

### Rancho Santiago Community College District **Sustainable RSCCD Committee**

**September 21, 2016 District Office** Decision Room #340 3:00 - 4:00 p.m.

#### **Agenda**

1. Annual Report Matsumoto

Discussion of 2016-2017 SRC Priorities All

3. Other

#### **Next Meeting**:

October 19, 2016 3:00 p.m. District Office – Decision Room #340

<u>Mission Statement</u>

The mission of the Rancho Santiago Community College District is to provide quality educational programs and services that address the needs of our diverse students and communities.

The mission of Santa Ana College is to be a leader and partner in meeting the intellectual, cultural, technological, and workforce development needs of our diverse community. Santa Ana College provides access and equity in a dynamic learning environment that prepares students for transfer, careers and lifelong intellectual pursuit in a global community.

Santiago Canyon College is an innovative learning community dedicated to intellectual and personal growth. Our purpose is to foster student success and to help students achieve these core outcomes: to learn, to act, to communicate and to think critically. We are committed to maintaining standards of excellence and providing accessible, transferable, and engaging education to a diverse community.



# **SUSTAINABILITY PLAN**

**2014-2015 ANNUAL REPORT** 

DISTRICT OFFICE
SANTA COLLEGE
SANTIAGO CANYON COLLEGE

**SEPTEMBER 21, 2016** 

Facility Planning, District Construction and Support Services Department Report-complied and prepared on behalf of the Sustainable Resources Committee

# TABLE OF CONTENTS

INTRODUCTION	3
SUSTAINABLE RSCCD COMMITTEE MEMBERS 2014-2016	
VISION STATEMENT, GOALS, PRIORTIES	5
SECTION: 4.1 MANAGEMENT AND ORGANIZATION STRUCTURE	
SECTION: 4.2 ENERGY EFFICIENCY	ε
SECTION: 4.3 FACILITIES OPERATION	8
SECTION: 4.4 SUSTAINABLE BUILDING PRACTICES	10
SECTION: 4.5 ON-SITE GENERATION AND RENEWABLE ENERGY	11
SECTION: 4.6 TRANSPORTATION, COMMUTING AND CAMPUS FLEET & TRAVEL	11
SECTION: 4.7 WATER, WASTEWATER, AND SUSTAINABLE LANDSCAPING	12
SECTION: 4.8 SOLID WASTE REDUCTION AND MANAGEMENT	13
SECTION: 4.9 GREEN PURCHASING	14
SECTION: 4.10 STUDENT AND CURRICULUM DEVELOPMENT	14
SECTION: 4.11 CAMPUS AND COMMUNITY OUTREACH & AWARENESS	15
SECTION: 4.12 CREATE A CLIMATE ACTION PLAN	16

#### INTRODUCTION

This report includes the annual 2015-2016 update to the Sustainability Programs & Plans Checklist Summary from Section 4 of the Sustainability Plan. The information was compiled through a collaborative effort between the colleges, District and members of the Sustainable RCCD Committee (SRC). It reflects achievements of programs, projects and plans completed and in various phases of implementation.

The SRC's goal for 2015-2016 was to work on establishing recycling programs at the colleges and District facilities by contracting with a new waste hauling management service provider. The provider's purpose would be to incorporate recycling activities and report on each of the District's facilities.

Although our primary goal as a committee was to focus on recycling, we expanded our efforts by completing programs and projects that meet several goals of the plan. The SRC continues to strive towards implementing all the goals of the Sustainability Plan and is proud to present the attached report.



