6

IMPLEMENTATION

Implementation

El Cerrito has laid a strong foundation for achieving its goals. Ensuring that the CAP results in significant emissions reductions will require robust implementation and increased coordination across all sectors. The preceding chapters describe the principle sources of El Cerrito's GHG emissions and outline related goals, objectives and strategies for achieving the community's emissions reduction targets. This chapter broadly outlines the implementation and monitoring process.

Implementation will need to include regular evaluation and an adaptive approach that will be able to respond to updated information, changing policy, funding opportunities, and advancements in technology.

El Cerrito has laid a strong foundation for achieving its reduction targets. Ensuring that the CAP results in real emissions reductions will require robust implementation and increased coordination across all sectors of the community.

Implementation Considerations

At the end of this section, *Figure 6.3, Climate Action Implementation Scores*, summarizes all the goals and objectives outlined in the CAP. Figure 6.3 also provides information to help the City prioritize measures for implementation. Implementation considerations include:

- Is the objective enabled by an existing policy?
- Are there significant other benefits that would result from implementing the objective?
- How effective is the objective in reducing GHG emissions relative to other objectives?
- What is the estimated cost to the City to fully implement the objective, relative to other objectives?

Appendix M assigns a number to each of these considerations: positive factors, such as effectiveness, are rated on an ascending numerical scale, while negative factors, such as costs, are rated on a descending scale. Strategies receiving the highest number will tend to be the most effective and implementable. However, as state, federal and private sector organizations respond to climate change, new opportunities—such as new funding streams and technological advances--will arise that are not foreseen at this time. As the City responds to these opportunities, the CAP and these implementation scores will need to be revised.

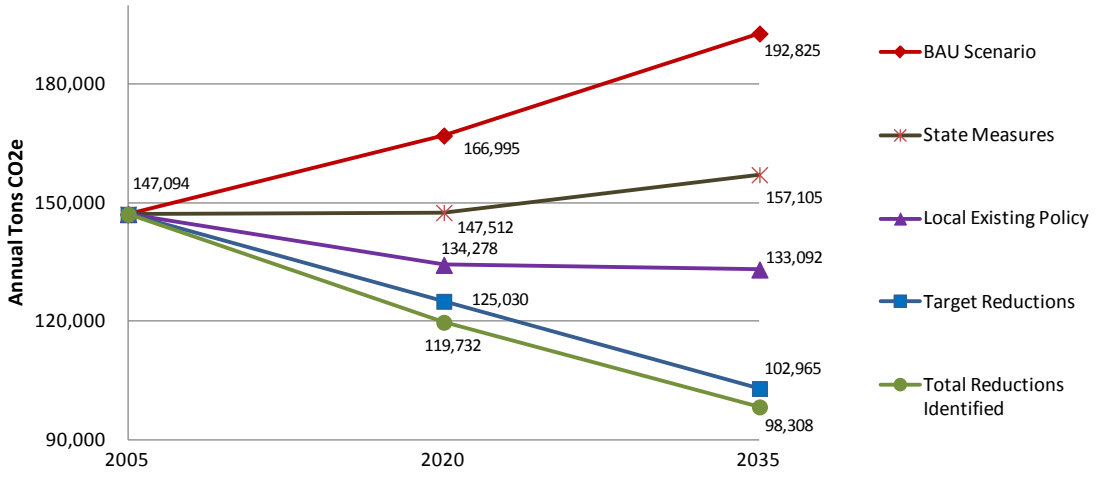
Using this rating methodology, Figure 6.3 considers the relative cost of each objective. We intentionally did not develop budgets for each objective for a variety of reasons. First, costs will largely be determined by program or project design and should be developed as part of implementing each strategy that is listed under that objective. Second, costs

to the City in implementing a strategy could range widely depending on program or project goals, the availability of grant funding, and opportunities to partner with the private sector. Finally, most objectives that have high costs, such as redeveloping under- utilized land along transportation corridors, also have many other benefits. While their implementation also results in reduced GHG emissions, they are not undertaken primarily for this purpose.

