



PART 5: Implementation

Steps to Reach Plan Goals

PART 5: IMPLEMENTATION

The extent of the success of Merced’s Climate Action Plan is directly linked to the degree of implementation. PART 5 describes four broad issues related to Climate Action Plan implementation, and includes:

- Locally Driven Plan
- Next Steps
- Phasing Plan and Monitoring, Evaluations, and Updates
- Barriers to Implementation
- Implementation Factors

“Although the amount of greenhouse gas emissions from City of Merced facilities and operations is relatively low, compared with those generated by the community as a whole, the capacity of local government to affect change in Merced’s overall emissions is high. For this reason, the City of Merced should be a leader to foster a sustainable community.”

-Kahri Boykin, member of the City of Merced Climate Action Plan Advisory Ad-Hoc Committee.

Locally Driven Plan

Reason for the Plan

In November 2009, the City Council accepted Energy Efficiency and Conservation Block Grant funds from the Federal Department of Energy to undertake several projects to increase energy efficiency. At that time, the Assistant City Manager identified the document to be completed by the Planning Division as a “roadmap” that included all current “green” activities and policies of the City, along with recommendations to expand these as appropriate. At the same time, Merced and other local California cities and counties navigated their draft general plan update efforts through the emerging setting of greenhouse gas emission analysis requirements. The efforts of many jurisdictions were challenged, resulting in negative consequences. For example, the City of Stockton agreed to limit development activity until they had completed a Climate Action Plan (CAP), the content of which was strongly influenced by outside entities. To strengthen the City of Merced’s effort’s, the “roadmap” document was titled a Climate Action Plan (CAP).

On September 7, 2010, the City Council took two key Climate Action Planning steps: (1) adopted City Council Resolution #2010-80 committing to take steps to reduce greenhouse gas emissions through adoption of a Climate Action Plan (CAP); and, (2) directed Staff to begin the recruitment process for members of a Climate Action Plan (CAP) Ad-Hoc Advisory Committee. The Committee met monthly from January through September 2011.

Self-Governance

The origin, development, and implementation of the Merced Climate Action Plan was grounded on the belief in local self-governance for the betterment of the community of Merced. While the City recognizes that some of the recommended actions reflect state mandates, many of the recommended actions are locally driven and benefit locals. Decisions of how to implement these actions are likewise locally driven, and the basis for such effort is based on a broad set of community values and goals established prior to the issue of global warming.

Local Leadership

The Merced Community consists of an array of interested citizens and groups each containing the ability and energy to implement in whole, or as partners with others, many of the ideas and actions expressed in the Climate Action Plan. Such independent and community-based spirit is celebrated and encouraged.

Implementation Decision Tree

The Climate Action Plan is primarily a collection of existing and proposed City policy statements that foremost improve the community and secondarily reduce greenhouse gas emissions. As a set of policy statements, implementation of the recommended actions necessitates further community involvement involving citizens, elected and appointed officials. Adoption of the CAP does not automatically deploy actions for implementation.

This section of the CAP describes the process City Department heads and managers will use when taking steps to initiate implementation of the actions recommended in this plan, and are based on the following statements which appear throughout this document including, but not limited to:

- The CAP is not binding on the Council or the Community.
- Strategies will be implemented in an incremental manner, based on the needs and ability of the Community.
- Strategies will be financially feasible.
- Pursue actions, not simply based on its GHG reduction potential, but on the suite of benefits that it can provide the community.
- Actions will be developed by CAP leadership and presented for the City Council's consideration prior to actual implementation.
- The City Council and public will be afforded an opportunity to review recommended actions and related costs and benefits, prior to implementation of any action.
- Prepare a detailed cost-benefit analysis of recommended strategies and actions, recognizing at least these values: (a) economic development; (b) GHG reduction potential; and, (c) co-benefits.
- Pursuing low or no-cost high-priority recommendations will have the greatest likelihood of success.
- After the CAP is adopted, specific actions will be developed by CAP leadership and presented for Council's consideration prior to actual implementation.

Implementation Decision Tree

Implementation of all recommended action items can only proceed after: 1) an assessment of its costs and benefits by staff, unless waived by the City Manager; and, 2) review of the detailed program to implement said action by the City of Merced City Council at a public hearing.

