



# CUYAMACA COLLEGE

## 2013 SUSTAINABILITY STRATEGIC PLAN



GROSSMONT-CUYAMACA COMMUNITY  
COLLEGE DISTRICT

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CUYAMACA COLLEGE PRESIDENT  
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2013

# CUYAMACA COLLEGE SUSTAINABILITY STRATEGIC PLAN

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# LETTER FROM THE PRESIDENT



Cuyamaca College has a long history of developing a culture of sustainability which traverses both the physical footprint of the college as well as its mission to serve a diverse community of students through educational programs and services. One of the seven fundamental values of the college is “Environmental Stewardship and Sustainability,” where we take pride in our campus and its resources, and we strive to be on the forefront of sustainability and green technology.

Over the past few years the college’s Environmental Sustainability Planning Committee (ESPC) has been researching and writing our Sustainability Strategic Plan which will be used to guide the college forward in its commitment to developing a sustainable college in a sustainable community.

Cuyamaca College’s ESPC works to improve environmental stewardship and sustainability in all areas of the college. This includes educational programs and student services; facilities and operations; and professional development and community outreach activities. Cuyamaca’s 2013 Sustainability Strategic Plan presents our college’s Awards and Accomplishments as well as the aforementioned, each section presents a detailed commitment to sustain current efforts and further develop environmental sustainability as our modus operandi.

# VISION

Learning for the Future



C U Y A M A C A  
· C O L L E G E ·  
L E A R N I N G F O R  
T H E F U T U R E

# MISSION

The mission of Cuyamaca College is to serve a diverse community of students who seek to benefit from the college's wide range of educational programs and services.

In order to fulfill its commitment to student learning, the college provides:

- Instructional programs that meet student needs for transfer education, career technical education, general education and basic skills courses
- Community education programs and services
- Programs that promote economic, civic and cultural development

To facilitate this mission, Cuyamaca College provides a comprehensive range of support services including: outreach and access initiatives, academic and learning resources, student development programs, and multicultural and co-curricular activities.

In support of its mission, Cuyamaca College structures its planning processes and engages the college community by pursuing the following areas of focus, which form the foundation of the 2010-2016 Strategic Plan:

- Student Access
- Learning and Student Success
- Value and Support of Employees
- Economic and Community Development
- Fiscal and Physical Resources

# VALUES

- **Equitable Access:** We value equitable access that facilitates participation in academic programs and support services needed to meet students' educational goals.
- **Individual Student Success:** We offer courses and programs leading to degrees, certificates, transfer, employment, personal enhancement, and lifelong learning.
- **Academic Excellence:** We employ a variety of methodologies and technologies responsive to students' needs and conducive to students' varied educational and experiential backgrounds and learning styles.
- **Innovation and Creativity:** We value innovation and creativity in order to encourage our students to question and to expand their thinking.
- **Diversity and Social Harmony:** We value and embrace diversity and create opportunities for our college community to work together to meet the challenges of a complex global society.
- **Environmental Stewardship and Sustainability:** We take pride in our campus and its resources, and we strive to be on the forefront of sustainability and green technology.
- **Strong Community Relations:** We recognize our role in the cultural, educational, technological, and economic/workforce development of the communities we serve.

# PARTICIPANTS

## Committee Members List:

Molly Ash, Continuing Education & Workforce Training, Grants

George Attar, Administrative Services, Operations

Tracy Calahan, Continuing Education & Workforce Training, Grants

Terry Carroll, Administrative Services, Maintenance

Camille Currier, Continuing Education and Workforce Training, Grants

George Diaz, Administrative Services, Maintenance

Martin DuBord, Administrative Services, Operations

Kim Dudzik, Science/Engineering

Paolo Espaldon, Continuing Education & Workforce Training, Grants

Sal Espiritu, Administrative Services, Maintenance

Bruce Farnham, Administrative Services, Facilities and Operations

Dave Francis, Graphics

Paul Funk, Administrative Services, Grounds

Michelle Garcia, Biology

John Heimaster, Administrative Services, Grounds

Bernard Higgins, Administrative Services, Grounds

Molly Hughes, Continuing Education & Workforce Training, Grants

Jonathan Kropp, Continuing Education & Workforce Training, Grants

Jennifer Lewis, Continuing Education & Workforce Training

Barbara Modica, Administrative Services

Tyla Montgomery, San Diego Resource Management Associates (SDRMA)

Alan Ridley, Greener Incentives Alliance, Consultant

Tonette Salter, Instruction Division II, Grants

Arleen Satele, Administrative Services

Donald Schultz, Ornamental Horticulture

Paul Silva, Administrative Services, Maintenance

Patty Tacket, Administrative Services, Grounds

Joy Tapscott, Administrative Services

Glen Widdop, Smart Safety, Consultant

Michael Wonsidler, County of San Diego, Waste Management, Consultant

## Student List:

Andrea Loomis

Besiana Sahiti

Bill Redmon

Chris Hernandez

Christopher Kohlmann

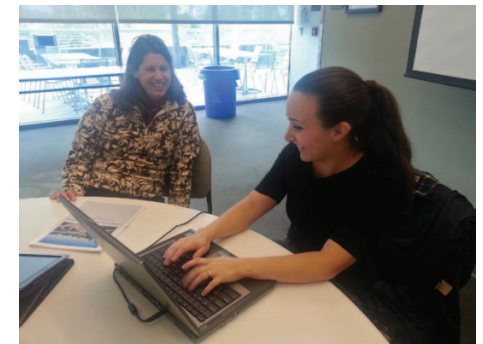
Cindy Rocha

Clarence To

Heather Dumais

Maggie Guan

Michael Casarrubig



BACKGROUND

BACKGROUND

# BACKGROUND

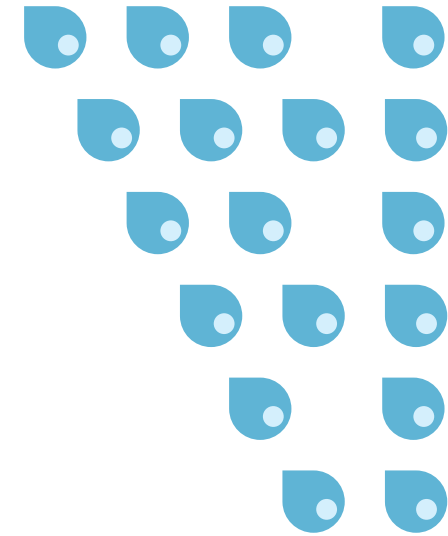
Cuyamaca College is committed to incorporating sustainability as a principle component in running the institution. To achieve the infusion of sustainability throughout the College, a Sustainability Strategic Plan is being launched to guide the College forward in its commitment to developing a sustainable college in a sustainable community.

Cuyamaca College's Environmental Sustainability Planning Committee (ESPC) works to improve environmental stewardship and sustainability in all areas of the college. This includes educational programs and student services; facilities and

operations; professional development and community outreach activities. The ESPC makes recommendations related to environmental stewardship to enhance the teaching and overall learning environment in order to improve student success. The ESPC is responsible for developing, monitoring, and revising the College Sustainability Plan, and making recommendations for implementation.

- Grossmont-Cuyamaca Community College District 2013 Facilities Master Plan
- Cuyamaca College Background



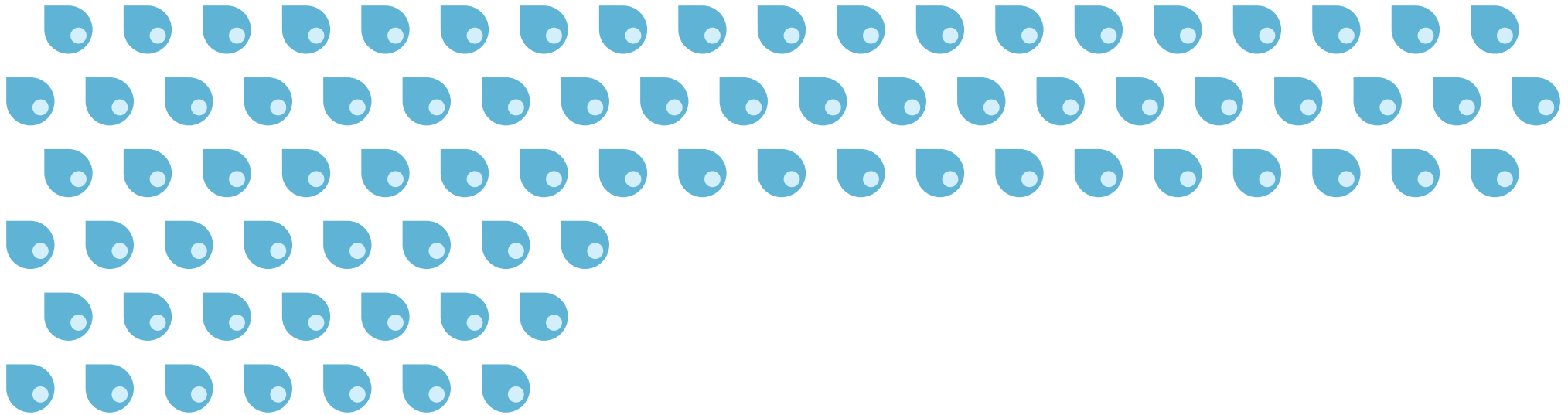


# GCCCD SUSTAINABILITY ESTABLISHING A SUSTAINABILITY PLAN

The 2012 GCCCD Educational Master Plan calls for the creation of a Sustainability Plan. As one of the district's integrated long-term plans, it will set the stage for allocation of resources toward the districtwide priority to "Develop sustainability initiatives that make GCCCD a regional leader in responsible and accountable stewardship of all resources." The facilities master planning process afforded the District with the opportunity to establish districtwide sustainability goals and brainstorm ideas.

On May 11, 2012, Sustainability Workshop 1 was held, bringing together representatives from both of the colleges and District Services to share their experiences, brainstorm ideas for future initiatives, and establish draft sustainability goals that will be developed into the GCCCD Sustainability Plan. As workshop participants engaged in the discussion, their visions and ideas were graphically recorded in real time. Proposed actions were recorded on colorful sticky-notes and priorities were identified with colored dots. Participants shared and learned that the GCCCD community has a strong, if not widely known, record of sustainability accomplishments. This revelation highlighted a benefit of districtwide integrated planning for sustainability – that it will magnify the impact of future efforts and "promote a culture of sustainability" throughout the district community.





On December 17, 2012, Sustainability Workshop 2 was held. The district stakeholders gathered again to review the completed analysis of existing conditions and provide feedback on the recommendations for sustainable facilities and site improvements. These recommendations have been incorporated throughout the *Facilities Master Plan*.

### Workshop 1

- Share Vision Statements + Successes
- Provide Feedback on Analysis
- Brainstorm Ideas
- Develop Draft Goals + Set Priorities

### Workshop 2

- Revisit + Add to Vision Statements from Workshop 1
- Map Solar Energy on the Campuses
- Provide Feedback on Analysis + Recommendations

The next sub-section, Sustainability Goals, is a record of the discussion from Workshop 1 and includes ideas for initiatives that will guide many aspects of district life, including some that go beyond facilities planning into culture, education and training, and operations. These goals are intended to be developed further into the districtwide Sustainability Plan, which will guide the integration of green practices into all endeavors and:

*“Promote a culture of sustainability through leadership; practices; policies; and districtwide engagement of employees, students, and the community.”*

This statement, which was drafted by the participants of Workshop 1, expresses the overarching sustainability goal for the district.



# SUSTAINABILITY GOALS

Be local and regional leaders in training the green workforce **01**

Through high performance-driven curriculum and culture, strive to prepare students for careers and lifestyles in our collective sustainable future.

## Host Community Sustainability Education Events

- Host sustainable urban landscape conference.
- Host sustainability awareness training.
- Build more facilities like the water and community demonstration gardens.
- Provide interpretive signage and educational kiosks with green touchscreens.

## Prepare and Educate the Workforce

- Teach sustainability in the classroom.
- Provide stackable credentials, Economic and Workforce Development (EWD).
- Develop the green work force, Sustainability Education and Economic Development (SEED) Center – Partner and leverage relationships with the clean technology industry and with the Center for Sustainable Energy.
- Demonstrate and exhibit GCCCD's accomplishments around and within the campus.

