



# **CSU CHANNEL ISLANDS SUSTAINABILITY REPORT**

Third Quarter FY 2020-21

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- **FTES:** Full Time Equivalent Students
- **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

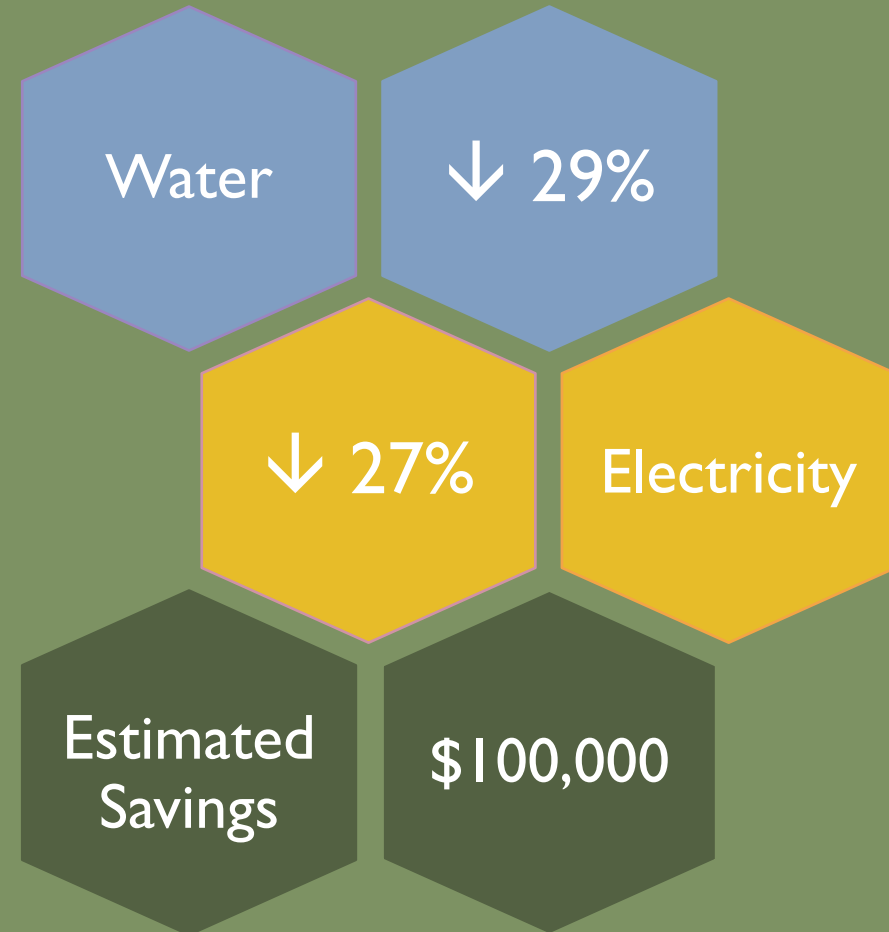
Sustainability and resource conservation are fundamental elements of operations at CSU Channel Islands (CI). CI's Strategic Initiatives feature a specific focus on sustainability, including the objective of "promoting sustainability as an integral part of University planning and operational activities."

As one measure of progress for the Capacity and Sustainability Strategic Initiative, this report provides an overview of utility usage on campus for the third quarter (January-March) of the 2020-21 fiscal year compared to past years. The report also highlights key sustainability initiatives coordinated by Facilities Services during this quarter, though it is not inclusive of all initiatives. The data for this report is collected from utility bills and campus sub-meters. Utility usage by the CI Power Plant and the University Glen community are not included.

# THE IMPACTS OF COVID-19

Since March 17, 2020, CSU Channel Islands (CI) has maintained a reduced population on campus in response to COVID-19. Prioritizing safety for students and employees, CI chose to maintain virtual learning and working for the third quarter of FY 20-21, with only a few exceptions for classes and work that could not be completed remotely.

