



MEMO

To: Bill King
City of Merced

From: Jennifer Venema

Cc: Tammy Seale and Nora De Cuir, PMC

Date: September 12, 2014

Re: Summary of City of Merced September 10, 2014 Focus Group Meeting

The purpose of this memo is to summarize the second Focus Group meeting convened on September 10, 2014, for the city's Programmatic Climate Action Plan project. Please contact me with any questions.

The City of Merced Programmatic Climate Action Plan (PCAP) effort is an implementation of the City's Climate Action Plan (CAP), adopted by the City Council in 2012. The goals of the PCAP project are to provide tools to support and implement the CAP. PCAP tools will serve to achieve Merced's adopted greenhouse gas (GHG) emissions reductions targets while streamlining permitting and development review. The PCAP will include an action plan, tools to track and analyze the cost-benefit of strategies, design guidance, and recommendations for updates to the City's development code.

FOCUS GROUP

The Focus Group for the PCAP project is an ad hoc committee of key stakeholders representing different organizations and interests in the community. Members of the Focus Group include representatives from businesses, local green industry, the Greater Merced Chamber of Commerce, and community groups, along with representatives from the Planning Commission, City Council, and City departments. The Focus Group will convene on a regular basis to provide input and feedback during the PCAP project process to City staff and decision-makers. It will review draft GHG reduction strategies, implementation tools, and development code language, along with other products of the PCAP project.

FOCUS GROUP MEETING #2

The second Focus Group meeting occurred on September 10, 2014, from 1:30 to 3:30PM at the Sam Pipes Room in the Merced Civic Center. Eleven Focus Group members attended, along with approximately seven members of the public, including City staff and representatives from the Institute for Local Governments. The purpose of the meeting was to discuss preliminary reduction measure results with Focus Group members to gain a clearer understanding of local priorities and aid in the refinement of measures. Feedback at the meeting also helped to confirm the approach to attain the CAP target of 1990 GHG emissions levels by 2020.

MEETING APPROACH

The meeting agenda included the following items:

- **Project Update:** The project team, including City staff and the consultant team, emphasized that the primary goal of this project is to implement the CAP and meet the 2020 emissions target. The approach to develop measures prioritizes determining political feasibility, finding concrete benefits, and communicating clearly with the public. Based on feedback received at the first Focus Group meeting in June, PMC quantified suggested changes to measures. City staff has also continued to engage staff and other agencies in the process. City staff emphasized that ongoing input from agencies and other partners will continue to guide the project. Additionally, on September 2, the City elected to participate in the HERO program for retrofit financing. This program supports initial reduction measures and helps to make progress toward the target.
- **Institute for Local Governments:** Steve Sanders and Sarah Reuben from the Institute for Local Governments (ILG) gave a presentation summarizing their efforts to provide community education on sustainability and CAP topics. These supplementary outreach efforts will complement the CAP project. ILG workshops will provide greater detail on topics such as economic development and sustainability. Focus Group members are invited to participate as volunteers for these events.
- **Preliminary Reduction Measure Results:** The consultant provided a presentation, throughout which the Focus Group asked questions and started discussions. Before presenting measure results, the consultant discussed the data sources and approach to develop the emissions forecast, explaining that the results displayed represented activities within the community. The forecast shows both a business-as-usual scenario and anticipated reductions from state and local actions. The presentation summarized GHG reduction measures in greater detail, highlighting the level of credit expected for measures that are primarily voluntary or incentive-based. Focus Group members listened while the consultant provided examples of the calculation of reduction measure benefits. Measure categories discussed included Land Use & Transportation, Energy Efficiency, Renewable Energy, Water and Wastewater, Solid Waste, and Off-Road Equipment. The presentation also addressed the range of metrics that could be used to analyze costs and benefits of measures. The consultant highlighted options to look at total community-wide costs or savings relative to the GHG emissions benefits of reduction measures. With the preliminary reduction measure results, community-wide greenhouse gas emissions achieve approximately an 8% reduction below baseline 2008 levels by 2020. To attain the target of 15% below 2008 levels, more opportunities for reductions must be identified.
- **Discussion Activity:** The consultant team facilitated an hour-long discussion activity to discuss priority measures with the Focus Group. This activity is described in greater detail below.