# SUSTAINABLE RSCCD COMMITTEE MEMBERS 2014-2016

Santa Ana College	Santiago Canyon College	District Office
President,	President,	Chancellor
Dr. Erlinda Martinez, (2014-2015)	Dr. John Weispfenning (2014-2015)	Dr. Raul Rodriguez (2014-2016)
Vice President, Admin Svcs	Vice President, Admin Svcs	
Dr. Michael Collins (2014-2016)	Steve Kawa (2014-2015)	
	Vice President, Amin Svcs	
	Arleen Satele (2015-2016)	
Vice President, CEC	Vice President, OEC	Vice Chancellor
James Kennedy (2014-2016)	Jose Vargas (2014-2016)	Peter Hardash (2014-2016)
Faculty	Faculty	Assistant Vice Chancellor
Dr. Kimo Morris (2014-2016)	Dr. Doug Deaver (2014-2016)	Carri Matsumoto (2014-2016)
Lisa McKowan-Bourguignon (2014-2016)	Leah Friedenrich (resigned) (2014-2016)	
Classified Staff	Classified Staff	Classified Staff
Delmis Alvarado (2014-2016)	Kelsey Bains (2014-2016)	Laurene Lugo ( <i>retired</i> ) (2014-2016)
Student	Student	Others
Kyle Murphy (2014-2015)	Nathan Underwood-Schuchman (2014-	
	2015)	Director of Public Affairs &
	Vacant (2015-2016)	Publications
		Judy lannaccone (2014-2016)
		Orange County Small Business
		Development Center
		Elisabeth Pechs (2014-2016)

# VISION STATEMENT, GOALS, PRIORTIES

The Sustainable RSCCD Committee has developed the following Vision Statement to guide the District in its Sustainability Planning efforts.

The Rancho Santiago Community College District holds sustainability to be a foundational principle in its current and future development.

As a responsible steward of natural resources and the environment, the District will endeavor to minimize its impact on the environment by implementing best practices for conserving resources, reducing waste, implementing energy reduction and alternative energy generation strategies, constructing efficient buildings, and by developing partnerships that will further these activities.

To realize this Vision Statement, the SRC has defined the following sustainability goals and priorities. The goals and priorities for the Sustainability Plan reflect campus needs, interests, and available resources.

Goal No.	Area of Sustainability	Established Goal
1	Campus & Community Engagement	Encourage participation in and awareness of sustainability issues through effective education and engagement. Integrate sustainability into all facets of student life, including student government, clubs, and organizations.
2	Curriculum Development	Facilitate the inclusion of environmental sustainability and social responsibility into existing curriculum and develop new curricula and career-oriented certificate and training courses with an emphasis on sustainability.
3	Energy	Utilize 2012-2013 benchmark study to establish annual energy use and demand reduction goals (target 5% reduction). Plan appropriate energy efficiency, demand reduction, or clean self-generation measures by mid-2015 to meet reduction goals.
4	Facilities Design & Operation	Design and construct all major capital projects and renovations to meet LEED Silver "equivalent" standard and operate facilities to meet solid waste, energy, and water use reduction goals. Employ sustainable landscaping practices.
5	Solid Waste Management	Continue to implement the landfill diversion program, expand it to include all sectors of recycling and waste reduction to landfills, and strive to meet the statewide landfill recycling goal of 75% by 2020.
6	Sustainable Procurement	Implement efforts to source campus food, materials, supplies, Information technology, equipment, and resources from organizations committed to social responsibility and environmental sustainability.
7	Transportation	Reduce the reliance of students, faculty, and staff on single occupancy vehicle commutes by 5 percent within the next five years, and encourage the use of low and zero emissions vehicles.
8	Water Management	Perform water use benchmarking studies at both campuses and the District Office to better understand usage as compared to similar facilities and community college peers. Based on the results, establish annual water use reduction goals and plan appropriate measures to achieve goals. The goals described above will apply to both Santa Ana College and Santiago Canyon College, the education centers, and the District Office. The goals are listed in alphabetical order, and are not necessarily listed by priority. The goals and criteria established for the Sustainability Plan will be monitored during Plan implementation as described in Section 5, "Measure and Report Performance".

#### **SECTION: 4.1 MANAGEMENT AND ORGANIZATION STRUCTURE**

GOAL: 3

All items above have been completed and activities are ongoing in nature. There are no new activities to report for the year.

