NOTICE AND CALL OF SPECIAL JOINT MEETING (STUDY SESSION) OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY MORENO VALLEY COMMUNITY SERVICES DISTRICT COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF MORENO VALLEY AND THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY

June 15, 2010 - 6:00 PM

NOTICE IS HEREBY GIVEN that a special joint meeting (Study Session) of the City Council of the City of Moreno Valley, Moreno Valley Community Services District and the Community Redevelopment Agency of the City of Moreno Valley and the Planning Commission of the City of Moreno Valley will be held on June 15, 2010 commencing at 6:00 PM, in the City Council Chamber, City Hall, located at 14177 Frederick Street, Moreno Valley, California.

Said special meeting shall be for the purpose of:

AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION

ROLL CALL

INTRODUCTIONS

PUBLIC COMMENTS ON MATTERS UNDER THE JURISDICTION OF THE CITY COUNCIL

There is a three-minute time limit per person. Please complete and submit a LAVENDER speaker slip to the Bailiff. All remarks and questions shall be addressed to the presiding officer or to the City Council and not to any individual Council Member, staff member or other person.

SPECIAL ORDER OF BUSINESS

1. Alessandro Corridor Study (Community Development Department/ 15 Min.)

2. Status of Energy Efficiency and Climate Action Strategy (Community Development Department/ 15 Min.)

3. City Council / Planning Commission Comments

4. Planning Commission Adjournment

See Attached Special Joint Planning Commission Agenda

ADJOURNMENT to Regular Study Session

NOTICE AND CALL OF A SPECIAL JOINT STUDY SESSION OF THE MORENO VALLEY CITY COUNCIL/PLANNING COMMISSION

NOTICE IS HEREBY GIVEN that a Special Joint Study Session of the City Council/Planning Commission of the City of Moreno Valley will be held on Tuesday, June 15, 2010, commencing at 6:00 p.m., in the City Council Chamber, City Hall, located at 14177 Frederick Street, Moreno Valley, California.

Said special meeting shall be for the purpose of discussing:

100 Call to Order

200 Roll Call

300 Joint City Council/Planning Commission Study Session

- Alessandro Corridor Study
- Energy Efficiency and Climate Action Strategy
- See Attached Special Joint Study Session of the City Council/Planning Commission Agenda

400 City Council/Planning Commission Comments

500 Planning Commission Adjournment

The City of Moreno Valley complies with the Americans with Disabilities Act of 1990. If you need special assistance to participate in this meeting, please contact Mel Alonzo, ADA Coordinator at (951) 413-3027 at least 48 hours prior to the meeting. The 48-hour notification will enable the City to make arrangements to ensure accessibility to this meeting.

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John C. Terell, Planning Official of the
City of Moreno Valley, California

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APPROVALS	
BUDGET OFFICER	caf
CITY ATTORNEY	Rut
CITY MANAGER	WB

Report to City Council

TO: Mayor and City Council
Planning Commission

FROM: Kyle Kollar, Interim Community Development Director

AGENDA DATE: June 15, 2010

TITLE: ALESSANDRO CORRIDOR STUDY

RECOMMENDED ACTION

Staff requests that the City Council and Planning Commission review and provide input on the draft Alessandro Corridor Study and potential implementation of the Study's recommendations.

ADVISORY BOARD/COMMISSION RECOMMENDATION

Not applicable.

BACKGROUND

The Southern California Association of Governments (SCAG) has previously created a strategy to accommodate long-range regional growth while providing for livability, mobility, prosperity, and sustainability. This strategy, called "Compass Blueprint" promotes a stronger link between region wide transportation and land use planning and encourages creative, forward-thinking and sustainable development solutions that fit local needs and support shared regional values. The strategy is broadly based on the following four key principles, which can be referred to as the "Compass Principles."

- **Mobility** - ***Getting where we want to go***
- **Livability** - ***Creating positive communities***
- **Prosperity** - ***Long-term health for the region***
- **Sustainability** - ***Promoting efficient use of natural resources***

Compass Blueprint Planning Services are provided through Demonstration Projects, opportunities for local planning efforts to become regional showcases for great planning. Demonstration Projects assist local agencies to evaluate planning options and stimulate sustainable development opportunities. The City of Moreno Valley applied for a Demonstration Project grant in May 2009 for the Alessandro Corridor Study and was awarded a grant in December of 2009. The grant funds the consulting services to analyze land use, street and bus rapid transit improvements to enhance Alessandro Boulevard from the future March Field/Moreno Valley MetroLink station to the Riverside Regional Medical Center as a transit corridor. SCAG and City staff conducted interviews and selected Raimi & Associates as the consultant for the study.

DISCUSSION

The proposed Alessandro Boulevard Corridor Study is intended to provide an understanding of development potential along the boulevard and surrounding areas. The ultimate potential depends upon many variables, including socioeconomic trends, surrounding development patterns, and the type of development envisioned for Alessandro Boulevard Corridor. This Study is a first step in evaluating these conditions and making a series of recommendations for next steps.

Over the past several months, the consultant conducted a site survey, analyzed available data, and interviewed a number of community stakeholders. This information was presented at two community meetings, held on April 22nd and May 6th in the City Council Chambers. All property owners along Alessandro Boulevard were invited to the meeting. Various stakeholders were also invited to participate. Approximately a dozen people attended one or both of the meetings. The input at the meetings was used to generate the draft Plan presented to you tonight.

The draft Plan provides an assessment of existing conditions along Alessandro Boulevard and provides data on future development potential. This information is used to support a recommendation for focused activity centers at key intersections, incorporating the recently adopted mixed use land use districts and other planning concepts, and enhancements to the public improvements that emphasize the importance of these centers and beautify and give unique character to the entire Boulevard.

The Study is anticipated to start a conversation on potential future steps to implement changes to City regulations, capital projects and outreach to property owners and the development community to improve the economic viability and community benefits of Alessandro Boulevard and enhance pedestrian, bicycle and transit facilities in concert with good motor vehicle access.

ALTERNATIVES

Not applicable.

RECOMMENDATION

Staff requests that the City Council and Planning Commission review and provide input on the draft Alessandro Corridor Study and potential implementation of the Study's recommendations.

NOTIFICATION

Posting of the Agenda.

ATTACHMENTS/EXHIBITS

None

Prepared By:
John C. Terell AICP
Planning Official

Department Head Approval:
Kyle Kollar
Interim Community Development Director

Council Action	
Approved as requested:	Referred to:
Approved as amended:	For:
Denied:	Continued until:
Other:	Hearing set for:

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APPROVALS	
BUDGET OFFICER	
CITY ATTORNEY	
CITY MANAGER	

Report to City Council

TO: Mayor and City Council
Planning Commission

FROM: Kyle Kollar, Interim Community Development Director

AGENDA DATE: June 15, 2010

TITLE: Discuss Status of Energy Efficiency and Climate Action Strategy.

RECOMMENDED ACTION

Staff recommends that the City Council and Planning Commission review the attached list of potential policies and provide direction to staff as to which ones to consider for inclusion in the Draft Energy Efficiency and Climate Action Strategy.

ADVISORY BOARD/COMMISSION RECOMMENDATION

Not applicable.

BACKGROUND

At its Study Session of October 20, 2009 the City Council considered the preparation of a Citywide Climate Action Plan. Various cities and counties in California have adopted climate action plans or initiatives. A climate action plan is a commitment on the part of a jurisdiction to pursue a set of goals, objectives and policies aimed at reducing that community's greenhouse gas emissions.

Both energy efficiency and climate change will be part of the Energy Efficiency and Climate Action Strategy. Energy efficiency for the purposes of this document is what the City as an organization is doing to achieve energy efficiency. Climate change covers energy efficiency and other measures that would be applied on a community-wide basis. Both energy efficiency and climate change plans will reduce the energy use and greenhouse gases that are emitted within the City, as energy production is one of the major contributors to greenhouse gas emissions.

At that Study Session, there was discussion about forming an Energy Efficiency and Climate Action Strategy Task Force, and creating an Energy Efficiency and Climate Action Strategy document. Since then, staff has conducted research on other cities energy efficiency and climate action plans. A Task Force has been formed which includes members from Planning, Capital Projects, Transportation, Special Districts, Maintenance and Operations, City Managers, Electric Utilities and Facilities Divisions. The Task Force has identified various past, current and potential policies and practices, that further energy efficiency and the reduction in greenhouse gases responsible for climate change. Attachment 1 presents a draft list of potential policies for discussion and comment by the City Council and Planning Commission. The list includes all potential policies identified by staff at the Task Force meetings and in review of other cities' plans and recommendations published from various environmental organizations. The list, while not exhaustive, is intended to provide policy makers with a wide range of options from which to choose for potential adoption.

DISCUSSION

The City has received funding under the Federal Stimulus Package Energy Efficiency and Conservation Block Grant to undertake several projects and initiatives to reduce the City organization's energy use and consequently its greenhouse gas emissions. The funding covers the cost of the Energy Efficiency and Climate Action Strategy Task Force. The Task Force has convened 5 times over the past 3 months. It has discussed the existing energy use and fuel types of City facilities and vehicles. In the future we may be able to estimate the existing energy/fuel used by City facilities and vehicles and projected future use. The Task Force discussed potential programs and policies to reduce the overall City energy use, increase the use of renewable energy, and identified a future City policy of life cycle costs. The strategy would prioritize implementation of programs, policies, and projects based upon energy efficiency, cost efficiency and potential resources. Part of efforts is also identifying other grant sources. The City has recently been awarded a $375,000 grant from Southern California Edison. The grant monies are to be used to expand the scope of the Energy Efficiency and Climate Action Strategy and assist in implementing the policies of the Strategy once it is adopted.

The City has adopted a number of energy and water saving initiatives that have and will continue to reduce the energy use and level of greenhouse gases that would otherwise be emitted in the City. To build on those efforts, the Strategy is intended to provide a coordinated set of policies to focus the City and community on energy efficiency and greenhouse gas reduction in a cost effective manner, with the goals of reducing utility costs for residents and businesses, enhancing the local environment and quality of life, and contributing to enhancing the global environment without unduly hampering economic development or burdening residents or businesses with increased costs. Examples of City initiatives are alternative energy incentives offered by Moreno Valley Utilities, the recently adopted water wise landscape ordinance, the use of LED lighting in traffic signals and activities related to the City's membership in the Riverside County Clean Cities Coalition and Community Energy Partnership.

