

CSU CHANNEL ISLANDS ANNUAL SUSTAINABILITY REPORT

FISCAL YEAR 2022–2023



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TERMINOLOGY

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 utility usage/performance to.

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.”**



Our Commitment

Annual utility usage is carefully monitored, with the 2022-2023 report showing our strides in **reducing our carbon footprint.**



Sustainable Measures

Our operations revolve around **sustainability & resource conservation**, ensuring these principles are at the heart of all we do.



Initiatives in Action

This year's key sustainability initiatives by Facilities Services reflect our **innovative approach**, though they represent just a fraction of our collaborative efforts.



Data Transparency

Data is drawn from **utility bills and sub-meters**, offering a transparent view of our journey. Exclusions include CI Power Plant and University Glen.

Statement on Social Equity

Sustainability encompasses three fundamental pillars: Equity, Economy, and the Environment.



We are dedicated to more than just environmental stewardship; we are committed to social equity and economic viability. Recognizing the interconnectedness of these realms, we strive to uplift and support the voices of our Black, Indigenous, and other students of color. We understand that sustainability encompasses three fundamental pillars - equity, economy, and the environment. Our mission is to balance these elements, ensuring that our sustainability initiatives are inclusive of underrepresented communities. We believe that a truly sustainable campus is one where every voice is heard, every community is respected, and every action is taken with a holistic view of the future.

Sustainability in Action

This year, CSUCI has championed groundbreaking efforts in environmental stewardship, setting new standards in sustainable practices. Join us to discover some of our exciting initiatives and accomplishments in the journey towards a more sustainable campus.



Coastal Cleanup Day

CSUCI participated as a site in California's Coastal Cleanup Day! Volunteers gathered on campus to pick up litter to reduce coastal pollution. Together, we collected more than 44 pounds of debris!



Energy Efficiency Projects

Facilities Services completed an efficiency project in the campus data center that is expected to save 44,655 kilowatt hours of electricity annually. That amounts to nearly \$4,500 a year in energy savings!



Food Waste Collection

CSUCI introduced new waste bins and signage on campus, including food waste collection. Food waste is taken by EJ Harrison, the local waste hauler, to be composted or used to create renewable energy.



Earth Month Events

In April 2023, CI hosted more than 17 events to celebrate Earth Month! Events included speakers on climate change, pollinator garden planting, a public transportation panel, and an Earth Day Bash!

Environmental Stewardship

Bee Campus

CI continues to be certified as a Bee Campus USA, reflecting the university's ongoing commitment to support pollinators through education and habitat improvements.

Tree Campus

The Arbor Day Foundation recognized CI as a Tree Campus USA for the 11th consecutive year! To commemorate this occasion in tandem with the university's 20th anniversary, students, employees, and community members gathered to plant 20 trees in the A3 parking lot.

Vegetation Management

In spring 2023, CI welcomed more than 300 goats and sheep to campus. The goats and sheep were used for targeted grazing to manage vegetation for fire mitigation, control weeds, and promote healthy soil.



Sustainability Strikes Gold

CSUCI's rigorous sustainability practices have earned the University Gold status under STARS (Sustainability Tracking, Assessment & Rating System), a program run by the Association for the Advancement of Sustainability in Higher Education (AASHE).

STARS standards include sustainability practices such as low water use, solar power, and green building, but also measures standards in terms of how much students and the campus are involved in sustainability efforts and education, as well as the commitment the campus has to human diversity and equity—practices that ensure a healthy, sustainable campus population.

Learn more about CI's STARS rating at <https://www.csuci.edu/fs/sustainability/documents/21-22starsreport.pdf>.



Advancing Climate Action

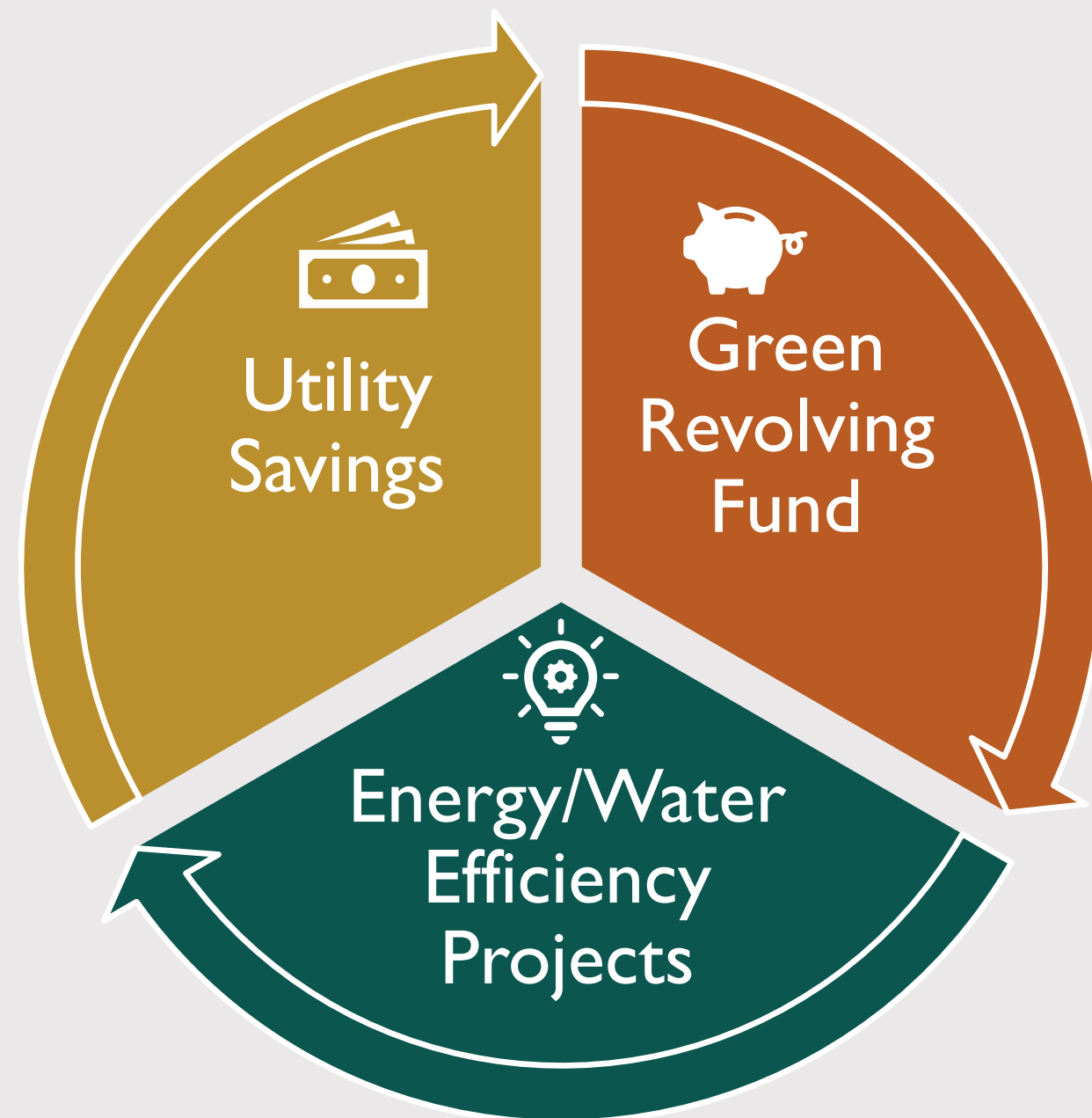
In January 2023, CI adopted its inaugural Climate Action Plan, establishing ambitious targets to address climate change. The plan outlines goals, strategies, and actions to advance sustainability on campus and reduce carbon pollution.

