



CSUN Sustainability Plan, 2013-2023 Annual Update, 2014

June 1, 2014



Executive Summary

CSUN's Sustainability Plan 2013-2023 went into effect in the 2013-14 academic year. This report highlights the activities which have taken place in each topic-specific section of the plan and provides a detailed update on each of the Phase 1 strategies identified in the plan together with the next steps to be taken for each of these. In addition new CSU-wide policy (May 2014) as it pertains to each topic is included, together with proposed priorities for the 2014-15 year.

The university has taken many important steps in the past year to establish itself as a leader and solidify its commitment to sustainability. In March 2013, President Harrison signed the American College and University Presidents' Climate Commitment (ACUPCC) committing the university to a leadership role in addressing climate change, through reduction of greenhouse gas emissions and education of the campus community on climate change causes and impacts. In April 2014, President Harrison took further action as a founding signatory to the Alliance for Resilient Campuses, which establishes CSUN as a resource hub and research leader on regional climate impacts, adaptation and resilience. In June 2013, the Institute for Sustainability was re-chartered for five years, and in 2013-14 the university began a search for a campus sustainability program manager to take on the responsibility of managing multiple sustainability improvement projects across campus. A result of many years' dedicated work by a systemwide network of CSU sustainability officers resulted in the passage of a new CSU Sustainability Policy in May 2014. This policy establishes a number of goals which align well with those defined in the CSUN plan.

The institutionalization of sustainability at CSUN advanced rapidly in 2013-14 with integration and coordination of sustainability practices into dozens of units across campus. Examples include the conversion of many traditional paper processes into electronic ones; the work carried out by PCA and PPM to increase the recycled content of purchased products including paper; development of a Geographic Information System to allow the sharing of data between academic and administrative units and reduce resource use; the reduction and standardization of student printing by Academic Affairs utilizing duplex printers; and the integration of sustainability goals into the planning of many units across campus. Campus auxiliaries have been integral to the institutionalization of sustainability efforts through their participation in the CSUN Green Core Team and adoption of energy and water efficiency improvements, local and sustainable food sourcing, organic cleaning products, and incentives for use of re-usable drink ware in campus dining facilities.

The campus has embarked on a directed effort to inform the community of its work in sustainability through increased signage, awareness campaigns and events. Formal education initiatives include an expansion of the sustainability minor offerings, faculty participation, and service learning opportunities with the Institute for Sustainability. In addition a campus-wide assessment of sustainability literacy was undertaken beginning in Spring 2014 which will help us understand better our student population and evaluate the efficacy of our sustainability education programs. Responsibility for coordinating the Sustainable Office Program for CSUN employees was assumed by



Associated Students in Spring 2014 and consultant training has been conducted. This program kicks off in Summer 2014.

Campus infrastructure improvements in energy and water efficiencies have been prioritized over the past year including the installation of cool roofs, LED lighting, and HVAC infrastructure; and tankless water heaters, Energy Star refrigerators, and energy-saving controls have been installed in student housing. In addition new energy and electricity monitoring has been installed at a building level for heat flow, temperature and electricity, which will allow for better control of those systems and reduced energy use.

A significant portion of our carbon footprint is from commuting. Efforts have been underway this year to reduce that footprint through improvements to bicycling infrastructure (new theft-reduction racks), adoption of ZipCar by Associated Students, and vanpool incentives. Further work remains to be done in this area, particularly in working with local agencies to improve public transportation options to campus.

Much work has been undertaken in the past year on reducing organic waste and water use through changes to campus grounds. The Eco-region garden established in 2012 continues to thrive as does the CSUN organic food garden north of Redwood Hall, in which students grow fruit and vegetables using compost generated from campus food waste. The composting program has expanded greatly in the past year now processing all of the kitchen food waste and coffee grounds from several of the coffee shops in a joint program between PPM, IS and TUC. This program has the potential to retain in-house all food waste generated by the campus. Projects have been undertaken to remove turf from several areas of campus and replace with drought-tolerant and native species in an effort to reduce water consumption and create habitat for native species. Further work is being undertaken with respect to water use with upgrades to the sprinkler system and indoor plumbing fixtures.

Priorities for 2014-15 are driven by the urgency to address climate change through reductions to our carbon footprint, and to reduce our overall impact on the environment. These efforts must incorporate outreach and education, together with improvements in practices. We must continue our momentum in institutionalizing sustainability as our goals can only be met by continuing to work together in a sustained and collaborative team effort.

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2014-15 Priorities

Administration

1. Hire a sustainability program manager
2. Move more paper processes to fully electronic (paperless)
3. Roll-out production version of Geographic Information System to FPDC, PPM and AA
4. Begin work on a Climate Action Plan
5. Increase outreach for sustainability with visibility and marketing. Use reusables for campus events to demonstrate commitment to sustainability.

Dining Services

1. Prepare tracking and reporting information for participation in the REAL Food Challenge
2. Expand vegetarian and vegan food offerings

Education

1. Implement Sustainable Office Program
2. Improve sustainability literacy amongst students
3. Expand faculty participation in sustainability teaching

Energy and Buildings

1. Outdoor LED lighting installation
2. Continued monitor-based commission of buildings

Organics

1. Collect and process all kitchen green waste into compost
2. Collect and process all campus coffee grounds into compost
3. Increase student participation in garden activities

Purchasing and Consumption

1. Increase use of recycled content paper
2. Increase recycled content of paper and other products purchased for use on campus

Transportation

1. Conduct and analyze campus-wide commuting survey
2. Expand ZipCar program
3. Expand support for reduced-footprint transportation (bicycles, van and car pools)

Waste and Materials Management

1. Assess pilot in-building recycling program and expand program to more buildings
2. Publish report on historical waste and recycling data
3. Implement new printing standards, including duplex printing throughout campus

Water

1. Complete retrofit of indoor plumbing fixtures to reduce water use
2. Continue transition of turf areas to native and drought-tolerant vegetation



Key to Acronyms and Abbreviations

AM = Asset Management
ARP = Academic Resources and Planning
AS = Associated Students
CIELO = Center for Innovative and Engaged Learning Opportunities
EH&S = Environmental Health and Safety
EPA = Environmental Protection Agency
FA = Faculty Affairs
FIN = Financial Services
FPDC = Facilities Planning, Design and Construction
HR = Human Resources
IS = Institute for Sustainability
IT = Information Technology
LSP = Liberal Studies Program
MMC = Marilyn Magaram Center for Food, Nutrition, and Dietetics
PS = Police Services
PCA = Purchasing and Contract Administration
PPM = Physical Plant Management
PTG = Pioneering Technology Group
RGS = Research and Graduate Studies
SA = Student Affairs
SLO = Student Learning Outcomes
SCC = Sustainability Curriculum Committee
SOP = Sustainable Office Program
Tseng = Tseng College
TUC = The University Corporation
USU = University Student Union

Status Key:

On-going = Item has no end date

In-progress = Item will be complete at some point in time

Priority Key:

Phase 1 = Top priority. Lowest cost for highest benefit

Phase 2 = Second priority. To be implemented, but will take more time and/or effort

Phase 3 = Lower payoff for implementation and may take substantial time and/or effort



Action Plan — Administration

In order to meet the ambitious objectives set forth in this document, CSUN will need to create and maintain a culture of sustainable thinking on the campus and invest in a sustainability infrastructure.

Main Issues

1. Incorporate the objectives defined for sustainability into established campus, division, and program planning processes.
2. Improve coordination, infrastructure, data collection and record keeping in support of sustainability efforts.
3. Utilize sustainability as a branding opportunity, particularly for recruitment.

Objectives for 2023

- Establish a culture of sustainability that is evident in policy and practice across the institution
- Allocate sufficient resources to support sustainability programs
- Coordinate sustainability efforts across campus to reduce resource use, including unification of data and data management
- Establish and promote CSUN as a destination campus for students interested in sustainability

New CSU Policy (May 2014)

- The CSU will pursue sustainable practices in all areas of the university, including:
 - business operations such as procurement; information technology; student services; food services; facilities operations; design and construction; and
 - self-funded entities such as student housing, student unions, parking, children's centers, and auxiliary operations. (14-New)
- Each CSU is encouraged to designate a sustainability officer responsible for carrying out and/or coordinating campus sustainability program efforts. (14-New)
- The CSU will strive to reduce systemwide facility greenhouse gas (GHG) emissions to 1990 levels, or below, by 2020 consistent with AB 32, California's Global Warming Solutions Act of 2006 (HSC §38550). Emissions will include both state and auxiliary organization purchases of electricity and natural gas; fleet, marine vessel usage; and other emissions the university or self-support entity has direct control over. The Chancellor's Office staff will provide the baseline 1990 facility emission levels (for purchased electricity and natural gas) for the campuses that existed at that time and assist campuses added to the CSU after 1990 to determine their appropriate baseline. (14-New)
- The CSU will strive to reduce facility GHG emissions to 80 percent below 1990 levels by 2040. Campus tracking and reporting of their GHG inventory will be grounded in the American College and University President's Climate Commitment guidelines or equivalent,



with consideration to campus requested improvements. Metrics will include GHG emissions per FTE. (14-New)

- To the extent possible, academic and non-academic programs will be consolidated in a manner to achieve the highest building utilization. (78-; 88-Adopt; 01-No Change; 04-No Change; 14-Revise)
- All CSU campuses will implement a utilities chargeback system to recover direct and indirect costs of utilities provided to self-supporting and external organizations pursuant to procedures in the Integrated California State University Administrative Manual (ICSUAM). (78-; 88-Adopt; 01-No Change; 04-No Change; 14-Revise)
- Each CSU campus is encouraged to develop and maintain a campuswide integrated strategic energy resource plan, which will include tactical recommendations in the areas of new construction, deferred maintenance, facility renewal, energy projects, water conservation, solid waste management, and an energy management plan. This plan will guide the overall energy program at each campus. (78-Adopt; 88-Revise; 01-Revise; 04-Revise; 14-Revise)

2013-14 Highlights

- The Institute for Sustainability was re-chartered in June 2013 for five years. It serves as the coordinating body within the university for issues related to sustainability
- Sustainability planning has been incorporated into the planning processes with Academic Affairs
- Sustainability planning goals have been incorporated in varying degrees within other units. These will be discussed during planning meetings in Summer 2014.
- President Harrison signed the American College and University Presidents' Climate Commitment (ACUPCC) on March 11, 2013.
- Newly purchased room reservation software is being programmed with HVAC zone information in order to provide the opportunity to cluster scheduling of classes during off-peak hours and reduce energy demand.
- Programming of the GIS (Geographic Information System) developed by IS for FPDC has been completed. The CAD room data is being updated within the GIS to provide accurate square footage data and align with the SFDB (square footage database) used by the Chancellor's Office. Completion of project is expected summer, 2014. The completion of this project will improve efficiencies in many divisions including FPDC, PPM, and ARP, and allow for improved cross-divisional data sharing. This project will provide the basis for a student/campus-wide digital map under development in IT and AA.
- E-forms have been developed in a number of important areas to reduce the use of paper and improve efficiencies. e-travel is being piloted and several other conversions are in progress.
- A Sustainability Program Manager position under FPDC was created and advertised. A search and screen committee evaluated applications, three candidates were brought to campus and a candidate was selected for the position but declined. The position description has been rewritten and re-advertised (May 2014). Candidates will be reviewed in summer 2014.
- A new policy on Sustainability was approved by the California State University Board of Trustees on May 21, 2014. The policy covers climate action planning, education, building, energy, food,



procurement, waste, and water and policy items are included in the relevant sections of this report. Specific goals were established in these areas and progress in achieving these goals is to be evaluated at the end of 2016-2017. The complete policy is attached in Appendix A.

