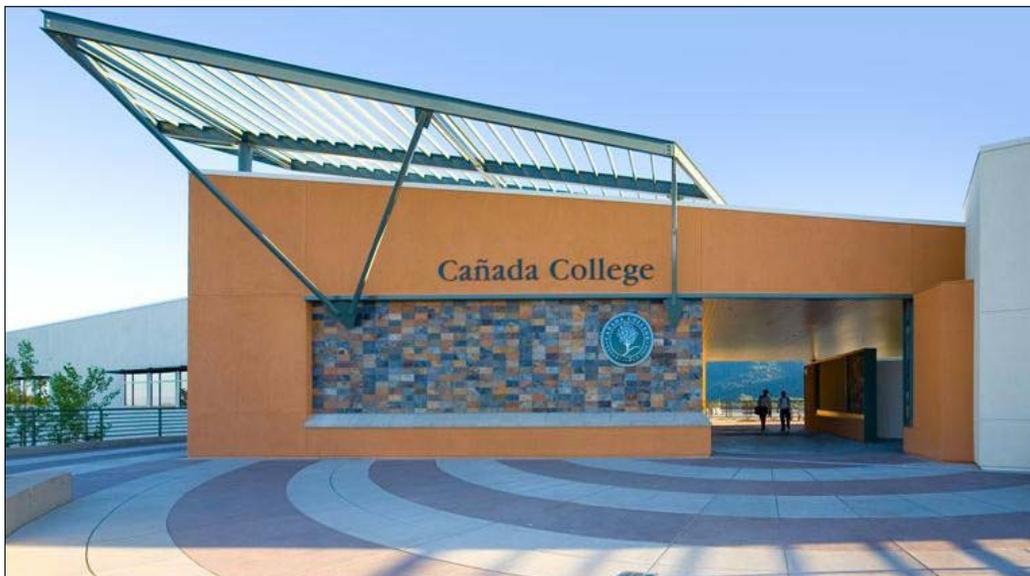




Cañada College Sustainability Plan



May 2018



GOAL 1: CURRICULUM INTEGRATION

Creatively integrate sustainability, including social justice, into existing courses and develop new curriculum and programs that focus on sustainability.

OBJECTIVES

	Year 1	Year 3	Year 5
Offer degree/certificate programs related to sustainability.	Develop and launch an Environmental Science A.S. degree. Market the new degree.	At least 5 students graduate and transfer as ENVS majors.	At least 2 students graduate annually and transfer as ENVS majors.
Increase participation in the Sustainability and Social Justice GE Pathways and work to increase sustainability across the college curriculum.	Track the number of GE Pathways courses offered, students enrolled, and completions.	Collaborate with 3 campus and/or community groups for outreach..	Launch CTE program
Use our campus and our community as a "living lab" for sustainability.	Offer at least one Sustainability Pathway event each semester and use an assessment method to gauge impact.	Explore CTE development.	Offer at least two professional development opportunities each year for GE Pathways faculty.
Increase opportunities for students to engage in meaningful research or advanced study related to sustainability	Identify instructors who have successfully used the campus as a living lab. Document their experience.	Offer at least one professional development opportunity for GE Pathways faculty.	Explore innovative ways to infuse sustainability into existing courses.
	Identify GE Pathways courses with honors addendums and target additional courses.	Expand instructor network interested in including sustainability concepts in their curriculum.	Implement at least two living lab modules linked across courses.
	Track the number of students pursuing honors research related to sustainability.	Develop and implement one living lab module.	Develop at least one community partnership to facilitate student research or advanced study.
		Increase the number GE Pathways courses offered in the honors program. .	
		Increase the number of students pursuing honors research related to sustainability.	
		Identify community partners for collaboration.	



SOCIAL IMPACT

Cañada College is developing the next generation of leaders and decision-makers. Integrating sustainability into the curriculum will provide leaders and citizens the knowledge and skills needed to solve difficult local and global issues. Engaging students in an active learning environment is crucial, so that students gain valuable insight as well as hands on experience. By utilizing the campus as a living lab, students can learn while giving back to their campus and local communities. Education that emphasizes holistic perspectives will foster an inclusive and adaptable campus culture within Cañada College.



MEASURING AND REPORT SUCCESS

✓ STARS Academic Points 1-8

✓ Cañada Educational Master Plan

✓ LEED School as a Teaching Tool Credit

✓ SMCCCD Strategic Plan



GOAL 2: CAMPUS AND COMMUNITY ENGAGEMENT

Encourage awareness of and participation in sustainability efforts and positively influence the campus community to champion sustainability at Canada College, in the community, and in their personal lives.

