ANNUAL SUSTAINABILITY REPORT 2017-2018

California State University, Channel Islands

California State University

FACILITIES SERVICES

CHANNEL ISLANDS

TABLE OF CONTENTS AND IMPORTANT TERMS

FTES: Full Time Equivalent Student

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, or years, we are comparing our usage to

- For water: 2013
- For other utilities: Average of 2008-2009 FY and 2009-2010 FY

CSU CHANNEL ISLANDS FACILITIES SERVICES

Our Mission Statement

Facilities Services (FS) supports Channel Islands (CI) stakeholders by providing the highest quality service by practicing excellent workmanship, exhibiting forward vision, using resources effectively and efficiently, and continuously improving the quality of service. FS provides support for the entire campus through Facilities Support, Operations, Maintenance Stores, Work Control Center, and Planning, Design and Construction.

Our core values are:

- Excellence in service
- Value our team members
- Continuous improvement
- Customer service
- Sustainable performance

California State University

FACILITIES SERVICES

CHANNEL ISLANDS

CSU CHANNEL ISLANDS FACILITIES SERVICES

Facilities Services incorporates and promotes sustainability on campus through:

- Energy Conservation
- Water Conservation
- Waste Minimization, Recycling, and Landfill Diversion
- Greenhouse Gas Monitoring and Minimization
- Native Landscaping and Habitat Preservation
- Riparian Restoration Projects
- Outreach, Education, and Engagement

Facilities Services also assists other entities and departments in their efforts by providing support for:

- Academic Affairs and Student Project Development
- Dining and Auxiliary Services
- Transportation
- University Glen / Site Authority
- Channel Islands Power (co-generation)
- Housing and Residential Education
- Outreach, Education, and Engagement

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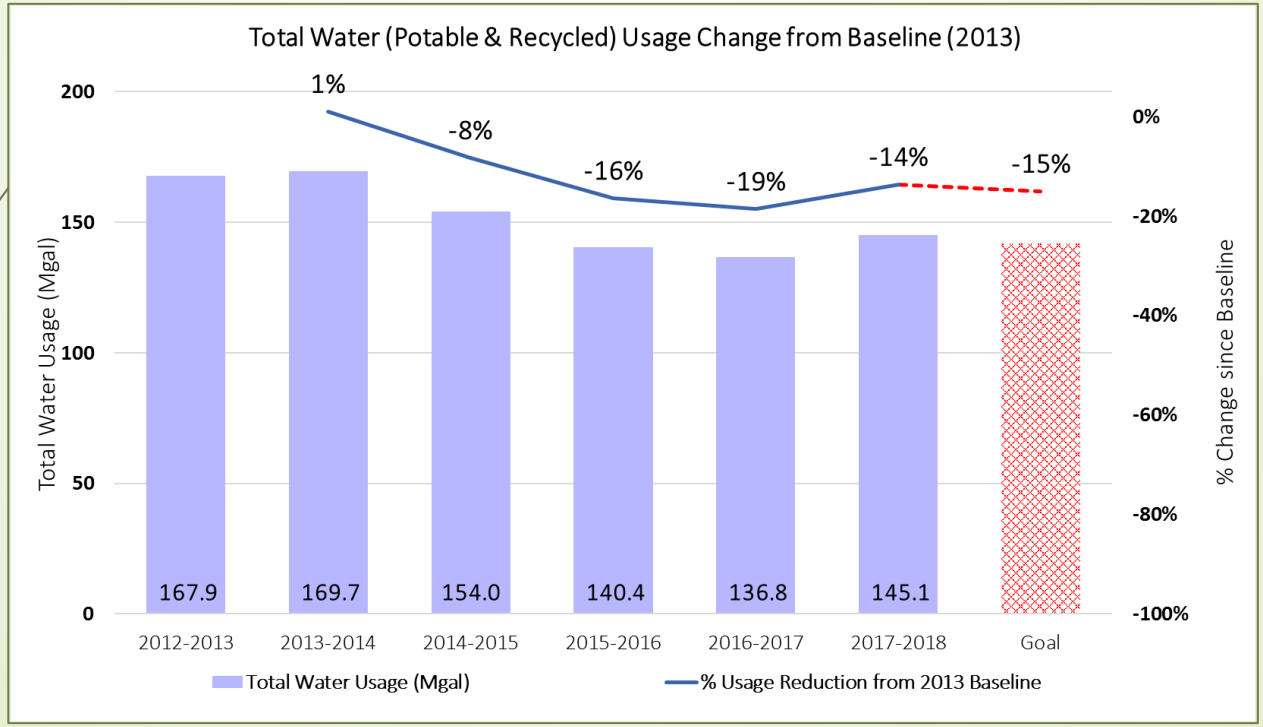
TOTAL WATER