## Campuses as Living Laboratories

- Use the buildings and grounds as learning tools to promote sustainability and awareness.
- Promote GCCCD's accomplishments, to the community and among ourselves, to develop awareness and action.

Reduce, reuse and recycle **02**

Promote a culture which reduces waste by actively using less, and then supplementing this effort by reusing and recycling.

## Reuse of Materials

- Go paperless: support paper reduction via digital distribution.
- Seek and promote a partnership with Waste Management.
- Provide E-books and rentals in the campus bookstore.

## Composting + Green Waste

- Expand green waste practices off-site.
- Make landscaping choices that reduce green waste: "Put the right plant in the right place".
- Coordinate with the County of San Diego Earth Machine and Sodexo to explore food waste reduction options.

## Hazmat Storage + Disposal

- E-Waste - Provide on-campus collection of batteries, styrofoam, and other "non-recyclable" items.

## Education and Training

- Expand and promote Environmental Health and Safety (EHS) and Environmental Health and Safety Management (EHSM) training for students.

## Renovation vs. Building New

- Consider reuse, renovation, and remodeling of existing buildings as an alternative to building new.

Improve environments for working and learning **03**

Provide a safe, welcoming, inviting, healthy, and comfortable working and learning environment that supports student success.

## Improve Air Quality

- Provide access to natural ventilation via operable windows.
- Specify low-emitting furniture + finishes (Green Seal).
- Use environmentally-safe cleaning products.

## Improve Occupant Comfort

- Provide connections to outdoor views.
- Provide access to natural light.
- Specify acoustically-treated materials to prevent sound penetration through spaces.
- Design facilities with tight building envelopes using durable and high quality materials and insulation to provide thermal comfort.

Foster environmental stewardship and economic prosperity

04

Promote a culture of sustainability through leadership, practices, policies, and districtwide engagement.

### Achieve Triple Bottom Line - People/Planet/Prosperity

- Reduce our carbon footprint.
- Be self-sustaining in terms of energy.
- Strive for zero waste and zero energy.

### Promote GCCCD as a Sustainable Leader

- Publicize sustainable actions by GCCCD through websites and on-campus interactive educational signage.

### Be Champions of Sustainability

- Establish a Sustainability Committee.
- Educate the students, staff, and community by using the campuses as learning tools.
- Demonstrate how sustainability can be simultaneously inviting, beautiful, and good for the environment.
- Promote further regional mini-grants for LEED Green Associate training.

Strive for energy independence with collective consciousness

05

Be good stewards of the environment by using less energy while providing the same types and levels of services districtwide.

### Change Behavior

- "Reduce before we produce energy."
- Consume water and energy wisely.

### Design High Performance Facilities

- Incorporate passive solar design strategies.
- Retrofit existing buildings.
- Consider implementation of a micro-grid that allows the campuses to be self-reliant.

### Use Efficient Appliances, Equipment and Computers

- Use smart outlets, CFLs, and T-8 light fixtures.
- Convert campus fleets to electric vehicles.
- Use occupancy and photosensors to manage electrical consumption.

### Incorporate Renewables

- Building Integrated Photovoltaics (BIPV)
- Wind Technology
- Fuel Cell Technology

### Track Progress to Improve Performance

- Employ retro-commissioning.
- Connect to building EMS to monitor use.
- Measure and report progress annually.

Be responsible and accountable for water use and management

06

Acknowledge that "water is the new gold" and through campus water-wise conservation practices, manage water as a sustainable resource to protect the environment and to meet current and future demand.

### Optimize Building Water Efficiency

- Install low-flow/no-flow fixtures with motion sensors and waterless urinals.
- Cover the swimming pool to prevent evaporation and save energy.
- Provide signage asking users to inform facilities staff of plumbing fixture leaks.

### Implement Site Storm Water Quantity and Quality Control Measures

- Pervious paving
- Cisterns
- Stormceptors
- Bioswales
- Permeable landscaping
- Green paving systems at fire access roads

### Incorporate Native/Adapted Drought Tolerant Vegetation

- Increase the use of xeriscape/drought-tolerant plants.
- Install rain gardens and bioswales.
- Reduce turf and water-loving plant typologies.
- Use recycled water (purple pipe) for irrigation.

# CUYAMACA COLLEGE SUSTAINABILITY MISSION, VALUES, RESOURCES

## MISSION STATEMENT

The Cuyamaca College Environmental Sustainability Planning Committee (ESPC) is committed to positively impacting Cuyamaca College's environmental footprint by instilling the value of sustainability in our students, faculty, staff, administration and our community. We serve as a resource, a catalyst, and an advocate enhancing Cuyamaca College's reputation as a leader in sustainability and exist to identify, evaluate, and implement sustainable opportunities related to facilities, instruction, student services, professional development, and community development.

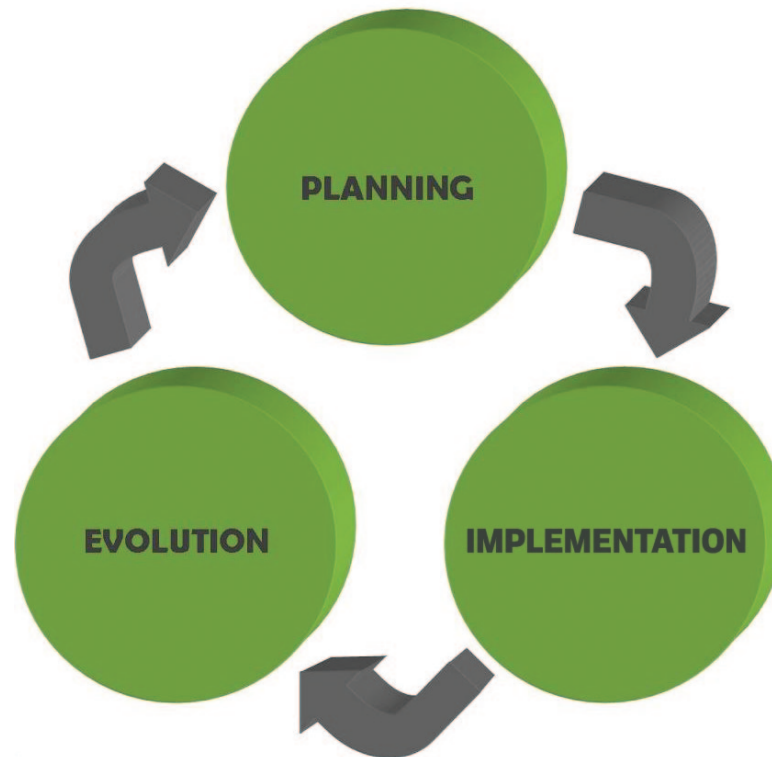
## VALUES

- Promote environmental stewardship
- Increase efficient use of natural resources
- Practice sustainable supply chain management
- Continue to build partnerships
- Foster a culture of sustainability that can be passed on to future generations
- Increase energy and water efficiency
- Promote sustainable modes of transportation
- Restore natural habitat
- Promote environmental and food justice

## RESOURCES

Many of the educational objectives in this and subsequent areas of this plan can be addressed through the College's routine shared governance processes and through the efforts of interested students and employees. In addition, the College will, as appropriate, seek appropriate grant funding for the purpose of promoting education for sustainability. For example, to develop more sustainability curricula and infuse sustainability into existing curricula may require new resources to provide faculty with professional development opportunities on how best to accomplish those objectives. The College will seek grant funding and may also evaluate the feasibility of offering competitive mini-grants to faculty for curriculum development.

Implementation will begin with an assessment of available resources, the prioritization of the most critical tasks in each time period, the creation of timelines, and assignment of responsibility to given individuals and units. Many details of implementation will be decided and planned at that time. Links with the budgeting system will occur during the implementation phase and will include the vigorous exploration of various funding sources. As always, the College will base its efforts on the educational, environmental, social and economic fronts on the rational exploitation of its resource base. The implementation of this Plan, once begun is quickly followed by the evaluation stage. As soon as implementation is underway, data should be gathered. The College will want to assess the results of measures taken and determine what adjustments will need to be planned for the next turn of the cycle.





ANALYSIS

ANALYSIS



# ANALYSIS

- Waste Audit
- Utility Use

# CUYAMACA COLLEGE WASTE AUDIT

Feb 22, 2013, by Tyla Montgomery, P.E.  
Recycling Specialist for San Diego Resource  
Management Associates

Funding provided by County of San Diego

- **Existing Practices**
- **Observations**
- **Opportunities**

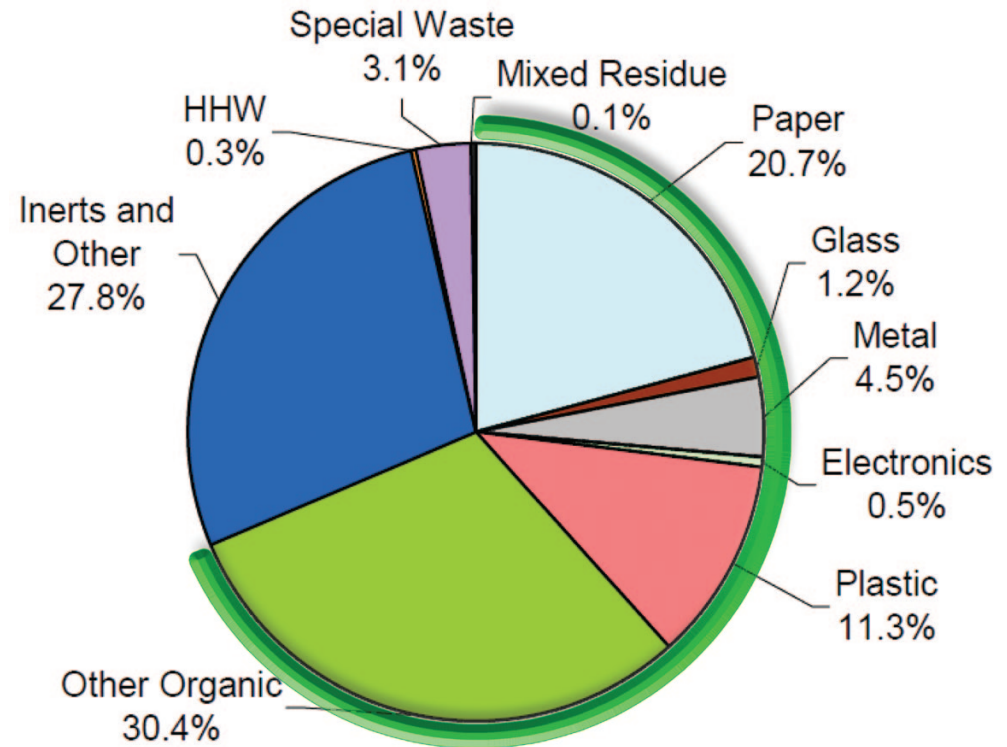


Tyla Montgomery

# TYPICAL WASTE COMPOSITION

Nearly 70% readily divertible

Source: 2008 Statewide Waste Characterization Study



# WASTE AND CARBON EMISSIONS

## Results for Cuyamaca College



### Share your results

This sheet provides a summary of the information you have provided so far. Email, save, or print this page to share the benefits of recycling and waste reduction.

### Current Trash and Recycling

**180** tons is roughly the amount of trash your business currently throws away annually.

**\$5,322** is the estimated amount that you spend on disposing this trash each year.

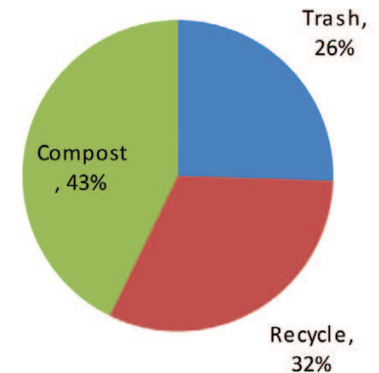
**525** tons is about how much your business currently recycles and/or composts annually.

