



**California Higher Education
Sustainability Conference
June 2013**

The California Community Colleges

Sustainability Template

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Sustainability

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

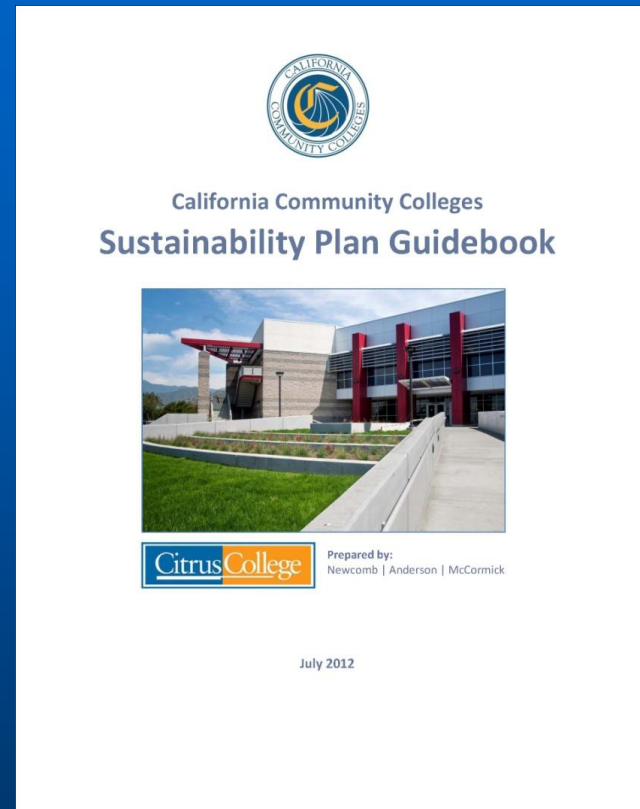
United Nations Bruntland Commission Report, 1987

California Community Colleges Sustainability Template

What is it?

- A collaboration between the CCC Chancellor's Office, Citrus College and Newcomb Anderson McCormick, funded by a California Energy Commission grant
- Provides a “roadmap” and “toolkit” for sustainability planning with enough flexibility to be utilized at Community Colleges throughout the state
- Addresses energy, transportation, solid waste/recycling, water issues, green purchasing, green curriculum, campus awareness, and provides recommendations for Climate Action Planning.

“The CCC Sustainability Template should be implemented at 100% of our campuses” – CCC Board of Governor’s



Sustainability Template: Three Parts



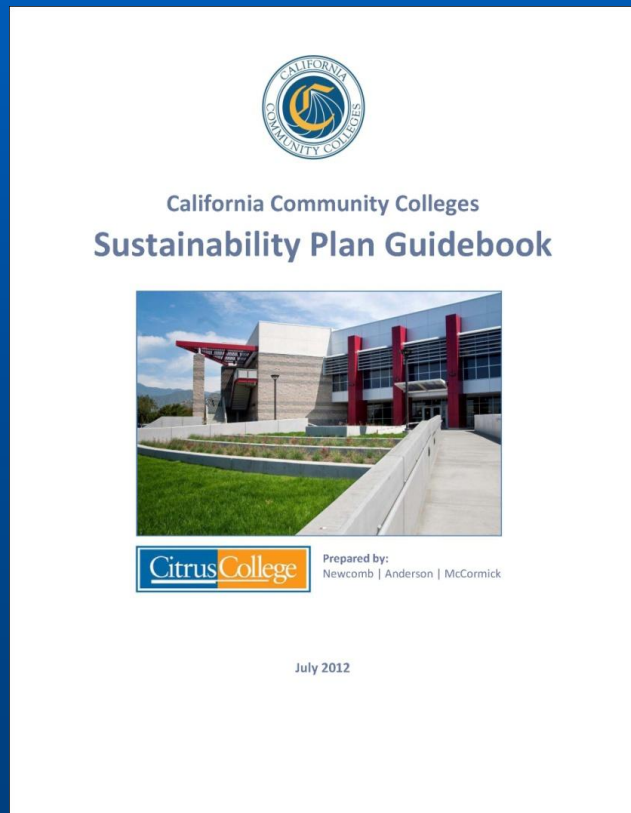
- Describes the start to finish implementation process
- Includes a menu of sustainability projects
- Identifies resources available

