



East Mesa Detention Facility 1,000 Kilowatt Photovoltaic System



County of San Diego Strategic Energy Plan 2013-2015



County Operations Center – Conference Center
USGBC LEED Platinum Certified Building

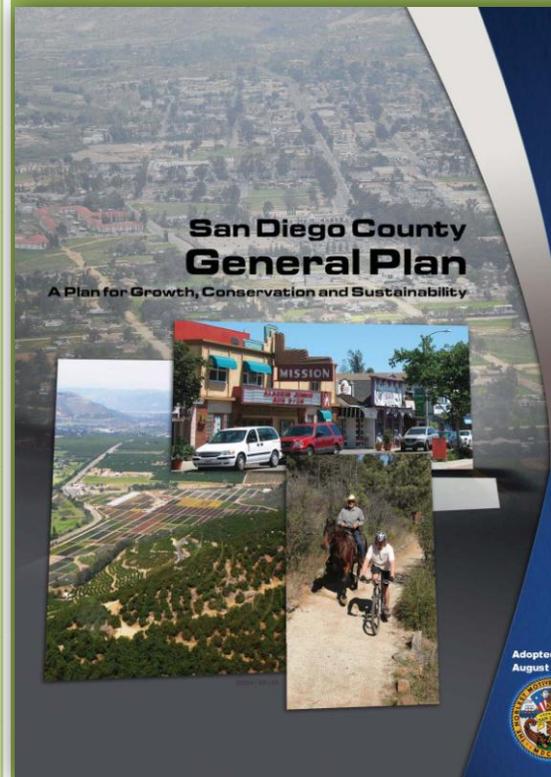


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Purpose

The purpose of the Strategic Energy Plan is to provide high-level energy and sustainability objectives and goals in the areas of energy and water conservation and efficiency, sustainable design, energy supply, distributed generation, vehicular transportation, energy and sustainability education and outreach, energy consumer choice, recycling and landfill diversion, and greenhouse gas emissions reductions. The Strategic Energy Plan is based on a three-year cycle with updated plans developed to address regulatory, technical, economic and societal changes. The main priorities for the next three years are to: 1) control utility costs, 2) accelerate distributed generation deployment, 2) facilitate alternative fuel vehicle deployment, 3) reduce the region’s carbon footprint, 4) expand choice for consumer energy supply, and 5) increase the use of information technology to help reach objectives and inform the public.

Background

Overview

The San Diego County region has one of the largest population centers in the United States with over three million people covering 4,200 square miles. Energy use is responsible for more than 90 percent of the region’s greenhouse gas (GHG) emissions. The largest GHG contributors are on-road transportation (46 percent), electricity use (25 percent) and natural gas-fired equipment (9 percent). Adopting energy-efficiency measures for buildings, accelerating the deployment of alternative fuel vehicles and distributed generation systems, and considering the energy impacts of land use and transportation planning decisions, all contribute to meeting both the County’s Climate Action Plan adopted in June 2012 and State directives and mandates to reduce GHG’s emissions economy-wide to 1990 levels by 2020 and the long-term goal of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050.

Because of our expanding population, tighter environmental regulations and increasing utility costs, the County of San Diego (County) is expanding its efforts in the area of energy and sustainability. The County has developed, and is working with other regional organizations such

as the San Diego Association of Governments, San Diego County Water Authority, San Diego Foundation, San Diego Gas & Electric, University of San Diego and other local government entities (City of San Diego, City of Chula Vista, and the Port of San Diego), in a comprehensive approach to aggressively pursue these objectives and strategies and to achieve positive environmental and economic impacts for County facilities, unincorporated land and the private sector.

Alignment with Board Policies

Relevant Board Policies are included in the table below.

Policy	Title
A-106	Water Supply, Conservation, and Reclamation
B-67	Recycled Products Procurement
G-15	Design Standards for County Facilities and Property
G-16	Capital Facilities and Space Planning
H-2	Fleet Vehicle Acquisition Policy

Board Energy Actions

Several energy-related Board actions were approved to implement the 2009-2012 Strategic Energy Plan including authorization to use SDG&E On-Bill Financing and California Energy Commission Loans to fund energy projects, to solicit a request for proposal to develop renewable energy systems at County facilities, to enter a retro-commissioning (building tune-up) program for up to five County facilities, to accept federal stimulus funding for energy projects and programs, to extend our SDG&E Energy Initiative Partnership Program through 2012, and adoption of a Climate Action Plan and temporary zoning ordinance to make it easier to install small-scale wind and solar energy systems.

Recently, the Board of Supervisors (Board) has directed the Chief Administrative Office to take action to: 1a) review and analyze all Property Assessed Clean Energy (PACE) programs, both residential and commercial, that currently exist and operate throughout the State of California. A side-by-side analysis of all programs shall be included with information regarding the various models, program vendors, fiscal impacts to the County and legal/financial risks to both the County and property owners. and 1b) report back to the Board within 120 days [February 26, 2013, #2]; 2a) update the Strategic Energy Plan, with an emphasis placed on reviewing the benefits of fuel cells, micro-turbines and renewable energy systems, and to continue working with the City of San Diego and other public agencies to coordinate regional objectives, strategies and polices, and 2b) provide a presentation to the Board of Supervisors after the Strategic Energy Plan has been updated [March 12, 2013, #7], 3) research and develop options for a comprehensive renewable energy plan, prepare a work plan including time and cost estimates and return to the Board within

120 days [April 10, 2013 (3)] and 4a) return to the Board within 60 days with the necessary actions to expand the County's current commercial PACE program and to report back on the expansion of residential PACE with vendors under both the AB811 and SB555 models, 4b) to seek clarification from the Federal Housing Finance Agency on whether or not the loan-to-value ratios would be adjusted in a jurisdiction with a non-FHFA PACE program, 4c) to provide options for both a Consent and a Notification PACE program with the pros and cons of each option, 4d) to draft a letter for the Chair's signature to the President of the United States encouraging modification of existing PACE policies, and 4e) to draft a letter to Gary Gallegos, Executive Director of SANDAG, asking that the SANDAG Board consider evaluating the various PACE options and explore whether there are any regional benefits to having SANDAG establish a PACE district [June 18, 2013 (26)].

Alignment with Regional, State and Federal Mandates and Initiatives

Although not a comprehensive list of all mandates and initiatives, those listed below have a major influence on the formulation of the goals of the 2013-2015 Strategic Energy Plan.

- U.S. Environmental Protection Agency
 - Energy Star Program
- California Legislation
 - AB 32 Global Warming Solutions Action
 - SB 375 Sustainable Communities Strategy/Regional Transportation Plan
 - AB 341 CalRecycle Mandatory Commercial Recycling Regulation
 - AB 117 Community Choice Aggregation
 - AB 811 Property Assessed Clean Energy
- California Energy Commission
 - Integrated Energy Policy Report
 - Title 24 Energy Codes
 - CALGreen Codes
 - Energy Upgrade California
 - Go Solar California! Campaign
- California Public Utilities Commission
 - Long-Term Energy Efficiency Strategic Plan
 - Self-Generation Incentive Program
- California Department of Resources Recycling and Recovery
 - Organics Road Map
- California Office of the Governor Executive Orders
 - S-3-05 - 2050 Greenhouse Gas Emissions Goal
 - S-14-08 (SB X1-2) – 2020 33% Renewable Energy Goal
 - B-16-2012 - Zero Emissions Vehicle Infrastructure

- California State Association of Counties
 - Institute for Local Government Beacon Award Sustainability Best Practices Framework
- San Diego Association of Governments
 - Regional Energy Strategy
 - Climate Action Strategy

Societal Benefits

Several societal benefits can be realized with the implementation of an energy strategy. Some examples include: reduced pollution, improved indoor air quality and smart development can lead to improved health; consumer choice can lead to lower utility costs; supplying clean energy at the point of use can improve reliability and increase energy independence; energy projects can create jobs and strengthen the economy and recycling can conserve our natural resources.

2009-2012 Strategic Energy Plan Progress Summary

Plan Development

In 2009, under a multi-departmental effort, a County Energy Stimulus Team (later renamed to Energy & Sustainability Team) developed the 2009-2012 Strategic Energy Plan in conjunction with applying for the American Recovery and Reinvestment Act Energy Efficiency and Conservation Block Grant (EECBG). For the first time, a County strategic energy plan included both County operations and County community initiatives. This plan, adopted by the Board on September 22, 2009 (#10), included eight Operations and six Community goal areas. With the help of \$5.1 million in three-year funding through the EECBG, \$2.5 million in three-year funding through the SDG&E/County of San Diego Energy Initiative Partnership and Board support, the Plan has been a success. Several departments throughout the County have been involved in various aspects of implementing the Strategic Energy Plan including Air Pollution Control District, Auditor & Controller, Chief Administrative Office, County Communications Office, County Counsel, Environmental Health, General Services, Housing and Community Development, Human Resources, Parks and Recreation, Planning & Development Services, Public Works, Purchasing and Contracting, Office of Strategy and Intergovernmental Affairs and the County Technology Office. Outside organizations contributing to implementation of the Plan include the California Center for Sustainable Energy, Institute for Local Government, San Diego Association of Governments, San Diego County Water Authority, San Diego Foundation and San Diego Gas & Electric.