2014-15 Priorities

1. Hire a sustainability program manager
2. Move more paper processes to fully electronic (paperless)
3. Roll-out production version of Geographic Information System to FPDC, PPM and AA
4. Begin work on a Climate Action Plan
5. Increase outreach for sustainability with visibility and marketing. Use reusables for campus events to demonstrate commitment to sustainability.

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
AD1.1	Sign the ACUPCC (American College and University Presidents' Climate Commitment) and develop a Climate Action Plan (CAP)	President, IS	ACUPCC: Completed CAP: GHG Inventory completed by IS (Cox). All business travel needs to be reported by flight and car miles, but campus data does not specify mode of transport so the assumption is being made that travel over 200 miles is via air.	Look into possible modification to system-wide e-travel system since ACUPCC campuses are required to report business travel (IT, Fin) GHG Report to be written (IS) A CAP team needs to be formed.
AD1.2	Campus integrated planning, including strategic planning, annual planning, and published priorities of units on the campus, should include statements related to sustainability	VPs	Completed within Academic Affairs. AR (Stephens)	AR (Stephens) will pursue sustainability integration into strategic planning in other divisions.



Issue	Strategy	Party Responsible	Status	Next/Action Items
AD1.3	Create Campus Sustainability Coordinator position with dual reporting through Administration and Finance and the Institute for Sustainability	FPDC, IS	Position will report to FPDC. Search and screen committee reviewed applications, interviewed candidates, and brought 3 candidates to campus. Candidate of choice did not accept position.	Position description was re-written and the position is currently posted. Initial screening and interview should occur in June 2014 (Rosenthal)
AD1.4	Implement Sustainable Office Program (SOP) throughout all campus offices/units	IS, AS, HR	Assessment instrument finalized. Student training session held. Resource materials developed. Students can now be hired as consultants through AS to perform assessments. AS will schedule assessments in Student Affairs departments. AS (Signett, Crandall), IS (Best, Cox)	Plan is to institutionalize program and conduct assessments across campus starting summer 2014. AS (Signett), IS (Best) Roll out as CSUN Shine campaign. A&F (Donahue)
AD2.1	Expand processes carried out electronically through implementation of electronic signatures and electronic forms for all campus processes	FIN, IT, IS, HR, RGS	Faculty/staff travel claim process (e-travel) will be electronic Spring 2014. Workflow for approvals is setup through SOLAR. It is being piloted in IT, President's Office, Admin and Finance, and HHD Dean's office. It will then be piloted in CECS Dean's Office and other administrative units. E-reimbursements are already in place. IT, FIN. Online service learning database launched Fall 2013. Field trip forms for service learning now electronic (IT, UGS). Campus directory is now only available online. Change of Major/Minor form now electronic Thesis submissions electronic (PTG)	Need ability to download travel data for GHG reporting. IS (Cox), FIN(Wallace). Field trip and internship forms are scheduled to become electronic in the future. Liability waiver could be electronic if integrated with portal. Authentication would be given with CSUN login. IT, PPM (Risk Mgmt). Electronic assessment product being developed (PTG) Faculty additional pay process will become electronic in the future.



Issue	Strategy	Party Responsible	Status	Next/Action Items
			<p>IRB (Human Subjects approval) is being converted to electronic. (PTG)</p> <p>Curriculum submission process through colleges will be moving to fully electronic. (PTG)</p> <p>Increased direct deposit availability is now in place for student refunds and employee expenses.</p> <p>HR staff service award nominations are now done online.</p> <p>Academic Affairs planning process is done using MyCSUNBox and BaseCamp.</p>	<p>Look into making the PCard monthly submission process electronic. Document file size needs to be increased to upload receipts and statements as PDFs.</p> <p>Current system in EBSuite. Open source software with OCR capability could be used to save receipts as PDFs. Workflow would need to be determined.</p> <p>IT (Hillbruner), FIN</p>
AD2.2	<p>Implement electronic document storage and retrieval for record-keeping throughout campus</p>	IT	<p>OnBase document scanning software is in use in some divisions and is replacing the old environment (Singularity). Academic Affairs is still using Singularity. Migration coordination carried out by AR (Porter, Morariu).</p> <p>MyCSUNBox, cloud software with a 50 GB capacity per user, is available to faculty, staff, and students. It's a good alternative to emailing/sharing files and for document management. (IT)</p>	<p>The ability to create department/committee accounts in MyCSUNBox needs to be rolled out so that individual users don't have to use their personal accounts for document sharing. (IT)</p>
AD2.3	<p>Continue to develop a standardized web interface for the campus</p>	IT, Advancement, ARP	<p>WebOne is being implemented across campus. Templates, guidelines, and web design standards have been set to create a consistent web presence campus-wide. Standardized website URLs are also being implemented. Sites that WebOne/Drupal can't handle will continue to be on another server. Library, Extended Learning, and IR websites will</p>	<p>Departments within Academic Affairs will be completed in summer 2014. Institutes and Centers will follow. AR (Stephens)</p>



Issue	Strategy	Party Responsible	Status	Next/Action Items
			not be migrated due to functions not available with WebOne. There is a completion goal of Summer/Fall 2014. AR (Stephens)	
AD2.5	Continue development of geographic information system (GIS) to store and maintain campus facility and infrastructure data with cross-linking capability to class scheduling software	FPDC, ARP, IS	<p>Code development completed Spring 2014. Re-import of CAD plans to calculate room areas correctly and preserve them in GIS has begun – expect completion Summer 2014. Photos/movie files of rooms ongoing. (IS, FPDC)</p> <p>System currently in use by FPDC and AR.</p> <p>IT (Ed Zix) wants to rollout a mobile web app. for students using Google Maps for indoor floor plans. Google wants PDFs submitted rather than links to the active database, which means that plans will become outdated with any building/remodeling changes. The app. will map WiFi hotspots to locate users. IS would like to incorporate online database being developed for FPDC.</p>	<p>Issues with performance in production environment need to be resolved. (IS, IT, PTG)</p> <p>IT will pursue talks with Google over indoor mapping and include IS. IS (Cox, Boroushaki - Geog) will build web interface on top of pdf plans with searchable rooms using Geog. faculty and students. Non-public areas should be removed and Police Services consulted so that there are no security concerns.</p>
AD2.6	Utilize and maintain data in GIS including tree inventory, space management and CAD plans	FPDC, ARP, IS	EBSuite implemented to track changes in CAD, SFDB and GIS updates. System now in use (sequence of six people/procedures tracked).	<p>Tree inventory training needs to be implemented. (IS, PPM)</p> <p>Complete steps to become a designated Tree Campus USA (FPDC)</p>



Action Plan — Dining Services

CSUN's goal is to provide sustainable food choices that are healthy and delicious in its on campus food service locations.

Main Issues

1. Increase campus food sources that are sustainable
2. Increase the availability of fresh, healthy vegetarian/vegan options on campus
3. Provide nutrition and sustainability information for foods from campus food services.

Objectives for 2023

- Expand sourcing of sustainable foods
 - 30% of total food purchases qualify as sustainable
 - 50% of produce purchased from local sources
 - 100% of seafood purchases Marine Stewardship Council certified, Aquaculture Certification Council certified, and/or Seafood Watch Guide "Best Choices" or "Good Alternatives"
- Expand the selection of healthy foods
- Provide information in all TUC-operated dining services to inform and educate the CSUN community about healthy and sustainable food choices

New CSU Policy (May 2014)

- All campus food service organizations should track their sustainable food purchases. Such tracking and reporting will be grounded in the Real Food Challenge guidelines, or equivalent, with consideration to campus requested improvements. Campuses shall strive to increase their sustainable food purchases to 20 percent of total food budget by 2020. **(14-New)**
- Campuses and food service organizations shall collaborate to provide information and/or training on sustainable food service operations to staff and patrons. **(14-New)**

2013-14 Highlights

- Corrigan has conducted research on food sources used by vendors and is pursuing data collection required by the REAL food initiative.
- Corrigan is seeking a vendor who can supply year-round local food.
- A pilot study was conducted in the SSU for a reduced meat meal plan. It received positive feedback from students and will be used to test reduced meat meal plan options in future.