**\$72,732** is the estimated amount that this recycling and composting saves your business by avoiding disposal costs.

**\$11,289** is about how much money this recycling and/or composting costs per year.

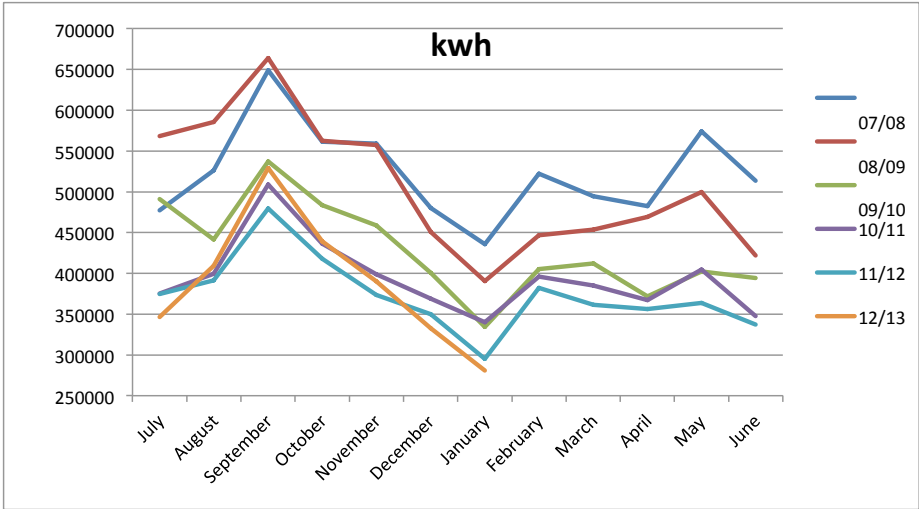
**879** metric tons of CO<sub>2</sub>e is the amount of greenhouse gas emissions that this recycling avoids each year.

### Right now, material goes to:

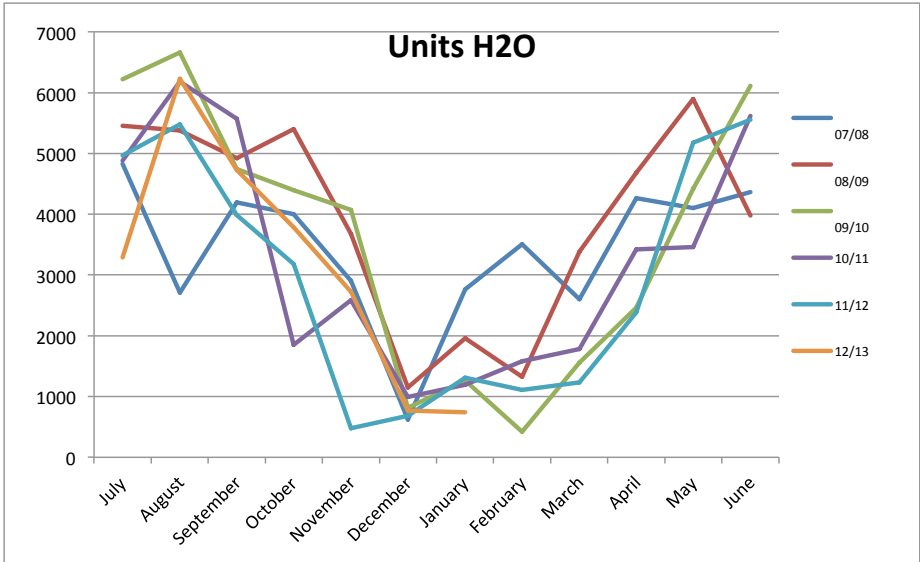


# CUYAMACA COLLEGE UTILITY USE

Cuyamaca 6 Year Electric Use



Cuyamaca 6 Year Water Use



Note: Increasing sustainable-use efforts have resulted in a significant decrease in electrical and water use over the last 6 years.

# EXISTING PRACTICES AND OBSERVATIONS

**Baler!**



**Side by Side Recycling Bins!**



**Signage - What is Recyclable?**



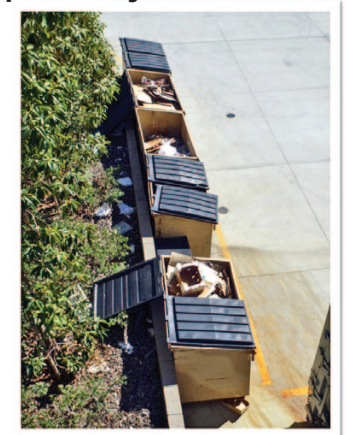
**Which is Which?**



**In the Trash**



**Paper Only?**



**Yard Trimmings and Mulching!**



**Pallets and Plants**



**Compactor**



# OPPORTUNITIES?

## **Outreach and Education**

- In-person meeting with Depts on recyclable materials and procedures
- Email announcement and semester reminders

## **Share existing practices**

- Pallets
- Onsite mulching/ recycling greens
- Dedicated paper and cardboard recycling
- Custodial review of how cardboard gets to the baler

## **Consistent labeling of bins and signage**

- Print signs in-house?
- Consider multi-lingual campaigns
- County can provide stickers for campus recycling cans

## **Add recycling dumpsters**

- Facilities building
- Add yard waste dumpsters at horticulture if they cannot get material to the other bins on campus

## **It's not the facilities' job, everyone participates.**

## **Light Bulbs and Universal Waste**

- Facilities needs help in collecting items for recycling
- Includes batteries, print cartridges

## **Food Diversion**

- Donation to Charity
- Onsite composting at community garden or horticulture dept
- Detailed audit to quantify food opportunities

## **Incorporation of Waste Reduction into Sustainability Plan**

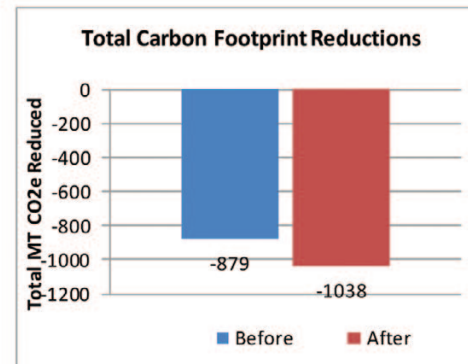
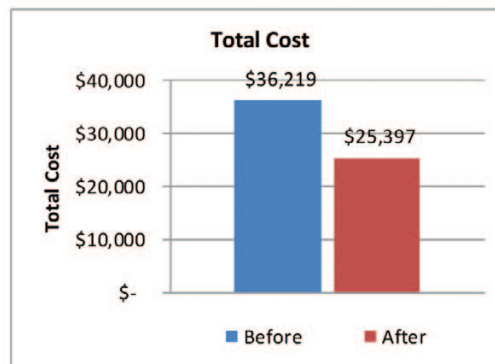
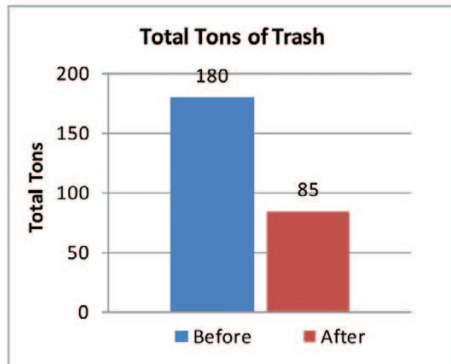
- Waste reduction/ recycling incorporated into Sustainability curriculum, including composting
- Dept. specific procurement practices to reduce disposable products brought onsite
- Through cost-savings or grant; hiring of staff person to oversee campus-wide recycling practices
- Simplify the duties of facilities staff

# COST AND CARBON SAVINGS

## Results for Cuyamaca College



### Future Trash and Recycling




By reducing your waste by **95** tons annually, your business will:

- avoid \$13,210** in trash disposal and material purchasing costs.
- spend \$3,105** in recycling costs.

for a net savings of **\$10,105**

**prevent 159** MT CO<sub>2</sub>e, which is roughly equal to:

**30** Annual tailpipe emissions from U.S. cars. 

 **19** Emissions from the electricity use of U.S. homes over a year.

Emissions from **370** barrels of oil consumed. 

 The carbon dioxide captured by **4,081** tree seedlings grown over 10 years.



# AWARDS & ACCOMPLISHMENTS

# AWARDS & ACCOMPLISHMENTS

- Awards
- Accomplishments
  - Educational and Student Services
  - Maintenance and Operations
  - Professional Development & Community Partnerships

# AWARDS

May 2012. Ornamental Horticulture Dept. receiving the inaugural Community College State Board of Governors Sustainability Award for faculty and student initiative



2007 San Diego County Recycling Award from the County of San Diego



# ACCOMPLISHMENTS - EDUCATIONAL AND STUDENT SERVICES

## STUDENT CLUBS

### Cuyamaca College Botanical Society

#### Blue Coyotes:

Promoting sustainability with student led initiatives. Promoting "bring your own cup" to reduce waste.

### Development of the Nature Preserve

#### Tree Frog Grant with SDG&E:

The project will restore Pacific Tree frog habitat and improve water resources, while educating high school students in science, technology, engineering and mathematics (STEM). Through field research, laboratory experiments and applying geospatial technologies, students will create a restoration plan for tree frogs in the preserve. This project will establish the Nature Preserve as a living environmental education laboratory.



#### Cuyamaca Science and Conservation Club:

work on categorizing vegetation and rehabilitation of Riparian area of preserve, related field trips and keynote speakers. The club will also act as mentors to the high school students accepted into the Tree Frog Grant workshop.

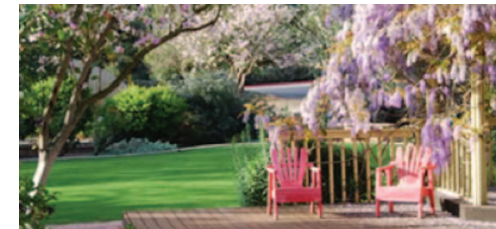
Invasive clean-up day in preserve (April 20, 2013)



## COURSES

### Sustainable Urban Landscaping Degree

OH department has created a Sustainable Urban Landscape web site to provide a resource to the landscape industry to be better informed.



### Ethnobotany and Ethnoecology courses

Funded through Kumeyaay Community College focusing on sustainable practices of the Kumeyaay in their uses of native plants and their land management techniques.





## ACCOMPLISHMENTS - MAINTENANCE AND OPERATIONS

- 5 Year Master Plan with Sustainability section developed
- Newer buildings (last 7 years) have Energy Star compliant roofing
- 5 Year Master Plan 2013 includes recommendations for drought tolerant vegetation and landscaped areas.
- Calsense Computer Automated irrigation system serves over 80% of campus areas.
- All buildings are now outfitted with water saving fixtures in bathrooms to exceed federal standards for water conservation.
- Selected irrigated areas have had sprinkler heads replaced with low flow heads and drip irrigation system.
- Stormwater management permits in place for all new construction over the last 7 years.
- New HVAC/R equipment installation and replacements over the last 7 years use CFC Free refrigerants.
- College works with the County of San Diego to maximize recycling efforts.
- All new and existing campus buildings outfitted with low mercury, energy efficient fluorescent lighting.
- All buildings utilize CO2 monitoring to maximize indoor air quality by way of economizer operation.
- No Smoking Policy adopted and enforced on campus property.
- Operations specifies "green rated" cleaning chemicals from all suppliers to reduce indoor air pollution.
- All green waste is collected and mulched for use on campus grounds to enhance pest control and reduce use of herbicides for weed control.
- Reduced utilities consumption by Gas=53%, Water= 12%, and Elect.=28% over the last 5 years by developing comprehensive energy conservation plan.



# ACCOMPLISHMENTS – PROFESSIONAL DEVELOPMENT & COMMUNITY PARTNERSHIPS

## EDUCATIONAL SERVICES

### Continuing Education & Workforce Training (CEWT)

#### Green Grants: (Over \$6 million 2008-2013)

- **Environmental Training Center (ETC)** (Funded multiple times): The ETC is a California Community Colleges State Chancellor's Office Economic and Workforce Development Initiative housed at Cuyamaca College. This Center serves more than 2,000 students and businesses throughout San Diego and Imperial counties each year by providing a variety of environmental health and safety training and certifications.
- **Sustainable Infrastructure:** The Sustainable Infrastructure grant addresses the need for a skilled and well trained workforce in two demand driven green training initiatives: California Advanced Lighting Controls Training Program (CALCTP) and Electric Vehicle Infrastructure Training Program (EVITP).