The draft Strategy has drawn on a number of resources. The City's General Plan has been researched and its policies have been incorporated into the draft document. The energy efficiency and climate change plans for the cities of San Carlos, Riverside, Redlands, and Palm Desert have been reviewed and their policies included in the draft list for consideration. Local utilities Southern California Edison, Eastern Municipal Water District and the Southern California Gas Company, and the City Utility were identified as possible providers of energy efficiency programs, policies, and funding. Finally, State, Federal and private activities were reviewed for potential policies for consideration given the impact of regulations and incentives related to building standards, alternative energy, and vehicle emissions and mileage standards.

On another track, the State has a number of initiatives to address the implementation of Assembly Bill 32 and Senate Bill 375, both aimed at reducing greenhouse gas emissions in California. SB 375 calls for the preparation of a Sustainable Communities Plan (SCS) by each Council of Governments. Moreno Valley will be part of the SCS prepared by the Southern California Council of Governments (SCAG). Planning staff is involved in the initial SCAG activities to develop the SCS. The SCS will assess current development and future plans, as represented in the adopted general plans of communities to ensure a certain level of greenhouse gas emissions on an area-wide basis. The SCS may identify land use changes that would need to be considered by Moreno Valley and other SCAG member cities to achieve the area-wide emissions reduction target. The SCS is required to be prepared and adopted within the next two years. The policies included in the Strategy will assist in the preparation of the SCS and in meeting the requirements of AB 32 and SB 375.

The above-referenced activities are an overview of the efforts of the Energy Efficiency and Climate Action Strategy Task Force. The Task Force is looking for direction from the City Council on the draft Energy Efficiency and Climate Action policies prior to embarking on the next stage of preparation of the Strategy.

ALTERNATIVES

Not applicable.

FISCAL IMPACT

Not applicable.

CITY COUNCIL GOALS

Not applicable.

SUMMARY

City Council provide direction as to their particular interest of the items called out in the Draft Energy Efficiency and Climate Action Strategy.

NOTIFICATION

Listing on the City Council Agenda.

ATTACHMENTS/EXHIBITS

1. Draft list of energy efficiency and climate action policies – To be provided under separate cover.

Prepared By:
Gabriel Diaz
Jeffrey Bradshaw
Julia Descoteaux
Associate Planners

Department Head Approval:
Kyle Kollar
Community Development Director

Concurred By:
John C. Terell
Planning Official

Council Action	
Approved as requested:	Referred to:
Approved as amended:	For:
Denied:	Continued until:
Other:	Hearing set for:

June 2010
DRAFT for City Council Review and Comment

City of Moreno Valley
Energy Efficiency and Climate Action Strategy

Draft prepared by the City of Moreno Valley Planning Division and the Energy Efficiency and Conservation Task Force

ATTACHMENT 1

Table of Contents

Executive Summary

The City of Moreno Valley Energy Efficiency and Climate Action Strategy (hereafter referred to as "Strategy") is a policy document which identifies ways that the City of Moreno Valley as an organization (its employees and the operation of its facilities) can reduce the consumption of electricity and water. The Strategy also identifies approaches that the City organization and the community can employ to reduce greenhouse gas emissions.

Introduction

The genesis of this project is the Federal Energy Efficiency and Conservation Block Grant which was awarded to the City for the purpose of implementing energy efficiency projects and strategies for the City as an organization. At the request of the City Council, the scope of the grant was expanded to include the preparation of a climate action strategy. The City recently was subsequently awarded a $375,000 SCE grant for the purpose of expanding the scope of the strategy and its implementation.

The City of Moreno Valley's Energy Efficiency and Climate Action Strategy plan is a comprehensive living document designed to provide the organization and the community with a policy document to address the energy conservation and the current and future effects of climate change. The Strategy is organized into two main sections: Energy Efficiency and Climate Action Strategy.

The City realizes the challenges the community may face due to climate change. However, with the implementation of energy conservation measures, training and public awareness, the expected results are the reduction of greenhouse gas and the community's carbon footprint. The City's General Plan may also need to be updated to reference this plan for guidance on energy efficiency and greenhouse gas reduction measures.

Recently, the State of California adopted several bills to address energy and climate issues, Assembly Bill 32 and Senate Bill 375.

Assembly Bill 32 establishes a statewide greenhouse gas emissions cap which requires emissions to be reduced to 1990 levels by the year 2020. The bill includes mandatory reporting rules, adoption of a plan and regulations to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, including provisions for using both market mechanisms and alternative compliance mechanisms. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The Air Resources Board (ARB) is the State agency charged with monitoring and regulating emissions of greenhouse gases. Under the current "business as usual" scenario, statewide emissions are increasing at a rate of approximately 1% per year as noted below.

California Senate Bill 375 provides emission-reducing goals so regions can plan, integrate disjointed planning and provide incentives for local governments and developers to follow new conscientiously-planned growth patterns. SB 375 enhances the Air Resources Board's (ARB) ability to reach AB 32 goals. For California to reach its greenhouse gas reduction goals, we must address how the state's communities grow. This law will direct the ARB to set greenhouse gas reduction targets for regions of the state and work with California's 18 metropolitan planning organizations (MPOs) to align their transportation, housing, and regional land-use plans with greenhouse gas reductions in mind. SB 375 has three goals: (1) to use the regional transportation planning process to help achieve Assembly Bill 32 goals; (2) to use CEQA streamlining

as an incentive to encourage residential projects which help achieve AB 32 goals to reduce greenhouse gas emissions (GHG); and (3) to coordinate the regional housing needs allocation process with the regional transportation planning process to reduce vehicle miles traveled. SB 375 will be responsible for reshaping the face of California's communities into more sustainable, walkable communities, with alternative transportation options and increased quality of life.

Overview of Energy Efficiency

The Energy Efficiency section's primary focus is to identify energy efficiency measures that can be adopted by the city as an organization. Once identified, the document will include both procedures that have been implemented and those that would benefit the City operations if completed. In addition, the document will provide direction and policies to ensure the most effective energy use is achieved. Section 3, Energy Efficiency provides details of measures the City of Moreno Valley has begun to implement and future measures to reduce energy consumption.

Overview of Climate Action Strategy

The focus of the Climate Action Strategy section is to promote measures similar to those identified in the Energy Efficiency section that can be implemented by residents and businesses and be applied on a community-wide basis. The Climate Action Strategy will analyze existing and future greenhouse gas emissions on a community wide basis and provide a set of policies to guide efforts to reduce our greenhouse gas emissions to a level consistent with State requirements without unduly compromising other community goals. This plan will include reduced energy use, the review of alternative transportation methods and effective land use design to promote walkable neighborhoods and a reduction of total vehicle miles traveled thus reducing greenhouse gas.

City's Current Goals and Objectives

The City's General Plan identifies goals and objectives to achieve energy conservation through land use planning, building design, site planning, compliance with Title 24 energy savings requirements, and rehabilitation of existing structures. The General Plan also encourages measures to reduce traffic congestion and offer more opportunities for walking and bicycling. Other areas of conservation include the use of water efficient irrigation and landscape and coordinated efforts with local water districts to use reclaimed water; recycling; and exterior lighting standards. Please see the appendices for the pertinent General Plan chapters. (GP Chapters 5, 6, 7, 8 and 9 and Objective 4.3)

SECTION I – ENERGY EFFICIENCY

Current Energy Efficiency Practices

As a matter of routine, the City currently employs a variety of measures that reduce consumption of electricity and water and reduce the amount of solid and green waste that would be sent to a landfill. The City has also purchased alternative fuel vehicles for various uses. The following is an outline of current energy saving practices.

Reduced Electricity Consumption

The City of Moreno Valley is currently employing the following practices at City owned and operated facilities to reduce electricity consumption:

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Based on the funding availability the City is retrofitting florescent light fixtures from T12 to T8 fixtures which use less energy. Retrofit sites include the Senior Center, the Library, City Hall, and Fire Stations 6, 48 and 65. Parking lot lighting for the six buildings listed above are also scheduled to be upgraded to more energy efficient LEC fixtures. This project was funded by the EECBG.			✓	
Light sensors have been installed in some rooms at City Hall which turn off the lights when the room is not in use. The sensors were installed 15 years ago and don't currently function in all rooms.			✓	
New buildings constructed in City parks are using solar tubes for day time lighting.			✓	
Traffic signal lights were replaced with LED fixtures 4 years ago with a reduction of 60% power usage. Newer traffic signal lights have been installed with LED fixtures.			✓	
Photo cells are being used for lighting park grounds and buildings along with automatic shutoff timers.			✓	
Most of the park lighting is shut down at 10 p.m. while some parks need to be lit all night to address safety issues.	Low	Medium	✓	
The sport field lights at parks have been replaced with more efficient fixtures with an average savings of at least 30% in energy costs with some fields seeing more savings.			✓	
City Hall fans are going all times to try to maintain a comfortable temperature and a humidity level of 60%.			✓	

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
The Conference and Recreation Center (CRC) was installed with a computer system that allows for continuous control of the HVAC systems. The temperature can be adjusted offsite, and scheduled to go on and off depending on the use of a particular room.			✓	
HVAC- routine maintenance is performed on all City Heating, Ventilation, and Air Conditioning units to keep them running as efficiently as possible.			✓	
The EECBG grant will cover the cost of replacing the AC at City Hall.			✓	
The EECBG grant will cover the cost of applying window tint or film to a portion of the windows at City Hall to make City Hall more energy efficient.			✓	
Pilot program through Moreno Valley Utility to install two induction lights for a 45 day trial period on light poles at Veteran's Way and Calle San Juan de los Lagos in front of the Police Station parking lot. The program is intended to determine the difference in lighting performance and cost to run induction lighting versus the existing lights.			✓	
Synchronizing traffic signals improves traffic flow and reduces air pollution and gas consumption. Funding available through the DMV's Air Quality fund.			✓	
The City is considering a Retrofit Program at Existing Signalized Intersections. This program will involve retrofitting approximately 40% of the existing fluorescent bulbs in the Internally Illuminated Street Name Signs with LED light engines. LED light engines are a proven enhancement to visibility, highway safety, and are environmentally friendly due to the longevity of the LED. An annual cost savings of approximately 50% will be realized with the retrofit of LED light engines. The savings is due to less use of electricity and less maintenance due to life expectancy of the LED.			✓	

Reduced Water Consumption

The City of Moreno Valley is currently doing the following things at City facilities to reduce water consumption:

