



City of Moreno Valley Energy Efficiency and Climate Action Strategy



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Summary

The City of Moreno Valley recognizes the impact of global climate change from carbon dioxide emissions arising from the activities of the City organization as well as the community's residents, businesses and visitors. Furthermore, the City recognizes the benefits achieved through energy and resource efficiency measures in reducing the community's carbon dioxide emissions as well as improving air quality, energy reliability and economic well-being in the City and region. The City recognizes the need to reduce our energy use and greenhouse gas emissions and become a more sustainable community. 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 can reduce energy and water consumption and greenhouse gas emissions as an organization (its employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and greenhouse gas emissions.

Introduction

The City of Moreno Valley's Energy Efficiency and Climate Action Strategy main objectives are to reduce the environmental impact and fiscal impact of energy usage and greenhouse gas emissions in municipal facilities and within the community. The genesis of the Strategy is the Federal Energy Efficiency and Conservation Block Grant awarded to the City to implement 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. With City Council support, City staff has applied for energy efficiency grants. In June 2010 the City was awarded a \$375,000 (SCE) Southern California Edison Strategic Solicitation for the purpose of expanding the scope of the Strategy and its implementation, including the preparation of a greenhouse gas inventory for the community.

The Strategy is intended to be a comprehensive living policy document for the City organization and the community to address energy and water conservation and effects of climate change. The Strategy is organized into two main sections: Energy Efficiency (City as an organization) and Climate Action (City as a community). The Strategy also contains a Greenhouse Gas Analysis component. The Greenhouse Gas Analysis is also separated into two parts, the City as an organization and the City as a community.

The City realizes the challenges the community may face due to climate change and excess energy and water consumption. With the implementation of energy and water conservation and greenhouse gas reduction measures, training and public awareness, the expected results are the reduction of greenhouse gas emissions and energy and water consumption. In implementing the Strategy, the City's General Plan may need to be updated to reference the Strategy for guidance on energy efficiency and greenhouse gas reduction.

In recent years, 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 to 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, communities must address how they grow. This law directs 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 potential energy efficiency measures for the City as an organization, both those that have been implemented and those that could be implemented in the future. In addition, the document provides direction and policies to ensure the most effective, practical, and affordable, energy use practices are implemented.

Overview of Climate Action

The focus of the Climate Action section is to promote measures similar to those identified in the Energy Efficiency section and additional measures that can be implemented by the community's residents and businesses to reduce greenhouse gas emissions on a community-wide basis. The Climate Action Strategy includes an analysis of existing and future greenhouse gas emissions community wide and provides a set of policies to guide efforts to reduce greenhouse gas emissions to meet or exceed State requirements without unduly compromising other community goals.

Overview of the Greenhouse Gas Analysis

The analysis was completed under the premise that the City and the community it represents are uniquely capable of addressing emissions associated with sources under the City's jurisdiction. The City's emission reduction efforts should coordinate with the

state strategies in order to accomplish emission reductions in an efficient and cost effective manner. The City developed this document with the following purposes in mind:

- Create a GHG baseline from which to benchmark GHG reductions;
- Provide a plan that is consistent with and complementary to: the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB 32); the Federal Government through the actions of the Environmental Protection Agency; and the global community through the Kyoto Protocol; and
- Guide the development, enhancement, and implementation of actions that reduce GHG emissions.

This report establishes 2010 as the year on which to base the existing inventory; this is the most recent year for which reliable data concerning the City’s residential, commercial, and government operations are available. Sources of emissions include transportation, electricity and natural gas use, landscaping, water and wastewater pumping and treatment, and treatment and decomposition of solid waste. The 2007 inventory represents conditions prior to the economic recession and will be used to set the target for reducing emissions by the year 2020. The 2010 inventory was calculated using the most recent data available. The 2010 inventory serves as a reference against which to measure the City’s progress towards reducing GHG emissions since 2007 and into the future, and also serves as documentation for potential emission trading opportunities.

Moreno Valley’s 2010 municipal operations inventory includes sources and quantities of GHG emissions from government owned or rented buildings, facilities, vehicles, and equipment. The community-wide emissions inventory identifies and categorizes the major sources and quantities of GHG emissions being produced by residents, businesses, and municipal operations taking place in the City of Moreno Valley using the best available data. By having the municipal emissions separated from the community as a whole, the local government can implement reduction strategies where it has direct control, closely monitor the changes in emissions over time, and set an example for the rest of the City.

2010 Municipal Emissions Inventory

Table 3-1 2010 Municipal Data Inputs		
Category	Data Input	Data Source
Electricity (kWh)	9,937,015	SCE
	3,847,738	MVU
Natural Gas (therms)	90,651	SCG
Vehicle Fleet		
<i>Gasoline(gallons)</i>	77,325	Fleet Manager
<i>Diesel (gallons)</i>	28,544	Special Districts
Equipment		
<i>Gasoline(gallons)</i>	2,118	Parks Division
<i>Diesel (gallons)</i>	2,208	Special Districts
Employee Commute (responses)	141	Employee Survey

The community-wide inventory represents all emissions from sources located with the jurisdictional boundaries of the City of Moreno Valley. Therefore, the municipal emissions described in the previous section are a subset of the community-wide inventories presented here. In 2010, the City of Moreno Valley emitted a total of 920,657 MT CO₂e from the community as a whole. The following sections describe the data inputs, emissions by source, and emissions by land use in 2010.

2010 Community-Wide Emissions Inventory

Table 3-5 2010 Community-Wide Data Inputs		
Category	Data Input	Data Source
Electricity (kWh)	633,215,207	SCE
	62,138,000	MVU
Natural Gas (therms)	26,266,326	SCG
Transportation		
<i>Annual Vehicle Miles Traveled</i>	1,077,909,543	City Traffic Engineer
<i>Annual Trips</i>	110,098,975	
Area Source (based on land use)		
<i>SFR (units)</i>	42,642	City Planning
<i>MFR (units)</i>	9,387	
<i>Commercial (ksf)</i>	8,325	
<i>Industrial (ksf)</i>	12,695	
Solid Waste (tons)	144,824	CIWMB
Water (AF)	26,183	EMWD
	87	Box Springs Mutual

With the implementation of GHG reduction measures, Moreno Valley is projected to reduce its community-wide emissions to a total of 798,137 MT CO₂e, which is 556 MT CO₂e below the 2020 reduction target. This is a decrease of 38.5 percent from the City’s 2020 BAU emissions inventory and 13 percent from the 2010 emissions. The reduction measures reduce GHG emissions from all sources of community-wide GHG emissions including transportation, energy, area sources, water, and solid waste. The following sections describe the emissions by source and land use category for the year 2020.