- Used to select and track Sustainability Projects
- Matches the projects described in the Sustainability Guidebook

- Used to create the customized Campus Sustainability Plan
- Contains template language and fill-in-the-blanks

Sustainability Plan Guidebook

Describes the Planning Process and More




- Purpose and Executive Summary
- “How to Use this Template” Tutorial
- Policy and Regulatory Drivers
- District Goals, Objectives, and Outcomes
- The Economics of Sustainability
- Implementation Programs and Projects
- Create an Action Plan
- Measure and Report Performance
- Best Practices Case Studies
- Tools and Resources (technical and funding)

Implementation Planning Checklist

Used with the Guide Book to help select and manage different sustainability projects

Sustainability Template Plan
Implementation Programs and Plans Checklist

District: enter information on Summary tab
Campus: enter information on Summary tab
Date: enter information on Summary tab

 Back to Summary Tab

Priority Implementation Plans Indicated Below

Policy Selected	Section	Selected Program or Project	Action Item	Priority (select)	Status (select)	Linked to	Cost (\$)	Primary Objectives	Target Completion Date	Assigned To	Email address
Section 7.1 MANAGEMENT AND ORGANIZATIONAL STRUCTURE											
TRK	7.1.1	Adopt a District Sustainability Policy									
TRK	7.1.2	Appoint a Sustainability Coordinator, Establish an Office of Sustainability									
TRK	7.1.3	Appoint a Campus Sustainability Committee									
TRK	7.1.4	Funding and Resources to Support Sustainability Activities									
TRK	7.1.5	Employ Sustainability Professionals, as required									
TRK	7.1.6	Conduct Sustainability in Endowment Investments									
Section 7.2 ENERGY EFFICIENCY											
TRK	7.2.1	Set Energy Efficiency Goals									
TRK	7.2.2	Evaluate Mechanisms for the Implementation of Energy Efficiency Projects									
TRK	7.2.3	Conduct Facility Prioritization Survey									
TRK	7.2.4	Conduct Comprehensive Facility Energy Audits									
TRK	7.2.5	Implement New and Existing Audit Recommendations									
TRK	7.2.6	Implement Ongoing Energy Monitoring									
TRK	7.2.7	Participate in Demand Response Programs									
TRK	7.2.8	Identify and Take Advantage of Grant and Incentive Programs									
TRK	7.2.9	Establish a Purchasing Policy									
TRK	7.2.9.1	Efficient Lighting and Lighting Controls									
TRK	7.2.9.2	Install Energy Efficient HVAC Systems									
Section 7.3 FACILITIES OPERATION											
TRK	7.3.1	Install Energy Management Systems									
TRK	7.3.2	Adjust Temperature Set Points and Schedule Operating Times									
TRK	7.3.3	Optimize Building Occupancy Scheduling									
TRK	7.3.4	Optimize HVAC Equipment Scheduling									
TRK	7.3.5	Activate Energy saving Features for Appliances and Computers									
TRK	7.3.6	Pursue Monitoring-Based(BMX)/Retro-Commissioning (RCx)									
Section 7.4 SUSTAINABLE BUILDING PRACTICES											
TRK	7.4.1	Establish a Green Building Standard									
TRK	7.4.2	Improve Sustainable Design Practices									
TRK	7.4.3	Use an Integrated Systems Approach									
TRK	7.4.4	Use Sustainable Building Design Professionals									
TRK	7.4.5	Commission New Buildings									