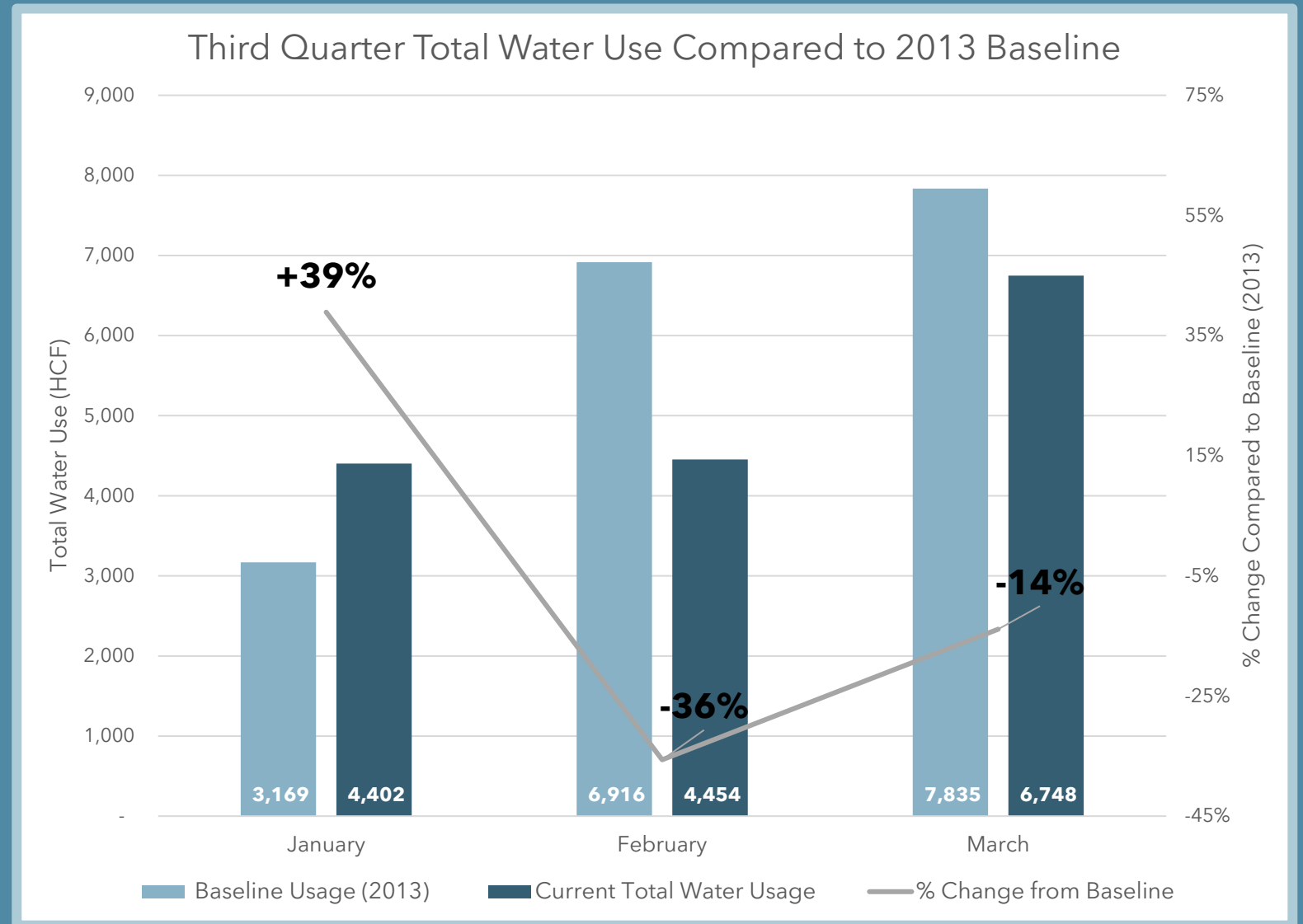
The campus depopulation in response to the coronavirus has resulted in significant reductions in electricity and potable water consumption for the third quarter of the 2020-2021 fiscal year.