2014-15 Priorities

1. Prepare tracking and reporting information for participation in the REAL Food Challenge
2. Expand vegetarian and vegan food offerings



2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
DS1.1	Research vendors that can provide sustainably sourced supplies	TUC, IS, MMC	TUC (Corrigan) has requested US Foods, the primary food distributor for campus, to provide data from their vendors on where they source their food and their sustainability practices. TUC is seeking the information as part of a growing interest in “REAL” food. Nature’s Produce is the current campus produce vendor; they provide that data now. The amount of local food varies by season between (40% in winter to 70% in summer). TUC is looking for a sustainably focused produce vendor who can achieve 70% all year. With additional data from U.S. Foods the percentage of “real food” served on campus can be calculated. Coffee and tea for Freudian Sip comes from Groundworks (formerly Supreme Being), which is organic whole bean. This does not include coffee served in convenience stores.	Possible student internship opportunity. AS EAC/SC (Zaich), TUC (Corrigan).
DS1.5	Increase the presence of the CSA program on campus	IS, MMC	The program is open to students and employees. Contract is with Underwood Farms through TUC.	Ongoing
DS2.2	Develop and introduce more healthy, vegan/vegetarian option in campus dining facilities	TUC	Vegetarian and vegan options are continuing to be added to menus and labeled. TUC hired a new marketing coordinator who is working on food signage and labeling. Signage could be added to inform campus that all food served is prepared fresh daily. The SSU Shoshone Room is being remodeled and a less meat focused/more plant based protein menu is being tested currently and	Educational materials could be created that list vegetarian/ vegan options and nutrition information. Possible redesign/placement of Sierra Marketplace salad bar to make it more



Issue	Strategy	Party Responsible	Status	Next/Action Items
			has received positive feedback so far. There are 1200 students on the meal plan. TUC has a Food Service Advisory Committee that meets twice a year.	accessible and prominent. Food survey data was collected by faculty/students in CSBS. Will analyze and share. IS (Cox, Wohldmann, Kirner), TUC (Corrigan).
DS2.3	Investigate options for a collaborative program between the Magaram Center and TUC chefs	TUC, MMC , IS	One student majoring in Food Science/Nutrition interns with TUC per semester. Their focus differs with each student's interest area. One student looked at gluten free options.	AS (Zaich) would like to have more students from FCS work with TUC (Corrigan) to increase sustainable food options.



Action Plan — Education

CSUN strives to reduce its own footprint on the environment and to educate its students and the broader campus population on sustainable practices.

Main Issues

1. Expand education on sustainability principles and practices to entire campus population
2. Increase formal educational offerings in sustainability
3. Increase opportunities for hands-on student learning in sustainability
4. Increase research opportunities in sustainability

Objectives for 2023

- Participation in sustainability office program by all campus offices/units by 2015
- Implement university-wide sustainability education for all students by 2018
- Offer graduate certificate in Sustainability by 2015
- Offer M.A. degree in sustainability practices by 2018
- Expand service learning and internship opportunities in Sustainability
- Expand network of faculty engaging in sustainability-related research

New CSU Policy (May 2014)

- The CSU will seek to further integrate sustainability into the academic curriculum working within the normal campus consultative process. **(14-New)**
- The CSU will develop employee and student workforce skills in the green jobs industry, promote the development of sustainable products and services, and foster economic development. **(14-New)**
- The CSU will cooperate with federal, state, and local governments and other appropriate organizations in accomplishing energy conservation and utilities management objectives throughout the state; and inform students, faculty, staff and the general public of the need for and methods of energy conservation and utilities management. **(78-Adopt; 88-Revise; 01-No Change, 04-No Change; 14-No Change)**

2013-14 Highlights

- SOP training and office resource materials have been completed. SOP survey has been finalized. Training workshop has been held for Sustainability Interns. A.S. is contracting with student interns to carry out office assessments beginning Summer 2014.
- Hosted Sustainability Day, Water Day, America Recycles Day and Earth Day with strong attendance at all events.
- New water savings signage developed for water spigots/fountains and in bathrooms
- Sustainability literacy (knowledge) assessment developed and rolled out. Plan is for 4-year study. Over 1000 students assessed in Spring 2014.



- Sustainability GE offerings and faculty involvement to be increased in 2014-15 through additional sections of SUST 300 and six new faculty to co-teach.
- Institute for Sustainability Moodle page created to connect students to volunteer and service learning opportunities in sustainability.

2014-15 Priorities

1. Implement Sustainable Office Program
2. Improve sustainability literacy amongst students
3. Expand faculty participation in sustainability teaching

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
ED1.1	Develop sustainable office program (SOP) training materials for student trainees and office staff	IS, AS	Training videos, assessment tool (survey), consultant FAQ sheet, and department resource list have been created. (IS)	Completed.
ED1.2	Establish schedule of training workshops for office staff and execute audits	IS, AS, HR	Training for student consultants conducted in April, 2014 (IS). There are 4-8 students interested in being consultants. AS will schedule assessments in Student Affairs offices.	See AD1.4
ED1.3	Establish and maintain tracking system for SOP	IS, AS	Data collected will be stored in survey monkey. New account purchased.	Ongoing
ED1.4	Continue to host annual sustainability day and water day events, and participate in America	IS, AS	IS continues to host Sustainability Day in the Fall and Water Day in the Spring. Approx. 525 students attended Sustainability Day, using Garbology as the theme. Thirteen faculty brought their classes and approx. 400 students attended Water Day, where climate change and the drought were the theme.	Ongoing



Issue	Strategy	Party Responsible	Status	Next/Action Items
	Recycles Day and Earth Day		AS continues to host America Recycles Day in the fall (700 attendees) and Earth Fair in the Spring (3,000+ attendees)	
ED1.6	Design and post educational signage at sustainability sites on campus	IS, FPDC , PPM	<p>Signage has been posted at Orange Grove, Fuel Cell, Rainforest, Institute for Sustainability, Student Rec Center, VPAC, AS Recycling, Food Garden, Weather Station, PV projects, Transit Station, Ecoregion Garden, and other sustainability sites on campus. Signage was added for the Matador Dr. and F5 bioswales.</p> <p>Signs have been posted by AS for new drinking fountain spigots for filling reusable water bottles.</p>	Signage will be added as new installations are made. Signs are being posted for new dual-flush toilets. Also new signage is being developed for the restrooms on saving water. (Rosenthal)
ED1.9	Coordinate with the University Ambassadors (UA) and Student Development Office (SD) to include sustainability education and features in campus tour and new student orientation	SA , AS		AS (Crandall) will work with UA and SD on implementation.
ED1.12	Assess sustainability literacy within student population	IS, Faculty , AS	<p>IS (Cox) developed survey based on one conducted at OSU and obtained Human Subjects Approval in Fall 2013. Conducted pre and post surveys for all SUST classes in F2013. IS (Jackiewicz, Geog) and a student assistant are conducting assessment with a range of classes, mostly lower division in Spring 2014. Goal is to assess 1000 students this semester and continue for 4 years. Analysis to take place based a multiple student attributes starting in Summer 2014.</p>	Ongoing



Issue	Strategy	Party Responsible	Status	Next/Action Items
ED2.4	Work with Department Chairs to develop discipline-specific tracks for Master's program in Sustainability Practices	SCC		Scheduled to start in Summer 2014. IS/SCC (Michaud)
ED2.5	Develop and provide sustainability literacy education to all students	SCC, LSP, IS, AS	Added second section of SUST 300 for Fall 2014. Developed new 100-level Climate Change course co-listed in 3 different colleges.	SUST 111/L, GEOG 111/L, SCI 111/L - to be taught for first time in Spring 2015 (Cox, Klein, Cadavid)
ED2.6	Identify faculty willing and able to teach sustainability	SCC, LSP, IS	Engaged two new PT faculty (URBS) to teach in 2013-14. One new one for Fall 2014. Establishing pool. A new partnership with Ecoponex was initiated through LA Clean Tech Incubator (LACI). This teams IS and its faculty associates with Ecoponex to assess the feasibility of developing a bio-REEF refinery on or close to campus. The facility would convert green/organic waste to energy to raise fish and grow vegetables in a circulating system.	Sections of SUST 300 for Fall 2014 will engage 8 – 12 faculty from different disciplines Ecoponex feasibility study to take place Summer – Fall 2014.
ED3.1	Establish list of service learning and internship opportunities on campus related to sustainability	IS, CIELO	Ongoing in garden.	Investigate internship course, SUST 494 possibility. IS/SCC (Michaud)
ED3.3	Establish procedures for accepting, allocating, and	IS, CIELO	Using IS Moodle page.	



Issue	Strategy	Party Responsible	Status	Next/Action Items
	supervising students in active learning opportunities in sustainability			
ED4.3	Increase faculty participation in green core team, and expand size and number of working groups	IS	Interested faculty are invited to join the GC team through new announcement posted in web page. Engaged several new faculty in 2013-14.	Faculty engaged in Matosphere housing committee. Six new faculty members to be engaged in teaching core Sustainability classes for 2014-15.



Action Plan — Energy and Buildings

Reduction in energy use and in the use of fossil fuels is a core component of CSUN's commitment to sustainability. This reduction can be achieved in three ways – by conservation, efficiencies, and use of renewables. The proposed plan puts a priority on those actions that will lead to conservation and efficiency savings.

Main Issues

1. Improve means to measure, report and communicate energy consumption at a building/unit level
2. Improve physical infrastructure to save energy through efficiency and conservation measures
3. Increase energy-related education and outreach to students, faculty and staff, and implement program to change behavior
4. Increase energy supplied from renewable and clean sources
5. Establish and implement strict building standards for new construction

Objectives for 2023

- All buildings to be individually metered for gas, (water) and electricity
- Retro-commissioning to be completed on all buildings by 2023
- Real-time and historical energy use available online to all campus community by 2018
- Reduction in energy intensity (energy/sq ft) of 15% by 2018 and 25% by 2023 over 2012
- Generate 20% on-site by 2018, with 25% on-site generation by 2023
- Increase investment in renewable energy: 10% from renewables by 2023
- All new buildings to meet LEED Gold or higher standard effective 2013

New CSU Policy (May 2014)

- The CSU shall pursue energy procurement and production to reduce energy capacity requirements from fossil fuels, and promote energy independence using available economically feasible technology for on-site and/or renewable generation. The CSU shall endeavor to increase its self-generated energy capacity from 44 to 80 megawatts (MW) by 2020. (05-New; 14-Revise)
- The CSU will endeavor to exceed the State of California and California Public Utilities Commission Renewable Portfolio Standard (RPS) sooner than the established goal of procuring 33 percent of its electricity needs from renewable sources by 2020. (05-New; 14-Revise)
- All CSU buildings and facilities, regardless of the source of funding for their operation, will be operated in the most energy efficient manner without endangering public health and safety and without diminishing the quality of education and the academic program. (78-Adopt; 88-Revise; 01-No Change; 04-No Change; 14-Revise)