Sustainability Template Plan Implementation Programs and Plans Checklist

District: enter information on Summary tab
Campus: enter information on Summary tab
Date: enter information on Summary tab

Priority Implementation Plans Indicated Below

Selected Programs and Plans for Implementation are Summarized Below				Score
Section 7.6 TRANSPORTATION, COMMUTING, AND CAMPUS FLEET & TRAVEL				Score
<input checked="" type="checkbox"/>	7.7.1	Understand Commute and Travel Patterns		1
<input checked="" type="checkbox"/>	7.6.2.1	Utilize the local MTA Programs		1
<input checked="" type="checkbox"/>	7.6.2.2	Increase Awareness		1
<input checked="" type="checkbox"/>	7.6.2.3	Facilitate Public Transit Use		1
<input checked="" type="checkbox"/>	7.6.2.4	Incentivize Public Transportation and Carpooling		1
<input checked="" type="checkbox"/>	7.6.2.5	Facilitate Ridesharing		1
<input checked="" type="checkbox"/>	7.6.2.6	Facilitate Car Sharing		1
<input checked="" type="checkbox"/>	7.6.3.1	Provide Priority or Discount Parking for Fuel Efficient Vehicles		1
<input checked="" type="checkbox"/>	7.6.3.2	Provide Electric Vehicle Charging Stations		1
<input checked="" type="checkbox"/>	7.6.4.1	Install Bike Racks and Showers		1
<input checked="" type="checkbox"/>	7.6.4.2	Increase Campus Bike Friendliness		1
<input checked="" type="checkbox"/>	7.6.4.3	Facilitate Bike Sharing		1
<input checked="" type="checkbox"/>	7.6.5.1	Reduce or Improve Petroleum Powered Vehicles and Equipment		1
<input checked="" type="checkbox"/>	7.6.5.2	Purchase or Lease Alternative Fuel Vehicles		1
<input checked="" type="checkbox"/>	7.6.5.3	Facilitate Telecommuting & Virtual Meetings		1
<input checked="" type="checkbox"/>	7.6.5.4	Enhance Student Distance Learning		1
Total Points this Section				16

See Sustainability Template Plan Section 7.6 for Details of Implementation Plans.

 Back to Summary tab

Macro-enabled MS Excel Spreadsheet to create and track Action Plans

Sustainability Plan Document Template

- Used to help campuses easily create their own Sustainability Plan
- Includes all critical elements
- Reduces time spent writing and reporting
- Fully customizable

MS Word file containing Plan elements, organization, formatting, and instructions to assist in creating campus-specific plans



[College Name] Community College
Sustainability Plan

[Reference to Further Information]

Produced by [Name of Campus Sustainability Committee]

[DATE]

Citrus Community College District

**2012 CCC Board of Governors
Energy and Sustainability Award Winner!**

District Leadership – Citrus College Sustainability Template





SAN MATEO COUNTY
COMMUNITY
COLLEGE DISTRICT

Sustainability Template



SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

**José D. Nuñez, LEED AP, Vice Chancellor Facilities
Planning, Maintenance & Operations, San Mateo County
Community College District**

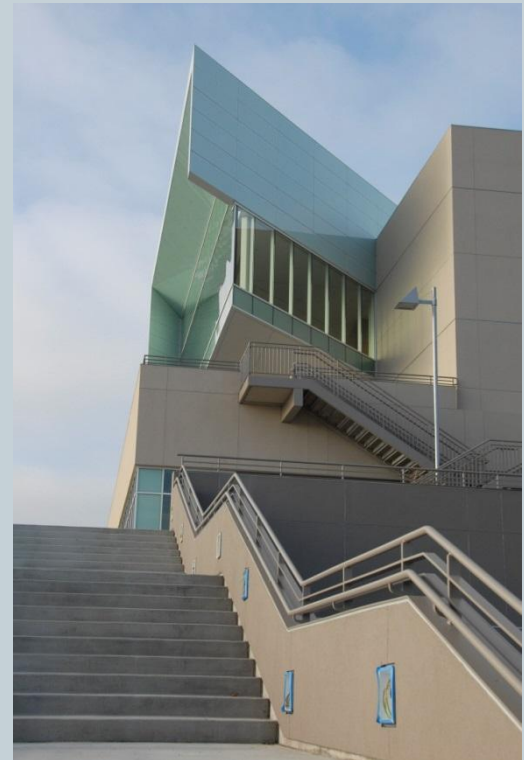


"Facilities Excellence"