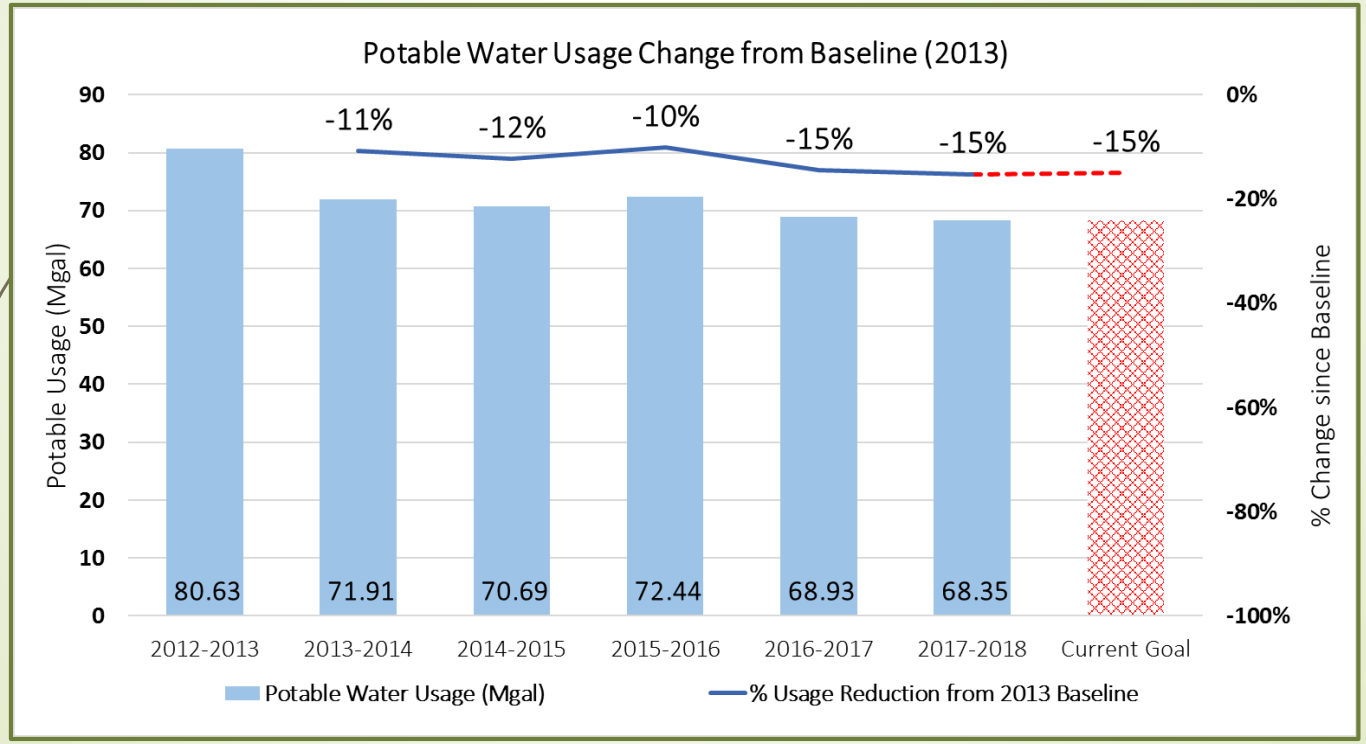
Total water is how we quantify all potable and recycled water used on campus. Recycled water is "waste water" that has received tertiary treatment for use in irrigation and other non-consumptive purposes, whereas potable water is drinkable and safe for consumption. The CSU Chancellor's Office has set a reduction goal for total water usage of 25% by 2020 compared to the 2013 water-usage baseline. Unlike other utilities, reduction in water usage (total, potable and recycled) is measured on an absolute basis.



We are working to meet this goal by using only recycled water for irrigation and utilizing WaterScope – a web-based monitoring tool - to continuously evaluate how and where we irrigate so that we may identify opportunities to lower usage. Education and outreach to our campus and community members are essential for making future reductions in our total water consumption.

