

# **CSU CHANNEL ISLANDS ANNUAL SUSTAINABILITY REPORT**

**Fiscal Year  
2019-2020**

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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."

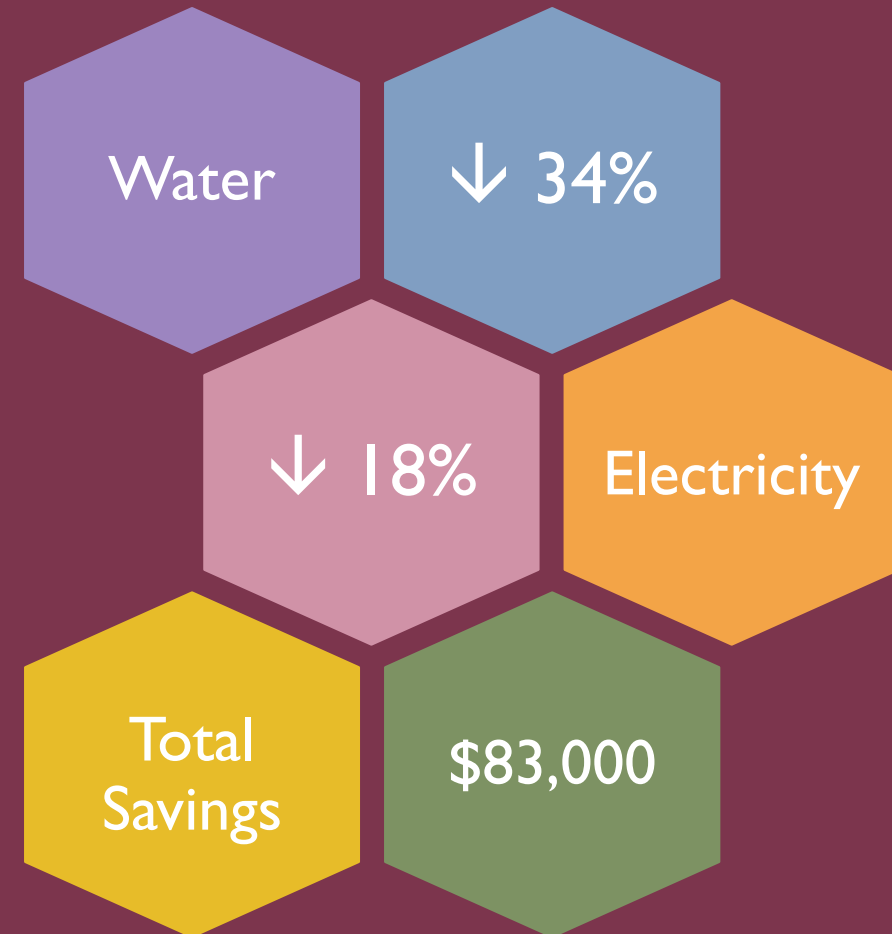
As one measure of progress for the Capacity and Sustainability Strategic Initiative, this report provides an overview of utility usage on campus for the 2019-2020 fiscal year compared to past years. The report also highlights key sustainability initiatives coordinated by Facilities Services during this year, though it is not inclusive of all partnerships and initiatives. 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.

# THE IMPACTS OF COVID-19

In early 2020, news emerged of a novel coronavirus that had begun to spread in China.

Within a few months, it was evident that the virus, known as COVID-19, was also present in the United States. In mid-March, to prevent potential spread of the virus, CSU Channel Islands began the transition to virtual learning. After closing to all students and non-essential personnel on March 17, 2020, the campus continued to be monitored and maintained by a limited number of Facilities Services staff.

The campus depopulation in response to the coronavirus resulted in significant reduction in electricity and potable water consumption for the final quarter of the 2019-2020 fiscal year.



# STATEMENT ON SOCIAL EQUITY

Sustainability is intended to be comprised of 3 pillars – equity, economy, and the environment. Too often, we find sustainability being focused solely on the environment, without proper attention to social equity implications. That means that in our pursuit to protect the planet, we often further marginalize underrepresented communities. However, our campus cannot be sustainable without balancing *all three* of these pillars.

It is well-documented that underrepresented communities, including low-income communities and people of color, are disproportionately impacted by environmental degradation, pollutants, and climate change. These, in addition to racism, wealth disparity, and food insecurity are only a few examples of social inequities that stand in the way of true sustainability.

