APPENDIX B

Implementation Factors

KEY

GHG Reduction Potential

An estimate of potential greenhouse gas reduction potential expressed in tons of CO_2 equivalent.

Program

Generally describes if the action is an ongoing, enhanced or new item.

Gov

"X" denotes this action affects government facilities and operations only.

Phasing Recommendation

1 = Phase 1 / Near-Term / 2012 to 2014

2 = Phase 2 / Mid-term / 2015 to 2016

3 = Phase 3 / Long Term / 2017 to 2020

Responsible Entity

PLNG = Planning

PFEDA = Public Financing and Economic Development Authority

ED = Economic Development

ENG = Engineering

PW = Public Works

MCAG = Merced County Association of Governments

IS = Inspection Services

FIN = Finance

Goal 1. Enhance Mobility of All Transportation Modes (EM)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY EM 1.1: SITE DESIGN PLANNING:					
EM 1.1.1 Codify Mobility Design Standards		new	-	2	PLNG
EM 1.1.2 Mobility Design Guidelines		new	-	1	PLNG
STRATEGY EM 1.2: TRANSIT PLANNING:	814				
EM 1.2.1 M / Bellevue Transitway		ongoing	-	1	MCAG/PLNG
EM 1.2.2 Mobility Access at Transit Stations		enhanced	-	1	PFEDA /PLNG
EM 1.2.3 Downtown Mobility Connections		enhanced	-	1	PFEDA /PLNG
EM 1.2.4 Transit Connection between jobs and housing		new	-	1	MCAG/PLNG
STRATEGY EM 1.3: BICYCLE PLANNING AND PROJECTS*:*	2,485				
EM 1.3.1 Trails along Urban Streams		ongoing	-	1	PLNG/ENG
EM 1.3.2 Coordination with Merced County Facilities		new	-	1	ENG
EM 1.3.3 South Merced Facilities		new	-	1	PLNG/ PFEDA /ENG
EM 1.3.4 20 miles of bike lanes		new	-	1	ENG
EM 1.3.5 Continuous Bike Connections with Land Uses		ongoing	-	ongoing	PLNG/ PFEDA /ENG
EM 1.3.6 Plan Updates		new	-	2	PLNG
EM 1.3.7 Require Destination Amenities		new	-	1	PLNG
EM 1.3.8 Expanded Bike Realm in Streets		new	-	1	PLNG/ PFEDA /ENG
EM 1.3.9 Update City Design Standards		ongoing	-	1	ENG
STRATEGY EM 1.4: PEDESTRIAN PLANNING AND PROJECTS:	621				
EM 1.4.1 Pedestrian Master Plan		new	-	1	PLNG
EM 1.4.2 Safe Routes to School		enhanced	-	1	ENG
EM 1.4.3 Shared Streets		new	-	2	ENG/PLNG
EM 1.4.4 Green Streets		new	-	2	ENG/PLNG
EM 1.4.5 Redeveloped Pedestrian Environs		new	-	2	PFEDA

Goal 2. Sustainable Community Design (SC)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY SC 2.1: COMPACT URBAN FORM / INFILL*:*					
SC 2.1.1 Focus Development Downtown		ongoing	-	ongoing	PLNG/ PFEDA
SC 2.1.2 Develop Brownfields		new	-	ongoing	PLNG/ PFEDA
SC 2.1.3 Codify Encouragement to Develop Infill Sites		new	-	1	PLNG
SC 2.1.4 Limit Rural Residential Expansions		ongoing	-	ongoing	PLNG
SC 2.1.5 Work to annex Rural Residential Areas		enhanced	-	3	PLNG
SC 2.1.6 Identify Suitable Multi-family Development Sites		new	-	1	PLNG
SC 2.1.7 Identify and Encourage Dev. of Vacant Infill Sites		new	-	1	PLNG/ PFEDA
STRATEGY SC 2.2: MIXED-USE / TRANSIT ORIENTED DEV.					
SC 2.2.1 Encourage Mixed Use Developments	6,127	ongoing	-	ongoing	PLNG
SC 2.2.2 Create Neighborhood Activity nodes		ongoing	-	ongoing	PLNG
SC 2.2.3 Expand Employment Base		ongoing	-	ongoing	ED/PLNG
SC 2.2.4 Industrial Dev.Workforce Housing Nexus study		new	-	2	ED
SC 2.2.5 Create a work-live ordinance		new	-	1	PLNG/ PFEDA
SC 2.2.6 Codify Village Core Land Uses		new	-	3	PLNG
SC 2.2.7 Create Business Park Zone		new	-	2	PLNG
SC 2.2.8 Create Mixed Use Industrial Zone		new	-	1	PLNG
SC 2.2.9 Craft the Bellevue Corridor Community Plan		new	-	1	PLNG
SC 2.2.10 Create a Mixed Use Zoning District		new	-	1	PLNG/ PFEDA
STRATEGY SC 2.3: GROWTH MANAGEMENT PLANNING*:*					
SC 2.3.1 Maintain Reduced fees in Infill Area		enhanced	--	1	PLNG/PFEDA/ED/ENG
SC 2.3.2 Infrastructure Encouragement Zones		enhanced	-	1	PLNG/PFEDA/ED/ENG
SC 2.3.3 Encourage High-Performance Designs		enhanced	-	2	PLNG/PFEDA/ED/ENG
STRATEGY SC 2.4: COMMUNITY APPEARANCE*:*					
SC 2.4.1 Gateway Design Standards in County and City		enhanced	-	ongoing	PLNG
SC 2.4.2 Expand program to underground utilities		enhanced	-	ongoing	PLNG
SC 2.4.3 Support Commercial Design Improvement Projects		ongoing	-	ongoing	PFEDA /PLNG
SC 2.4.4 Support Downtown Beautification Efforts.		ongoing	-	ongoing	PFEDA /PLNG