Overview



- San Mateo Community College District
- SMCCCD Sustainability History
- Sustainability Goals and Planning
- Collaboration and Coordination
 - Process
 - Vision
 - Planning
- Implementation and Next Steps

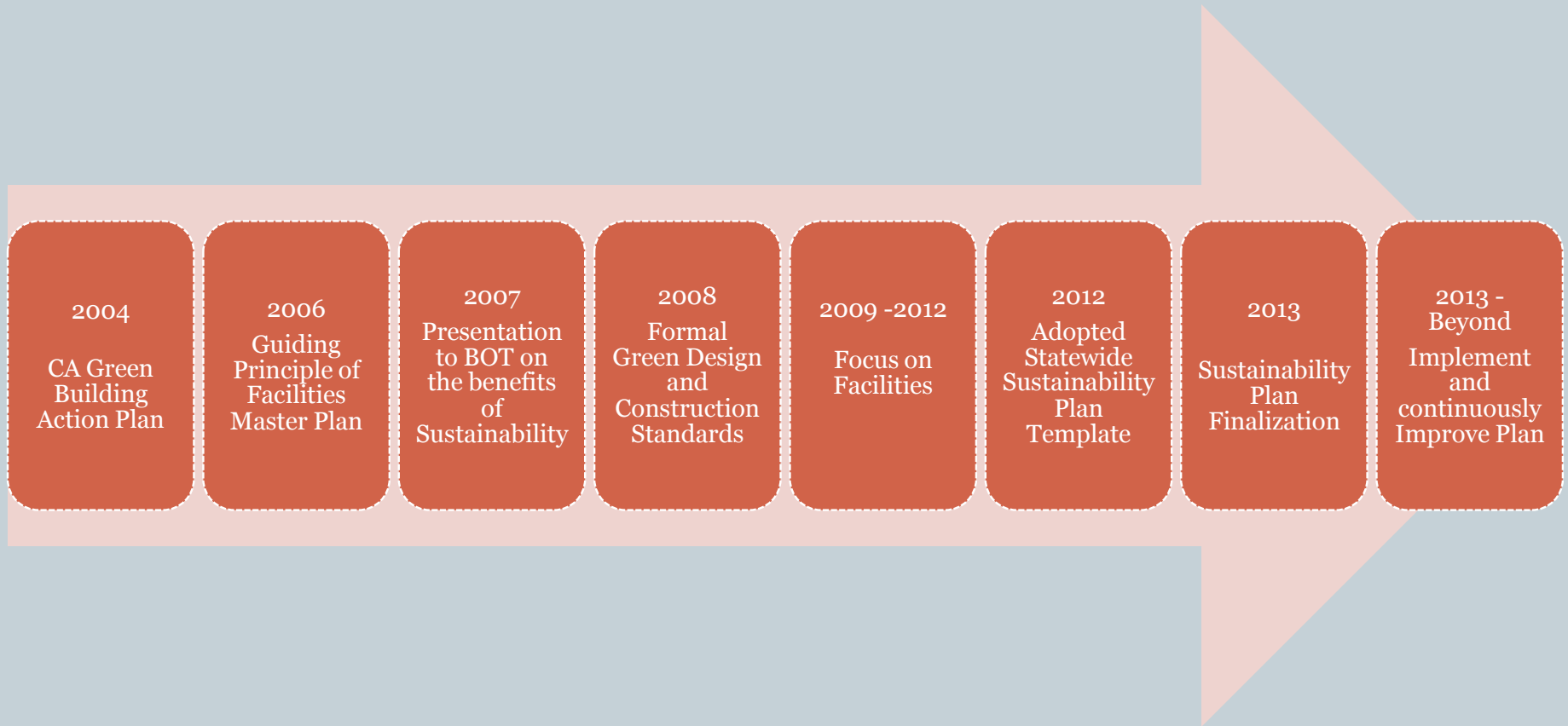


San Mateo County Community College District



- **Three Campuses (1.4M GSF / 346 Acres)**
 - Cañada College – Redwood City - 1968
 - Skyline College – San Bruno - 1969
 - College of San Mateo – San Mateo – 1963
 - District Office, San Mateo - 1978
- **25,000 Students / 1,000 Staff / Adjuncts**
- **\$900M Capital Improvement Program**
 - Multiple Funding Sources
 - Multiple Delivery Methods

Snapshot of Sustainability History



District Energy/Sustainability Goals



- Reduce Operating Costs through Renewable and Energy Efficiency Capital Projects
- All new projects LEED Silver Certified
- All Modernization Projects designed to LEED Standards
- Every new project to achieve 15% better than Title 24 requirements
- Mandatory PG&E Energy Efficiency/Savings by Design Application
- Mandatory Life Cycle Cost Analysis on Major Equipment



District Sustainability Planning - Facilities



- Design Standards
 - Mandatory Goals
 - PG&E Energy Efficiency/Savings by Design
- Project Review (Different Goals)
 - College Leadership
 - Maintenance & Operations Staff
 - Designers
 - Constituents (Faculty/Staff/Students)
- Design/Construction (Constant Vigilance)
 - Programming
 - Schematic Design (SD)
 - Design Drawings (DD)
 - Construction (RFI/Submittal Review)
 - Commissioning (Programming through Occupancy)



Sustainability Planning - Colleges



10/12

- District Wide Sustainability Committee Established

11/12

- College Sustainability Committees Established

11/12 –
5/13