POTABLE WATER

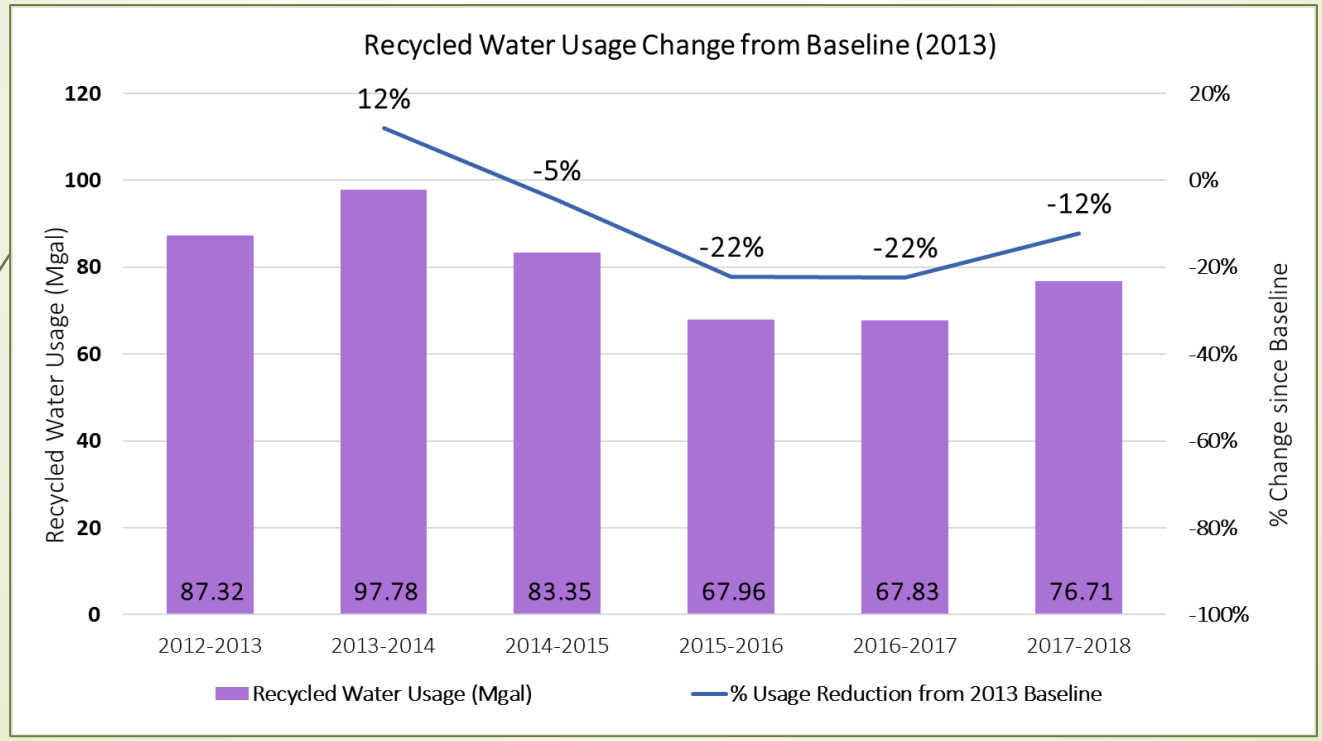
Potable water is water that is safe for drinking, bathing, cooking, and doing laundry. Potable water is supplied to the campus by our municipal provider, Camrosa Water District, who has requested that potable water usage be reduced by 15% compared to our 2013 baseline year. This means that, in spite of campus growth, we must continue to reduce our water usage so that it remains below our baseline, and we have consistently been successful in meeting those goals.



CSUCI has successfully installed efficient fixtures around campus, but the most progress we will make in reaching our reduction goals must come from efforts made by the campus community. It is vitally important that our students, faculty, and staff know that they collectively hold the power to make a difference.

RECYCLED WATER

Recycled water includes all water that has been treated by our municipal water provider, Camrosa Water District, at a tertiary level so that it is viable for use in campus irrigation and landscaping. Despite our campus' continuous growth, we have been successful in keeping recycled water usage consistently below our 2013 water-usage baseline. Recycled water usage is highly variable as it depends on the time of year, weather, and landscaping/irrigation needs.