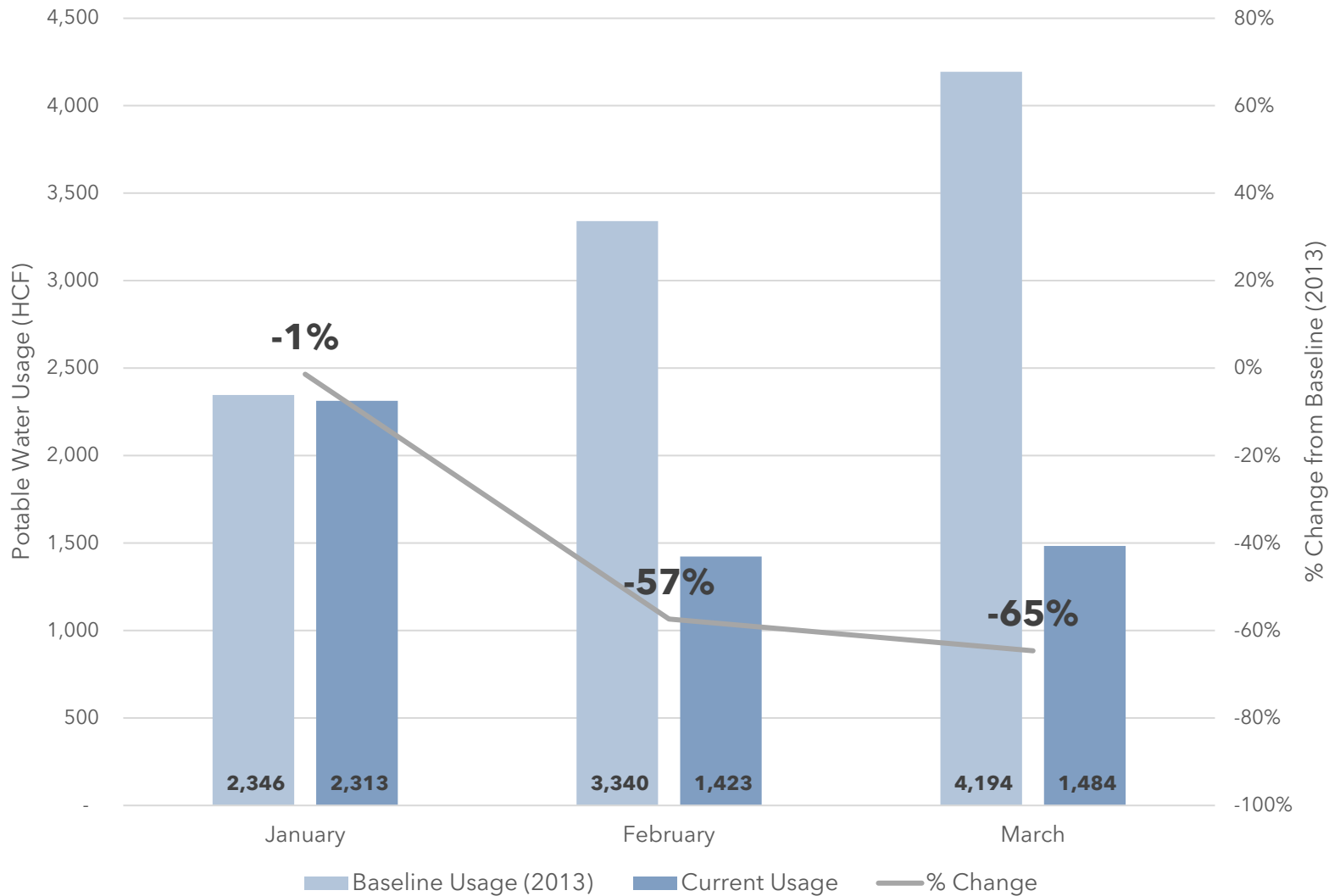
# TOTAL WATER

Total Water is the combination of potable and recycled water usage. The CSU Office of the Chancellor has set a **goal to reduce total water usage 20% by 2020** compared to our 2013 baseline.

In the third quarter of FY 20-21, CI **reduced total water usage 13%** compared to the baseline. This reduction in total water use is lower than we've achieved in other years. The primary reason for falling short of the 20% reduction goal is the incredibly dry weather this quarter that has led to increased reliance on irrigation to maintain healthy plant life on campus.



Third Quarter Potable Water Use Compared to Baseline



# POTABLE WATER

CI's water provider, Camrosa Water District, has requested a **15% reduction of potable water use** from the 2013 baseline.

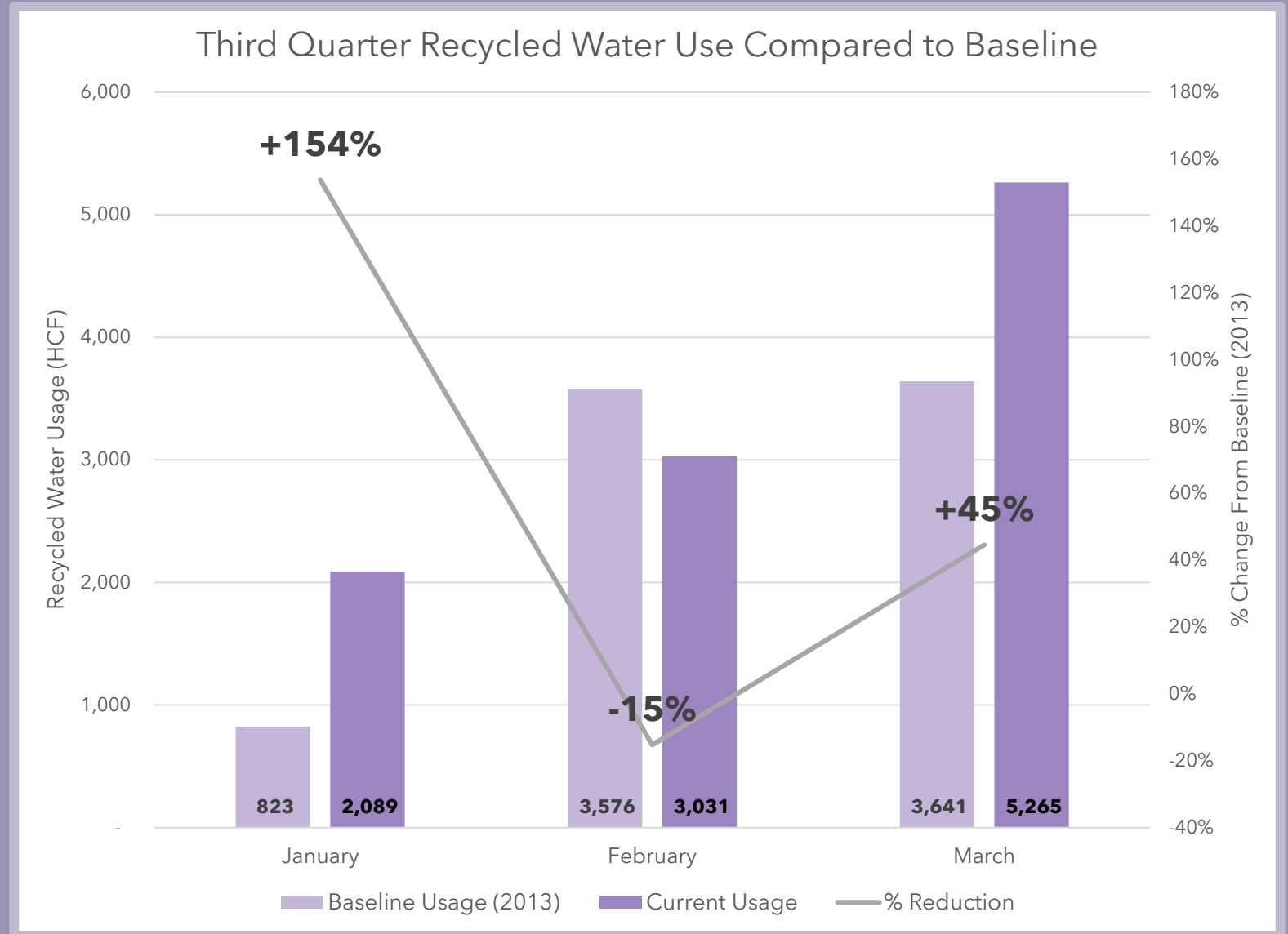
The campus realized a **47% reduction in total potable water use** during the third quarter. This reduction is primarily due to a significant reduction in the population on campus due to COVID-19 safety precautions.

A portion of the elevated use in January is associated with a leak that started during a weekend and was not detected until Monday.

