

SUSTAINABILITY PRACTICES

Sustainability Practices

"This is an exciting time in campus history as we envision the facilities needed to ensure future generations of students will get the most from Cal Poly's hands-on Learn by Doing education. Our student-created Climate Action Plan to achieve carbon neutrality and climate resilience is a tremendous example of Campus as Living Lab, and will help guide campus development to ensure these new facilities are not only beautiful and functional, but achieve high performance and sustainability through innovation and integrated design." – Jeffrey D. Armstrong President Cal Poly San Luis Obispo, California

Operations

Climate Action Planning

Created over the 2015–2016 academic year in collaboration between Facilities Management and Development and Cal Poly's City and Regional Planning Department, Cal Poly's Climate Action Plan (PolyCAP) was written by a team of 27 senior and graduate students in the CRP 410/411 studio. Many of the proposed strategies are already underway or have been completed ahead of schedule, such as Cal Poly's 4.5 MW solar farm. Data show the university has already reduced greenhouse gas emissions from the built environment (Scopes 1 & 2) to pre-1990 levels, five years ahead of the state mandate, in spite of 100 percent growth in building square footage and on-campus housing since that time. Please download the full report and supporting documents here (<https://afd.calpoly.edu/sustainability/campus-action/climate-resilience/>).

Renewable Energy and Energy Conservation

Cal Poly continues to make progress on its goal of carbon neutrality by 2050. In 2019, greenhouse gas emissions from the campus' built environment (Scopes 1 & 2) were 19 percent below the 2015 baseline year, and 28 percent below 1990 levels. Energy conservation efforts have reduced campus energy use intensity 22% from 2002 levels. Accelerated installation of renewable energy generation across the state from solar, wind, and other renewable energy, have resulted in over 80% percent of Cal Poly's electricity purchase coming from carbon-free sources—up from 59 percent in 2015. Additionally, with the completion of the 4.5 MW Gold Tree Solar Farm in May of 2018, 22 percent of Cal Poly's total electricity needs are now being met by on-site solar generation, with more solar projects in development. Read more about ways Cal Poly is working to reduce GHG from energy (<https://afd.calpoly.edu/sustainability/campus-action/energy/>).

Water Conservation

Being good stewards of water resources and eliminating waste rank among Cal Poly's most important sustainability efforts. Throughout the years, Cal Poly has been an excellent steward of its water resources, having implemented hundreds of water conservation measures. Since 2003, total campus water usage has remained nearly flat despite a 60% growth in building square footage and 100% growth of on-campus residency over the same period. Cal Poly is in the process of increasing water system sustainability and resilience through the development of an on-campus recycled water facility. This facility will treat campus waste water into up to 400 acre-feet per year of recycled water, enough to meet the needs of Cal Poly's campus farm, sports complex, and future landscape. Read more about water conservation at Cal Poly here (<https://afd.calpoly.edu/sustainability/campus-action/water/>).

Waste Reduction

The 2014 CSU sustainability policy set a goal of reducing per-capita landfill disposal 80 percent by the year 2020, then continue toward zero waste. In 2018 Cal Poly achieved 37 percent reduction and in 2019 and 55 percent reduction in per capita disposal over our 2006 base year. Campus recycling efforts include collection of cardboard, paper, bottles and cans, construction and demolition debris, scrap metal, and collection of food scraps, yard waste, and animal manure for composting. But in order to move toward Zero Waste, we need to move up the waste hierarchy and focus on waste prevention, waste reduction and reuse, which are better for the environment than recycling. To that end, Cal Poly has increased reuse of materials through campus surplus and collection of food, clothing and household goods during student Move-Out. Campus Dining is working with Copia to capture edible food for donation rather than compost. In order to further our campus Zero Waste efforts, we are looking at redesigning products and processes in order to eliminate waste before it happens, including reducing single-use packaging, reducing paper use by implementing electronic processes, and encouraging the use of Canvas to deliver all class materials electronically. Want to learn more about how Cal Poly is working towards zero waste, click here (<https://afd.calpoly.edu/sustainability/campus-action/zero-waste/>).

Sustainable Transportation

The greatest challenge Cal Poly faces on its path to carbon neutrality is transforming the way commuters get to campus, as commuting accounts for nearly half of total campus carbon emissions. When commuter and other transportation related emissions (Scope 3) are considered, Cal Poly has reduced total emissions 5% below 1990 levels and only 2% below the 2015 baseline. Transportation and Parking Services implemented numerous initiatives to reduce emissions from commuting, including prohibition of cars for freshmen living on campus, addition of bike racks, expansion of ZipCar and vanpool programs, limiting sale of parking permits, and a pilot to assign parking areas for permit holders to reduce circling. To learn how you can commute to campus more sustainably click here (<https://afd.calpoly.edu/parking/commutingtocampus/>).