SECTION: 4.1 MANAGEMENT AND ORGANIZATION STRUCTURE	STATUS	GOALS
4.1.1 Adopt A District Sustainability Policy		
4.1.3 Appoint A District Sustainability Committee	Completed	3 for all
4.1.4 Funding and Resources to Support Sustainability Activities	For all	
4.1.5 Employ Sustainability Professionals as required		
4.1.7 Integrate Sustainability Planning into Campus Master Plan		

#### **SECTION: 4.2 ENERGY EFFICIENCY**

SECTION: 4.2 ENERGY EFFICIENCY	STATUS	GOALS
4.2.1 Set Energy Efficiency Goals		
District Office:	Camanlatad	2
Prepared a data history of energy consumption report for districtwide using 2012 as the	Completed	3
baseline to establish energy reduction goal for each sites.		
4.2.2 Conduct Comprehensive Facility Energy Audits		
District Office:		
Prepared a data history of energy and gas consumption report for districtwide using	Completed	3
2012 as baseline for audits in conjunction with Southern California Edison (SCE) &		
California Community Colleges/Investor Owned Utilities (CCC/IOU) Partnership		
4.2.5 Implement New and Existing Audit Recommendations	Ongoing	3
4.2.8 Identify and Take Advantage of Grants and Incentive Programs		
<u>District Office:</u>		
Leverage state funding (schedule maintenance and proposition 39 funding) to complete		
multiple energy efficiency projects for the following projects:		_
Central Plant Load Shifting Program	Ongoing	3
Edison Charge Ready Electric Vehicle Test Pilot Program	Ongoing	3
Proposition 39 Year 4: Santa Ana College, Digital Media Center and Orange County	In Progress	3
Sheriff's Regional Training Academy EMS System		
Santa Ana College:	Completed	3
Proposition 39 projects: Year 1 SAC Interior and Exterior Lighting, Year 3 Digital	For all	for all
Media Center and Orange County Sheriffs Training Academy	FOI all	ioi aii
Conversion from gas power carts for M&O to electric carts, with incentives for		
conversion		
Santiago Canyon College:		
Proposition 39 Projects:		
Year 1 Science Center Retro-commissioning		
• Teal 1 Science Center Netro-Commissioning		

Year 2 Interior and exterior LED Lighting at multiple buildings		
Year 3 Building D Chiller and Control Replacement		
4.2.9 Energy Efficient Equipment		
<ul> <li>4.2.9.2 Efficient Lighting and Lighting Controls</li> <li>District Office, Santa Ana College &amp; Santiago Canyon College: replaced fluorescent lighting of the interior and exterior to more efficient LED lightings.</li> <li>District Office, Santa Ana College &amp; Santiago Canyon College: repaired all occupancy sensors to ensure lighting systems turn off when unoccupied.</li> <li>Digital Media Center &amp; Orange County Sheriff's Regional Training Academy: replacement interior and exterior fluorescent lights to LED lighting.</li> </ul>	Completed For all	3 for all
4.2.9.3 Install Energy Efficient HVAC Systems <u>District Office:</u> Replace chiller plant with more efficient equipment utilizing latest		
technology to reduce chiller operations energy consumption. Installed new VFD control for cooling tower operations and upgrade the EMS system with new advanced energy efficient sequences including supply air reset, chiller water reset, optimal start, night-set back, and better scheduling schemes.	Completed	3
Santa Ana College: The construction of a new central plant building and replacement of all underground utilities (domestic water, sewer, fire water, storm drain, gas, electric and data) includes a reduction of electrical loads during peak demand periods, chilled water loop system, connection to 7 existing buildings to the HVAC equipment to provide cooling, a new Energy Management System (EMS) to control building temperatures and monitor system remotely.	In Progress	3
<ul> <li>Santiago Canyon College:</li> <li>Retro-commissioned Science Center and implemented multiple Energy Efficiency Measures (EEMs) to reduce energy waste associated with 24/7 HVAC operations.</li> <li>Completed a chiller replacement and EMS upgrade at building D.</li> <li>Upgraded campus EMS to new EMS with advanced HVAC energy efficient programming, advanced lighting, control, and automatic demand response programming.</li> <li>Replaced inefficient split system units at CDC with new efficient units utilizing economizer control.</li> </ul>	Completed for all	3 for all