# RECYCLED WATER

Recycled water reduction targets are included in CI's goal to **reduce total water use 20% by 2020**. Overall, CI's **recycled water use increased 29%** compared to the 2013 baseline during the third quarter of FY 20-21.

This increase can be attributed to the incredibly dry winter we've been experiencing. Ventura county is currently in an extreme drought. The lack of precipitation means that we must rely more heavily on irrigation to sustain plant life on campus. These drought conditions underline the importance of continuing to replace water-intensive plants with drought-tolerant varieties.





## WATER CONSERVATION TIPS

### 💧 **Use your dishwasher.**

If you have a dishwasher, using the appliance instead of manually washing dishes has been shown to use more than 50% less water! Make sure to opt out of the pre-rinse and heated dry options to ensure the most energy and water savings.

### 💧 **Turn off the tap.**

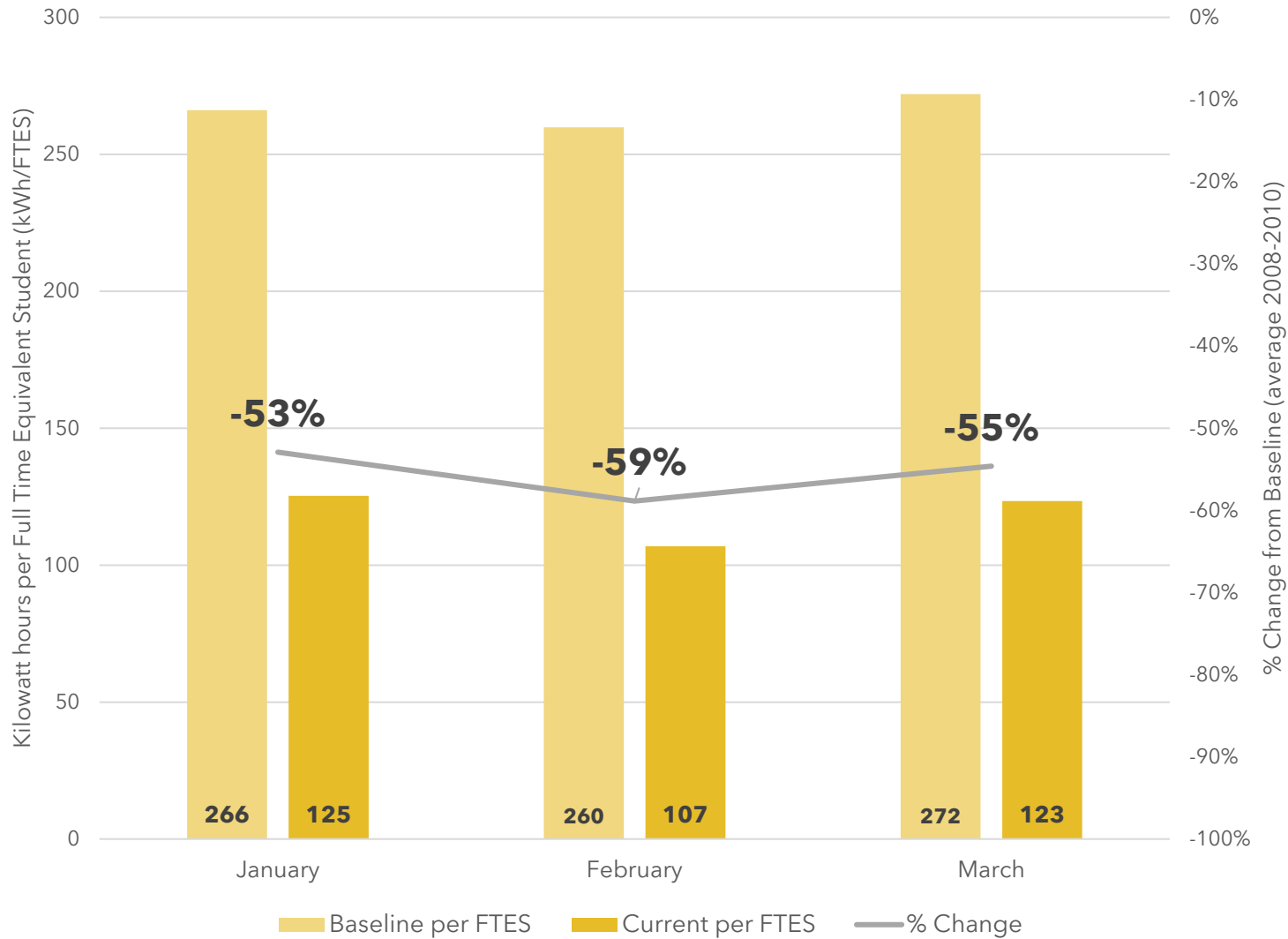
Whether you're soaping up your hands, scrubbing dishes, brushing your teeth, or shaving, remember to turn off the tap when you aren't actively using the water. Turning off the tap can save 2.5 gallons per minute!

### 💧 **Change your mower settings.**

If you have a lawn to mow, set your mower blades to 2-3 inches high. Leaving your grass a little longer helps to shade the soil, improving water retention and supporting development of a deeper root system.