Water Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
The restrooms and other buildings in City parks are installed with faucets that automatically shut off.			✓	
Special Districts is seeking grants to fund the cost of renovating the medians on Alessandro Boulevard. The new median concept would reduce the use of water and electricity and gasoline for maintenance equipment along with reducing maintenance and green waste. The median would have an irrigation control program called Maxicom, which can be controlled online, allowing for adjustments to irrigation schedules due to changing weather patterns.			✓	
Capital Projects was working on a demonstration project in a median on Frederick Street to check on the cost and performance of synthetic turf, but project has stopped due to lack of funding.			✓	
The Facilities Division is in the process of testing 0.5 gallon per minute aerators for restroom faucets. Currently, 2.0 and 2.2 per minute gallon aerators are installed on restroom faucets.			✓	
Approximately 40 acres of City park land utilizes reclaimed water for irrigation.			✓	
The irrigation at City parks utilizes smart controllers which are self-regulating and have their own weather stations.			✓	
Synthetic turf was used at the Moreno Valley Park soccer fields to conserve water. Water usage was reduced significantly.			✓	
The City adopted new landscape standards in January 2010 which require the use of drought tolerant landscape and water efficient irrigation.				✓
Facilities staff has researched the use of waterless urinals. The maintenance requirements and costs of the current technology do not make this a viable option for use in public rest rooms at this time.			✓	

Recycling and Diversion

The following practices or measures help to achieve the recycling and diversion goals of the City:

Recycling Measures	Cost to Implement	Effectiveness	Practice	Policy
The City recycled paving last year and is doing it again this year.			✓	
Existing street material is being ground up recycled, and is being used as base for new streets. If the ground up street material is not reused right of way it is stored at the City yard for future use.			✓	
All City facilities now have recycling programs.			✓	✓
The City is using green recycled janitorial products at City Hall and the Annex.			✓	✓
The City has a pilot program for recycling with the Moreno Valley School District.			✓	
City recycling programs include: Procurement Policy, City Facilities Recycling Program, Animal Shelter: Lonely Hearts Adoption Program, School Recycling Program, Residential Recycling, Curbside & Buy-back, Voluntary Commercial Recycling, C&D Recycling, CIP Program, Community Outreach, Grasscycling, Composting Workshops, Mulch, Residential Recycling, Commercial Recycling.			✓	✓
City staff has gone out into the community to present programs on recycling. The City has worked with the Chamber of Commerce to promote recycling. The City is working on and an education program for City employees on recycling and disposal of hazardous materials.			✓	
Rubberized asphalt has been used on some City street projects. Higher cost in the past but more recently the cost is comparable to regular asphalt. Recycled tires are used in the preparation of the rubberized asphalt. Results in reduced road noise, reduced breaking distance, and slightly longer life to road surface. Some limitations on where rubberized asphalt can be installed.			✓	

Alternative Fuel Vehicles

The City is currently doing the following with City fleet vehicles:

Alternative Fuel Vehicle Measures	Cost to Implement	Effectiveness	Practice	Policy
The City has one electric vehicle and four natural gas vehicles (two street sweepers, one pick up truck, and one storm drain cleaning truck).			✓	
The City just recently spent grant money to retrofit the engines of diesel vehicles to comply with new laws to make diesel engines cleaner burning.			✓	

Education

The of Moreno Valley currently promotes education related to energy efficiency by participating in partnerships and organizations that promote energy efficiency and by attending seminars, workshops and trade shows related to green building, water conservation, facility maintenance.

The City of Moreno Valley currently participates in the following organizations:

- Community Energy Partnership – this partnership identifies incentives and rebates for City and developer projects.

- Energy Coalition - the City's Facilities Department has completed energy audits for eight buildings with the energy coalition.

- Clean Cities – Western Riverside Council of Governments has taken a leadership role in coordinating the Clean Cities Coalition, a public-private partnership dedicated to achieving air quality, energy security, economic development, and transportation goals.

- WRCOG Air Quality Task Force – the task force brings together cities and local resources to share information on efforts and funding opportunities to improve air quality in the region.

Proposed Energy Efficiency Policies

The following energy efficiency measures are suggested as policies for the City of Moreno Valley. The suggested measures include current practices of the City of Moreno Valley along with recommendations from the City's Energy Efficiency Task Force and the practices and policies of other jurisdictions.

Reduced Electricity Consumption

The following measures are suggested as policies to assist the City of Moreno Valley in reducing electricity consumption at City owned and operated facilities:

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Replace interior and exterior lighting fixtures with more energy efficient fixtures when they become available on the market through changes in technology to be funded through the EECBG.			✓	
Install light sensors, which turn off the lights when the room is not in use, in conference and meeting rooms at City facilities.			✓	
Require that new buildings constructed in City parks use solar tubes for day time lighting.			✓	
Require the use of photo cells in park buildings along with automatic shutoff timers.			✓	
Evaluate the lighting requirements and safety concerns for City facilities and shut off exterior lights when facilities are not in use.	Low	High	✓	
Require all City leases to include permission to do energy retrofits (e.g. replace light bulbs) which is more efficient than having the landlord do them.			✓	
Require that all City building thermostats be set in accordance with federal and state recommendations, which is currently 68 degrees in the winter and 78 degrees in the summer, wherever possible. Revise dress code as appropriate to allow staff to dress accordingly to accommodate their own comfort level.			✓	
Promote turning off lights in offices and work areas when not in use at all City facilities.	Low	High	✓	

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Use an energy monitoring system to track electricity use and identify areas/facilities that can be operated more efficiently.			✓	
Require the installation of energy efficient fixtures for all sport field lights in new parks (average savings of at least 30% in energy costs at existing parks with some fields seeing more savings). Retrofit existing lights as funding is available.			✓	
Require the installation of computer monitoring systems in new City facilities which allows for continuous control of the HVAC systems. The temperature can be adjusted offsite and scheduled to go on and off depending on the use of a particular room. Retrofit existing facilities as funding is available.			✓	
Require the operation of the ventilation fans at City Hall at all times to maintain a comfortable temperature and a humidity level of 60%.			✓	
Require routine maintenance of the heating and air conditioning (HVAC) systems at City facilities.			✓	
Require that all new City buildings and facilities participate in the Savings by Design program. This program is funded by utility ratepayers and is administered private utility companies under the auspices of the California Public Utilities Commission. The program identifies ways to improve the energy efficiency of proposed construction.			✓	
Identify opportunities for on-site renewable energy generation on City and privately-owned property.(San Carlos)				
Increase the City's Electric Utility renewable energy mix.			✓	
Implement "green at work" programs including "Cops on Bikes" (Los Angeles)				
Establish an environmentally preferable purchasing program (EPP) for government operations. (San Carlos)				
Complete a comprehensive energy assessment of all City facilities to identify EE&C opportunities (e.g., HVAC, lighting, weatherization, appliances) (Redlands)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Consider the use of timers on streetlights to shut off during late evening and early morning hours where traffic volumes are low. The cost to install the timers would be $62 per streetlight. A policy regarding hours of operation for the streetlights would have to be determined.			✓	
Consider changing existing and future illuminated streetlights to LED. The retrofit cost for LED lighting is not feasible at this point. Also SCE and MVU do not currently have a separate rate structure for LED. An effective LED fixture and spacing would also need to be established.			✓	
Require that all new City buildings and facilities or renovations of existing facilities coordinate with Southern California Edison or Moreno Valley Electrical Utility, Eastern Municipal Water District, and The Gas Company on rebate opportunities and submit applications for possible rebates. Qualifying projects can use rebates in addition to grants and other funding. • If City projects are grouped together, this can provide the City with a greater reimbursement pay off. • When lights are upgraded to more efficient fixtures, payback is usually 1-2 years: with incentive,payback is less than 1 year. • Any project that will save energy qualifies for an incentive for Edison and the City Utility. • New park lighting may qualify for a utility refund. • Projects being funded by a grant for energy savings, are also eligible for a utility refund.			✓	
Consider moving City electric load off-peak to decrease cost for increased peak capacity and to take advantage of lower rates. (Track costs to determine savings). (Redlands)				
Identify and obtain funding sources to implement energy conservation & efficiency programs adopted by the City. (Redlands)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Pursue early participation in the smart meter rollout with SCE and automated meter reading at SCG. (Redlands)				
Encourage City employees to submit energy efficiency and conservation recommendations for City operations and follow-up on them. (Redlands)				
Establish a fund from a portion of energy savings to pay for additional energy savings projects.			✓	

Reduced Water Consumption

The following measures are suggested as policies to assist the City of Moreno Valley in reducing electricity consumption at City owned and operated facilities:

Water Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Research the potential of savings of using synthetic turf in medians. Installation and maintenance costs would have to be determined. Synthetic turf could potentially result in reduced use of water, energy, gasoline for the maintenance equipment.			✓	
Seek grants to fund the cost of renovating the medians on Alessandro Boulevard to reduce or eliminate turf. The new median concept would reduce the use of water and electricity and gasoline for maintenance equipment along with reducing maintenance and green waste. The median would have an irrigation control program called Maxicom, which can be controlled online, allowing for adjustments to irrigation schedules due to the changing weather patterns. Reduced water runoff from the landscape median would also lower maintenance costs to adjacent asphalt damaged by the runoff.			✓	
Require automatic shutoff faucets in all new City buildings and facilities. Replace existing faucets with automatic shutoff faucets where applicable when funding is available.			✓	
Replace existing aerators in restroom and break room faucets with 0.5 gallon per minute aerators.	Low	High	✓	

Water Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Require the use of reclaimed water for City buildings, facilities, parks and parkways where connection to reclaimed water lines is feasible.			✓	
Require the use of smart controllers which are self-regulating and have their own weather stations for all City projects for consistency with the City's Landscape Standards. Retrofit existing controllers as funding becomes available.			✓	
Replace turf at City buildings and facilities with drought tolerant groundcover and shrubs, except in gathering areas.			✓	
Review current median landscape standards to increase water efficiency with water efficient irrigation, grading that retains water run off and a drought tolerant plant palette.			✓	
Restrict the use of turf at City buildings and facilities to gathering areas and useable open space. The CRC would be a good place to start in reducing turf. Several areas could be changed to drought tolerant plants species. Patriot Park is an example where drought tolerant plants have been used except for gathering and recreational areas which have grass.			✓	
Assess the use of low flow toilets and waterless urinals as performance improves and maintenance costs of the fixtures become lower.			✓	
Require water audits for renovation projects and new projects.			✓	
Establish a fund from a portion of water cost savings to fund additional water saving projects.			✓	