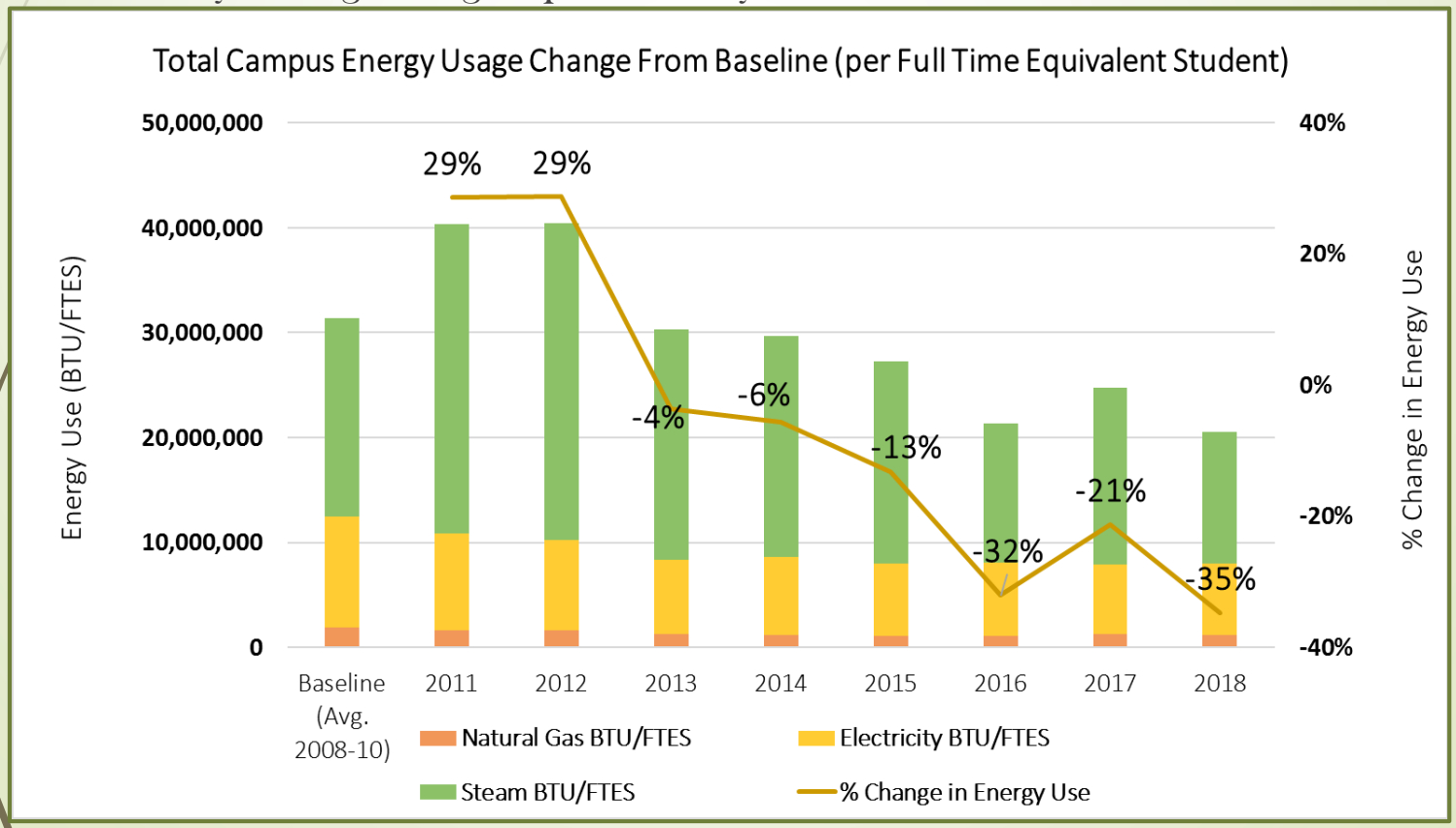
We will continue to reduce our consumption of recycled water (and total water) by utilizing improved irrigation management systems, metering, planting more drought-tolerant and native plants, adding mulch, and implementing native landscaping when possible.

REDUCTION TIPS: WATER USAGE

- Limit shower duration and frequency.
- Avoid taking baths.
- Turn off the tap while lathering hands and while brushing teeth.
- Only run full loads of laundry and dishes. If hand-washing dishes, fill up the sink instead of letting the water run.
- Repair leaky sinks or toilets.
- When possible, upgrade to efficient, water-conserving fixtures
- Reuse water used for cooking to water plants.
- Collect water from the shower whilst waiting for it to get hot. Use this to water plants.
- Use car washes instead of washing at home; commercial car wash businesses are mandated to treat and reuse their water.
- Replace water-intensive turf with drought-tolerant, native plants. This way, local animals and insects thrive and landscapes continue to look beautiful.
- Report leaking sinks and toilets to the Work Center at 805-437-8461