SC 2.4.5 Revitalize Existing Urban Villages		new	-	2	PLNG/ PFEDA

Goal 3. Water Conservation and Technology (WC)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY WC 3.1: WATER CONSERVATION AND TECHNOLOGY*:*	1,192				
WC 3.1.1 Enforce existing water shortage regulations		ongoing	-	ongoing	PW
WC 3.1.2 Implement voluntary residential water audit program		new	-	2	PW
WC 3.1.3 Enhance Residential Retrofit Program		enhanced	-	1	PW
WC 3.1.4 Implement voluntary Washing Machine Rebate Prgm.		new	-	1	PW
WC 3.1.5 Implement voluntary Conservation Program		new	-	2	PW
WC 3.1.6 Implement a tiered water rate structure		new	-	2	PW
WC 3.1.7 Implement voluntary-*Low-Flush Toilet Program*		new	-	1	PW
WC 3.1.8 Implement the *Large Landscape Conservation Program*		new	**X**	1	PW
WC 3.1.9 Enhance the existing *Water Metering Program*		new	-	2	PW
STRATEGY WC 3.2: REDUCE GROUNDWATER PUMPING*:*					
WC 3.2.1 Pursue Demand-Reduction programs for potable water		new	-	2	PW
WC 3.2.2 Perform a *System Water Audit*		new	-	3	PW
WC 3.2.3 Reach a long-water term transfer agreement with MID		new	-	3	PW
WC 3.2.4 Preserve and enhance MID surface water system		new	-	2	PW
WC 3.2.5. Explore use of MID surface water for other than Ag..		new	-	2	PW
WC 3.2.6 Consider Use of Reclaimed Water		new	-	2	PW
WC 3.2.7 Increase water storage capacity		new	-	2	PW/ENG
WC 3.2.8 Upgrade energy efficiency of water systems		new	**X**	2	PW
WC 3.2.9 Maintain and repair existing plumbing fixtures, etc.		ongoing	**X**	ongoing	PW
STRATEGY WC 3.3: WATER EFFICIENT LANDSCAPES*:*					
WC 3.3.1 Landscape audits for large commercial customers		new	-	2	PW
WC 3.3.2 Use reclaimed water for landscape irrigation		new	**X**	3	PW
WC 3.3.3 Convert industrial & irrigation demands to recycled H_20		new	-	3	PW