- **San Diego Gas & Electric Green Campus & Green Building Program:**

1. *Green Campus Project:* Funding to support a "Students for Change" Initiative at Cuyamaca College where student leaders will submit proposals for energy efficiency projects on campus. Funding will be used for materials necessary to complete projects selected and other program needs.
2. *Sustainable Green Building Pathways Project:* Funding to support a green career exploration class and internships for California Conservation Corps (CCC) members.

- **Regional Consortium:** LEED Green Associate Grant: This Regional Consortium professional development grant was written to facilitate the training and credentialing of Region 10 faculty, staff, and administrators in LEED. This grant enabled multiple people from various colleges to sit for the LEED Green Associate exam.

- **Sustainable Supply Chain Management (SsCM):** The SsCM grant was written and funded to develop a Sustainable Supply Chain Management program that will provide over 100 hours of instruction and 20-40 hours of work experience for students in the San Diego region.

- **Green Building Pre-Apprenticeship Program (GBP):** (Funded multiple times): The GBP project provided over a 100 hours of instruction in the area of green building by utilizing a survey approach to green training, affording student the opportunity to learn about multiple disciplines before choosing a more technical course (examples include: Energy Efficiency, Solar, Water, etc).
- **Solar PV & Thermal Installation:** The Solar Installation program provided 120 hours of safety and installation training to dislocated and adult workers in either Solar Photovoltaics or Solar Thermal.



- **Next Generation Solar: Solar Sales, Estimation & Design:** This solar grant trained underemployed and unemployed workers in the areas of solar sales, design & estimation as well as building integrated photovoltaics
- **Solar Sales Estimation & Design: Best Practices:** This grant builds on the work completed on the Next Generation grant by continuing to fund student training to provide best practices.
- **Workforce Innovation Program: Green Ventures:** This project utilizes economic development strategies, and build on regional economic trends, by partnering with Santana High School, a K-12/ROCP leader in San Diego County to provide clear career pathways from high school to Cuyamaca College's green programs.
- **California Advanced Lighting Controls Training Program (CALCTP):** The California Advanced Lighting Controls Training Program (CALCTP) is a statewide initiative aimed at increasing the use of advanced lighting controls in commercial buildings and industrial facilities.

- **San Diego Intergenerational Garden Project:** The effort to secure funding and build-out an Intergenerational Garden has been spearheaded by CEWT in 2012-13. The Intergenerational Garden (1/3 of an acre adjacent to the Child Development Center) is a place where children from the College Child Development Center will work with seniors (55+) from the community to learn about where food comes from, making healthy food choices and



sharing the lifetime of knowledge our senior citizens have with our children.

- **Border Area Development and Growth of Environmental Responsibility (BADGER):** This project addressed the training needs of the automotive businesses alongside the U.S./ Mexico border that generate hazardous waste, produce air emissions and also generate waste that contribute to storm-water pollution and other environmental issues.
- **California Clean Energy:** This project trained unemployed and underemployed workers in Building Performance (BPI), Energy Shell Training, Energy Efficiency Standards, and Solar Installation.
- **Gateway to Green (Water):** This initiative innovatively combined the expertise of Cuyamaca College's Water/Wastewater Technology, Ornamental Horticulture, and Environmental Health and Safety programs to create certificate and preparation coursework which leads to state and national industry credentialing in Water Conservation Practitioner, Water Management, and Landscape Irrigation Auditor in the rapidly expanding water industry.
- **California WaterWorks:** This collaborative grant focused on identifying, recruiting, and training the next generation of water and wastewater industry professionals. Cuyamaca College leads efforts to enhance existing programs and is assisting other community colleges in starting new degree and certificate programs.

## Growing Green Careers Symposium

With about 164 career technical educators, administrators, counselors, green industry experts, and students attending, the Growing Green Careers Symposium held Friday, Oct. 16, 2009 at Cuyamaca College was a smashing success. This all-day event showcased models for



“greening” existing curricula and also provided hands-on opportunities to touch and see biodiesel production lab equipment, an unveiling of the eco-friendly model of a soon-to-be-built wing of Scripps Ranch High School, a propane lawnmower and a shuttle bus from San Diego’s first green shuttle service, Wherever Shuttle, which runs on vegetable oil. Its founder is a Cuyamaca College graduate.

## Green Business Symposium

This event was made possible by a grant from the Department of Labor, the Clean Energy Workforce Training Partnership. The team that put the event on included staff from Cuyamaca College, the San Diego Workforce Partnership and the California Center for Sustainable Energy. This successful event held on May 26, 2011 was attended by over 250 people and showed the great interest and optimistic hope for the future of green enterprise in San Diego.



## Cuyamaca College’s Spring Garden Festival

This festival is produced by the college’s Ornamental Horticulture



Department and the Water Conservation Garden. April 27, 2013 marked the event’s 20th anniversary!



## Sustainable Urban Landscape Conference

The Ornamental Horticulture (OH) Department hosted its 5th Annual Sustainable Urban Landscape Conference on March 7, 2013. Over 1,500 people attended from all aspects of the landscape industry. Sustainable landscape architecture is a category of sustainable design concerned with the planning and design of outdoor space. This can include ecological, social and economic aspects of sustainability.







# CUYAMACA COLLEGE PARTNERSHIPS

# **CUYAMACA COLLEGE PARTNERSHIPS**

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## GRID Alternatives

*GRID Alternatives' mission is to empower communities in need by providing renewable energy and energy efficiency services, equipment, and training. GRID Alternatives works collaboratively with communities and local organizations to identify specific needs and to develop renewable energy solutions that are environmentally, socially, and economically sustainable.*

GRID Alternatives has partnered with Cuyamaca on several green grants and provided hands-on installation experience to students in green programs. Grid Alternatives utilized Cuyamaca students to install solar panels on low income housing throughout San Diego.



## California Center for Sustainable Energy

*The California Center for Sustainable Energy (CCSE) is an independent, nonprofit 501(c)(3) corporation that helps residents, businesses and public agencies save energy, reduce grid demand and generate their own power through a variety of rebate, technical assistance and education programs. CCSE also provides the community with objective information, research, analysis and long-term planning on energy issues and technologies.*

The CCSE is a longtime partner of Cuyamaca College. The CCSE has provided Cuyamaca College with industry expertise, free curriculum, student tours, training facilities, co-chaired the San Diego Green Coalition (with Cuyamaca College and the San Diego Workforce Partnership) and even donated state of the art equipment for training.



## bp

*bp provides customers with fuel for transportation, energy for heat and light, lubricants to keep engines moving and petrochemical products used to make everyday items*

BP generously donated solar equipment to our Solar Installation class along with pens, hats, and workbooks.



## U.S. Green Building Council

*The U.S. Green Building Council (USGBC) is a 501(c)(3) nonprofit organization committed to a prosperous and sustainable future for our nation through cost-efficient and energy-saving green buildings..*

The USGBC has partnered with Cuyamaca College by making us one of their green schools partners. The partnership has provided Cuyamaca College with free membership to the USGBC affording students, faculty, staff, and administrators the ability to receive reduced pricing (materials, courses, and credentials). Additionally, Cuyamaca College is able to get free materials and curriculum to facilitate green building courses.



### San Diego Gas and Electric (SDGE)

SDGE continues to partner with Cuyamaca College in countless ways. SDGE has donated cutting edge facilities space to facilitate green training/events as well as awarding Cuyamaca multiple grants all pertaining to sustainability and student lead clubs.



### Ford Motor Company

*Ford Motor Company is focused on creating a strong business that builds great products that contribute to a better world.*

Ford through its long time partnership with Cuyamaca College's Automotive Department donated a 2005 Ford Escape Hybrid. This green vehicle provides a great opportunity for student to gain hands-on experience with new trending technologies resulting from America's sustainability movement



### San Diego Workforce Partnership

*The San Diego Workforce Partnership funds job training programs that enable eligible participants to develop the skills and knowledge needed for emerging career opportunities within such fields as green jobs, healthcare, and clean technology. A network of career centers and community partners, funded by the San Diego Workforce Partnership, assists eligible jobseekers interested in subsidized job training. Additionally, The San Diego Workforce Partnership serves as a vital source of information on the region's present and projected labor market.*

The San Diego Workforce Partnership (local workforce investment board) has partnered on many projects with Cuyamaca College as well as funded over a \$1,000,000 in green workforce education grants to Cuyamaca College. The SDWP has also provided Cuyamaca College with important labor market scans, expertise, and additional marketing channels.



### Clipper Creek

*Clipper Creek's mission is to Design the safest, most innovative, and smartest grid-ready EV charging stations on the market. Deliver the most cost effective and reliable EV charging solutions available. ClipperCreek advances the plug-in vehicle market and broadens the acceptance of the most exciting vehicle revolution in a century.*

Clipper Creek recently partnered with Cuyamaca's Sustainable Infrastructure Project to donate two electrical vehicle charging units enabling students to gain hands-on training.



# SUSTAINABILITY STRATEGIC PLAN

# Educational Programs & Student Services



# EDUCATIONAL PROGRAMS AND STUDENT SERVICES SUSTAINABILITY PLAN

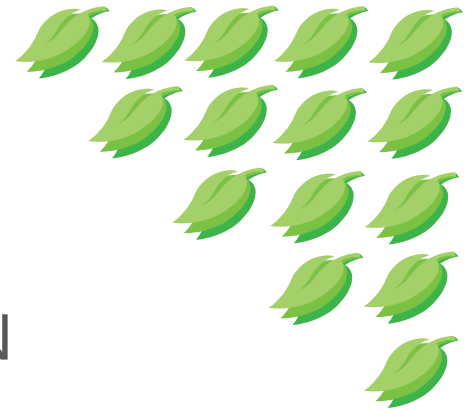
Cuyamaca College is committed to incorporating sustainability as a principle component in running the institution. To achieve the infusion of sustainability throughout the College, a Sustainability Strategic Plan is being launched to guide the College forward in its commitment to developing a sustainable college in a sustainable community. This plan focusses on three areas. The first area of focus concentrates on the education of students and the infusion of sustainability throughout curriculum and fostering student success by preparing students for the careers of tomorrow. Please refer to Sections A and B for information regarding Educational Programs and Student Services, respectively. The second area of focus contains plans to develop a sustainable approach to Operations and Facilities Management. It is a guide for sustainable waste management, energy consumption, transportation, purchasing, landscaping, construction, and similar

facilities-based concerns. Please refer to Section C for an overview of the Sustainability Strategic Plan and information on the above topics. The third area consists of a plan for fostering community partnerships as an important means for providing sustainable education. Please refer to Section D for complete information regarding community outreach.

Education is a powerful agent for positive change. Cuyamaca College is dedicated to educating students and fostering their success by preparing them for the careers of tomorrow. As economic and environmental sustainability becomes increasingly important to all facets of society, Cuyamaca College will play an important role in moving current and future generations toward a sustainable future. Greening educational curriculum by using campus-wide infrastructure and natural resources as pedagogical tools to inform students about

systems thinking and thereby develop a holistic view of education for sustainable development is a priority in achieving this goal. By embedding social responsibility sustainable development strategies into existing courses, and encouraging the development of new curricula with an environmental and sustainability focus, Cuyamaca College should strive to create opportunities for student involvement so that on campus sustainability initiatives are clear and have a visible focus.

In order to achieve the goal of promoting environmental, social, and economic sustainability throughout the college, Part 3 of the Sustainability Strategic Plan focuses on providing an education to members of the college and community about the principles, resources, and best practices necessary to meet the challenges faced in the 21st Century.



# EDUCATIONAL PROGRAMS SUSTAINABILITY PLAN

## Infusing sustainability throughout instructional programs and developing learning resources.

### Curriculum, Student and Resource Development

#### A.1 Utilize Different Pathways to Integrate Sustainability in the Curriculum

- A.1.1 Create a subcommittee of the Curriculum Committee to work with a workgroup from the Sustainability Committee focused on greening the curriculum.

Similar to implementing sustainability in other areas of the college, successful integration of sustainability in the curriculum often relies on a champion for this cause. Creating a combined workgroup from these two committees devoted to infusing sustainability through the curriculum, will not only encourage progress but will also provide a focus for the college faculty and student body to facilitate a coordinated process for the integration of sustainability. The workgroup could also facilitate the consolidation and coordination between different sustainability course offerings, to

avoid overlaps or gaps in material. The workgroup can clarify sustainability in the context of Student Learning Outcomes and integration into course outlines.