CI's Climate Action Plan (CAP) calls for the campus to achieve carbon neutrality by 2040, five years ahead of the State's goal. The CAP includes 43 actions organized into seven focus areas, including:

- ◆ Support Actions
- ◆ Buildings & Energy
- ◆ Environment & Water
- ◆ Food
- ◆ People and Campus Life
- ◆ Transportation
- ◆ Waste

See the full plan and campus goals at <https://www.csuci.edu/fs/sustainability/plans-and-policies/climate-action-plan.htm>.

GREEN REVOLVING FUND



In Summer 2023, CSUCI approved a campus Green Revolving Fund (GRF).

- The GRF is an internal fund to finance energy/water efficiency projects
- Projects must have a measurable return on investment
- Utility savings achieved by the project are used to repay the project loan

Learn more and apply at <https://www.csuci.edu/sustainability>

UTILITY USAGE

Reviewing CI's water, energy, and waste trends and goals



WATER

Section Key Terms

Baseline: Fiscal Year (FY) 2018-2019

Potable Water: drinking water, used in buildings

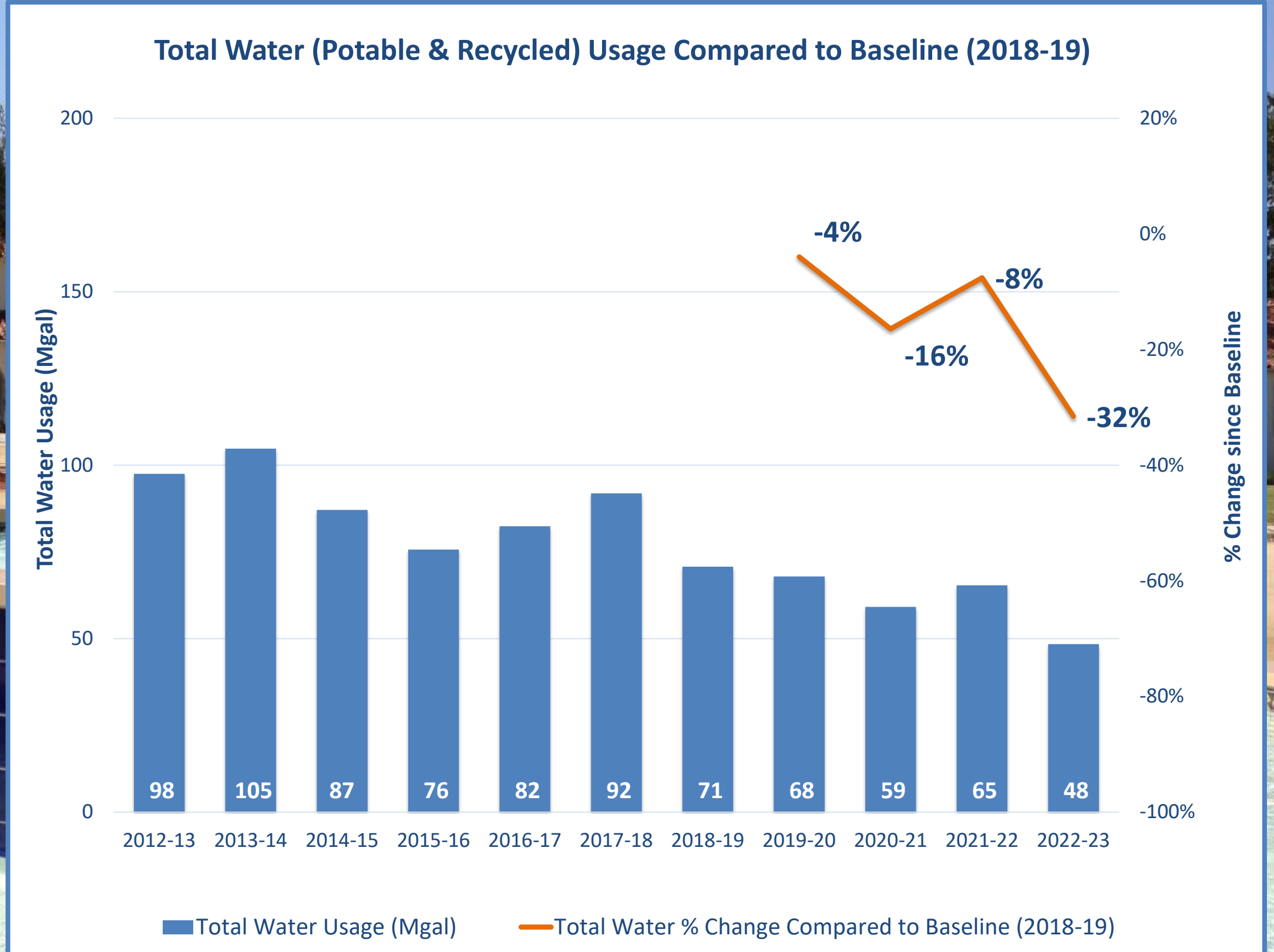
Recycled Water: tertiary-treated wastewater, used for irrigation