- College Committees Meet Regularly and collaboratively build Sustainability Plans

6/13

- Final Sustainability Plan comments were gathered and adjustments made where appropriate

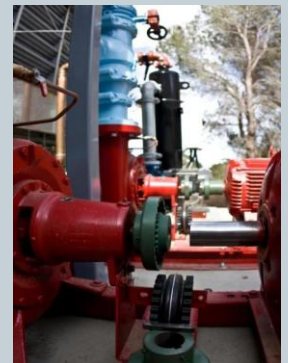
9/13

- Kick of the 2013-14 School year with a Presentation to the Board of Trustees and celebration; Implementation continues.

The Collaborative Process - Colleges



- Representatives selected from all stakeholder groups (staff, faculty, administration) for committee who incorporated input from their groups.
- Shared final draft with Campus Community
- Presented draft Plan to shared governance councils
- Final comments were gathered and adjustments made where appropriate
- Board study session (Sept. 2013)



Vision of Sustainability - Colleges



- Cañada College will be a model for environmental sustainability, inspiring and empowering our community to implement sustainable practices and promote social equity.
- CSM will be a model for sustainability, inspiring and empowering our community to implement sustainable economic and environmental practices and promote social equity in all aspects of the college's mission and operations
- Skyline College will inspire a collaborative, global community of learners to empower and transform the College and the community, advancing social equity through environmental stewardship and sustainable practices

Sustainability Planning - Colleges



1. Campus and Community Awareness & Involvement
2. Curriculum Development
3. The Built Environment
4. Energy Conservation and Efficiency
5. Water Conservation and Efficiency
6. Solid Waste Management
7. Transportation
8. Sustainable Procurement
9. Renewable Energy and Onsite Generation
10. Climate Action Plan
11. Sustainability Plan Management