- A.1.2 Add a Green Component to an Existing Course Outline

One pathway is to add components of sustainability into existing courses, particularly courses for associate degrees. Some areas of study, such as economics, the sciences, and sociology, present clear links to sustainability while others, such as ethics and political science, may have less obvious connections but would still benefit from the inclusion of sustainability. Components of sustainability and ecology in literature and mathematics can enrich those courses, and assignments or projects that have a sustainability theme to add another dimension to coursework.

- A.1.3 Create a New Course

A new course can be developed to meet learning needs in sustainability that are not adequately addressed by incorporating sustainability into existing courses. Creating a new course can also have the added benefit of interdisciplinary study to enhance

student learning. A stand-alone course has the potential to lead to a full degree or certificate for students in the future. While budget reductions and an increased emphasis on scheduling basic college skills courses have slowed the development of new course offerings, interest in these new sustainability courses is high and may be a source of college growth.

- A.1.4 Create a New Certificate or Degree Program

New certificate and degree programs with a sustainability focus can enhance career and technical education programs. When developing new Certificates of Achievement, the Cuyamaca College will work with the regional consortium of colleges to ensure that the new certificate does not compete with existing certificates offered by other local colleges. The college will also consult and receive input from the local labor market to pursue new certificate programs that meet the needs of the community and lead to supporting green entrepreneurship while remaining current in the emerging green jobs sector.

## A.2 Raise awareness among faculty and students

### A.2.1 Provide Professional Development and Create a Faculty Forum

Since much of the change in the curriculum will be driven by faculty, providing opportunities for professional growth for individual faculty members will increase the success of sustainability integration. Flex Hours can be used as an opportunity to hold workshops on sustainability in the curriculum and start the discussion among faculty. In addition, forums and workshops could be held throughout the year for faculty to learn more about sustainability and to create discussions and partnerships between departments to foster development of sustainability in the curriculum. Recognize faculty that take leadership in the integration of sustainability in the curriculum.

## A.3 Develop courses that are interdisciplinary or linked.

A. 3.1 Interdisciplinary courses encourage students to reach beyond the typical constraints of a single content area and engage in interdisciplinary learning fostering critical thinking, creativity, and

communication skills. Interdisciplinary work can lead to more personal, relevant, and memorable learning experiences for students and faculty and a deeper understanding of what sustainability is, enriching the overall educational experience. Examples of interdisciplinary courses include a Science Writing course that will tie science and sustainable concepts to an English based course or a historical geography course. CTE courses can also be linked with credit programs.

A.3.2 Appointment of an Instructional Sustainability Coordinator that will receive either reassigned time or a stipend. The program coordinator will report to the Sustainability Committee and be responsible for the following:

- o Create an online website as a resource for faculty, staff and students
- o Familiarize faculty with concepts related to sustainability
- o Identify and engage instructors that are interested incorporating sustainability into their courses
- o Develop sustainability workshops for Professional Development

## A.4 Facilitate Hands On Campus Projects

A.4.1 With the guidance of a faculty or staff mentor, students can increase campus sustainability while gaining hands on experience through campus projects. Motivated students can participate in many projects such as enhancing recycling, organic gardening, ecological studies and/or restoration projects in the nature preserve. Students should be compensated with a stipend or course credit.

## A.5 Encourage Social Service

A.5.1 Student growth and learning should not be limited to the classroom and workplace. Encouraging students to participate in social service through honors programs and other avenues can further enrich student learning. Federal programs such as the Science, Technology, Engineering and Mathematics (STEM) Program can also provide an opportunity for outreach, and student should look for local community and government opportunities to give back to their community.

#### A.6 Invite Notable Speakers

A.6.1 Bring the “real world” to campus by inviting notable speakers who have experience in the realm of sustainability to address the students and the campus at large. Cuyamaca and Grossmont Colleges can partner to increase student exposure and share any major costs associated.

#### A.7 Support Student Committees & Clubs

A.7.1 Encourage students to take leadership roles in organizations and to actively contribute to campus sustainability through clubs and committees.

#### A.8 Promote development and use of college resources relating to sustainability

A.8.1 Encourage the use of campus resources in and outside of the classroom  
Developing and incorporating college resources can greatly enhance student learning. By utilizing these resources and making them accessible to faculty and students, Cuyamaca will lead by example. Examples of resource development and utilization are:

- o Expansion of library collections to include resources to complement sustainable curricula
- o Encourage faculty use of water conservation garden as an educational resource for sustainable living
- o Develop nature preserve into an outdoor classroom for faculty and community use promoting a stewardship of the environment
- o Development of land behind H-building into a Heritage Garden focusing on creating habitats for native animals using native plants and providing education on Native American plant usage and sustainable living.
- o Pursuit of grant resources to provide funding to enhance available college resources.

#### Use of Instructional Technology and Non-toxic Resources in Classroom

A.9 Reduce excess use of resources and generation of solid waste associated with traditional classroom practices

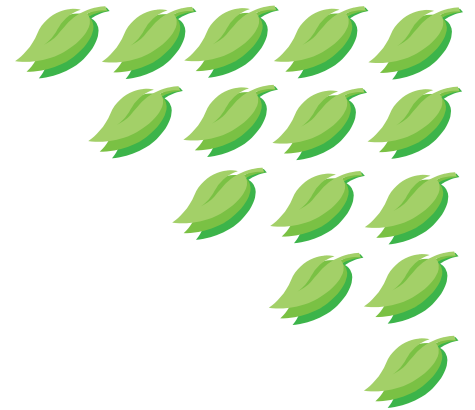
A.9.1 Encourage instructors to utilize web-based technologies as a resource for their student to minimize paper usage

A.9.2 Provide distance learning alternatives such as the development of additional online courses to minimize energy usage on campus

A.10 Support use of non-toxic resources in classroom

A.10.1 Identify toxic substances in use and establish procedure for making decisions about use of toxics

A.10.2 Work with faculty and staff to identify ways of replacing toxic substances wherever possible



# STUDENT SERVICES SUSTAINABILITY PLAN

## Achieving sustainability goals through welcoming and enlisting the support of students.

### Outreach to Prospective and Current Students

- B.1 Communication with prospective and current students on how the commitment to sustainability benefits the college and the community
  - B.1.1 Develop a sustainable outreach presentation for incoming or potential students to demonstrate what Cuyamaca College has to offer
  - B.1.2 Sustainable approach to enlisting and welcoming students to demonstrate sustainability to students through actions, not just words.
  - B.1.3 Use of videos and web based approach as well as presentation software instead of handouts and brochures.
- B.2 To Assist in Green Internship and Job Placements
  - B.2.1 Provide Training Opportunities for Students Create a list of sustainability related opportunities for students that coordinate with coursework

Having career counselors provide information about green jobs to students opens up opportunities for students that may have traditionally been overlooked. There are green jobs in a broad range of industries that Cuyamaca can help students identify and counselors can point students to green job boards. Students can enhance the learning done in the classroom environment with hands on experience by applying what they have learned to the real world.

### Orientation in Sustainable Practices

- B.3 Increase student awareness of college commitment to sustainability and how sustainability can benefit them and increase their occupational opportunities
  - B.3.1 Orientation of new students to include segment on sustainability goals of college emphasizing practice and commitment to sustainability
  - B.3.2 Incorporate into orientation of new students sustainable opportunities provided by the college including new “green” certificate courses and programs
  - B.3.3 Encourage the reduction of paper use

- B.3.4 Encourage and emphasize recycling opportunities on campus
- B.3.5 Work with Associated Students to utilize events, posters, web, and posters to communicate useful sustainable messages to students

### Book Loan Program

- B.4 Promote economic, social, and environmental sustainability by loaning books to students that cannot afford to purchase their own copy.
  - B.4.1 Develop a Book Loan Program for students
  - B.4.2 Continue providing copies of texts on reserve in the library and expand upon the collection and quantity of texts available to students



# Facilities & Operations

# **FACILITIES & OPERATIONS SUSTAINABILITY PLAN**



## **COMMITMENT TO SUSTAINABILITY**

Higher education is increasingly incorporating sustainability as a societal value and ideal, regarding it as a natural and essential element within the educational mission. A sustainable society meets the needs of the present without sacrificing the ability of future generations to meet their own needs. Put simply, sustainability requires that we limit our negative impact on the natural, social, and economic environments, while at the same time positively impacting these environments. Environmental sustainability is a cornerstone of the Plan, which contains many strategies that will greatly enhance our environment, including some exciting programs which have already been initiated.

Maintaining a college environment that is sustainable in social, environmental and economic terms, expanding the incorporation of sustainable practices into day-to-day operations and environmentally friendly maintenance practices.

Continuing to expand the use of sustainable practices in the planning, design and construction of all new facilities and retrofitting of existing facilities to provide superior quality campus environment for all faculty, staff, students and the community.

## **SELECTION OF GREEN BUILDING STANDARDS**

The United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Rating System for New Construction, Major Renovation Projects and the Existing Buildings was reviewed in the development of this plan.

## **COLLEGE FACILITIES STANDARDS**

Cuyamaca Community College will review and improve its current campus standards to outline required products and mandatory design constraints for all construction on College campuses. The standards will be complimentary to specific project requirements and may be modified at the discretion of the College's Representative. The standards are not meant to dictate design solutions, as this is the function of each project's design professional. The standards will provide the College with functional and durable buildings based on experience with existing campus buildings, systems, products and materials used.

## **SUSTAINABLE SITES**

The College is cognizant of local and federal laws and will comply with specified regulations related to Sedimentation and Erosion Control, Selection of Sites, and other relevant laws pertaining to Sustainable Sites.



# FACILITIES & OPERATIONS SUSTAINABILITY PLAN

## **Reduced Site Disturbance**

- C.1 To conserve existing natural areas, restore damaged areas, provide habitat and promote biodiversity
  - C.1.1 The College's Master Plan presents plans and recommendations for the long-term development of the campus. Selected project locations and designs will have minimal footprint to reduce site disruption. Established construction boundaries will be clearly marked to minimize existing site disturbance and restore previously degraded areas to their natural state. Site disturbance including earthwork and clearing of vegetation will be limited to 40 feet beyond building perimeter, 5 feet beyond primary roadway curbs, walkways, and main utility branch trenches, and 25 feet beyond pervious paving areas that require additional staging areas and a minimum of 50% of remaining open area will be restored with native or adapted vegetation.

## **Development footprint**

Development footprint (including building, access roads and parking) will be reduced to exceed local zoning's open space requirement for project site by 25% where possible. Cuyamaca College will consider multi-story buildings within the limits of El Cajon zoning restrictions to reduce the size of land required for construction, where this is cost effective and feasible.

## **Landscape and Exterior Design to Reduce Heat Islands**

- C.2 To reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat
  - C.2.1 Thirty percent or more of non-roof impervious surfaces including parking lots, walkways, and plazas will be shaded with landscape features to minimize the overall building footprint. The College may specify and use ENERGY STAR roof-compliant, high-reflectance and high emissivity roofing to reduce heat absorption. "Green" (vegetated) roof may be installed for at least 50% of the roof area if considered feasible.

## **Light Pollution Reduction**

- C.3 To eliminate light trespass from the building site, improve night sky access, and reduce development impact on nocturnal environments
  - C.3.1 Cuyamaca College will adopt a site lighting criteria to maintain safe light levels and avoid off-site lighting and night sky pollution. The Illuminating Engineering Society of North America (IESNA) foot-candle level requirements stated in the Recommended Practice Manual: Lighting for Exterior Environments will not be exceeded. Site lighting may be modeled using a computer simulation to determine the minimum site lighting where possible.

## Plan for Green Site and Building Exterior Management

C.4 To encourage grounds/site/building exterior management practices that have the lowest environmental impact possible, and to preserve ecological integrity, enhance diversity and to protect wildlife while supporting building performance and integration into surrounding landscapes.

C.4.1 The College will institute a low-impact site and green building exterior management plan to address overall site management, chemical/fertilizer/pest management and building exterior cleaning and maintenance practices. This plan will include the following:

- Green cleaning materials/chemicals (with list of certified vendors/manufacturers), and maintenance practices with minimal environmental impact.