OBJECTIVES

	Year 1	Year 3	Year 5
<p>Use college communication tools and partnerships with college groups to build awareness and promote sustainable behaviors.</p> <p>Develop marketing materials for sustainability-related academic programs.</p> <p>Provide educational signage (print and/or digital) for campus sustainability projects).</p> <p>Offer sustainability-related professional development opportunities.</p> <p>Report progress and lessons learned to campus community at established intervals.</p>	<p>Develop a communication plan including tools, contacts, and protocols.</p> <p>Identify campus groups for further collaboration.</p> <p>Assess sustainability literacy.</p> <p>Identify college sustainability programs and contacts.</p> <p>Identify campus projects that need educational signage.</p> <p>Identify campus groups, classes, and/or staff for collaboration on signage content and design.</p> <p>Engage interested campus community members to brainstorm professional development activities.</p> <p>Collaborate with District Facilities to identify content, format, and timing of reporting.</p>	<p>Post at least one campus communication per semester.</p> <p>Partner in at least one collaborative event per year.</p> <p>Collaborate with ASCC to expand use of Green Event Checklist.</p> <p>Develop orientation material for each segment of the college community.</p> <p>Develop and implement a marketing plan that includes on and off campus outreach.</p> <p>Develop signage for at least two projects.</p> <p>Offer (and assess) at least one professional development opportunity per semester.</p> <p>Institutionalize reporting plan.</p>	<p>Post at least four campus communication per semester.</p> <p>Partner in at least two collaborative events per year.</p> <p>Use modified Green Event Checklist for all college events and meetings.</p> <p>Develop assessment tools to assess effectiveness of marketing efforts.</p> <p>Institute plan to include educational signage in all campus projects that related to sustainability.</p> <p>Develop a resource list of professional development opportunities related to sustainability.</p>



CAÑADA COLLEGE



SOCIAL IMPACT

According to the Community College survey of Student Engagement, “active and collaborative learning is linked with higher grades and course completion measures as well as long-term persistence and degree completion” (2007).

Students at Cañada College engage in sustainability in their coursework or outside in student groups such as Environmental Club or Associated Students of Cañada College.

Persistent collaboration within the Cañada College campus and greater community would promote student success and other positive outcomes.

MEASURING AND REPORT SUCCESS

✓ STARS EN 1-9

✓ LEED School as a Teaching Tool Credit



GOAL 3: ZERO NET ENERGY

Accomplish Net Zero Energy by 2030 while ensuring safety, security, comfort, and functionality.

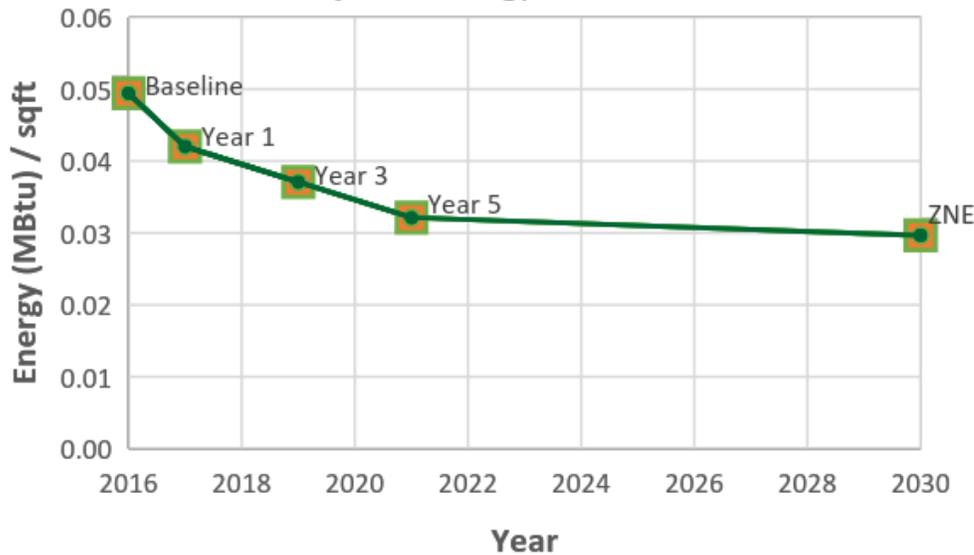
OBJECTIVES

	Year 1	Year 3	Year 5
Benchmark building energy loads. Create a phased plan and establish a budget for identified improvement opportunities.	Establish baseline and reduce Energy Utilization Intensity by 15% per square foot across campus compared to baseline.	Reduce Energy Utilization Intensity by 25% per square foot across campus compared to baseline.	Reduce Energy Utilization Intensity by 35% per square foot across campus compared to baseline.