Independent Community Efforts

Many CAP recommended actions could occur independently of City involvement, and are not subject to the decision-tree described above.

Statement of Intent

On August 28, 2012, the Economic Development Advisory Committee unanimously recommended approval for the adoption of the proposed Climate Action Plan (CAP). During the discussion period, however, several EDAC members expressed concern that the CAP appears to create the potential for future City imposed requirements and fees. It was suggested that a statement be prepared that describes the intent of the City in pursuing the proposed CAP and addresses the expressed concern.

In response, staff noted that the intent of the CAP was to promote the following:

- compliance with federal and state greenhouse gas emission laws
- voluntary actions reflecting community values
- gaining a competitive advantage to secure grant funding
- the use of incentives to encourage positive change

Furthermore, the CAP will not require new or expanded fees or regulations except where consistent with State law or local ordinance.

City Staff emphasized that the CAP includes checks-and-balances, including a section that requires all actions encouraged or required in accordance with the CAP be subject to public review and a cost benefit analysis.

On October 1, 2012, the City Council of the City of Merced affirmed this statement, and contributed the first bullet-point above.

Next Steps

GHG Reduction Tools

The Climate Action Plan includes the following tools to reach the City's GHG reduction target 1990 levels by 2020:

- A locally-supported comprehensive list of strategies and implementation actions;
- An Implementation Phasing Plan;
- A list of Implementation "Initial Steps" and "Guiding Principles";
- A list of Potential Community Partners; and,
- List of Implementation Factors.

The CAP includes 31 strategies and 156 implementation actions, and describes numerous City departments and community partners. In order to reach the selected GHG reduction target, a comprehensive approach, both in terms of actions and implementers, will be required.

Initial Steps and Guiding Compass

The Merced CAP is an important benchmark step toward achieving a sustainable community, and provides tools and direction for implementation. Further steps are needed to integrate the CAP into the operating fabric of the City and Community, however. The Climate Action Plan Advisory Ad-Hoc Committee, made up of citizens, business owners, development interests, community advocacy groups, chamber of commerce groups, utilities, and public agencies, recommends that the City Council take appropriate actions to achieve these initial steps, which are outlined below, and should primarily occur during the "near-term" phase of the implementation.

In addition to these initial steps, the Merced Climate Action Plan comes with a *Guiding Compass*, which is a set of strategies that charts a general course of direction and approach to implement the CAP. The strategies are not an exhaustive list of prescriptions for what could or should be done. The strategies listed below are based on the premise that the greatest potential to reduce greenhouse gas emissions is from a coalition of independent individuals and groups, banded together under a common goal. The strength of each entity is based on knowledge and understanding of the issues, ability to act independently, and encouragement to discover new approaches.



Leadership

INITIAL STEPS

- The City Council to examine and select an appropriate leadership model for Plan Implementation.

GUIDING COMPASS

- Identify the highest priority problems for the City and the most cost-effective solutions.
- Foster communication among City Departments, City Officials, and citizens.
- Update actions to address new challenges and opportunities.
- Expand Leadership Capacities in Local Government and the Community.



Programs and Budgets

INITIAL STEPS

- The City Council will select a leadership model to create a detailed Implementation Plan.
- Integrate CAP Measures into Department Work Plans, as appropriate.
- Identify sets of measures that when implemented together, provide value-added GHG reductions.

GUIDING COMPASS

- Utilize the CAP as a resource of identifying potential Capital Improvement Projects.
- Establish knowledge among City Staff and Community Partners of funding opportunities for use with specific measures.
- Maintain and Strengthen Existing Local Sustainability Programs.
- Expand programs on foundations set during initial plan phases.
- Position City to capture future funding opportunities.
- Pursue a Coordinated Funding Strategy with Community Partners.
- Identify and pursue local, regional, state, and federal grants as appropriate to support implementation.

Partnerships



INITIAL STEPS

- Coordinate to avoid redundancy and to leverage resources.

GUIDING COMPASS

- Recognize and support the actions of independent entities.
- Form new partnerships; enhance existing relationships.
- Increase technical support and data sharing capacity.
- Motivate partners and Mercedians by use of incentives and recognition programs, applicable to the varied interests and needs of the community. For example, use of energy-saving appliances in new homes as a marketing tool to home-buyers.
- Work with partnerships that implement the Climate Action Plan.