DISCUSSION ACTIVITY

Following the presentation of preliminary reduction measure results, the consultant team facilitated an interactive discussion activity with Focus Group members. Around the room, four posters presented preliminary reduction measure results. Information presented for each measure included topic area, expected GHG reduction, 2020 participation rates, and performance metrics. Each Focus Group member used 12 stickers to vote on measures for discussion. Votes were tallied and the top-voted measures were opened for further questions and discussion. The consultant team facilitated a one-hour discussion of measures with the most votes. Other meeting attendees, including City staff members attending as representatives of the Technical Advisory Committee for the CAP, participated in the discussion. Members of the public in attendance did not cast votes.

Voting Results

The tables below show the votes tallied for each measure. Approximately eleven Focus Group members participated in the polling activity. Nine measures received the highest votes and were discussed with the group: Measure 1 (High Density and Mixed Use Development), Measure 7 (Traffic Signal Synchronization), Measure 9 (Electric Vehicles), Measure 10 (Energy Efficiency in New Development), Measure 17 (Residential Renewable Energy), Measure 18 (Nonresidential Renewable Energy), Measure 23 (Landscaping Water Conservation), Measure 25 (Composting), and Measure 26 (Recycling). Discussion also covered a range of issues relevant to general topics and other reduction measures.

Results from the sticker voting activity are shown in the tables below. Votes represent measures that Focus Group members prioritized for discussion with the group. Measures shown in bold received the highest votes and were discussed with the Focus Group.

Poster 1: Voting Results for Reduction Measure Discussion

Measure Number	Issue Area	Measure Language	Votes
1	Land Use and Transportation - Density and Connections	Develop higher density and mixed use development to support alternative travel in downtown Merced and appropriate neighborhood centers, including around the planned high-speed rail station.	10
2	Land Use and Transportation - Density and Connections	Increase per-person intra-city and inter-city transit use 30% by 2020 by building 25% of new development near transit stops.	4
3	Land Use and Transportation - Density and Connections	Improve the efficiency of personal vehicle trips by promoting carpool and car share systems.	0

Measure Number	Issue Area	Measure Language	Votes
4	Land Use and Transportation - Density and Connections	Increase the feasibility and use of bicycles in Merced for commute and recreation through new bicycle infrastructure and education.	2
5	Land Use and Transportation - Density and Connections	Establish telecommuting as a viable commute alternative for 3% of Merced employees an average of 1.5 days per week by 2020.	1
6	Land Use and Transportation - Density and Connections	Work with UC Merced to establish a Transit Demand Management (TDM) program for new student housing located within the City.	2
7	Land Use and Transportation - Density and Connections	Synchronize traffic signals along 10 miles of major roads to improve fuel efficiency.	7
8	Land Use and Transportation - Alternative Fuels	Increase the use of neighborhood electric vehicles (NEVs, such as lower-speed, streetsafe golf carts) to 3% of households by 2020.	0
9	Land Use and Transportation - Alternative Fuels	Increase the household adoption of passenger electric vehicles (EV) and other alternative fuels to 5% by 2020.	7

Poster 2: Voting Results for Reduction Measure Discussion

Measure Number	Issue Area	Measure Language	Votes
10	Energy Efficiency - New Construction	Improve energy efficiency in new and significantly retrofitted buildings subject to state CALGreen standards.	10
11	Energy Efficiency - New Construction	Site new buildings to take advantage of natural solar resources for heating and cooling.	6
12	Energy Efficiency - Existing Buildings	Support improved energy efficiency in existing multifamily units, rental units, and affordable households through voluntary retrofits.	3
13	Energy Efficiency - Existing Buildings	Facilitate energy efficiency through voluntary retrofits in 15% of single-family homes, and promote low-cost opportunities to reduce energy use in single-family households.	2

Measure Number	Issue Area	Measure Language	Votes
14	Energy Efficiency - Existing Buildings	Improve energy efficiency through voluntary retrofits in 16% of businesses and other energy efficiency strategies in existing commercial and industrial facilities.	0
15	Energy Efficiency - Existing Buildings	Use cool roofs and shade trees to reduce the urban heat island effect in Merced.	2
16	Energy Efficiency - Existing Buildings	Retrofit public lighting in Merced to reduce energy use.	2