Regional Participation

The County has been and continues to be an active participant in regional and statewide energy and sustainability organizations and initiatives. By collaborating with other local governments, public agencies, private industry and nonprofit organizations, the County's energy and sustainability program is strengthened and provides leadership to San Diego County. Some examples include:

- **San Diego Association of Governments (SANDAG):** Energy Working Group – standing member on issues related to the coordination and implementation of the Regional Energy Strategy (RES), including measures to reduce energy consumption and greenhouse gas emissions related to electricity, natural gas, and transportation fuels, Regional Planning Technical Working Group – standing member that is a key forum for decisions related to the Regional Transportation Plan and implementation of its projects and programs and Bicycle Pedestrian Working Group – participation in this Committee, which establishes grant criteria and oversees dispensing grants for active transportation projects.

- **San Diego Regional Electric Vehicle Infrastructure (REVI) Working Group** – advisory members of the REVI Working Group, which addresses barriers to the widespread deployment of private and public plug-in electric vehicle supply equipment across the region.
- **San Diego Regional Clean Cities Coalition (SDRCCC)** - network of more than 80 volunteer, community-based coalitions, which develop public/private partnerships to increase the use of alternative fuels and alternative fuel vehicles. County has long had a presence on SDRCCC’s Board of Directors.
- **San Diego Retrofit Advisory Committee (SDRAC)** – designed to further develop and support regional Energy Upgrade California (EUC) implementation and the broader existing home retrofit market to facilitate “deep energy retrofits” (both in terms of high energy savings and untapped markets in existing residential buildings). This committee includes broad stakeholder participation from local governments, community organizations, realtors, financing institutions and contractors.
- **San Diego Regional Energy Partnership** – two-year collaboration begun in 2013, funded by the California Public Utilities Commission and administered by SDG&E, to promote community-based energy-efficiency and sustainability initiatives in the region. Member organizations included the City of Chula Vista, City of San Diego, County of San Diego, Port of San Diego and San Diego Gas & Electric.
- **San Diego Integrated Regional Water Management (IRWM) Regional Advisory Committee** - assists in completion of San Diego's first IRWM Plan and prioritization of projects both within the IRWM Plan and for future funding applications as they arise.
- **San Diego Region Climate Collaborative** - new, regional forum for public agencies and organizations that support public agencies to share expertise and leverage resources to facilitate climate action planning in the San Diego region.
- **San Diego Foundation Regional Climate Protection Network** - supports regional efforts to increase community awareness and education about climate change and efforts to reduce greenhouse gas emissions working with government, nonprofits, businesses and consumers to support research to build a scientific foundation for public policy; partner with local governments to address climate change impacts; support climate action planning by local cities and public agencies; support nonprofit organizations that will address climate change locally; and engage donors to contribute to climate action solutions.
- **San Diego Gas & Electric Major Customer Advisory Panel** –quarterly meetings with SDG&E’s large customers to receive updates from SDG&E management and provide feedback regarding important regional energy issues.
- **United States Green Building Council** - nonprofit trade organization that promotes sustainability in how buildings are designed, built and operated. USGBC is best known for

the development of the Leadership in Energy and Environmental Design (LEED) green building rating systems. The County pursues LEED certification on all new construction and major renovation projects and participates at the San Diego Chapter level.

2009-2012 OPERATIONAL ACCOMPLISHMENTS

This section involves the design, construction, operation and maintenance of County facilities and the vehicle fleet. In Fiscal Year 2011-2012, County operations spent approximately \$22 million on utilities including electricity, natural gas, propane and water/sewer to operate 1,131 facilities and \$11 million on fuel for vehicle and mobile equipment fleet operations.

Operations Goal #1 – Energy Efficiency and Utilization

Integrate energy retrofit projects into the County's Major Maintenance Improvement Projects (MMIP) process while including facility condition assessment information, energy efficient purchasing and energy improvements in building operations and maintenance. Reduce annual energy consumption by 1 percent on a kBtu (thousand British Thermal Units)/Square Foot/Year for each of the next three years based on a Fiscal Year (FY) 2008-2009 baseline.

Reduced energy use at County facilities by an average 3.7 percent per year over the last three years.

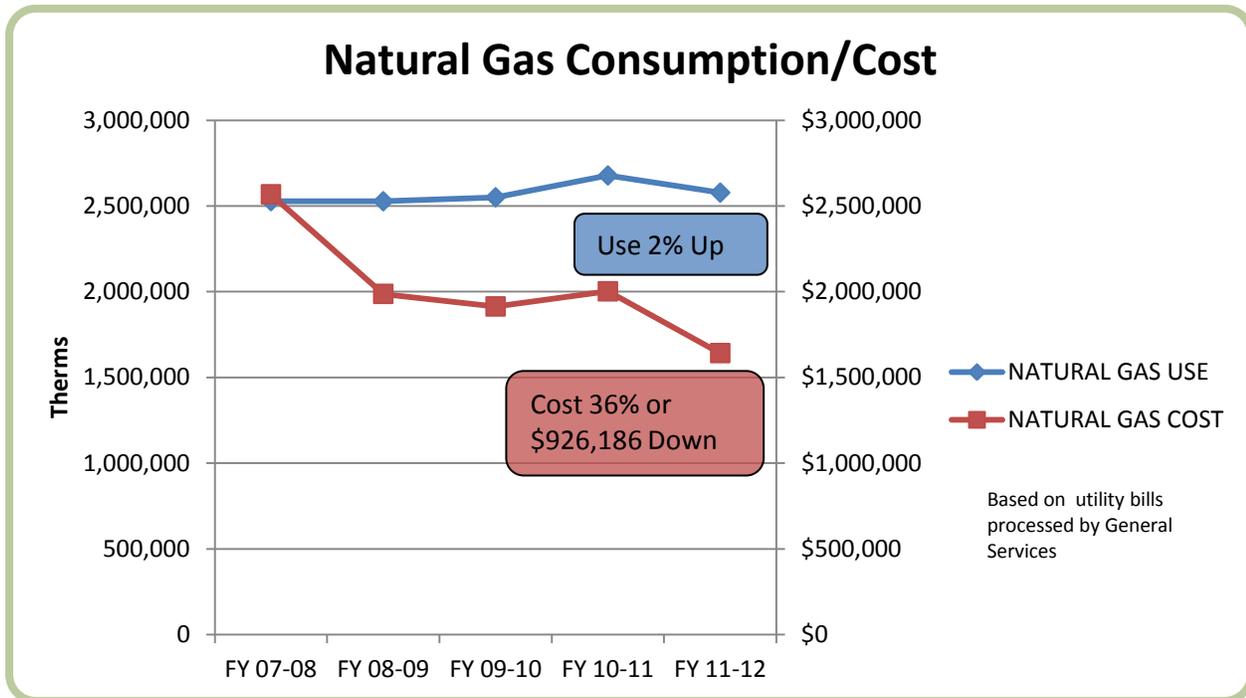
- Reduced electricity use by 0.21 percent in FY 09/10 , 7.83 percent in FY 10/11 and 3.11 percent in FY 11/12 from the FY 08/09 baseline
- Implemented power management features on all eligible networked desktop computers to reduce energy waste and lower electricity costs
- Engaged a consultant, in conjunction with SDG&E to perform energy assessments for low-income and multi-family residential housing owned or managed by the County
- Established the Energy Trust Fund in 2011 with SDG&E Savings-By-Design incentive money, largely from the County Operations Center Redevelopment. Funds were used to perform energy assessments at existing facilities and implement energy-efficiency measures.
- Performed HVAC, lighting and building automation energy efficiency retrofit projects at various facilities using the American Recovery and Reinvestment Act of 2009 Energy Efficiency and Conservation Block Grant (EECBG) totaling \$1.57 million
- Performed retrocommissioning (building tune-ups) and energy efficiency measures under the Portland Energy Conservation Inc. RCX Program at the Health Services Complex, East Mesa Detention Facility, North County Regional Center and Mills Building
- Installed water saving devices and fixtures, with funding support from San Diego Gas & Electric and the San Diego County Water Authority, resulting in over \$900,000 per year in current water and sewer charges
- Installed or upgraded HVAC systems at the Lakeside and Fallbrook Community Centers, South Bay Regional Center, Downtown Law Library, South Bay Regional Center, North

County Regional Center, East County Regional Center, East Mesa Detention Facility and Sheriff Crime Lab.