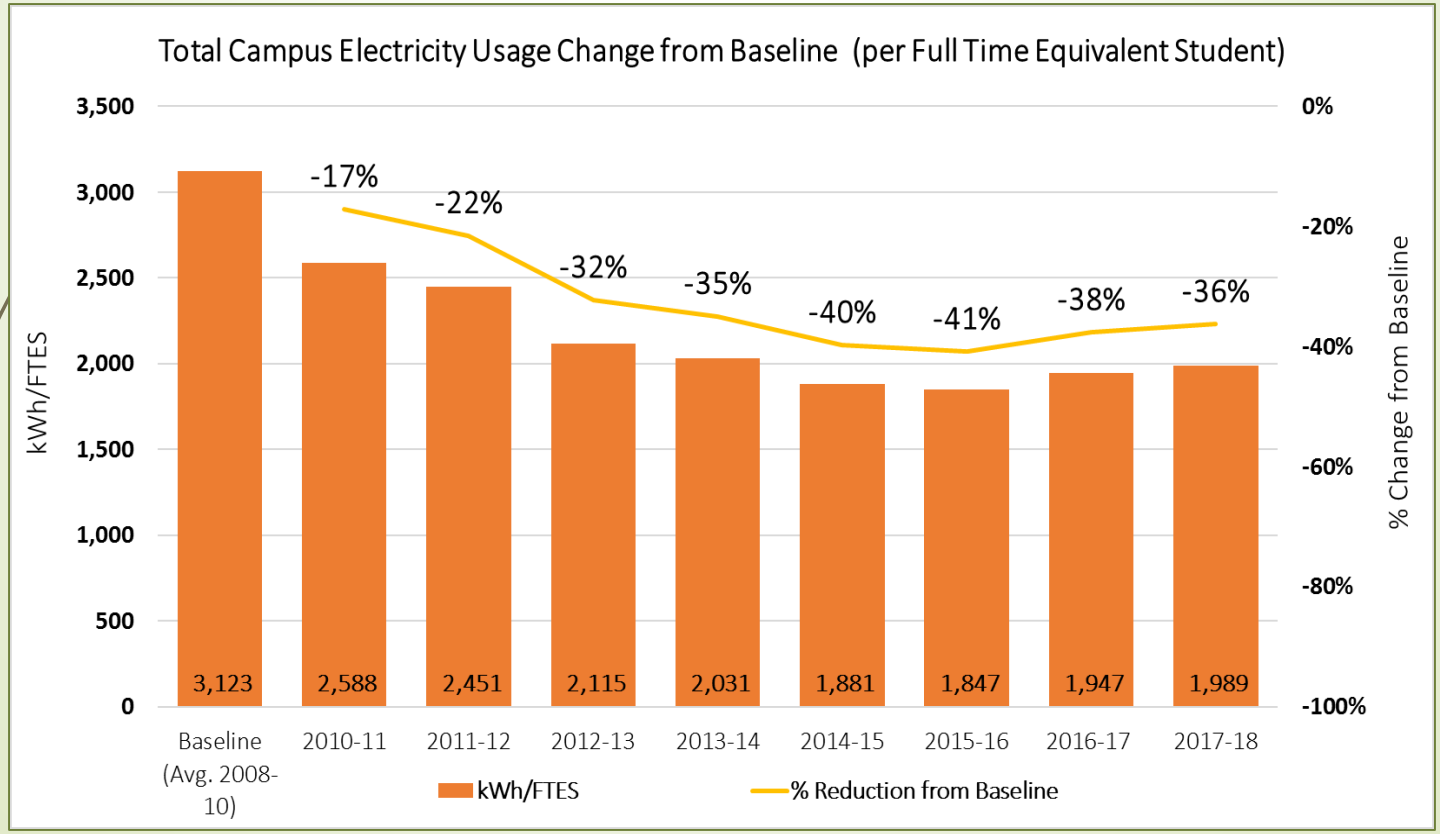
TOTAL ENERGY

Total energy is how we quantify our consumption of *all* sources used to provide energy to the campus. The majority of the energy provided to campus prior to April 2018 has come from Channel Islands Power (CIP). CIP generated our electricity from both gas and steam turbines, and the "waste" steam was channeled to Central Plant where it was used to produce hot and chilled water. Hot water is used domestically for showers and sinks while both hot and chilled water are utilized in our HVAC system to keep buildings at comfortable temperatures. As of April, CI now obtains *all* electricity through the grid provided by Southern California Edison.