Recycling and Diversion

The following measures are suggested as policies to achieve the recycling and diversion goals of the City:

Recycling Measures	Cost to Implement	Effectiveness	Practice	Policy
Require that all City facilities have recycling programs.			✓	
Require the use of green recycled janitorial products at City facilities.			✓	

Recycling Measures	Cost to Implement	Effectiveness	Practice	Policy
Require that existing street material be recycled and used as base for new streets. If the ground up street material cannot be used at that time, it can be stored at the City yard for future use. Review City street standards to accommodate recycled material without compromising safety or durability.			✓	
Establish a City standard which identifies the criteria for using rubberized asphalt for City projects.			✓	
Support zero waste which as a policy, would require everything to be recycled, minimal disposables would be allowed, and composting would be required (San Carlos)				
Establish a City standard which identifies the criteria for using 'green concrete' or concrete that has been made with recycled aggregate. Results in reduced CO_2 emissions and reduces solid waste sent to landfills such as granulated coal ash, blast furnace slag or various solid wastes including fiberglass waste materials, granulated plastics, paper and wood products/wastes, sintered sludge pellets and others.			✓	
State recycling requirements are currently for a 50% diversion rate. Proposal to increase overall waste diversion by at least 1% per year. (San Carlos)				
Replace paper towel dispensers with air dryers in all City facilities.			✓	

Alternative Fuel Vehicles

The following measures are suggested as policies regarding the use of alternative fuel vehicles:

Alternative Fuel Vehicle Measures	Cost to Implement	Effectiveness	Practice	Policy
Establish a policy to convert more City Vehicles to hybrid, electric, alternative fuel, or smaller vehicles where such vehicles meet the requirements and needs of staff. (San Carlos)				

Alternative Fuel Vehicle Measures	Cost to Implement	Effectiveness	Practice	Policy
Seek resources that fund alternative fuel vehicles or fund improvements to City vehicles such as the DERA grant (Diesel Emissions Reduction Act) that was used for retro fitting City fleet.			✓	
Purchase fuel-efficient vehicles for City fleet. Purchase vehicles geared toward what the vehicle will be used for on a regular basis (i.e., "right size" vehicles rather than size for the exceptional use). (Redlands)				
Use AQMD's diesel retrofit program and continue retrofit all City-operated diesel engines to comply with clean diesel combustion. (Redlands)				
Consider joining Pluginpartners (www.pluginpartners.org) a national organization that supports hybrid electric vehicles. (Redlands)				
Increase the number of clean vehicles in the non-emergency City fleet to at least 60% by 2015. (Riverside)				
Establish a minimum fleet mileage standard for non-emergency fleet vehicles (Riverside)				

Transportation

The following measures are suggested as policies to improve energy efficiency promote conservation at City facilities:

Transportation	Cost to Implement	Effectiveness	Practice	Policy
Provide for a shuttle service in order to increase transit rider ship by City employees. (San Carlos)				
Increase accommodation and promotion of alternatively fueled vehicles and hybrid vehicles at City facilities. (San Carlos)				

Education

The following measures are suggested as policies to promote conservation at City facilities:

Education	Cost to Implement	Effectiveness	Practice	Policy
Promote car sharing programs (San Carlos)				
Educating Staff by sending them to training seminars or having training seminars conducted onsite.			✓	
Provide incentives for city staff to develop expertise in green building strategies and certification. (Redlands)				
Host an annual "Energy Efficiency" Day for employees, similar to Safety Day. The Energy Coalition, Gas Company, SCE, MVU, etc. could put on demonstrations, distribute literature, give out products (light bulbs, etc.). This would help maintain our Gold level status with the Energy Coalition and be a way to educate employees on saving energy at work and at home.			✓	

Resources

The following measures are suggested as policies to find and utilize resources to help fund or guide the City's energy efficiency efforts:

Resources	Cost to Implement	Effectiveness	Practice	Policy
Coordinate with adjacent cities and jurisdictions, and work together as a region to implement energy efficiency programs.			✓	
Devise a checklist of agencies to contact for rebates and/or incentives whenever new construction or renovations are performed. The list would also include the types of projects for which rebates are typically eligible (light retrofits, appliance replacements/upgrades, etc.)			✓	

Other Measures

The following measures are suggested as policies to promote conservation at City facilities:

Other	Cost to Implement	Effectiveness	Practice	Policy
Require LEED *Building Design and Construction* Silver certification (at minimum) for all municipal construction and renovation projects exceeding 5,000 gross square feet. Encourage LEED *Operations and Maintenance* Silver certification for all existing municipal facilities exceeding 5,000 gross square feet. (Redlands)				
May not want to require LEED certification, as there are substantial expenses related to formal certification by LEED. Buildings that could possibly become LEED certified as 'demonstration' buildings are the new Library and Fire Station, to highlight energy and environmental improvements for public information. Implementing LEED standards without certification requirements; just not pay for the certification process, and still become more energy efficient.			✓	
Increase bicycle parking at City facilities. (San Carlos)				
Adopt a green building standard for all City development and major remodels. (San Carlos)				
Require life cycle cost compared to the initial cost for projects. Include as part of City Council reports, so that the decision makers are more informed.			✓	
Document municipal green building efforts and post-occupancy building performance metrics on the city's website for use as an educational resource for the development community. (Redlands)				
Establish a standard for saving energy beyond Title 24 requirements.			✓	
Establish purchasing decisions based on accurate environmental information from recognized certification organizations. (Redlands)				
Include environmental factors along with price and performance in purchasing policy and decisions. (Redlands)				

Other	Cost to Implement	Effectiveness	Practice	Policy
Evaluate on-line purchasing for climate friendly benefits. (Redlands)				
Provide preference to climate friendly vendors in bid and proposal documents. (Redlands)				
Track changes in climate friendly marketplace and constantly update procurement policies. (Redlands)				
Increase percentage of climate friendly purchase by 5 percent each year. (Redlands)				
Establish departmental and interdepartmental teams to review climate friendly purchasing policy. (Redlands)				
Establish a policy that mandates a green building rating system standard that applies to all new municipal buildings over 5,000 square feet by January 1, 2008. (Riverside)				
Evaluate programs to address indoor air quality issues by the end of 2011. (Riverside)				

SECTION II – CLIMATE ACTION STRATEGY

Climate Action Strategy

The actions in the following tables will individually and cumulatively contribute to achieving Moreno Valley's Climate Action goals. Qualitative descriptors are provided for each action to guide decision making.

Energy Efficiency

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
City should partner directly with the 5 largest consumers of energy to encourage and promote their energy efficiency activities. (Redlands)				
Establish Energy Efficiency and Conservation baselines. (Redlands)				
Partner with Southern California Edison and the Moreno Valley Electric Utility to launch a Community Partnership program. This partnership might allow for funding that the City can use for energy conservation marketing, education, and outreach efforts. The City should set municipal and community wide energy demand and usage reduction goals and implement them by leveraging the program resources and incentives either already committed or potentially available. (Redlands) (The City of MV is already a member of a Community Partnership with SCE and MVU through The Energy Coalition,).				
City should become a model of energy conservation stewardship (e.g. replace lighting in council chambers). Build upon historical and current energy conservation achievements as the foundation for continued efforts and educate the community on the value of efficiency and conservation in terms of cost savings and environmental benefits. (Redlands)				
Pursue early participation in the smart meter rollout with SCE and automated meter reading at SCG. (Redlands)				
Explore participating in new high efficiency technology programs such as the LED City program. (Redlands)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Require that all new large development (projects of regional significance) participate in the Savings by Design program. This program is funded by California Utility customers and is administered by Pacific Gas and Electric Company, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, and the Southern California Gas Company under the auspices of the California Public Utilities Commission. The intent of the program is to identify ways to improve the energy efficiency of proposed construction.				
Provide information and contacts to encourage new development to coordinate with Southern California Edison or Moreno Valley Electrical Utility, Eastern Municipal Water District, and The Gas Company on rebate opportunities and submit applications for possible rebates.				
Consider the use of timers on some streetlights. The cost to install the timers would be $62 per streetlight. A policy regarding hours of operation for the streetlights would need to be determined.				
Consider changing existing and future illuminated streetlights to LED. The retrofit cost for LED lighting is not feasible at this point. Also SCE and MVU do not currently have a separate rate structure for LED.				
Leverage and help drive community participation in utility company programs and financial incentives within the city (e.g., incentives, core programs, on bill financing etc.) (Redlands)				
Complete comprehensive review of City codes and standards for energy and water applicability for energy efficiency conservation measures and make changes to modify accordingly. (Redlands)				
Follow New York City's lead and dedicate 10% of existing energy expenditure budget to investing in energy efficiency opportunities within the City's energy using infrastructure. (Consider making it a line item in the budget) (Redlands)				
Be an early adopter of model dark sky ordinance. (Redlands)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Set goals consistent with the State's Long Term Strategic Plan: All new residential construction in California will be zero net energy by 2020. All new commercial construction in California will be zero net energy by 2030. The heating, ventilation, and air conditioning (HVAC) industry will be reshaped to ensure optimal equipment performance; and all eligible low-income homes will be energy-efficient by 2020. (Redlands)				
Expand energy saving opportunities to businesses (San Carlos)				
Provide for increased albedo (reflectivity) of all urban surfaces including roads, driveways, sidewalks, and roofs in order to minimize the urban heat island effect. (San Carlos)				
Adopt and implement a policy to increase the use of renewable energy to meet 33% of the City's electric load by 2020. (Riverside)				
Promote community as a Solar City by implementing programs for residential and commercial customers that will increase solar generation in the City to 1 MW by 2015 (enough for 1,000 homes), and 3 MW by 2020. (Riverside)				
Generate at least 10 MW (enough for 10,000 homes) of electric load from regional zero emissions sources by 2025. (Riverside)				
Reduce the City's per capita base load energy consumption by 10% through energy efficiency and conservation programs by 2016. (Riverside)				
Implement programs to encourage load shifting to off-peak house and explore demand response solutions by the end of 2008. (Riverside)				
Install light colored "cool" roofs and cool pavements. (CA Attorney General's Office) (cool roofs now a requirement per new State Title 24 Building Standards).				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Use passive solar design, e.g., orient buildings and incorporate landscaping to maximize passive solar heating during cool seasons, minimize solar heat gain during hot seasons, and enhance natural ventilation. Design buildings to take advantage of sunlight. (CA Attorney General's Office) (already a design guideline for Moreno Valley).				
Install efficient lighting, (including LEDs) for traffic, street and other outdoor lighting. (CA Attorney General's Office)				
Reduce unnecessary outdoor lighting. (CA Attorney General's Office)				
Use automatic covers, efficient pumps and motors, and solar heating for pools and spas. (CA Attorney General's Office)				
Provide education on energy efficiency to residents, customers and/or tenants. (CA Attorney General's Office)				
Proposed reducing the City's energy consumption by 30% by the year 2011. (Palm Desert)				
Manage program implementation through team coordination. Establish program management teams consisting of all partners Establish an Office of Energy Management (OEM) with staff dedicated to the program. The City's OEM as the point of contact for the community and leading community outreach efforts. Include both Utility partners on-site staff at the OEM office in City to better address the community needs and work more effectively with the City's staff. (Palm Desert)				
Offer new customized incentives to address the critical energy needs of residents and commercial customers. Increased incentives on Heating, Ventilation, and Air Conditioning (HVAC) equipment to promote saving energy on air conditioning during hot months and heating during cool months. Create new incentives for pool pumps and heaters to upgrade pools. Consider adopting a new energy efficiency ordinance requiring 10-15% above Title 24. Develop new incentives for electric and natural gas. (Palm Desert)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Target customer segments that are unique to community's demographics. Develop new combined SCE or MVU/SoCalGas incentive programs for Golf Courses and Food Service establishments (modify for Moreno Valley). Enlist Homeowners Associations to sponsor community events and marketing of energy efficiency surveys and direct install programs to their residents. Communicate with top tier business customers. City and Utility reps to meet periodically with these key stakeholders to address current and future projects. (Palm Desert)				
Use co-branded marketing to leverage the City's influence and knowledge of the community. Create new Partnership brand, for integrating City and Utility marketing campaigns offered to customers. Develop Marketing Team to coordinate City and Utility marketing. Advertise constantly on local media: radio, TV, newspaper, City newsletter, and *Set to Save* website. (Palm Desert)				
Reduce barriers to customer participation. Start developing creative financing options for large equipment purchases. Begin developing a simpler sign-up experience with "One-Stop Shopping". (Palm Desert)				
Continue to expand utility programs and marketing. Aggressively market campaign in local media and direct mail, increase sign-ups of utility Common programs, bundle offers from SCE, MVU and SoCalGas, and develop new incentives and programs. (Palm Desert)				
Simplify the customer participation process. To eliminate the confusion and complexities of the existing utility program sign-up processes, the utilities are developing One-Stop-Shopping/Make-It-Simple procedures. (Palm Desert)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Build community groundswell. Achieving 30% savings will require a whole community effort, so the City is taking the lead in expanding community outreach efforts through more face-to-face marketing with key City stakeholders, Homeowners Associations (HOAs), service clubs and other community organizations, to reach and educate more customers. (Palm Desert)				
Provide customer financing to assist customers with purchasing the more expensive efficiency equipment, the City can take the lead in developing a financing plan through property taxes based on the guidelines proposed in Assembly Bill 811 (AB811). The bill was signed by the Governor in July 2008. (Palm Desert) (Moreno Valley is a partner in WRCOG effort to establish a regional AB811 program).				
Motivate behavioral change. Behavioral change is a large contributor to the Partnership Project, representing approximately 15% of the electric savings and 40%-50% of the natural gas savings. In addition to providing energy-saving tip information in local media and program marketing collateral, test direct mail behavioral change campaign. This campaign would focus on quantifying the savings attributed to behavioral change. (Palm Desert)				
Utilize new technology. As a demonstration project, test new technology, from conducting small trials of new innovative products to expanding the uses of LED lights, solar, fuel cells, and liquid pool covers for commercial and residential applications within the City. (Palm Desert)				
Expand Point-of-Sale Rebates, since these rebates are the simplest methods for customers to qualify for incentives. Pursue adding more retailer participants within community, as well as expanding the product line of rebates available at these larger retailers. (Palm Desert)				

