

Sustainability Report

by the

Ad Hoc Sustainability Committee

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Committee Members:

Chair: Scott Hewitt

Faculty: Pinaki Chakrabarti (Civil & Environmental Engineering), Becky Dolhinow (Women's Studies), Scott Hewitt (Chemistry & Biochemistry), Nancy Jimeno (Politics, Administration & Justice), Jochen Schenk (Biological Science), and Jon Taylor (Geography)

Staff: Greg Dymont (Director of the Arboretum)

Administration: Willem van der Pol (Director of Physical Plant)

Students: Anthony Martinez (ASI Chief Governmental Officer) and Marlene Nang (Sustainability Coordinator for Chancellor's Office)

Unofficial student members: Gina van Deth (Chair of CSUF Environmental Action & Advocacy Committee) and Allen Morton

Actions Taken by the Ad Hoc Sustainability Committee and Some Results

- met four times
- surveyed the literature and internet for definitions of sustainability
- contacted faculty at other campuses and surveyed the internet for what other campuses are doing with regard to sustainability (focused mainly on CSUs and UCs) – see p. 4-5 for a summary of some of our results
- surveyed all full and part-time faculty about sustainability. 30 faculty replied that they have expertise and/or interest in sustainability. Sustainability is incorporated into at least 53 CSUF courses in 14 different departments. Prior to formation of this committee, an email went out to all full and part-time faculty to see who would be interested in serving on this committee: 27 faculty expressed interest in serving on this committee (usually, we have a difficult time finding enough faculty to serve on a committee). Between the two surveys, 48 faculty have expressed an interest in sustainability.
- had four students who were actively involved on our committee, even though there were only two student seats on the committee (most committees have difficulties getting students to attend their meetings)
- invited a sustainability consultant, Dr. Jason Hamilton, to campus (Vice Presidents Smith and Hagan provided the funding). Dr. Hamilton gave two large seminars, entitled Sustainability at CSUF: Why our future depends on it, to the campus community and three small workshops (faculty leadership with regard to sustainability, sustainability management for the Presidents Advisory Board and other CSUF managers, and incorporating sustainability into the curriculum). In total, 163 campus members attended these five events. During the PAB workshop, Vice President Hagan agreed to pay for CSUF to become a member of the Association for the Advancement of Sustainability in Higher Education (AASHE).
- during this time, we have been contacted by community members on several occasions. One alum would like to work with us to install solar energy devices, photovoltaics, on our campus. He now works at a local photovoltaics company. The Commissioner for the City of Fullerton Energy and Resource Management Committee, who also works in our Center for Entrepreneurship, would like to see the City of Fullerton and CSUF work together to become more sustainable. She mentioned that she was pushing for the City of Fullerton to sign the U.S. Mayors Climate Agreement (similar to the Presidents Climate Commitment – see p. 4). One of our part-time faculty member who works full-time at Fullerton Community College and is involved with sustainability activities at Fullerton Community College, would like to see FCC and CSUF work together on sustainability. All community members who have responded are very enthusiastic about making CSUF more sustainable.
- made recommendations to the CSUF Academic Senate (see p. 6-7)

Definition of Sustainability

There are many definitions of sustainability (or sustainable development). The United Nations definition for sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Dr. Hamilton discussed that “sustainability is achieved by creating the connections between healthy people, healthy environments, healthy communities, and healthy businesses.” The committee agrees with this view, as it highlights how all faculty, staff, students, local community members, and local businesses can be involved.

Sustainability at CSUF encompasses all of our activities: teaching, research, purchasing, how we reach campus each day, ... It encompasses our buildings, our energy usage, our water usage, our land, our dining facilities, waste management, ...

An appropriate sustainability principle or goal for universities is the following statement from Chico State: “We strive to become leaders in achieving a new vision of education, which integrates the principles of sustainable development into the academic programs, practices, and collaborations of our university.”