ELECTRICITY

CSUCI makes efforts year after year to encourage the minimization of electricity usage campus-wide. Energy conservation efforts are encouraged in all buildings on campus through informational stickers and signage next to manual light switches. CI is in the process of retrofitting buildings with variable air volume equipment for HVAC that will be more efficient and make spaces more comfortable. We continue to move toward clean sources of power through increasing CI's usage of renewables.

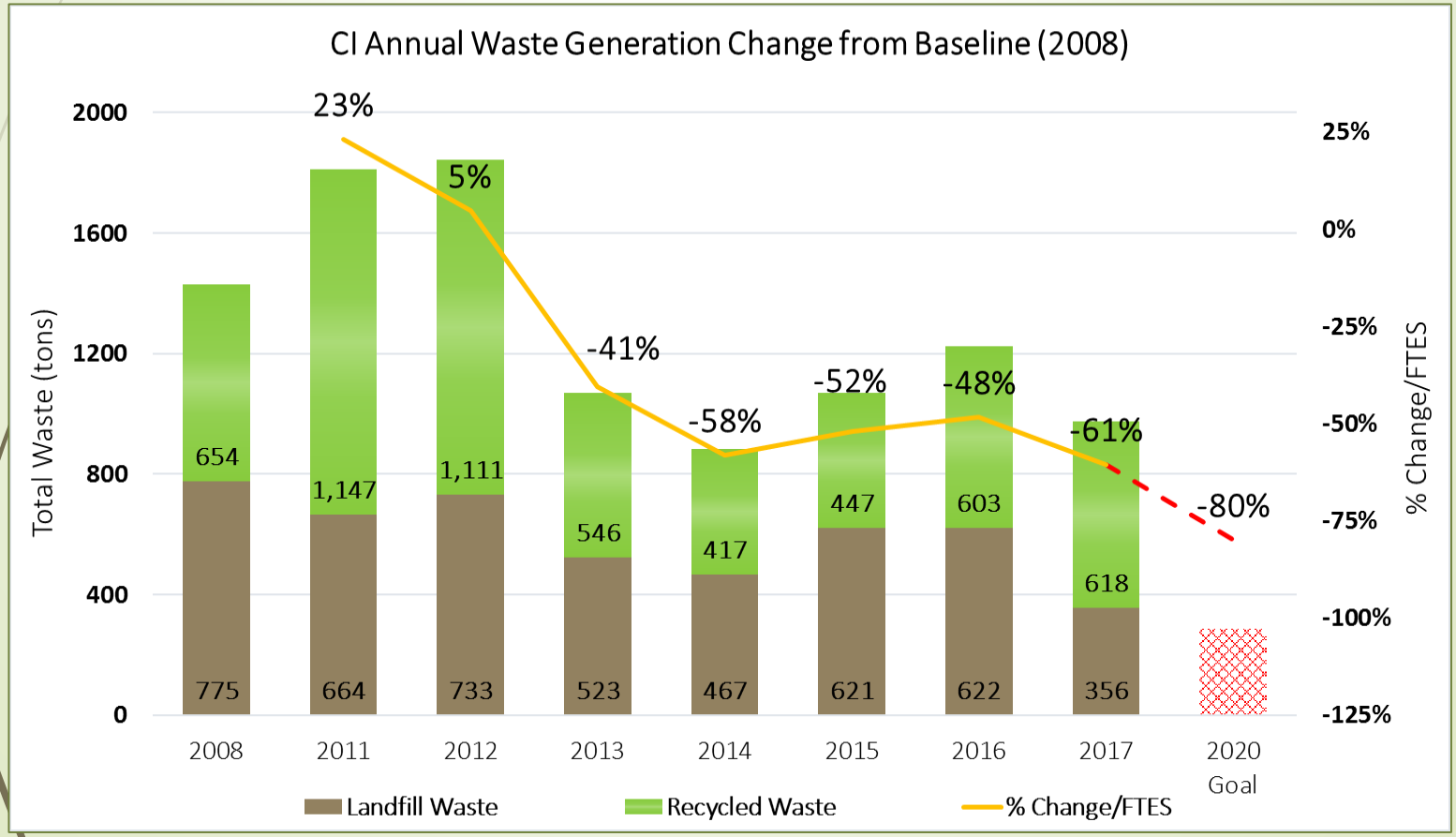


REDUCTION TIPS: ENERGY USAGE

- Close windows and doors while air conditioning is in use, whether that be at home, at school or in the car.
- Wash clothes in cold water – it cleans just as well without having to pay to heat it.
- Switch to using efficient light bulbs such as LED – this can reduce energy usage by as much as 80%.
- Utilize power strips, which are useful for turning multiple appliances off at once. Most electronics constantly use small amounts of energy – and it adds up!
- Unplug devices and appliances when not in use.
- Use windows for free lighting and adjust blinds to regulate temperature.
- When applicable, use a programmable thermostat.
- Clean A/C filters regularly – dirty filters force the unit to run harder and spreads dust and allergens.
- Seal air leaks and properly insulate before the air you paid for escapes right out the front door!
- Upgrade to Energy Star appliances.