Goal 4. Protect Air Resources (AR)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY AR 4.1: REDUCED VEHICLE TRIPS*:*					
AR 4.1.1 Support employer-based trip reduction programs	1,820	enhanced	**X**	1	PW
AR 4.1.2 Encourage development of communication infrastructure		enhanced	**X**	ongoing	all
AR 4.1.3 Implement "Complete Streets" policies	3,097	ongoing	-	ongoing	PLNG/ENG
AR 4.1.4 Enable Transfer Between Mobility Options		ongoing	-	ongoing	PLNG/ENG/MCAG
AR 4.1.5 Increasing Use of Ridesharing	1,259	ongoing	-	ongoing	MCAG
AR 4.1.6 Complete network of bicycle and pedestrian routes		ongoing	-	ongoing	PLNG/ENG
AR 4.1.7 Establish a local car-share program	3,181	new	-	2	PLNG
AR 4.1.8 Narrow Streets for reduced speeds and traffic		new	-	1	PLNG/ENG
AR 4.1.9 Construct park-and-ride lots	217	ongoing	-	ongoing	PLNG/ENG
AR 4.1.10 Collect Impact Fees to Construct Transit Facilities		new	-	1	PLNG/ENG
AR 4.1.11 Use parking citations for Alternative Transportation		new	-	1	PLNG/ENG
AR 4.1.12 Encourage Community Based Farms and gardens		new	-	1	PLNG
STRATEGY AR 4.2: CLEAN TRIPS – CLEAN VEHICLES*:*					
AR 4.2.1 Expand Green Fleet	169	enhanced	**X**	1	PW
AR 4.2.2 Adopt a City-fleet fuel-efficiency standard		new	**X**	2	PW
AR 4.2.3 Improved Traffic Signal Coordination	648	new	-	1	ENG
AR 4.2.4 Reduce Idling	284	new	-	2	PLNG/IS
AR 4.2.5 Establish City Design Standards for traffic roundabouts		new	-	2	ENG
AR 4.2.6 Purchase fuel efficient vehicles / alternative fuel vehicles		new	**X**	1	PW
AR 4.2.7 Retire old and underutilized vehicles		ongoing	**X**	ongoing	PW
AR 4.2.8 Neighborhood Electric Vehicle Networks		new	-	ongoing	all
AR 4.2.9: Reduce heavy-duty diesel emissions.		new	-	1	PLNG/ED
STRATEGY AR 4.3: REDUCE NON-VEHICULAR EMISSIONS*:*					
AR 4.3.1 Participate in the Clean Green Yard Machine Program		new	-	1	PW

Goal 5. Waste Reduction (WR)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY WR 5.1: REDUCE, REUSE, AND RECYCLE*:*					
WR 5.1.1 Reuse construction materials		new	-	2	PW/IS
WR 5.1.2 Locate a recycling / hazardous-waste facility		new	-	2	PW
WR 5.1.3 Develop a volunteer "Master Recycler" program		new	-	1	PW
WR 5.1.4 Establish a Business and Resident reuse campaign		new	-	2	PW
WR 5.1.5 Implement State Commercial recycling requirements		new	-	1	PW
WR 5.1.6 Implement Green Code		new	-	1	IS
WR 5.1.7 Provide recycling opportunities at special events		new	**X**	1	PW
WR 5.1.8 Form waste-reduction programs w/schools and business		new	-	2	PW
WR 5.1.9 Develop and implement a waste audit program		new	-	3	PW
WR 5.1.10 Adopt waste-reduction policies/ordinances		new	-	1	PW
WR 5.1.11 Consider Recycling Service for Industrial Users		new	-	1	PW
WR 5.1.12 Consider establishing recycling incentives		new	-	2	PW
WR 5.1.13 Consider program to evaluate major waste generators		new	-	2	PW
WR 5.1.14 Provide community recycling education.		ongoing	-	ongoing	PW
WR 5.1.15 Consider implementing food waste segregation		new	-	2	PW

Goal 6. Increase the use of Renewable Energy Sources (RE)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY RE 6.1: RENEWABLE ENERGY SYSTEMS*:*					
RE 6.1.1 Encourage installation of solar energy systems	15,343	new	-	1	IS
RE 6.1.2 Implement solar hot water & space heating program	1,347	new	-	2	IS
RE 6.1.3 Encourage on-site renewable energy systems		new	-	3	IS
RE 6.1.4 Require solar hot water systems for new pools		new	-	1	IS
RE 6.1.5 Install methane-powered electric generators at WWTP		new	-	2	PW
RE 6.1.6 Enable B20 Biodiesel to fuel City Fleet		new	**X**	3	PW
RE 6.1.7 Adopt code allowances for renewable energy generators		new	-	1	PLNG
RE 6.1.8 Community financing of renewable systems		new	-	ongoing	Community
RE 6.1.9 Establish AB 811 energy financing districts		new	-	1	IS
RE 6.1.10 Revolving loan fund for renewable energy.		new	-	1	IS
RE 6.1.11 Regulate new peaker plants		new	-	1	PLNG
RE 6.1.12 Geothermal and grey-water plumbing options		new	-	1	IS