This report sets a baseline for the City’s GHG emissions, projects how these emissions will grow, and includes strategies to reduce emissions to a level consistent with California’s emissions reduction target. These strategies complement the City’s General Plan policies and are consistent with Moreno Valley’s vision for a more sustainable community.

Greenhouse Gas Analysis Reduction Policies

The purpose and intent of these policies is to achieve compliance with AB 32 and reduce GHG by 15% by 2020. In 2020, the City of Moreno Valley is projected to emit a total of 1,298,543 MT CO₂e without the incorporation of GHG reduction policies. The statewide reduction measures would reduce the bulk of Moreno Valley’s emissions and make a substantial contribution toward reaching the 2020 reduction target. However, the City would still need to supplement the statewide measures with the implementation of local reduction policies, in order to achieve 15% reduction in GHG by 2020. Future local policy

measures will require decision-maker approval. These reduction measures include the following:

- R2-T1: Land Use Based Trips and VMT Reduction Policies. Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.
- R2-T3: Employment-Based Trip Reductions. Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.
- R2-E1: New Construction Residential Energy Efficiency Requirements. Require energy efficient design for all new residential buildings to be 10% beyond the current Title 24 standards. (Reach Code)
- R2-E2: New Construction Residential Renewable Energy. Facilitate the use of renewable energy (such as solar (photovoltaic) panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources offsite.
- R2-E5: New Construction Commercial Energy Efficiency Requirements. Require energy efficient design for all new commercial buildings to be 10% beyond the current Title 24 standards. (Reach Code)
- R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining. Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy efficient projects.
- R3-L2: Heat Island Plan. Develop measures that address “heat islands.” Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.
- R2-W1: Water Use Reduction Initiative. Consider adopting a per capita water use reduction goal which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.
- R3-W1: Water Efficiency Training and Education. Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.
- R2-S1: City Diversion Program. For Solid Waste, consider a target of increasing the waste diverted from the landfill to a total of 75% by 2020.

Examples of current statewide and regional planning efforts to reduce GHG emissions are identified in the GHG analysis. Current City efforts include working with RTA to continue to provide timely and effective transit services, and promoting existing incentive

programs for residents that promote residential and commercial energy efficient retro-fits, such as WRCOG’s low interest loan programs. These current City efforts wouldn’t involve any changes in current City policy or ordinances.

City’s Current Goals and Objectives

The City’s General Plan includes goals and objectives to achieve energy conservation through land use planning, building design, site planning, compliance with State Title 24 energy savings requirements, and rehabilitation of existing structures. The General Plan also includes measures to reduce traffic congestion and provide 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. See Section III Appendix _ for specific General Plan goals and objectives.

SECTION I – ENERGY EFFICIENCY

Current Energy Efficiency Practices

The City currently employs a variety of measures that reduce consumption of electricity and water and reduce the amount of solid and green waste sent to a landfill. The City has also purchased alternative fuel vehicles that reduce the consumption of gasoline. 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 Effectiveness	Practice	Policy	Lead Division
A1.	New buildings constructed in City parks are using solar tubes for day time lighting.	High	✓		Parks & Community Services
A2.	Photo cells are being used for lighting park grounds and buildings along with automatic shutoff timers.	High	✓		Parks & Community Services
A3.	Most park lighting is shut down at 10 p.m. except parks that need to be lit all night to address safety issues. Many sites are equipped with two or more circuits on a timer, so alternating lights may be turned off early.	High	✓		Parks & Community Services

A4.	Sport field lights at parks have been replaced with more efficient fixtures with an average energy savings of at least 30%.	High	✓		Parks & Community Services
A5.	Applied window tint/film to the City Hall building windows using grant funds. Project was completed in January 2011. Applying tint/film to windows has made City Hall more energy efficient, comfortable for employees, and reduced energy cost.	High	✓		Planning
A6.	Routine maintenance is performed on all City Heating, Ventilation, and Air Conditioning units to keep them running as efficiently as possible.	High	✓		Purchasing & Facilities
A7.	Replacement of Air Conditioning system at the City Hall Building has been completed (September 2011) using grant funds.	High	✓		Purchasing & Facilities
A8.	Conference and Recreation Center and Public Safety Building have computer systems that allow 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.	High	✓		Purchasing & Facilities
A9.	Using grant funding, the City is retrofitting florescent light fixtures from T12 to T8 fixtures which use less energy. Retrofit sites are the Senior Center, Library, City Hall, and Fire Stations 6, 48 and 65. Parking lot lighting for these buildings are scheduled to be upgraded to more energy efficient LED fixtures.	High	✓		Purchasing & Facilities
A10.	Light sensors have been installed in some rooms at City Hall which turn off the lights when the room is not in use. Sensors were installed 15 years ago and not all still function.	High	✓		Purchasing & Facilities
A11.	Traffic signals synchronized using grant funds to improve traffic flow and reduce air pollution and gas consumption.	High	✓		Transportation Engineering
A12.	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.	High	✓		Transportation Engineering

A13.	Using grant funding, the City is retrofitting all of the fluorescent bulbs in Internally Illuminated Street Name Signs with LED light engines that enhance visibility, street safety, and last longer. Annual cost savings of about 50% will be realized with the retrofit due to less use of electricity and less maintenance due to longer life expectancy of the LED.	Medium	✓		Transportation
A14.	City Hall fans run at all times while the building is occupied to maintain a comfortable temperature and a humidity level of 60%, and reduce carbon dioxide levels, per Title 24.	Low	✓		Purchasing & Facilities
A15.	Pilot program by MV Utility installed two induction lights for a 45 day trial period on light poles at Veteran's Way and Calle San Juan de Los Lagos to measure lighting performance and cost of induction lighting versus the existing lights.	TBD	✓		Special Districts

Reduced Water Consumption

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

	Water Reduction Measures	Cost Effectiveness	Practice	Policy	Lead Division
A16.	Restrooms and other buildings in City parks are installed with faucets that automatically shut off.	High	✓		Parks & Community Services
A17.	About 40 acres of City park land uses reclaimed water for irrigation.	High	✓		Parks and Community Services
A18.	Newer irrigation systems at City parks utilize smart controllers which are self-regulating and utilize a central weather station or have their own weather stations.	High	✓		Parks and Community Services
A19.	City adopted new landscape standards in January 2010 which require the use of drought tolerant landscape and water efficient irrigation in new installations and most retrofit projects.	High		✓	Planning
A20.	Purchasing & Facilities Division is testing 0.5 gallon per minute aerators for restroom faucets. Currently, 2.0 and 2.2 per minute gallon aerators are used.	High	✓		Purchasing & Facilities
A21.	Synthetic turf was used at the Moreno Valley Community Park soccer fields to conserve water and increase use time. Water usage was reduced significantly. Synthetic turf should be considered for other sports fields.	Medium	✓		Parks and Community Services

