

SUSTAINABILITY PRACTICES

Climate change poses challenges to society unseen in human history. We are at a crossroads in which the disciplines of business, politics, public policy and technology must collaborate to drive innovation and implement real solutions. As a comprehensive polytechnic university, Cal Poly is uniquely positioned to educate and inspire the next generation of leaders, innovators, and decision makers who will confront this challenge. That is why I chose to commit Cal Poly to achieve net zero greenhouse gas emissions by 2050 and integrate these efforts into curriculum, research, and student experience through Learn by Doing. Our children and grandchildren deserve no less. – Jeffrey D. Armstrong President Cal Poly San Luis Obispo, California

In March 2016, Cal Poly adopted the AASHE (Association for the Advancement of Sustainability in Higher Education) STARS (Sustainability Tracking, Assessment, and Rating System) as a framework for implementation, measurement, and improvement of sustainable practices across the entire university. The data collection and certification process finalized in February of 2017 earned Cal Poly a silver rating. The full report appears online:

<https://stars.aashe.org/institutions/california-polytechnic-state-university-ca/report/2017-02-16/>. The voluntary point-based rating system measures sustainability performance in the categories of Curriculum and Research, Campus and Community Engagement, Operations, and Planning and Administration further detailed below:

Please see University Policies (<http://catalog.calpoly.edu/universitypolicies>) for Cal Poly's Statement on Sustainability.

Curriculum and Research

Cal Poly seeks to **educate for environmentally responsible citizenship**. Literacy in sustainability begins with a student's first on-campus experience through presentations and modeled sustainable activities such as zero waste meals. Students may elect to fulfill general education and major requirements by enrolling in sustainability courses. See <http://suscat.calpoly.edu/>. Students wishing to specialize in various aspects of sustainability may choose from more than a dozen minors.

In 2009, the Academic Senate proposed and the University accepted the addition of Sustainability Learning Objectives to Cal Poly's University Learning Objectives. As a result, all faculty members are encouraged to systematically incorporate sustainability into their courses. Please see <http://ulo.calpoly.edu/>.

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. Please see <http://sarc.calpoly.edu/>.

From 2011-2015, the self-organized SUSTAIN (Sino-US Strategic Alliance for Innovation) learning initiative involved over 200 freshmen and 50 different majors in over 40 community projects organized around sustainability; this effort linked courses from 16 different faculty

collaborators across five of Cal Poly's six academic colleges and 24 different community partners. Begun in 2008 by a Cal Poly team with faculty from Tongji University and Stanford University, the SUSTAIN institute committed to learning to innovate for sustainable design in China and San Luis Obispo. Please see <https://sustainslo.calpoly.edu/>.

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."

Campus and Community Engagement

The Empower Poly Coalition serves as the center for student engagement and unifies the voice of over two dozen sustainability-related clubs and groups on campus.

Cal Poly's STRIDE Program has worked with schools and government agencies to design and assess novel, comprehensive community-based education and intervention programs for promoting healthy living.

Cal Poly's iRideshare, Bike to Work, and Bike to School Day programs match carpool groups, track modes of travel documented, and incentivize using active transportation.

Operations

For Earth Day 2016, President Armstrong signed the Second Nature Climate Leadership Commitment, making Cal Poly a Charter Signatory to the largest climate change initiative in higher education. Participating campuses must create Climate Action Plans to achieve carbon neutrality and climate resilience as soon as possible and infuse these topics into curriculum, research, and student experience. Cal Poly has established a goal of net zero emissions by 2050 and is working with regional partners to ensure campus resiliency to impacts from climate change. To achieve these goals, Facilities Management and Development and the City and Regional Planning Department collaborated to create Cal Poly's first Climate Action Plan (CAP). The CAP included a comprehensive greenhouse gas inventory, which shows Cal Poly has already reduced emissions to within ten percent of 1990 levels, despite a 100 percent increase in building square footage and on-campus residency. The Poly CAP report, transportation survey, and GHG dashboard appears online: https://afd.calpoly.edu/sustainability/campus_resources/climate_action.

Cal Poly practices institutional ecology and has taken significant steps to reduce its environmental footprint. In 2013, classes began in the Warren J. Baker Center for Science and Mathematics, a 189,000 square-foot building embodying sustainability principles. In 2009, Cal Poly opened Poly Canyon Village a 1.4-million-square-foot mixed-use complex, which provides apartment-style housing for over 2,600 students – the largest LEED Gold project in the region and in the CSU. LEED certification is being achieved in all new buildings as well as selected retrofits. In 2017, Cal Poly broke ground on the 4.5 MW Gold Tree Solar Farm.

The College of Agriculture, Food and Environmental Sciences (CAFES) operates state-of-the-art instructional facilities on 10,000 acres and incorporates sustainability principles into its operations in the form of water, energy and soil conservation, and through integrated farm, ranch and vineyard management. Notable features include a CCOF certified organic farm, a large-scale composting facility, holistically-managed

pastures, fair trade chocolates, and award-winning certified-sustainable forests.

Cal Poly has received more than two dozen UC/CSU/CCC Energy Efficiency and Sustainability Best Practice Awards. Recent awards honored the HVAC Retrofit (2016), Water Efficiency and Site Water Quality (2015), Sustainability Innovations (2015), and Sustainability in Academics (2015). In 2010, the National Wildlife Federation's "National Report Card on Sustainability in Higher Education" rated Cal Poly as "Leading School for Environmental Sustainability Goal Setting" and "Leading Employer of Environmental Management and Sustainable Professionals."

Planning and Administration

In May 2014, the CSU Board of Trustees, adopted the first CSU system-wide Sustainability Policy. The policy further reduces the environmental impact of construction and operation of buildings and integrates sustainability across the curriculum. Our polytechnic, hands-on, Learn-by-Doing approach uniquely qualifies Cal Poly to educate the future leaders, problem solvers, and decision makers to confront the effects of climate change. The CSU Sustainability Policy established goals to:

- Reduce greenhouse gas emissions to 1990 levels by 2020
- Reduce greenhouse gas emissions 80 percent below 1990 levels by 2040
- Procure 33 percent of energy supply from renewable sources by 2020
- Increase on-site energy generation from 44 to 80 MW by 2020
- Reduce per-capita landfill waste 50 percent by 2016 and 80 percent by 2020
- Reduce water use 10 percent by 2016 and 20 percent by 2020

Cal Poly signed the Talloires Declaration in April 2004. This 10-point action plan formalized Cal Poly's commitment to sustainability and environmental literacy in teaching, theory, and practice. Through the combined work of the President's Sustainability Advisory Committee (http://www.academicsenate.calpoly.edu/content/university_comm/sustainability_advisory), the Academic Senate's Sustainability Committee (http://www.academicsenate.calpoly.edu/content/acadsen_comm/sustainability), and the numerous faculty, staff and students involved with sustainability, the University's commitment to sustainability grows at all levels. For more information, please see <http://sustainability.calpoly.edu/>.