- Green landscape practices which focus on using native plants, reducing size of lawns, changing maintenance practices, reducing the use of power equipment, storm-water control, minimal use of fertilizers, composting waste, applying integrated pest management, avoiding/removing invasive plants, protecting natural areas and using plants to reduce heating and cooling needs.
- Integrated Pest Management (IPM) for safe, effective and economical pest control management.
- Other Activities such as using mulching mowers to reduce yard waste generation, fertilizer needs and water consumption through retention of organic matter.

## Water Conservation

California has put forth a goal of 20 percent reduction in water use by 2020. Cuyamaca College will meet or exceed this 20 percent reduction goal through the use of the construction standards described in this section.



## Water Appliance Standards in New and Remodeled Buildings

All new and replacement plumbing fixtures shall meet or exceed federal water conservation standards. Plumbing fixtures shall be upgraded to these standards when any part of a building is remodeled or renovated, as follows:



1. **New toilets:** All toilets installed in new facilities or new restrooms shall be high efficiency models that are rated at 1.28 gallons per flush or lower.
2. **Replacement toilets:** When a building is being remodeled, all toilets in the building that have a flush volume of 3.5 gallons per flush or greater will be replaced by high efficiency models that are rated at 1.28 gallons per flush or lower. However, in the case of older buildings with sewage slope lines that are below modern standards in terms of pitch, toilets of 1.6 gallons per flush may be used.
3. **Urinals:** All urinals installed in new or remodeled facilities or restrooms shall be high efficiency models that are rated at 0.5 gallons per flush or less.
4. **Sinks:** New and replacement faucets and faucet aerators shall have a maximum flow rate of 1.5 gallons per minute at a flowing water pressure of 60 pounds per square inch. Gooseneck faucets will be installed.
5. **Autoflush appliances:** The College will install automatic flush toilets and urinals or motion activated sinks. Any existing automatic water appliances will be replaced when the building is remodeled.
6. **Showerheads:** All showerheads shall be low-flow devices having a maximum rated flow of not more than 2 gallons per minute at a flowing water pressure of 80 pounds per square inch.

## Water Efficient Landscaping

- C.5 To minimize or eliminate the use of potable water for landscape irrigation.
  - C.5.1 Landscape design and water use will conform to the water efficient landscape ordinance outlined by the California Department of Water Resources Model Ordinance. To reduce or eliminate the need for irrigation, soil/climate analysis will be performed to determine appropriate landscape types and design for each landscaping project and drought-tolerant plants and shrubs will be specified. Other measures will include installation of high efficiency and/or temporary irrigation systems in areas that may require irrigation and artificial turf for active play areas and fields. Permanent irrigation systems that are not high efficiency will be avoided, and Cuyamaca College will continue to research the possibility of using municipally supplied reclaimed water for irrigation.

## Stormwater Management Infrastructure

- C.6 To reduce negative impact on water and air quality by increasing on-site infiltration, minimizing storm-water runoff, and reducing contaminants during and after construction



- C.6.1 To meet stormwater compliance requirements and to minimize and/or prevent sediments from entering the combined sewer system, CCC will follow the best management practices outlined by the State Water Resources Control Board and will comply with the 2003 EPA Construction General Permit (CGP). The project site will be designed to maintain natural storm-water flows and to improve infiltration. Pervious paving will be specified and used to minimize impervious surfaces. Where possible, stormwater may be collected and used for non-potable uses such as landscape irrigation.

For construction area of 1 acre or greater, CCC will apply for the Construction General Permit. Techniques such as the installation of a sedimentation tank will be used to collect and pre-treat storm-water before discharging into the City's combined sewer system for further treatment. The College will follow the requirements of the SDCWQA for post construction stormwater management practices. Techniques to be employed will include but not be limited to reduced use of impervious surfaces, installation of porous pavements, filtration basins and trenches, and grassy swales.

## Energy

### Minimum Energy Performance

- C.7 To establish the minimum level of energy efficiency for proposed building and related systems.
- C.7.1 The building envelope and systems for new construction and major renovation projects will be designed to maximize energy performance and to exceed the Title 24 - 2007 California energy efficiency standards by 10%. Computer simulation model will be used to assess energy performance and to identify the most cost effective energy efficiency measures. This will be compared to the Title 24 - 2007 baseline building. For existing buildings, annual electricity bill, including cost and usage amounts will be analyzed to identify energy savings opportunities. Energy-efficiency retrofits and energy-saving techniques will be implemented to reduce energy use to meet this goal.

## CFC Reduction in HVAC&R Equipment

C.8 To reduce ozone depletion.

C.8.1 For existing HVAC systems, inventories will be conducted to identify equipment that uses chlorofluorocarbons (CFC) refrigerants and CCC will adopt a schedule to replace these refrigerants. For new buildings, new HVAC equipment with zero use of CFC-based refrigerants will be specified.



## Optimize Energy Performance

C.9 To achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use and/or replaced throughout the College. For existing buildings, energy-efficiency retrofits and energy-saving techniques will be implemented to reduce energy use to the level required to meet this credit.

C.9.1 Building envelope and systems will be designed to maximize energy performance. Regulated energy components will include HVAC systems, building envelope, service hot water systems, lighting and other regulated systems as defined by the American Association of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) (see details at [www.energycodes.gov/implement/determinations.com.stm](http://www.energycodes.gov/implement/determinations.com.stm)). Energy performance will be quantified and compared to a baseline building. Sensors for lighting will be repaired and/or replaced throughout the College. For existing buildings, energy-efficiency retrofits and energy-saving techniques will be implemented to reduce energy use to the level required to meet this credit.

## Renewable Energy

C.10 To encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.

C.10.1 All new and future projects will be assessed for renewable energy potential including on site solar and wind strategies along with other savings by design programs being offered by local utilities agencies and third party financing options. The performance of the system will be evaluated from the annual energy output using the Department of Energy (DOE) Commercial Buildings Energy Consumption Survey (CBECS) database as a guide to determine the baseline electricity use. If any of these above stated strategies are employed, Cuyamaca College will take advantage of the net metering with the respective local utility agency. The College will evaluate the electrical consumption trends on all existing buildings and will identify opportunities for using renewable energy sources. Where such opportunities can be exploited, Cuyamaca College will work with the local utility company and/or other renewable power companies to guarantee credit from fraction of

electric power derived from net non-polluting renewable technologies. The College will engage in a green power contract with local utility agencies where such opportunities exist and when considered viable.

### **Additional Commissioning**

C.11 To verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.

C.11.1 The College will contract with a Commissioning Authority (CA) during the design phase of a project to conduct project reviews before, during, and after construction documents are complete; develop a commissioning manual for the building and review project at near-warranty end. For projects considered for certification, CA will be involved in the early planning and design phase of the project.

### **Ozone Depletion and Additional Ozone Protection**

C.12 To reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming.

C.12.1 For all new construction and renovation projects, refrigeration and fire suppression systems that use no HCFCs or halons will be specified and installed. For existing buildings, inventory of existing systems using refrigerants and fire suppression chemicals will be taken and systems containing CFCs, HCFCs or halons will be replaced accordingly.

### **Existing Building Commissioning**

C.13 To verify that fundamental building systems and assemblies are performing as intended to meet current needs and sustainability requirements.

C.13.1 Cuyamaca College will evaluate existing building systems to ensure that the fundamental building elements and systems have specified functional and efficient performance. A 5-year improvement plan will be developed to repair/upgrade and/or repair components that do not meet specifications. Intended improvements will meet the requirements of current building usage, and address heating, cooling, humidity control lighting and safety systems, along with building automation control systems.

## Storage and Collection of Recyclables

C.14 To facilitate the reduction of waste in new and existing buildings.

C.14.1 In new construction and existing buildings, CCC will designate easily accessible and well-lighted areas for collection and storage of non-toxic recyclable materials (paper, cardboard, glass, plastics, metal, etc.) Designated areas at all buildings will be equipped with separate and appropriate collection bins for recyclable and non-recyclable wastes. Bins will be clearly labeled.



## Reduced Mercury in Light Bulbs

C.15 To establish and maintain a toxic material source reduction program to reduce the amount of mercury brought into existing buildings through light bulbs.

C.15.1 Cuyamaca College will initially institute and follow a light bulb purchasing program that keeps the weighted average mercury content below 100 picograms of mercury per lumen hour.

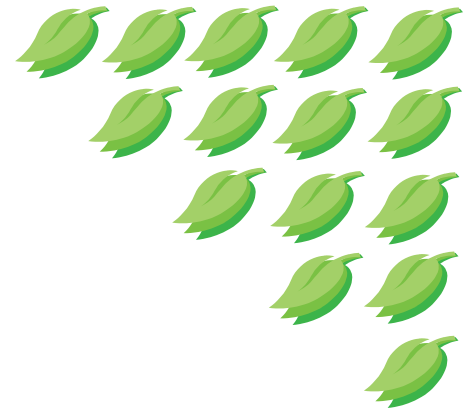


## Indoor Air Quality (IAQ) Performance

C.16 To establish minimum indoor air quality (IAQ) performance to enhance indoor air quality in buildings, thus contributing to the comfort and well-being of the occupants.

C.16.1 Cuyamaca College will institute a program to enhance IAQ performance by optimizing practices to prevent the development of indoor air quality problems in all buildings in order to maintain and/or improve the well-being of all occupants. Building systems will be periodically evaluated in order to identify and repair IEQ problems. The program will include ongoing problem prevention measures which will include prevention of moisture accumulation and mold in buildings and procedures to maintain a high level of IAQ on an ongoing basis. For additional information, the EPA Web site, [www.epa.gov/iaq/largebldgs/baqtoc.html](http://www.epa.gov/iaq/largebldgs/baqtoc.html), will be consulted.





## **Environmental Tobacco Smoke (ETS) Control**

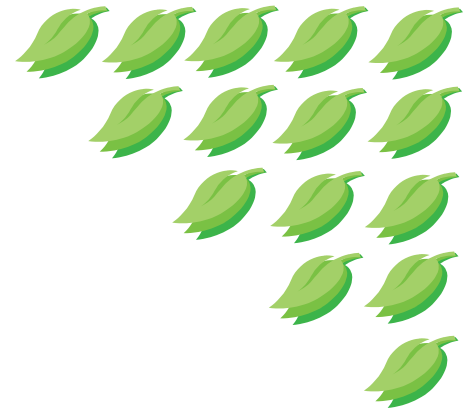
- C.17 To minimize exposure of building occupants, indoor surfaces, and ventilation air distribution systems to Environmental Tobacco Smoke (ETS)
- C.17.1 The College will continue to adhere to the BP-3065 and AP-3065 smoking regulation which prohibits smoking on campus grounds. The College will continue to work towards 100% smoke-free campuses.

## **Carbon Dioxide (CO<sub>2</sub>) Monitoring**

- C.18 To provide capacity for indoor air quality (IAQ) monitoring to sustain long-term occupant health and comfort
- C.18.1 HVAC systems will be designed with carbon dioxide monitoring sensors where possible and sensors will be integrated with the building automation system (BAS).
- C.18.2 HVAC automation system will be programmed to modulate outside air dampers to introduce additional outside air in response to predetermined high levels of carbon dioxide in all buildings.

## **Increase Ventilation Effectiveness**

- C.19 To provide for the effective delivery and mixing of fresh air to support the health, safety, and comfort of building occupants.
- C.19.1 HVAC systems will be designed with carbon dioxide monitoring sensors where possible and sensors will be integrated with the building automation system (BAS).
- C.19.2 HVAC automation system will be programmed to modulate outside air dampers to introduce additional outside air in response to predetermined high levels of carbon dioxide in all buildings.



## No- or Low- Emitting Materials

C.20 To reduce the quantity of indoor air contaminants which are odorous or potentially harmful to the health and comfort of installers and occupants.

C.20.1 No- or Low-Volatile Organic Compound (VOC) materials will be required in the construction documents for all projects. VOC limits relating to adhesives, sealants, paints, coatings, carpet systems, and composite woods will be clearly stated in each corresponding section of the Technical Specification.

## Indoor Chemical & Pollutant Source Control

C.21 To avoid exposure of building occupants to potentially hazardous chemicals that adversely impact air quality and/or reduce exposure of building occupants and maintenance personnel to potentially hazardous particle contaminants which adversely impact air quality, health, building finishes, building systems and the environment.