Third Quarter Electricity Use per FTES Compared to Baseline



# ELECTRICITY

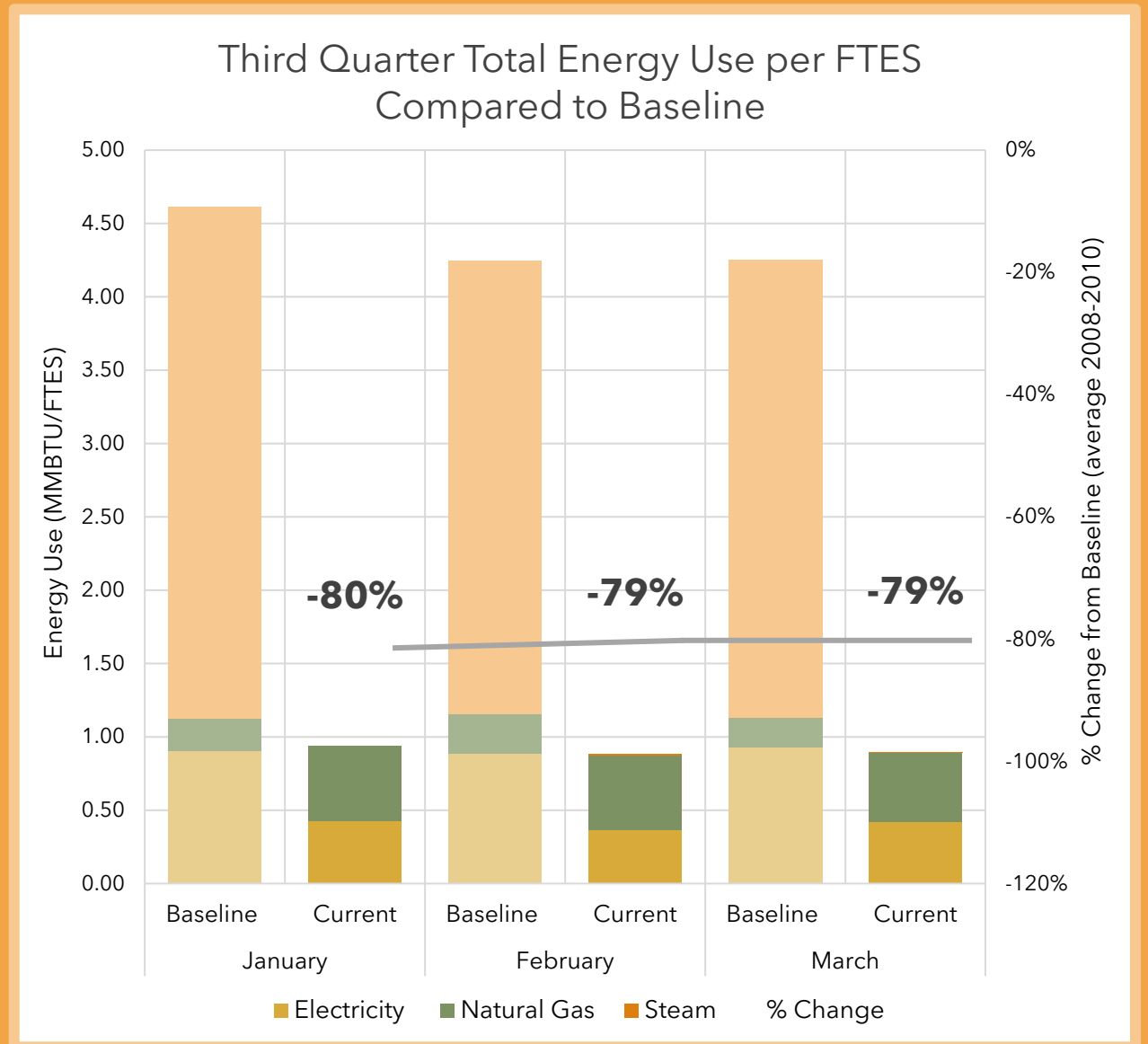
Electricity on campus is primarily used for cooling, lighting, vehicle charging, other equipment needs (i.e. fans, pumps, etc.) and plug load. Electricity is also used for heating in the Broome Library.

The CSU Chancellor’s Office set a **goal to reduce electricity usage 25% per FTES** from the baseline (average annual usage from 2008-2010). Since the campus continued to operate in a primarily virtual environment during this quarter, electricity usage **decreased 55% per FTES**. With less than 5% of classes taught on campus, this figure can be misleading. Not adjusted for population, **total electricity usage decreased 12%** compared to the baseline usage this quarter.

# TOTAL ENERGY

Total energy accounts for all sources of energy on campus including electricity, steam and natural gas. Until April 2020, steam was the most abundant source of energy. It was used for heating hot water, chilled water for cooling, and providing space heating for campus. However, in April 2020 the campus transitioned to using natural gas boilers for space heating and heating hot water and electric chillers for cooling. Natural gas is also used for cooking.

CI's **goal is to reduce total energy consumption 25% per FTES** compared to the baseline. Due to the extremely limited population on campus and the transition away from steam, **total energy use decreased 79% per FTES** during this quarter. Without normalizing the data based on population, the campus **reduced total energy consumption 59%** from the baseline during this reporting period.





# ENERGY CONSERVATION TIPS

## ✦ Favor your fans.

With temperatures starting to rise for summer, it is time to dust off your fans. Although fans don't actually cool the air, they do create a cooling effect by circulating air and they are much more efficient than blasting the air conditioning. If you do have air conditioning, try bumping the temperature up a little and using a fan to help amplify the cooling effect. It'll save money and energy!

## ✦ Close the blinds.

If you have southern- or western-facing windows, you are likely to gain a lot of heat on summer days. Close the blinds or drapes in the morning to reduce heat gain. If your office has southern- or western-facing windows, make sure to close the blinds when you leave on Friday to reduce cooling needs over the weekend.