The Facilities Services Sustainability program at CSUCI is committed to doing better. We are committed to sharing diverse voices, forming deep partnerships to support diversity, equity and inclusion on campus, and understanding the potential impacts of sustainability initiatives on underrepresented students. We are committed to supporting and uplifting the voices of our Black, Indigenous, and other students of color in our work to protect people and the planet.

# WATER

## Section Key Terms

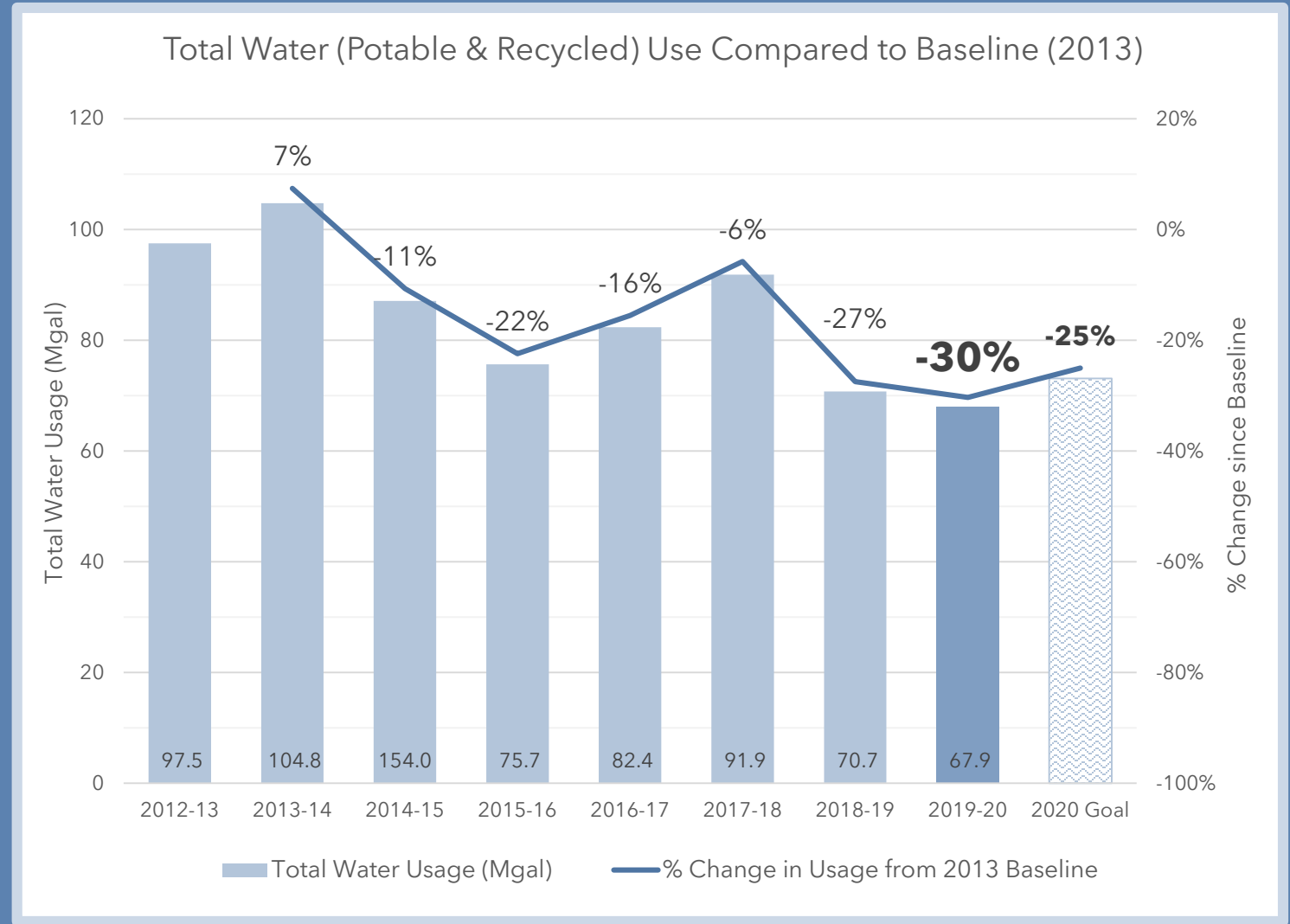
**Potable Water:** drinking water - used in buildings