Assessment, Monitoring, Evaluations, and Updates



INITIAL STEPS

- Prepare a detailed cost-benefit analysis of recommended strategies and actions, recognizing at least these values: (a) economic development; (b) GHG reduction potential; and, (c) co-benefits.

GUIDING COMPASS

- Monitor key indicators to identify any increases in building energy efficiency and conservation advancements in waste reduction and improvements to the vehicle fleet, etc. This will not only help the City track its progress towards reaching its emission reduction targets, but also to critique the success of any projects or policies that may be implemented to reduce emissions.
- The City should regularly re-inventory its emissions. The process of conducting a re-inventory will allow demonstration of progress toward local emissions reduction targets and identify opportunities to integrate new or improved measures into your emissions reduction plan.
- Review and update the CAP as appropriate.
- Provide regular Climate Action Plan progress reports to the City Council and City Manager. These progress reports can be posted on the City website to inform the community on progress.
- Realize incremental change.
- Amend City policies and ordinances, as appropriate, to implement the CAP goals, policies, and actions.

Phasing Plan and Monitoring, Evaluations, and Updates

Phasing Plan

Adoption of the City of Merced Climate Action Plan is a starting point in reducing greenhouse gas emissions to 1990 levels by 2020. For purposes of this CAP, 2020 is regarded as the Plan's end-point, leaving just 8-years after adoption of the Plan to reach the City's GHG reduction target. In general, the Climate Action Plan Ad-Hoc Advisory Committee recommends that the City first follow the path of least resistance in deploying actions, i.e. those actions that have the least financial and regulatory barriers to implementation. To help ensure continued momentum of Merced's efforts, the Climate Action Plan Ad-Hoc Advisory Committee also recommends the use of interim targets to facilitate additional support and accountability. This results in a 3-phase plan, and is consistent with the Merced City Council's direction to recognize short-term and near term approaches to meet the City's 2020 long-term goal. This 3-phase plan also provides a framework in which to set implementation strategies that can be achieved in an incremental manner, based on the needs and ability of the Community and City Staff.



Phasing Plan Considerations

The following considerations are provided to aid in the preparation of a complete implementation schedule, which will describe the “what,” “when,” and “whom” aspects for all listed strategies and actions of the CAP. The outcome of such task is largely dependent upon the form of leadership and available City resources to implement the CAP.

- It is important to note that this phased approach is conceptual in nature and subject to adjustment based on implementation successes and challenges, as well as what leadership model is deployed.
- Use of higher order leadership models can result in greater productivity and implementation of actions in earlier phases.
- Although each phase includes a kick-off year and describes a focus period, near-term and mid-term measures will likely extend into subsequent phases.



PHASE 1: NEAR-TERM

Phase 1, generally occurring from 2012 to 2014, should consist of strategies and actions that:

- have already begun to be implemented;
- are required by state law;
- are enhancements of existing City or Community programs;
- lay public outreach groundwork for more complicated projects to be implemented in the later phases;
- includes several voluntary compliance measures for the Community; and,
- form relationships with community groups engaged in sustainability.



PHASE 2: MID-TERM

Phase 2, generally occurring from 2015 to 2016, should consist of strategies and actions that:

- implement new state-based mandatory programs which capitalize on the educational and voluntary compliance measures of Phase 1 programs; and,
- implement measures that provide significant emission reductions with low-to-moderate costs.



PHASE 3: LONG-TERM

Phase 3, generally occurring from 2017 to 2020, should consist of strategies and actions that:

- could not be implemented earlier due to obstacles of available data, technology, or resources;
- require substantial engagement of the community; and,
- require future technologies and significant monetary resources.

Incorporating into Existing Planning Mechanisms

This plan builds upon the momentum developed through previous and related planning efforts and recommends implementing projects, where possible, through the following mechanisms:

- *Merced Vision 2030 General Plan*
- City Ordinances
- Urban Water Management Plan
- Capital Improvement Plans and budgets
- City of Merced Bicycle Plan
- Building and Safety Codes
- Official Standard Engineering Designs
- Other plans, regulations, and practices with a mitigation focus

Efforts should be made to monitor the progress of Climate Action Plan recommended actions implemented through these other planning mechanisms and where appropriate, priority projects should be incorporated into updates of this Plan.