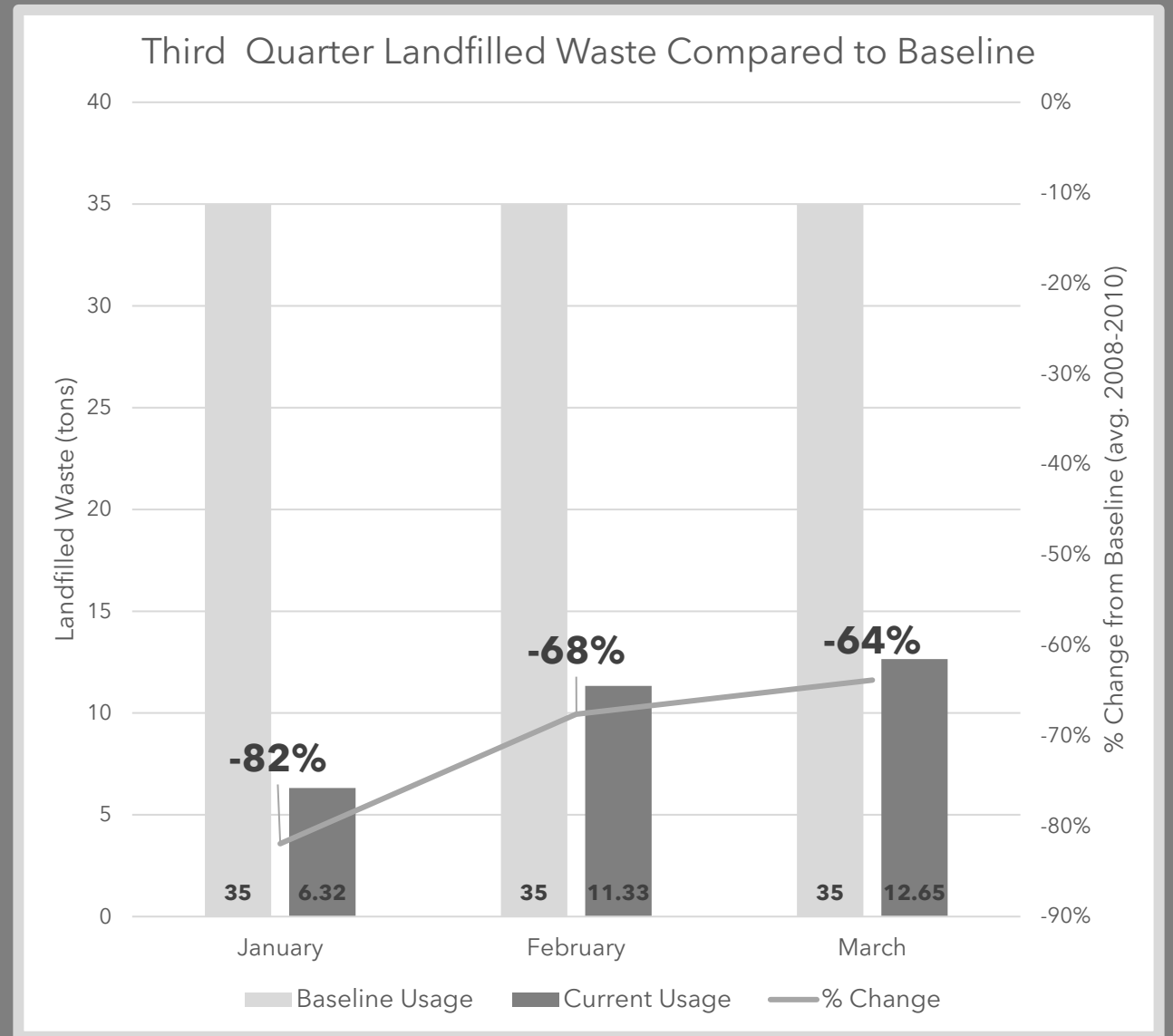
## ✦ Wash with cold water.

A good portion of energy is used every day to heat water for various applications. Using cold water to wash your clothes saves energy, reduces costs, and is better for the fabrics. Make sure to choose the cold setting on your washing machine and only run full loads.

# LANDFILLED WASTE

The CSU Chancellor's Office has set a **goal to reduce solid waste disposal by 80% by 2020**. Historically, the campus fluctuates around 50% reduction in solid waste disposal compared to the baseline. Due to the significantly reduced population on campus, we have realized a **71% decrease in waste disposal** during this quarter.