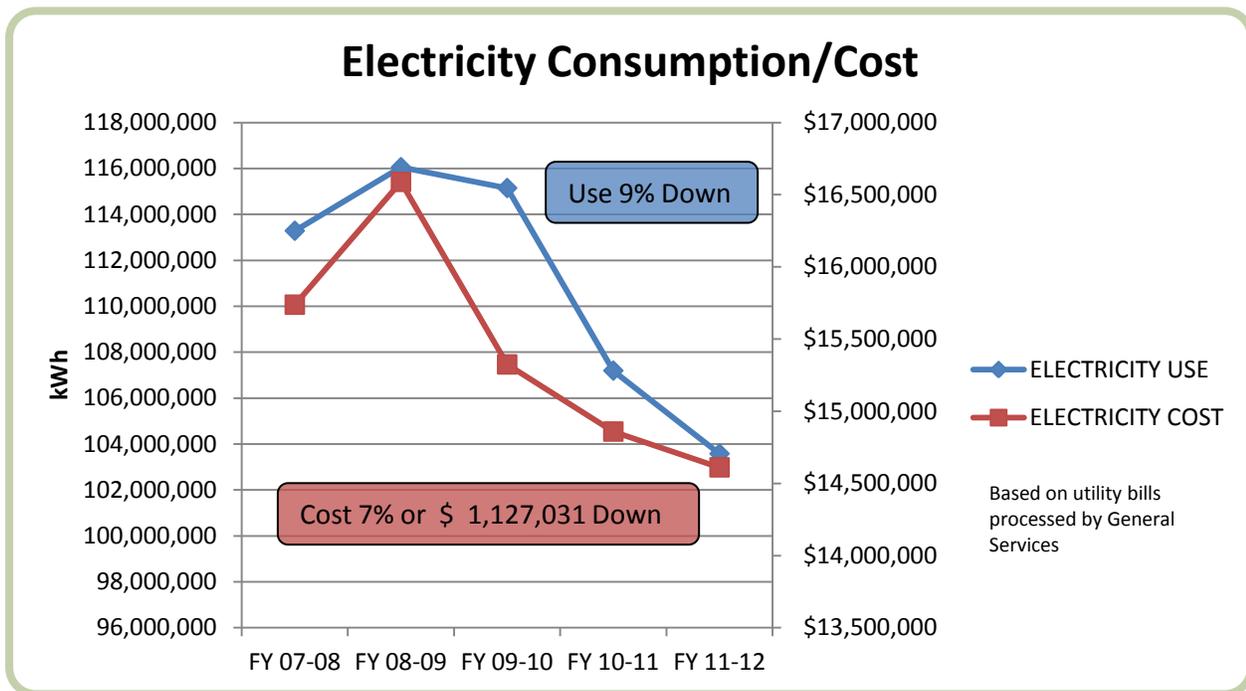
- Replaced standard water heaters with energy-saving tankless water heaters in the Fallbrook Community Center, Derby House, Guajome, Potrero, Dos Picos and Sweetwater Summit Regional Parks
- Completed energy-efficient lighting retrofits at the Lakeside, Fallbrook and Spring Valley Community Centers, Agua Caliente Regional, Dos Picos, Lake Morena, Cactus Regional and Sweetwater Summit Regional Parks, Lindo Lake and Sweetwater Lane Parks, Rios Avenue Staging Area, Fleet Garages, El Cajon Library, El Cajon Insectary, County Administration Center, Spring Valley Community Center, El Cajon Assessor's Office and Kearny Mesa Juvenile Detention
- Tuned-up packaged air-conditioning units at 69 facilities by participating in the SDG&E Premium Efficiency Cooling Program
- Retrofitted back-up generator electric resistance engine block heating with high efficiency heat pump systems
- Added electricity misers to vending machines in Agua Caliente, Sweetwater Summit, Lake Morena, Dos Picos, Heise, and Guajome Regional Parks, Spring Valley Gym/Teen Center and the Fallbrook and Lakeside Community Centers
- Trained all County staff on energy efficiency and several staff received specialized training in green building design and construction and energy-efficient operation and maintenance practices.
- Received \$2.9 million in SDG&E/County of San Diego Partnership funding for energy-efficiency initiatives.

The charts below illustrate utility cost and consumption trends for natural gas, electricity and water/sewer over the last five fiscal years.

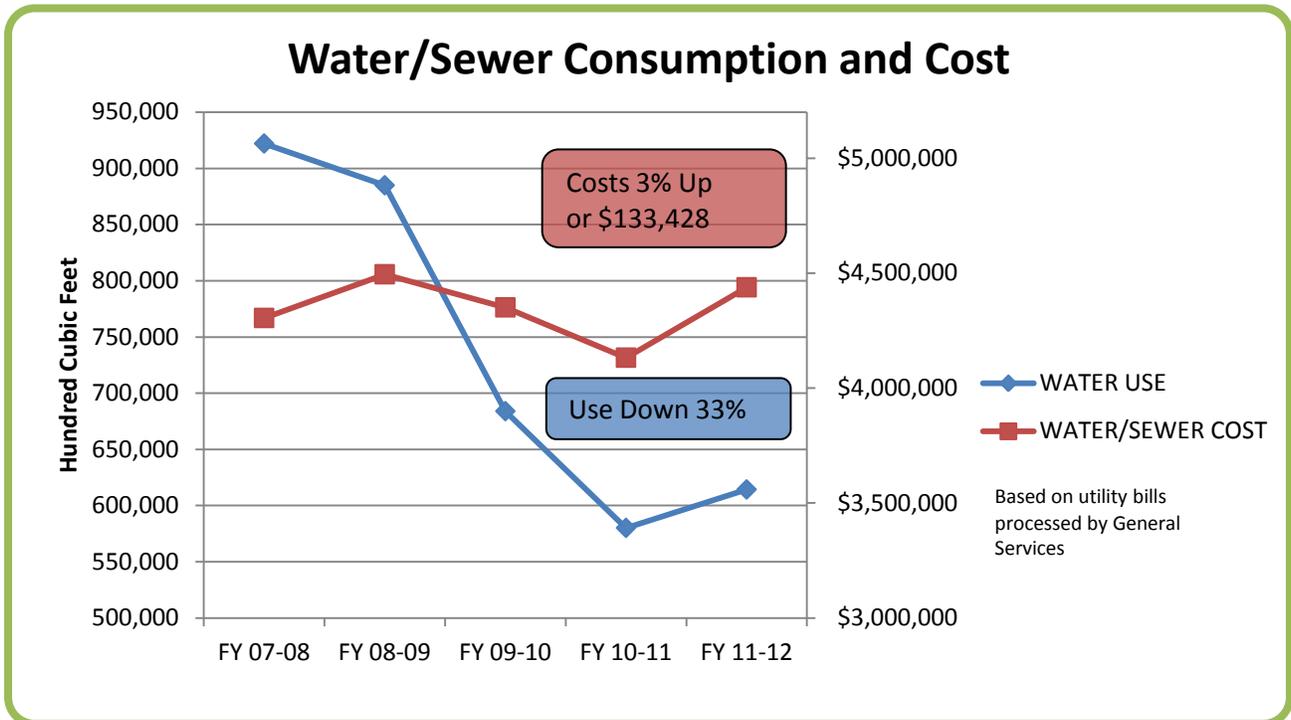
Natural Gas is used primarily for space heating, water heating and cooking. Natural gas usage has remained flat over the last four years, but costs have recently and significantly declined due to lower costs of production. Projects to reduce natural gas consumption generally have longer payback periods than electricity-retrofit projects.

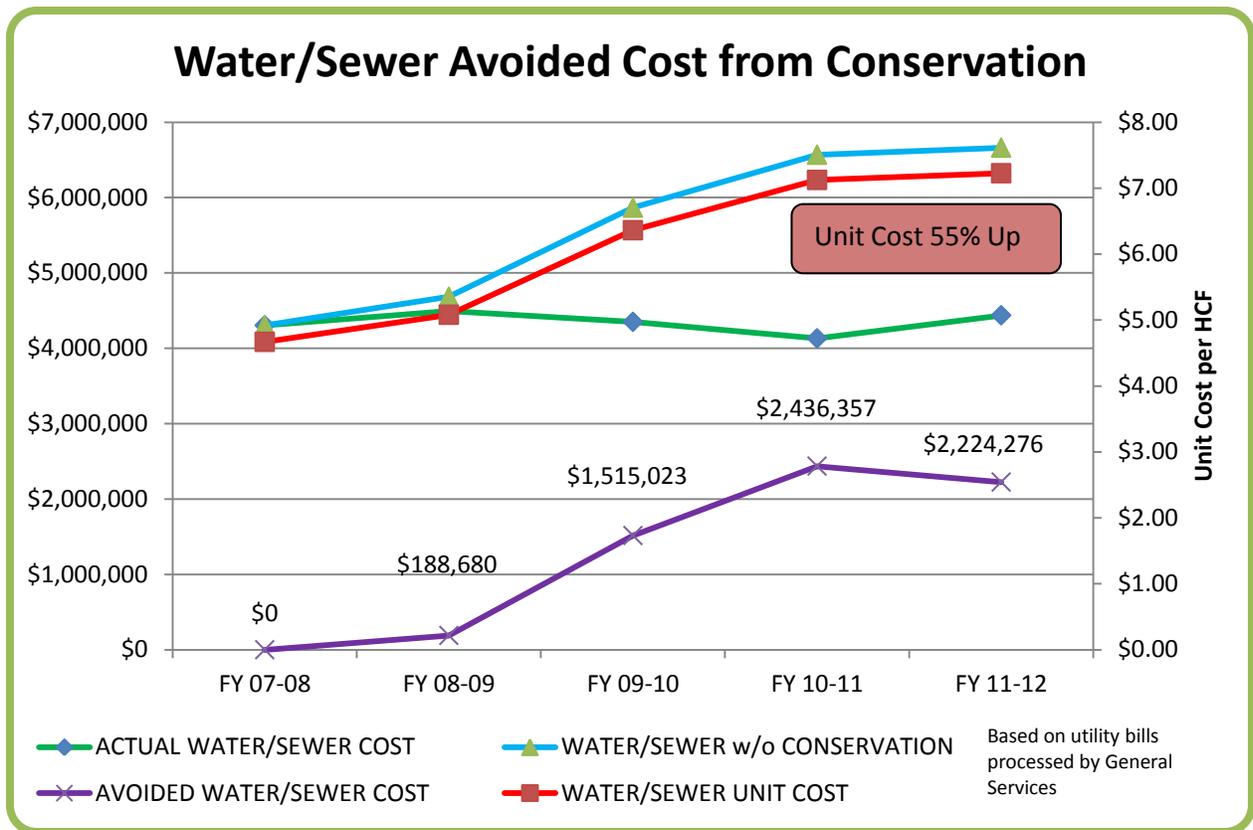


Electricity is used primarily for heating, ventilation and air-conditioning, lighting, office equipment and operating various electronic devices. Both electricity consumption and electricity costs have been reduced significantly over the last four years. Primary reasons for reduced energy consumption are the implementation of energy efficiency retrofit projects, staff energy conservation efforts and consolidation of operations to newer, more efficient facilities. Electrical energy cost savings are primarily associated with lower electrical consumption and our Direct Access electricity procurement strategy.