Monitoring, Evaluation, and Updates to the Plan

MONITORING THE PLAN

Upon adoption, the Climate Action Plan faces the truest test of its worth: implementation. Implementation implies two concepts—action and priority, which are closely related. While this plan puts forth many worthwhile and high priority recommendations, the decision about which action to undertake first will be the first task facing the City. Two factors will help in making that decision. First, there are high-priority items, and second, funding is always an issue. Thus, pursuing low or no-cost high-priority recommendations will have the greatest likelihood of success.

Implementation is most successful when actions are incorporated into the day-to-day functions and priorities of the government and development community.

Simultaneous to these efforts, it is important to maintain a constant monitoring of funding opportunities that can be leveraged to implement some of the more costly recommended actions. This will include creating and maintaining a bank of ideas on how any required local match or participation requirement can be met. When funding does become available, the Climate Action Plan will be in a position to capitalize on the opportunity.

EVALUATING THE PLAN

Evaluating progress is an ongoing process, and as such, the Climate Action Plan should be treated as a living document that must grow and adapt in order to keep pace with changes. Data to measure success and challenges will be collected continuously during the implementation period. A full report and assessment will be crafted prior to the beginning of Phase 2 and 3 to describe the effectiveness of recommended actions, and to reflect necessary changes or adjustments. The evaluation process includes a firm schedule and timeline, and identifies the local agencies and organizations participating in plan evaluation.

City Staff members will be responsible for monitoring and evaluating the progress of the emission reduction strategies in the Plan. City Staff will review the goals, strategies, and action items to determine their relevance to changing situations in the City, as well as changes in State or Federal policy, and to ensure they are addressing current and expected conditions. City Staff will also review the *Context of Climate Action Planning* and *Capacity Assessment* portions of the Plan to determine if this information should be modified, given any new available data. Partnership organizations responsible for various actions will be encouraged to report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised.

Evaluation of progress can be achieved by monitoring changes related to a series of GHG emission metrics. In order to best evaluate reduction of GHG emissions as a result of plan implementation, the TAC will follow the following process:

- A representative from the responsible entity identified in each action will be responsible for tracking and reporting project status and provide input on whether the project as implemented meets the defined goal and is likely to be successful in reducing emissions.
- Projects that have failed or are not considered feasible may be adjusted and/or noted after a review of their consistency with established criteria, time frame, community priorities, and/or funding resources.

UPDATING THE PLAN

In 2020, the City Manager, subject to available funding and Council priorities, will cause the preparation of a comprehensive update to the Climate Action Plan. Appropriate changes to the Plan will be made before submitting it to the full TAC and presenting it to the City Manager prior to approval by the City Council. The TAC will also notify all holders of the City's Plan when changes have been made. In keeping with the process of adopting the plan, a public involvement process to receive public comment on plan updating will be held during the review period, and the final product will be adopted by the City Council.

CONTINUED PUBLIC INVOLVEMENT

Continued public involvement is imperative to the overall success of the plan's implementation. The update process provides an opportunity to seek additional public comment. A public meeting(s) to receive public comment on plan evaluations and updates will be held during these processes. CAP implementation leadership will coordinate with all stakeholders participating in the planning process.

The plan update process will include continued public and stakeholder involvement and input through attendance at meetings, web postings, and press releases to local media. The public will also have the opportunity to provide feedback about the Plan. Copies of the Plan will be catalogued and kept at all of the appropriate agencies in the City. The existence and location of these copies will be publicized in the City newsletter which reaches every utility customer in the City.

Copies of the Plan and any proposed changes will be posted on the City's website. This site will also contain an email address and phone number to which people can direct their comments and concerns.

After the CAP is adopted, specific actions will be developed by CAP leadership and presented for Council's consideration prior to actual implementation.

Barriers to Implementation

Introduction

While the City of Merced CAP includes many tools to reduce GHG emissions, there are barriers to implementation that must be recognized. The Climate Action Plan includes a comprehensive list of strategies and associated actions to reduce GHG from new development and from existing emission sources, but the ability to implement these is dependent upon the leadership and available staff resources. The Climate Action Plan (CAP) Ad-Hoc Advisory Committee recommends that as a first step, the City Council consider all options and take action to assess and implement the highest-order Leadership Model possible, soon after adoption of the CAP.

