CSU CHANNEL ISLANDS SUSTAINABILITY REPORT FY 2019-20

Second Quarter

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- FTES: Full Time Equivalent Students
- GSF: Gross Square Feet
- HCF: Hundred Cubic Feet
- kWh: kilowatt hour
- BTU: British Thermal Unit
- Potable Water: Drinking water
- Recycled Water: Tertiary-treated waste water
- Baseline: the year(s) we compare current usage to (for water: 2013, for energy: average of 2008-2009 FY and 2009-2010 FY)

INTRODUCTION

Sustainability and resource conservation are fundamental elements of operations at CSU Channel Islands (CI). CI's Strategic Initiatives feature a specific focus on sustainability, including the objective of "promoting sustainability as an integral part of University planning and operational activities."

As one measure of progress for the Capacity and Sustainability Strategic Initiative, this report provides an overview of utility usage on campus for the second quarter of the fiscal year, October through December 2019. The report also highlights key sustainability initiatives coordinated by Facilities Services during this quarter, though it is not inclusive of all partnerships and initiatives that are underway. The data for this report is collected from utility bills and campus utility sub-meters. Utilities used by the CI Power Plant and the University Glen community are not included.

TOTAL WATER

Total Water is the combination of potable and recycled water used on campus. The CSU Chancellor's Office set a goal to reduce total water usage 20% by 2020 compared to our 2013 baseline. In the second quarter of FY19-20, collective efforts contributed to an overall reduction of 46% compared to the baseline. Variability from month to month is attributed to campus holidays, weather patterns, and increased winds. Continued efforts by our campus community are essential if we are to continue reaching our reduction goals each month.



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POTABLE WATER

Cl's municipal water provider has requested the campus to reduce potable water consumption by 15% from the 2013 baseline. Realizing that goal requires the participation of every member of our campus community. In Q2 of FY 2019-20, the campus only reduced potable water usage by a total of 6%, due to increased water usage in October. This increase may be attributed to leaks in the campus infrastructure.



RECYCLED WATER

Recycled water is used for most irrigation on campus. Recycled water reduction goals are included in the total water usage goals. High variability in usage from month to month is largely due to weather patterns and corresponding irrigation needs. Due to early rains, strategic irrigation practices, and expansion of drought tolerant landscaping, the university reduced recycled water usage by an average of 66% compared to the 2013 baseline during the second quarter. We can build upon this success by continuing to replace turf with native, drought-tolerant plants and expanding sub-metering for early leak detection.



WATER CONSERVATION TIPS

- Report any leaking faucets, running toilets, broken sprinklers, or other water waste to Facilities Services.
- Take advantage of native and drought tolerant plants in landscaping and replace irrigated lawn with a beautiful succulent garden like the pollinator garden at Sierra Hall.
- If you have a lawn or garden that requires irrigation, program sprinklers to come on at night when evaporation is at its lowest.
- Be conservative at the tap whether you're doing dishes, thawing meat, washing hands or brushing your teeth; if its not in use, it should be off.
- Always run full loads in the washing machine and dishwasher to save energy and water.
- While waiting for the bath/shower water to warm up, use a bucket or bowl to capture the running water and use it to water plants.

ELECTRICITY

As the campus grows, our demand for electricity increases. However, as we continue to innovate and utilize more efficient technologies, our overall electricity usage per student has decreased compared to our baseline (average 2008-09 and 2009-10 FY). The CSU Chancellor's Office set a goal of a 25% reduction per FTES compared to the baseline. CI has exceeded that goal each month this quarter.



TOTAL ENERGY

Total energy is the representation of all sources of energy on campus: electricity, steam and natural gas. Steam makes up the largest amount of energy because it is used for the majority of heating hot and cold water along with space heating after it's converted at our Central Plant. Electricity is used for lighting, plug loads, and various equipment around campus. Natural gas is only used in a few buildings for heating hot water, cooking, and space heating. Our goal is a 25% reduction per FTES compared to our baseline, which we are exceeding.



ENERGY CONSERVATION TIPS

✓ Avoid letting your car idle: an idling car is wasting gas and spewing pollution into the environment.

✓ Save money, gas, and reduce pollution by carpooling, walking, biking, or using public transportation whenever possible.

Wear layers and use blankets or fans instead of adjusting the thermostat up or down at home or in the office.

Make sure to close windows and doors when running air handling units - they are ineffective at changing the temperature outside!

Make it a habit to turn off lights when you leave a room. Utilize natural light whenever possible.

✓ Wash clothes in cold water – it cleans just as well without having to pay to heat the water.

✓ Unplug devices and appliances when not in use.

WASTE

The CSU Chancellor's Office has set a goal for each campus to divert 80% of all waste from the landfill by 2020. In the second quarter of FY 2019-20, CI saw a decrease in waste diversion, averaging only 52% of total waste diverted from the landfill. In order to achieve the 80% waste diversion goal, the campus must focus on reducing waste, improving recycling, and providing more opportunities to compost food waste.



WASTE MANAGEMENT TIPS

- C Pause before you print. Consider if you really need a printed copy. If you do, make sure the settings are accurate before you click print.
- O Currently, wasted food is the largest category of material sent to landfills. Prevent food waste by only taking what you can eat.
- O Take advantage of reusable items: water bottles, coffee mugs, canvas grocery bags, tupperware, scrap paper, batteries (rechargeable), packaging materials - be creative and instill new life into materials you already have.
- O Before you buy online, consider purchasing gently-used and pre-loved items from local consignment, antique, and second-hand stores.
- U Know what is recyclable and where to take it. Bring electronics to e-waste centers and compost food scraps to make your own soil.
- O Avoid buying items in non-recyclable thin plastic films. If you want to be a super zero waste champion, ask your favorite stores to stop carrying products packaged in plastic.

SUSTAINABILITY ON CAMPUS

Facilities Services Sustainability partnered with programs throughout campus to conduct sustainability outreach and education during the fall semester. FS Sustainability hosted a tree planting for Clean Air Day on October 2nd and received 18 pledges from individuals committing take action to improve local air quality. In November, FS Sustainability tabled during Mental Health Week with information about eco-stress and climate-anxiety, including tips to manage stress and anxiety about climate change and environmental concerns. We also collaborated with CHEM 100 to tour the Camrosa Water Plant adjacent to campus.



Clean Air Day Tree Planting



Mental Health Week Tabling



Camrosa Water Plant Tour

SUSTAINABILITY ON CAMPUS



GREEN CALIFORNIA GREEN BUSINESS NETWORK VENTURA COUNTY

Pizza 3.14 is a Certified Green Business

FS Sustainability worked with University Auxiliary Services throughout the summer and fall of 2019 to earn a Green Business Certification for Pizza Pi. The certification recognizes Pizza Pi's commitment to conserving resources, reducing waste, and preventing pollution through strategic operations.



Arroyo Gym Lighting Upgrade

In November 2019, Facilities Services replaced 72 compact fluorescent lights in Arroyo Gym with 36 LED lights. The new lights improve safety for students in the gym and are expected to reduce energy usage by 13,000 kWh annually, saving \$1,430.

ACKNOWLEDGEMENTS

CSU Channel Islands strives for a more sustainable campus community every day.

Keep up to date between reports on our website: http://www.csuci.edu/fs/sustainability/index.htm

For questions, concerns, or ideas on new sustainability efforts, please email: roxane.bc@csuci.edu

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