Energy Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Increase Residential Surveys and Direct Installs. Surveys are critical to educate residents on energy saving behaviors, as well as funnel leads and customer data to the appropriate marketing channels to encourage more extensive energy upgrades. (Palm Desert)				
Take lead in increasing face-to-face marketing efforts within the City by organizing the following community activities: • Mayor holding key stakeholder meetings; • City OEM sponsoring Bright Ideas Expo and participating at other regional energy related events; • City OEM presenting the program to local businesses at Chamber of Commerce meetings; • City OEM working with community organizations, local service clubs, and business organizations to educate and sign-up members to programs; • Program partners organizing and/or participating in HOA Energy Rallies and other community events; • Contractors conducting face-to-face marketing to both residential and business customers; • City council publicly recognizing individual “energy champions” to demonstrate savings to others and increase participation in the program; and • Sponsoring Commercial Food Service luncheons for restaurant, hotel, and country club owners and managers. (Palm Desert)				

Water Efficiency

Water Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Promote replacing existing aerators in residential and commercial faucets room faucets with 0.5 gallon per minute aerators.				
Promote use of low flow toilets for residents and businesses.				
Work with EMWD to update water and wastewater rates including review of tiered rates to encourage water conservation. (Redlands)				
Review and update the landscape irrigation ordinance to continue lowering use of potable water for landscape irrigation. (Redlands) (Moreno Valley updated its landscape standards in 2009 to further encourage water conservation.)				
Establish incentives for use of water efficient fixtures and fittings. (Redlands)				
Conduct gray water, rainfall runoff, and other system research and pilot study. (Redlands)				
Develop gray water and other system guidebooks. (Redlands)				
Update ordinances to allow for use of various wastewater sources for landscape irrigation. (Redlands)				
Develop and implement a public education outreach program that addresses the discharge of preventable contaminants into the sanitary sewer system by Riverside residents and businesses by 2012 (example: no pharmaceuticals or paint down the drain). (Riverside)				
Develop recycling methods and expand existing uses for recycled wastewater by 2015. (Riverside)				
Work with EMWD to increase the use of recycled water from the wastewater treatment plant to recover 30% of plant effluent by 2020. (Riverside)				
Implement water efficiency, conservation and education programs to reduce the City's per capita potable water usage by 15% by 2025. (Riverside)				
Seek funding sources to implement feasible renewable energy sources. (Redlands)				

Water Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Establish organic and local farming economic development zones in suitable locations. (Redlands)				
Cooperate with EMWD to evaluate feasibility of renewable energy sources for water and wastewater operations. (Redlands) (EMWD has installed upgrades to Moreno Valley treatment plant to lower energy consumption)				
Investigate state and local financing programs to assist with expanding the local farming programs. (Redlands)				
Expand the community garden program. (Redlands)				
Eliminate barriers and establish incentives for increased local food production. (Redlands)				
Make effective use of graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines. Graywater to be used for landscape irrigation. (CA Attorney General's Office)				
Incorporate water-reducing features into building and landscape design. (CA Attorney General's Office)				
Create water-efficient landscapes. (CA Attorney General's Office)				
Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and use water-efficient irrigation methods. (CA Attorney General's Office)				
Implement low-impact development practices that maintain the existing hydrology of the site to manage storm water and protect the environment. (CA Attorney General's Office) (Use of low impact development practices is a requirement of the new regional water quality permit to be implemented over the next year)				
Devise a comprehensive water conservation strategy appropriate for the project and location. (CA Attorney General's Office)				

Water Reduction Measures	Cost to Implement	Effectiveness	Practice	Policy
Design buildings to be water-efficient. Install water-efficient fixtures and appliances. (CA Attorney General's Office)				
Offset water demand from new projects so that there is no net increase in water use. (CA Attorney General's Office)				
Provide education about water conservation and available programs and incentives. (CA Attorney General's Office)				

Green Building

Green Building Measures	Cost to Implement	Effectiveness	Practice	Policy
Integrated stormwater management. See *CalGreen* 406.2. (Redlands)				
Require Energy Star equipment and appliances in new construction & renovations. See *CalGreen* 504.1. (Redlands)				
Submeter major energy/water systems (HVAC equipment, lighting, plug loads, process load). Commercial only. Encourage real-time monitoring. See *CalGreen* 504.2. (Redlands)				
Require submittal of Owner's Project Requirements (OPR) and Basis of Design (BoD) for permitting. See *CalGreen* 504.4. (Redlands)				
Require submittal of Systems Manual prior to occupancy. See *CalGreen* 504.4 and 710.2. (Redlands)				
Require 50% reduction in irrigation water usage (performance). Limit turfgrass coverage to [0-5% commercial, 50% residential]. See *CalGreen* 604. (Redlands) (turf limited to gathering areas in non-residential and to 25% of front yard for single family residential per new City landscape guidelines)				
Require 20% (40% in office/retail) reduction in domestic water usage, using EPAct as a baseline (for new construction). Develop prescriptive fixture rates for renovations. See *CalGreen* 603.2. (Redlands)				
Specify no- or low-VOC materials. See *CalGreen* 804.4. (Redlands)				

Green Building Measures	Cost to Implement	Effectiveness	Practice	Policy
Minimum energy performance. Require performance-based energy modeling. Require a minimum compliance margin of 10% better than Title 24 Part 6. Require noncompliance reporting; to include estimates of process, plug loads. This modifies *CalGreen* 503.1 to make the requirements less stringent. (Redlands)				
Require a construction indoor air quality plan (CIAQ), including a preoccupancy building flush-out. See *CalGreen* 804.1 and 804.2. (Redlands)				
Entryway systems. All major points of entry will have a permanent walk-off system (commercial only). See *CalGreen* 804.5.1. (Redland)				
Adopt broadly accepted design-phase calculation methodologies for energy conservation, water conservation, irrigation water conservation, alternative transportation use, and stormwater management; adjust development impact fees accordingly.				
Develop protocols for aligning predicted impact reductions with measured impact reductions. (Redlands)				
Develop secure bicycle storage, showers, and changing rooms for all commercial, industrial, and mixed-use facilities with full-time equivalent on site staff greater than or equal to 20. Shared facilities are acceptable. (Redlands)				
Develop shaded, protected, attractive, and accessible pedestrian paths of travel between building entrances and parking lots, sidewalks, adjacent properties, and public transportation stops. (Redlands)				
Review projects for compliance with green building requirements and for opportunities for potential green building strategies. (Redlands)				
Provide incentives for city staff to develop expertise in green building strategies and certification. (Redlands)				