	Water Reduction Measures	Cost Effectiveness	Practice	Policy	Lead Division
A22.	Capital Projects Division had a demonstration project for a median on Frederick Street to evaluate cost and performance of synthetic turf. Project was placed on hold due to lack of funding.	Low	✓		Capital Projects
A23.	Facilities staff researched use of waterless urinals. Maintenance requirements and costs of current technology do not make this a viable option for use in public restrooms.	Low	✓		Purchasing & Facilities

Recycling and Diversion

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

	Recycling and Diversion Measures	Cost Effectiveness	Practice	Policy	Lead Division
A24.	Maintenance & Operations has an ongoing program to recycle asphalt concrete. Existing pavement is ground up and recycled material is used as base for repaving. If not reused immediately, material is stored for future use.	High	✓		Maintenance & Operations
A25.	All City facilities now have recycling programs.	High	✓	✓	Maintenance & Operations
A26.	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, Mulch, Composting Workshops, Residential Recycling, Commercial Recycling.	High	✓	✓	Maintenance & Operations
A27.	City staff presents community programs on recycling. The City works with the Chamber of Commerce to promote recycling. The City is preparing an education program for City employees regarding recycling and disposal of hazardous materials.	High	✓		Maintenance & Operations
A28.	Rubberized asphalt concrete has been used on City street projects when cost is comparable to regular asphalt concrete. Recycled tires are used. Advantages include reduced road noise, reduced breaking distance, and slightly longer life to road surface. There are some limitations on where it may be installed.	Medium	✓		Capital Projects
A29.	Cold in Place Recycling (CIR) is used as appropriate for street rehabilitation projects. The process includes removing old pavement, combining the old pavement with emulsion, and placing it back down as part of the new street section.	Medium	✓		Capital Projects

A30.	In central plant recycling, reclaimed asphalt pavement (RAP) is screened, crushed, sized, and mixed with an asphalt rejuvenator. The recycled mix can be transported immediately to a job site, or it may be stockpiled for later use. The RAP can be freshly milled, or it may come from a stockpile.	Medium	✓		Capital Projects
A31.	For capital projects, the contractor is required to complete monthly Solid Waste Disposal and Recycling Reports and submit them to the City.	Medium	✓		Capital Projects or Contracting Division/Department
A32.	City uses green recycled janitorial products at City Hall and the Facilities Annex.	Low	✓	✓	Purchasing & Facilities

Alternative Fuel Vehicles

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

	Alternative Fuel Vehicle Measures	Cost Effectiveness	Practice	Policy	Lead Division
A33.	City used grant money to retrofit diesel engines vehicles to comply with new laws to make diesel engines cleaner burning. Phase I, December 2009, Phase II scheduled to be completed by December 2011.	High	✓		Maintenance & Operations
A34.	City has one electric vehicle and four natural gas vehicles (two street sweepers, one pick up truck, and one storm drain cleaning truck).	?	✓		Maintenance & Operations

Education

The City 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, and facility maintenance.

The City of Moreno Valley participates in the following organizations:

- Community Energy Partnership – this partnership identifies incentives and rebates for City and developer projects.
- Energy Coalition - Facilities Maintenance Division has completed energy audits for five buildings with the Energy Coalition.
- WRCOG Clean Cities – public-private partnership dedicated to achieving improved 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.

- WRCOG Solid Waste Technical Committee – the task force comprised of staff from each of WRCOG’s member agencies and meets to discuss solid waste and recycling issues and makes recommendations to the WRCOG’s Technical Advisory Committee on matters directly relating to Western Riverside County.
- Riverside County Solid Waste Management Advisory Council (Countywide Local Task Force) – this group provides advisory to the County’s Planning Commission and Board on all substantive waste management issues and solid waste facility land use matters, and also assists the County and its cities in meeting AB939 requirements, from the preparation and revision of the Countywide Integrated Waste Management Plan (CIWMP) to reviewing and commenting on solid waste facilities and their expansions for consistency and recycling goals to the Department of Resources, Recycling and Recovery.

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:

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B1.	Establish a standard for saving energy beyond Title 24 requirements.	✓						High	Building
B2.	Document municipal green building efforts and post-occupancy building performance metrics on the City website for use as an educational resource for the development community.	✓						High	Capital Projects
B3.	Require the use of reclaimed water for City buildings, facilities, parks and parkways where connection to reclaimed water lines is feasible.		✓					High	Capital Projects or Contracting Division / Department
B4.	Require all new City buildings and facilities to participate in the Savings by Design program, which identifies ways to improve the energy efficiency of proposed construction.	✓						High	Capital Projects or Contracting Division / Department
B5.	Establish policy that mandates a green building rating system standard that applies to all new buildings and retrofits over 5,000 square feet.	✓						High	Capital Projects

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B6.	Require all new and renovated City facilities to coordinate with Southern California Edison or Moreno Valley Utility, Eastern Municipal Water District, and The Gas Company to maximize rebate opportunities. Use rebates to expand energy saving upgrades. Group projects to provide eligibility to apply for grants and rebates, and provide greater reimbursement.	✓						High	Capital Projects or Contracting Division / Department
B7.	Require life cycle cost where appropriate, to be compared to initial cost for projects. Include as part of City Council reports, in order for the decision makers to be more informed of true costs of projects.	✓						High	Capital Projects
B8.	Adopt green building policy for all City new construction and major remodels.	✓						High	Capital Projects
B9.	Implement LEED standards without becoming LEED certified to become more energy efficient. LEED certification has substantial expenses involved.	✓						High	Capital Projects

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B10.	Devise checklist of agencies to contact for rebates and/or incentives for new construction or renovation projects. List would include types of projects for which rebates are typically eligible.	✓						High	Capital Projects
B11.	Benchmark all City facilities in the Energy Star web site.	✓						High	Electric Utility
B12.	Require all City facilities have recycling programs.			✓				High	Maintenance & Operations
B13.	Require existing asphalt concrete be recycled and used as base for streets whenever feasible. Store recycled material that cannot be used immediately.			✓				High	Maintenance & Operations
B14.	State recycling requirements are currently for a 50% diversion rate. The City intends to meet or exceed all future mandates passed by the state legislature.			✓				High	Maintenance & Operations
B15.	Seek funding for alternative fuel vehicles or fund improvements to City vehicles (e.g. City funding sources used for retrofitting City fleet).				✓			High	Maintenance & Operations
B16.	Use AQMD's diesel retrofit program to all City-operated diesel engines to comply with clean diesel combustion.				✓			High	Maintenance & Operations