### **SECTION: 4.3 FACILITIES OPERATION**

GOALS: 3 & 4

SECTION: 4.3 FACILITIES OPERATION	STATUS	GOALS
4.3.1 Encourage and Support Energy Efficiency Training of Staff		
Santa Ana College:		
Regular EMS training for HVAC/Plumbing staff with Western Powers	Ongoing	3,4
New EMS system is being sourced for the upcoming Central Plant, which will require	In Progress	3,4
robust training for college team to run the Central Plant and EMS in concert.		
Santiago Canyon College:		
<ul> <li>Santiago Canyon College:</li> <li>Standardized EMS Systems to ensure consistency with user friendly HVAC</li> </ul>	Completed	3,4 for
management.	for all	all
Provided new laptops to M&O staff to better utilize EMS system.		
<ul> <li>Provided in-depth EMS training to the M&amp;O staff as part of EMS installation.</li> </ul>		
Review systems manual and air/water balance reports for all commissioned projects		
with the maintenance staff to help them better understand system operations and		
system status.		
4.3.2 Install Energy Management System (EMS)		
District Office:		
Integrated the existing EMS into the EMS server.	Completed	3,4
Santa Ana College:		
Proposition 39 Year 4 project planning to implement a campus wide EMS system that will		
cover an additional 15 buildings, as well as the Digital Media Center and Orange County	In Progress	3,4
Sheriff's Regional Training Academy.		
Santiago Canyon College:		
EMS Systems have been implemented and completed in January 2016.	Completed	3,4
4.3.3 Adjust Temperature Set Points and Schedule Operating Times	Completed	3, .
note regate composition of the analysis of the		
District Office:		
HVAC renovation was completed October 2014 and temperature set points to 72 degrees	Completed	3,4
on the cooling and 70 degrees on the heating. The HVAC was set to optimize building		
occupancy to take advantage of optimal usage and energy efficiency.		
Santa Ana College:		
The college has adjusted temperature set points last year, Fiscal Year 2014-2015, to 74		
degrees on the cooling end and 68 degrees on the heating side. These set points have	Completed	3,4
become standard operation procedures for the Fiscal Year 2015-2016. It has resulted in a		
reduction in electrical load during peak period, thus reducing electricity use.		
Santiago Canyon College:		
<ul> <li>Standardized HVAC set point ranges between 70 – 74 to maintain consistent</li> </ul>	Completed/	3,4
temperatures and removed ability for users to adjust temperature to provide better	Monitoring	for all
control of HVAC equipment	for all	

<ul> <li>Exterior lighting controls have been improved so the lights turn off and on based on local weather station sunrise and sunset data.</li> <li>Implemented the sequences into EMS Systems to allow the campus to automatically make set point adjustments at all the buildings when there is an all-call for energy reduction.</li> <li>Optimized HVAC building occupancy hour across all the buildings to take advantage of optimal start sequences.</li> </ul>	Completed/ Monitoring for all	3,4 for all
4.3.4 Optimize Building Occupancy Scheduling		
<u>District Office:</u> Optimized HVAC building occupancy hour across all the buildings to take advantage of optimal start sequences programmed into the new EMS server	Completed/ Ongoing Monitoring	3,4
Santiago Canyon College Optimized HVAC building occupancy hour across all the buildings to take advantage of optimal start sequences programmed into the new EMS server.	Completed/ Ongoing Monitoring	3,4
4.3.5 Optimize Equipment Scheduling		
<u>District Office:</u> The chiller and boiler plant have been optimized via new sequence programming to start and stop whenever there is a certain number of cooling and heating calls, thereby, eliminating the need for the equipment to run continuously.	Completed/ Ongoing Monitoring	3,4
Santa Ana College: Coordinate scheduling of internal and external events with HVAC team and college facilities coordinator to limit operation of HVAC systems when buildings are not being fully utilized.	Completed/ Ongoing Monitoring	3,4
<ul> <li>Santiago Canyon College:</li> <li>All new energy efficient projects have undergone commissioning and staff has been trained on EMS operations to maintain operations as originally commissioned.</li> <li>As part of the EMS sequences, all HVAC has been optimized via new sequence programming to start and stop whenever there is a certain number of cooling and heating calls, thereby, eliminating the need for the equipment to run continuously.</li> </ul>	Completed/ Ongoing Monitoring for both	3,4
4.3.6 Activate Energy-Saving Features for Appliances and Computers	Ongoing	3,4
4.3.7 Pursue Monitoring-Based Commissioning (MBCX) Retro-Commissioning (RCX)	Ongoing	3,4

