Presidio of Monterey



Presidio Municipal Services Agency

Cities of Monterey and Seaside

Monterey Model Military-Municipal Partnership

Started in 1997

Collaboration between Community and Presidio of Monterey (IMCP: Enhanced Capabilities through Partnerships)

City Staff is Garrison's Staff

Delivery of PW Services through Cost Reimbursement

- Infrastructure Maintenance
- Refuse and Recycling
- Since 2004 Energy Reduction as Goal (IMCP: Sustainability = Energy Efficiency and Security)

Principles

- Improve Save Innovate
- Improve Quality of Life and Enhance Mission (IMCP: Are we doing the right things?

 Are we doing things right?)
- Save Taxpayer Dollars

Experience with saving local tax dollars

Know how to maximize and protect tax dollars

(IMCP: Budget Culture vs. Cost Culture)

Introduce new ideas, new thinking, everyday (IMCP: What are we missing?)

2 Numbers

\$7.5 Million for Base Operations

 \$4.1 Million Utility Costs (Electricity/Natural Gas)

Our Joint "Idea"

Create a "Self- Funding" Installation that "funds" Base Operations through reduced utility costs.

Turn the base into an energy efficient neighborhood.

Be Smart. Be Excellent.

Reduce Carbon Footprint



State of "Californiea"

Assembly Bill 32:

Reduce carbon emissions by 25% by the year 2020



Senate Bill 375:

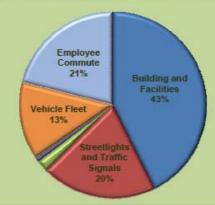
Develops regional greenhouse gas emission reduction targets; builders can get relief if the use sustainable building standards



City of Monterey

Greenhouse Gas Audit Results





- ■Building and Facilities
- Streetlights and Traffic Signals
- **M**Port Facilities
- ■Water Delivery Facilities
- Wastewater Facilities
- **■Vehicle Fleet**

City of Mo	onterey M	unicipal E	missions - 2	2005*
	CO2 (Tons)	Energy (MMBtu)	Cost	Source
Building and Facilities	2,512	38,206	\$1,042,482	PG&E
Streetlights and Traffic Signals	1,176	16,483	\$528,845	PG&E
Port Facilities	121	1,676	\$88,596	PG&E
Water Delivery Facilities	41	562	\$21,088	PG&E
Wastewater Facilities	9	119	\$4,713	PG&E
Vehicle Fleet	791	9,904	\$250,534	City of Monterey Data (Gas Use Reports)
Employee Commute	1,242	15,526	NA	City of Monterey Data (Zip Code)

Success Story...

Monterey Sports Center - Using funding rebates from the California Public Utilities Commission, the Monterey Sports Center was retrofit with energy efficient lighting in 2005.

Following completion of the upgrades, energy use reduced from almost 100,000 kWh to 60,000 kWh per year. Annual cost savings are about \$47,000 per year.

Important Dates

August 16, 2009 Environmentally Friendly Food Packaging Ordinance in effect

August 15, 2009 Green Building Ordinance in

Urban Environmental Accord

City signed Urban Environmental Accord

7 articles and 21 measures

- Water
- Transportation
- Waste Reduction
- Urban Design
- Environmental Health,
- Energy and Urban Nature.



City of Monterey Environmental Projects and Achievements Last update June 15, 2011

- Watering with Lake Water
- Drip Infoation
- **Dual Flush Tollets and Waterless Urinals**
- Low flow and Pressure Reducing Valves
- Green Building Ordinance
- Waterless Cleaning Station for Trucks
- Evapotranspiration meters on watering systems
- Convert El Estero Water Pump to Recycled Water Circulation
- Sensor driven irrigation systems in City Parks
- Certified Green Marina
- 9 Battery Recycling Locations
- 3 CFL Collection Boxes
- Waste Oil and Filter Curtiside Recycling
- Green Certified Automotive Repair Facility 5
- 6 Regular Maintenance of Sewer Mains
- 7. Olly Blice Water Pumpout Facility for Boats
- Storm Water Treatment Improvements
- Storm Drein Stenciling Since 1995, 11 yrs prior to regulation
- BMP Ordinance for All Sites (not just over 1 acre per State reg)
- Regular Vehicle Maintenance, fluid leak prevention
- 911 EARTH Blict Discharge Hotline Participation 1-800-Cleanup
- 13. Participation Monterey Regional Storm Water & Education Alliance (SEA)
- Establish and Monitor 2 First Flush Sites and Snapshot Day Dry Weather Sampling
- Storm Water Detention Basins
- Installation of 2 Storm Water Filters (CDS Units)
- 17. Urban Storm Water Pollutant Source Tracking Efforts
- 18. Hot Spot Catch Basin Monitoring and Cleanup
- 19. Green Cleaning Products in City Facilities
- 20. Paint and Thinner Collection
- 21. Enhanced Waste Vegetable Oil Collection
- 22. Environmentally Preferable Purchasing Policies
- 23. CFL Collection Facility
- 24. Rehabilitation of Storm Drain Infrastructure
- 25. Rehabilitation of Sewer Infrastructure