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B17.	Establish minimum fleet mileage standard for various classes of fleet vehicles.				✓			High	Maintenance & Operations
B18.	Promote rideshare program for employees to decrease vehicles miles traveled.				✓			High	Maintenance & Operations
B19.	Restrict 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 provides a good example of this concept.		✓					High	Parks & Community Services
B20.	Require use of smart controllers which are self-regulating with their own weather stations for all City projects consistent with City Landscape Standards. Retrofit existing controllers as funding becomes available.		✓					High	Parks & Community Services
B21.	Consider that new buildings constructed in City parks use solar tubes or equal design for daytime lighting.	✓						High	Parks & Community Services
B22.	Require installation of energy efficient fixtures for all sport field lights in new parks. Retrofit existing lights as funding is available.	✓						High	Parks & Community Services

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B23.	Implement "green at work" programs including "Cops on Bikes"	✓						High	Planning
B24.	Identify and apply for funding to implement adopted energy conservation & efficiency programs.	✓						High	Planning
B25.	Encourage employees to submit energy efficiency and conservation recommendations for City operations and assess them.	✓						High	Planning
B26.	Establish an energy efficiency revolving fund to deposit energy savings, rebates and incentives. The policy should consider the following funding sources: 100% of rebate and incentive money and 50% of energy bill savings money for future energy efficiency projects.	✓						High	Planning
B27.	Require water audits for new and renovation projects.		✓					High	Planning
B28.	Establish a fund from a portion of water savings, rebates and incentives to fund additional water saving projects.		✓					High	Planning
B29.	Provide on-site training seminars for employees on energy saving methods.	✓						High	Planning

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B30.	Install light sensors, which turn off the lights when a room is not in use, wherever practical.	✓						High	Purchasing & Facilities
B31.	Evaluate lighting requirements and safety concerns for City facilities and reduce or turn off exterior lights when facilities are not in use.	✓						High	Purchasing & Facilities
B32.	Consider 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.	✓						High	Purchasing & Facilities
B33.	Encourage that all City building thermostats be set at Federal and State recommendations, currently 68 degrees in winter and 78 degrees in summer.	✓						High	Purchasing & Facilities
B34.	Promote turning off lights in offices and work areas when not in use at all City facilities.	✓						High	Purchasing & Facilities
B35.	Utilize an energy monitoring system to track electricity use and identify areas/facilities that can be operated more efficiently.	✓						High	Purchasing & Facilities
B36.	Require routine maintenance of the heating and air conditioning (HVAC) systems at City facilities.	✓						High	Purchasing & Facilities

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B37.	Complete an energy audit of all City facilities to identify EE&C opportunities (e.g., HVAC, lighting, weatherization, appliances), and implement all cost effective recommendations.	✓						High	Purchasing & Facilities
B38.	Pursue early participation in the smart meter rollout with SCE and automated meter reading at SCG.	✓						High	Purchasing & Facilities
B39.	Replace interior and exterior lighting fixtures with more energy efficient fixtures when they become available on the market through changes in technology as funding is available.	✓						High	Purchasing & Facilities
B40.	Establish purchasing decisions based on environmental information and life cycle costs.	✓						High	Purchasing & Facilities
B41.	Encourage installation of computer monitoring systems in new City facilities which allow continuous control of the HVAC systems wherever practical. Retrofit existing facilities as funding becomes available.	✓						High	Purchasing & Facilities
B42.	Install automatic shutoff faucets in all new City buildings and facilities wherever possible. Replace existing faucets as funding is available.		✓					High	Purchasing & Facilities

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B43.	Consider replacing aerators in existing faucets with 0.5 gallon per minute aerators where practical.		✓					High	Purchasing & Facilities
B44.	If funding is available, host 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 Gold level status with Energy Coalition and educate employees on saving energy at work and at home.	✓					✓	High	Purchasing & Facilities
B45.	Review current median landscape standards to increase water efficiency, with efficient irrigation, grading that retains water run off and a drought tolerant plant palette.		✓					High	Special Districts

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B46.	Seek grants to renovate Alessandro Boulevard medians to reduce or eliminate turf. New median concept would reduce water, electricity and gasoline (maintenance equipment) use, and reduce maintenance cost and green waste. Medians would have irrigation control program controlled online, allowing for adjustments to irrigation schedules due to the changing weather patterns. Reduced water runoff from medians would also lower maintenance costs to adjacent asphalt pavement.		✓					High	Special Districts
B47.	Establish guideline that identifies criteria for using 'green concrete' or concrete made with recycled aggregate. Use reduces CO ₂ emissions and solid waste sent to landfills (e.g. granulated coal ash, blast furnace slag).			✓				Medium	Capital Projects
B48.	Establish guideline that identifies criteria for using rubberized asphalt concrete for City projects.			✓				Medium	Capital Projects

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B49.	'Demonstration' buildings such as future new buildings, may want to become LEED certified to highlight energy and environmental improvements for public information.	✓	✓	✓		✓	✓	Medium	Capital Projects
B50.	Consider moving City electric load off-peak to increase peak capacity and take advantage of lower rates.	✓						Medium	Electric Utility
B51.	Increase the City's Electric Utility renewable energy mix.	✓						Medium	Electric Utility
B52.	Identify opportunities for on-site renewable energy generation on City-owned and private property.	✓						Medium	Electric Utility
B53.	Establish policy to replace (by normal attrition) more City Vehicles with hybrid, electric, alternative fuel, or smaller vehicles where such vehicles meet the use requirements. When it is economically feasible.				✓			Medium	Maintenance & Operations
B54.	Establish a zero waste policy to require everything to be recycled, with minimal disposables allowed and encourage composting.			✓				Medium	Maintenance & Operations
B55.	Require use of photo cells in park buildings and automatic shutoff timers wherever practical.	✓						Medium	Parks & Community Services

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
B56.	Coordinate with adjacent cities and jurisdictions, and work together as a region to implement energy efficiency programs.	✓						Medium	Planning
B57.	Use green recycled janitorial products at City facilities when it is cost effective.			✓				Medium	Purchasing & Facilities
B58.	Provide bicycle parking at City facilities.				✓			Medium	Purchasing & Facilities
B59.	Research potential savings of synthetic turf and/or low water use plantings in medians, assessing installation, maintenance and water costs.		✓					Medium	Special Districts
B60.	Consider use of timers on street lights to shut off during late evening and early morning hours when traffic volumes are low, pursuant to adoption of a policy regarding hours of operation for the streetlights.	✓						Medium	Special Districts
B61.	Provide incentives for City staff to develop expertise in green building strategies and certification.	✓	✓	✓	✓	✓	✓	Low	Building
B62.	Consider increasing available charge stations and other accommodations for alternative fuel and hybrid vehicles at City facilities.				✓			Low	Maintenance & Operations
B63.	Consider joining				✓			Low	Maintenance

Reduction Measures Section I		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	Pluginpartners (www.pluginpartners.org) a national organization that supports hybrid electric vehicles.								& Operations
B64.	Assess use of low flow toilets and waterless urinals as performance improves and maintenance costs of fixtures become lower.		✓					Low	Purchasing & Facilities
B65.	Establish an environmentally preferable purchasing program for government operations.	✓						Low	Purchasing & Facilities
B66.	Require operation of ventilation fans at all City facilities during occupied hours to maintain a comfortable temperature, humidity level of 60%, and reduce carbon dioxide levels per Title 24.	✓						Low	Purchasing & Facilities
B67.	Replace paper towel dispensers with air dryers in City facilities where practical and cost effective.			✓				Low	Purchasing & Facilities
B68.	Consider adopting LED standard for streetlights, and requiring new installations to meet standard and retrofit existing lights as funding permits. SCE and MVU do not currently have a separate rate structure for LED. An effective LED fixture and spacing would also need to be	✓						Low	Transportation Engineering

Reduction Measures Section I	Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
established.								