#### **SECTION: 4.4 SUSTAINABLE BUILDING PRACTICES**

GOALS: 3, 4, & 8

SECTION: 4.4 SUSTAINABLE BUILDING PRACTICES	STATUS	GOALS
4.4.1 Establish a Green Building Standards  District follows 2013 California Green Code and has developed a facilities working group that includes College and District facility representative to review and update District	Completed	3,4,8
design guidelines/standards.  Santa Ana College: The Central Plant project is designed to meet Leadership in Energy and Environmental Design (LEED) Silver certification by United States Green Building Council. The energy efficient elements include water-efficient landscaping, plumbing fixtures, high efficient	In Progress	3,4,8
HVAC units, and daylighting.  Santiago Canyon College: Humanities Building received LEED Gold certification for energy efficient building.	Completed	3,4,8
A.4.2 Implement Sustainable Design Practices  District Office: District standards have been developed with sustainability in mind. For example, all new light fixtures are required to be LED type to reduce energy waste. All projects are required to be enrolled in SCE's 'Savings by Design' program to maximize energy savings.	Ongoing	1,3,4,6,8
Santa Ana College: The college is working with District Facilities team to implement design standards in repair/replacement projects, as well as in new construction.	Ongoing	1,3,4,6,8
Santiago Canyon College: The college is working with District Facilities team to implement design standards in repair/replacement projects, as well as in new construction.	Ongoing	1,3,4,6,8
4.4.3 Use an Integrated Systems Approach in Building Design	Ongoing	1,3,4,6,8
4.4.5 Commission New Building & Maintain Appropriate Operations to Support Functionally		
All new buildings and HVAC equipment are required to be commissioned.	Ongoing	3,4

#### **SECTION: 4.5 ON-SITE GENERATION AND RENEWABLE ENERGY**

GOAL: 3

SECTION: 4.5 ON-SITE GENERATION AND RENEWABLE ENERGY	STATUS	GOALS
4.5.1 Evaluate Clean Cogeneration and Renewable Energy Generation		
Santiago Canyon College: New Photo Voltaic Arrays were installed at the Humanities Building to generate 10%-20% of its energy use.	Completed	3
4.5.2 Evaluate Load Shifting Technologies		
Santa Ana College:		
• Currently under construction is the central plant project, which is based on permanent	In Progress	3
load shifting through thermal ice storage facilities for cooling.		
Implemented staggered starts for the electrical utilities, such as HVAC and other	In Progress	3
electrical draws. This allows for lower peaks during high demand electrical events.		

# SECTION: 4.6 TRANSPORTATION, COMMUTING AND CAMPUS FLEET & TRAVEL

**GOALS: 1 & 7** 

SECTION: 4.6 TRANSPORTATION, COMMUTING, AND CAMPUS FLEET & TRAVEL	STATUS	GOALS
4.6.1 Understand Commute and Travel Patterns  Santa Ana College:		
<ul> <li>Partnered with the AQMD to produce a commute and travel survey as part of the college's annual AQMD Rule 22 compliance survey.</li> <li>Traffic management plans developed for Spring 2014 and Fall 2014 for Santa Ana College for the new construction (Dunlap Hall and Central Plant).</li> <li>Parking surveys undertaken Fall 2014 and Spring 2015 to establish parking demand deadline.</li> </ul>	Completed for all	1,7 for all
4.6.2 Encourage and Enhance Public Transportation and Ridesharing Options		
Santa Ana College:		
Partnered with AQMD to meet with employees and students at the Fiscal Year 2015-2016	Completed	1,7
Sustain-a-Palooza event, as well as the classified appreciate event in May.	Completed	±,,
4.6.3 Encourage and Enhance Bicycling Options		
All new projects require design for bicycle racks space (5% of total spaces).	Ongoing	1,7
4.6.4 Improve Campus Fleet & Travel		
Santa Ana College: College has purchased two electric carts after trading them in for our old gas powered carts.	Completed	7
4.6.5 Enhance Student Distance Learning	Ongoing	1,7
4.6.6 Encourage Electric Vehicles for Commuters		
<ul> <li>Santa Ana College:</li> <li>Implemented electric car charging stations in Parking Lot #11 to encourage the use of</li> </ul>	Completed	1,7
electric vehicles and included premium parking for the users of the stations.	Completed	Ι,/
<ul> <li>Ongoing assessment for future electric vehicle charging facilities</li> </ul>	Ongoing	1,7