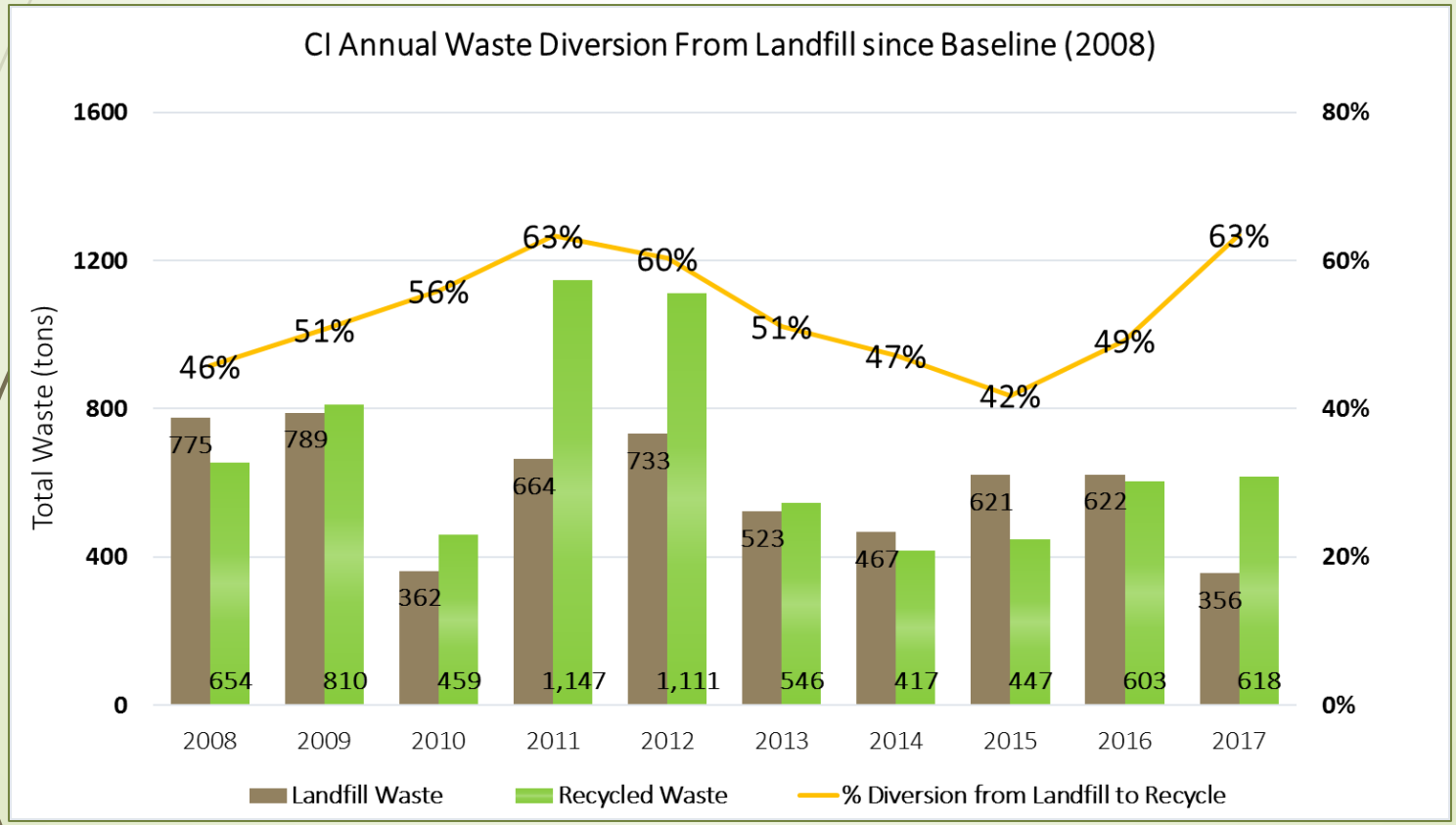
WASTE

Our waste reduction goal, as set by the CSU Chancellor's Office, is to reduce solid waste disposal by 50% compared to our baseline. Even considering that the university has doubled its campus community since 2008, efforts made by our students, faculty and staff contribute to an ever-decreasing trend in waste generation on both an absolute (total tons) and per student (tons/FTES) basis.