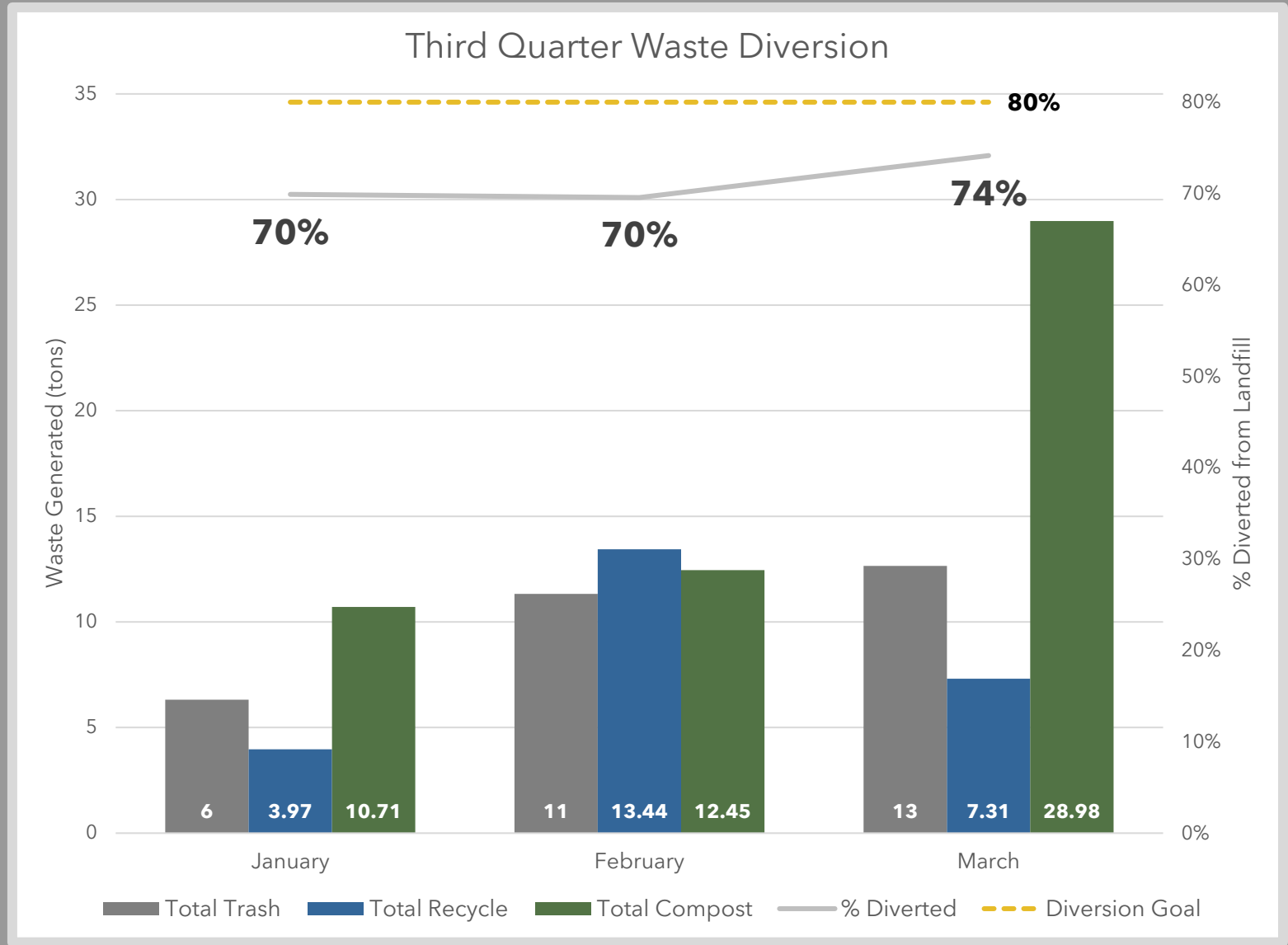
To maintain this level of waste reduction when the campus is fully occupied, we must begin by reducing the amount of disposable waste used on campus, such as single-use plastics. Efforts to reduce waste disposal save the university money and reduce greenhouse gas emissions.



# WASTE DIVERSION

The CSU Chancellor's Office has set a goal for all campuses to **divert 80% of waste from the landfill**. During the third quarter of FY 20-21, CI maintained an average diversion rate of 71%.

CI can make progress toward the 80% diversion goal by improving recycling efforts, composting pre- and post-consumer food waste, and reducing the amount of non-recyclable and non-compostable waste generated on campus.





## WASTE MANAGEMENT TIPS

✓ **Learn what to recycle.**

Recycling guidelines are not universal, which can make recycling correctly a bit tricky. It is important to learn what materials are accepted by your waste hauler for recycling to avoid contaminating the waste stream and causing recyclables to end up in the landfill. See the next page for a helpful guide for proper waste sorting on campus.

✓ **Print double-sided.**

The pandemic helped us better leverage digital document management, but there may still be times that you need a hard copy of something. If you do need to print documents, make sure you select the double-sided option in your printer settings.

✓ **Invest in reusables.**

As we prepare to return to campus, now is a great time to invest in reusable containers for beverages, snacks, and meals that you may bring to campus. During the pandemic, the use of disposable items increased exponentially as we all did our best to prioritize health and safety. However, studies show that using reusable containers, bags, utensils, etc. is still safe, as long as regular cleaning practices are followed.