**Recycled Water:** tertiary-treated waste water - used for irrigation

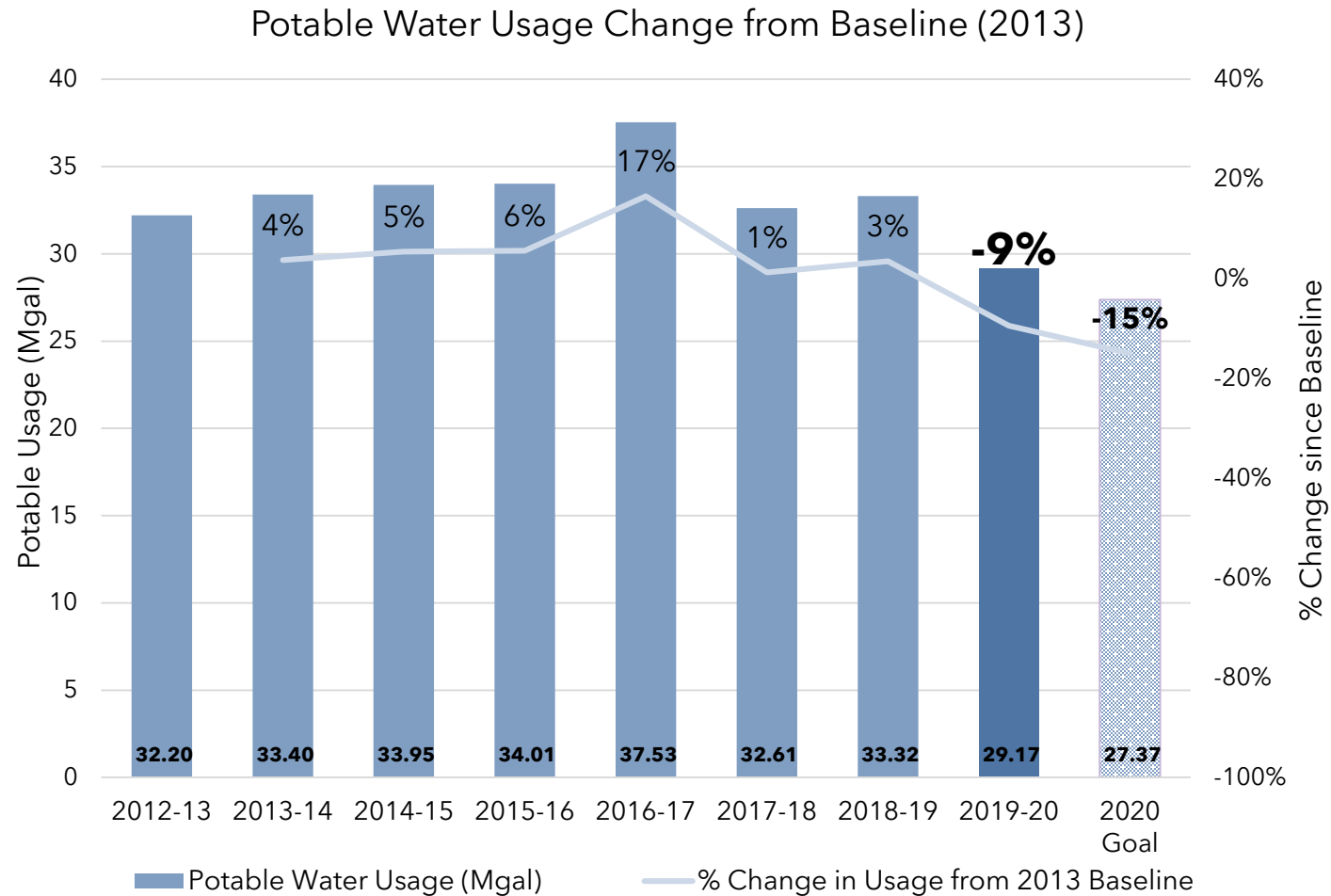
**Mgal-** million gallons

# 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 25% by 2020 compared to our 2013 baseline. Overall, **total water consumption reduced 30%** this year compared to 2013. Most of this reduction can be attributed to water savings from minimal campus occupancy from mid-March through June due to COVID-19, as well as significant decreases in irrigation usage.