C.21.1 Separate exhaust and plumbing systems will be designed for rooms with contaminants to physically isolate them from the rest of the building.

## Green Cleaning

C.22 To reduce exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants which adversely impact air quality, building finishes, building systems and the environment.

C.22.1 *Entryway Systems:* All exterior entrances with entryway systems (grills, grates, mats etc.) will be designed to catch and hold dirt particles and to prevent contamination of the building interior. Exterior stone, brick or concrete surfaces will drain away water from building entrances, as will low-maintenance vegetation incorporated in the landscape design for building entrances. Plants, trees and bushes that yield berries, flowers and leaves that are likely to be tracked into the building should be avoided at building entrances. The plant selection will be based on the appropriate Integrated Pest Management approach to eliminate pesticide applications with diffusion into buildings. Where possible, water spigots and electrical outlets will be provided at entryways for maintenance and cleaning activities.

## Water Conservation Program

C.23 To reduce the overall water consumption and to ensure that water usage does not exceed 2010 baseline potable water usage.

C.23.1 High efficiency irrigation design and technology, drought tolerant plants and shrubs will be specified to limit the use of potable water for irrigation. Separate meters will be installed at various locations on the campuses and/or buildings to monitor water consumption and the generation of waste water. Annual audits of potable water use and wastewater volumes will be performed. Responses to leakages will be improved to reduce water loss and to prevent pollutants from entering the water supply system. Water conservation measures will be incorporated in all new buildings and modernization projects, existing buildings and retrofits; this should include the phasing in of replacement drinking faucets that allow refilling of reusable water bottles. The College will consider installing rainwater catchment systems and explore the feasibility of piloting (and later installing) gray water systems for existing buildings District wide. The College will investigate a ban on the purchase and sale of bottled water throughout the district

## Landscaping

C.24 To implement landscape planning, design, construction and practices that conserve water, reduce waste generation, minimize air, water, and soil pollution, require minimal maintenance and provide pleasant visual effects on all campuses

C.24.1 *Landscape Planning and Design Guidelines:* Develop a Landscape Master Plan and Design Guidelines as a framework for landscaping initiatives. These initiatives will be used to preserve, improve and reinforce the overall integrity of open spaces based on their historical significance, preservation of natural resources and usage intensity. Emphasis will be placed on the interaction among the campus community and physical barriers will be eliminated where possible. Pedestrian and wheelchair access to buildings and public spaces will be improved, and pedestrian, bicycle and vehicular circulation on campuses will be improved to reduce conflicts. Landscaping should be designed to encourage pollinators and attract birds and other species as well as to provide wildlife corridors.



The College will seek the help of habitat restoration experts (for example, faculty experts). Landscape design and plant selection will feature and prefer the use of native plants. Plants selected must contribute positively to habitat and wildlife corridors, and add to the attractiveness and enjoyment of the campus. Drought and wind tolerance, purchase cost, usefulness and safety, maintenance requirements, suitability for specific location, and compatibility with other plants will also be acknowledged as significant considerations in plant selection and landscape design. Lawns that are not regularly used by students to sit on are to be replaced with low-water-use native ground covers.

The College community will have advisory input into landscaping decisions on the campus. Departments which could be affected will be contacted before plants are removed or destroyed.

Landscape design and water use will conform to the water efficient landscape currently maintained by the Water Conservation Garden. Perform soil/climate analysis to reduce or eliminate the need for irrigation by determining appropriate landscape types and design for each landscaping project.

*Efficient Irrigation System:* Specify high efficiency irrigation design and technology for all new construction and renovation projects. Institute a phased-in plan to replace inefficient irrigation systems with high efficiency systems. Install a grey water irrigation system to reduce potable water usage. Replace inefficient sprinklers with low-water-use drip irrigation systems in all areas except lawns. Cover exposed areas between plants in woodchips or landscape fabric to reduce water use and weeds. Assess the feasibility of using cisterns with collection of roof-top rain and dew.

C.24.2 Minimum use of pesticides and fertilizers: Utilize organic gardening practices including companion planting in lieu of pesticides and synthetic fertilizers.

C.24.3 *Tree Care:* Follow the same general guidelines for selection of trees as in selection of other plants. Solicit, as needed, the services of a State certified arborist to evaluate mature trees for any problems that may threaten the life of the tree. Design a care program to promote tree health and ensure their value will continue to grow. Where trees may be affected by a construction project, consult an arborist in the planning. The arborist may be required to work with the project teams throughout each construction project. Construction teams will adopt appropriate methods to reduce adverse impacts on mature trees. The College community will have advisory input into major decisions affecting trees on any campus.

C.24.4 *Fences, Walls and Gateways:* Use architectural tools such as gateways to provide identity, scale and create a sense of community for the campuses. Provide gateways with adequate lighting, circulation, planting and signage. The height of any fences should enhance the view.

C.24.5 *Paving:* For all applicable projects, specify light-colored porous paving material along the sidewalks, parking areas, plazas and other hard surfaces to reduce storm water runoff. Specify paving material with up to 100% recycled content. The selection of recycled materials should be done with attention to the existing soil and underlying rock structure at each site.

C.24.6 *Site Lighting*: Adhere to the vehicular/pedestrian lighting requirement of the City of El Cajon. Improve existing light quality without increasing offsite light impact to adjacent properties. Utilize pedestrian level bollards and/or pole lights; make lamping consistent with adjacent buildings and/or properties. For new construction, continue to phase in solar-powered, LED, and sensor-driven lighting fixtures. Pursue a long-term goal of replacing all fixtures in this way. Utilize fixtures that cast light downward, not upward.

C.24.7 *Site Furnishing*: Select Site furnishing (e.g., benches, tables, litter/ash receptacles, planters, bike racks, and bollards) for functional and aesthetic purposes. Seek first to reuse existing furnishings, purchasing new ones with 100% recycled content as a second option. For furnishings that must come from wood, the College should only purchase FSC-Certified (Forest Stewardship Council) wood. Develop a plan to replace and or repair old site furnishings.

C.24.8 *Landscape Maintenance*: Establish a maintenance program including regular inspections, mulching, fertilizing, pruning, and problem detection, to provide necessary landscape care.

### **Energy Conservation Program**

C.25 To maximize energy performance in buildings and to exceed Title 24 - 2001 California energy efficiency standards Identify, review and implement energy savings initiatives including but not limited to the following:

C.25.1 Perform periodic energy audits to identify economically viable improvements that will contribute substantially to energy savings.

C.25.2 Set all thermostats at the most efficient comfort levels; no higher than 68 degrees at night during the winter months. Audit thermostat function.

- Minimize the use of air conditioning and electric heaters, except in areas where there is sensitive equipment, or where environmentally-friendly alternatives are found infeasible to ensure comfortable conditions for employees and students.
- Keep doors closed in any air-conditioned or heated areas.
- Develop and implement a plan to phase in renewable energy sources on existing rooftops (e.g., wind turbines and/or solar photovoltaic and solar thermal panels).
- Use departmental coffee makers and refrigerators instead of personal units.
- Replace light bulbs with more efficient compact fluorescent and LED bulb lighting.

## Operations and Maintenance Program

C.26 To implement cost-effective procedures and practices to ensure that all College facilities and building systems are reliable, safe, and energy efficient

### C.26.1 *Operations and Maintenance*

*Manual:* Develop and deploy an Operations and Maintenance Manual to guide Operations and Maintenance management and technical staff.

### C.26.2 *Building Systems Maintenance and*

*Monitoring Programs:* The guide will include a comprehensive Best Practices Equipment Preventative Maintenance Program to manage in-house maintenance services and/or contractual services for post-warranty maintenance. Use automated systems to monitor equipment functions and indoor conditions where possible, and provide training on all new systems.

## Alternative Transportation

### *Bicycle Rack, Storage and/or Changing Rooms:*

The CCC goal is for new construction projects and renovation projects to include bicycle racks in or near all buildings.

### *Parking Capacity and Demand Control Measures:*

The College's parking supply will not exceed the minimum local zoning requirements and will not be expanded beyond existing levels without the implementation of all feasible TDM measures. Demand will be evaluated continuously to monitor and to minimize traffic on all campuses. CCC will continue to work with Municipal Transportation System (MTS) to improve pedestrian and bicycle access to all campuses.



## Operations and Maintenance

C.27 To support appropriate operations and maintenance of buildings and building systems so that they continue to deliver target building performance goals over the long term

### C.27.1 *Building Systems Maintenance:*

CCC will develop a comprehensive Best Practices Equipment Preventative Maintenance Program to provide in-house maintenance services and/or contractual services to deliver post-warranty maintenance.

### C.27.2 *Building Systems Monitoring:*

Automated systems will be used to monitor equipment function and indoor space conditions where possible. This will help in early detection of system problems and quick response to such problems.



# Professional Development



# PROFESSIONAL DEVELOPMENT SUSTAINABILITY PLAN

## **Realizing the Commitment to Sustainability through Staff Development Initiatives**

Full implementation of this Plan will depend on the College's commitment to sustainability receiving broad support of employees throughout all of operations and services. Additionally, as Cuyamaca College has nearly 800 employees, it is the responsibility of the College as a San Diego employer to provide faculty, staff and administrators with important information about personal responsibility in promoting the environmental, social and economic sustainability of the region. Each of us can do many small and big things individually in our work and home lives for the benefit of our communities, but key information must reach us so that we can know how best to help. Many faculty and staff working

in instructional and operational departments will also need professional development in order to effectively "green" curriculum, "green" our campus, implement new courses and programs in green careers. Accordingly, Cuyamaca College will continue to expand efforts to inform and educate employees on sustainability issues in a variety of ways. This portion of the Plan creates the foundation for the implementation of sustainability in all programs and operations of the College by providing a structure for bringing the necessary information about sustainability to all employees. There is a natural overlap in conveying a commitment to sustainability to employees, to students, and to the community through College publications, website and other public communications. Therefore, please refer also to other chapters for additional plans to inform employees along with the community.

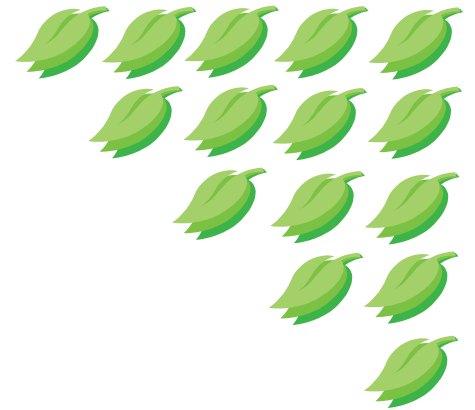
## **Resources**

Many of the educational objectives in this and subsequent areas of this plan can be addressed through the College's routine shared governance processes and through the efforts of interested students and employees. In addition, the College will, as appropriate, seek appropriate grant funding for the purpose of promoting education for sustainability. For example, to develop more sustainability curricula and infuse sustainability into existing curricula may require new resources to provide faculty with professional development opportunities on how best to accomplish those objectives. The College will seek grant funding and may also evaluate the feasibility of offering competitive mini-grants to faculty for curriculum development.