WASTE

Collective efforts have contributed to an all-time high in waste diversion from landfills. In 2017, we diverted 63% of waste generation on campus to recycling as opposed to landfill. This was achieved through educational campaigns, a student project that involved updating informational signage about waste and recycling, and increased efforts by the entire CI community. *Thank you!!*



REDUCTION TIPS: WASTE AND CONSUMPTION

- Bring reusable bags when shopping for clothes or groceries and when traveling.
- Bring reusable containers when packing/storing lunches and leftovers.
- Avoid purchasing individually wrapped items, snack packs, and single-serve containers. Buy in bulk when practical, just make sure to consume all of the product you buy.
- Purchase cleaning agents in concentrated forms, and dilute when ready to use.
- Utilize items you already own as much as possible – for example, making cleaning supplies from household materials. Be innovative!
- Compost food and yard waste – it's a free and easy way to make your own organic, nutrient-rich soil amendments.
- Use both sides of paper while printing, writing and note-taking. Be sure to recycle when done.
- Reduce the amount of mail you receive by utilizing the internet and email when practical.
- Shop for clothes, furniture, appliances, and other items at second-hand shops – it saves money and reduces waste by giving items a second chance at life.

ENCOURAGING AND PROMOTING SUSTAINABILITY

On Campus

The Grounds Department in FS tested out an autonomous, electric mower on campus. In addition to their overall efficiency, the mowers would support campus sustainability efforts: they require zero fossil fuel, produce zero emissions, and recycle grass clippings.

In the Community

Four students from Rancho Campana High School came to CSUCI to shadow FS staff for a day. CSUCI's Sustainability and Operations Analyst, Coleen Barsley, taught the students about the importance of sustainability and what our campus has achieved in terms of sustainable practices in addition to providing some insight as to what her role is here on campus.

ENCOURAGING AND PROMOTING SUSTAINABILITY: PROJECT HIGHLIGHTS

Sustainable Pollinator Gardens

Dr. Khan's Spring 2018 Energy and Society (CHEM 344) class implemented a pollinator garden on the second floor of Sierra Hall. The garden includes multiple native plant species as well as drought-tolerant succulents and is designed to give pollinators a "safe haven" here at CSUCI. More pollinator gardens are in the works in various other locations on campus.

Waste Signage Improvement

This project aims to further students' understanding of which materials are recyclable and which go into landfill. The signs, which were created by CHEM 344 students, display common items that are often thrown away on campus. This way, students know exactly where an item should be disposed of.

STUDENT INVOLVEMENT

During the Spring semester, a group of students created a campaign to raise campus awareness about the dangers of single-use plastics and their detriment to the environment. Their petition, which was created to eventually eliminate all single-use plastics on campus, got nearly 1000 student, staff and faculty signatures –

an outstanding number that represents a significant portion of our campus community and exemplifies the importance of sustainability at CSUCI.

The campaign was created in alignment with the CSU-wide goal of moving toward zero waste set by the Chancellor's Office. Those who collaborated in this effort were the CI Art club, the Santa Rosa Island Student Committee, Green Generation Club, Surfrider Club, FS, and several CI faculty and staff.

The campaign will continue on through the 2018-2019 academic year to create and implement the next steps for eliminating single-use plastics on our campus.

AWARDS AND RECOGNITION

For the sixth year in a row, CSUCI has received the Tree Campus USA recognition. This recognition highlights the efforts made by the campus community to preserve, maintain, educate about, and plant trees at CSUCI.

This Spring, we were notified that CSUCI had received the Campus As a Living Lab (CALL) grant. This grant will allow us to upgrade our propagation house on campus. In a collaboration between the Biology Department and FS Groundskeepers, the propagation house will be used to grow native plants that will be utilized on campus for drought-tolerant & sustainable landscaping.

ACKNOWLEDGEMENTS

CSU Channel Islands is striving for a more sustainable campus community every day. To stay up to date with our activities, check out our website:

http://www.csuci.edu/fs/sustainability/

For questions, additional information or ideas on new sustainability efforts, please email

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