Next Steps: Plan Implementation



- Bridging the gap between Instruction and Facilities
- Supporting Campus Sustainability Change agents and Champions
- Tracking metrics and proving value
- Continuously Improve and Adjust



“By adopting this Sustainability Plan, CSM commits to address the impacts of climate change and develop green curriculum to educate students for the challenges of the 21st century “ ~ College of San Mateo Sustainability Plan

Next Steps: Leveraging Proposition 39

- Cañada College Solar Photovoltaic 1.1 MW
- Cañada College LED Roadway & Parking Lot Lights
- College of San Mateo LED Roadway & Parking Lot Lights
- College of San Mateo & Skyline College Cogen Replacement
- District Wide Measurement & Verification
 - EMS/EIS Retrofit & MBCx/RCx

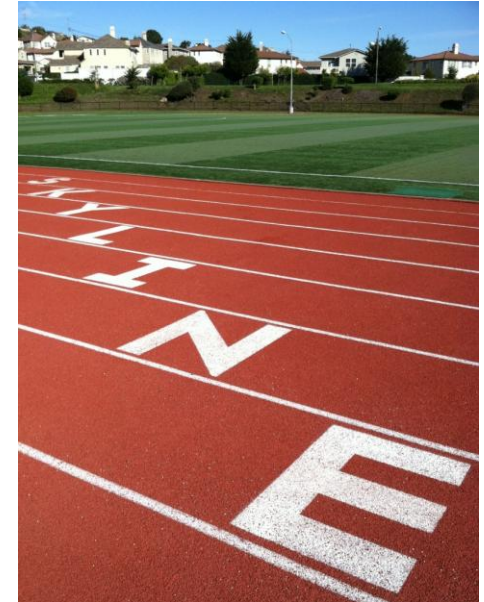


Implementing Sustainability from the Faculty Point of View

Dr. Carina Anttila-Suarez
Professor of Biology & Field Studies
Skyline College



Skyline College will **inspire** a collaborative, global community of learners to **empower** and transform the College and the **community**, advancing social equity through **environmental** stewardship and **sustainable** practices.



- 1) **Student Engagement**
- 2) **Campus and Community Education and Awareness**
- 3) **Curriculum Development**
- 4) The Built Environment
- 5) Energy Efficiency
- 6) Water Conservation
- 7) Solid Waste Management
- 8) Transportation
- 9) Sustainable Procurement

Our Process – Started with our campus community & completed by strong support of Newcomb, Anderson & McCormick

Commitment from Campus Administration



Establish Sustainability Ambassador Network (SAN)



- SAN is comprised of students, staff and faculty from the campus community



Climate Corps Intern



<http://www.climatecorps-bayarea.org>

Our Process: Participatory Governance



Committee	Date
Associated Students of Skyline College (ASSC)	Fall 2012, Spring 2013
Classified Council	Fall 2012
Academic Senate	Spring 2013

February 8, 2013 Vol. 2 No. 20

Skyline College Completes Sustainability Plan!

The Skyline College Sustainability plan is a part of a district-wide effort to improve campus sustainability at all three colleges in the San Mateo County Community College District. Through its Sustainability Plan, Skyline College will inspire a collaborative, global community of learners to empower and transform the College and the community, advancing social equity through environmental stewardship and sustainable practices.

A special thank you to the faculty, staff and students of the Sustainability Ambassador Network for their contributions to the Sustainability Plan. If you are interested in reviewing the working draft visit this link, <http://www.skylinecollege.edu/sustainability/assets/draft-sustainabilityplan/DRAFT-SkylineCommunityCollegeSustainabilityPlan.pdf>.

Please email all comments to lawrencegomez@smccd.edu by 5pm Monday, February 11, 2013.