Mgal: million gallons



TOTAL WATER

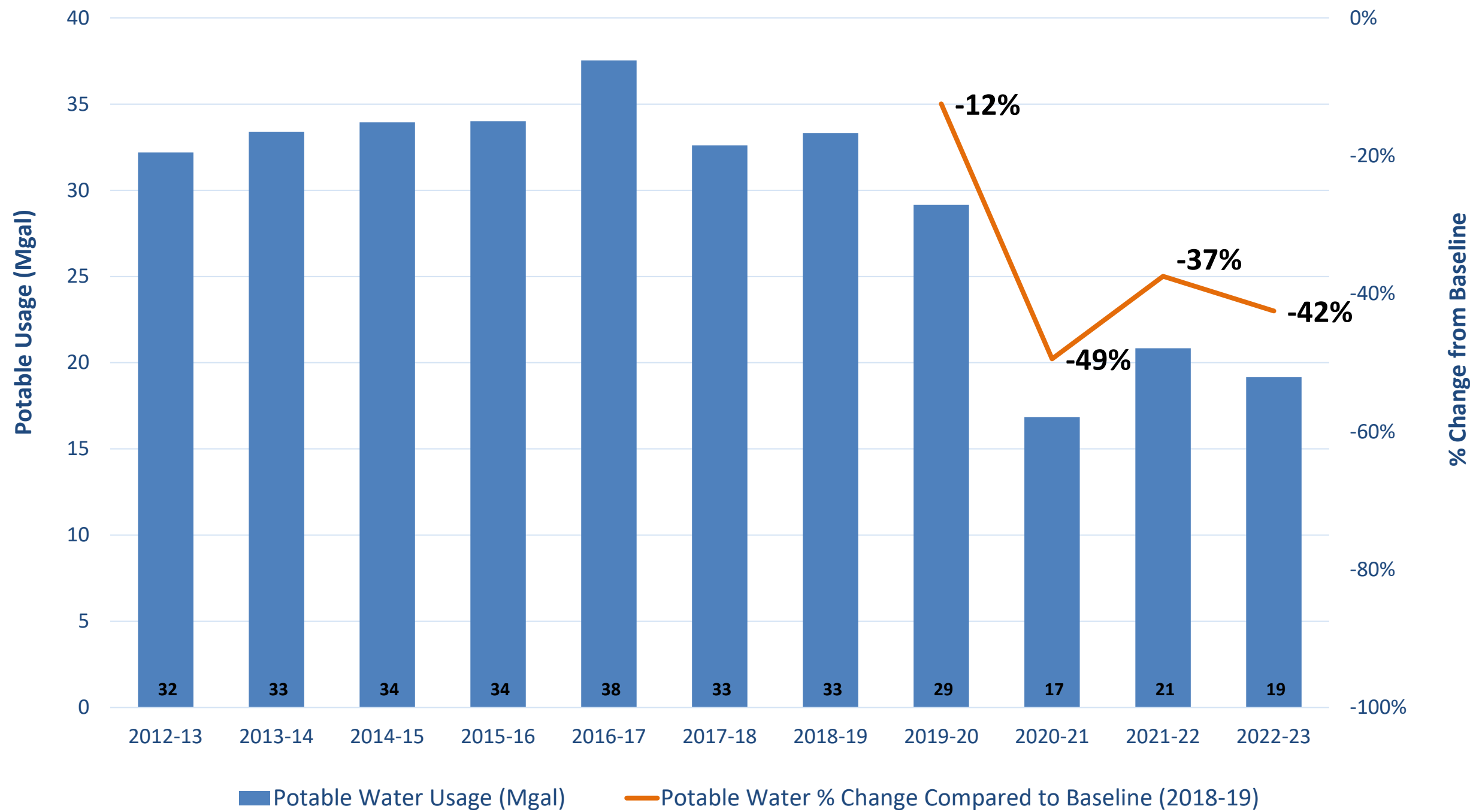
Total Water includes potable and recycled water used on campus. The CSU Chancellor's Office set a **goal to reduce total water use 10% by 2030** compared to 2019. Overall, **total water consumption reduced 32%** this year compared to 2019. The data for 2022-23 highlights the campus community's successful adaptation and commitment to sustainability and resource conservation.



POTABLE WATER

In FY 2022-23, CI surpassed the CSU's goal to cut water consumption by 10% from the 2019 baseline, achieving a **42% reduction** in absolute potable water usage. To sustain potable water reduction in future years the university will need to continue investing in water efficient equipment and modeling a variety of water conservation strategies.