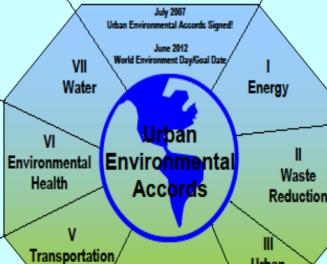
Jeban Erwindmental scoords 6:05 yayars Climate Protection Agreement My City Signed It!

Applicacy, California

www.dorteray.org

Urban

Design



- Native Plant Demonstration at Library
- 1,255 New Plants and 72 New Trees Planted
- Volunteer Tree Planting Days
- Integrated Pest Management Strategy and Training
- Tree City USA Status for 27 Years

Urban Nature

- Restoration Projects with Native Plants and No-Mow Turf
- Regular Garden Maintenance
- Provide Free Mulch and Wood Chips to Residents
- Community garden publiciprivate partnership
- Green roof sections on library
- Implementation of Organic Based Turf Program
- Shade canopy study

- Distributed 5,000 Energy Efficient Light Bulbs to Residents
- Joined ICLEI Cities for Climate Change
- Library Lighting Upgrade and HVAC Controllers
 - Monterey Conference Center Energy Retroft, HVAC
 - Sports Center Interior, Gym & Natatorium Lighting; Dehumidifier, HVAC Controllers and VFD's
- Presidio Lighting, Heating, Vending Machine, Motor, HVAC, Venting & Showerhead Upgradus
- Police Department Lighting and HVAC Controls
- Parking Garage Lighting
- Variable Frequency Drive and NEMA Motors Installed
- Senior Center Furnace Retroft
- Cool Roofs Installed Presidio and 735 Pacific Offices
- LED Traffic Signals (\$70,000/yr savings)
- Solar Powered Traffic Safety Signs
- On-Demand Hot Water Heaters
- Green Certified Computer Network Switches
- Demand Response Program, Peak Load E Curtaliment
- MCC Interior and Exterior Lighting retrofit
- 18. Sports Center Exterior Lighting Retrofit
- Baseline GH3 Emissions Inventory
- 20 Renewable Energy for Larger City Facilities
- Additional Energy Upgrades (Lighting, HVAC, Kitohen Venting)
 Solar Panel on City Administartive Building 786 Paoifio
- 23. FIRST Renewable Energy Program for Resident
- 24. Lighting Retroft on Recreation Trail Path and Turn?
- 25. GHB Action Flori
- Giveaway 1,000 Cloth Bags
- Public Outreach Once per Month at Farmer's Market
- Fryer 2 Fuel Waste Vegetable OII Collection Program (education and
- New Mixed Recycling/Trash Containers Throughout City of Monterey
- Environmentally Acceptable Food Packaging Ordinance
- (biodegradable and recyclable only)
- Trash to Treasures youth educational program
- Eco-Art youth educational program
- Camp Quien Sabe Environmental Team recycling
- 68% Waste Diversion Achieved
- www.MontereyRecycles.org Comprehensive Info Website
- Monterey recognized as California's first Comprehensive Recycling Community 2008
- Recycling Containers in schools and 3,000 Hotel Rooms, 300 Bars & Restaurents
- New Mixed Recycling/Tresh Containers Throughout City of Monterey
- 9 Battery Recycling Locations
- Waste Oil and Filter Curbside Recycling
- Large Item Pickup and Metal Recycling
- E-waste Events in City Coordinated with Other Organizations
- Recycling Buyback Centers & Dropoff Locations
- Portable Recycle Bins for Special Events Beach Cleanup Events
- Bio-degradable Food Container ordinance
- Green Business Certification for Businesses and City Offices
- Green Remodel at 735 Pacific
- Increased Mixed Use Land Use Designations Downtown Mixed Use and Design Guidelines
- First Green Building Expo on Peninsula
- Green Building Workshops
- Green Property Insurance
- Mansionization Ordinance (Increased Open Space on Developed Lots
- and Mixed Use)
- Green Building Ordinance
- Update all Neighborhood and Area Plans (Mixed Use, Smart Growth concepts) North Fremont Street Mixed Use Design Guidelines
- North Fremont Street Streetscape Study
- Lighthouse Area Mixed-Use Design Guidelines
- Low-Income Housing Project Solar Hot Water and Energy Efficiency Upgrades