Santiago Canyon College:		
Ongoing assessment for future electric vehicle charging facilities	Ongoing	1,7

### SECTION: 4.7 WATER, WASTEWATER, AND SUSTAINABLE LANDSCAPING

SECTION: 4.7 WATER, WASTEWATER, AND SUSTAINABLE LANDSCAPING	STATUS	GOALS
4.7.1 Establish Water Conservation Goals	Completed	8
4.7.2 Implement Water Conservation Strategies		
District Office:		
Repaired irrigation system and removed the landscaping material to reduce water usage.	Completed	8
Repaired irrigation system and removed the landscaping material to reduce water usage.	Completed	Ü
Santa Ana College:		
Water conservation rebates with new low flow plumbing fixture installs	Completed	8 for all
Smart irrigation controllers installed.	Completed	
College utilized low flow drip irrigation systems	Completed	
Xeriscaping has been employed in multiple areas around campus	Completed	
Aerators have been checked and installed throughout campus faucets		
Signage has been installed throughout campus restrooms to encourage water	Completed	
efficiency/savings	Completed	
College has drastically reduced irrigation time and frequency	Completed	
Pressure washing has been significantly limited		
Plumbing/irrigation repairs are made quickly, and parts stocked, in order to reduce	In	
down time and leaking	Progress	
Planning and scoping the installation of smart irrigation controls on campus (part of		
the District's Scheduled Maintenance projects 2015-2016).	In	
Landscaping and Hardscape improvements a part of the Central Plant project	Progress	
Santiago Canyon College:		
A large water conservation project will be implemented in the summer 2016-2017 (part of		8
the District's Scheduled Maintenance projects 2015-2016) to upgrade all the irrigation	In	0
controllers. New weather stations will be installed and new controllers will communicate	Progress	
via WIFI online website to program. Users will be able to program controls and measure	Fiogress	
water usage. The controllers will turn the main valves on and off based on ambient		
weather conditions and forecasts. The new irrigation system will alert users to faulty		
valves, leaks, and excessive water use.		
4.7.3 Reduce Storm Water, Sewer Discharges, and Water Pollution		
Santa Ana College/Orange County Sheriff's Regional Training Academy:		
A storm water improvement project is being developed for the undeveloped property at	In	8
the Orange County Sheriff's Regional Training Academy to address the runoff drainage and	Progress	
erosion from property to implement best management practices to be implemented in		
2016-2017.		

Santiago Canyon College:	In	8
A storm water improvement project is planned for Fall 2016. The improvements will divert	Progress	
excess rain water from the soccer fields and the undeveloped lot, adjacent to the		
Coastkeeper's Garden, to the appropriate catch basins while filtering sediment and debris.		
This is project is an effort to implement storm water best management practices.		
4.7.4 Adopt Sustainable Landscaping Practices		
<u>District Office, Santa Ana College and Santiago Canyon College</u>		
All new Facility Design standards required low water use plants. And, irrigation systems	Ongoing	8
with controllers to reduce and monitor water use. All new construction will comply with		
California Green Code.		
• Implemented the 4-R's Action Plan: 1) Recognize 2) Reduce 3) Repair 4) Replace	Ongoing	8