- All CSU campuses will continue to identify energy efficiency improvement measures to the greatest extent possible, undertake steps to seek funding for their implementation and, upon securing availability of funds, expeditiously implement the measures. **(78-Adopt; 88-Revise; 01-No Change; 04-No Change; 14-Revise)**
- Each CSU campus will designate an energy/utilities manager with the responsibility and the authority for carrying out energy conservation and utilities management programs. The Chancellor's Office will have the responsibility to coordinate the individual campus programs into a systemwide program. (78-Adopt; 88-Revise; 01-No Change; 04-No Change; 14-No Change)
- The CSU will monitor monthly energy and utility usage on all campuses and the Chancellor's Office, and will prepare a systemwide annual report on energy utilization and greenhouse gas emissions. The Chancellor's Office will maintain a systemwide energy database in which monthly campus data will be compiled to produce systemwide energy reporting. Campuses will provide the Chancellor's Office the necessary energy and utility data, such as electricity and natural gas consumption; water and sewer usage; fuel consumed by fleet vehicles, boats, and ships; waste disposal for the systemwide database in a timely manner. (78-; 88-Adopt; 01-Revise; 04-No Change; 14-Revise)
- All future CSU new construction, remodeling, renovation, and repair projects will be designed with consideration of optimum energy utilization, low life cycle operating costs, compliance with all applicable energy codes (enhanced Title 24 energy codes) and regulations. In the areas of specialized construction that are not regulated through the current energy codes, such as historical buildings, museums, and auditoriums, the CSU will ensure that these facilities are designed to consider energy efficiency. Energy efficient and sustainable design features in the project plans and specifications will be considered in balance with the academic program needs of the project within the available project budget. (78-Adopt; 88-Revise; 01-Revise; 04-Revise; 14-Revise)
- Capital Planning, Design and Construction in the Chancellor's Office shall monitor building sustainability/energy performance and maintain information on design best practices to support the energy efficiency goals and guidelines of this policy. The sustainability performance shall be based on Leadership in Energy and Environmental Design (LEED) principles with consideration to the physical diversity and microclimates within the CSU. (05-New; 14-Revise)
- The CSU shall design and build all new buildings and major renovations to meet or exceed the minimum requirements equivalent to LEED "Silver." Each campus shall strive to achieve a higher standard equivalent to LEED "Gold" or "Platinum" within project budget constraints. Each campus may pursue external certification through the LEED process. (05-New; 14-Revise)
- Each campus shall operate and maintain a comprehensive energy management system that will provide centralized reporting and control of the campus energy related activities. (78-Adopt; 88-Revise; 01-Revise; 04-No Change; 14-Revise)



2013-14 Highlights

- Heat flow and temperature monitoring in all existing buildings in progress. Project will allow better monitoring and control of heat, AC, and energy consumption on building level.
- Electrical infrastructure improvement project in progress. Will lead to better capacity and monitoring at a building level.
- Cool roofs are being installed throughout campus; four buildings were completed this year.
- All thermostats have been replaced in housing.
- Housing replaced all boilers with tankless hot water systems to reduce energy use.
- LED lights have been installed in the B4 parking lot, along Jacaranda Walk, Cleary Walk, and Lindley Walk, with an additional four outside University Hall, and 2 next to Chicano House. New lighting along Cleary is “smart”.
- Induction lighting has been installed in Redwood Hall 250 and the Matadome.
- The MataSphere themed living community is accepting applications. Up to 100 students will be accepted, 50 students per floor.
- In Housing all refrigerators 10+ years old were replaced with Energy Star units.

2014-15 Priorities

1. Outdoor LED lighting installation
2. Continued monitor-based commission of buildings

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
EN1.1	Install flow meters and temperature sensors throughout campus to monitor heat and A.C. energy consumption for individual buildings/units	FPDC, PPM	Ongoing. Building-level flow and temperature monitoring is being installed throughout campus to measure energy consumption from the hot/chilled water loop.	Installation and connection is nearing completion. PPM (Wang) is establishing a timeline to make metering of these a priority on PPM project list.
EN1.2	Install electric meters for individual buildings/units to monitor electricity consumption	FPDC, PPM	This is being done as electrical infrastructure is being upgraded. Auxiliary locations with chargeback/MOU for electricity are being done first (USU, parking structures, TUC). This will save PPM from doing meter readings at these locations. New meters will be connected to EMS.	Older buildings will be done next as switch gear, panel boards etc. are replaced to increase the energy capacity of buildings such as Cypress Hall,



Issue	Strategy	Party Responsible	Status	Next/Action Items
				Nordhoff, Eucalyptus, Sierra etc.. It will take 2-3 years to implement throughout campus.(FPDC, PPM)
EN2.3	Prioritize energy efficiency improvements (insulation, double-paned windows, window shading, thermostat locations etc.) and begin improvement projects	FPDC, PPM	Cool roofs are being installed throughout campus, a few buildings each year. Housing was finished last year, four buildings were completed on campus this year. Old mechanical equipment is being replaced in Nordhoff Hall to reduce energy consumption in that building. Individual rooms that have temperature issues are being investigated in an attempt to improve occupancy comfort, but no overall retrofits of windows or other energy efficiency projects are planned at this time due to lack of funding. All thermostats were replaced in housing. Housing replaced all boilers with tankless hot water systems to reduce energy costs. The fuel cell has not been running well since 2013. Stacks continue to need replacement, which causes strain on system. They are supposed to last five years.	Three more bldgs. (Cypress, Jacaranda, Education) will be done this summer. (FPDC, PPM) PPM put in a request to add variable frequency drives to the air handlers in Santa Susana Hall to correct temperature issues. Fuel cell contract issues to be discussed with the manufacturer. (FPDC)
EN2.4	Evaluate existing research and recommendations on outside lighting and begin upgrades	FPDC, PPM	An analysis done for FPDC showed that LED was superior to induction lighting. There is a five-year payoff and the conversion takes approx. 30 minutes per fixture. The plan is to install on E-W walkways first and then N-S. LED lights have been installed in the B4 parking lot, along Jacaranda Walk, Cleary Walk, N. of Redwood Hall & Lindley Walk,	TUC will look at LED conversions for their locations. Parking will look at LEDs and lighting levels for structures. 2014-15 goal:



Issue	Strategy	Party Responsible	Status	Next/Action Items
			<p>with an additional four outside University Hall, and 2 next to Chicano House.</p> <p>New lighting along Cleary is “smart” – programmable, dimmable, with motion and light level sensors.</p> <p>Induction lighting has been installed in Redwood Hall 250 and the Matadome.</p> <p>Ten test LED fixtures have been installed on first floor of the B5 structure by the elevator.</p> <p>Housing changed pool lights to LED (\$260/light). SRC, USU, and Redwood pools have LED lighting.</p> <p>Indoor lighting hasn’t been updated to date, but LED is being used in new projects. The Library commons is mostly LED, the Career Center and the USU east conference center will be all LED.</p> <p>All new construction will use LED.</p>	<p>Convert as many E-W walkways as possible using retrofits, and street lighting on west side of campus. (FPDC, PPM)</p> <p>Indoor LED will come after outdoor.</p>
EN2.7	Reduce power consumption from office and lab computers	IT, IS, PTG, college techs, USU IT		
EN3.4	Promote more sustainable user behavior within the campus through energy conservation incentives, competitions, and other initiatives	PPM, IS, Housing, AS	<p>Housing entered the Campus Conservation Nationals competition between their own buildings. The MataSphere themed living community is launching next Fall, applications are currently being accepted. Up to 100 students will be accepted, 50 students per floor. The MataSphere committee has been meeting to discuss ideas.</p> <p>Students could possibly take over or share maintenance of the campus food garden and compost area.</p> <p>A.S. Environmental Affairs Committee has taken leadership on many new initiatives. It is being renamed A.S. Sustainability</p>	<p>MataSphere students could possibly take over or share maintenance of the campus food garden and compost area. IS (Giraldo), Housing (Trevan)</p>



Issue	Strategy	Party Responsible	Status	Next/Action Items
			Committee.	
EN3.6	Post energy-consumption related information at visible locations around campus	IS	Infrastructure is needed prior to being able to display energy data (see EN1.2). The cost is prohibitive at present (individual meters on a building or sub-building level). Watt Café and Lucid dashboards have been considered. Watt Café is less expensive.	
EN5.1	Require all new construction to meet LEED Gold or higher standard	FPDC	Ongoing. Student Housing Phase II and Extended Learning will both be LEED Gold.	



Action Plan — Environmental Quality

Factors that contribute to environmental quality are related to the use of chemicals and hazardous materials such as refrigerants, synthetic fertilizers, cleaning products, paints, and chemicals used in science and engineering laboratories and art studios. It is important that the University works toward reducing the use of these products and continues to ensure their proper disposal.

Main Issues

1. Reduce use of hazardous materials and ensure proper disposal
2. Increase awareness of issues related to hazardous materials

Objectives for 2023

- Study effectiveness of organic fertilizers and related operational issues and apply results to reducing the use of synthetic fertilizers and progressively replacing them with organic fertilizers. Quantitative goals (% reduction) for 2023 to be set upon further consultation with the appropriate campus entities and following study.
- Phase in more Green Seal-certified cleaning products and adopt green cleaning procedures. Objectives for 2023 to be set upon further consultation with the appropriate entities.
- Develop a set of sustainable operations and maintenance standards in coordination with the appropriate entities.
- Complete the campus inventory of chemicals and hazardous materials and make it available to University faculty and staff.

New CSU Policy (May 2014)

- The CSU will encourage the reduction of hazardous waste to the extent possible while supporting the academic program. **(14-New)**

2013-14 Highlights

- PPM and USU are researching and testing organic fertilizers to replace synthetic ones.
- USU will include the use of organic cleaners in negotiation of their third party custodial contract.

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
EQ1.1	Identify and implement alternatives	PPM, USU, IS, Housing	PPM is researching slow release fertilizers, such as Milorganite, which is organic and would feed lawns over 6-8 months. There are approximately 95 landscaped acres and need	Ongoing



Issue	Strategy	Party Responsible	Status	Next/Action Items
	to synthetic fertilizers		to find a product that meets our needs - smell from slow release products can be an issue. Compost from food waste collection could be used around campus, depending on quality and volume, and whether it can be produced in a form for use on lawns. The USU is researching use of organic fertilizers for their areas.	
EQ1.2	Phase in more Green Seal-certified cleaning products and adopt green cleaning procedures	IS, PPM, USU, Housing	In housing, Green Seal products make up 67% of money spent on total cleaning products. It is written into contracts that cleaning company must use Green Seal certified products. PPM currently uses traditional chemical products for cleaning but will research if current contractor, Diamond, has or uses Green Seal certified products. PPM would like to increase use of these products in the future. The USU is in renegotiation of their third party custodial contract; the use of organic cleaners will be included.	Research use of these products with contractor. (PPM)



Action Plan — Organics

Organic materials are the largest component of municipal solid waste accounting for 30% of the total. Food waste (21%) is the single largest material in the solid waste stream. Reducing the amount of food waste has significant economic, social and environmental benefits including reducing disposal costs, improving the lives of the needy by donating food, reducing the resources and costs in the production of wasted food (including water, fertilizers, pesticides, and energy), reducing greenhouse gas emissions (methane) from landfills and creating compost, a valuable soil amendment. CSUN has an important role to play as an educator and socially responsible party in the efforts to reduce the quantity of food waste produced, and to reduce the shipment of organic waste off campus.