Water is used primarily for restrooms, showers, cooking, irrigation, cooling tower water and cleaning. Water usage has declined significantly since 2009, but water/sewer costs have gone up. The largest reason for water consumption reduction was a large water efficiency project at East Mesa Detention Facility and irrigation efficiency measures at park facilities. Water cost increases are due to higher unit costs for water and sewer that are outside of the County's control.





Operations Goal #2 – Energy Efficient New Construction

Improve energy efficiency of new construction and major renovations for County facilities through design team selection criteria, improved energy efficient design, better design review processes and system selection criteria and the installation, use and training of state-of-the-art building controls and energy monitoring systems. Achieve annual energy usage at least 20 percent better than the current minimum California Energy Commission Title 24 Building Standards for both new construction and major renovations. (Title 24 of the California Code of Regulations establishes energy and water use standards for construction and remodeling of buildings in the State of California.)

Increased County buildings designed to the United States Green Building Council Leadership in Energy & Environmental Design Building Rating System (USGBC LEED) by over 800,000 total square feet since 2009.

- Since 2009, all new construction and major renovation project have met or exceeded the LEED Certified rating
- Since 2009, all new construction projects are designed to exceed California Energy Code compliance by 20 percent

List of County-owned LEED Certified Buildings

Building	Location	Certification Level	Year Certified	LEED Rating System
Goodan Ranch Visitor's Center	Poway	Silver	2008	2.1 NC
San Elijo Lagoon Visitor's Center	Encinitas	Platinum	2009	2.1 NC
County Operations Center Office Building (5500 Overland)	San Diego	Gold	2010	2.2 NC
County Operations Center Office Building (5560 Overland)	San Diego	Gold	2010	2.2 NC
Ramona Library	Ramona	Gold	2011	2009 NC
County Operations Center 9235 Hazard Way *	San Diego	Certified	2011	2009 NC
County Operations Center 9335 Hazard Way *	San Diego	Certified	2011	2009 NC
San Pasqual Academy Housing	Escondido	Platinum	2011	2009 VH
Medical Examiner and Forensic Center	San Diego	Silver	2011	2.2 NC
Fallbrook Library	Fallbrook	Silver	2012	2.2 NC
County Operations Center Office Building (5510 Overland)	San Diego	Gold	2012	2.2 NC
County Operations Center Office Building (5530 Overland)	San Diego	Gold	2012	2.2 NC
County Operations Center Conference Center (5520 Overland)	San Diego	Platinum	2012	2.2 NC
9225 Chesapeake Drive *	San Diego	Certified	2013	2.2 NC

NC = New Construction, VH = Volume Homes *Existing Building Major Renovation



San Pasqual Academy received LEED Platinum Certificates for each of 30 housing units. Before this award there were only 21 LEED Platinum Certificates for student housing units in the entire world.

Operations Goal #3 – Energy Supply

Evaluate alternatives for supplying reliable and reasonably priced energy including distributed generation (cogeneration, photovoltaics, etc.) for County facilities. Provide a portfolio that achieves an overall annual cost savings at least two percent better than the utility bundled rates.

Saved \$3.7 million or approximately 9 percent average savings over bundled service between 2009 and 2012 using Direct Access electricity procurement

- Increased total electrical load under Direct Access (electricity commodity purchased outside of utility) from 72 to 90 percent
Saved \$150,000 annually through rate analysis and changing to the most favorable utility rate

Operations Goal #4 – Renewable Energy

The County will provide at least two percent of its annual electricity usage from renewable energy systems by FY2011-2012 with a FY2008-2009 baseline.

Onsite renewable energy systems at County facilities produce approximately 2.3 percent of our annual electricity consumption, exceeding our 2 percent target.

List of Renewable Energy Systems at County Facilities Installed Since 2009

Facility	City/Community	Completed	Nominal Output (kW)	Annual Output (kWh)	Funding Source
<u>Owned Photovoltaic Systems</u>					
Spring Valley Community Center	Spring Valley	2009	10	15,000	County
Lakeside Community Center	Lakeside	2010	45	67,500	Grant
Fallbrook Community Center	Fallbrook	2010	25	37,500	Grant
Ramona Library	Ramona	2011	50	75,000	County
Sheriff Crime Lab	San Diego	2011	45	67,500	Grant
Wilderness Gardens Preserve	Pala	2012	5	6,750	County
Sweetwater Regional Park	Bonita	2012	185	277,500	County
Guajome Regional Park	Oceanside	2013	100	150,000	County
Lincoln Acres	Lincoln Acres	2013	30	45,000	County
COC Conference Center	San Diego	2013	18	26,400	County
Older Systems (pre-2009)			285	427,500	County
Sub-Total			661	916,500	
<u>Photovoltaic System Power Purchase Agreement</u>					
East Mesa Detention Facility-Juvenile Detention	San Diego	2011	1,000	1,500,000	Sun Edison
TOTAL SYSTEMS SERVING COUNTY FACILITIES			1,661	2,416,500	
<u>Hosting SDG&E Photovoltaic System</u>					
COC Parking Structure A	San Diego	2011	425	637,500	Lease
<u>Owned Solar Thermal Systems</u>					
COC Conference Center	San Diego	2012		1,050 therms	County



The 114kW photovoltaic system at Guajome Regional Park includes a weather station, Data Acquisition System (DAS), and self-cleaning system mounted over carports. The system was designed to offset the park's previous year's electric consumption.

Operations Goal #5 - Demand Reduction

Invest in metering, building controls and energy monitoring systems in all County buildings with peak demand of 200 kilowatts (kW) or more to enable the County to support demand response programs. The County will achieve at least 600 kW of demand responsiveness capability on a peak summer day by FY2011-2012.

The South Bay Regional Center Smart Building Pilot Project is the first County facility to integrate energy and water using systems into web-based remote monitoring and control resulting in the capability for fully automated demand response.

- Smart Building Pilot Project was installed at the South Bay Regional Center to use the latest building and information technology to reduce utility costs and improve the working environment

Operations Goal #6 – Utility Monitoring and Reporting

Provide quarterly value-added energy and water usage and tracking information to support energy-efficient building system performance. Provide facility operators and energy management staff with near real-time monitoring of electricity and natural gas usage at facilities over 20,000 square feet by FY2011-2012.

Real time monitoring of electricity and natural gas was added to 11 buildings since 2009.

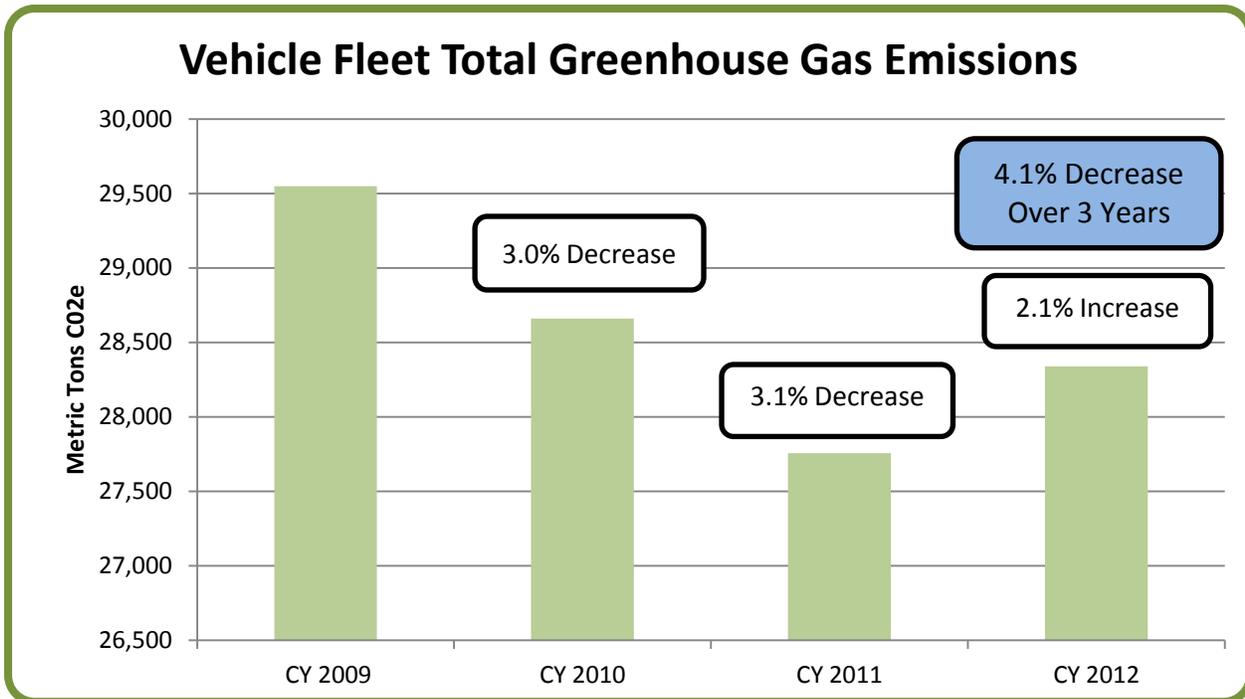
- Electricity, natural gas and water consumption year-to-year and year-to-date reports are distributed to Operations staff on a monthly basis
- Utility cost information is shared monthly with department financial analysts