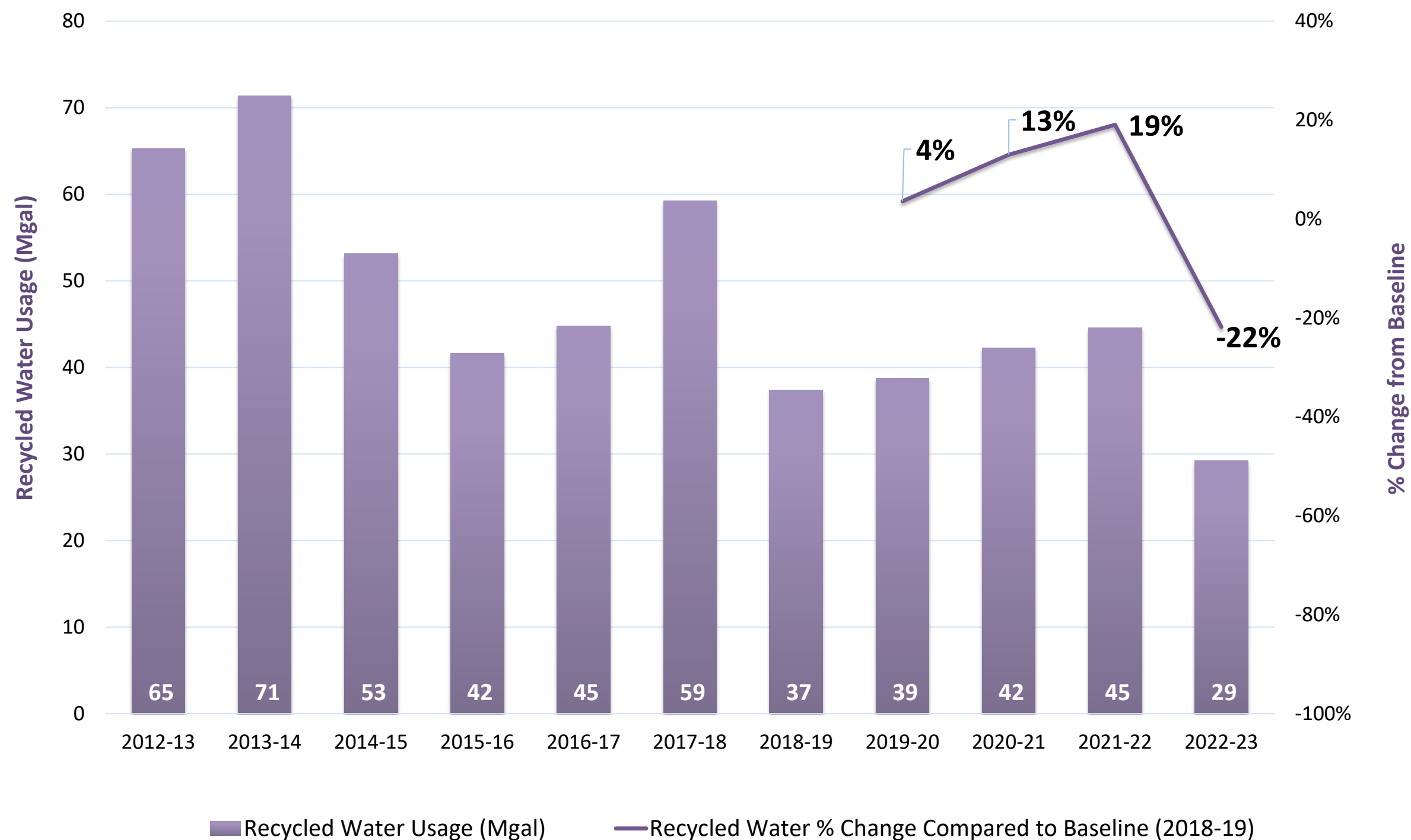
Potable Water Usage Compared to Baseline (2018-19)



RECYCLED WATER

Recycled water reduction goals are encompassed in the total water goals. Overall, CI used **22% less** recycled water in FY 2022-23 compared to the 2019 baseline. The Grounds Department continues to work diligently to refine irrigation schedules, quickly address breaks, and convert water-intensive landscaping to native and drought tolerant plants. Continuing these practices will be an essential part of sustaining CI's irrigation water savings during drought years.

Recycled Water Usage Compared to Baseline (2018-19)





ANNUAL WATER OVERVIEW

METRICS SUMMARY

- **ACHIEVED GOAL** to reduce total water usage 10% by 2030.
- **REDUCED** total water usage by 32% compared to 2019.

Water conservation in 2022-2023 **saved the campus \$63,054** compared to 2021-2022.