Contribution of Strategies Toward Reduction Goals

El Cerrito has already done much work to set the stage for comprehensive implementation of the CAP, especially in relation to the CAP's Sustainable Communities, Waste Reduction, and Municipal Goals. *Figure 6.1, Reductions from Existing and Proposed Strategies,* compares the CAP's Emissions Business-As-Usual (BAU) and Reduction Target Scenarios against, first, a scenario involving full implementation of only those strategies already enabled by existing City policy, and, second, against a scenario where the full list of identified strategies in the CAP is implemented. The line labeled "Local Existing Policies" quantifies the potential reductions enabled by existing policies, plans, and/or programs, if robustly implemented. Thus, the differential between potential reductions resulting from the strategies that have already been enabled and our 2020 reduction target is approximately 9,300 tons. If the City and other agencies implemented the full list of strategies included in the CAP, we have the potential to exceed our 2020 goal by 4%, as depicted by the line labeled "Total Reductions Identified."

Fig. 6.1: Reductions from Existing and Proposed Strategies

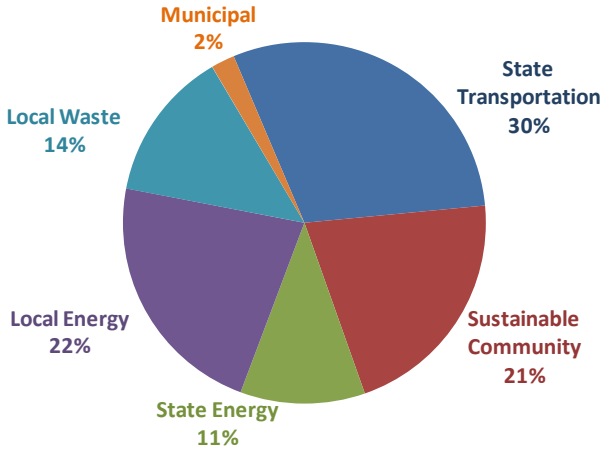


Reduction Potential by Emissions Source

Figure 6.2, Reduction Potential of Strategies, depicts the reduction potential of all identified strategies within each emissions source. In combination with the State Vehicle Fuel Standards, the City's Sustainable Community (transportation, land use, and community development) strategies provide reductions commensurate with the transportation sector's contribution to our baseline emissions, which comprised 51%

of total emissions in 2005. At 33%, local Energy and Water strategies, in combination with the State's Renewable Portfolio Standards, contribute less towards the reduction targets than the energy and water sector's contribution to the 2005 baseline, which was 44%. Finally, local waste reduction strategies contribute 14% towards the reduction goal, even though it comprises only 5% of the overall emissions.

Fig. 6.2: Reduction Potential of Strategies



Financial Considerations

Implementing the CAP over the next 22 years will require significant investment. The majority of investments will be made by the private sector as developers build projects in El Cerrito, homeowners and businesses improve the energy and water performance of their properties, and people purchase higher efficiency or electric cars and make different choices about their transportation habits. In a majority of cases, these investments will not be made primarily for the purpose of reducing GHG emissions, but rather for their significant other benefits. Many of these strategies will be implemented to increase the quality of life in El Cerrito and to create long-term positive outcomes, such as redeveloping under-utilized land along El Cerrito's transportation corridors, upgrading and maintaining the existing building stock, and saving consumers on fuel, natural gas, and electricity costs.

Implementing the CAP will also require sustained, strategic public investment by local, regional, state, and federal agencies. While the City can leverage its policy, permitting and leadership functions to help make climate protection "the new normal," robust implementation of the CAP will also require outside funding and public/private partnerships. At the state and regional levels, existing and new revenue streams are being increasingly aligned with GHG emission reduction goals. For example, in late 2012, California passed legislation to dedicate a portion of revenues from AB 32's Cap and Trade auctions to grants for GHG reductions. Also, a way of implementing SB 375, the Metropolitan Transportation Commission (MTC) is in the process of aligning regional transportation funding with infrastructure investments that support compact development along transportation corridors.