SECTION II – CLIMATE ACTION STRATEGY

Proposed Climate Action Policies

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

Reduced Energy 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:

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
C1.	Install light colored "cool" roofs and cool pavements. (Cool roofs are now a requirement per State Title 24/CalGreen Building Standards).	✓						High	Building
C2.	Promote and offer new customized incentives to address critical energy residential and commercial customer needs. Increase incentives on 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. Develop new incentives for electric and natural gas.	✓						High	Building
C3.	Require Energy Star equipment and appliances in new construction & renovations.	✓					✓	High	Building
C4.	Specify no- or low-VOC (Volatile Organic Compound) materials.						✓	High	Building
C5.	Consider adopting a new energy efficiency ordinance requiring 10-15% above Title 24.	✓	✓	✓		✓	✓	High	Building
C6.	Install photovoltaic or other solar technology based on demonstrated return on investment for city owned facilities.					✓		High	Capital Projects or Contracting Division / Department
C7.	City should partner directly with the 5 largest consumers of energy to encourage and promote their energy efficiency activities.	✓						High	Electric Utility

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
C8.	Promote energy saving opportunities to businesses.	✓						High	Electric Utility
C9.	Promote and implement programs to encourage load shifting to off-peak house and explore demand response solutions.	✓						High	Electric Utility
C10.	Provide education on energy efficiency to residents, customers and/or tenants.	✓						High	Electric Utility
C11.	Use co-branded marketing to leverage the City's influence and knowledge of the community. Create new Partnership brand to integrate City and Utility marketing campaigns to customers. Develop Marketing Team to coordinate City and Utility marketing. Advertise routinely on local media: radio, TV, newspaper, City newsletter, and website.	✓						High	Electric Utility
C12.	Promote and motivate behavioral change, by providing energy saving tip information in local media.	✓						High	Electric Utility
C13.	Take lead to increase face-to-face marketing efforts in the City by organizing the following community activities: <ul style="list-style-type: none"> • Mayor sponsoring key stakeholder meetings; • City sponsored ideas expo and participating at other regional energy events; • City presenting program to local businesses at 	✓						High	Electric Utility

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	<p>Chamber of Commerce meetings;</p> <ul style="list-style-type: none"> • City working with community organizations, local service clubs, HOA's and chambers of commerce to educate and sign-up participants; • Contractors conducting face-to-face marketing to both residential and business customers; • City Council recognizing "energy champions" to demonstrate savings to others; and <p>Sponsoring Commercial Food Service luncheons for restaurant, hotel, and country club owners and managers.</p>								
C14.	Explore use of other renewable energy technologies to expand City efforts to utilize renewable energy.					✓		High	Electric Utility
C15.	Implement low impact development practices that maintain existing hydrology of the site to manage storm water and protect the environment. (Use of low impact development practices is required by the new regional water quality permit to be implemented over the next year)		✓					High	Land Development
C16.	Require that developer recycle existing street material for use as base for new streets.			✓				High	Land Development

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
C17.	Address and minimize vegetation that degrades access along public rights of way.				✓			High	Land Development
C18.	Develop and implement a public education outreach program that addresses the discharge of preventable contaminants into the sanitary sewer system by residents and businesses (example: no pharmaceuticals or paint down the drain) as an element of the existing public education outreach program.		✓					High	Maintenance & Operations
C19.	Work with Waste Management to utilize billing statements or MVTV-3 to encourage businesses and residents to enroll in a recycling program.			✓				High	Maintenance & Operations
C20.	Create a contest that encourages increased community recycling.			✓				High	Maintenance & Operations
C21.	Offer rewards that will motivate recycling.			✓				High	Maintenance & Operations
C22.	Support and encourage Extended Producer Responsibility (EPR), also known as "Take-Back Programs" for household hazardous waste and other difficult to recycle materials.			✓				High	Maintenance & Operations
C23.	Explore grants to pay for recycling collection devices and their maintenance to be placed with public trash bins and designed to minimize contamination and theft.			✓				High	Maintenance & Operations
C24.	Integrate reuse and recycling into residential industrial, institutional and commercial projects.			✓				High	Maintenance & Operations