ENERGY

Section Key Terms

Baseline: Average of energy used in FY 2008-09 and FY 2009-10

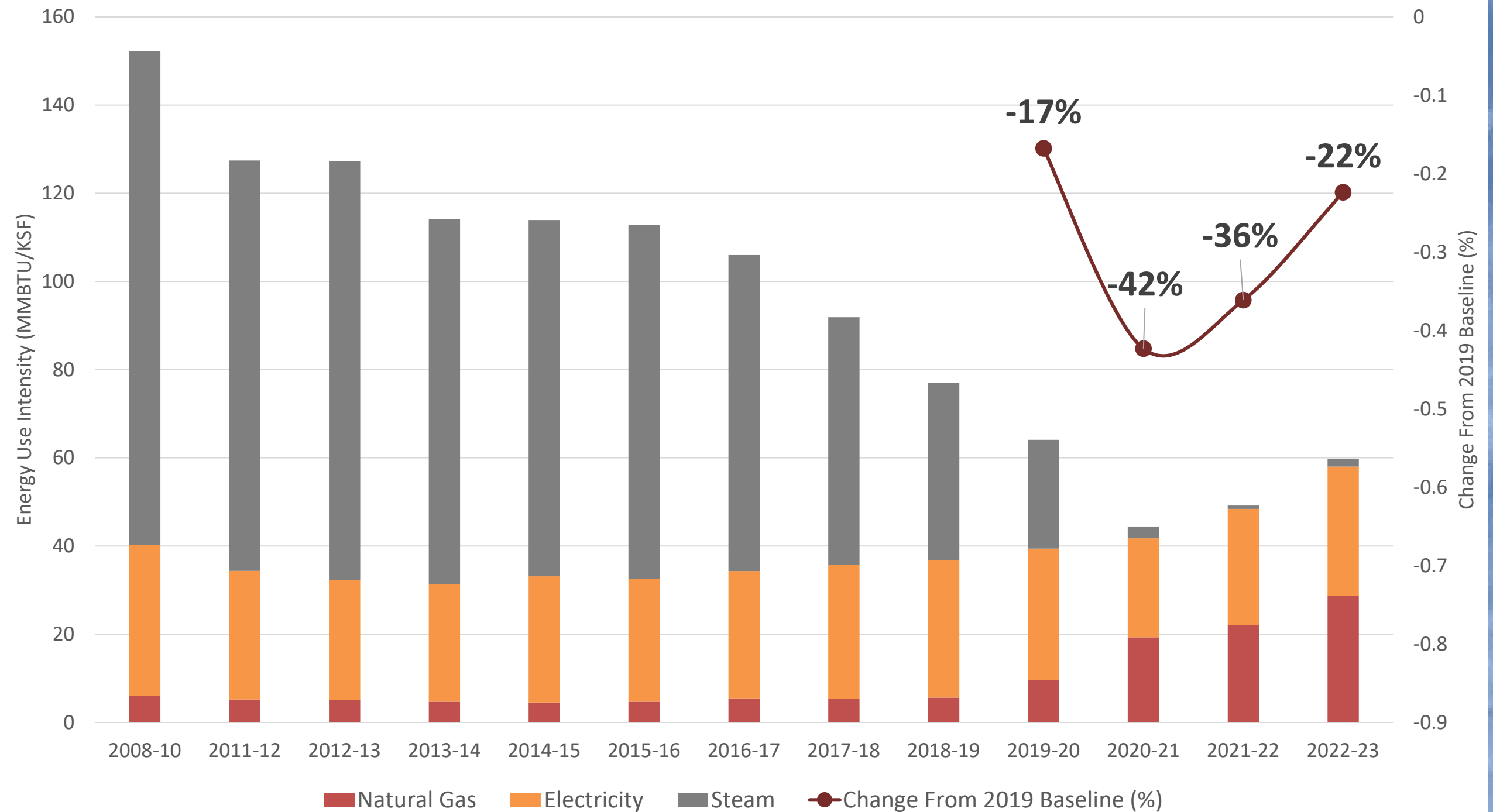
kWh: Kilowatt hour

BTU: British Thermal Unit

MMBTU: One Million British Thermal Units

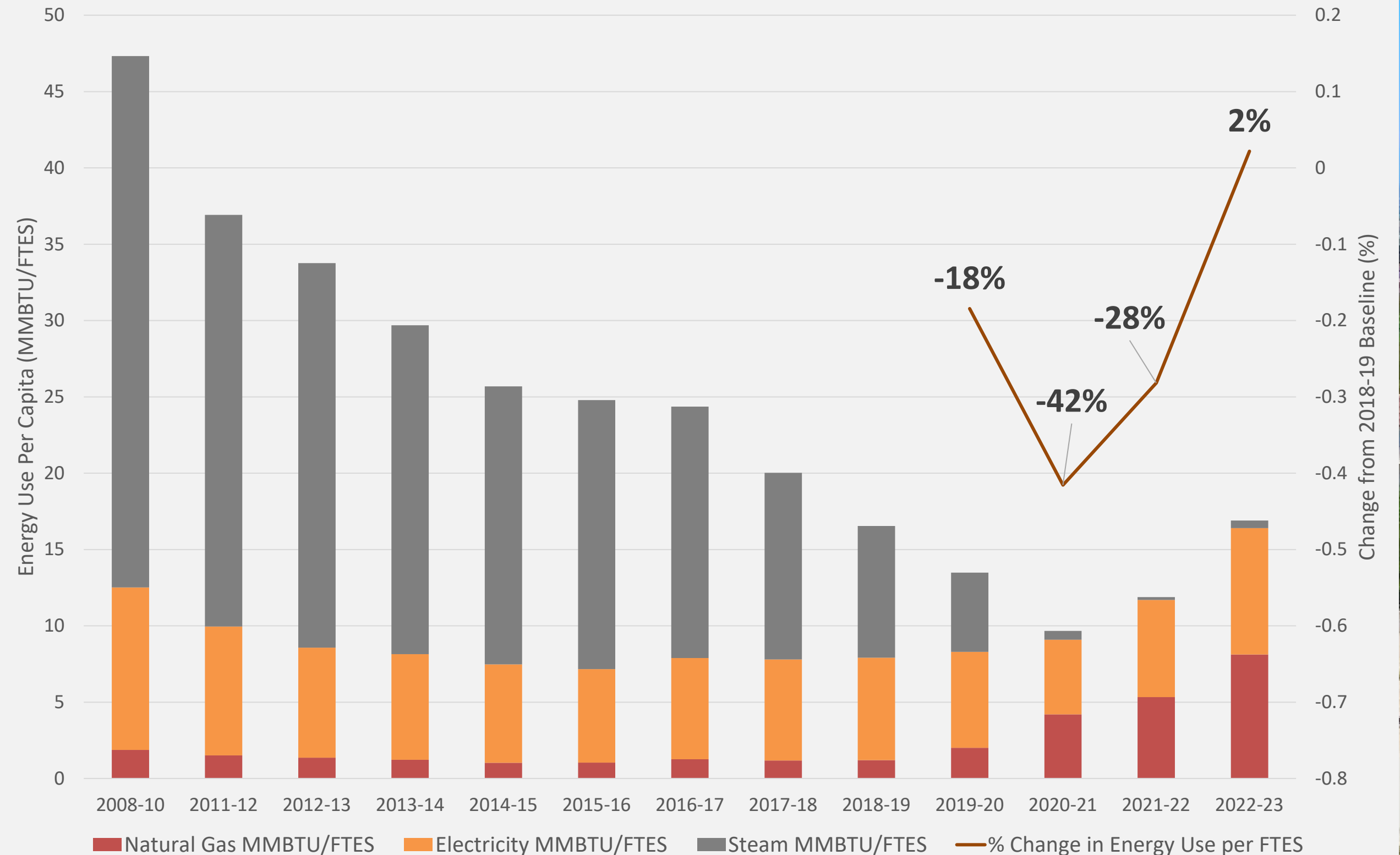
ENERGY USE INTENSITY

CI uses energy use intensity (EUI) to assess the energy efficiency of the campus. EUI is the total energy used per square foot of building space. In FY 22-23, CI **reduced EUI 22%** compared to the 2018-19 baseline. This reflects the university's ongoing efforts to improve energy efficiency by improving building system controls, replacing inefficient equipment, and engaging students and employees in energy saving habits. The campus looks forward to continuing to improve EUI through LED lighting upgrades and completing audits of the building controls program.