Green Building Measures	Cost to Implement	Effectiveness	Practice	Policy
Develop and require completion of a decommissioning plan that describes the design intent for the end-of-life of new projects, including expected life span of core and shell, possible adaptive reuse scenarios, potential material reuses, recyclability of demolished materials, and disassembly of building systems. (Redlands)				
File away decommissioning plans in digital format for future reference upon application for major renovation or demolition. (Redlands)				
Adopt a green building standard for all new development and major remodels. (San Carlos) Incorporate green building practices and design elements. (CA Attorney General's Office)				
Increase housing density near transit. (San Carlos)				
Work with developers to increase housing near transit through recently adopted mixed use zones.				
Increase bike parking. (San Carlos)				
Encourage tree planting. (San Carlos)				
Improve residential energy efficiency (San Carlos)				
Actively promote walking and biking as safe modes of local travel, particularly for children attending local schools (San Carlos)				
Implement programs to encourage green buildings in the private sector by January 1, 2012. (Riverside)				
Encourage programs to establish green operations and maintenance for public and private sector businesses before 2012. (Riverside)				
Meet recognized green building and energy efficiency benchmarks. (CA Attorney General's Office)				
Install energy efficient lighting (e.g., light emitting diodes (LEDs)), heating and cooling systems, appliances, equipment, and control systems. (CA Attorney General's Office)				

Green Building Measures	Cost to Implement	Effectiveness	Practice	Policy
Use passive solar design, e.g., orient buildings and incorporate landscaping to maximize passive solar heating during cool seasons, minimize solar heat gain during hot seasons, and enhance natural ventilation. Design buildings to take advantage of sunlight. (CA Attorney General's Office)				
Install light colored "cool" roofs and cool pavements. (CA Attorney General's Office)				
Install efficient lighting, (including LEDs) for traffic, street and other outdoor lighting. (CA Attorney General's Office)				
Reduce unnecessary outdoor lighting. (CA Attorney General's Office)				

Recycling and Diversion

Recycling and Diversion Measures	Cost to Implement	Effectiveness	Practice	Policy
Require that developer recycle existing street material for use as base for new streets.				
Establish a City standard which identifies the criteria for using rubberized asphalt for public streets.				
Establish a City standard which identifies the criteria for using 'green concrete' or concrete that has been made with recycled aggregate for public improvements. Results in reduced CO_2 emissions and reduces solid waste sent to landfills such as granulated coal ash, blast furnace slag or various solid wastes including fiberglass waste materials, granulated plastics, paper and wood products/wastes, sintered sludge pellets and others.				
Target commercial and multi-unit housing locations with a direct mail recycling campaign (Include a cost analysis). (Redlands)				
Work with Waste Management to utilize billing statements or MVTV-3 to encourage businesses and residents to enroll their property in a recycling program. (Redlands)				

Recycling and Diversion Measures	Cost to Implement	Effectiveness	Practice	Policy
Based on feedback from promotion of recycling commitment, consider eliminating obstacles that might hinder commercial and residential recycling. (Redlands)				
Create a contest that encourages increased residential recycling. (Redlands)				
Offer rewards that will motivate all demographics to recycle. (Redlands)				
Publicize the residential recycling contest in a manner that reinforces what should be placed in the recycle bin. (Redlands)				
Identify new items to add to the list of accepted recycled materials. (Redlands)				
The City should support and encourage Extended Producer Responsibility (EPR), also known as “Take-Back Programs” for household hazardous waste and other difficult to recycle materials. (Redlands)				
The City should promote biomass gasification plants near landfills. The gasification plant will convert organic waste into combustible gases and fuels. (Redlands)				
The City should promote dirty material recovery facilities at landfill to process municipal solid waste. (Redlands)				
The City should explore grants that could pay for recycling collection devices to be placed wherever we have public trash bins and should be designed to minimize contamination and possible theft. (Redlands)				
Implement programs to encourage and increase participation of diverted waste from landfills by 2% before the end of 2008. (Riverside)				
Develop measures to encourage that a minimum of 40% of the waste from all construction sites be recycled throughout communit by the end of 2008. (Riverside)				
Encourage the reduction of any disposable, toxic, or nonrenewable products by 5% through program creation by 2009. (Riverside)				
Integrate reuse and recycling into residential industrial, institutional and commercial projects. (CA Attorney General’s Office)				

Recycling and Diversion Measures	Cost to Implement	Effectiveness	Practice	Policy
Provide easy and convenient recycling opportunities for residents, the public, and tenant businesses. (CA Attorney General's Office)				
Provide education and publicity about reducing waste and available recycling services. (CA Attorney General's Office)				

Climate Friendly Purchasing

Climate Friendly Purchasing Measures	Cost to Implement	Effectiveness	Practice	Policy
Purchasing decisions based on accurate environmental information from recognized certification organizations. (Redlands)				
Include environmental factors along with price and performance in purchasing policy and decisions. (Redlands)				
Evaluate on-line purchasing for climate friendly benefits. (Redlands)				
Provide preference to climate friendly vendors in bid and proposal documents. (Redlands)				
Track changes in climate friendly marketplace and constantly update procurement policies. (Redlands_)				
Increase percentage of climate friendly purchase by 5 percent each year. (Redlands)				
Establish departmental and interdepartmental teams to review climate friendly purchasing policy. (Redlands)				

Renewable Energy

Renewable Energy Measures	Cost to Implement	Effectiveness	Practice	Policy
Establish incremental growth goals for solar power systems in Redlands (e.g., solar PV, solar thermal). (Redlands)				
Create solar scorecard process so that attainment of goals can be easily communicated to the residents. (Redlands)				

Renewable Energy Measures	Cost to Implement	Effectiveness	Practice	Policy
Accelerate implementation of solar energy-based technology through permitting process (e.g., reduced permit fees, streamlined permit approval process). (Redlands)				
Put recommendations and examples together for solar energy-based technology installations on historic public and residential buildings to be used as guidelines. (Redlands)				
City ordinances should clearly articulate guidelines to address tree shading issues associated with solar power installations. (Redlands)				
Install photovoltaic or other solar technology on city available space based on demonstrated return on investment (ROI), for both city-owned and PPA (?) purchased energy. (Redlands)				
Investigate Multi-Family Affordable Solar Housing, Single-Family Affordable Solar Housing and any other incentive programs for solar energy-based technology incentives for multi-family housing, single-family affordable housing and city owned buildings. In new construction stipulate that solar energy-based technology incentive programs be investigated. (Redlands)				
Encourage event organizers to use solar technology in event staging as possible including an outline of types of technologies available to assist event staging. (Redlands)				
Integrate energy efficiency surveys or audits into the AB811 program. (Redlands)				
Constantly monitor activities in other areas in California, such as the Sonoma County Energy Independence Program, to identify other energy saving and climate impact reducing programs suitable for inclusion in the AB 811 program. Recommend inclusion of programs appropriate for Redlands. (Redlands)				
Consider becoming the pilot location for conversion of mixed municipal waste to energy based on the advanced gasification technology. (Redlands)				

Renewable Energy Measures	Cost to Implement	Effectiveness	Practice	Policy
Continue city's efforts to convert methane gas from the landfill and water reclamation plant to energy to power the water reclamation plant. (Redlands)				
In the absence of implementing a gasification project, investigate anaerobic composting of mixed solid waste to reduce GHG, divert MSW and to generate electricity from the off-gas. (Redlands)				
Explore use of other renewable energy technologies to expand Moreno Valley's efforts to utilize renewable energy. Seek opportunities to align with university and other programs to explore these technologies. (Redlands)				
Monitor development in renewable energy technologies to identify potential opportunities to include renewable energy research, manufacture, assembly, installation, consulting and other activities into Redlands economic development strategy. (Redlands)				
Meet "reach" goals for building energy efficiency and renewable energy use. (CA Attorney General's Office)				
Install solar and wind power systems and solar hot water heaters. (CA Attorney General's Office)				
Install solar panels on unused roof and ground space and over carports and parking areas. (CA Attorney General's Office)				
Where solar systems cannot feasibly be incorporated into the project at the outset, build "solar ready" structures. (CA Attorney General's Office)				
Incorporate wind and solar energy systems into agricultural projects where appropriate. (CA Attorney General's Office)				
Include energy storage where appropriate to optimize renewable energy generation systems and avoid peak energy use. (CA Attorney General's Office)				
Use on-site generated biogas, including methane, in appropriate applications. (CA Attorney General's Office)				

Renewable Energy Measures	Cost to Implement	Effectiveness	Practice	Policy
Use combined heat and power (CHP) in appropriate applications. (CA Attorney General's Office)				

Efficient Transportation

Efficient Transportation Measures	Cost to Implement	Effectiveness	Practice	Policy
Work with RTA to expand local bus transit service by increasing frequency and adding more routes along arterial streets during peak periods. (Redlands)				
Promote free shuttle service connecting to Metrolink that synchronizes with Metrolink's schedule. (Redlands)				
Create travel routes that ensure that destinations may be reached conveniently by public transit, bicycling and walking. (San Carlos)				
Increase housing density near transit. (San Carlos)				
Work with RTA to evaluate expanding access to (public transit) by adding routes, and shelters and benches within 1/4 mile of as many residential areas, employment centers, commercial centers, schools, and parks as possible. Evaluate existing lighting at all shelters to improve safety. (Redlands)				
Work with WRCOG to develop a new master plan to encourage electric vehicle use. NEV's are environmentally friendly street legal vehicles. WRCOG is developing a concept plan to connect Moreno Valley and adjacent cities.				
Work with RTA to establish bus rapid transit routes to serve the community.				
Actively promote walking and biking as safe modes of local travel, particularly for children attending local schools (San Carlos)				
Address and minimize vegetation that degrades access along public rights of way. (San Carlos)				