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
C25.	Increase recycling at public events.			✓				High	Maintenance & Operations
C26.	Continue to promote the locations of local recycling facilities.			✓				High	Maintenance & Operations
C27.	Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and use water-efficient irrigation methods.		✓					High	Parks & Community Services
C28.	Promote use of City's multi-use trail system.				✓			High	Parks & Community Services
C29.	Establish Energy Efficiency and Conservation baselines.	✓						High	Planning
C30.	Maintain City's Community Partnership program with Southern California Edison, The Gas Company, and Moreno Valley Electric Utility through the Energy Coalition. This partnership allows for funding the City can use for energy conservation marketing, education, and outreach efforts. Set municipal and community wide energy demand and usage reduction goals and implement them by leveraging program resources and incentives already committed or potentially available.	✓						High	Planning
C31.	City should become a model of energy conservation stewardship. Build upon historical and current energy conservation efforts as the foundation for continued efforts and education of the community on the value of efficiency and	✓						High	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	conservation in cost savings and environmental benefits.								
C32.	Require new large developments (projects of regional significance) participate in the Savings by Design program, funded by Utility customers and administered by private utilities under the auspices of the State Public Utilities Commission. Program identifies ways to improve energy efficiency of proposed construction.	✓						High	Planning
C33.	Encourage community use of Southern California Edison, Moreno Valley Utility, Eastern Municipal Water District, and The Gas Company financial incentives / rebate opportunities.	✓						High	Planning
C34.	Adopt a dark sky ordinance.	✓						High	Planning
C35.	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. (Existing design guideline).	✓						High	Planning
C36.	Reduce unnecessary outdoor lighting.	✓						High	Planning
C37.	Provide customer financing to assist customers with purchasing energy efficiency equipment. WRCOG will take lead in developing a financing plan through property taxes based on	✓						High	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	the guidelines proposed in Assembly Bill 811. City is a partner in WRCOG effort to establish regional AB811 program.								
C38.	Encourage Point-of-Sale Rebates, since they 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.	✓						High	Planning
C39.	Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits.					✓	✓	High	Planning
C40.	Promote use of low flow toilets for homes and businesses.		✓					High	Planning
C41.	Review and update the landscape ordinance to continue lowering use of potable water for landscape irrigation. (City updated landscape standards in 2009 to further encourage water conservation.)		✓					High	Planning
C42.	Promote incentives for use of water efficient fixtures and fittings.		✓					High	Planning
C43.	Implement water efficiency, conservation and education programs to reduce the City's per capita potable water usage.		✓					High	Planning
C44.	Cooperate with EMWD to		✓					High	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	evaluate feasibility of renewable energy sources for water and wastewater operations. (EMWD has installed upgrades to Moreno Valley treatment plant to lower energy consumption)								
C45.	Incorporate water-reducing features into building and landscape design.		✓					High	Planning
C46.	Design buildings to be water-efficient. Install water-efficient fixtures and appliances.		✓					High	Planning
C47.	Offset water demand from new projects so that there is no net increase in water use.		✓					High	Planning
C48.	Provide education about water conservation and available programs and incentives.		✓					High	Planning
C49.	Require 50% reduction in irrigation water usage. Limit turf use (turf limited to gathering areas in non-residential and to 25% of front yard for single family residential per City landscape guidelines).		✓					High	Planning
C50.	Require 20% (40% in office/retail) reduction in domestic water usage, using EP Act as a baseline for new construction. Develop prescriptive fixture rates for renovations.		✓					High	Planning
C51.	Reduce unnecessary outdoor lighting.	✓						High	Planning
C52.	Protect existing trees and encourage the planting of new drought tolerant trees. Adopt a tree protection and replacement		✓					High	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	ordinance.								
C53.	Work with developers to increase housing near transit through recently adopted mixed use zones. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			High	Planning
C54.	Monitor activities in other areas in California to identify energy saving and climate impact reducing programs suitable for the City.					✓		High	Planning
C55.	Designate Transit-Oriented Development district(s). (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			High	Planning
C56.	Explore building footprint, setbacks, height, scale, hardscape requirements to create compact building design techniques.	✓					✓	High	Planning
C57.	Explore reduced parking minimums required for mixed-use developments to encourage transit and non-motorized transportation.				✓			High	Planning
C58.	Explore greater flexibility with shared parking requirements.				✓			High	Planning
C59.	Explore incentive zoning techniques that allow developers to build more intensity in exchange for open space protection.	✓			✓		✓	High	Planning
C60.	Explore infrastructure master plans and focus expansion in designated growth areas away	✓			✓		✓	High	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	from open space areas.								
C61.	Apply urban planning principles that encourage high density, mixed-use, walkable/bikeable neighborhoods, and coordinate land-use and transportation with open space systems and promote the efficient delivery of services and goods. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)	✓			✓			High	Planning
C62.	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 areas in the City.					✓	✓	High	Planning
C63.	Require hardscape and parking lots to be shaded.						✓	High	Planning
C64.	Explore ways to utilize GIS analysis to optimize tree placement to consider utility lines, automated recycling truck arms, and hardscape.						✓	High	Planning
C65.	Promote "Energy Efficiency" at City events or events that the City participates in such as 4 th of July and the March Air Show. The Energy Coalition, Gas Company, SCE, EMWD, MVU, etc. could put on demonstrations, distribute literature, give out products (light bulbs, etc.).	✓						High	Planning
C66.	Test new technology, from conducting small trials of innovative products to expanding	✓						High	Purchasing & Facilities

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	uses of LED lights, solar, fuel cells, and liquid pool covers for commercial and residential applications.								
C67.	Pursue early participation in the smart meter rollout with SCE and automated meter reading at SCG.	✓						High	Purchasing & Facilities
C68.	Promote on-line purchasing for climate friendly benefits.	✓						High	Purchasing & Facilities
C69.	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.	✓						High	Purchasing & Facilities
C70.	Actively promote walking and biking as safe modes of local travel.				✓			High	Transportation Engineering
C71.	Work with RTA to expand local transit service by increasing frequency and adding routes along arterial streets during peak periods.				✓			High	Transportation Engineering
C72.	Work with RTA to expand 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 lighting at all shelters to improve safety.				✓			High	Transportation Engineering
C73.	Explore trip reduction programs such as carpools/vanpools and preferential parking areas with City staff and other large				✓			High	Transportation Engineering

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	employers.								
C74.	Promote school rideshare programs to assist parents/students forming carpools.				✓			High	Transportation Engineering
C75.	Encourage schools to incorporate pickup/drop-off zones. Zones should be separated according to mode of transportation, where feasible.				✓			High	Transportation Engineering
C76.	City should adopt a Non-Motorized Transportation Plan. With focuses on pedestrian and bicycle routes and Master Sidewalk Plan. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			High	Transportation Engineering
C77.	Work with WRCOG and CalTrans to provide better traffic signal synchronization on regional roads. Provide better traffic light synchronization for locally controlled traffic signals.				✓			High	Transportation Engineering
C78.	Promote “least polluting” ways to connect people and goods to their destinations.				✓			High	Transportation Engineering
C79.	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.				✓			High	Transportation Engineering
C80.	Institute teleconference, telecommute and flexible work hour programs to reduce employee trips at the City and the private sector.				✓			High	Transportation Engineering
C81.	Educate consumers, residents,				✓			High	Transportation

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	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.								Engineering
C82.	Coordinate a plan with local agencies to expand affordable convenient public transit to assist in reducing per capita vehicle trips in the City.				✓			High	Transportation Engineering
C83.	Encourage businesses to offer discounts for customers who use alternative modes of transportation.				✓			High	Transportation Engineering
C84.	Promote car sharing programs.				✓			High	Transportation Engineering
C85.	Set goals consistent with 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.	✓						Medium	Building
C86.	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.	✓						Medium	Building
C87.	Require a construction indoor air quality plan (CIAQ), including a preoccupancy building flush-out.	✓						Medium	Building
C88.	Require all major points of entry have a permanent walk-off	✓						Medium	Building

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	system (commercial only).								
C89.	Install energy efficient lighting (e.g. LED), heating and cooling systems, appliances, equipment, and control systems.	✓						Medium	Building
C90.	Encourage installation of solar and wind power systems and solar hot water heaters.					✓		Medium	Building
C91.	Establish City guideline that identifies criteria for using rubberized asphalt concrete for public streets.			✓				Medium	Capital Projects
C92.	Establish City guideline that identifies criteria for using 'green concrete' that has been made with recycled aggregate for public improvements. Results in reduced CO ₂ emissions and reduces solid waste sent to landfills.			✓			✓	Medium	Capital Projects
C93.	Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles.				✓			Medium	Capital Projects or Contracting Division / Department
C94.	Follow New York City program that dedicates 10% of existing energy expenditure budget to energy efficiency projects.	✓						Medium	Electric Utility
C95.	Adopt and implement a policy to increase the use of renewable energy.	✓						Medium	Electric Utility
C96.	Promote residential surveys to educate residents on energy saving behaviors, and direct leads and data to appropriate marketing channels to encourage more extensive energy upgrades.	✓						Medium	Electric Utility
C97.	Seek funding sources to		✓					Medium	Electrical Utility