Monitoring and Continuous Improvement

Monitoring progress is a critical component to ensuring that we are on target to meet our emissions reduction goals. The Environmental Services Division will track emissions reductions, resource savings, and any other effects of each implemented measure.

- Every year, the Environmental Services Division will issue a CAP Implementation Report to

update the City Council, residents, and other interested stakeholders on progress towards implementing CAP objectives. The report will, at a minimum, detail activities to date and any lessons learned, and will make recommendations for changes to the implementation strategy or the CAP itself.

- Every five years, a full GHG inventory will be conducted. The results of the inventory should be reported to Council in a the CAP Implementation Report. Based on the results of the 5-Year GHG Inventory, changes may be made to the CAP to reflect new reduction goals and measures that would ensure the City is on track in meeting its reduction targets.

Next Steps

Upon adoption of the CAP the City will pursue the following next steps. The Environmental Services Division will:

- Develop the first Five-Year GHG Emissions Inventory to monitor actual progress towards the 2020 reduction target;
- Report back to the City Council, within the year, on the results of the 2012 Emissions Inventory and recommendations for a work-plan to guide implementation over the next three years;
- Continue to pursue opportunities to fund and implement specific strategies in the CAP.

Fig. 6.3: Climate Action Implementation Scores

Climate Action Implementation Scores

This is a summary of all the goals and objectives outlined in the CAP. It provides information to help the City prioritize measures for implementation. Implementation considerations include: Is the objective enabled by an existing policy? Are there significant other benefits that would result from implementing the objective? How effective is the objective in reducing GHG emissions relative to other strategies? What is the estimated cost to the City to fully implement the objective, relative to other objectives? A number is assigned to each of these considerations, where positive factors, such as effectiveness, are rated on an ascending numerical scale, and negative factors, such as costs, on a descending scale. Objectives receiving the highest number will tend to be the most effective and implementable.

Measure				Implementation Score (17 pts. possible)						
Goal #	**Goals and Objectives**			**Effective-ness**	**Co-Benefits**	**Name of Benefits**	**Cost**	**Required**	**Total Score**	**% of Strategies Enabled by Current Policy**
From CAP		in 2020	in 2035	1= low, 5=high	1= low, 5=high		5=low, 1=high	0=No; 2=Yes	sum of scores	
Sustainable Community										
SC-1	**Encourage higher density TOD and infill development on transportation corridors**									
SC-1.1	Update General Plan and other applicable plans and ordinances to support higher densities			4	4	Required activity that helps guide land use and municipal investment in the community	1	2	12	100%
SC-1.2	Develop planning mechanisms to encourage development of higher densities in designated areas			4	4	econmic development; planning certainty	3	0	11	50%
SC-1.3	Develop and implement a parking demand management strategy to encourage high density development and alternatives to driving			4	4	congestion management; economic development	2	0	10	25%
SC-2	**Diversify City's economy to increase the City's job base and to encourage more pedestrian-friendly economic activity**									
SC-2.1	Create attractive walkable commercial areas			5	5	economic development; quality of life; place making	2	0	11	67%
SC-2.2	Enhance neighborhood serving commercial nodes and encourage commercial spaces in mixed-use areas			4	4	economic development; quality of life; jobs-housing balance	4	0	11	33%
SC-2.3	Encourage green practices in existing businesses and attract "green economy" businesses to El Cerrito			3	3	economic development; food security; quality of life	4	0	10	33%
SC-3	**Invest in pedestrian-, bicycle-, and transit-friendly infrastructure**									
SC-3.1	Create development standards for bicycle and pedestrian friendly design	10,027	20,378	3	3	air quality, public health, congestion mgmt; place making	4	0	10	50%
SC-3.2	Maintain an active streetscape improvement program			3	4	air quality, public health, congestion mgmt; place making	2	0	9	100%
SC-3.3	Implement the Ohlone Greenway Master Plan			3	4	air quality, public health, congestion mgmt; place making	2	0	9	67%
SC-3.4	Expand and improve the City's bicycle and pedestrian infrastructure			3	4	air quality, public health, congestion mgmt; infrastructure improvements	2	0	9	100%
SC-3.5	Work with regional agencies to support improvements and greater access to transit facilities			3	4	air quality, public health, congestion mgmt; infrastructure improvements	4	0	11	50%
SC-4	**Increase and enhance urban green and open space**									
SC-4.1	Develop a comprehensive Urban Greening Plan			3	4	quality of life, public health, place making, bio-diversity, environmental quality	3	0	10	100%
SC-4.2	Promote Bay Friendly tree planting and landscaping and the creation of public open and green spaces, including community gardens.			3	4	water conservation, food security, water quality, bio-diversity, environmental quality	2	0	9	60%
SC-5	**Develop alternative transportation outreach and incentive programs**									
SC-5.1	Encourage residents and businesses to adopt trip reduction programs	242	443	2	3	air quality, public health, congestion management	4	0	9	67%
SC-5.2	Develop education and outreach campaigns and events to promote walking, biking and taking transit			2	3	air quality, public health, congestion management, fuel savings	3	0	8	100%
SC-State	**State transporation measures: fuel efficiency & low carbon content**	14,189	27,167			air quality, public health, cost savings				
Total Sustainable Community Reductions Identified (Tons CO2e)		***24,458***	***47,988***							
	Reductions from Existing (Enabled) Local Policy	***6,642***	***13,458***							