Poster 3: Voting Results for Reduction Measure Discussion

Measure Number	Issue Area	Measure Language	Votes
17	Energy Efficiency - Renewable Energy	Increase the amount of renewable electricity generation for on-site residential use.	7
18	Energy Efficiency - Renewable Energy	Facilitate renewable energy for on-site commercial and industrial uses.	7
19	Energy Efficiency - Renewable Energy	Support the use of solar energy to meet on-site water heating needs for domestic and nonresidential uses and swimming pools.	0
20	Energy Efficiency - Renewable Energy	Create a community shared solar program to produce renewable energy for off-site use in Merced.	0
21	Water and Wastewater - Water Conservation	Promote indoor water conservation through retrofits to existing buildings.	1
22	Water and Wastewater - Water Conservation	Improve indoor water efficiency in new buildings.	1
23	Water and Wastewater - Water Conservation	Reduce the amount of water used for landscaping.	7
24	Water and Wastewater - Alternative Water Sources	Promote individual greywater and rainwater catchment systems to reduce potable water demand.	4

Poster 4: Voting Results for Reduction Measure Discussion

Measure Number	Issue Area	Measure Language	Votes
25	Solid Waste - Increased Diversion	Expand composting of organic waste produced by the community.	7
26	Solid Waste - Increased Diversion	Increase recycling in Merced with a goal of improving diversion of recyclables by 25%.	9
27	Solid Waste - Increased Diversion	Divert 50% of construction and demolition (C&D) waste from new construction projects and renovations.	5
28	Off-Road Equipment	Reduce emissions from lawnmowers and leaf blowers by 10%.	1
29	Off-Road Equipment	Use alternative-fuel and fuel-efficient construction equipment, and reduce construction equipment idling time.	2

DISCUSSION AND QUESTIONS

After the group voted on measures to review, the consultant facilitated a one-hour open discussion. Approximately five minutes were spent to discuss each of the nine measures selected for discussion. Participants raised a number of questions and topics, including discussion between Focus Group members to vet the merits of different approaches. This discussion is summarized below:

Measure 1: High Density mixed-use development, focusing on compact connected development downtown and near the train

- Question/comment: The goal of this measure is to increase the percentage of multifamily housing by 2020. There was a vocal lack of confidence in measure targets being achievable by then. Some participants believed that this could still make a lot of impact throughout the city, but not necessarily adjacent to the high-speed rail area – where the development ultimately happens would consequently guide the feasibility of this measure. There is an existing draft plan, the Bellevue Corridor Community Plan, which includes TOD near the UC Merced campus. However, this is a long range plan with a 10–20 year development period (i.e., development will not be completed by 2020).
 - *Response:* A member of the consulting team noted that this measure would be revised with this improved understanding of its feasibility in mind.

Measure 7: Synchronized traffic signals to improve fuel efficiency

- Question/comment: A member of the consultant team explained that this measure takes credit for improving the efficiency of vehicle trips within the city. The strategy reduces idling time, which reduces fuel use. The measure has a smaller GHG reduction (compared to Measure 9,

Electric Vehicles), but is cheaper to implement and does not require as extensive of an investment in infrastructure. A member of the Focus Group noted that the City has already programmed funds for adding a right turn lane and signaling on 16th Street, which will help to reduce traffic and idling times.

- *Response:* Quantification will be adjusted to account for these planned activities and other related improvements the City has already committed to. The consultant may increase the 2020 performance target to accommodate existing actions.

Measure 9: Increase the household adoption of passenger electric vehicles (EV) and other alternative fuels

- Question/comment: What is the cost? We need to do a cost-benefit analysis.
 - *Response:* A cost-benefit analysis will be completed by the consultant. The analysis will account for factors discussed by the Focus Group and will be presented at the next meeting.
- Question/comment: This could be implemented through building codes.
- Question/comment: Chargers may be getting more affordable, but because the cars don't have a long range, there would need to be publicly accessible stations to complement at-home chargers.
 - *Response:* The City is considering purchasing electric charging stations for the City fleet and placing them in downtown parking garages, but is being careful that if city employees charge personal EVs at work, the City must be ready to either cover that cost or limit this activity. At least one member of the City staff has an electric vehicle. The City already owns a range of alternative fuel vehicles and hybrids. At least one member noted the infeasibility of wholesale community transition to electric vehicles due to the limited range and high cost. The consultant agreed that this measure may be more costly and challenging to implement, with less local potential than strategies like Measure 7 (Traffic Signal Synchronization).