Cañada's Projected Energy Reduction Goals



SOCIAL IMPACT

Cañada College has the largest solar array in San Mateo County (at the time of publishing). The 1.25 MW installation offsets 50% of Cañada College's energy load. The solar farm is utilized as a learning tool for students to visit, view dashboards, and analyze energy data. This campus as a living laboratory tool is supporting a resilient economy, reducing energy costs, reducing greenhouse gas emissions, and providing leadership for the greater community.

MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 8 and 9 ✓ LEED Energy and Atmosphere Category ✓ Energy Star



GOAL 4: WATER SYSTEMS

Reduce freshwater consumption per square foot of building space by 50% by 2025 compared to 2013 baseline.

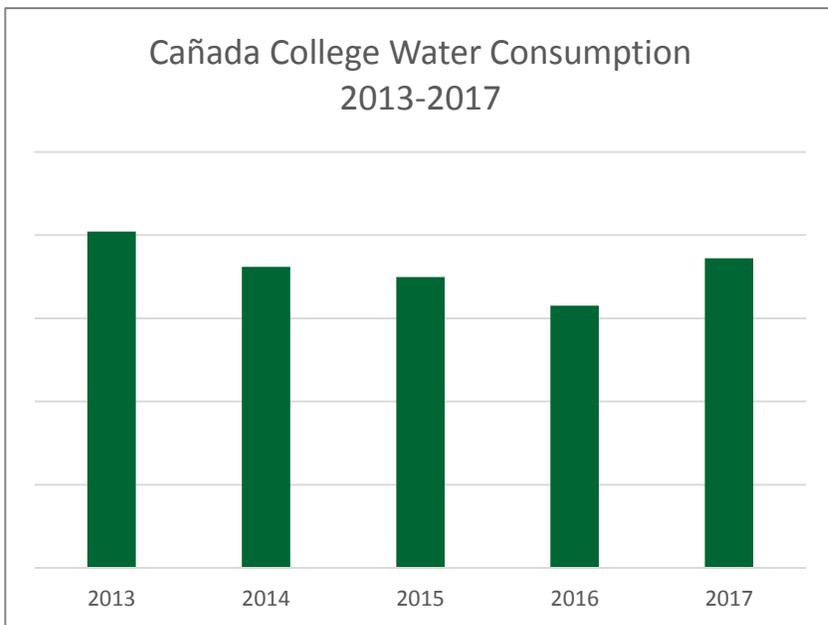
OBJECTIVES

	Year 1	Year 3	Year 5
Reduce water use by 25% compared to the 2013 baseline	Reduce water consumption by 30% compared to the 2013 baseline.	Reduce water consumption by 40% compared to the 2013 baseline.	Reduce water consumption by 45% compared to the 2013 baseline.
Normalize per square foot	Revise the Stormwater Management Program to include educational resources and lesson plans.	Revisit the SWMP and evolve educational resources to take regular qualitative and quantitative measurements of runoff.	Fully institute regular reporting methods for quantity and quality of runoff; collaborate with local agencies to model the SWMP in other schools and public facilities.
Slow, sink and spread stormwater runoff from campus to protect local water resources and ecological resources.			





Cañada College Water Consumption
2013-2017



SOCIAL IMPACT

Water is life and Cañada College is committed to ensuring that we help ensure clean water security in the Bay Area. Over the past decade, Cañada took early steps to reduce water use through: natural turf replacement on athletic fields, adjusting irrigation schedules, implementing weather-based irrigation controllers, planting of native landscaping, and informational signage. Recently, Cañada has taken this one step further by using the campus as a living lab to assess water efficiency opportunities. Engaging students in water systems issues in such a way is a powerful reminder of humanity's dependence on nature and each other.

MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 22 and 23

✓ LEED Water Category

✓ Energy Star



GOAL 5: ZERO WASTE

Accomplish Net Zero Waste by 2025.