Measure				Implementation Score (17 pts. possible)						
Goal #	Goals and Objectives			Effective-ness	Co-Benefits	Name of Benefits	Cost	Required	Total Score	% of Strategies Enabled by Current Policy
From CAP		in 2020	in 2035	1= low, 5=high	1= low, 5=high		5=low, 1=high	0=No; 2=Yes	sum of scores	
Energy and Water Use										
EW-1	**Reduce energy and water use in exisitng buildings by 20%**									
EW-1.1	Promote and provide energy and water efficiency education & incentive programs in El Cerrito	2,736	10,411	4	3	cost savings, energy/ water security, resource conservation	2	0	9	60%
EW-1.2	Promote clean energy financing strategies, such as PACE, for property owners	887	1,953	4	4	cost savings, energy security, private investment	4	0	12	0%
EW-1.3	Utilize existing points of interaction with the City to encourage and/or require energy and water improvements	867	3,503	3	3	cost savings, energy/ water security, resource conservation	3	0	9	0%
EW-2	**Encourage new construction to build to a higher level of green building and energy efficiency than is required by CA code**									
EW-2.1	Encourage green building adoption and/or net-zero energy design in new construction	445	1,333	3	5	indoor air quality, cost savings, energy/ water security, natural resource protection	3	0	11	0%
EW-3	**Reduce reliance on fossil fuel based energy by increasing renewable energy use in El Cerrito**									
EW-3.1	Facilitate greater adoption of renewable energy use	1,061	3,566	4	4	cost savings, energy security, peak load mitigation	3	0	10	40%
EW-3.2	Join a Community Choice Aggregation	4,242	6,868	5	2	greater control of energy policy & programs	4	0	11	0%
EW-4	**Encourage water conservation and diversify the community's water supply for non-potable uses.**									
EW-4.1	Promote and provide water efficiency education & incentive programs in El Cerrito	63	95	2	4	cost savings, water security, resilience to drought	3	0	9	50%
EW-4.2	Encourage adoption of rainwater catchment and gray water irrigation systems			2	4	cost savings, water security, resilience to drought	4	0	10	0%
EW-State	**State electricity measures: Renewable Energy Standard**	5,294	8,553			clean air state-wide				
	Total Energy / Water Reductions Identified (Tons CO2e)	***15,595***	***36,282***							
	Reductions from Existing (Enabled) Local Policy	***456***	***1,474***							