Main Issues

1. Reduce quantity of organic waste
2. Educate students and the campus community about food waste
3. Continue to develop the CSUN Organic Food Garden as an educational resource
4. Develop and manage campus grounds using sustainability practices

Objectives for 2023

- Reduce quantity of food waste by 15% by 2018 and by 50% by 2023
- Reduce quantity of other green waste by 50% by 2015 and 80% by 2023
- Conduct on-site composting to generate organic fertilizer for use on campus grounds
- Gain recognition as a Tree Campus USA¹
- Re-use waste vegetable oil
- A fully-developed Organic Food Garden that provides educational and research opportunities for students, faculty, staff and the surrounding community.

New CSU Policy (May 2014)

N/A

2013-14 Highlights

- All pre-consumer food waste from Geronimo's and Juice it Up, and coffee grounds from three Freudian Sips is being collected and processed for compost. 43,000 lbs (est.) was collected and processed in 2013-14.
- Planted area in the campus organic vegetable garden has been expanded to about 70% capacity.
- Fencing of the garden to prevent theft and vandalism has begun using bamboo poles from rainforest area.
- Compost area was expanded and new bins constructed for each phase.
- Sea train was relocated to garden area and is being used for storage of garden equipment.



- PPM is replacing grass with native and drought tolerant plants around campus where feasible.
- Sprinklers are also being replaced with drip in places to use less water and the number of sprinkler heads is being greatly reduced.
- Housing is removing sprinklers and replacing plants with native, drought tolerant plants.

2014-15 Priorities

1. Collect and process all kitchen green waste into compost
2. Collect and process all campus coffee grounds into compost
3. Increase student participation in garden activities

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
OG1.1	Collect and record all current waste from campus dining facilities for baseline data, set targets, and measure progress	TUC, IS	Student assistant (IS) collects all pre-consumer food waste from Geronimo's and Juice it Up. Food is weighed at Geronimo's and the weight of material collected from other locations is being estimated using volume to weight conversions based on samples. Approximately 16,000 lbs of kitchen waste and coffee grounds have been collected and composted during Spring 2014. Recently changed to smaller bins with lids so they weigh less for lifting and transporting.	Plans are to calculate conversion weights from fresh food to compost after breakdown. IS (Giraldo)
OG1.4	Provide pre-consumer food waste receptacles inside all campus food preparation kitchens and collect daily	TUC, IS	Currently food waste is collected only from Geronimo's and Juice It Up. In addition Sierra Center Marketplace and Arbor Grill are open during summer and can be collected from. Waste is not currently being picked up from these. Post-consumer waste: The campus is currently re-negotiating the waste hauler contract. Purchasing will inquire about including collection of compostables in contract. Food waste is currently not shredded. In order to carry out onsite post-consumer waste composting, a pulper could be purchased for Geronimo's to reduce mass. We would need to purchase a large composting bin (Earth	Expand to other dining facilities (Sierra Center and Arbor Grill). Collect only plant waste. Requires additional student labor. TUC can sort kitchen waste internally first to see if the volume produced is worth collecting. Four additional bins would need to be purchased.



Issue	Strategy	Party Responsible	Status	Next/Action Items
			Tub), which is sealed and can be manually rotated to ensure matter is exposed to oxygen and reaches a safe temperature for bacterial decomposition. Program at CSU Humboldt could be reviewed as a model.	<p>TUC, IS.</p> <p>Research plant-based plastics used for take-out containers and transition to compostable flatware from black plastic. (TUC)</p> <p>Investigate installation of pulper for Geronimo's/ (TUC)</p> <p>Look into purchase of Earth Tub. IS (Giraldo)</p>
OG1.5	Collect coffee grounds from all campus coffee shops and compost at campus garden	TUC, IS	Grounds are being collected from Bookstore annex, Arbor Grill, and USU locations three days a week.	Plans to expand to Library and Sierra Center Marketplace Sips. IS (Giraldo)
OG1.6	Expand composting operation at campus garden to incorporate pre-consumer waste from all campus kitchens		Pineapple heads are a problem to break down so are being sorted separately and soaked. Some are being planted. The compost area has been covered in mulch to absorb water draining from composting bins. Additional mulch could be used if dropped off in compost area by PPM. The carbon source was changed from grass clippings to mulch to reduce smell and beds are being rotated at less high traffic times to avoid any issues with passers-by. No complaints received.	<p>Coordinate drop off of mulch in compost area. IS, PPM</p> <p>Will initiate pilot project to collect compostable containers from dining locations. IS.</p>
OG1.10	Collect and process	PPM, IS, TUC	WVO is currently collected and distributed to outside agency for	



Issue	Strategy	Party Responsible	Status	Next/Action Items
	waste vegetable oil from campus kitchens into biodiesel		processing into biodiesel. Not enough use for it in campus vehicles. Too risky to utilize in expensive construction equipment that runs on diesel. Permits would be needed to sell and transport fuel and a pump would need to be installed on campus. In future this oil could be connected with the EcoPONEX project. If project goes forward, all campus food waste and oil could be used.	
OG2.3	Expand student internship program in campus garden	IS	May connect garden to MataSphere themed-living community in student housing. Giraldo (Geog) will be the coordinator for Sustainability Principles GE path starting Fall 2014 and will recommend faculty have students do service learning in garden/compost. Giraldo will also connect garden/compost with Geog Field Studies class. The garden is about 70% full right now. Much of open area is shaded by trees. Plans to add annual plants and produce that doesn't need to be processed (blackberries, eggplants, grapes, etc.) Received 25-30 bamboo poles from PPM to grow beans. Currently only enough seating for 15-20 people.	Looking for additional seating. Benches to be supplied to expand seating area once they become available. PPM
OG2.4	Provide additional research opportunities for students to study composting	IS		Vermicomposting opportunities to be added. IS (Giraldo)
OG3.5	Establish sufficient space for the compost area	PPM, IS	Compost area was moved and expanded to accommodate more organic material. Series of bins created for each phase of process.	Completed
OG4.3	Maintain and utilize campus tree inventory	FPDC, PPM, IS	Can expand inventory to include student housing after existing map is updated.	PPM (Logsdon) needs GIS training to maintain



Issue	Strategy	Party Responsible	Status	Next/Action Items
	(GIS) for managing tree maintenance			database in ArcGIS. IS (Yetter)
OG4.4	Investigate options for reducing areas of irrigated landscape and introducing native plants	FPDC, PPM	Grass is being replaced with native, drought tolerant plants around campus. Turf is being removed from grass verges. This includes the eco-region garden north of University Hall, area west of PPM between Plummer and Halsted, and on Plummer south of lots E6 & D6. Sprinklers are also being replaced with drip in places to use less water. Lawn area north of Arbor Court will be replaced with drought tolerant plants, DG, and benches. Number of sprinkler heads will be greatly reduced, which will save approximately 23,000 gallons of water/year. PPM (Logsdon) has a list of plants that will be used for replacements. Housing is removing sprinklers and replacing plants with native, drought tolerant.	

¹ <http://www.arborday.org/programs/treeCampusUSA/index.cfm>



Action Plan — Purchasing and Consumption

CSUN seeks to reduce the significant impacts of its consumption by reducing the amount of total products purchased and increasing sustainable products purchased.

Main Issues

1. Reduce overall product consumption
2. Increase the use of sustainable products
3. Increased awareness regarding sustainable purchasing and consumption

Objectives for 2023

- Implement campus-wide environmentally-preferred purchasing policy
- Create campus purchasing reduction goal for various product categories based on baseline data to be collected
- Reduce campus copy paper use by an amount to be determined upon consultation with appropriate entities. Proposed reduction goal of 20% by 2015, of 40% by 2020, and of 50% by 2023.

New CSU Policy (May 2014)

- Campuses will promote use of suppliers and/or vendors who reduce waste, re-purpose recycled material, or support other environmentally friendly practices in the provision of goods or services to the CSU under Contract. This may include additional evaluation points in solicitation evaluations for suppliers integrating sustainable practices. (14-New)
- To move to zero waste, campus practices should: (1) encourage use of products that minimize the volume of trash sent to landfill or incinerators; (2) participate in the CalRecycle Buy-Recycled program or equivalent; and (3) increase recycled content purchases in all Buy-Recycled program product categories. (14-New)
- Campuses shall continue to report on all recycled content product categories, consistent with PCC § 12153-12217 and shall implement improved tracking and reporting procedures for their recycled content purchases. (14-New)

2013-14 Highlights

- Paper usage report received from Office Max. PCA is following up to determine which campus entities are not using recycled content paper.
- Campus (PPM) is using toilet paper that is 100% recycled content; paper towels that are 70% recycled content; folded towels that are 100% recycled content.
- Small Order Program (orders less than \$75) was rolled out. Number of small orders has decreased to 22% of total orders.



2014-15 Priorities

1. Increase use of recycled content paper
2. Increase recycled content of paper and other products purchased for use on campus

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
PU1.1	Determine baseline paper usage to determine appropriate reduction goal	OM	Campus-wide data has been provided by Office Max (July 2012 – June 2013 and July 2013-March 2014) broken down into recycled 30%, 50% and 100% content and non-recycled. Some depts. are not purchasing recycled content paper. USU is not included in usage report data. A procedure could be put in place to request that faculty not print syllabi that are available on Moodle. Faculty should be made aware that Moodle can be used as a document repository for all classes, not just online courses. (Possible action item for Faculty Senate discussion.)	Flugum will follow up on CSUN customers who are purchasing non-recycled paper. Will request that OfficeMax perform an auto conversion from 20# non-recycled copy paper to at least 30% PCW paper when added to a user's shopping cart. PCA (Flugum)
PU1.3	Move from 30% PCW recycled paper to 50% and 100% PCW recycled paper	OM, IS, PCA	Cost analysis of increasing to 50 or 100% PCW from 30% was calculated last year. Would increase cost from \$44,118 to \$47,288 (50% RC) to \$49,729 (100% RC). Perhaps a lower contracted rate could be negotiated on 50-100% recycled paper with OM for system-wide contract if can promise a minimum amount would be purchased? This may make up any additional cost increase.	Investigate possibility of system-wide contract on lower rate for 50% or 100% RC content. Assessing cost impact to switch campus in 2014 dollars.