Efficient Transportation Measures	Cost to Implement	Effectiveness	Practice	Policy
Explore trip reduction programs such as carpools/vanpools with City staff, large employers and with neighborhoods with various incentives. (Redlands)				
Expand carpool/vanpool preferential parking areas for downtown area, large commercial areas, large employers, and City staff. (Redlands)				
Promote school rideshare programs to assist parents/students forming carpools. (Redlands)				
Replace school buses with "bicycle trains and walking school buses", where applicable. (Redlands)				
Encourage schools to incorporate pickup/drop-off zones. Zones should be separated according to mode of transportation, where feasible. (Redlands)				
Coordinate with the school district to adopt the League of America Bicyclists' Cycling curriculum so students learn safest way to bike. (Redlands)				
Coordinate with area school district to install bike racks on school buses similar to public buses. (Redlands)				
Develop a program with school district that provides incentives for students to purchase bikes. Bikes would "rollover" from advancing class to incoming students. (Redlands)				
The City should adopt a Non-Motorized Transportation Plan that focuses on pedestrian and bicycle routes (Class I, Class II, Class III, shared travel lanes), and Master Sidewalk Plan. (See also Land Use and Community Design). (Redlands)				
Encourage telecommuting for City staff and for the private sector. (Redlands)				
Seek installation of safe and secure bicycle lockers at employment centers, commercial buildings, commercial districts, schools, and park destinations. (Redlands)				
Promote "Stay-cations" with discount packages showcasing local merchants and events. (Redlands)				

Efficient Transportation Measures	Cost to Implement	Effectiveness	Practice	Policy
Implement "Smart Bus" technology - GPS with electronic displays at stops to provide actual time data to passengers. (Redlands)				
Develop and offer incentives to residents that downsize the number of cars in their household. (Redlands)				
Create idling ordinance for delivery trucks/buses. (Redlands)				
Develop renewable fuel locations and electric plug-in stations including a map for drivers to find refueling locations. (Redlands)				
Work with WRCOG and CalTrans to provide better traffic signal synchronization on regional roads. Provide better traffic light synchronization for locally controlled traffic signals. (Redlands) (Moreno Valley already has several routes with signal coordination)				
Consider the use of round-a-bouts instead of traffic signs at low volume intersections for new development. (Redlands)				
Retrofit existing intersections with video proximity detection rather than magnetic sensors so that cyclists and others lower weight/lower metal content vehicles are easily detected as vehicles at intersections. (Redlands)				
Encourage the use of bicycles as an alternative form of transportation, not just recreation, by increasing the number of bike trails and bike lanes throughout the City before 2025. Establish specific numerical goal. (Riverside)				
Promote use of City's multi-use trail system.				
Develop programs to reduce mobile sources of pollution, such as encouraging the purchase of alternative fuel vehicles or lower emission hybrids and plug-ins for the residential and business community before 2012. (Riverside)				
Promote and encourage the use of alternative methods of transportation throughout the community by providing programs to City employees that can be duplicated by local businesses. (Riverside)				

Efficient Transportation Measures	Cost to Implement	Effectiveness	Practice	Policy
Implement a regional transit program between educational facilities by 2012. (Riverside)				
Coordinate a plan with local agencies to expand affordable convenient public transit that will assist in reducing the per capita vehicle trips within the City limits by 2012. (Riverside)				
Implement use of solar radar feedback signs (which display vehicle's speed) to encourage compliance with speed limits and reduce waste of gasoline.				
Meet an identified transportation-related benchmark. (CA Attorney General's Office)				
Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation. (CA Attorney General's Office)				
Build or fund a major transit stop within or near the development. (CA Attorney General's Office)				
Provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to residents and customers. (CA Attorney General's Office)				
Promote "least polluting" ways to connect people and goods to their destinations. (CA Attorney General's Office)				
Incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments. (CA Attorney General's Office)				
Require amenities for non-motorized transportation, such as secure and convenient bicycle parking. (CA Attorney General's Office)				
Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation. (CA Attorney General's Office)				
Work with the school districts to improve pedestrian and bike access to schools and to restore or expand school bus service using lower-emitting vehicles. (CA Attorney General's Office)				

Efficient Transportation Measures	Cost to Implement	Effectiveness	Practice	Policy
Connect parks and open space through shared pedestrian/bike paths and trails to encourage walking and bicycling. Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points. (CA Attorney General's Office)				
Institute teleconferencing, telecommute and/or flexible work hour programs to reduce unnecessary employee transportation. (CA Attorney General's Office)				
Provide information on alternative transportation options for consumers, residents, tenants and employees to reduce transportation-related emissions. (CA Attorney General's Office)				
Educate consumers, residents, tenants and the public about options for reducing motor vehicle-related greenhouse gas emissions. Include information on trip reduction; trip linking; vehicle performance and efficiency (e.g., keeping tires inflated); and low or zero-emission vehicles. (CA Attorney General's Office)				
Purchase, or create incentives for purchasing, low or zero-emission vehicles. (CA Attorney General's Office)				
Create a ride sharing program. Promote existing ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles, and providing a web site or message board for coordinating rides. (CA Attorney General's Office)				
Create or accommodate car sharing programs, e.g., provide parking spaces for car share vehicles at convenient locations accessible by public transportation. (CA Attorney General's Office)				
Provide a vanpool for employees. (CA Attorney General's Office)				
Create local "light vehicle" networks, such as neighborhood electric vehicle systems. (CA Attorney General's Office)				

Efficient Transportation Measures	Cost to Implement	Effectiveness	Practice	Policy
Enforce and follow limits idling time for commercial vehicles, including delivery and construction vehicles. (CA Attorney General's Office)				
Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles. (CA Attorney General's Office)				

Land Use and Community Design

Land Use and Design Measures	Cost to Implement	Effectiveness	Practice	Policy
Identify "Village Centers" and develop a Smart Code. (Redlands)				
Designate Transit-Oriented Development (TOD) district(s) (Redlands)				
Expedited permit application review for smart growth projects. (Redlands)				
Explore building footprint, setbacks, height, scale, hardscape requirements to create compact building design techniques. (Redlands)				
Increase native tree planting requirements and establish incentives to plant native or low water plantings for all private and public projects. (Redlands)				
Explore reduced parking minimums required for mixed-use developments to encourage transit/non-motorized transportation. (Redlands) (This concept is included in the recently adopted mixed use zones).				
Establish off-street parking requirements for new development that reduce reliance on single occupancy vehicles. (Redlands)				
Explore greater flexibility with shared parking requirements. (Redlands) (Moreno Valley code already provides for shared parking).				
Provide a range of housing opportunities for all income levels. (Redlands)				
Integrate single-family and multifamily development for a more diversified population. (Redlands)				
transportation choices. (Redlands)				

Land Use and Design Measures	Cost to Implement	Effectiveness	Practice	Policy
Establish standards for development which incorporates architectural, site planning, and landscape sustainable elements that address housing and				
Develop a city-wide comprehensive Non-Motorized Transportation Plan. (Redlands)				
Encourage employers to implement carpools/vanpools incentives. (Redlands)				
Evaluate metered parking in major retail areas to encourage alternative modes of transportation. (Redlands)				
Encourage businesses to offer discounts for customers who use alternative modes of transportation. (Redlands)				
Encourage all new business, commercial, industrial developments over 10,000 square feet in size to incorporate enclosed bicycle storage facilities. (Redlands)				
Explore developing a Smart Growth Development Impact Fee matrix. Fee based on trips generated by project. (Redlands)				
Prepare a Master Sidewalk Plan that identifies "missing links" where sidewalks are necessary and identifies streets for which no sidewalk is required. (Redlands)				
Evaluate and update existing General Plan street cross-sections to accommodate "complete streets" design standards. (Redlands)				
Develop a regional Transfer of Development Rights (TDR) program. (Redlands)				
Explore incentive zoning techniques that allow a developer to build more intensity in exchange for open space protection. (Redlands)				
Develop an incentive program for infill projects that include significant open space. (Redlands)				
Explore infrastructure master plans and focus expansion in designated growth areas away from open space areas to reduce development pressure and avoid urban sprawl. (Redlands)				
Obtain funding sources to implement strategies. (Redlands)				

Land Use and Design Measures	Cost to Implement	Effectiveness	Practice	Policy
Apply urban planning principles that encourage high density, mixed-use, walkable/bikeable neighborhoods, and coordinate land-use and transportation with open space systems in 2012. (Riverside)				
Ensure that there is an accessible park, recreational, or public open space within a 1/2 mile of 90% of City residents by 2015. (Riverside)				
Plant at least 1,000 trees in City parks and right-of-ways and encourage the planting of at least 3,000 shade trees on private property annually. (Riverside)				
While actively protecting critical habitat corridors, coordinate with the Multi-Species Habitat Conservation Plan (MSHCP) to develop and implement a plan to protect natural habitat and wildlife through increasing the amount of preserve and reserve areas in the City. (Riverside)				
Ensure consistency with “smart growth” principles – mixed-use, infill, and higher density projects that provide alternatives to individual vehicle travel and promote the efficient delivery of services and goods. (CA Attorney General’s Office)				
Meet recognized “smart growth” benchmarks. (CA Attorney General’s Office)				
Educate the public about the many benefits of well-designed, higher density development. (CA Attorney General’s Office)				
Incorporate public transit into the project’s design. (CA Attorney General’s Office)				
Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio. (CA Attorney General’s Office)				
Develop “brownfields” and other underused or defunct properties near existing public transportation and jobs. (CA Attorney General’s Office)				
Include pedestrian and bicycle facilities within projects and ensure that existing non-motorized routes are maintained and enhanced. (CA Attorney General’s Office)				

Storing and Offsetting Carbon Emissions

Storing Carbon Emissions Measures	Cost to Implement	Effectiveness	Practice	Policy
Develop sequestration value for street trees from City database/determine impact on reducing the City's mandated goal for reducing carbon footprint. (Redlands)				
Select and apply suitable program for measuring carbon offset value of urban forest and seek opportunities to participate in carbon markets. (Redlands)				
Expand that assessment to entire Redlands urban forest. (Redlands)				
Steer development towards Infill rather than greenfield areas. (Redlands) Consider differential impact fee system with lower fees for areas with infrastructure.				
Develop incentives for Landowners to preserve groves and open space. (Redlands)				
Optimize street tree palette for carbon sequestration, drought tolerance and shade provision. (Redlands)				
Establish a street tree watering card commitment program to fill street tree vacancies. (Redlands)				
Send a thank you note with a "benefits of your street tree" as a bill insert to all residents with street trees in front of their homes. (Redlands)				
Optimize street tree, sidewalk, and hardscape interface design when planning new projects to minimize future maintenance impacts. (Redlands)				
Use satellite imagery to develop a shade tree canopy coverage assessment of all parking lots in Redlands to establish baseline. (Redlands)				
Revise Redlands Municipal Code (e.g., RMC §18.168.210) to require hardscape and parking lots be shaded. (Redlands) (Recently adopted landscape guidelines require 50% shading in parking lots).				
Develop "retrofit strategy" for existing parking lots that lack shade. (Redlands)				
Carefully consider a shade tree ordinance and utility incentives for shading south and west faces of dwelling units. (Redlands)				

Storing Carbon Emissions Measures	Cost to Implement	Effectiveness	Practice	Policy
Revise municipal code to ensure solar access is maintained for future solar electric and solar hot water installations. (Redlands)				
Explore ways to utilize GIS analysis to optimize tree placement to consider utility lines, automated recycling truck arms, and hardscape. (Redlands)				
Establish programs and incentives for achieving carbon neutrality at City sponsored events. (Redlands)				
Recommend all events receiving in-kind support in lieu of event permit fees to explore carbon offsets for their events. (Redlands)				
Develop closed loop process whereby carbon credits generated from urban forest can be sold to offset community emissions. (Redlands)				
Promote the City's urban forest to encourage planting and maintenance of trees.				