- Bectric Vehicles and Hybrids for City Fleet
- B5 Blodlesel for City Fleet and Fire Trucks B100 Blodlesel in City Crane
- Green Certified Automotive Repair Facility
- Downtown Mixed Use Development Guidelines
- Weekly Vehicle Inspection
- Neighborhood Traffic Calming Measures
- Bectric Vehicle Charging Stations
- Bicycle and Pedestrian Plan Update Safety and Interconnectivity
- Monterey County Bike Week Support
- Commuter Incentive Program



- Dual Flush Toilets and Waterless Urinals
- Low flow and Pressure Reducing Valves
- Treat leaking faucets and showers as High Priority
- Closed loop Water Treatment
- Sodium Potassium for Softeners
- Backflow Preventers
- 1.5 Galls Aerators and Shower heads

- **Battery Recycling Locations**
- CFL Collection Boxes
- Regular Maintenance of Sewer Mains
- Storm Drain Stenciling Since 1995, 11 yrs prior to regulation
- BMP Ordinance for All Sites (not just over 1 acre per State reg)

1. Electric Vehicles and Charging Stations

3. Park and Ride Program in the City with bus

5. Car pool Workers from surrounding Citys

transportation from City's parking garages to

2. Bus Program for Commuting Students

4. Bicycle storage Presidio

- 6. Scheduled Maintenance on sewer lateral lines.
- Scheduled Air Duct cleaning
- 8. Scheduled fresh air supply
- No Chemical cleaning in sewer
- Recycle Light bulbs
- 11. Drinking Fountain Filter change
- 12. Test Drinking Water
- Pest inspection
- Exhaust Fan Inspection

Presidio of Monterey - Environmental Projects and Accomplishments Last update June 15, 2011

Joban Environmental Accords & US Mayors Climate Protection Agreement My City Signed It!

July 2007 Urban Environmental Accords Signed! June 2012

World Environment Day/Goal Date Water

Urban VI

Environmental Prince | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | 1987 | Environmental Health Accords

Transportation.

Urban Nature

Waste Reduction

Ш Urban Design

Energy

- Active Tree Management Plan
- Plant Native Plants throughout Presidio
- New Trees being planted throughout year
- Integrated Pest Management Strategy and Training
- Restoration Projects with Native Plants and No-Mow Turf

- Installed Energy Management Controllers throughout Presidio
- Installed Variable Frequency Drives in several Facilities
- 3. Installed new energy efficient lighting in Price Fitness Center
- 4. Boiler upgrades throughout installation
- 5. Installed and testing of Solar Powered Street LEDs
- 6. Advised COE and local Garrison of Statewide Energy Funding Programs AND received state dollars for Federal Energy Reduction
- 7. Installed Vending Misers throughout Installation (140 vending
- Energy Save Induction Exterior lights
- High efficiency NEMA or Gold Motors
- Combustion analysis (CO2 reducing)
 - Giveaway Cloth Bags and Recycling Bins
 - Held Recycling Events with Buy Back Centers
 - 3. Weigh and Measure Waste Stream on a monthly Basis
 - Terminate Paint use, no more recycle paint
 - Metal collection (copper, bronze, etc)
 - Recycle campet installation
 - Recycle office paper
 - Recycle cleaning rug
 - Recycle Compressor and Motor oil
 - Recycle Paint Thinner
 - 11. Recycle Plywood and all Lumber

Highlights

- Installation Wide Mechanical Audit
 - Pick 'the low hanging fruits'
- Audit the Water Distribution System
 - Eliminate leakages
 - Install Pressure Reducing Valves
- Solar Power
 - Solar Street Lights as Pilot Site
 - Project designed/built by City Engineering
 - Solar Panels on Fitness Center
 - Project conceptualized by City Engineering / COE will build
 - Use State's Rebate program, up to \$1 million over 5 years
- Lighting Upgrades
 - Change to Induction Lighting or LED Lighting

Use State Funds on Federal Installation

- Energy Rebates from California Energy
 Commission come form various sources
 - Pacific Gas and Electric
 - Association of Monterey Bay Area Governments
 - Grants
- All rebates stay with the installation resulting in better ROI

Next 10 Years...

- Decrease Carbon Footprint of Base through continued smart investments
- Reduce Waste through increased recycling, reduction and reuse
- Create a Joint Climate Action Plan between City and Installation
- Continue Developing Joint Models
- iaw: Follow the IMCP!

It is not for us...But for them...