# **SECTION: 4.8 SOLID WASTE REDUCTION AND MANAGEMENT**

SECTION: 4.8 SOLID WASTE REDUCTION AND MANAGEMENT	STATUS	GOALS
4.8.1 Create Waste Reduction Goals		
District Office:	)	
Procurement of new waste hauler is In Progress. A request for proposal for Integrated Waste	Ongoing	5
Management Services was advertised and a screening committee assembled to review the		
responses. The District's recommendation of the contract with a new Waste Management		
Service provider is currently under review and pending the Board of Trustees approval		
anticipated in May 2016.		
Santa Ana College:		
Coordination with waste hauler vendors to identify solid waste reduction goals and	Ongoing	5
strategies to improve processes and efforts.		
4.8.2 Maximize Programs Offered by Contracted Waste Hauler		
District Office:		
Applied for Beverage Container Recycling Grant Programs (RBC 28 & RBC 29) to promote		
recycling and to reduce waste to the landfill by installing beverage containers at the	In	5
District Office, Santa Ana College, Centennial Education Center, Digital Media Center,	Progress	
Santiago Canyon College, Orange Education Center and Orange County Sheriff's Regional		
Training Academy.		
Santa Ana College:		
Recycling, Construction & Demolition Recycling, Green waste, Food waste	For all	5
4.8.3 Reduce the Waste Stream to the Landfill	Ongoing	1,5,6
4.8.4 Improve Existing Recycling Programs	Ongoing	1,5
4.8.6 Green Waste and Food Waste Composting	Ongoing	5
4.8.7 Adopt Construction and Demolition (C&D) Recycling		
District:		
Implemented the Construction and Demolition recycling within the District's construction		
contract documents.	Completed	5
4.8.8 Consider Feasibility of On-Campus Recycling	Planned	5

#### **SECTION: 4.9 GREEN PURCHASING**

**GOALS: 1 & 6** 

SECTION: 4.9 GREEN PURCHASING	STATUS	GOALS
4.9.1 Sustainable Food Purchasing	Planned	1,6
4.9.2 Green Purchasing		
<u>District Office:</u> District Purchasing Department has received an award from Office Depot for the most purchased recycled paper for the Fiscal Year 2015.	Completed	6
<ul> <li>Santa Ana College:</li> <li>Purchasing less toxic cleaning solutions</li> <li>LED lighting reduces hazardous waste and the need to replace lamps</li> <li>Ensure paper products are spec'd that contain more recycled product</li> <li>Analyze copy making and equipment to ensure more efficient process and more recycled content in paper product</li> </ul>	Ongoing for all	6 for all

### **SECTION: 4.10 STUDENT AND CURRICULUM DEVELOPMENT**

GOALS: 1 & 2

SECTION: 4.10 STUDENT AND CURRICULUM DEVELOPMENT	STATUS	GOALS
4.10.1 Create a Sub-Committee in the Associated Student Government	Planned	1
4.10.2 Provide Professional Development and Create a Faculty Forum	Planned	1
4.10.3 Utilize Different Pathways to Integrate Sustainability in the Curriculum  Santa Ana College:		
<ul> <li>Engineering classes include sustainability coursework, and energy efficiency as a tenant to building design</li> </ul>	In Progress	1,2 for all
Biology has incorporated waste reduction and renewable energy sources into course curriculum	for all	
Automotive programs have focused instruction on alternative fuel vehicles, retro and maintenance of these vehicles		
SAC fine arts has developed a sustainable theme for some of its mural programs		
Santiago Canyon College:		
The Water Utility Science program is developing a Certificate of Proficiency in Water	Completed	1,2
Conservation		
4.10.4 Advocate for Change at the Statewide Level	Planned	1
4.10.5 Training Opportunities for Students		
Santa Ana College:		
Engineering, Biology, Geology field trips, sustainable design element in engineering, automotive program	Ongoing for all	1,2 for all
Sustain-a-Poolza has been a very successful event on campus		
Santiago Canyon College:		
	Completed	1,2