Goal 7. Building Energy Conservation (BE)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY BE 7.1: GREEN CITY FACILITIES AND INFRASTRUCTURE*:*					
BE 7.1.1 Complete Phase I of the City Energy Retrofit Project	825	ongoing	**X**	ongoing	PW
BE 7.1.2 Construct City buildings to exceed Title 24 by 15%.		new	**X**	1	IS
BE 7.1.3 Renewable energy systems on City-owned facilities		new	**X**	1	IS
BE 7.1.4 Daylight janitorial services		new	**X**	1	PW
BE 7.1.5 Energy efficient standard procurement policy		new	**X**	2	all
BE 7.1.6 Energy efficiency upgrade when replacing equipment		new	**X**	1	PW
BE 7.1.7 Lighten colors of rooftops and street paving		ne new w	**X**	1	PW
BE 7.1.8 Reduce lighting of areas that are over lit		new	**X**	1	PW
BE 7.1.9 Prevent waste in day-to-day operations		new	**X**	1	all
BE 7.1.10 Recover food waste		new	**X**	1	PW
STRATEGY BE 7.2: ENERGY EFFICIENCY IN NEW DEVELOPMENT*:* D					
BE 7.2.1: Implement the minimum CALGreen standards		ongoing	-	1	IS
BE 7.2.2: Promote enhanced energy conservation standards		new	-	1	IS/PLNG
BE 7.2.3: Update the City's Public Infrastructure Design Standards		new	-	1	ENG
BE 7.2.4: Energy Efficiency Performance Code	3,970	new	-	3	IS/PLNG
STRATEGY BE 7.3: RESIDENTIAL ENERGY EFFICIENCY*:*					
BE 7.3.1 Create assessment district bond financing program		new	-	1	IS
BE 7.3.2 Public Information on Energy Conservation		new	-	1	HOUSING
BE 7.3.3 Low-income homeowners and renters energy audits		new	-	1	HOUSING
BE 7.3.4 Low/moderate income family weatherization program	1,743	enhanced	-	1	HOUSING
BE 7.3.5 Promote point-of-sale energy audits and retrofits		new	-	1	IS
BE 7.3.6 Promote energy audits at time of remodels		new	-	1	IS
BE 7.3.7 Explorer financing tool for residential energy retrofits	4,218	new	-	1	IS/FIN
BE 7.3.8 Promote Energy Upgrade California	12,537	new	-	1	IS
BE 7.3.9 Residential Rental energy efficiency strategies		new	-	1	IS

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY BE 7.4: COMMERCIAL AND INDUSTRIAL ENERGY PERFORMANCE*:*			-		
BE 7.4.1 Implement a "Green Building" Incentive Program	10,350	new	-	1	IS
BE 7.4.2 Free Resource and Energy Business Evaluation	18,129	new	-	1	IS
BE 7.4.3 Maximize use of energy efficiency rebate programs		new	-	1	IS
BE 7.4.4 Establish PACE (AB 811) program	4,218	new	-	1	IS/FIN
BE 7.4.5 Revolving loan fund for industrial Energy Projects		new	-	1	IS/FIN
BE 7.4.6 Green building standards for remodeled buildings		new	-	3	IS/PLNG
STRATEGY BE 7.5: URBAN FORESTRY / HEAT ISLAND EFFECT*:*					
BE 7.5.1 Community Planting Program		enhanced	-	1	PW
BE 7.5.2 Heat-Island Effect Code	836	new	-	2	PLNG/IS
BE 7.5.3 Merced Tree Planting Initiative	2,524	new	-	1	PW
BE 7.5.4 Protect and Conserve Tree-Cover Areas		new	-	2	PW
BE 7.5.5 Regulate removal and replacement of trees		new	-	2	PLNG/PW

Goal 8. Public Outreach and Involvement (PO)

Strategies and Actions	GHG Reduction Potential	Program	Gov.	Phase	Responsible Entity
STRATEGY PO 8.1: COMMUNITY RESOURCE:					
PO 8.1.1 Form Partnership with local energy utilities		new	-	1	all
PO 8.1.2 Coordinate Bike Plan Efforts with County and UCM		ongoing	-	ongoing	PLNG/ENG
PO 8.1.3 Coordinate waste reduction efforts with State		ongoing	-	ongoing	PW
PO 8.1.4 Implement an Energy Program Website		new	-	1	PW
PO 8.1.5 DoRight Leadership Corps		new	-	1	Community
PO 8.1.6 Work with Community Action Agency weatherization		new	-	1	IS/HOUSING
PO 8.1.7 Cool Roofs and Pavement Campaign		new	-	1	IS
PO 8.1.8 Support the San Joaquin Valley Blueprint		new	-	ongoing	PLNG
STRATEGY PO 8.2: SUPPORT A GREEN ECONOMY:					
PO 8.2.1 Create a Green Business Challenge		new	-	1	ED
PO 8.2.2 Encourage efforts of REACON team		new	-	ongoing	ED
PO 8.2.3 Partnerships with area employers		new	-	ongoing	ED
PO 8.2.4 Develop a Green Business Program		new	-	1	ED
STRATEGY PO 8.3: SUPPORT SUSTAINABLE NEIGHBORHOODS:					
PO 8.3.1 LEED Neighborhood Planning		new	-	2	PLNG
PO 8.3.2 Community-Climate Action Challenge Program		new	-	1	PLNG
PO 8.3.3 Development of the Sustainable Community Strategy		new	-	ongoing	PLNG/HOUSING
PO 8.3.4 Revitalized Urban Villages		new	-	2	PLNG