Issue	Strategy	Party Responsible	Status	Next/Action Items
				PCA (Flugum)
PU2.4	Meet or exceed and document full compliance with state recycled products campaign policy. Identify shortfalls and options for closing them, and improve percentage of recycled purchases reported in State Agency Buy Recycled Campaign (SABRC) annual report.	PCA, PPM	Toilet paper is 100% recycled content; Kraft Roll Towels are 70% recycled content; Folded towels (Bay West) are 100% recycled content. Report data collection is done through PPM (Bruce Weinstein). Purchasing reports this data to state.	
PU3.1	Promote office related programs including requirement to purchase a minimum 30% PCW paper, office surplus, pen recycling through TerraCycle, toner cartridge	PCA, OM, IS, ASR	Small Order Program (orders less than \$75) was rolled out. Number of small orders has decreased to 22% of total orders. Rubbermaid/Newell (mfg for PaperMate and other brand pens) has advised that TerraCycle is still a viable program for 2014. At that time, the program will be reviewed for renewal. Totes (reusable shipping containers) are being used but design may change design due to merger of Office Max with Office Depot.	Consider TerraCycle Pen collection program for a pilot program in May. AS (Signett), PCA (Flugum)



Issue	Strategy	Party Responsible	Status	Next/Action Items
	and ink-jet recycling, e-waste procedures, and battery collection			



Action Plan — Transportation

CSUN employs more than 3,500 faculty and staff and has a student enrollment of over 35,000, almost 95% of whom commute to campus, 74% by single occupancy vehicle. The University is addressing the adverse consequences of being primarily a commuter campus by investing in policies to reduce commuting, by increasing use of alternative modes of transportation, and by use of alternative fuel and power technology.

Main Issues

1. Reduce total number of commuting miles
2. Reduce use of single occupancy vehicles for commuting
3. Reduce emissions associated with vehicle use on campus

Objectives for 2023

- Reduce commuting population from 95% to 85%
- Reduce vehicle miles traveled by faculty, staff and students by 10%
- Reduce commuting trips to campus by 10%
- Increase share of alternatives to single-occupancy vehicles for commuting from 26% to 40%
- Gain recognition as a Bicycle-friendly University
- Reduce, with a goal of eventual elimination, vehicle use in the campus core
- Reduce average emissions associated with university fleet operations (non-construction/maintenance vehicles) by 50%
- Systematize transport data collection

New CSU Policy (May 2014)

- The CSU will encourage and promote the use of alternative transportation and/or alternative fuels to reduce GHG emissions related to university associated transportation, including commuter and business travel. (14-New)

2013-14 Highlights

- New student housing is under construction for Fall 2015 move-in. This will add 400 beds.
- AS obtained two ZipCars that are available for faculty, staff, students and the community. Usage data for first three months is excellent.
- PS started a high occupancy vehicle (HOV) program with preferred parking spaces for employee initiated rideshare groups.
- Funding was obtained through CQF for new bicycle racks around Sierra Hall. 28 Peak bike racks were ordered and have been installed (May 2014).
- A CQF proposal was submitted for 2014-15 to install Peak racks at Jacaranda Hall and Oviatt Library.



- PS is working to try to change the commuter bus route from Santa Clarita Valley to stop at CSUN en route to Warner Center.
- Installation of “Smart Parking” hardware and software in B5 parking lot was completed and tested.

2014-15 Priorities

1. Conduct and analyze campus-wide commuting survey
2. Expand ZipCar program
3. Expand support for reduced-footprint transportation (bicycles, van and car pools)

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
TR1.1	Increase opportunities to live on campus for students following Campus Master Plan	FPDC, Housing	400 more beds are being built in student housing, construction will be done April 2015 for Fall 2015 move-in. There are no plans to add additional beds beyond that at this point; future will depend on financing. Housing is at 100% capacity. Student rent rates at CSUN are the second lowest in the CSU.	
TR2.3	Implement ridesharing programs for students	SA, AS, PS	AS obtained two ZipCars that are available for faculty, staff, students and the community. They are parked in student housing. They are being heavily used by students in first three months (37.7% March, 33% April, 48.7% May utilization rates). Ridelinks (online app.) ridesharing is available for students with a customized CSUN interface. There needs to be more marketing to increase student sign-ups. Employees: Logan started a high occupancy vehicle (HOV) program with preferred parking spaces for employee initiated rideshare groups. There are three groups on campus who have created their own rideshare because they did not meet the criteria for a campus sponsored program. Pre-tax employee contribution for highway vehicle commuting expenses	Look into linking Ridelinks signup to the portal and ask students to sign up when registering for classes. TWG, AS. Look into implementation of pre-tax commuting expenses deduction at CSUN. TWG, PS.



Issue	Strategy	Party Responsible	Status	Next/Action Items
			(vanpool, transit) is in place at other campuses (CSU LA, Fullerton, and San Jose). A code needs to be issued by the State Controller's office to allow us to participate in this.	
TR2.8	Create campus pedestrian and bicycle master plan to improve pedestrian safety and infrastructure for bicycle circulation.	FPDC	CSUN Bicycle report was completed in 2012, which includes recommendations for pedestrian and bicycle infrastructure and circulation. Parking/FPDC has proposed a permanent closure of Lindley Ave to through traffic. Delivery and fire department access is needed, but deliveries could be scheduled for designated days. The Metrolink shuttle currently picks up passengers on Lindley, east of Sequoia Hall.	Initiate pedestrian and bicycle master plan by working on Lindley closure (FPDC)
TR2.9	Improve bicycle parking by increasing the overall capacity and by replacing most of the existing bike racks with safer types	FPDC	Funding obtained through CQF for new bicycle racks around Sierra Hall. 28 Peak bike racks have been ordered - nine 8-slot, 15 6-slot, and four 5-slot racks. 182 bikes will be accommodated. Racks will be installed once they arrive. Displaced racks will be relocated to Manzanita, Live Oak, and Eucalyptus Halls. Another CQF proposal was submitted for 2014-15 to install racks at Jacaranda Hall and Oviatt Library. (Waiting to hear.) Bicycle parking needs to be increased prior to adding bicycle lanes throughout campus. Bike paths have been installed on Jacaranda Walk and Lindley Ave. from Plummer to Halsted.	
TR2.10	Establish a bike shop and a bike rental program	AS	The shop may be housed in proposed AS Sustainability Center, but design needs revisiting because of budget constraints. Looking at possible funding sources/models. Students from the CSUN Bicycle Collective could assist in the program.	Investigate option for a sea train which could be purchased to house the bike shop at a relatively low-cost. (AS, TWG)



Issue	Strategy	Party Responsible	Status	Next/Action Items
TR2.11	Establish an education program to provide information on availability, safety, and rules of operation on all available modes of transportation on campus	FPDC, IS, PS, AS	Signage on proper bicycle locking and registering bicycles with the Police Department is being developed by FPDC for the new racks at Sierra Hall. A QR code may also be included on signs. If there are funds left over from the Sierra Hall bike rack installation, a bicycle repair station may be added, the cost is \$1500 each. There are some vandalism issues with the bicycle repair station at the Transit Station. Alternative transportation options are now posted on the IS website.	
TR2.12	Coordinate efforts on campus with government agencies to support alternative transportation modes, such as improving and expanding bus lines and improving sidewalks around the campus	IS, PS	There are approximately 900-1000 commuters from the Santa Clarita Valley, but no direct public transit from SCV to CSUN currently. Commuter bus currently goes from SCV to Warner Center. The AVTA from Palmdale/Lancaster stops at CSUN before going to Warner Center. The Santa Clarita Metrolink goes from Newhall to Sylmar/Sun Valley, but there is no shuttle to CSUN from those locations. Employee vanpool from Valencia to CSUN has nine passengers, but 1-2 spots may be opening. PS are advertising for replacements.	Work with Chris Park (Warner Center) on trying to change the commuter bus route from SCV to stop at CSUN. PS (Logan), TWG Investigate possible shuttle from Sylmar Metrolink to CSUN. (TWG)
TR3.10	Develop and encourage use of "smart parking" software	IS, SA, AS, PS	Installation in B5 complete and tested.	Smart phone app, supporting web server and user interface need to be developed and demonstrated. After completion and approval, system will be expanded to the B3 and G3 structures.
TR3.11	Seek	PPM, PS	PPM has a request in to replace an old	Ongoing



Issue	Strategy	Party Responsible	Status	Next/Action Items
	alternatives that work toward a zero emission fleet		fleet vehicle with a hybrid SUV. Vehicles can only be replaced as old vehicles reach end of life and are removed. CNG can be explored, but a closer refill station is needed. The closest one currently is at Van Nuys airport. Most of PPM's fleet are electric carts.	
TR3.12	Avoid motorized vehicle use where possible	FPDC, PPM, PS	Incentives could be provided for employees to use public transportation to commute to meetings.	Research possibility/interest in university or Chancellor's office purchasing a license for GoTo Meeting to reduce the need to travel for meetings. (IS)
TR3.14	Continue to regularly maintain vehicles in top condition	PPM	Preventative maintenance is scheduled on all campus vehicles.	Ongoing
TR3.16	Establish designated delivery/pick-up days for OfficeMax, FedEx, UPS, and other campus vendors to reduce fuel costs and CO2 emissions	PCA	It was determined that there is no benefit to reduce OfficeMax or mail carrier delivery days to campus because deliveries are made to areas surrounding campus daily anyway. Specialized deliveries like science equipment could be consolidated to specific days each week. On days that no deliveries are scheduled, no thru' traffic would be allowed on Lindley. Waste hauler vehicles currently pick up daily.	<p>It should be determined if waste hauler visits could be decreased or if pick-up locations consolidated/staggered. (See WR1.1)</p> <p>Per PPM, decreasing the pick-up schedules nor staggering pick-ups is not available at this time.</p> <p>Monthly reporting will be included in future RFPs. PCA (Flugum)</p>



Action Plan — Waste and Materials Management

In 2011 CSUN generated 1,430 tons of waste which was hauled away and transported to Sunshine Canyon Landfill in the Los Angeles basin at a cost of \$193,926. Campus waste generation amounts to approx. 70 pounds per person annually. Reduction of CSUN's waste is necessary to conserve valuable natural resources, reduce environmental pollution and reduce negative social impacts.