Measure 10: Energy efficiency in new and retrofitted buildings subject to CalGreen standards

- Question/comment: This measure encourages actions that would make builders exceed standards to get 5% above state CalGreen requirement, using the "worst case" growth scenario.
 - *Discussion:* The consultant is accountable for showing how a 1990 level of GHG emissions would be achieved, and to do this they have to assume a "worst case" growth scenario, including annexation of UC Merced land. Improved efficiency beyond base CalGreen standards has a limited benefit, but measures account for a range of actions to demonstrate all that is required to achieve the reduction target. With more mandatory actions, the CAP could provide more certainty and potentially require fewer reduction measures.

Measure 17: Increase the amount of on-site renewable energy generated by residential uses

- Question/comment: Now that the City is participating in the HERO program, expedited building permit reviews and/or waived permit fees for solar installations should be granted.
 - *Response:* This would be hard to achieve considering recent City budget cuts and staffing limitations.
- Question/comment: How can we make new solar-compatible roofs less expensive?
 - *Response:* A member of the consultant team noted that in some jurisdictions, pre-approved designs are used to expedite and lower the costs associated with the design process. Another participant noted that these standardized designs would need to account for both current and future solar panel signs.
- Question/comment: What is the target for participating homes?
 - *Response:* The consultant emphasized a low target, somewhere below 10%.
- Question/comment: There is an opportunity here for new development.
 - *Response:* The consultant noted that ideally 800–900 homes would comply by 2020, a significant portion of which could come from new development.
- Discussion: Potential to require the low-cost action, such as roof orientation in all new residential development to accommodate solar PV installations. At least one member of the Focus Group noted that this requirement is infeasible and costly and would require financial incentives to offset the costs. Another Focus Group member noted that this more limited requirement may be a good way to facilitate on-site solar PV.

Measure 18: Facilitate on-site renewable energy generation by commercial and industrial uses

- Question/comment: How far do we get toward our emissions target with requiring LEED certification?
 - *Response:* The consultant noted the diminishing benefits (in terms of energy efficiency) and high costs of requiring LEED. The educational questions and issues of economics are very important to measure implementation, and will be addressed by ILG's outreach and education efforts.
- Question/comment: What would passive solar include?
 - *Response:* Certain types of new construction must have roof space that allows for panel(s) to be placed, but they are not required to install the panel(s) at the same time. May also incorporate passive solar in design codes to maximize cooling of houses.
- Discussion: When is the next generation of solar panels coming that are more efficient?
 - Designs are frequently changing – hard to track.
 - The solar farm at UC Merced is an impressive example.
 - For commercial success, the City needs to promote solar panels. Businesses should be educated about the longer term benefits, which help mitigate the upfront costs.

Measure 23: Reduce the amount of water used for landscaping.

- Question/comment: A City staff member noted strides that had been made in Merced toward conservation, notably having reduced to two days of outdoor water use per week. The City also conducts ongoing education to promote water conservation. However, only half the town is metered, so members of the public are needed to help report water waste when they notice it.
- Question/comment: A participant noted that although the GHG reduction benefits of this measure are lower, there is still a positive and worthy reason to conserve water and implement, especially considering the drought.

Measures 25 and 26: Expand Composting & Increase Recycling

- Discussion/comment: State legislation may require composting and limit the amount of alternative daily cover that can be placed on landfills. The City and the Merced County Regional Waste Management Authority investigated the costs of composting, and it's expensive. There may not be the market to purchase it. The best way to compost is on-site. Waste strategies should focus on the three 'Rs:' Reduce, Reuse, Recycle.
- Discussion: What about commercial composting?
 - Many companies already do residential composting – could the City work with them?
 - Many of the places already doing this are in true urban centers. Would it work in Merced? The best place for composting may be at home, through reduction and reuse.
 - Education is needed about home composting and incentive programs.
- Question/comment: Recycling always shows up as one of the largest reductions, but not everything can be recycled for a profit. If the profit isn't there, it is hard to achieve the diversions.
 - *Response:* A member of the consultant team noted that the challenge around this problem is that some of it is outside of the City's control.
- Question/comment: A member of the consulting team noted that the team would look at the structure of the waste measures (25, 26, and 27) and potential statewide composting requirements.

NEXT STEPS

The meeting concluded with three homework questions for the Focus Group. Input was requested by October 23, 2014. The next PCAP meeting for the general public and Focus Group will be held on November 13, 2014, in the Sam Pipes Room in the City of Merced Civic Center. Discussion at the next meeting will focus on the updated reduction measures, the cost-benefit analysis of reduction measures, and a proposed monitoring framework. The ILG will continue working closely with Bill King on the complementary education and outreach efforts.