Sustainable Food and Dining

As one of the largest commercial services at Cal Poly, Campus Dining strives to lessen the university's environmental impact with programs, products and services that reduce the campus's overall ecological "foodprint." Our sustainability efforts are focused around four key areas; food, waste, water and energy, and green buildings and transportation.

Campus Dining received a Best Practice Award for its food sustainability program in the 2017 Energy Efficiency and Sustainability Best Practice Awards Competition. The program was recognized for increasing food sustainability through procurement, production and waste practices, building partnerships across the campus and employing community outreach and education to promote food sustainability. Read more about Campus Dining sustainability efforts here (<https://www.calpolydining.com/sustainability/>).

Curriculum and Research Infusion

SusCat

As Cal Poly educates future leaders, the university recognizes the benefits teaching sustainability in the classroom. To fulfill sustainability goals set forth by the 2014 CSU Sustainability Policy, Second Nature Climate Commitment, and AASHE STARS a catalog of sustainability focused and related courses and programs was developed, often referred to as SusCat or the Sustainability Catalog. The purpose of the SusCat digital resource is threefold; to help student find courses and

programs that focus on sustainability, to allow faculty to highlight the courses they teach in sustainability, and to track and grow the list of sustainability offerings in Cal Poly academics. Students wishing to focus their studies on sustainability should use this website as a tool to guide selections of major and minor programs and use the site quarterly to determine course choices. To learn more visit suscat.calpoly.edu (<https://suscat.calpoly.edu/>). For a full list of courses, please see the Sustainability Courses website (<https://catalog.calpoly.edu/coursesaz/#sustainabilitycoursestext>) in the Courses A-Z section of the Cal Poly Catalog.

University Honors Program

In 2018, Cal Poly's University Honors Program won a UC/CSU/CCC Best Practice Award in the Sustainability in Academics category for a three-quarter, first-year learning experience in which students investigated environmental, social, economic and political elements of sustainable communities using both a historical and contemporary lens. The interdisciplinary experience satisfies a general education course requirement and incorporates a number of high-impact educational practices, including collaborative projects, service learning, research, diversity learning and e-portfolios. Learn more here (<https://honors.calpoly.edu/>).

CAFES Center for Sustainability

In 2010, the University formally recognized the CAFES Center for Sustainability, which started as a student-led program in 2000. The Center helped establish the Cal Poly Organic Farm, numerous professional development programs in sustainable pest management, composting, artisan foods and, most recently, the FEED (Farmer Experiential Education and Development) program for veterans entering agriculture. The Center has hosted many of the leaders of the sustainable agriculture movement at Cal Poly and has offered scores of public education programs on organic gardening, permaculture, holistic management, fair trade, bee keeping, carbon farming, and more. The Center also facilitates campus-community collaborations, which have resulted in regional food system initiatives, buy local campaigns, and young farmer coalitions. Visit the Center for Sustainability here (<https://cfs.calpoly.edu/>).

Sustainable Environments Minor

In 2015, the College of Architecture and Environmental Design's 25+ year-old interdisciplinary Sustainable Environments Minor program, completed by approximately 80 students/year from every college on the campus, won a UC/CSU/CCC Energy Efficiency and Sustainability Best Practice Award for Sustainability in Academics. This same program received the top national American Institute of Architects award in 2005 for "Ecological Literacy in Architectural Education." Learn more about the program here (<http://www.catalog.calpoly.edu/collegesandprograms/collegeofarchitectureandenvironmentaldesign/sustainableenvironmentsminor/>).

Campus and Community Engagement

AASHE-STARs Certification

The AASHE (Association for the Advancement of Sustainability in Higher Education) STARs (Sustainability Tracking, Assessment, and Rating System) offers a framework to implement, measure, and improve sustainable practices across the entire university. AASHE STARs uses a detailed data collection and certification process to foster sustainability across the entire campus. Cal Poly began working on AASHE STARs in 2016, earning a silver rating in February 2017, and a gold rating in September, 2019. The full report appears online here

(<https://reports.aashe.org/institutions/california-polytechnic-state-university-ca/report/2019-09-19/>).