Article by Sabrina Lawrence-Gomez

Admissions Academics Student Life Student Services About Skyline

Sustainability

- Overview
- News and Events
- Get Involved
- Academics
- Sustainability Programs
- Facilities
- Meet the Staff
- Contact Us

Related Links

Sustainability at Skyline College

At Skyline College, sustainability is a part of our campus culture. From LEED certified buildings to campus recycling, faculty, staff and students are all involved in sustainability. Learn more about sustainability programs and how to get involved in sustainability at Skyline College.

Our Commitment

To inspire a collaborative, global community of learners to empower and transform the College and the community, advancing social equity through environmental stewardship and sustainable practices.

What is Sustainability?

In 1987, the Brundtland Commission of the United Nations defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." Sustainability explores the questions:

- Are resources and environmental burdens distributed equitably?
- How do we utilize limited resources in a world with unlimited possibilities?

Campus Sustainability

A sustainable campus is one that weaves this holistic thinking into the fabric of its work: education, the landscape of its setting; its facilities; and the spirit of its community: students and employees.

To this end Skyline College, in conjunction with the San Mateo County Community College District, has created a Sustainability Plan which sets campus goals for improving: campus and community involvement, curriculum, the built environment, energy efficiency, water and waste management, transportation and procurement. Through its sustainability initiatives, Skyline College hopes to advance environmental stewardship and improve social equity, citizenship, and fiscal responsibility within the college and community.

Click the link to view a working draft of the [Skyline College Sustainability Plan](#).



Our Process

Define Goals, Criteria and Timelines



- Student Engagement
- Campus and Community Education and Awareness
- Curriculum Development



A hand holding a glowing green laser pointer against a black background with green light trails.

***Skyline Students Step Up for
Sustainability***

*be the
light of
change*

\$5000, 3 Grants

To Support Skyline Student Projects

Success: Implemented Programs

Goal	Area of Sustainability	Successful outcomes to date
1	Student Engagement	<ol style="list-style-type: none">1. Students Step Up for Sustainability2. Green Gorillas



Success: Implemented Programs

Goal	Area of Sustainability	Successful outcomes to date
2	Campus and Community Education and Awareness	<ol style="list-style-type: none"> 1. Campus Hydration Station 2. Earth Week activities



IMMENSE ATTRACTION
 EARTH WEEK • 4/24/2013
 SKYLINE COLLEGE • BUILDING 7 • ROOM 7106
 EARTH WEEK CELEBRATIONS &
 THE ENVIRONMENTAL SCIENCE CLUB PRESENT


CMDR. SCOTT SHACKLETON
 ASSISTANT ENGINEERING DEAN, U.C. BERKELEY

TO GIVE HIS
LECTURE
 ENTITLED:
“SHACKLETON’S ANTARCTIC STORY: YESTERDAY & TODAY”

WEDNESDAY, APRIL 24
12 - 1PM • 7106

In addition to giving popular accounts of his own South Polar Expedition, Cmdr. Shackleton will discuss his fifth cousin, polar explorer Sir Ernest Shackleton and changes to the environment at the pole today.

THE CHAIR WILL BE TAKEN BY
 DEANNA BADONG, President, Environmental Club & Sustainability Coordinator
 SABRINA LAWRENCE-GOMEZ & CARINA ANTILLA-SUAREZ, Ph.D., Prof. of Biology