# PROFESSIONAL DEVELOPMENT SUSTAINABILITY PLAN

- D.1 **General to all employees:** To provide an inclusive Sustainability Awareness Program for faculty, staff, and administrators to learn about sustainability issues while building community within the College.
  - D.1.1 Use special events (e.g., Spring Garden Festival, Carbon Footprint Workshop, Earth Day) to raise sustainability awareness and increase knowledge about how the many aspects of sustainability relate to the Cuyamaca College mission and each employee's work life and home life.
  - D.1.2 Present sustainability workshops during Professional Development Week and include sustainability awareness in other types of in-service training and meetings (e.g. Green Chemistry Seminar series).
  - D.1.3 Post simple user guides and conservation tips in restrooms, classrooms and other areas with either high water or high energy use.
  - D.1.4 Provide all employees with training on established Cuyamaca College sustainability practices such as sustainable purchasing, proper disposal, and reuse/recycling, as well as information on global issues such as climate change.
- D.2 **Encouraging Participation:** To inform employees, students, and the community of ongoing activities which promote sustainability in operations (and how they can help).
  - D.2.1 Identify ways in which sustainability is incorporated into operations at the College and inform employees, students, and the community about current Cuyamaca College sustainable operations.
  - D.2.2 Utilize large visual displays (e.g., growth charts, oversized thermometers) to measure progress in carbon units or other measures towards operational sustainability targets.
  - D.2.3 Create incentives such as sustainability recognition programs.
  - D.2.4 Inform employees about Cuyamaca College sustainability targets and motivate employees to participate in Cuyamaca College operational sustainability efforts to achieve targets and goals
  - D.2.5 Design all staff/professional development activities relating to sustainability as fun, inclusive, and educational.
  - D.2.6 Emphasize transparency and openness in sustainability planning and related professional development by posting all information on the sustainability website and designate sustainability liaisons on each of the college committees.
- D.3 **External Conferences and Sustainability Networking:** To keep Cuyamaca College up to date on sustainability issues and technologies.
  - D.3.1 Encourage participation by employees from different parts of the College in sustainability conferences where they can network with other universities and colleges to exchange knowledge on sustainability issues.
  - D.3.2 Share best practices with other community colleges in California.
- D.4 **New Employees:** To communicate the sustainability commitment of the College to new employees during new faculty and employee orientations.
  - D.4.1 Include information on the College's sustainability initiative and commitment among the topics covered in new employee orientations, including ways new employees can contribute to the implementation process.



D.5 **Building Users:** To tailor sustainable operations efforts to specific user groups and their local conditions.

D.5.1 Conduct periodic staff development meetings with building user groups to raise awareness of specific sustainability issues at each facility/building (e.g., climate control, lighting, recycling) and how employees and students can help reach goals and address conditions specific to that location.

D.6 **Administrators:** To meet the professional development and information needs of administrators regarding sustainability issues at work, at home, and in their communities.

D.6.1 Assign implementation responsibility for the various activities of the Sustainability Plan to all administrators and provide them with the information and resources needed for effective implementation.

D.6.2 Encourage administrators to attend college-wide sustainability events that are intended to provide information to all students and employees, such as sustainability conferences outside the college.

D.7 **Classified Staff (General):** To meet the professional development and information needs of classified staff in relation to sustainability issues at work, at home, and in their communities.

D.7.1 Offer sustainability workshops during Classified Appreciation Day and during Professional Development Week.

D.7.2 Disseminate Sustainability Initiative information to classified staff through college-wide emails and links.

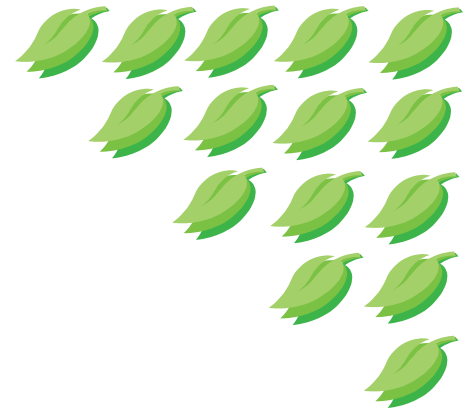
D.7.3 Encourage staff to attend college-wide sustainability events that are intended to provide information to all students and employees.

D.7.4 Assess the feasibility of offering in-office/onsite assessments and presentations to staff where they work, (e.g., including voluntary audits of office environmental practices, hands-on guides, and information about setting up and tracking individual office/department recycling and waste minimization and incentives).

D.8 **Landscape Maintenance Staff:** To inform landscape maintenance staff regarding the means and methods to achieve sustainable landscape maintenance.

D.8.1 Provide all landscape maintenance personnel with periodic workshops on sustainable landscape maintenance.

D.8.2 Collaborate with the Cuyamaca College's Ornamental Horticulture and Environmental Health and Safety Departments in the implementation of safe and sustainable landscaping.



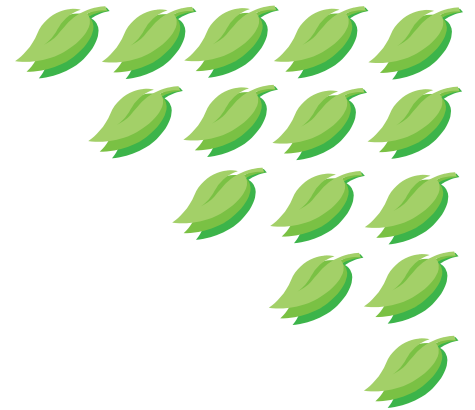
**D.9 Other Maintenance & Operations Staff:**

To guide operations and maintenance management and technical staff in achieving enhanced sustainability and efficiency.

- D.9.1 Develop and deploy an Operations and Maintenance Manual to provide necessary details about sustainable policies and practices (including green purchasing) in operations and maintenance and to outline a training program for staff.
- D.9.2 Inform maintenance and operations staff and supervisory personnel regarding the means and methods to achieve sustainable building performance while protecting employees and students from environmental illness/injury.
- D.9.3 Develop onsite and/or offsite training programs for building operations and maintenance staff, as well as managers and technical personnel, to address sustainability in building operations, building system operations and maintenance. Conduct regularly scheduled training in these areas for all affected Buildings and Grounds personnel.

- D.9.4 Develop and implement a green purchasing policy to buy and use only janitorial equipment and supplies that maximizes the reduction of building contaminants and which minimizes environmental impact.
- D.9.5 Evaluate equipment and operational practices in conjunction with staff and develop a plan of action to upgrade and replace equipment and to train employees to use the new equipment and processes.
- D.9.6 Implement policies, procedures and mixing systems that minimize exposure of cleaning staff to concentrate or harmful cleaning chemicals (e.g., avoid floor cleaning products containing zinc).
- D.9.7 Provide all maintenance and custodial staff with ongoing training in sustainable methods and materials, and recycling and disposal procedures.
- D.9.8 Collaborate with the Cuyamaca College Environmental Health and Safety Department and the San Diego Environmental Training Center in the development and implementation of safe and sustainable building operator training.

- D.9.9 Provide all project managers involved in the planning, design and/or implementation of College projects with basic Leadership in Energy & Environmental Design (LEED) training and/or LEED Accredited Professional training. The intent is to provide project managers with the basic knowledge of green concepts and to nurture their talents and energies to incorporate these concepts into the individual projects they manage. The College commits to participating on an ongoing basis in local and regional sustainability events and conferences aimed at providing learning experiences and networking opportunities with other agencies and higher education institutions.



D.10 **Instructional & Library Faculty & Staff (Green Operations):** To encourage sustainability in daily operations, and provide instructional departments including Learning Resources with information for measuring and increasing sustainability efforts.

D.10.1 Utilize workshops, posters, Web information, and emails to create awareness about energy and water use, waste reduction, and other sustainability issues of importance in College departmental operations.

D.10.2 Create a professional development series to infuse sustainability into new courses and programs and modify existing courses and programs.

D.10.3 Provide information on how to infuse sustainability by linking two sections of different courses in different departments.

D.10.4 Invite faculty and deans involved with linked courses (i.e., Biology and English) to speak to colleagues regarding how it is done and what benefits are gained.

D.10.5 Share ideas with and among teaching faculty about how to implement and infuse sustainability within the context of existing course outlines.

D.10.6 Invite two or three instructors from different fields to present how they incorporate sustainability within existing course outlines.

D.11 **Knowledge Management/Informal Faculty Sharing:** To provide opportunities for faculty to share among themselves knowledge about teaching sustainability.

D.11.1 Set up informal means to share knowledge among faculty on sustainability topics as related to their areas of expertise (see College of Marin website, for example).



# Community Partnerships

# COMMUNITY PARTNERSHIPS SUSTAINABILITY PLAN

## **Communicating a commitment to sustainability and utilizing community expertise**

Ensuring that Cuyamaca College contributes to the sustainability of the San Diego region - and the world beyond - is best accomplished by working in cooperation with others who share the same concerns and resources to implement change. Clearly, the College can contribute more to sustainability in partnership with other organizations; moreover, the College needs to

continually reach out for the most up-to-date information that is available. Networking and partnering with other institutions allows Cuyamaca College to leverage its own resources to greater advantage, to share its own expertise, and also benefit from the specialized knowledge of others. Therefore, this portion of the Sustainability Plan focuses on partnering with the community in various ways, to share our expertise with that of others, and to communicate to the community our commitment to the ideals of environmental, social and economic sustainability.



# COMMUNITY PARTNERSHIPS SUSTAINABILITY PLAN

## E.1 Collaborations with Local, Regional, State, National, & International Efforts in the Government & Education Sectors:

To partner with other governmental and educational entities in order to leverage resources and promote greater sustainability.

- E.1.1 Participate in national efforts to increase sustainability such as Focus the Nation and the Association for the Advancement of Sustainability in Higher Education.
- E.1.2 Establish close collaborations with local governments and the State regarding their sustainability efforts.
- E.1.3 Partner with other community colleges on sustainability efforts.
- E.1.4 Develop partnerships to write grants to support the efforts of Cuyamaca College's Sustainability Plan.

## E.2 Partnerships with Local Industry, Utilities, & Community Based Organizations: To share expertise and resources in addressing sustainability issues.

- E.2.1 Further develop and maintain partnerships with local One Stop Career Centers and the San Diego Workforce Partnership.
- E.2.2 Host an annual county-wide sustainability conference.
- E.2.3 Develop partnerships with various corporate and nonprofit entities along common sustainability interests, especially where funding is available to encourage such collaboration.
- E.2.4 Develop a sustainability advisory board and/or include green experts on existing CTE industry advisory boards, campus advisory boards, etc.
- E.2.5 Invite neighbors and neighborhood organizations to learn about Cuyamaca College's Sustainability Initiative and cooperate with the College to reach their goals.



- E.2.6 Take full advantage of seminars offered by SDG&E and the California Center for Sustainable Energy
- E.2.7 Develop partnerships with training organizations such as the US Green Building Council, California Building Performance Contractors Association, Build It Green and others entities to bring training certifications and awareness to students and staff.
- E.2.8 Host "Sustainability Square" (tables, resources, and information sharing) at the Annual Spring Garden Festival.

- E.3 **Sustainable Economic Development:** To promote the economic sustainability of the San Diego East County.
- E.3.1 Provide career and technical education for industries that have high local impact and/or which are in a growth mode.
  - E.3.2 Partner with government, private funding sources, and community agencies to develop innovative programs to increase skills and employment opportunities among low income San Diegans.



- E.4 **Internships/Work Experience:** To provide students a start in green careers.
- E.4.1 Create internships and work experience opportunities in green through partnerships with industry.

- E.5 **Social & Economic Equity:** To continue to address discrimination as well as economic inequality.
- E.5.1 Target educational opportunities (including career and technical training as well as education for academic and other goals) to communities and individuals at high risk.
  - E.5.2 Continue to respond to the needs of the construction industry and other industries. Develop support programs to enhance the skills of workers.
  - E.5.3 Capitalize on the availability of the local Workforce Investment Act and other grant funding to train the green workforce.

- E.6 **Reciprocal Outreach:** To offer community-based organizations a way to bring their environmental message to diverse communities in exchange for facilitating their recruitment of volunteers and service learning students who are multicultural and multilingual.
- E.6.1 Establish reciprocal outreach partnerships with community based organizations and government agencies which focus on sustainability. Ask them to publicize our sustainability courses in their publications and among their clients and encourage them to participate in Cuyamaca College events on campus.
- E.7 **Speakers:** To educate the college community on sustainability through the use of topical, high interest presentations.
- E.7.1 Establish a Green Speakers Bureau.
- E.7.2 Invite experts to speak to students and employees about global warming and other critical issues of sustainability (panel discussion or individual speaker). Utilize local resources such as SDG&E and the Sierra Club as well as internationally known speakers.
- E.7.3 Consult with the Cuyamaca College Speech and Graphic Design Departments for ideas on how to communicate the Sustainability Initiative most effectively to students and employees.
- E.8 **Community and Continuing Education:** To develop and implement fee-based educational workshops and seminars that would enhance community awareness and promote a clean green future for East County residents. Topics may include sustainability, renewable energy, green building, etc.
- E.8.1 Partner with SDGE and/or CCSE to host a green series on campus.
- E.8.2 Partner with instructional departments such as Automotive or Ornamental Horticulture to develop and deliver environmental workshops for the community.
- E.8.3 Create green building workshops for home and business owners.



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