical assistance of the Kern Energy Watch program.

Challenges. The municipalities within the Kern COG REAP and GHG projects are mostly small and remote, with diverse economies driven by mining, Federal Air Force bases, wind and solar energy production, and agriculture. While some cities have very few municipal operations, others operate large facilities such as correctional institutions, wastewater treatment plants, and airports.

Developing energy efficiency plans for each of these cities while using a template approach presents challenges due to the diverse nature of the cities, and the variety of facilities operated by the municipalities. All energy efficiency measures developed for the EAPs will have a similar format and approach, but be highly customizable by the municipalities based on their particular needs and circumstances. For example, data from two of the smaller cities show that 80-90% of the electricity consumed by municipal operations is used for pumping water or conveying sewage. Such a city will have a large focus on increasing pumping efficiency and improving water efficiency throughout the city. In contrast, Kern County operates several landfills, three wastewater treatment plants, a correctional facility, an airport, and over 100 buildings. Due to the diverse nature of these facilities, the EAP for Kern County will thus be more comprehensive in terms of the strategies included to improve energy efficiency. However, the EAPs for all municipalities will be based on the same framework template, and all analysis will occur using similar methodologies.

Another challenge is the restriction that only five out of the eleven incorporated cities are participating in this particular effort because the projects are funded by SCE and only five cities are located in the SCE territory. This potentially could lead to inconsistent approaches to calculating energy and GHG baselines between the two groups of cities, as well as varied energy efficiency policies that make it difficult for developers and energy contractors to work efficiently in the region. Thus, to overcome this challenge, the project team working on the Kern COG REAP project endeavors to coordinate closely with the other cities in order to share data and best practices. More specifically, the Kern COG Regional Planning Advisory Committee (RPAC) is serving as the Energy Action Plan Work Group (EAPWG) for this project. Consultants for both programs (Kern REAP and Green Communities) provide program updates at each monthly meeting. One of the deliverables that will be created from this project, the Regional Information Sharing Plan, is designed explicitly to share information with the jurisdictions in the PG&E territory. Already, an existing deliverable, the Energy Action Plan Template, has been shared with the City of Visalia, located in neighboring Tulare County.

Coachella Valley Association of Governments (CVAG)

The Coachella Valley Association of Government's (CVAG) comprehensive approach to their climate action planning provided a foundation for greenhouse gas emissions reductions goals and policies, as well as key implementation programs and actions. The seven communities located in Riverside County leveraged the regional approach to demonstrate local government leadership while creating a branded outreach campaign for 435,000 residents. The paramount purpose of the CAP effort was to provide a roadmap for climate action that institutionalizes local conditions, values, and unique circumstances.

Several existing efforts provided a platform to develop the climate action planning effort. A regional blueprint identified the sustainability sector as a potential economic driver for the Coachella Valley (Market Street Services 2009). A regional greenhouse gas inventory was completed by the South Coast Air Quality Management District. Riverside County also provided funding for air quality mitigation and greenhouse gas reduction. Ratepayer funds were administered by CVAG's Desert Cities Local Government Partnership with Southern California Edison.

CVAG also looked beyond the Valley's region to utilize national and international tools created by ICLEI. In addition, CVAG coordinated closely with other peer MPOs/COGs to leverage CAP perspectives from the surrounding areas of Riverside County, Palm Desert, La Quinta and Coachella.

The local governments' broad development of plans, programs and policies development provided a basis for the Valley's politicians to discuss energy efficiency with their constituents. While the climate action plan was being created, the local governments and Tribe embarked on the following additional efforts that provided "early implementation actions" to reduce GHG emissions within the communities:

- *Launched a green building program for commercial and residential development.* The project developed a template for a Voluntary Green Building Policy appropriate for customization to meet the needs of each participating municipality..
- *Developed municipal Energy Action Plans*. The EAPs set strategies that directly reduce greenhouse gas emissions for the jurisdictions. In addition to energy efficiency goals for municipal facilities, the EAPs included goals for residential, commercial/industrial new construction and a timeline for development and adoption of reach codes.
- *Adopted benchmarking and retro-commissioning policies*. The project included a policy framework to identify systemic change in how the municipalities' facilities would be monitored for energy efficiency opportunities. Furthermore, an outreach plan was developed to reach out to other government agencies, school districts and the commercial sector to promote their use of commissioning/retro-commissioning guidelines and policies.
- *Implemented a regional Utility Manager System*. This enterprise energy management information system provided tools to review and analyze energy usage data and measure success in reducing energy use and greenhouse gas emissions, as well as identification of new energy efficiency opportunities.

While many communities have developed CAPs and EAPs, the CVAG project went beyond planning and visioning to implement specific greenhouse gas reduction programs for the community. The Green for Life campaign was developed to brand the broad offering of greenhouse gas reduction programs. Initially, CVAG focused the delivery of the Green for Life campaign to the local elected officials, government staff, and specific stakeholders (e.g., United States Green Building Council, University of California at Riverside, College of the Desert, American Planning Association and Desert Valley Builders Association). Once the local governments were aware of the effort, the campaign was directed to the community.

CVAG also created a grass-roots Intern Team to highlight and promote the Green for Life program to the residents. The team was trained to assist with GHG inventory data collection, as

well as engage in conversations with the community regarding energy, sustainability, and climate reduction strategies, as well as promote the SCE core energy efficiency programs.