Operations Goal #7 – Fleet Fuel Efficiency and Utilization

Manage County fleet vehicle procurement, maintenance and utilization to increase fuel efficiency, reduce vehicle emissions and decrease the impact on the environment. Achieve a 5 percent reduction in County fuel consumption and vehicle emissions by FY 2012-2013 based on a FY 2008-2009 baseline. Evaluate, encourage and implement appropriate transportation alternatives.

The Fleet achieved a ~~5.5~~ 4.1 percent reduction in total greenhouse emissions over the last three years.

- The Fleet Division was recognized as one of the “100 Best Fleets” in the nation in 2012, in part for energy and sustainability practices.
- Green maintenance procedures are used to reduce the impact on the environment from Fleet operations
- Transit Pass Program provides a reimbursement for using public transportation
- Employees are encouraged to consider telecommuting, alternative work schedules and carpooling



In Calendar Year 2009, Fleet Operations replaced a substantial number of vehicles with higher efficiency models, resulting in lower tailpipe emissions

Operations Goal #8 – Communication and Training

Develop a highly trained facilities operations staff, educate employees regarding energy conservation measures, and be recognized and acknowledged for the successes in the Energy Management Program. Provide reports to management on the status of the Energy Management Program.

Since 2009, 15 facilities personnel have obtained Building Operator Certification and 5 project managers have achieved LEED accreditation.

- County Communications Office prepared Project Green video featuring various actions across all areas of County government
- Trained all County staff in energy awareness in 2011
- Trained 31 staff in United States Green Building Council standards
- Facilities operations staff attended training for Building Operator Certification in energy efficiency
- Received recognition for program achievements including:
 - 2009 California Center for Sustainable Energy SANDEE Award – Outstanding Organizational Achievement in Energy
 - 2009 California Sustainability Alliance – Sustainability Showcase Award
 - 2010 CCSE Energy All-Star Award – Governmental Buildings for COC Phase1A
 - 2010 Society of Registered Architects Design Award of Honor – Ramona Library

- 2010 Design-Build Institute of America Excellence Award-Civic – Fallbrook Library
- 2011 SDG&E Energy Showcase Award – Sustainability/New Construction for COC Phase 1A
- 2011 NACo Achievement Award – Water Efficiency Program
- 2011 NACo Achievement Award – Energy Savings Adventures Teen Education Program
- 2012 San Diego Architectural Foundation Orchid Award – People’s Choice for COC Campus
- 2012 Institute for Local Government Beacon Award Interim Recognition
- 2012 Association of Environmental Professionals Outstanding Environmental Resource Document for the Water Efficient Landscape Design Manual
- 2012 Association of Environmental Professionals Outstanding Planning Document and Outstanding Environmental Analysis Document for the General Plan

2009-2012 COMMUNITY ACCOMPLISHMENTS

The Board of Supervisors adopted two critical plans in 2011 and 2012 that broadly address energy issues: the County of San Diego General Plan and the Climate Action Plan (CAP). The updated General Plan addresses energy issues by approving a land use pattern that will minimize vehicle trips. The General Plan also realigned future growth to areas with existing or planned infrastructure and essential services. The plan increases opportunities for transit, pedestrians and bicycles; supports green building and land development conservation initiatives; and policies address energy and water conservation, adaptation to climate change, and other areas of concern. The CAP addresses issues of growth and climate change through planning for decreased traffic congestion, better air quality, efficient use of energy and water, less solid waste generation, safer streets, more local amenities, and more local jobs. The CAP was designed to support the mitigation of climate change impacts and to comply with the General Plan Environmental Impact Report.

Community Goal #1 – Reduce Energy Consumption

Reduce per capita energy consumption of County communities by 20 percent from 2007 to 2030 through a comprehensive approach that addresses new construction, existing buildings, and water use. Energy efficiency in existing buildings is the key to achieving cost-effective carbon reductions on a mass scale in the time frame that is required. Existing residential buildings in particular represent the largest potential for energy performance improvements in our region.

The County's Water Efficient Landscape Design Manual received an award for Outstanding Environmental Resource Document from the Association of Environmental Professionals.

- In 2012, sent approximately 75,000 energy-efficiency surveys to targeted residential properties in the unincorporated county to promote retrofits of energy-efficiency components in existing buildings. As property owners responded to the survey, they receive from SDG&E a personalized energy report identifying potential retrofit measures that could be taken to conserve energy.
- The Board of Supervisors December 8, 2009 (30) approved the County of San Diego's participation in the California FIRST program, created to issue bonds to finance property-assessed clean energy (PACE) improvements to help homeowners finance renewable energy systems and energy efficiency devices in 2010.
- Collaborated with SDG&E, City of San Diego, City of Chula Vista, CCSE, and SANDAG in the formation of a working group for the development of a Geographic Information System (GIS) tools and usage data to identify key target areas to perform residential energy retrofits.
- On January 13, 2010 (9), the Board adopted the Landscape Water Conservation Ordinance which requires new single-family residential projects to conserve water in landscaping by establishing and adhering to water budgets, and using recycled water, where available.

The County's Water Efficient Landscape Design Manual was developed to provide details on water-efficient irrigation systems, drought-tolerant plant selection, and methods for establishing water budgets to assist with compliance with the Landscape Water Conservation Ordinance.

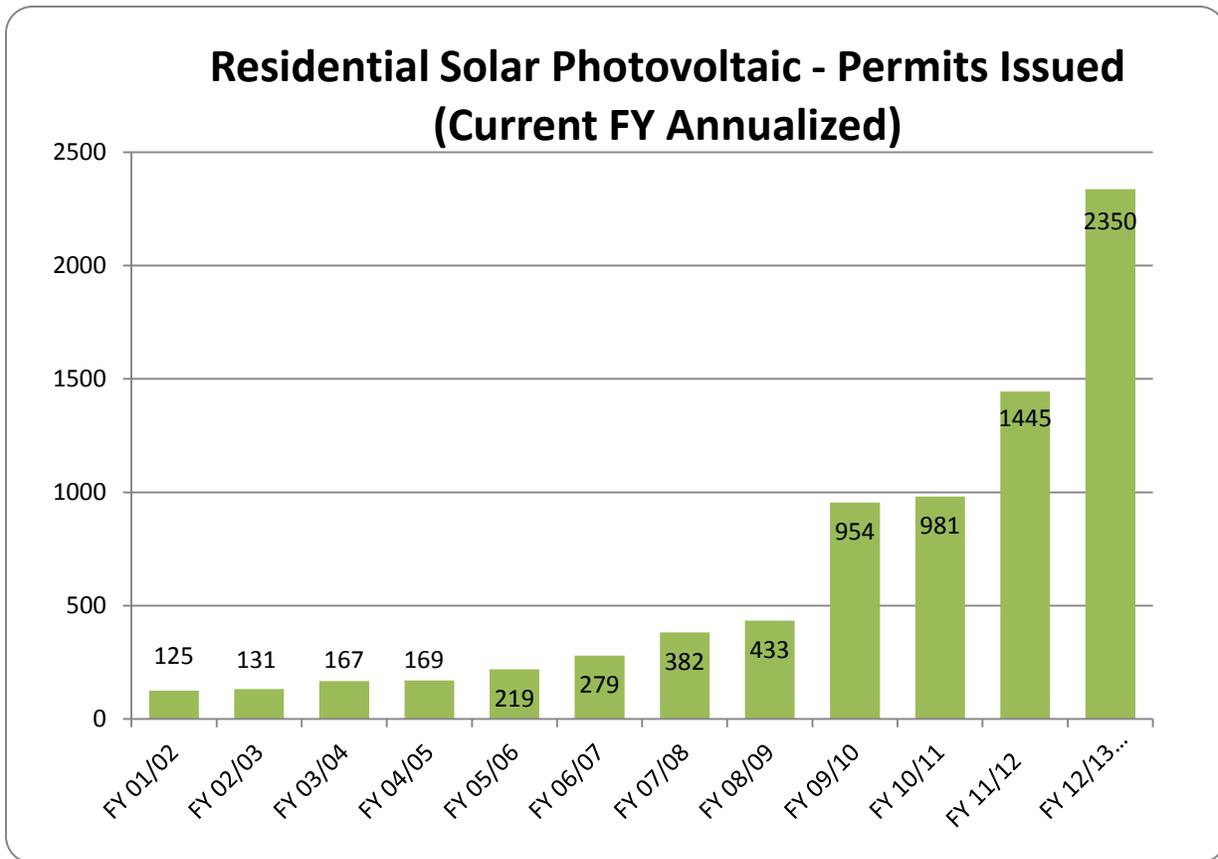
- On January 12, 2011 (6), the Board adopted amendments to building and energy codes incorporating the California Green Building Standards and the latest efficiency codes published by the California Energy Commission

Community Goal #2 – Renewable Energy

Facilitate the development of at least 200 residential/commercial photovoltaics projects per year and the development of commercial renewable energy in the unincorporated County with the goal of at least 50 megawatts (mW) of production by 2015

Through December 2012, the County permitted more than 45.25 megawatts of renewable energy in the unincorporated area, or enough power for approximately 45,000 single family homes. Permitted projects included more than 19.25 megawatts of residential photovoltaic and 26 megawatts from one large utility scale photovoltaic plant in Borrego.