# LANDFILL



tissues, napkins  
& paper towels



candy wrappers



plastic bags &  
film pastic



paper food  
containers



chip bags



styrofoam



paper plates  
& wrapping  
paper



pizza boxes  
w/food stains



straws, lids &  
small plastics



Channel Islands

# RECYCLE



aluminum & tin



clean plastic cups  
& utensils



cartons



paper, mail,  
magazines &  
cardboard



clean plastic food  
containers



plastic & glass  
bottles

## NOT FOR RECYCLING



food & liquid



paper food  
containers



styrofoam



food wrappers



small plastics



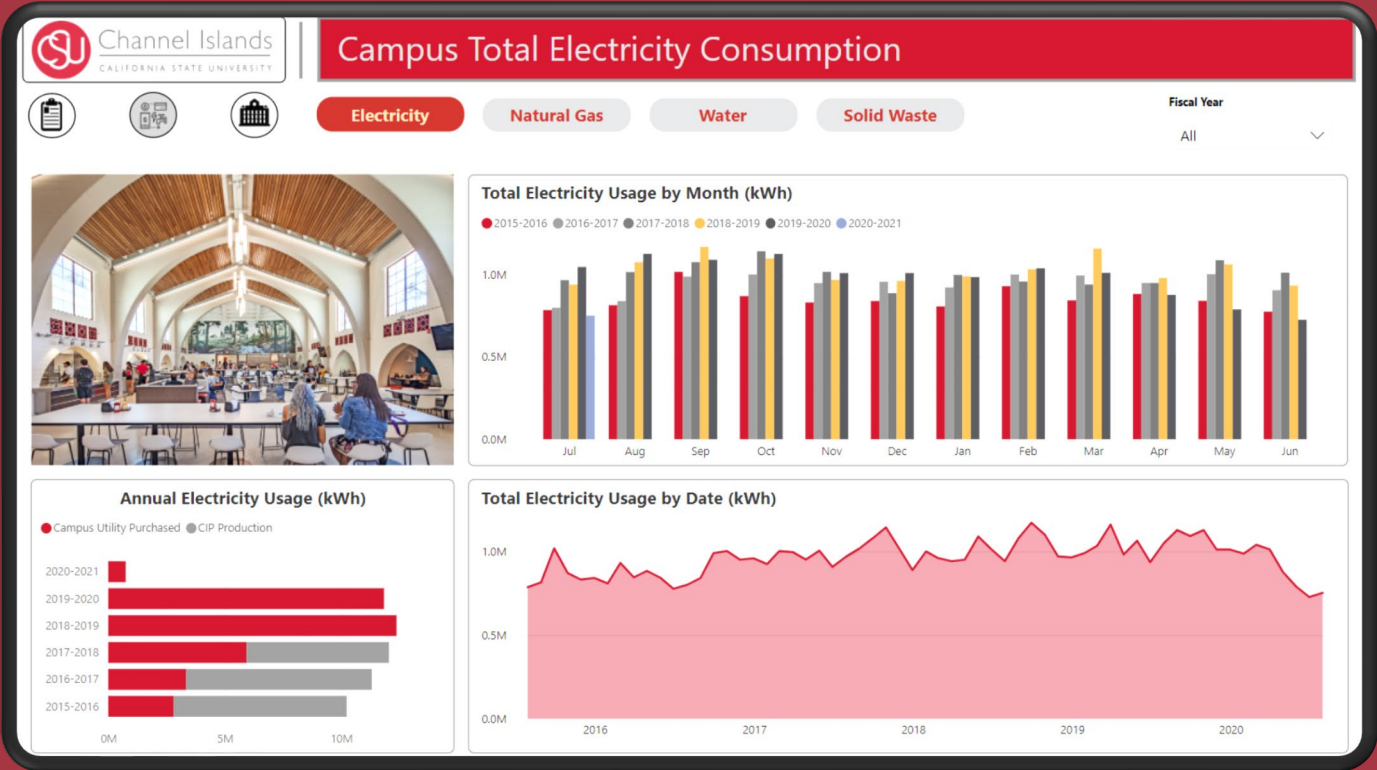
plastic bags

# SUSTAINABILITY IN ACTION

## CI Energy Management Dashboard

Facilities Services has been busy integrating a new Energy Management System (EMS) to streamline utility billing, tracking, management, and reporting. Adopting this EMS program also enables the university to create interactive dashboards with water, energy, and waste metrics. The first dashboard provides monthly data for campus utility consumption based on reports submitted to the Chancellor's Office. This dashboard will automatically update whenever new data is available.

Facilities Services is also working to develop an interactive dashboard that will provide more granular, building-level data in the near future. Click on the picture to visit CI's Energy Management Dashboard.





# CLIMATE ACTION FORUM

This spring, CI's Sustainability Working Group and the Student Union collaborated to host the university's first Climate Action Forum. The Forum brought together dozens of people from throughout campus to learn about climate change, address regional climate impacts, discuss a sustainable vision for CI's future, and brainstorm potential actions to reduce the university's contribution to climate change. The Sustainability Working Group is using the information and feedback received during the forum to continue drafting a Climate Action Plan.



**CI's Climate Action Forum:  
How Can You Influence Our Future?**

Share Input, Discuss,  
Hear From Guest  
Speakers and Win  
Giveaways!

**THURSDAY, MARCH 25  
noon - 1:30 pm**

Register Today! <https://tinyurl.com/CSUCIForum>  
Questions? Email us at: [sustainableci@csuci.edu](mailto:sustainableci@csuci.edu)

STUDENT UNION  
STUDENT UNION PERKS PROGRAM!  
FACILITIES SERVICES  
CHANNEL ISLANDS



**Why Does CI  
Need a CAP?**

**CLIMATE CHANGE**  
A real, serious, and urgent threat to humans.

**PRESIDENTS' CARBON COMMITMENT**  
National initiative to empower higher education to lead with climate action.

**CSU GHG REDUCTION GOALS**  
Goal to reduce GHG emissions 80% below 1990 levels by 2040.

Roxane Beigel-Cory...





# TREE CAMPUS USA

CI has earned the honorable designation as a Tree Campus USA for the ninth consecutive year! This recognition celebrates the university's commitment to protecting, expanding, and providing opportunities for student learning and engagement with the campus tree canopy. The certification program requires annual reporting on five standards:

- ❁ Campus Tree Advisory Committee
- ❁ Campus Tree Care Plan
- ❁ Dedicated annual expenditures for tree care
- ❁ Arbor Day Observance
- ❁ Service Learning

In 2020, Facilities Services planted more than 200 new trees on campus, including Toyons and Coast Live Oaks.



## ACKNOWLEDGEMENTS

CSU Channel Islands is striving 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](mailto:roxane.bc@csuci.edu).

Appreciation goes out to the following contributors:

- ❖ Department of Facilities Services
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