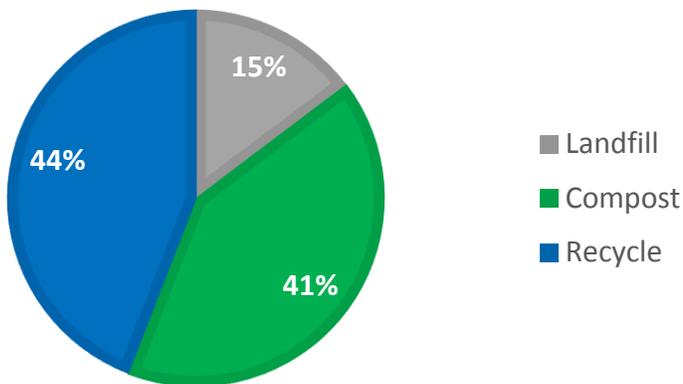
OBJECTIVES

	Year 1	Year 3	Year 5
Achieve 25% waste reduction.	Establish baselines and reduce overall waste by 10%.	Reduce overall waste by 15% relative to baseline.	Reduce overall waste by 25% relative to baseline
Achieve 100% waste diversion.	Increase waste diversion to 75%.	Increase waste diversion to 85%.	Increase waste diversion to 95% Develop and implement assessment tools for improving program





2015 CAÑADA COLLEGE WASTE AUDIT



SOCIAL IMPACT

Cañada College is committed to reducing waste hauled to the landfill by developing programs for waste reduction and by offering indoor and outdoor recycling. In compliance with Assembly Bill 1826 (Mandatory Commercial Organics Recycling), starting in Fall 2017 composting was introduced campus wide. Education and engagement are vital to waste reduction and diversion efforts, therefore Cañada students in the Environmental Club, Middle College, the Sustainability Pathway program, and others are working with the Sustainability Committee to educate the campus community.

MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 19-21

✓ LEED Waste Category

✓ Energy Star



GOAL 6: BUILT ENVIRONMENT

Modify and construct facilities using/exceeding the highest sustainability standards in the industry, while ensuring that the college community is engaged in the planning process, all facilities focus on community needs (especially students), and the facilities and operations support interactive and project-based learning (e.g. campus as a living lab).

OBJECTIVES

	Year 1	Year 3	Year 5
Apply district sustainability standards to make all existing buildings, infrastructure, and landscaping as sustainable as possible.	Optimize the design and function of existing systems for comfort, safety, and health.	Partner with USGBC to examine feasibility of LEED O&M Certification for existing buildings.	Assess and apply LEED O&M to all LEED certified buildings.
Design new construction to achieve USGBC gold standard.			
Prepare new construction for Zero Net Energy.			
Design all new and remodeled buildings to facilitate campus as a living lab opportunities.			





SOCIAL IMPACT

According to the International Energy Agency “...energy efficiency has the potential to support economic growth, enhance social development, advance environmental sustainability, ensure energy-system security and help build wealth” (2014). By being as energy efficient as possible, Canada College is supporting a resilient economy, reducing energy costs, reducing greenhouse gas emissions, and providing leadership for the greater community.

MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 3-5

✓ LEED O&M: Existing Buildings

✓ Energy Star



GOAL 7: TRANSPORTATION

Improve access to campus resources by leveraging low carbon, community-building transportation options, such as carpooling, bicycling, public transportation, and electric vehicle infrastructure. Create infrastructure and partnerships within SMCCCD and with public transportation agencies to facilitate efforts.

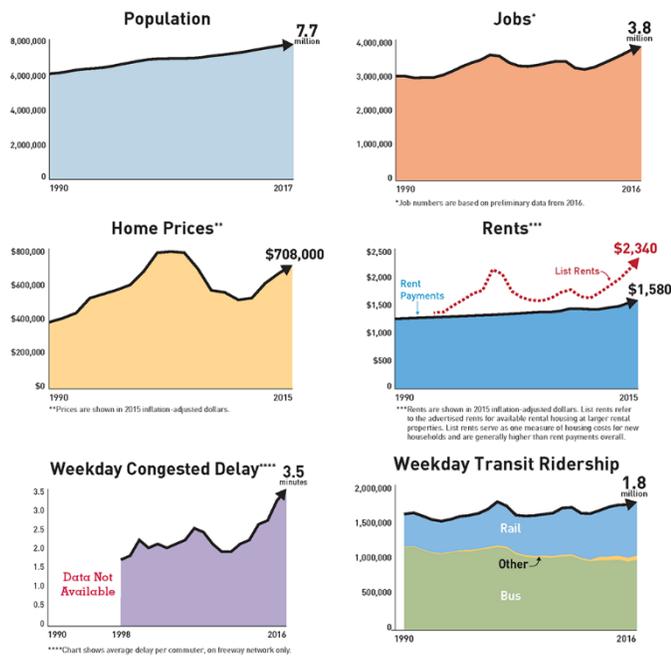
OBJECTIVES

	Year 1	Year 3	Year 5
Benchmark vehicle miles traveled to and from campus	Conduct a comprehensive transportation study; create a baseline of Vehicle Miles Traveled (VMT) to campus.	Achieve 5% reduction in single occupancy vehicles (SOV) through public transit discounts, carpool and rideshare programs, incentives for carpooling, and improving distance learning options and accessibility	Implement alternative transportation programs.
Create systems and partnerships to support alternative transportation	Initiate conversations with public transit agencies. Engage staff, students, and the community in goal setting and achievement.	Apply for grants with public transit agencies.	Achieve a 10% reduction in SOV's. Update transportation study.