<ul> <li>The Library has developed a Water Conservation display for Fall 2015 to showcase water conservation facts and guidelines</li> <li>Earth Awareness Day was held on April 21, 2016, which featured fuel efficient cars, drought resistant landscape ideas, a tree planting near the Library, specialized equipment, water efficiency, and an environmental science career panel.</li> </ul>	for all	for all
<ul> <li>Free Electronic Recycling event took place on April 23, 2016</li> <li>Every semester a tour of the Conservation Garden is provided to international students who enrolled in the English Language program to promote awareness on water conservation and to build vocabulary.</li> </ul>	Completed Ongoing	1,2 for all
4.10.6 Joint Meeting with Faculty & Staff (Academic Senate) and Students (Associated Student Government)	Ongoing	1

# **SECTION: 4.11 CAMPUS AND COMMUNITY OUTREACH & AWARENESS**

SECTION: 4.11 CAMPUS AND COMMUITY OUTREACH & AWARENESS	STATUS	GOALS
4.11.1 Create a Website Dedicated to Campus Sustainability		
District created a website and information are posted.	Completed	1
4.11.3 Sustainability Events-Earth Day Awareness		
Santa Ana College  4th Annual Sustain-A-Palooza Earth Day event held on April 20, 2016  OC Food Access, US Green Building Council, Farmers Market, Selman Chevrolet  SAC Security – Forms Waived, Banning Ranch Conservatory, City of Santa Ana (Storm Drain), OC Transportation Authority, Heritage Museum, 3 Workshops on  Environmental Forensics, Sustainable Construction Projects, and Banning Ranch.	On-going/ Annually	1
<ul> <li>Santiago Canyon College</li> <li>Workshop on Air Quality conducted at SCC (4/23/13);</li> <li>Workshop on Water Quality and Water Sustainability Practices (4/23/13);</li> <li>4 Vehicles ranging from low emissions to zero emissions were demonstrated and available for test drives (4/23/13)</li> <li>The use of spoiled fruit for composting a garden through a fun "fruit smashing" events (4/24/14, 4/21/15, and 4/21/16)</li> </ul>	On-going/ Annually	1 for all
<ul> <li>Hyundai showcased one of their vehicles equipped with the latest Hybrid technology (4/24/14)</li> <li>SCC Water Utility Science Professor Stephen McLean disseminated information about the State's water supply and water conveyance (4/21/15)</li> <li>Shared Information about conserving water by converting traditional landscapes to ones that require less water or converting to newly designed water conserving irrigation systems (4/21/15);</li> <li>Panel Session about Environmental Careers (4/21/16)</li> <li>Conducted 4 Sustainability Expositions to date (4/23/13, 4/24/14, 4/21/15, and 4/21/16)</li> </ul>	On-going/ Annually for all	1 for all

4.11.4 Campus Specific Outreach & Awareness		
<ul> <li>Santiago Canyon College</li> <li>Conducted 4 Sustainability Expositions to date (4/23/13, 4/24/14, 4/21/15, and 4/21/16). The events have been open to the Community.</li> <li>E-Waste Event held in January 2016</li> </ul>	Completed for all	1 for all
4.11.5 Community Specific Outreach & Awareness  Santiago Canyon College: Conducted 4 Sustainability Expositions to date (4/23/13, 4/24/14, 4/21/15, and 4/21/16). The events have been open to the Community.	Completed	1

# **SECTION: 4.12 CREATE A CLIMATE ACTION PLAN**

GOALS: 2, 3, 4, 5, & 7

SECTION: 4.12 CREATE A CLIMATE ACTION PLAN	STATUS	GOALS
4.12.5 Make a Commitment to Reduce Greenhouse Gas Emission		
<u>District Office:</u> As part of the California Environmental Quality Act, the reduction of greenhouse gas emission is required for all new construction projects. Mitigation measures are implemented per project.	Ongoing	2,3,4,5,6,7
<ul> <li>Santa Ana College:</li> <li>Boiler replacement projects</li> <li>Pool heater replacement project</li> <li>Pool pump control system upgrade</li> <li>Electric car charging station</li> <li>Transformation from gas powered carts to electric</li> <li>Set point adjustments for HVAC units</li> </ul>	Completed /Ongoing In Progress In Progress Completed Completed Completed /Ongoing	2,3,4,5,6,7 for all