ENERGY USE PER CAPITA

Another way of evaluating the university's energy use is to assess the energy use per capita based on the number of full-time equivalent students (FTES). As exhibited in the chart on the right, despite consistent reduction prior to the coronavirus pandemic in 2020, energy use per capita climbed in FY 2022-2023, **increasing 2%** compared to the FY 2018-2019 baseline. While the university did continue to reduce overall energy use, this increase per capita is reflective of the reduced enrollment in the reporting year.



SOLAR POWER



CI harnesses energy from the sun through the university's **3.75 megawatt** solar array located along University Drive and Lewis Road.



The 14-acre solar field provided enough energy in FY 22-23 to meet **66% of the electricity needs** for the campus.



By leveraging the power of the sun, the university **saved more than \$100,000** in electricity costs in FY 22-23.



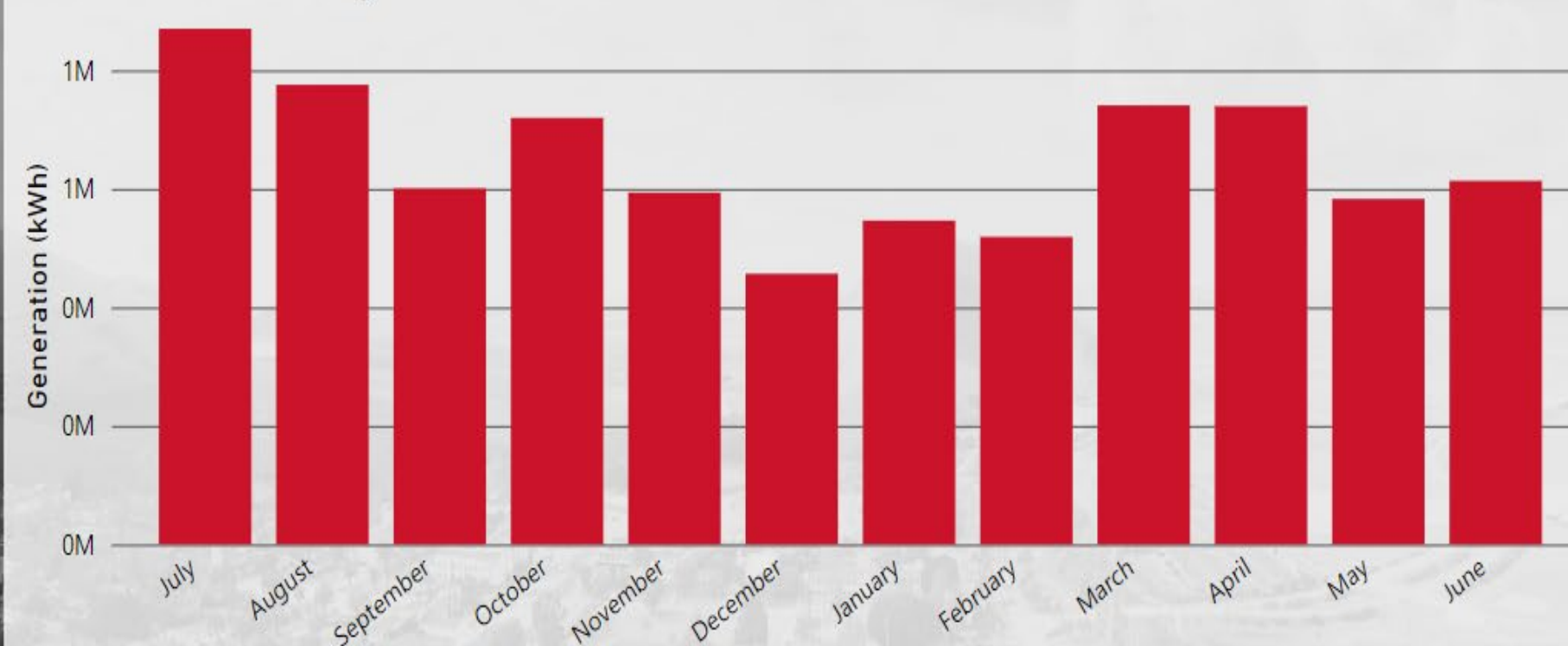
SOLAR POWER

CSUCI joined the Environmental Protection Agency's Green Power Partnership in March 2023. By choosing green power, CSUCI is helping to advance the voluntary market for green power and support development of renewable power sources. Investing in renewable energy reduces the negative health impacts of energy generation, including those related to ozone, fine particles, acid rain and regional haze.



Visit [CSUCI's Solar Dashboard](#) for more solar data.

Solar Production During Selected Time Period



Select a Time Period:

- Yesterday
- 14 Days
- 30 Days
- 1 Year

Generation for 3/20/2023 to 3/19/2024

7,759,423 kWh

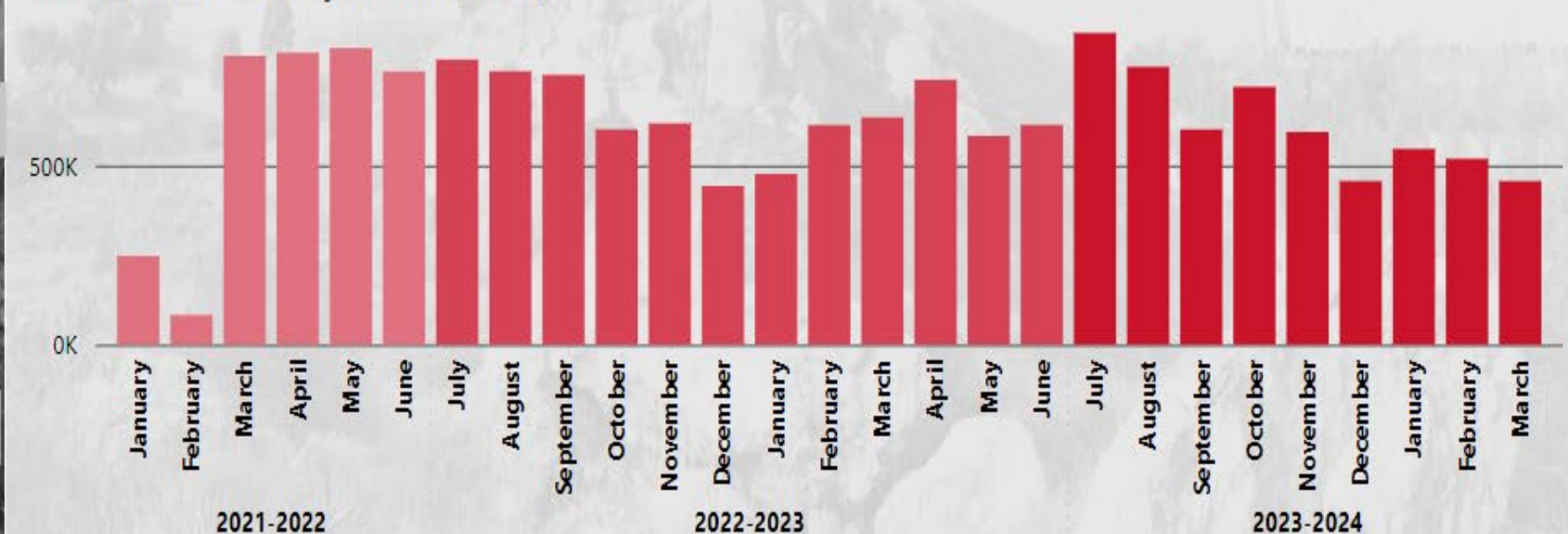
Total Lifetime Generation

16,715,858 kWh

Equivalent Offset of Total Lifetime Generation

- 1,642,029** Diesel vehicles taken off the road for an entire year
- 18,421,194** Avoided pounds of coal used to fuel power plants
- 276,325** New trees planted and capturing carbon for 10 years

Solar Generation by Month (kWh)





ANNUAL ENERGY OVERVIEW

METRICS SUMMARY

- **REDUCED EUI 22%** compared to baseline.
- **INCREASED per capita energy use** by 2% compared to 2019.

Solar power generation in 2022-2023 **saved the campus more than \$100,000** compared to market-rate electricity.

WASTE

Section Key Terms

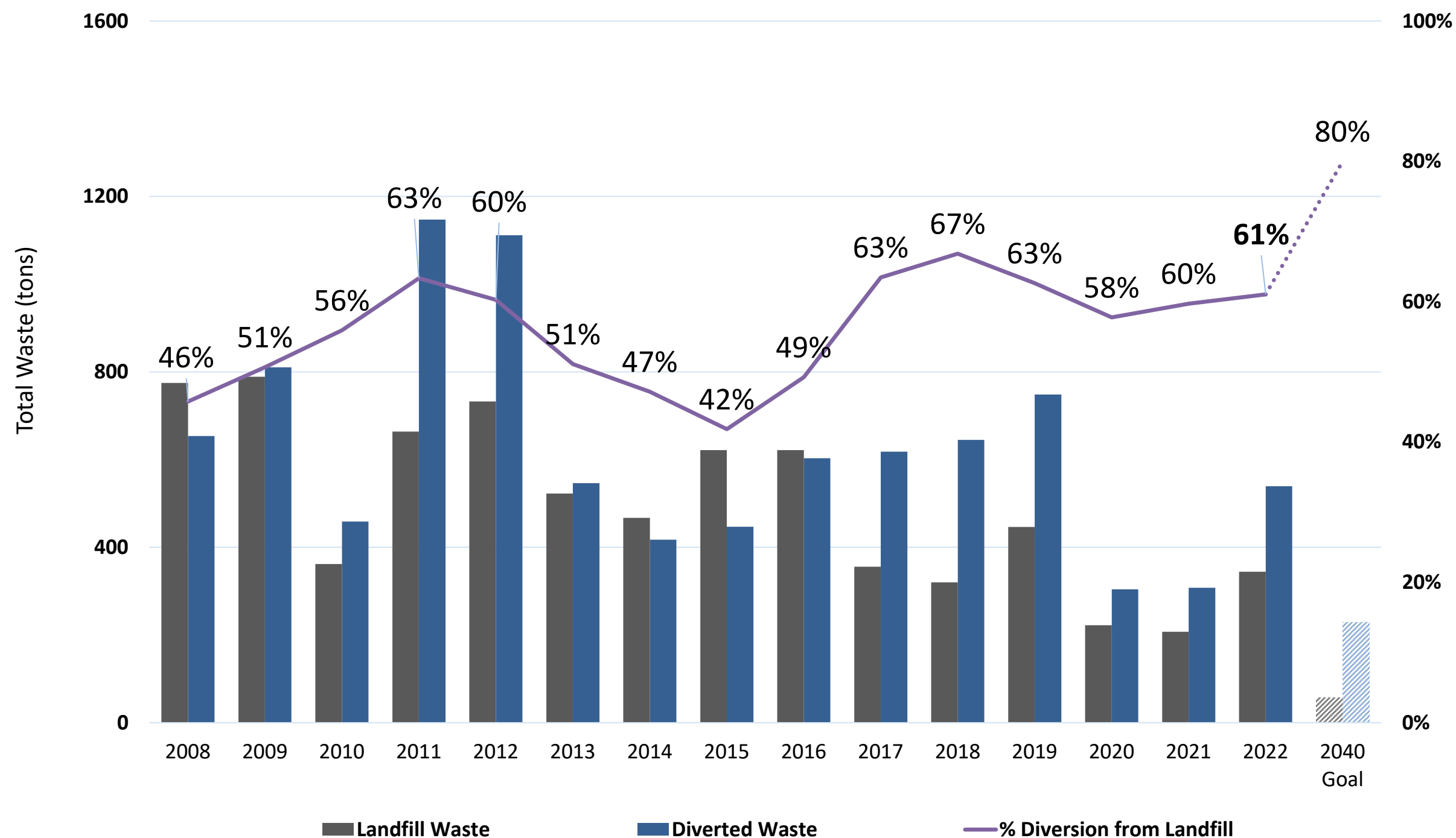
Waste Generation: All waste disposed of on campus, including trash, recycling, food waste, landscaping waste, etc.