- On September 15, 2010 (4), the Board adopted amendments to the County Zoning Ordinance to codify the use of on-premise energy systems including height and setback exceptions for on-premise photovoltaic systems and establishing an administrative permit process for smaller (<10 acre) photovoltaic distribution facilities.
- From fiscal years 2010/11 to 2012/13, there was an average of 1,588 photovoltaic permits issued each year in the unincorporated area of San Diego County, with a 138% increase from 2010/11 to 2012/13.



The number of permits for residential solar installations has seen an exponential increase since FY 09/10 due to several factors including lower equipment costs, increased competition, greater public awareness, consumer choice and desire to go green.

Community Goal #3 – Energy Infrastructure

Support development of energy infrastructure that is compatible with the character and natural resources of the unincorporated area, and which accommodates a transition to local distributed generation. Distributed generation includes solar, wind, biomass (biological material from living, or recently living organisms used to generate electricity or produce heat) and biogas (methane and carbon dioxide from bacterial degradation of organic matter), fuel cells, clean and efficient combined heat and power systems, efficient microturbines, internal combustion engines, and advanced energy storage.

The County has identified actions to reduce greenhouse gas emissions in the unincorporated area of San Diego County to 15 percent below the 2005 baseline emissions level by 2020. This equates to a 676,887 metric ton CO₂ equivalent reduction by 2020.

- On August 3, 2011 (1), the Board approved a comprehensive update to the General Plan that included various energy policies and goals that will support distributed generation

including: COS-14.3 Sustainable Development, COS-14.4 Sustainable Technology and Projects; COS-14.7 Alternative Energy Sources for Development Projects; COS-16.4 Alternative Fuel Sources, COS-17.5 Methane Recapture, COS-18.1 Alternate Energy Systems Design; and COS-18.2 Energy Generation from Waste.

- On June 20, 2012 (4), the Board approved a Climate Action Plan that defines goals to reduce greenhouse gas emissions and includes goals that support distributed generation: Goal R1 is to have solar water heating systems installed on 19% of residential and commercial buildings by 2020. Goal R2 is to have 5% of residential electricity and 8% of commercial electricity generated from alternative energy systems by 2020. Goal T4 is to facilitate a 15% increase in electric vehicle purchases.

Community Goal #4 – Transportation and Land Use

Reduce petroleum demand through reduced vehicle demand and vehicle miles traveled, and by encouraging deployment of alternative fuel vehicles

As part of the County General Plan, the County adopted a land use pattern that will result in approximately 3.8 million fewer vehicle miles traveled at build out compared to the prior general plan.

- Supported the use of Compressed Natural Gas (CNG)-fueled school buses by providing grant funding to local school districts for their purchase and to upgrade CNG tanks on existing school buses. While reducing emissions, these conversions also reduce fuel and maintenance costs.
- Provided two grants to supply shore power to docked ships, eliminating the need to run diesel engines to generate electricity. These projects have reduced emissions of nitrogen oxides (NO_x), reactive organic gases, and particulate matter by as much as 90%.
- Provided outreach and technical assistance to local governments, land developers, neighborhood groups, and nonprofits to reduce vehicle trips and associated emissions through transit/land use (i.e., "smart growth") and street design improvements ("complete streets").
- Ongoing participation in the Transportation Demand Management TDM program development for the North Coast Corridor (I-5 widening) project at the request of SANDAG.
- Promoted the SANDAG iCommute Program. The goal of the program is to reduce traffic congestion in order to reduce greenhouse gas emissions and other environmental pollutants that result from driving alone.
- Interconnected and synchronized 83 of its 188 traffic signals with fiber optic cable, resulting in an average 17% reduction in vehicular delay, fuel consumption and emissions.

- In 2012, launched a new online permitting system (Accela Automation and Accela Citizen Access) that provides increased opportunities for online permitting and provides the public with the ability to conduct property research and permit history research without driving to County offices.
- Increased use of the Survey Record System (SRS), a web-based geographic search and retrieval tool that allows industry professionals, the public and County staff to find and download land-based records, which has reduced the need for customers to travel to Kearny Mesa for document searches.

Community Goal #5 – Education and Outreach

Provide resources to the residents of the unincorporated County so they can be readily informed of steps they can take to reduce their energy consumption and improve energy efficiency at their homes and businesses

The County participated in over 250 outreach events, highlighting the County's partnership with SDG&E by providing energy-efficiency and conservation materials to over 93,000 event attendees.

- Provided "Green Business" education focused on energy-efficiency and resource conservation to regulated businesses.
- Initiated a fluorescent lamp recycling program to educate and simplify recycling for consumers
- The Annual Lawnmower Trade-In Event allowed residents of San Diego County to turn in their working gas-powered lawnmower and purchase a new, cordless, rechargeable electric mower at a greatly reduced price. During 2010-2012, approximately 1,900 gasoline-powered lawn mowers were traded in for zero-emission electric mowers, removing an estimated 18,800 pounds of air pollutant emissions from San Diego's air on an ongoing annual basis.
- Established the Energy Savings Adventures Program that educated Spring Valley and Lakeside Teen Center participants about energy efficiency and conservation

Community Goal #6 – Recycling

Reduce energy use associated with first generation manufacturing and distribution through increased recycling and reuse

Unincorporated areas of the county achieved the equivalent of a 60% landfill diversion rate in 2011, surpassing the previous landfill diversion rate of 58% in 2009.

- In FY 11-12, conducted 50 recycling and waste reduction school presentations to 4,683 students, 10 used oil recycling presentations to 266 English-as-a-Second Language students, 11 home composting trainings for 1,227 residents, 407 assistance visits and presentations to staff at commercial and multifamily facilities, 9 used oil filter exchanges with 2,171 attendees, and numerous outreach activities including community booths, free recycling events, and reuse and repair fairs. The County's Recycling and Household Hazardous Waste Hotline and online database received 5,177 requests for how and where to reuse, recycle or properly dispose of items.
- Enacted the Construction and Demolition (C&D) Recycling Ordinance in 2007. Since 2009, 144 projects recycled 14,270 tons of C&D materials. Since the inception of the program, 52% of projects have met the program requirements.
- Administered the North San Diego County Recycling Market Development Zone (RMDZ) program, which offers assistance and low-interest loans to businesses that manufacture using recycled materials. In 2012, staff assisted the El Corazon Compost Facility in Oceanside to obtain \$1.3 million in financing for new equipment, which will allow the facility to accept food scraps and to process greater volumes of material into compost.
- Reviewed land use regulations with the intent to encourage greater landfill diversion of organic materials (yard trimmings, food scraps, manures, etc.). Diversion of these materials is considered crucial to achieve the State goal of 75% waste diversion by 2020. Proper management of organic materials reduces methane emissions at landfills and provides multiple benefits. When composted organic material is applied to landscape and agricultural soils, the need for fertilizers, pesticides, and water are reduced and carbon is stored in the soil. Anaerobic digestion of organic materials creates a source of renewable energy.
- Created a Reuse and Repair committee to bring together and promote organizations and industry representatives that sell and/or repair used materials (including items such as building materials, furniture, household goods, etc.). Industry best management practice trainings and creation of a database of reuse and repair organizations are planned in 2013.
- Received a City of San Diego Director's Recycling Award for waste reduction and recycling efforts

2013-2015 Strategic Energy Plan

Since the 2009-2012 Strategic Energy Plan was prepared, several areas of energy and sustainability have changed including factors ranging from increased awareness to advancement in technology to expanded funding opportunities. Participation in the Institute for Local Government and the Statewide Energy Efficiency Collaborative Beacon Award: Local Leadership Toward Solving Climate Change has identified best practice areas that broaden the goal areas than we strive to achieve. The new plan reflects both updates to the existing goals and new goals identified over the last three years.

Trends in Energy and Sustainability



Water & Sewer Costs/Embedded Energy – Regional water and sewer costs are rising rapidly and the long-range potential for water scarcity in Southern California impacts residents, businesses and County operations. Water-related energy use in California is high. The California Public Utilities Commission (CPUC) estimates that 19 percent of the state’s electricity, 30 percent of its natural gas and 88 billion gallons of diesel fuel every year are consumed to transport water. Water conservation

and efficiency are increasing in importance.