Public Outreach and Education

Public Outreach and Education	Cost to Implement	Effectiveness	Practice	Policy
Encourage original programming on MVTV-3 that promotes energy efficiency, e.g. a program that follows a residential energy audit, to demonstrate how residents can make their homes more energy efficient.				
Promote "Energy Efficiency" at City events or events that the City participates in such as 4th of July and the March Air Reserve Base Air Show. The Energy Coalition, Gas Company, SCE, EMWD, MVU, etc. could put on demonstrations, distribute literature, give out products (light bulbs, etc.).				
Increase recycling and composting at public events.(San Carlos)				
Promote the locations of local recycling facilities				
Promote car sharing programs. (San Carlos)				

Public Outreach and Education	Cost to Implement	Effectiveness	Practice	Policy
Promote local demonstration gardens at Western Municipal Water District and the planned garden at the southeast corner of Cactus and Heacock, around the EMWD pump station.				
Provide community sustainability action website that will appeal to all residents and businesses and will provide a comprehensive level of information. (Redlands)				
Develop community education initiative that provides consistent educational materials and resources for use by City staff and community groups. (Redlands)				
Promote sustainability actions through various media using public service announcements, features in the local press, the MVTV3, community events such as 4th of July Celebration, and inserts in municipal bills. (Redlands)				
Partner with local businesses to promote sustainability action. (Redlands)				
Mobilize educational sectors of community to develop their own climate and sustainability action awareness programs. (Redlands)				
Designate city staff person responsible for coordinating climate action by city departments. (Redlands)				
Seek state and federal grants to fund City sustainability staff position. (Redlands)				
Work with school districts to provide climate and sustainability action curriculum materials. (Redlands)				
Implement educational programs to promote green purchasing throughout the community before 2009. (Riverside)				

Greenhouse Gas (GHG) Emission Strategies

Greenhouse Gas Emission Strategies	Cost to Implement	Effectiveness	Practice	Policy
Establish the 1990 greenhouse gas (GHG) emission baseline for the City government on a per capita basis. (Riverside)				

Greenhouse Gas Emission Strategies	Cost to Implement	Effectiveness	Practice	Policy
Implement a climate action plan that will reduce GHG emissions by 7% of the 1990 municipal baseline by 2012. (Riverside)				
Develop a calculation for and establish the 1990 GHG emissions baseline on a per capita basis for the City of Riverside as a geographic locale. (Riverside)				
Utilizing the City boundaries as defined in 2008, implement a climate action plan to reduce GHG emissions by 7% of the of the 1990 City baseline by 2012. (Riverside)				
Establish programs that comply with the South Coast Air Quality Management District (AQMD) and the City's General Plan to improve the quality of air in community. (Riverside)				
Aggressively support programs at the AQMD that reduce GHG and particulate matter generation in the Los Angeles and Orange County regions to improve air quality and reduce pollution in community. (Riverside)				

Agriculture and Forestry

Agriculture and Forestry Strategies	Cost to Implement	Effectiveness	Practice	Policy
Require best management practices in agriculture and animal operations to reduce emissions, conserve energy and water, and utilize alternative energy sources, including biogas, wind and solar. (CA Attorney General's Office)				
Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits. (CA Attorney General's Office)				
Protect existing trees and encourage the planting of new trees. Adopt a tree protection and replacement ordinance. (CA Attorney General's Office)				

SECTION III – APPENDICES

General Plan Goals and Objectives

- Chapter 7. Energy conservation is a way to control energy costs, reduce reliance on foreign energy supplies and minimize air pollution. Energy efficiency can be derived in the arrangement of land uses, in the design of developments and the architecture of individual buildings. (GP Issues and Opportunities 7.6.2.)

- Chapter 7. Issues and Opportunities 7.6.2.The amount of energy consumed in automobile travel can be reduced if commercial and recreational opportunities are located near residential uses. Commuter travel can be minimized if there is a reasonable balance between jobs and housing within the area. Placing high intensity uses along transit corridors can also reduce automobile travel.

  Reducing residential street width can affect microclimates and reduce the summer cooling needs of adjacent homes. The orientation of buildings can be arranged to affect the amount of heat gain. Shade trees can also cool microclimates and aid in energy conservation.

  Building construction options are available to reduce energy consumption. Building construction methods include, but are not limited to, insulation of walls and ceilings, insulated windows and solar water heating systems. Many building energy conservation measures have been incorporated into Title 24 of the California Administrative Code and are required of all residential structures. (GP)

- Orient commercial development toward pedestrian use. Buildings should be designed and sited so as to present a human-scale environment, including convenient and comfortable pedestrian access, seating areas, courtyards, landscaping and convenient pedestrian access to the public sidewalk. (GP)

- Chapter 8. **Energy Conservation 8.4.11** The City of Moreno Valley, through its housing rehabilitation programs provides grants or loan funds that include work for energy conservation repairs or replacements. The City of Moreno Valley, through its Neighborhood Preservation division, participates in utility energy conservation programs sponsored by private sector utility companies. When households participating in the City's housing rehabilitation programs require additional assistance in the area of energy conservation, utility discounts or replacement of inefficient appliances, staff provides information on programs available through utility companies. Depending on the availability of funds, utility companies make available weatherization services, replacement of inefficient air conditioners with evaporative coolers, replacement of refrigerators that are over 10 years old, repair or replacement of inefficient furnaces as well as free energy efficient compact fluorescent light bulbs. (GP)

- **Objective 4.3** Develop a hierarchical system of trails which contribute to environmental quality and energy conservation by providing alternatives to motorized vehicular travel and opportunities for recreational equestrian riding, bicycle riding, and hiking, and that connects with major regional trail systems. (GP)
- 5-13 Implement Transportation Demand Management (TDM) strategies that reduce congestion in the peak travel hours. Examples include carpooling, telecommuting, and flexible work hours. (GP)
- 7.5.2 Encourage energy efficient modes of transportation and fixed facilities, including transit, bicycle, equestrian, and pedestrian transportation. Emphasize fuel efficiency in the acquisition and use of City-owned vehicles. (GP)
- 7.5.3 Locate areas planned for commercial, industrial and multiple family density residential development within areas of high transit potential and access. (GP)
- Chapter 5. Transportation Demand Management 5.3.5 Transportation Demand Management (TDM) strategies reduce dependence on the single-occupant vehicle, and increase the ability of the existing transportation system to carry more people. The goal of TDM is to reduce single occupant vehicle trips during peak hours and modify the vehicular demand for travel.

  A reduction in peak hour trips and a decrease in non-attainment pollutants can be achieved through the implementation of TDM strategies. Examples of the strategies include: carpooling, telecommuting, flexible work hours, and electronic commerce that enables people to work and shop from home.

- 7.5.1 Encourage building, site design, and landscaping techniques that provide passive heating and cooling to reduce energy demand. (GP)

    - 7.8.1 Encourage recycling projects by individuals, non-profit organizations, or corporations and local businesses, as well as programs sponsored through government agencies. (GP)
    - Chapter 7. Solid Waste 7.3. The City Council adopted a “Source Reduction and Recycling Element” in 1992, describing how Moreno Valley plans to meet the goals mandated by AB939. The element includes strategies to address various components of the solid waste challenge, including the character of the waste stream, source reduction, recycling, composting, special waste (e.g. construction debris, auto bodies, medical waste, tires and appliances), education and public information, disposal facility capacity, funding and integration of the various components.

Moreno Valley works in concert with the local waste hauling company to meet its waste diversion requirements. Residential customers place recyclable materials at the curb for collection by the waste hauler, Waste Management of the Inland Empire. The waste hauler separates and markets the recyclable materials, including cardboard, paper, tin/metal, aluminum cans, plastics and glass. In 2004, fifty-one percent of the solid waste generated in Moreno Valley was diverted from landfills. (GP)

- 7.3.1 Require water conserving landscape and irrigation systems through development review. Minimize the use of lawn within private developments, and within parkway areas. The use of mulch and native and drought tolerant landscaping shall be encouraged. (GP)
- 7.3.2 Encourage the use of reclaimed wastewater, stored rainwater, or other legally acceptable non-potable water supply for irrigation. (GP)
- 7-2 Advocate for natural drainage channels to the Riverside County Flood Control District, in order to assure the maximum recovery of local water, and to protect riparian habitats and wildlife. (GP)
- 7-4 Provide guidelines for preferred planting schemes and specific species to encourage aesthetically pleasing landscape statements that minimize water use. (GP)
- Maintenance of systems for water supply and distribution; wastewater collection, treatment, and disposal; solid waste collection and disposal; and energy distribution which are capable of meeting the present and future needs of all residential, commercial, and industrial customers within the City of Moreno Valley. (GP)
- 7-3 Maintain a close working relationship with EMWD to ensure that EMWD plans for and is aware of opportunities to use reclaimed water in the City. (GP)
- Provide landscaping in automobile parking areas to reduce solar heat and glare. (GP)
- 6.7.6 Require building construction to comply with the energy conservation requirements of Title 24 of the California Administrative Code. (GP)
- 7.5.4 Encourage efficient energy usage in all city public buildings. (GP)
- 7.5.5 Encourage the use of solar power and other renewable energy systems. (GP)
- A dark sky policy
- Chapter 9. 2.10.7 On-site lighting should not cause nuisance levels of light or glare on adjacent properties. (GP)
- Chapter 9. 2.10.8 Lighting should improve the visual identification of structures. Within commercial areas, lighting should also help create a festive atmosphere by outlining buildings and encouraging nighttime use of areas by pedestrians.(GP)

Resources

- ICLIE - Local Governments for Sustainability (ICLEI) is a membership association of local governments committed to advancing climate protection and sustainable development.
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