Diverted Waste: Waste kept out of the landfill through recycling or composting



WASTE DIVERSION

Annual Waste Diversion Rate

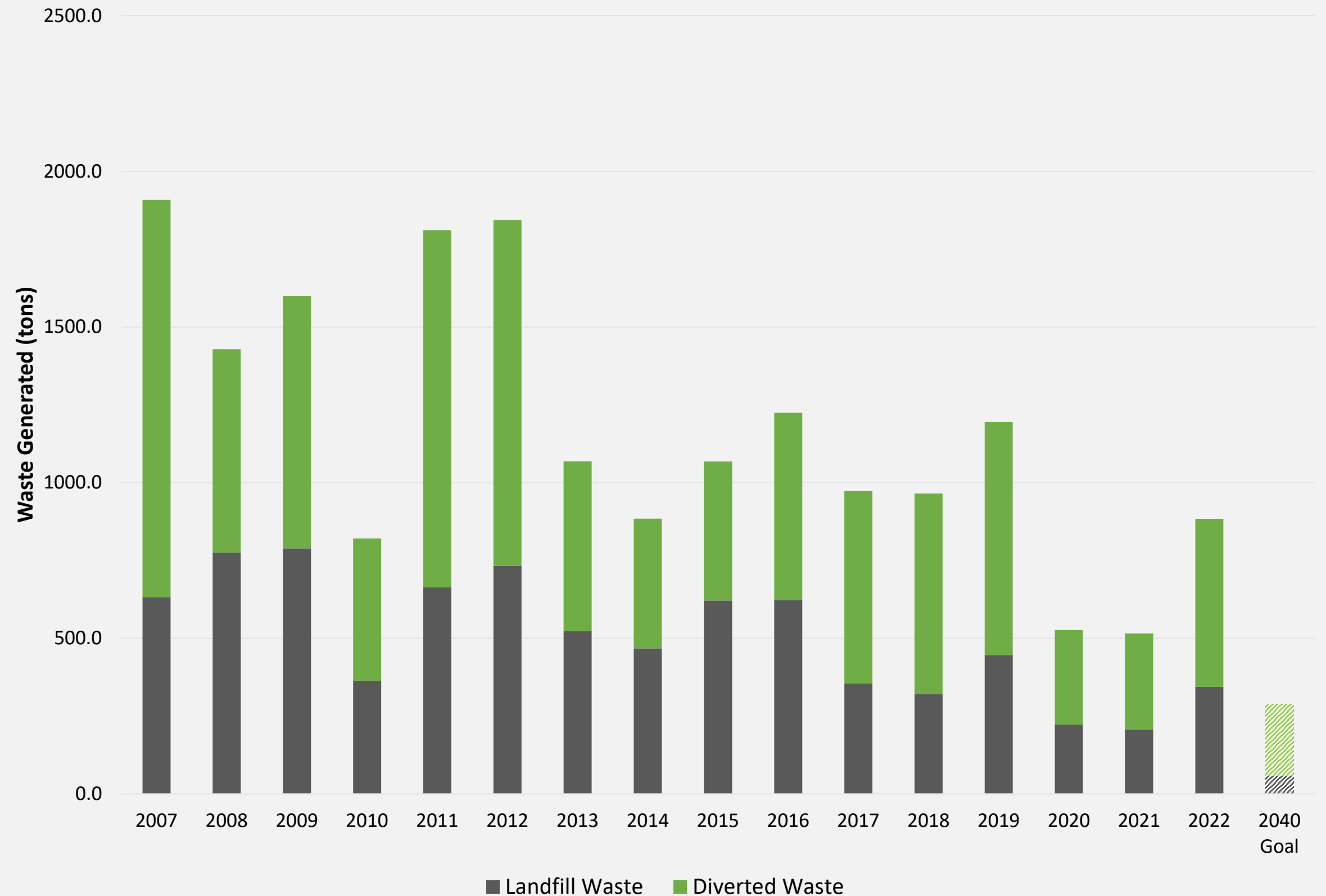


The CSU Sustainability Policy calls for all campuses to divert 80% of solid waste from the landfill by 2040. In 2022, CSUCI **diverted 61% of campus waste** from the landfill, through recycling and composting. The university's diversion rate is still 19% below the 2040 target.

To achieve the 80% diversion rate, the university will need to take a multifaceted approach, with foci on reducing inorganic, non-recyclable waste, improving waste sorting, and expanding collection or organic waste to include university events.

TOTAL WASTE GENERATION

In addition to improving waste diversion by increasing recycling and composting rates, it is also essential that we reduce the total amount of waste generated on campus. In 2022, total waste generation began to rise again toward pre-pandemic levels, moving us further away from the 2040 goal. It is essential for the campus to continue seeking opportunities to reduce waste through responsible resource management and implementation of waste reduction and reuse strategies.



ANNUAL WASTE OVERVIEW

METRICS SUMMARY

- **DIVERTED 61%** of campus waste through recycling and composting.
- Still **19% SHORT OF GOAL** to divert 80% of waste by 2040.



SUSTAINABILITY TIPS



Want to contribute to CI's sustainability goals?
Try out these sustainability tips to reduce your
impact!

- Bring your own mug/thermos when getting coffee on campus to reduce single-use waste.
- Explore alternative transportation options, like CSUCI's free bus passes, carpooling program, and EV charging.
- Turn off your computer when you leave for the day. Even in sleep mode, it is using energy!
- Turn off the tap while lathering your hands or brushing your teeth to conserve water.
- Opt for plant-based meals at least one day a week.
- Dispose of food waste in the campus food waste bins to be composted.
- Sign up for [Ekho Bites](#) to receive alerts when extra food is available from catered events.

ACKNOWLEDGEMENTS

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

Appreciation goes out to the following annual report contributors:

- Department of Facilities Services
- Tom Hunt, Assistant Vice President for Facilities Services
- Roxane Beigel-Coryell, Sustainability & Energy Director
- Sustainability Working Group
- Nikita Sarmiento, Student Assistant

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