# POTABLE WATER

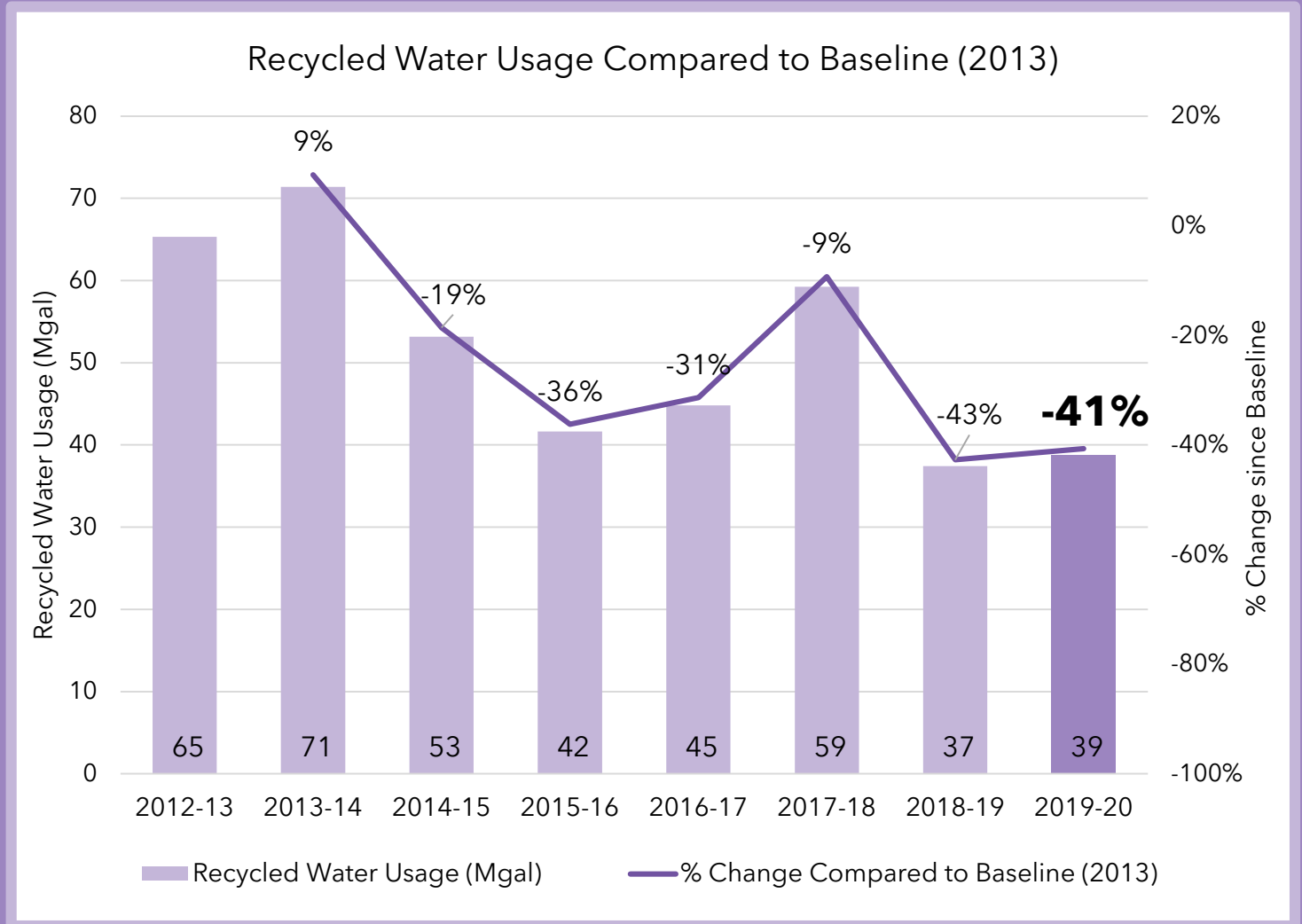


Camorsa Water District, CI's water supplier, asked the university to reduce potable water usage by 15% from the 2013 baseline. In FY 2019-20, CI **reduced absolute potable water usage by 9%** compared to 2013, falling shy of the goal. However, potable water use **reduced 37% per capita**. While CI consistently surpasses 15% reduction per person on campus, the reduction in absolute potable water use is primarily due to the campus depopulation in mid-March in response to COVID-19. To sustain absolute water reduction in future years the university will need to continue investing in water efficient equipment and modeling water conservation strategies.



# RECYCLED WATER

Recycled water reduction goals are encompassed in the total water goals. Overall, CI **used 41% less recycled water** in FY 2019-20 compared to the 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. With the potential for extended periods of heat and drought due to climate change, continuing these practices will be an essential part of sustaining CI's recycled water savings.