Main Issues

1. Reduction of total waste generated by the campus (including landfill, recycling, and other disposal methods)
2. Increase diversion of wastes from landfills
3. Increased awareness of waste, recycling and related issues
4. Improve collection and access of waste related data and information

Objectives for 2023

- Reduction of total waste per capita by 20% over current values
- Diversion of 75% of waste from landfills by 2023
- Expand recycling capability to a wider range of plastics and other materials

New CSU Policy (May 2014)

- Campuses shall seek to reduce the solid waste disposal rate by 50 percent (PRC § 42921) by 2016, by 80 percent by 2020, and move to zero waste. (14-New)

2013-14 Highlights

- IS has collected historical waste and recycle data from campus entities and is compiling into a report.
- AS conducted a waste audit in Sierra Quad area as part of Earth week.
- Freudian Sips are switching to double lined cup to eliminate need for sleeve. Cup lining will be plant-based (biodegradable and recyclable).
- TUC is selling 16 oz. reusable mugs and water bottles. First drink is free with purchase and customers save \$0.30 on future purchases.
- Plastic bags have been removed from all convenience stores.
- Eucalyptus Hall bathrooms are being upgraded to include both hand dryers and paper towels, LED lighting, dual flush toilets, and ultra low-flow urinals.
- Printers capable of automatic duplex printing are being purchased for computer labs. A 100 page/student/semester quota will be allocated and tracked based on student ID. A CQF proposal has been submitted for Go Print software, server, printers and copiers, and duplex printers to create uniform printing quota across campus.
- Faculty wrote joint resolution ERC/ATC for duplex and electronic submission of work from students.



- MyCSUNBox was installed for saving and sharing of documents electronically.
- Advancement has announced that the @CSUN newspaper is no longer in print; it was replaced with the CSUN Shine Weekly e-newsletter.

2014-15 Priorities

1. Assess pilot in-building recycling program and expand program to more buildings
2. Publish report on historical waste and recycling data
3. Implement new printing standards, including duplex printing throughout campus

2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
WR1.1	Conduct a comprehensive assessment of waste management and resource recovery by all entities on campus to ensure that these are being managed in the most efficient manner and that functions are not duplicated. Streamline operations to maximize efficiencies.	PPM (Johnson, Logsdon), Asset Mgt (Thomas), Housing (Watson, Reeves), TUC (Killops), USU (Ross, Raab); AS Recycling (Signett); IS; PCA	IS collected waste/recycle data from most campus entities. Waste hauler pick-up days could potentially be reduced. Trash from TUC is picked up every day during the academic year, less in summer. Housing has pick-ups five days a week during the academic year and three days a week during summer. PPM has pick-ups five days a week. (See also WR4.1.) A campus-wide waste audit should be conducted. AS conducted an audit on April 22 in Sierra Quad area. SUST class (Wohldmann) is conducting audit of post-consumer food waste from campus dining locations. Campus waste invoices paid by Accounts Payable. Some data is required to be reported to the state, but information is not easily available. PPM accountant compiles all monthly data. Stacy Sullivan is contact at Republic (waste hauler). AS has data for recyclables by weight. Housing is included on state contract. TUC and USU have their own contracts. TUC: Freudian Sips switching to double lined cup to eliminate need for sleeve. Cup lining will be plant-based (biodegradable and recyclable). TUC selling 16 oz. reusable mugs for \$12 (same as cost to TUC). Price may be reduced to \$10 to encourage people to buy them. First drink is free with purchase	Campus waste hauling contract is up for renewal. Add request for monthly trash, construction and demolition, and green waste weight data report into new contract. PCA (Flugum). Schedule meeting regarding campus waste reduction with all key people. (IS, PPM)



Issue	Strategy	Party Responsible	Status	Next/Action Items
			<p>and customers save \$0.30 on future purchases. TUC is selling reusable water bottles and can be refilled (with water) at fountain drink locations for free. Plastic bags have been removed from all convenience stores. Customers can purchase a reusable bag.</p>	
WR1.2	<p>Carry out cost-benefit analysis for replacing paper towels in restrooms with electric blow dryers, and replace where viable</p>	PPM	<p>Not viable due to intermittent heavy demand in bathrooms. Bathrooms are in heavy use between classes – blowers could not meet demand. Blowers are feasible in low traffic restrooms.</p> <p>Eucalyptus Hall bathrooms are being upgraded to include both Dyson hand dryers and paper towels, LED lighting, dual flush toilets, and ultra low-flow urinals.</p>	
WR1.3	<p>Reduce printing of documents and implement two-sided printing wherever possible</p>	IT, college IT reps., library	<p>Printers capable of automatic duplex printing are being purchased for computer labs. Student printing limits are being evaluated and reduced (AR - Stephens). A CQF proposal has been submitted for Go Print software, server, printers and copiers, and duplex printers to create uniform printing quota across campus. Library would give up contract with current copy vendor if printing initiative is funded. In college labs, a 100 page/student/semester quota will be allocated and tracked based on student ID. This applies to all students (grad, undergrad, pt, ft). The USU is using the same printing software and will have separate quota for students. There will be an initial cost increase, but there may be revenue from over quota printing costs. Faculty wrote joint resolution ERC/ATC for electronic submission of work from students.</p> <p>MyCSUNBox is available to save documents electronically.</p> <p>Advancement is making coverage of sustainability related events a priority and considering it a “shine point” for the campus. The @CSUN newspaper is no</p>	<p>OneCard initiative will be researched (IS)</p>



Issue	Strategy	Party Responsible	Status	Next/Action Items
			<p>longer in print; it was replaced with the CSUN Shine Weekly e-newsletter. The Northridge Magazine is still printed, but hasn't been published in over a year. Working on making a consistent campus look so there is less need for individual department printing.</p> <p>Student, faculty, staff ID cards could have a magnetic strip, which enable them to be used for printing, campus purchases, meal plan, bike lockers, room locks, etc. (OneCard)</p>	
WR1.4	Establish an office surplus reuse or donation program for office supplies that includes tracking	AS, IS, AM	Departments with surplus office supplies contact Signett (AS), who sends an email to the Recycle listserv.	Office surplus program should be advertised through the SOP. (AS, IS)
WR2.3	Add recycling bins to the lobby of The Valley Performing Arts Center.	AS, TUC, VPAC, PPM		VPAC management should be approached regarding bins. The same bins as existing trash cans could be installed with a recycle symbol. TUC (Corrigan)
WR4.1	Conduct comprehensive assessment of historical waste and recycling data. Report data.	PPM, IS, AS, USU, Housing, TUC	In progress (IS). Data collected.	Report to be written (IS)



Action Plan — Water

CSUN is located in a region that is characterized by an insufficient supply of local water to serve its population. The problem of inadequate local supply has been addressed by accessing water from the northern parts of the State and the Colorado River, but it appears inevitable that these sources will cease to be as effective in future in light of continued population growth and the effects of global warming. CSUN's commitment is to be a good steward of water resources, and to conserve wherever we can.

Main Issues

1. Improve conservation practices and reduce water consumption
2. Improve data collection, management and analysis
3. Increase awareness of water as a valuable resource and educate on water conservation principles

Objectives for 2023

- 15% reduction in water consumption
- Measure, record and analyze water consumption on a facility level
- Increase awareness of water-related issues by students, faculty and staff

New CSU Policy (May 2014)

- All CSU campuses will pursue water resource conservation to reduce water consumption by 10 percent by 2016, and 20 percent by 2020 including such steps to develop sustainable landscaping, install controls to optimize irrigation water use, reduce water usage in restrooms and showers, and promote the use of reclaimed/recycled water. In the event of a declaration of drought, the CSU will cooperate with the state, city, and county governments to the greatest extent possible to reduce water use. (78-; 88-Adopt; 01-No Change; 04-No Change; 14-Revise)

2013-14 Highlights

- PPM conducted an inventory of all plumbing fixtures in 2013-14 to ascertain where water savings can be made.
- Dual flush toilet retrofits with signage have been done in Juniper Hall and University Hall, and are being used for pilot testing.
- All kitchen and bathroom aerators have been replaced in campus housing with low-flow (1.5 gpm), 796 toilets have been replaced with 1.2 gpf, showerheads with 2 gpm flow rate. All upgrades were funded through LADWP rebates at no cost to Housing.

2014-15 Priorities

1. Complete retrofit of indoor plumbing fixtures to reduce water use
2. Continue transition of turf areas to native and drought-tolerant vegetation



2013-14 Update on Phase 1 Strategies

Issue	Strategy	Party Responsible	Status	Next/Action Items
WA1.1	Review urinals and use low-flow or waterless as appropriate	PPM	PPM has a stock of waterless urinals that will not be installed due to past issues. The current cartridge has been discontinued; retrofitting can be done to install a different cartridge, but it's not an easy retrofit. Only the three smallest CSU campuses are using waterless urinals, most campuses with waterless have converted to ultra low-flow. Waterless urinals work in low to moderate use restrooms, but not high traffic areas due to odor concerns and need to replace cartridges frequently.	Remaining high water use urinals will be replaced with ultra-low-flow urinals. (PPM)
WA1.2	Retrofit plumbing fixtures across campus as needed, prioritizing high consumption areas like commercial kitchens and toilets	PPM, Housing	Inventory of all devices conducted in 2013-14 (PPM). Dual flush toilet retrofits with signage are being done in Juniper Hall and University Hall. Sierra Hall is high traffic, but retrofits are difficult due to the pedal flush. Science buildings will be considered next. In Housing, all kitchen and bathroom aerators have been replaced with low-flow (1.5 gpm), 796 toilets have been replaced with 1.2 gpf, refrigerators 10+ years old were replaced with Energy Star units, showerheads are all 2 gpm flow rate. All upgrades were funded through LADWP rebates at no cost to Housing.	Low-flow devices will be installed where needed this summer. (PPM) Installation of dual flush toilets where feasible (PPM).
WA1.5	Reduce amount of irrigated landscaping	FPDC	See OG4.4 Water drip catchment from HVAC systems to use for irrigation has been done in Sonoma and LA Counties. It may be possible to get approval from LADWP to do on campus. Water will need to be treated because grey water has contaminants. EH&S will need to be consulted.	Investigate possibility of using HVAC condensate for irrigation (PPM)



Appendix A: CSU Sustainability Policy (Adopted May 21, 2014)

JOINT MEETING

COMMITTEE ON EDUCATIONAL POLICY COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

California State University Sustainability Policy Proposal

Presentation by :

Ephraim P. Smith
Executive Vice Chancellor and Chief Academic Officer
Academic Affairs

Elvyra F. San Juan
Assistant Vice Chancellor
Capital Planning, Design and Construction

Summary

This item brings forward the revised policy on sustainability for approval by the California State University Board of Trustees, having been presented at the March 2014 board meeting as an information item. An updated report highlighting the accomplishments of the CSU in sustainability since 2011, as well as the vision for the future as prescribed by the policy herein, will be available at the meeting.