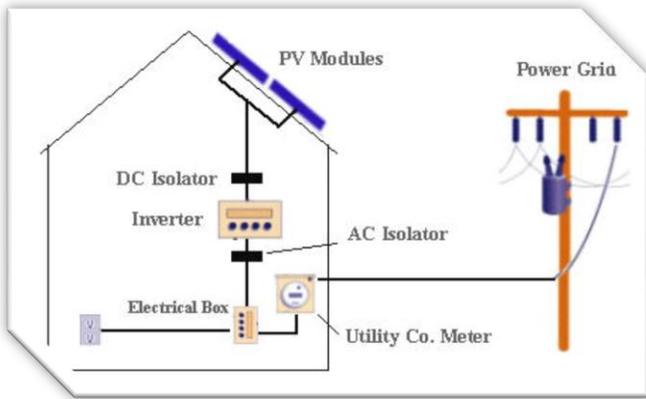
CALGreen/Title 24 Codes – The California Green Building Codes, in place since 2011, includes two voluntary tiers that may be adopted by local jurisdictions. Several California jurisdictions have adopted these tiers that include higher standards for energy efficiency. The California Energy Commission, California Air Resources Board, and the CPUC have adopted the policy goal to achieve zero net energy (ZNE) building standards by 2020 for residential buildings and by 2030 for commercial buildings. The more stringent building standards will impact both County operations and the public in how buildings are designed and renovated. County facilities include several provisions of the CALGreen tiers in the design and construction of new buildings.



Smart Grid/Smart Building - A smart grid is an electrical grid that uses information and communications technology about the behaviors of suppliers and consumers, in an automated fashion to improve the efficiency, reliability, and sustainability of electricity production and distribution. The smart grid interacts with building systems to achieve cost savings and grid reliability. The County has invested in building automation systems at our largest



facilities that are capable of being upgraded to optimize performance on an ongoing basis. Electric vehicle charging infrastructure can also be optimized through communication to the smart grid. Energy storage systems technology capabilities, costs and application are important factors in how the smart grid functions.



Distributed Generation - Distributed generation systems are small-scale power generation technologies located close to where electricity is used to provide an alternative to or an enhancement of utility power. The most common technologies include solar electric (photovoltaics or PV), solar thermal (solar water heating collectors), wind, fuel cells and gas combustion turbines. Fuel cells and gas combustion turbines can have the added benefit

of cogeneration, producing both electrical power and thermal energy for uses such as water heating from one fuel. Installation costs for distributed generation systems, specifically solar electric, have decreased dramatically since 2009, making more locations economically feasible. The large anticipated increase in distributed generation systems in the San Diego County region has created debate about how future utility rates should be structured for grid-tied solar electric system owners.

Alternative-Fueled Vehicles - Alternative-fueled vehicles are increasing in popularity with many manufacturers offering new models each year. The regional infrastructure to support all-electric and plug-in hybrids is increasing, but is not robust. The regional infrastructure to support compressed natural gas, propane and biofuels is growing, but still very small. Alternative-fuel vehicles have the dual benefit of potential lower operational costs while reducing emissions.



Smart Development - Form-Based Codes (FBC) is a type of zoning regulation that establishes standards on the design and form of structures. FBCs not only improve urban design and our quality-of-life, this approach has an added value for the shared solutions of more efficient energy sources, new technology and conservation measures. A more urban development pattern means more compact buildings with lower heating and cooling

requirements, lower utility bills, less irrigation water, and opportunities to replace vehicle trips with walk or bike trips. FBCs allow jurisdictions to easily regulate new urban development enabling living and working in buildings demanding less energy, operating them with renewable resources, and traveling via less energy intensive modes.

Resource Management and Recycling -

Recent State regulations and policy goals will place a greater focus on increasing recycling, especially for organic materials and those produced in the commercial and multifamily sectors. AB341 sets a State policy goal to achieve 75% landfill diversion by 2020 and requires commercial, public entity and multifamily recycling as of July 1, 2012. CalRecycle's Strategic Directive 6.1 calls for a reduction of 50% in the amount of organic materials disposed of by 2020. The State has also adopted requirements for electrical energy to be comprised of 33 percent renewable energy by 2020. To meet these aggressive goals, capacity for organics processing (yard trimmings, food scraps and other compostable items) will need to expand within the County.



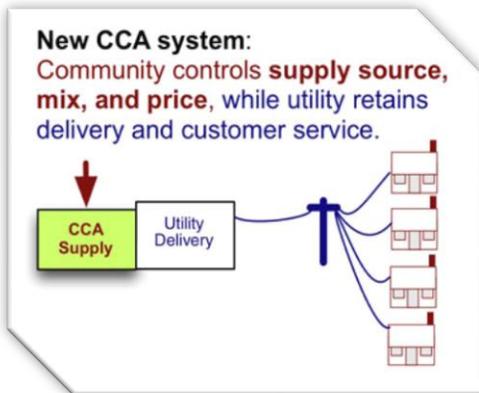
Increasing organics processing through composting and anaerobic digestion will reduce landfill disposal and greenhouse gas emissions while increasing production of compost and renewable energy. The State is evaluating new rules and incentives to facilitate this expansion.

Green Jobs – Green jobs are a growth sector of the economy. Therefore, promoting projects like distributed generation systems and electric vehicle recharging are important considerations of the County’s Energy Program and the promotion of green jobs.



Community Choice Aggregation – Various California counties and regional organizations have implemented, are in the process of implementing or are researching Community Choice Aggregation (CCA).

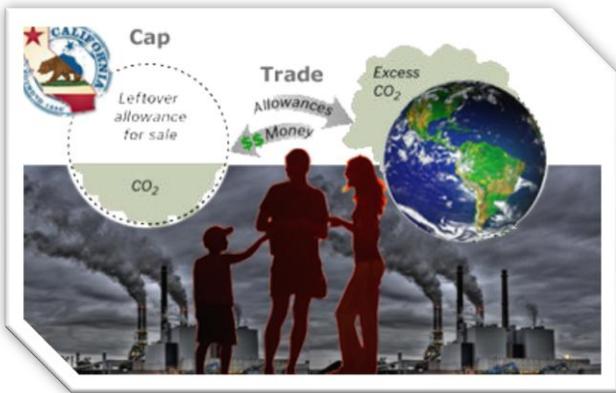
CCA gives consumers a choice of their electricity supplier, the CCA or the utility. Potential benefits include community choice in deciding which resources would serve its electricity needs, expanded access to competitive suppliers, local control of energy generation planning decisions, opportunities to provide stable electricity rates for customers, significantly increased utilization of renewable energy resources and overall electricity cost savings. The utility continues to own and operate the transmission and distribution system that delivers electricity. In the San Diego region, the San Diego Energy District Foundation was formed, in part, to pursue creation of a Joint Powers Authority to implement CCA. Although a 2005 study was commissioned by the County, much has changed in that time and an updated study would be required to make an informed decision.



Regional Energy Networks – In 2012, the CPUC issued a ruling to provide direction to entities interested in submitting proposals to the CPUC for local government regional energy network pilot programs and also allowed CPUC consideration of proposals for local government regional energy networks (RENs) separate from the investor-owned utility applications for their 2013-2014 energy efficiency portfolios. RENs give local governments a larger role in administering funds for regional energy efficiency initiatives. The result was the San Francisco Bay Area Regional Energy Network [\$26 million over two years] and the Southern California Regional Energy Network [\$45 million over two years]. The approved San Diego Regional Energy Partnership, jointly funded by the City of Chula Vista, City of San Diego, Port of San Diego, SANDAG and County of San Diego, an alternative arrangement to a REN administered through SDG&E, received \$757,000 for regional community-based energy-efficiency initiatives. Local governments and other organizations are currently discussing the feasibility for a San Diego REN starting in 2015. The County of San Diego, as the County of Los Angeles has done, could provide the leadership to San Diego REN.



Cap and Trade - California's greenhouse gas (GHG) cap-and-trade program, a central element of California's Global Warming Solutions Act (AB 32), covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The California Air Resources Board distributes allowances, which are tradable permits, equal to the emissions allowed under the cap. The first California Air Resources Board cap-and-trade auction took place in 2012 and enforceable compliance obligation beginning with the 2013 GHG emissions.



Revenues generated from the State's cap-and-trade auctions may be a source of funding for local government energy and sustainability efforts.

Energy Installation Financing Options – In 2009, the County adopted a CaliforniaFIRST Resolution, envisioning a commercial and residential PACE program for the region. CaliforniaFIRST is a program of the California Statewide Communities Development Authority (CSCDA), which was created in 1988 to provide California’s local governments with an effective tool for the timely financing of community-based public benefit projects. CSCDA is sponsored by the California State Association of Counties and the League of California Cities. Due to decisions at the federal level to restrict residential PACE programs, the CaliforniaFIRST residential financing program was placed on hold. Despite this obstacle, in order to meet ambitious goals to reduce energy consumption and emissions at existing facilities, the financing marketplace is increasing available funding opportunities for residential and commercial building energy efficiency projects. Several local governments and the regional collaborative are currently ramping up efforts to facilitate funding for homeowner and business energy and water efficiency projects such as the San Diego Retrofit Advisory Council. The County is currently evaluating the best options to participate in the growth of energy financing to benefit the region.