Success: Implemented Programs

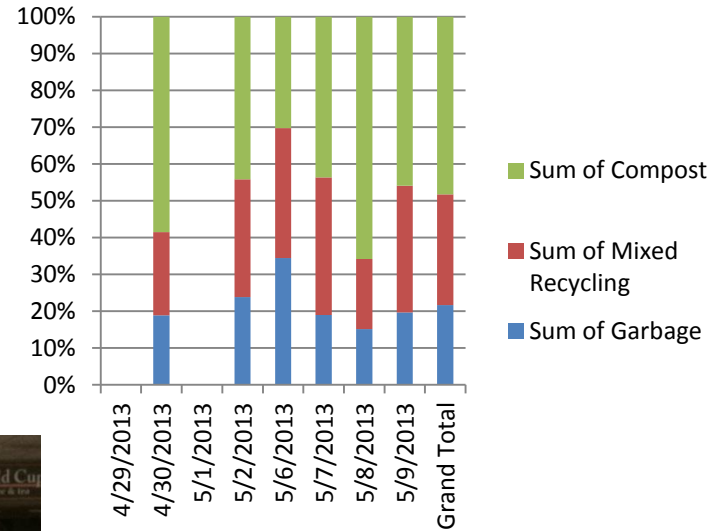
Goal	Area of Sustainability	Successful outcomes to date
3	Curriculum Development	<ol style="list-style-type: none">1. Create certificate and degree programs in Energy Systems Technology and Management (formally ENVS)2. Learning Communities3. Service Learning



Measure and Report Performance



Green Gorillas





- Quincy, Plumas County
- “Lost Sierra”, Feather River Country
- 24 Full-time Faculty
- ~600 Full-time, on-campus students

Feather River College

Sustainability Action Team

Dr. Darla DeRuiter

Associate Professor, Environmental Studies & Outdoor Recreation Leadership



FRC's Experience

- 2011 – Sustainability Management Plan #1
- 2012 – Co-pilot?
- Prioritizing projects when *everything* is worthy



Limited Resources

- “Slash” Jobs
- Environmental Studies / Outdoor Rec Leadership
- Director of Facilities / Information Services



Criteria Alternatives Matrix (CAM)

- Qualitative analysis; results in quantitative, prioritized list
- Four Criteria
 1. Efficiency
 2. Feasibility
 3. Political Acceptance
 4. Strategic Direction

CAM RESULTS	Efficiency	Feasibility	Political Acceptance	Strategic Direction	PRIORITIZATION AVERAGE
Optimize HVAC Equipment Scheduling	4.67	4.67	4.33	3.67	4.33
Efficient Lighting and Lighting Controls	4.33	3.83	4.33	4.00	4.13
Activate Energy-saving Features for Appliances & Computers	4.50	4.50	3.67	3.83	4.13
Adjust Temperature Set Points	4.83	4.17	3.67	3.67	4.08
Integrate Sustainability Planning	3.83	4.17	3.33	4.50	3.96
Set Energy Efficiency Goals	4.00	3.50	4.00	3.83	3.83
Provide Professional Development	3.50	4.00	3.67	4.00	3.79
Encourage and Enhance Bicycling Options	3.67	4.50	3.50	3.50	3.79
Community Specific Outreach & Awareness	3.33	3.17	4.17	4.17	3.71
Pursue Grant and Incentive Programs	4.17	2.83	4.00	3.83	3.71
Enhance Student Distance Learning	4.00	3.33	3.67	3.83	3.71
Pursue Public Transportation & Ridesharing	3.67	4.33	3.00	3.67	3.67
Appoint a Campus Sustainability Committee	3.64	3.41	3.65	3.80	3.63
Hold Workshops and Presentations	3.50	3.17	3.83	3.33	3.46
Improve Existing Recycling Programs	3.67	3.33	3.50	3.33	3.46
Hold Sustainability Events	3.00	3.17	3.67	3.67	3.38
Reduce Waste Stream to the Landfill	3.33	3.00	3.83	3.33	3.38
Employ Sustainability Professionals	3.00	1.67	2.50	4.00	2.79

Getting the Word Out

- Plan A
- Scrap that – straight to Senates, Cabinet, BOT
- Meanwhile...moving forward



Questions?



The Sustainability Template can be downloaded from the
CCC Chancellor's Office website:

<http://extranet.cccco.edu/Divisions/FinanceFacilities/Sustainability.aspx>

For more information contact:

Fred Harris, Assistant Vice Chancellor
College Finance & Facilities Planning

fharris@cccco.edu

916-324-9508 Office/Cell

THANK YOU!