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	implement feasible renewable energy sources.								
C98.	Establish incremental growth goals for solar power systems. (e.g., solar PV, solar thermal).					✓		Medium	Electric Utility
C99.	Encourage and support development of alternative technologies for processing municipal solid waste in an effort to reduce GHG emissions and generate electricity.					✓	✓	Medium	Electric Utility
C100.	Encourage installation of solar panels on unused roof and ground space and over carports and parking areas.					✓		Medium	Electric Utility
C101.	Include energy storage where appropriate to optimize renewable energy generation systems and avoid peak energy use.					✓		Medium	Electric Utility
C102.	Conduct gray water, rainfall runoff, and other system research and pilot study.		✓					Medium	Land Development
C103.	Implement integrated stormwater management.		✓					Medium	Land Development
C104.	Enforce and follow limits on idling time for commercial vehicles, including delivery and construction vehicles.				✓			Medium	Land Development
C105.	Based on feedback from promotion of recycling commitment, consider mitigating obstacles that might hinder commercial and residential recycling.			✓				Medium	Maintenance & Operations
C106.	Actively explore new items to add to the list of accepted recycled materials with the City's			✓				Medium	Maintenance & Operations

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	franchised waste hauler.								
C107.	Promote clean material recovery facilities at landfill to process municipal solid waste.			✓				Medium	Maintenance & Operations
C108.	Implement programs to encourage and increase participation of diverted waste from landfills to meet or exceed state regulation requirements.			✓				Medium	Maintenance & Operations
C109.	Develop measures to encourage waste from all construction sites be recycled in order to meet or exceed state regulation requirements.			✓				Medium	Maintenance & Operations
C110.	Promote clean material recovery facilities at landfill to process municipal solid waste.			✓				Medium	Maintenance & Operations
C111.	Implement programs to encourage and increase participation of diverted waste from landfills to meet or exceed state regulation requirements.			✓				Medium	Maintenance & Operations
C112.	Develop measures to encourage waste from all construction sites be recycled in order to meet or exceed state regulation requirements.			✓				Medium	Maintenance & Operations
C113.	Provide easy and convenient recycling opportunities for residents, the public, and businesses.			✓				Medium	Maintenance & Operations
C114.	Provide education and publicity about reducing waste and available recycling services.			✓				Medium	Maintenance & Operations
C115.	Implement educational programs to promote green purchasing throughout the community.	✓						Medium	Media

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
C116.	Reduce City's per capita base load energy consumption by 15% through energy efficiency and conservation programs by 2020.	✓						Medium	Planning
C117.	Use automatic covers, efficient pumps and motors, and solar heating for pools and spas.	✓						Medium	Planning
C118.	Develop recycling methods and expand existing uses for recycled wastewater.		✓					Medium	Planning
C119.	Make effective use of gray water. (Gray water is untreated household waste water from bathtubs, showers, bathroom sinks, and clothes washers. Gray water is for landscape irrigation.		✓					Medium	Planning
C120.	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.	✓	✓		✓			Medium	Planning
C121.	Develop shaded, protected, attractive, and accessible pedestrian paths of travel between building entrances and parking lots, sidewalks, adjacent properties, and public transportation stops.	✓			✓			Medium	Planning
C122.	Encourage programs to establish green operations and maintenance for public and private sector businesses.	✓						Medium	Planning
C123.	City ordinances should clearly articulate guidelines to address					✓		Medium	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	tree shading issues associated with solar power installations.								
C124.	Investigate Multi-Family Affordable Solar Housing, Single-Family Affordable Solar Housing and other incentive programs for solar energy-based technology for multi-family housing, single-family affordable housing and city owned buildings.					✓		Medium	Planning
C125.	Increase housing density near transit. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			Medium	Planning
C126.	Encourage native tree planting and establish incentives to plant native or low water plantings for all private and public projects.		✓					Medium	Planning
C127.	Establish off-street parking requirements for new development that reduce reliance on single occupancy vehicles.				✓			Medium	Planning
C128.	Obtain funding sources to implement strategies.	✓	✓	✓	✓	✓	✓	Medium	Planning
C129.	Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.	✓				✓	✓	Medium	Planning
C130.	Develop sequestration value for street trees from City database/determine impact on reducing the City's mandated goal for reducing carbon footprint.						✓	Medium	Planning
C131.	Select and apply suitable program for measuring carbon offset value of urban forest and seek opportunities to participate						✓	Medium	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	in carbon markets.								
C132.	Prepare an assessment of the entire City's urban forest.					✓	✓	Medium	Planning
C133.	Steer development towards infill rather than greenfield areas. Consider differential impact fee system with lower fees for areas with infrastructure.						✓	Medium	Planning
C134.	Develop incentives for Landowners to preserve open space.						✓	Medium	Planning
C135.	Optimize street tree, sidewalk, and hardscape interface design when planning new projects to minimize future maintenance impacts.						✓	Medium	Planning
C136.	Use satellite imagery to develop a shade tree canopy coverage assessment of all parking lots to establish baseline.						✓	Medium	Planning
C137.	Develop "retrofit strategy" for existing parking lots that lack shade.						✓	Medium	Planning
C138.	Carefully consider a shade tree ordinance and utility incentives for shading south and west faces of dwelling units.	✓					✓	Medium	Planning
C139.	Revise municipal code to ensure solar access is maintained for future solar electric and solar hot water installations.	✓				✓	✓	Medium	Building
C140.	Establish programs and incentives for achieving carbon neutrality at City sponsored events.						✓	Medium	Planning
C141.	Recommend all events receiving in-kind support in lieu of event						✓	Medium	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	permit fees to explore carbon offsets for their events.								
C142.	Promote the City's urban forest to encourage planting and maintenance of trees.					✓	✓	Medium	Planning
C143.	Provide community sustainability action website for residents and businesses to provide comprehensive information.	✓						Medium	Planning
C144.	Develop community education initiative that provides consistent educational materials and resources for use by City staff and community groups.	✓						Medium	Planning
C145.	Partner with local businesses to promote sustainability action.	✓						Medium	Planning
C146.	Mobilize educational sectors of community to develop their own climate and sustainability action awareness programs.	✓						Medium	Planning
C147.	Designate city staff person responsible for coordinating climate action by city departments.	✓						Medium	Planning
C148.	Work with school districts to provide climate and sustainability action curriculum materials.	✓						Medium	Planning
C149.	Establish the 2007 greenhouse gas emission baseline for the community on a per capita basis.	✓						Medium	Planning
C150.	Establish programs that comply with South Coast Air Quality Management District and City General Plan to improve the quality of air in community.	✓					✓	Medium	Planning
C151.	Aggressively support programs at the AQMD that reduce GHG and	✓					✓	Medium	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	particulate matter generation in the Riverside, San Bernardino, Los Angeles and Orange County regions to improve air quality and reduce pollution in the community.								
C152.	Develop a water wise community garden program.		✓					Medium	Parks & Community Services
C153.	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.		✓					Medium	Parks & Community Services
C154.	Consider use of timers on some streetlights. A policy regarding hours of operation for streetlights would need to be determined.	✓						Medium	Special Districts
C155.	Promote free shuttle service connecting to Metrolink that synchronizes with Metrolink's schedule.				✓			Medium	Transportation Engineering
C156.	Create travel routes that ensure destinations may be reached conveniently by public transit, bicycling and walking. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			Medium	Transportation Engineering
C157.	Work with WRCOG to develop a new master plan to encourage use of neighborhood electric vehicles, which are environmentally friendly street legal vehicles.				✓			Medium	Transportation Engineering
C158.	Coordinate with school districts to adopt the League of America				✓			Medium	Transportation Engineering