Waste Reduction										
W-1	**Reduce waste going to landfill to 4,000 tons by 2020 and and 2,000 tons by 2035**									
W-1.1	Increase participation in curbside waste reduction services in all sectors	6,324	8,397	4	4	Resource savings, pollution prevention, fewer landfills	4	0	12	60%
W-1.2	Expand one-stop waste diversion options at the Recycling and Environmental Resource Center			3	5	Resource savings, pollution prevention, fewer landfills, quality of life	4	2	14	100%
W-1.3	Reduce landfill waste from Construction and Demolition Projects			3	4	Resource savings, pollution prevention, fewer landfills	4	1	12	0%
W-1.4	Develop & implement a Zero-Waste Plan			3	4	Resource savings, pollution prevention, fewer landfills	3	0	10	0%
	Total Waste Reductions Identified (Tons CO2e)	***6,324***	***8,397***							
	Reductions from Existing (Enabled) Local Policy	***5,758***	***8,528***							

Measure				Implementation Score (17 pts. possible)						
Goal #	Goals and Objectives			Effective-ness	Co-Benefits	Name of Benefits	Cost	Required	Total Score	% of Strategies Enabled by Current Policy
From CAP		in 2020	in 2035	1= low, 5=high	1= low, 5=high		5=low, 1=high	0=No; 2=Yes	sum of scores	
Municipal Climate Action										
M-1	**Reduce municipal transportation related GHG emissions by 15% by 2020 and 30% by 2035**									
M-1.1	Reduce annual VMT associated with employee commutes and field work	100	134	4	5	air quality, public health, congestion management, fuel savings	4	2	13	60%
M-1.2	Green the municipal fleet	12	20	2	3		3	0	8	40%
M-1.3	Reduce car travel associated with large City-sponsored events	0.63	1.00	1	4		4	0	9	50%
M-2	**Reduce reliance on utility provided energy and water in municipal operations**									
M-2.1	Reduce overall energy and water use in municipal operations	200	334	5	4	cost savings, energy security	3	0	12	80%
M-2.2	Locate solar energy projects on city buildings.	112	140	5	4		2	0	11	100%
M-2.3	Use Bay Friendly and Water Smart Irrigation practices and technologies	2	2.4	2	4	aesthetics, natural habitat, air quality, water savings, maintenance savings, waste reduction	3		9	40%
M-2.4	Convert City landscaped areas to "Bay Friendly," drought-tolerant landscapes (includes water/waste/fuel savings)	82	113	3	5		1		9	50%
M-3	**Update the City's project development and procurement practices to ensure the purchase of environmentally preferable projects, equipment, and products.**									
M-3.1	Update the City's Environmentally Preferable Purchasing policy and tools	embedded energy, not measured		3	3	environmental leadership; pollution prevention; resource savings; indoor air quality; maintenance of city assets	5	0	11	0%
M-3.2	Develop a green building ordinance for municipal buildings and projects	embedded energy, not measured		4	5		4	0	13	0%
M-3.3	Maintain an active pavement preservation and management program	embedded energy, not measured		5	5		1	2	13	100%
M-3.4	Reduce refrigerant emissions from City-owned AC units, vehicles, and regrigerators	295	322	5	3		4	0	12	0%
M-4	**Make City operations a model of "reduce, reuse, recycle, and compost"**									
M-4.1	Institute robust recycling and food waste composting programs in all City facilities	counted in community waste reductions		5	4	Resource savings, pollution prevention, fewer landfills, quality of life	5	0	14	75%
M-4.2	Create protocols, tools, and trainings to aid staff in specifying and purchasing recycled-content products, equipment, and materials.	embedded energy, not measured		3	4		4	0	11	0%
M-4.3	Institute waste reduction policies and projects.	embedded energy, not measured		3	3		4	0	10	0%
	Target Reductions (Tons CO2e)	***801***	***1,685***							
	Total Municipal Reductions Identified (Tons CO2e)	***803***	***1,064***							
	Reductions from Existing (Enabled) Policy/ Projects	***378***	***553***							

Total Community & Municipal Reductions (Tons CO2e)		***2020***	***2035***
	Target Reductions at 15% and 30%	*41,965*	*89,860*
	Reductions from State Policy	*19,483*	*35,720*
	Reductions from Local Existing (Enabled) Policy	*13,234*	*24,013*
Remaining Reductions to Enable to Make Targets		*9,248*	*30,127*
	Total Possible Reductions Identified	*47,180*	*93,732*
% CO2e reduced if all measures sucessfully implemented		*19%*	*33%*