As stated at the March 2014 board meeting, the Board of Trustees has been a proponent of energy conservation and other sustainability measures and has had established policies since 1978. This proposed revised policy is broader than prior policies and more inclusive of all areas of the university community. The policy aims not only to reduce the university's impact on the environment and educate our students, faculty and staff on sustainable practices and incorporate sustainability principles and climate science in our educational offerings.

University Sustainability

1. The CSU will seek to further integrate sustainability into the academic curriculum working within the normal campus consultative process. **(14-New)**
2. The CSU will develop employee and student workforce skills in the green jobs industry, promote the development of sustainable products and services, and foster economic development. **(14-New)**



3. The CSU will pursue sustainable practices in all areas of the university, including:
 - a. business operations such as procurement; information technology; student services; food services; facilities operations; design and construction; and
 - b. self-funded entities such as student housing, student unions, parking, children's centers, and auxiliary operations. **(14-New)**
4. Each CSU is encouraged to designate a sustainability officer responsible for carrying out and/or coordinating campus sustainability program efforts. **(14-New)**

Climate Action Plan

1. The CSU will strive to reduce systemwide facility greenhouse gas (GHG) emissions to 1990 levels, or below, by 2020 consistent with AB 32, California's Global Warming Solutions Act of 2006 (HSC §38550). Emissions will include both state and auxiliary organization purchases of electricity and natural gas; fleet, marine vessel usage; and other emissions the university or self-support entity has direct control over. The Chancellor's Office staff will provide the baseline 1990 facility emission levels (for purchased electricity and natural gas) for the campuses that existed at that time and assist campuses added to the CSU after 1990 to determine their appropriate baseline. **(14-New)**
2. The CSU will strive to reduce facility GHG emissions to 80 percent below 1990 levels by 2040. Campus tracking and reporting of their GHG inventory will be grounded in the American College and University President's Climate Commitment guidelines or equivalent, with consideration to campus requested improvements. Metrics will include GHG emissions per FTE. **(14-New)**
3. The CSU will encourage and promote the use of alternative transportation and/or alternative fuels to reduce GHG emissions related to university associated transportation, including commuter and business travel. **(14-New)**

Energy Independence and Procurement

1. The CSU shall pursue energy procurement and production to reduce energy capacity requirements from fossil fuels, and promote energy independence using available economically feasible technology for on-site and/or renewable generation. The CSU shall endeavor to increase its self-generated energy capacity from 44 to 80 megawatts (MW) by 2020. **(05-New; 14-Revise)**
2. The CSU will endeavor to exceed the State of California and California Public Utilities Commission Renewable Portfolio Standard (RPS) sooner than the established goal of procuring 33 percent of its electricity needs from renewable sources by 2020. **(05-New; 14-Revise)**

Energy Conservation and Utility Management

1. All CSU buildings and facilities, regardless of the source of funding for their operation, will be operated in the most energy efficient manner without endangering public health and safety and



without diminishing the quality of education and the academic program.
(78-Adopt; 88-Revise; 01-No Change; 04-No Change; 14-Revise)

2. All CSU campuses will continue to identify energy efficiency improvement measures to the greatest extent possible, undertake steps to seek funding for their implementation and, upon securing availability of funds, expeditiously implement the measures.
(78-Adopt; 88-Revise; 01-No Change; 04-No Change; 14-Revise)
3. The CSU will cooperate with federal, state, and local governments and other appropriate organizations in accomplishing energy conservation and utilities management objectives throughout the state; and inform students, faculty, staff and the general public of the need for and methods of energy conservation and utilities management. **(78-Adopt; 88-Revise; 01-No Change, 04-No Change; 14-No Change)**
4. Each CSU campus will designate an energy/utilities manager with the responsibility and the authority for carrying out energy conservation and utilities management programs. The Chancellor's Office will have the responsibility to coordinate the individual campus programs into a systemwide program. **(78-Adopt; 88-Revise; 01-No Change; 04-No Change; 14-No Change)**
5. The CSU will monitor monthly energy and utility usage on all campuses and the Chancellor's Office, and will prepare a systemwide annual report on energy utilization and greenhouse gas emissions. The Chancellor's Office will maintain a systemwide energy database in which monthly campus data will be compiled to produce systemwide energy reporting. Campuses will provide the Chancellor's Office the necessary energy and utility data, such as electricity and natural gas consumption; water and sewer usage; fuel consumed by fleet vehicles, boats, and ships; waste disposal for the systemwide database in a timely manner. **(78-; 88- Adopt; 01-Revise; 04-No Change; 14-Revise)**
6. Each CSU campus is encouraged to develop and maintain a campuswide integrated strategic energy resource plan, which will include tactical recommendations in the areas of new construction, deferred maintenance, facility renewal, energy projects, water conservation, solid waste management, and an energy management plan. This plan will guide the overall energy program at each campus. **(78-Adopt; 88-Revise; 01-Revise; 04-Revise; 14-Revise)**

Water Conservation

1. All CSU campuses will pursue water resource conservation to reduce water consumption by 10 percent by 2016, and 20 percent by 2020 including such steps to develop sustainable landscaping, install controls to optimize irrigation water use, reduce water usage in restrooms and showers, and promote the use of reclaimed/recycled water. In the event of a declaration of drought, the CSU will cooperate with the state, city, and county governments to the greatest extent possible to reduce water use. **(78-; 88-Adopt; 01-No Change; 04-No Change; 14-Revise)**



Waste Management

1. Campuses shall seek to reduce the solid waste disposal rate by 50 percent (PRC § 42921) by 2016, by 80 percent by 2020, and move to zero waste. **(14-New)**
2. The CSU will encourage the reduction of hazardous waste to the extent possible while supporting the academic program. **(14-New)**

Sustainable Procurement

1. Campuses will promote use of suppliers and/or vendors who reduce waste, re-purpose recycled material, or support other environmentally friendly practices in the provision of goods or services to the CSU under Contract. This may include additional evaluation points in solicitation evaluations for suppliers integrating sustainable practices. **(14-New)**
2. To move to zero waste, campus practices should: (1) encourage use of products that minimize the volume of trash sent to landfill or incinerators; (2) participate in the CalRecycle Buy-Recycled program or equivalent; and (3) increase recycled content purchases in all Buy-Recycled program product categories. **(14-New)**
3. Campuses shall continue to report on all recycled content product categories, consistent with PCC § 12153-12217 and shall implement improved tracking and reporting procedures for their recycled content purchases. **(14-New)**

Sustainable Food Service

1. All campus food service organizations should track their sustainable food purchases. Such tracking and reporting will be grounded in the Real Food Challenge guidelines, or equivalent, with consideration to campus requested improvements. Campuses shall strive to increase their sustainable food purchases to 20 percent of total food budget by 2020. **(14-New)**
2. Campuses and food service organizations shall collaborate to provide information and/or training on sustainable food service operations to staff and patrons. **(14-New)**

Sustainable Building Practices

1. All future CSU new construction, remodeling, renovation, and repair projects will be designed with consideration of optimum energy utilization, low life cycle operating costs, compliance with all applicable energy codes (enhanced Title 24 energy codes) and regulations. In the areas of specialized construction that are not regulated through the current energy codes, such as historical buildings, museums, and auditoriums, the CSU will ensure that these facilities are designed to consider energy efficiency. Energy efficient and sustainable design features in the project plans and specifications will be considered in balance with the academic program needs



of the project within the available project budget. **(78-Adopt; 88-Revise; 01-Revise; 04-Revise; 14-Revise)**

2. Capital Planning, Design and Construction in the Chancellor's Office shall monitor building sustainability/energy performance and maintain information on design best practices to support the energy efficiency goals and guidelines of this policy. The sustainability performance shall be based on Leadership in Energy and Environmental Design (LEED) principles with consideration to the physical diversity and microclimates within the CSU.
(05-New; 14-Revise)
3. The CSU shall design and build all new buildings and major renovations to meet or exceed the minimum requirements equivalent to LEED "Silver." Each campus shall strive to achieve a higher standard equivalent to LEED "Gold" or "Platinum" within project budget constraints. Each campus may pursue external certification through the LEED process.
(05-New; 14-Revise)

Physical Plant Management

1. Each campus shall operate and maintain a comprehensive energy management system that will provide centralized reporting and control of the campus energy related activities.
(78-Adopt; 88-Revise; 01-Revise; 04-No Change; 14-Revise)
2. To the extent possible, academic and non-academic programs will be consolidated in a manner to achieve the highest building utilization. **(78-; 88-Adopt; 01-No Change; 04-No Change; 14-Revise)**
3. All CSU campuses will implement a utilities chargeback system to recover direct and indirect costs of utilities provided to self-supporting and external organizations pursuant to procedures in the Integrated California State University Administrative Manual (ICSUAM). **(78-; 88-Adopt; 01-No Change; 04-No Change; 14-Revise)**

The following resolution is presented for approval:

RESOLVED, by the Board of Trustees of the California State University, that:

1. The revised Sustainability Policy in Agenda Item 1 of the May 20-21, 2014 joint meeting of the CSU Board of Trustees' Committees on Educational Policy and Campus Planning, Buildings and Grounds is adopted.
2. The progress in achieving the goals stated in this revised Sustainability Policy shall be evaluated at the end of 2016-2017. Interim reports may be requested.
3. The chancellor or his designee is authorized to take all necessary steps to implement the intent of this policy including seeking available state, federal, grant, and private sector funds.





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