Advantages and benefits. One of the advantages of this plan was the ability to link the 6 cities and the tribe as a region. This aspect was enhanced as the Agua Caliente Band of Cahuilla Indians tribal reservation lands span across three of the cities in the region providing an overlay for a working relationship. As a benefit, the CVAG project served as an important catalyst to work collaboratively on greenhouse gas emissions reduction programs. The Tribe's demonstration of leadership and long commitment to environmental issues reinforced the sustainability activities.

The SCE funding included provisions for city staff time in addition to consultant project costs. Prior to the Coachalla Valley CAP project, no cities had completed CAPs or EAPs. At the conclusion of the project, all participating cities will have EAPs that identify energy efficiency opportunities in municipal facilities. The CVAG project highlights the importance of aggregating regional resources to implement programs and develop example policies that are tailored to a specific area.

Challenges. There were two notable challenges faced during the development of the climate action plan. The Coachella Valley's political climate created a challenge to foster sustainability initiatives. This was alleviated as CVAG ensured there was a strong focus on saving money and highlighting economic opportunities. Also, a hindrance was the reduction in city staff and increased workloads, which made it difficult to prioritize an activity not previously part of the basic governmental services. The lack of funding for city staff time can make it difficult to participate in regional planning activities. This hurdle was overcome by a passionate and dedicated staff who worked after hours to facilitate the CVAG planning efforts.

Key Findings

While many cities in California and nationally have developed stand-alone climate action plans for their communities, the three case studies demonstrate that the regional partnership approach to climate action planning provides many benefits related to costs, energy savings, and motivating local governments to adopt long-term strategies for greenhouse gas reductions. Local governments can better leverage funding and resources both for the development of the plan itself and for the implementation of GHG reduction programs.

The collective buying power of MPOs in these budget restricted times is essential for many communities and can be truly empowering for the region's climate change efforts. The project costs associated a regional CAP approach is much less than if each city contracted out separately for CAP services. Further, some communities are beginning to band together to purchase bulk amounts of renewable energy or energy efficiency equipment and installations, thus receiving large discounts. The regional CAP approach is being further supported through grant funding from federal and state agencies as well as investor-owned utilities.

As states across the country are increasingly mandating utility supported energy efficiency programs, the California IOUs are turning to local governments as essential partners in these efforts (Mackres et al. 2012). The number of local government partnership programs has expanded significantly in recent years in both quantity and visibility, with new partnerships around greenhouse gas reduction strategies, and climate action planning. Furthermore, Kern

COG shows how it is using the regional EAP project to assist cities to participate in SCE's Energy Leader Partnership program and successfully identify opportunities for energy efficiency retrofits in municipal facilities and participation in demand response programs.

Finally, the regional CAP projects show that MPOs can play an important role in bringing cities together to develop consistent energy and GHG reduction strategies that work across the region. In all three of the case studies, the MPOs shepherded its municipalities through a process that provided both financial and technical assistance for energy efficiency planning and coordination with utility programs. Coachella Valley also provided specific implementation assistance to ensure that plans would result in meaningful green building, benchmarking and retro-commissioning policies, as well as energy data management that empowers cities to effectively manage their energy use.

Effective climate action planning requires identification of cost-effective GHG reduction measures that are consistent with community priorities and that articulate realistic outreach strategies for community education. According to the California Office of Planning and Research, it is essential that the regional CAPs are customized sufficiently by each jurisdiction so that specific actions can be identified as part of a CEQA analysis. While the specific CAPs adopted by individual local governments should be unique, the regional CAP process is still an important starting point that provides important funding and identification of regional initiatives, programs and resources available to each city.

Conclusion

While metropolitan planning organizations (MPOs) have long worked on resource conservation initiatives, regional climate action plan (CAP) projects are found to serve as a catalyst for bringing regions together in a manner that crosses many segments of existing efforts. Where previously, cities had mostly completed CAPs on their own, the regional CAP projects bring together cities to work on identifying appropriate energy and greenhouse gas (GHG) reduction measures. MPOs serve as an efficient convener of cities to complete the initial steps of climate action planning, namely for GHG emissions inventories, strategic planning and program design. Given the success of the regional approach to getting CAPs completed, MPOs should continue to take a lead role to ensure that the regions measure GHG emissions regularly in order to assess whether existing local government strategies are sufficient to meeting the GHG reduction targets outlined in AB 32 and the individual CAPs.

References

[BAAQMD] Bay Area Air Quality Management District. *California Environmental Quality Act Guidelines Update. Proposed Thresholds of Significance.* May 2010.

California Public Utilities Commission. 2008. *California Long-Term Energy Efficiency Strategic Plan.* September 2008.

Karl, T. R., J. M. Melillo, and T. C. Peterson (eds.). *Global Climate Change Impacts in the United States.* For the U.S. Global Change Research Program. (New York: Cambridge University Press, 2009).

Market Street Services, Inc. *Coachella Valley Economic Blueprint Report.* September 2009. http://cvepblueprint.com/

Mackres, E., E. Alschuler, A. Stitely & E. Brandt. 2012. "The Role of Local Governments and Community Organizations as Energy Efficiency Implementation Partners: Case Studies and a Review of Trends." ACEEE and EESP White Paper. February.

[OPR] Office of Planning and Research. *State of California General Plan Guidelines*. October 2003.

[PG&E] Pacific Gas & Electric. Regulatory Filing. 2010-2012 Energy Efficiency Portfolio Local Government Program Implementation Plan Government Partnership Master PGE2125. February 28, 2011.

[SMC] San Mateo County. *San Mateo County Energy Strategy.* 2012. http://www.ccag.ca.gov/pdf/USTF/reports/Draft%20County%20Energy%20Strategy.pdf