Driving Forces Behind Sustainability

- International, national, and local concerns about global climate change. Almost all scientists who are climate experts conclude that increasing levels of greenhouse gases are currently causing global warming (IPCC report 2007). Uncertainty exists with regard to the rate of global warming, and when we will reach the “tipping point.” It is predicted that we have only 10 to 30 years to make significant changes, if we are to avoid the major consequences of global climate change (IPCC mitigation report 2007).
- 22% of all mammals on our planet are currently threatened (IUCN Red List 2007). It is predicted that 25% of mammals will be extinct by 2100.
- Higher Education Sustainability Act of 2007 was reintroduced into the House of Representatives. It would annually support 25 to 200 sustainability projects by individual higher education institutions and higher education consortia/associations. Funds can be used to establish multidisciplinary sustainability education, research, and outreach programs; and to conduct energy management, green building and purchasing, and waste and toxics management, transportation, and related sustainability initiatives.
- U.S. businesses are becoming more sustainable to reduce costs, improve public relations, open up new opportunities for growth, and to obtain a more stable, predictable future.
- AB32 was signed by Governor Schwarzenegger. Requires the CSUs to reduce greenhouse gas emissions to 1990 levels by 2020.
- CSU: CSU Sustainability Clearinghouse website (www.calstate.edu/cpdc/sustainability/); CSU Sustainability Coordinator; CSU Sustainability Advisory Committee; Board of Trustees' Policy on Energy Conservation, Sustainable Building Practices, and Physical Plant Management;

CSU Strategic Planning Initiative, Access to Excellence, makes multiple references to sustainability.

- President Gordon listed sustainability as one of our university goals, in his State of the University address on Nov. 15, 2007.
- Presidents Climate Commitment to become carbon neutral (434 U.S. colleges and universities have signed, including 5 CSUs and the entire UC system)
- U.S. colleges and universities are institutionalizing sustainability: office and/or director of sustainability, incorporating sustainability into their mission and goals statement, incorporating sustainability into the curriculum, providing teaching and research sustainability grants, ... (see “snapshot” below).

Sustainability Activities at CSUF

- Ad Hoc Sustainability Committee (faculty driven)
- University Sustainability Study Group (administrator driven, funded via a Mission & Goals Initiative)
- CSUF Environmental Action and Advocacy Committee (student driven)

- We have at least 53 courses in 14 different departments that incorporate sustainability
- We divert about 60% of our waste for recycling
- Our latest buildings all have green elements (Arboretum Visitor Center, Student Rec Center, Mihaylo Hall)
- About 16% of our energy comes from alternative or green sources
- We have upgraded our lighting, heating, and cooling systems
- Electric vehicles on campus, greener cleaning products, ...

Snapshot of Sustainability Activities on Other Campuses

This is a “snapshot” of what the committee found via contacts with colleagues at other institutions and via the internet. As such, the information is not complete and some of it may be out of date. We focused mainly on sustainability curriculum and management structure in the CSUs and UCs.

Sustainability in the Curriculum

- general education core requirement: CSU Chico
- sustainability courses, some interdisciplinary
- infusion of sustainability into existing courses, disciplines, colleges
- specialized sustainability degrees (MBA/MSBA in Sustainable Business, Ecology and Sustainability MS at CSU Stanislaus; major in Sustainable Commerce at U. Arizona; minor in Global Sustainability at UC Irvine)
- service learning, internship, and research opportunities
- U. British Columbia has more than 300 courses dealing with sustainability issues
- using the campus and the community as a sustainability learning lab

Sustainability Management

- Sustainability Office: UC Santa Barbara, U. British Columbia
- Director of Sustainability: CSU Chico, Humboldt State, UC Santa Barbara, UC Irvine, Stanford, (CSU Sacramento and UCLA plan to hire someone)
- Sustainability Advisory Committee (faculty, staff, and students): U. British Columbia, UC Davis, UC Berkeley, San Diego State, Cal Poly Pomona, CSU Monterey Bay, Stanford, UC Riverside, Cal Poly SLO, UCLA, UC Santa Barbara
- Sustainability faculty committee: CSU Stanislaus, Cal Poly SLO, Cal Poly Pomona, CSU Channel Islands
- sustainability websites: Chico, UC Davis, UC Santa Barbara, UC Irvine, Stanford, Cal Poly SLO,
- incorporation of sustainability into “university mission & goals”: U. British Columbia, CSU Chico, CSU Humboldt State, CSU San Marcos, UC Irvine, UC Santa Barbara
- Stanford is going to hire a campus sustainability executive director who will oversee sustainability, energy management, water use, parking & transportation (major restructuring of Facilities Operations). A second new position, the sustainability programs manager, will help promote outreach activities in the community.
- UC Davis has an intramural sustainability grants program and a Sustainability Advisory Committee with the following subcommittees: 1) Campus Planning and Transportation, 2) Education and Outreach, 3) Energy and Atmosphere, 4) Green Buildings, 5) Material Management.
- UCI has separate “Sustainability” committees for 1) Green Buildings, 2) Energy Efficiency, 3) Transportation Management, 4) Emissions Reductions, 5) Waste Management, 6) Grounds Management, 7) Dining.