Green Campus

The Green Campus team works from a student led model with oversight from the Energy, Utilities, and Sustainability department in Facilities. Having the CSU policy goals to work from, the Green Campus team implements conservation projects, expands educational outreach and marketing, infuses sustainability into curriculum, and empower student leaders and clubs to be more impactful. Every year Green Campus team members are trained directly by Sustainability staff on strategies and tactics to engage their peers. Green Campus team members are responsible for targeting all students at the university to become sustainability experts. Green Campus conducts peer to peer outreach by hosting a variety of events ranging from film screenings, festivals and fairs, art installations, panels, and workshops. Team members are also responsible for conducting training for all incoming freshmen during all orientation events and tabling on a weekly basis. In the 2018/19 academic year, Green Campus employed 8 team members who each worked on average 10 hours per week for 30 week of the school year resulting in 2400 hours of peer to peer outreach planning and execution. Interested in joining the team, learn more here (<https://afd.calpoly.edu/sustainability/student/green-campus/>).

Eco Reps

Eco Reps are a group of students committed to creating a culture of environmental stewardship on campus at Cal Poly. Managed by the Green Campus Team within Facilities, Eco-Reps exemplify the "learn by doing" motto and play a direct role in Cal Poly's advancement to a fully sustainable future. Every year Eco Reps collect Green Living Certifications from students who live on and off campus. Through the Green Room and Green Office programs, Eco Reps provide sustainable consultations to students, staff, and faculty to educate and empower the Cal Poly community to live more consciously and in turn reducing Cal Polys energy, water, and waste. The goal of the Green Room Certifications is threefold: to serve as a mechanism to continue increasing sustainability awareness, to bring together already sustainable minded students, and to bring new students into the community. In the 2018/19 academic year, we trained 25 Eco Reps who each worked on average 5 hours per week for 30 week of the school year resulting in 3750 hours of peer to peer outreach planning and execution. Click here to learn more or get involved (<https://afd.calpoly.edu/sustainability/student/eco-reps-greenroom/>).

Zero Waste Ambassadors

Student Zero Waste Ambassadors educate event attendees about waste sorting and ensure that event waste streams result in high waste diversion. In 2018/19, with nearly 150 volunteers, the program reached more than 14,200 attendees at 25 events over seven months and diverted over 3 tons of waste from the landfill. The 150 volunteers worked on average 3 hours, resulting in 450 volunteer peer to peer outreach hours. As of February 2020, Zero Waste Ambassadors had funding to hire 8 student assistants to support events and manage volunteers. To learn more about the program click here (<https://afd.calpoly.edu/sustainability/student/zero-waste-ambassadors/>).

Central Coast Climate Collaborative

The Central Coast Climate Collaborative (4C) is a membership organization fostering a network of local and regional community leaders throughout six Central Coast counties to address climate change mitigation and adaptation. The Collaborative involves representatives from local and regional government, business and agriculture, academia, and diverse community groups to share information and best practices, leverage efforts and resources and identify critical issues and needs.

The Collaborative engages all communities throughout the region to help ensure a resilient and low-carbon Central Coast prepared for the impacts of climate change. 4C engages with other collaborative throughout the state. The Energy, Utilities and Sustainability Department committed funding for student time to support the faculty lead for the 4C, and campus leadership covers 8 units of release time for the Cal Poly Faculty lead to manage the collaborative. To learn more about 4C visit the homepage (<https://www.centralcoastclimate.org/>).

SLO Climate Coalition

In 2017, a group of San Luis Obispo County community leaders formed the SLO Climate coalition to address a growing need for local leadership on Climate Change in order to create a vibrant, just, and climate-resilient Central Coast. The SLO Climate Coalition brings together community expertise, creativity, and resources to champion high impact regional climate solutions that inspire other communities to do the same. The SLO Climate Coalition works in partnership with the City of San Luis Obispo and other local and regional partners. The university partners in this effort by providing technical support from the Energy Utilities and Sustainability department Director and Program Analyst. Read more about the SLO Climate Coalition here (<https://carbonfreeslo.org/>).

Poly Canyon Ventures

Poly Canyon Ventures is a 501(c)(3) non-profit founded by Cal Poly students and managed by Cal Poly Alumni. PCV provides high-impact Cal Poly student-led startups with funding, consulting, and other resources to help them grow and thrive. PCV is accelerating cleantech innovation and entrepreneurship at Cal Poly through the Climate Changer's Fund in partnership with the city of San Luis Obispo Mayor's office (?) and the Cal Poly Department of Energy, Utilities, and Sustainability. The Energy Utilities and Sustainability department has committed \$10K per year for up to 5 years. To learn more about PCV visit their site (<https://polycanyonventures.org/>).