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	Bicyclists' Cycling curriculum so students learn safest way to bike.								
C159.	Implement "Smart Bus" technology - GPS with electronic displays at stops to provide actual time data to passengers.				✓			Medium	Transportation Engineering
C160.	Develop and offer incentives to residents that downsize the number of cars in their household.				✓			Medium	Transportation Engineering
C161.	Develop renewable fuel locations and electric plug-in stations including a map for drivers to find refueling locations.				✓			Medium	Transportation Engineering
C162.	Consider the use of roundabouts instead of traffic signs at low volume intersections for new development.				✓			Medium	Transportation Engineering
C163.	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.				✓			Medium	Transportation Engineering
C164.	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.				✓			Medium	Transportation Engineering
C165.	Model use of alternative modes of transportation throughout the community by providing programs to City employees that can be duplicated by local businesses.				✓			Medium	Transportation Engineering
C166.	Implement a regional transit				✓			Medium	Transportation

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	program between educational facilities. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)								Engineering
C167.	Implement use of solar radar feedback signs (which display vehicle speed) to encourage compliance with speed limits and reduce waste of gasoline.				✓			Medium	Transportation Engineering
C168.	Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation.				✓			Medium	Transportation Engineering
C169.	Provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to customers.				✓			Medium	Transportation Engineering
C170.	Incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			Medium	Transportation Engineering
C171.	Ensure that projects enhance, and do not disrupt or create barriers to, non-motorized transportation.				✓			Medium	Transportation Engineering
C172.	Connect parks and open space through shared pedestrian/bike paths and trails to encourage walking and bicycling.				✓			Medium	Transportation Engineering
C173.	Create and Encourage employers to implement carpools/vanpools incentives.				✓			Medium	Transportation Engineering
C174.	Explore developing a Smart Growth Development Impact Fee matrix. Fee based on trips	✓			✓			Medium	Transportation Engineering

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	generated by project. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)								
C175.	Prepare a Master Sidewalk Plan that identifies "missing links" where sidewalks are necessary and identifies streets for which no sidewalk is required.				✓			Medium	Transportation Engineering
C176.	Evaluate and update existing General Plan street cross-sections to accommodate "complete streets" design standards.				✓			Medium	Transportation Engineering
C177.	Incorporate public transit into the project's design. (GHG Policy R2-T1 Land Use Based Trips and VMT Reduction Policies)				✓			Medium	Transportation Engineering
C178.	Provide incentives for city staff to develop expertise in green building strategies and certification.	✓	✓	✓		✓		Low	Building
C179.	Accelerate implementation of solar energy-based technology through permitting process (e.g., reduced permit fees, streamlined permit approval process).					✓		Low	Building
C180.	Where solar systems cannot feasibly be incorporated into the project at the outset, build "solar ready" structures.					✓		Low	Building
C181.	Where applicable develop 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			✓				Low	Capital Projects

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	material reuses, recyclability of demolished materials, and disassembly of building systems.								
C182.	File decommissioning plans in digital format for future reference upon application for major renovation or demolition.			✓				Low	Capital Projects
C183.	Submeter major energy/water systems (HVAC, lighting, plug loads, process load) commercial only. Encourage real-time monitoring.	✓	✓					Low	Electrical Utility
C184.	Create solar scorecard process so attainment of goals can be communicated to residents.					✓		Low	Electric Utility
C185.	Ensure that there is an accessible park, recreational, or public open space within a 1/2 mile of 90% of City residents.	✓				✓	✓	Low	Parks & Community Services
C186.	Increase bike parking.	✓			✓		✓	Low	Planning
C187.	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.	✓			✓		✓	Low	Planning
C188.	Establish organic and local farming zones.		✓					Low	Planning
C189.	Investigate State and local resources to expand local farming.		✓					Low	Planning
C190.	Seek installation of secure bicycle lockers at employment centers, commercial buildings, commercial districts, schools, and park destinations.				✓			Low	Planning
C191.	Develop "brownfields" and other				✓			Low	Planning

Reduction Measures Section II		Energy Use Reduction	Water Use Reduction	Recycling and Diversion	Alternative Transportation	Renewable Energy	Greenhouse Gas Emission	Cost Effectiveness	Lead Division
	underused or defunct properties near existing public transportation and jobs.								
C192.	Include environmental factors in purchasing policy and decisions.	✓						Low	Purchasing & Facilities
C193.	Track changes in climate friendly marketplace and constantly update procurement policies.	✓						Low	Purchasing & Facilities
C194.	Increase purchasing of climate friendly products when practical, and affordable.	✓						Low	Purchasing & Facilities
C195.	Coordinate with area school districts to install bike racks on school buses similar to public buses.				✓			Low	Transportation Engineering
C196.	Develop a program with school districts that provides incentives for students to purchase bikes.				✓			Low	Transportation Engineering
C197.	Purchase, or create incentives for purchasing, low or zero-emission vehicles.				✓			Low	Transportation Engineering
C198.	Consider changing existing and future illuminated streetlights to LED. The retrofit cost for LED lighting is not feasible at this point. SCE and MVU do not currently have a separate rate structure for LED.	✓						Low	Special Districts

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, 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.
- The Energy Coalition
- Community Energy Partnership
- Southern California Edison
- The Gas Company
- Eastern Municipal Water District
- Energy Star
- WRCOG
- Waste Management
- Moreno Valley Utilities
- Moreno Valley Unified School District
- Val Verde Unified School District