VITAL SIGNS What's the latest pulse of the Bay Area?



For more information and the latest data, go to vitalsigns.mtc.ca.gov

SOCIAL IMPACT

The cost of living and congestion in the Bay Area make it challenging for students to live and work in San Mateo County. The options for commuting to campus, thus, need to be efficient, timely and reliable. By partnering with regional agencies, private vendors and others Cañada College can help students access the high quality educational resources that abound on campus. Infrastructure, technological systems and a variety of approaches will be critical to ensuring that we serve the diverse needs of our community and continue to put Students First.

MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 15-18 ✓ LEED Location and Transportation Category



GOAL 8: CLIMATE ACTION

Develop a climate action plan that results in industry-leading reductions in greenhouse gas emissions over the next 5 years.

OBJECTIVES

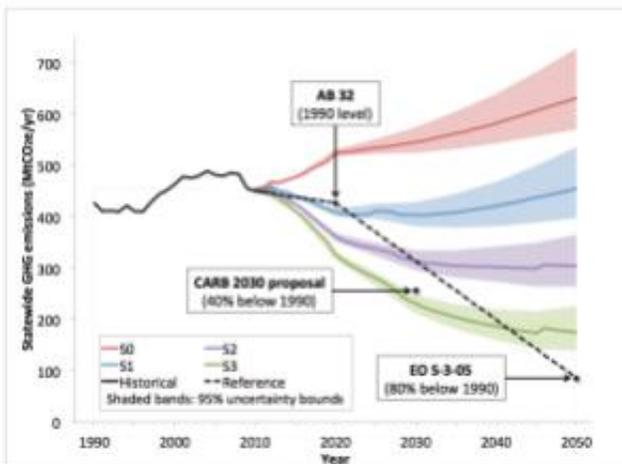
	Year 1	Year 3	Year 5
GHG emissions inventory	Establish GHG emissions inventory baseline.	Update GHG emissions inventory and write Cañada Climate Action Plan (CAP).	Update GHG emissions inventory and update Cañada Climate Action Plan.
Reduce Emission Sources	Reduce Scope 1, 2, and 3 emissions by 10%.	Reduce Scope 1, 2, and 3 emissions by 20%.	Reduce Scope 1, 2, and 3 emissions by 30%.





SOCIAL IMPACT

Human-caused climate impacts are not some far-off phenomenon. The effects of a warming planet have immediate and real impacts to students, faculty, staff and the Cañada College Community at large. Planning for and acting to prevent these impacts is especially vital in educational institutions. Cañada College can be a working example of how to operate a socially, ecologically, economically responsible business. Decreasing emissions does not mean that we sacrifice quality or education. Indeed, the impacts of climate change rely on the entire community to be aware, motivated and active. An interdisciplinary approach to education puts students first; supporting the myriad approaches to addressing climate change while producing better learning outcomes, greater community engagement and more stable business model.



MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 1 and 2 ✓ LEED Air and Climate Category ✓ Energy Star



GOAL 9: SUSTAINABLE PROCUREMENT

Work collaboratively with General Services, Auxiliary Services and others to establish a green purchasing policy and meet incremental goals

OBJECTIVES

	Year 1	Year 3	Year 5
<p>Prioritize purchasing of local organic food for cafe</p> <p>Replace and donate/properly dispose of inefficient and outdated equipment and replace with smart and efficient technology</p> <p>Report progress and lessons learned to campus community at established intervals</p>	<p>Engage with campus café and bookstore.</p> <p>Develop a meaningful baseline for paper and other office supply use. Set incremental targets.</p>	<p>Develop purchasing plan that prioritizes minimal and sustainable packaging and local, organic food.</p> <p>Reduce campus-wide office paper consumption by 20%</p>	<p>Fully implement purchasing plan and develop tools to assess the plan</p> <p>Reduce campus paper consumption by 30%</p>





SOCIAL IMPACT

According to the International Journal of Economics and Management Sciences, “sustainable procurement has the potential to cut costs, shorten timescales, enhance stakeholder relationships, increase sales, reduce risks, enhance reputation and improve margins” (2012). By adopting sustainable procurement practices, the Cañada College can create resiliency , and provide leadership for students and the greater community.

MEASURING AND REPORT SUCCESS

✓ STARS Ops Points 11-14