Relationship of Leadership and Implementation Schedule

The current leadership model consists of “Focused Programs,” in which an assigned part or full time employee implements a single program, for example, water conservation or recycling. This is a good first step toward establishing the more robust sustainability program, which is needed to reach the GHG reduction target. Existing programs in Merced include:

- Water Conservation Specialist, City of Merced, Public Works Department
- Recycling Information Specialist, Merced County Association of Governments (MCAG)
- Commute Connection Website, MCAG Contracted Service
- Community Energy Manager, PG&E

Absent the hiring of additional staff members, work on sustainability and climate-related tasks by existing City Staff would need to be balanced with other duties and priorities.

The current Leadership Model will be able to implement a select group of actions; a change in the current leadership model is necessary to enable the City to reach the full GHG reduction target of 20% below 1990 by the year 2020.

Funding

The capacity of City Staff resources has been dramatically reduced due to budget cuts, associated layoffs and retention of existing services. Although Climate Action Planning is a high funding priority for federal and state departments, these project-based revenue sources are not guaranteed. Local funding sources are limited.

In March 2011, ICLEI asked its members to submit their approaches to funding sustainability staff and operations, and compiled responses from 38 local governments across the county. Its findings found that local government employ a mix of strategies, though many relied exclusively on their General Fund.

- 55% funding staff and operations through their General Fund (fully or partially)
- 37% through special fees or rebates, such as solid waste fees
- 24% through foundation grants or partnerships
- 29% through the federal Energy Efficiency and Conservation Block Grant or their stimulus related funding
- 16% through cost savings

In recent years, City of Merced General Fund resources have been reduced. Intertwined with the City Council's decision on leadership is the related issue of funding.



Implementation Factors

Near Term Implementation Focus

The current leadership model will be able to implement some, but not all strategies and actions generally described in Phase 1 of the CAP, and include those that:

- have already begun to be implemented, such as recycling, water conservation, and bike planning;
- are required by state law, for example, commercial recycling and enforcement of CALGreen; and,
- are enhancements of existing City or Community programs, as resources allow.

New Development Projects

The City's Development Services Department will apply project mitigation measures and conditions of approval to new development projects to reduce GHG emissions. Appendix E provides a list of project-level actions applicable to new development.

Implementation Factors

For each recommended strategy and actions, the CAP lists several factors to aid in the drafting of an implementation plan. These are described in Appendix B.

Existing, Enhanced, and New Actions

CAP *actions* are comprised of existing or enhanced policies and programs as well as new ideas based on best practices from around the country.

Government Operations / Community

Government Operations are specific to the internal operations of the City of Merced. They apply to buildings the City of Merced owns or leases, vehicles used to provide services such as police and fire, lighting of roadways, etc. Conversely, Community Activities require involvement and participation from citizens and/or private property.

Greenhouse Gas Reduction Potential

Various specific actions will result in different GHG emission reductions. For example ⁵³:

Action	CO2e reduction (metric tons)
Replace 5 mid-sized fleet vehicles with hybrids	5
Replaced 1,000 fluorescent lights with Super T8 lamps with electric ballast	28
Increase energy efficient of a 30,000 sq. ft. building by 25%	51

The GHG reduction potential amounts in this Plan should be regarded as general estimates and subject to revision.

Assessment of Costs and Benefits

Preparation of a cost-benefit analysis with the Climate Action Plan would have been cost-prohibitive and premature. The cost to hire a specialist knowledgeable in GHG reduction potentials for all energy sources (buildings, vehicles, waster, water, land use, etc.) and performed for all proposed action items would have taken a large portion of the grant funds. Additionally, due to changes in costs or project approach, the cost-benefit analysis would have been out-of-date when actions would be implemented. Rather, the focus of the planning effort was to identify several potential greenhouse gas reduction actions, and then conduct a cost-benefit analysis at a time when its implementation approach and costs are more certain, and when additional community involvement could occur in deciding the actual approach of the action.

Responsible City Departments/Divisions

Even with a Sustainability Manager, the primary responsibility to implement various GHG reduction activities lay with an array of different City Departments, and include the following:

- Planning (PLNG)
- Inspection Services (I.S.)
- Public Works (PW)
- Housing (H)
- Economic Development (ED)