How Would Institutionalizing Sustainability Benefit CSUF?

- Sustainability can strengthen and unify the campus, as it affects all disciplines and all campus members.
- It is an opportunity to enhance our links to our community via outreach efforts and working together to become sustainable.
- Involving students in sustainability projects and incorporating sustainability into the curriculum will engage and retain our students. It will also give them an edge when applying for jobs.
- Reducing resource usage will reduce CSUF operating costs. Tapping into external sustainability funding will increase our external support.

Working towards sustainability is in line with at least seven of our eight Mission & Goals:

- I. To ensure the preeminence of learning.
- II. To provide high quality programs that meet the evolving needs of our students, community, and region.
- III. To enhance scholarly and creative activity.
- IV. To make collaboration integral to our activities.
- VI. To increase external support for university programs and priorities.
- VII. To expand connections and partnerships with our region.

VIII. To strengthen institutional effectiveness, collegial governance and our sense of community.

Recommendations from the Ad Hoc Sustainability Committee

1) Raise awareness and build capacity

- Invite speakers to our campus to talk about sustainability and how to implement sustainable principles. These seminars/forums/workshops should be targeted to all campus members, as well as the local community.
- Provide funding for faculty, staff, and students to attend sustainability meetings and workshops off campus.
- Create a campus sustainability website.
- Perform outreach to educate the local community, businesses, and children about sustainability.
- Form a faculty/staff sustainability group.
- Make sustainability visible (displays, public relations, large projects, buildings, ...)

2) Incorporate sustainability throughout the curriculum

- Encourage faculty to incorporate sustainability into their classes
- Encourage faculty to link a series of classes across departments or create interdisciplinary classes (healthy people, healthy environment, healthy communities, healthy businesses).
- Make sustainability a GE learning goal, similar to the diversity learning goal.
- Create intramural grant programs to encourage incorporation of sustainability into the curriculum and to encourage sustainability research.
- Work with the local community to make Fullerton and Orange County more sustainable.
- Provide our students with opportunities to make a difference now, through research projects, internships, and service learning experiences.

3) Institutionalize sustainability

- Sign the Presidents Climate Commitment (within two years, we agree to present a plan to become carbon neutral sometime in the future).
- Create a Director of Sustainability to coordinate all campus sustainability efforts.
- Join the Association for the Advancement of Sustainability in Higher Education.
- Sign the Talloires Declaration (agree to sustainability principles, in general).
- Incorporate sustainability into our CSUF Mission & Goals and/or create a set of sustainability principles for the campus to follow.
- Make sustainability a budget priority, especially when long-term operating costs are reduced.
- Create our own goals, establish metrics of success and plot progress.

4) Form a Sustainability Task Force (6 faculty, no more than two from one college; 2 students; 1 administrator; 1 staff member; two year timeline).

- To coordinate raising awareness, building capacity, and incorporating sustainability throughout the curriculum
- To work with the administration, staff, and students to institutionalize sustainability
- Create our own goals, establish metrics of success and plot progress.

Long-Term Vision

We envision that CSUF will have a Sustainability Director, a Sustainability Office, and a Sustainability Advisory Board (made up of faculty, staff, students, and administrators). Sustainability will be an integral part of some courses and a GE requirement. Other courses will incorporate sustainability modules, assignments, and projects. Perhaps there will be a sustainability minor or a sustainability degree. Faculty, students, staff, and community members will be working together on sustainability projects. Perhaps we will create a Sustainability Institute that focuses on sustainability research and outreach.

California State University Fullerton Sustainability Resolution

Whereas, the United Nations introduced the term sustainability when it declared that “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs;”¹ and,

Whereas, “sustainability is achieved by connections between healthy people, healthy environments, healthy communities, and healthy businesses;”² and,

Whereas, CSUF has a responsibility to educate our students about sustainability; and

Whereas, CSUF has a responsibility to lead by example and to work with our local community and businesses to become sustainable; therefore be it

Resolved that a Sustainability Task Force be formed to raise awareness of sustainability and build faculty capacity to support sustainability efforts on our campus and in the community;

Resolved that the Sustainability Task Force coordinate efforts to incorporate sustainability throughout the curriculum;

Resolved that the Sustainability Task Force work with the administration, staff, and students to institutionalize sustainability at CSUF.

1. United Nations World Commission on Environment and Development
2. Dr. Jason Hamilton, Ithaca College