2013-2015 Energy Program Goals and Objectives

In response to regulatory, economic, marketplace and technology changes, updated goals and objectives are required. The more ambitious goals and objectives benefit from the substantial progress made in developing programs and implementing projects over the last three years and continue the County's leadership role in energy and sustainability.

The County of San Diego has two distinct components related to energy and sustainability:

The **County Operations Energy Strategy** has been developed to include County-owned facilities, leased facilities, and the County's vehicle fleet. The County's main objectives are to lower operational costs, reduce energy and water consumption and minimize greenhouse gas emissions.



The **County Community Energy Strategy** has been created to include program development and management for the unincorporated areas within the county and for coordination with federal, state and local entities. The County Community Energy Strategy has a regional focus with specific emphasis on the unincorporated area where the County has land use jurisdiction. The main objectives are to reduce energy and water consumption, minimize greenhouse gas emissions that result in healthier and more sustainable communities.



County Operations Energy Strategy

AREA	GOAL
Energy and Water Efficiency and Utilization [conservation practices and technology upgrades at County facilities and energy intensity based on building square feet or ground acreage]	<ol style="list-style-type: none"> 1. Reduce annual building energy use intensity by 6 percent comparing FY 2014-2015 to a FY 2011-2012 baseline 2. Reduce annual facility water use by 3 percent comparing FY 2014-2015 to a FY 2011-2012 baseline
Green Design and Construction for New Facilities [ZNE buildings produce the equivalent amount of onsite energy as is consumed each year]	<ol style="list-style-type: none"> 1. Explore the feasibility of achieving a zero net energy (ZNE) building on a new construction project
Energy Supply [procurement of utilities to minimize overall costs]	<ol style="list-style-type: none"> 1. Manage an energy commodity portfolio that achieves at least 5 percent annual cost savings when compared to utility bundled rates for all accounts under commodity purchase agreements
Distributed Generation Systems Deployment [e.g. renewable energy (such as photovoltaics, solar thermal, biomass & wind), & microturbines & fuel cells]	<ol style="list-style-type: none"> 1. Increase from 2.5 percent to 10 percent of total energy consumed at County facilities provided by distributed generation systems by the end of FY 2014-2015.
Smart Building/Smart Grid Technology Deployment [building automation, smart meters, electric energy storage and information technology integration]	<ol style="list-style-type: none"> 1. Add 5 campus facilities to the centralized web-based Smart Building Platform 2. Achieve 1,000 kW of automated demand response at County facilities 3. Install electric vehicle charging stations for public and County use at 10 County sites
Monitoring and Reporting [tracking and publishing key energy, water, waste and emissions metrics of County operations. Monitor energy and sustainability-related legislation and industry trends]	<ol style="list-style-type: none"> 1. Publish greenhouse gas emissions reports for calendar years 2012, 2013 and 2014 on County's Intranet and Internet websites 2. Achieve interim GHG emissions reduction for County operations to meet Climate Action Plan 2020 target 3. Benchmark 300 buildings in Energy Star Portfolio Manager 4. Provide annual status reporting to Board and public on the Strategic Energy Plan
Vehicle Fleet Fuel Efficiency and Utilization [increasing green procurement and operational practices with vehicles and mobile equipment]	<ol style="list-style-type: none"> 1. Implement recommendations of the 2013 Green Fleet Action Plan 2. Increase County vehicle average miles per gallon by 3 percent by the end of 2015 based on a 2012 baseline 3. Reduce vehicle emissions per mile driven by 3 percent by the end of 2015 based on a 2012 baseline

AREA	GOAL
Communication and Training [increase energy and sustainability awareness and knowledge of County staff operating County facilities and serving the public]	<ol style="list-style-type: none"> 1. Pursue the Institute for Local Government Beacon Award Silver award recognition for climate change leadership 2. Train all appropriate staff in new California 2013 Energy Codes 3. Certify 10 additional facility operations staff in energy efficient building operational practices 4. Accredit 4 additional staff as USGBC Green Associates 5. Promote the County’s sustainability practices twice each year to all County employees
Procurement [procurement or acquisition of goods and services that are a lesser or reduced source of greenhouse gas emissions when compared with competing goods or services that serve the same purpose]	<ol style="list-style-type: none"> 1. Explore including green procurement practices as a vendor selection criteria 2. Evaluate participation in USGBC LEED Version 4 Building Product Disclosure and Optimization Credit
Waste Reduction & Recycling [waste reduction and recycling activities reduce the potential to generate methane at landfills, as well as reduces pollutants generated from transporting waste to disposal sites. Waste reduction and recycling activities also conserve natural resources]	<ol style="list-style-type: none"> 1. Continue to explore increased composting at County facilities 2. Increase percentage of waste diverted from the landfill generated by County operations 3. Reduce waste generated from County operations

County Community Energy Strategy

AREA	GOAL
Regional Collaboration	<ol style="list-style-type: none"> 1. Continue participation in San Diego Regional Energy collaborative efforts 2. Evaluate California Public Utilities Commission Regional Energy Network participation for 2015
Reduce Energy Consumption	<ol style="list-style-type: none"> 1. Maintain the County’s Green Building Incentive Program to incorporate the latest green building principles, reference available certification programs, and to address green building in remodels (existing homes). Reevaluate incentives to ensure that they provide for maximum effectiveness 2. Update County’s Building and Energy Codes (Title 9, County Code of Regulatory Ordinances) and supporting County procedures in alignment with the California Green Building Code and Energy Code update and encourage additional measures to increase energy efficiency 3. Promote development of projects to interconnect and synchronize traffic signals resulting in measurable reduction in delay, vehicle stops, fuel consumption and emissions
Distributed Generation [Renewable Energy Systems, Fuel Cells]	<ol style="list-style-type: none"> 1. Update applicable codes to streamline the permitting process for renewable energy technology (e.g., solar and wind energy, biogas fuel cells, and biomass) while balancing environmental constraints and community character 2. Continue to provide incentives (such as fee waivers and expedited processing) for permitting the installation of photovoltaics systems and other renewable energy technologies

AREA	GOAL
Transportation and Land Use	<ol style="list-style-type: none"> 1. Support alternative fuel vehicles by providing incentives (such as preferred parking and charging stations) and by updating applicable codes as necessary to streamline the permitting process and to support the installation of infrastructure to accommodate alternative fuel vehicles (e.g., commercial and at-home/business fueling stations) 2. Pursuant to the availability of grant funding, update the County’s Bike Master Plan to refine and expand the County’s bicycle network to better serve existing and planned communities, connect to other routes, and encourage increased bicycle use 3. Pursuant to the availability of grant funding, prepare and implement pedestrian studies, traffic calming or road design plans, town center plans, form-based codes (codes that emphasize design over use), and other planning concepts that promote walkability and improved community design that promote non-vehicular transportation 4. Increase the availability of online County services to reduce customer vehicle miles traveled (e.g., online permit applications, online payments and online submission of contract proposal documents)
Education and Outreach	<ol style="list-style-type: none"> 1. Enhance County websites to provide various resources on energy use and efficiency 2. Participate in 150 outreach events focusing on the County’s partnership with SDG&E by providing energy efficiency and conservation materials to event participants 3. Continue to provide energy efficiency and conservation education at the Spring Valley and Lakeside Teen Centers 4. Continue to host and conduct the Annual Lawnmower Trade-In Event 5. Implement a demonstration composting or biogas project at a County facility 6. Install interpretive signage on sustainability measures implemented at County facilities to educate the public and employees 7. Continue to provide energy efficiency and conservation education targeting food facilities at Green Business kiosks located at the COC and at the SDG&E Energy Innovation Center

AREA	GOAL
Recycling	<ol style="list-style-type: none"> 1. Review and revise regulations as necessary to accommodate recycling facilities and encourage diversion of organics from landfills 2. Review and revise regulations as necessary to promote recycling at businesses and residences 3. Review and revise regulations as necessary to further require construction and demolition debris recycling
Climate Action Plan Implementation	<ol style="list-style-type: none"> 1. Prepare a Climate Action Implementation Plan 2. Develop and implement GHG tracking tool protocols 3. Provide annual unincorporated area emissions summary report for energy-related sectors
Community Choice Aggregation [allows communities to offer procurement service to electric customers within their boundaries]	<ol style="list-style-type: none"> 1. Provide the Board information and options related to Community Choice Aggregation for consideration as part of the response to the direction to return with information regarding a Comprehensive Renewable Energy Plan
PACE Financing [Property Assessed Clean Energy – energy efficiency and renewable energy installations with loan repaid through assessment on property tax bill]	<ol style="list-style-type: none"> 1. Provide the Board with actions necessary to expand the County’s current commercial PACE program 2. Provide the Board with actions necessary to expand residential PACE under both the AB811 and SB555 models

Strategic Energy Plan Progress Reporting

The Energy & Sustainability Team (staff representing each participating department) will identify and implement specific actions based on the 2013-2015 Strategic Energy Plan priorities and goals to meet or exceed our objectives. This team will prepare and provide a Strategic Energy Plan Progress Report to the Board of Supervisors on an annual basis. This report will include the status of each goal area and significant accomplishments during the past year. Each Strategic Energy Plan Progress Report will be placed on the County of San Diego public website.