# ANNUAL WATER OVERVIEW

## METRICS SUMMARY

- 💧 **ACHIEVED GOAL** to **reduce total water usage 25%** by 2020
- 💧 **REDUCED potable water 9%** overall, falling short of 15% goal
  - 💧 Per capita, CI used **37% LESS potable water** compared to baseline
- 💧 Used **41% LESS** water for **irrigation** compared to 2013 baseline
  - 💧 This equates to **\$40,796 savings** in avoided recycled water costs

## CONSERVATION TIPS

- 💧 Always run full loads in the washing machine or dishwasher.
- 💧 Install water efficient showerheads and sink aerators.
- 💧 Only use the garbage disposal when necessary. Dispose of food scraps in the compost or trash.
- 💧 Use a broom to clean driveways, sidewalks, decks and patios instead of hosing them off.

# ENERGY

## Section Key Terms

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

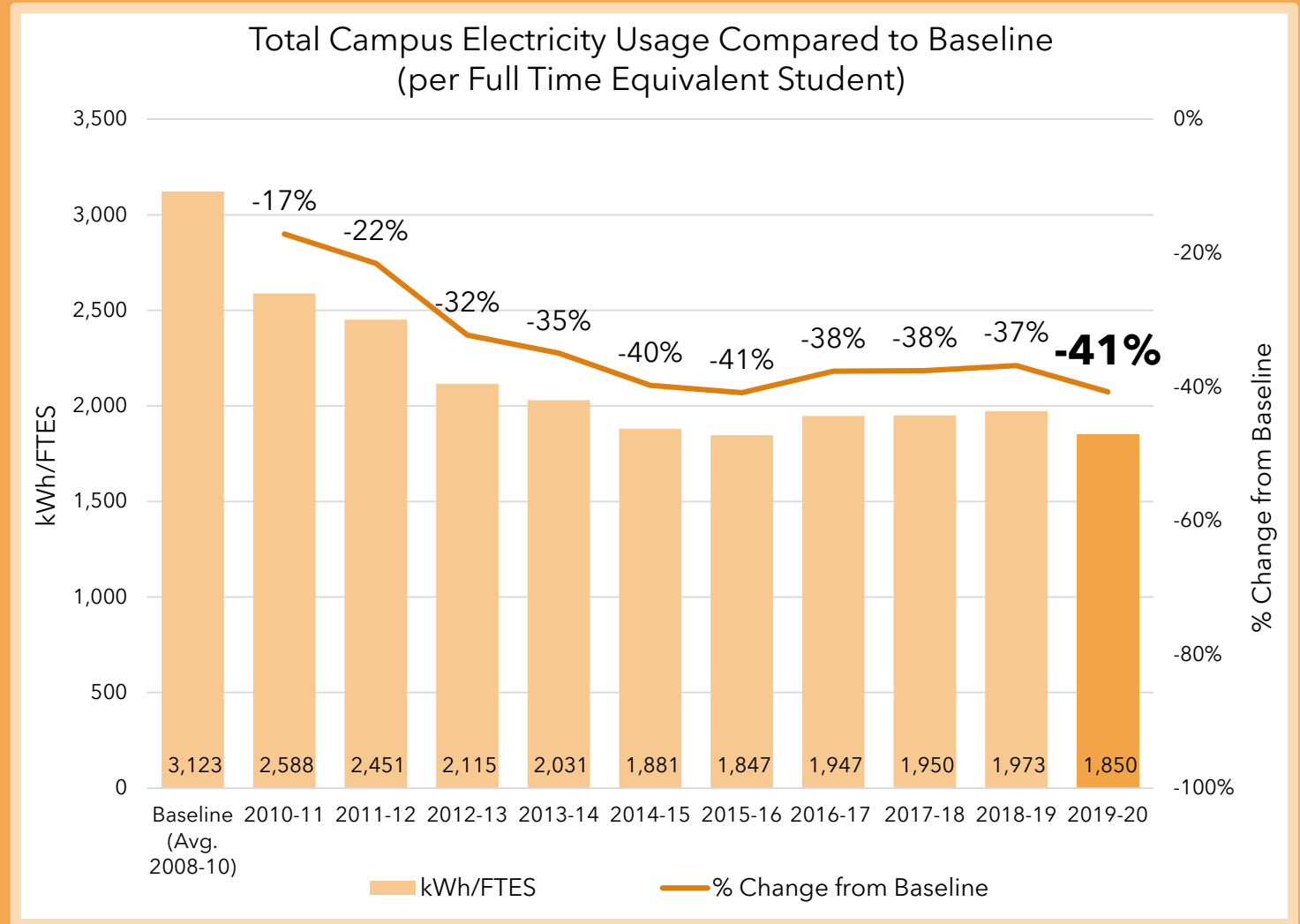
**kWh:** kilowatt hour

**BTU:** British Thermal Unit

**MMBTU:** One Million British Thermal Units

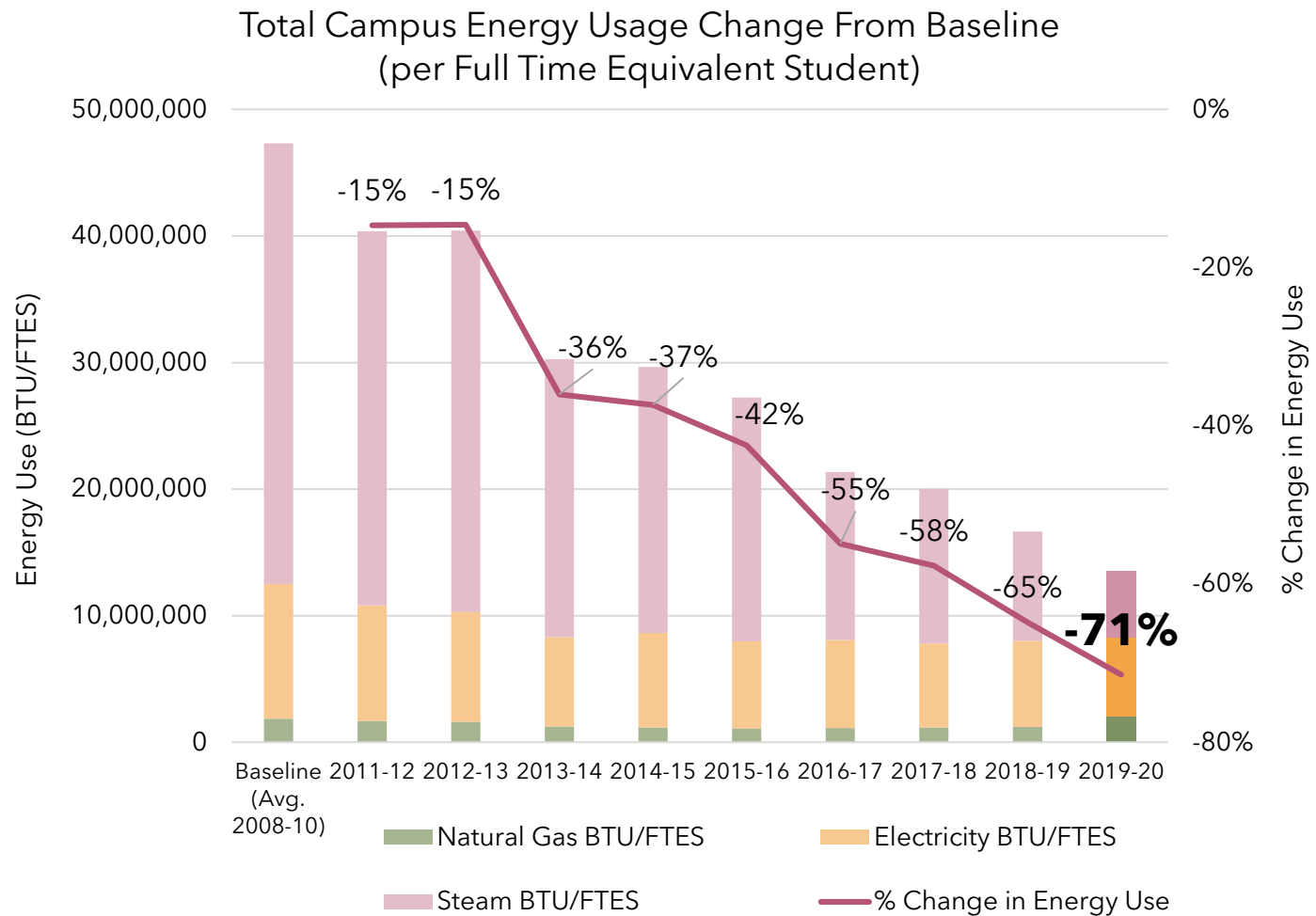
# ELECTRICITY

The campus demand for electricity continues to increase as the campus grows and we all rely more on electronics. However, this year CI **reduced electricity usage per student by 41%** compared to the baseline. The Chancellor's Office set a goal of 25% reduction per FTES compared to the baseline, which CI has exceeded on an annual basis since 2013. Even as we exceed that goal it is imperative that we continue pursuing opportunities to conserve electricity to build resiliency and contain costs. The least expensive and most efficient kilowatt is the one we don't use!



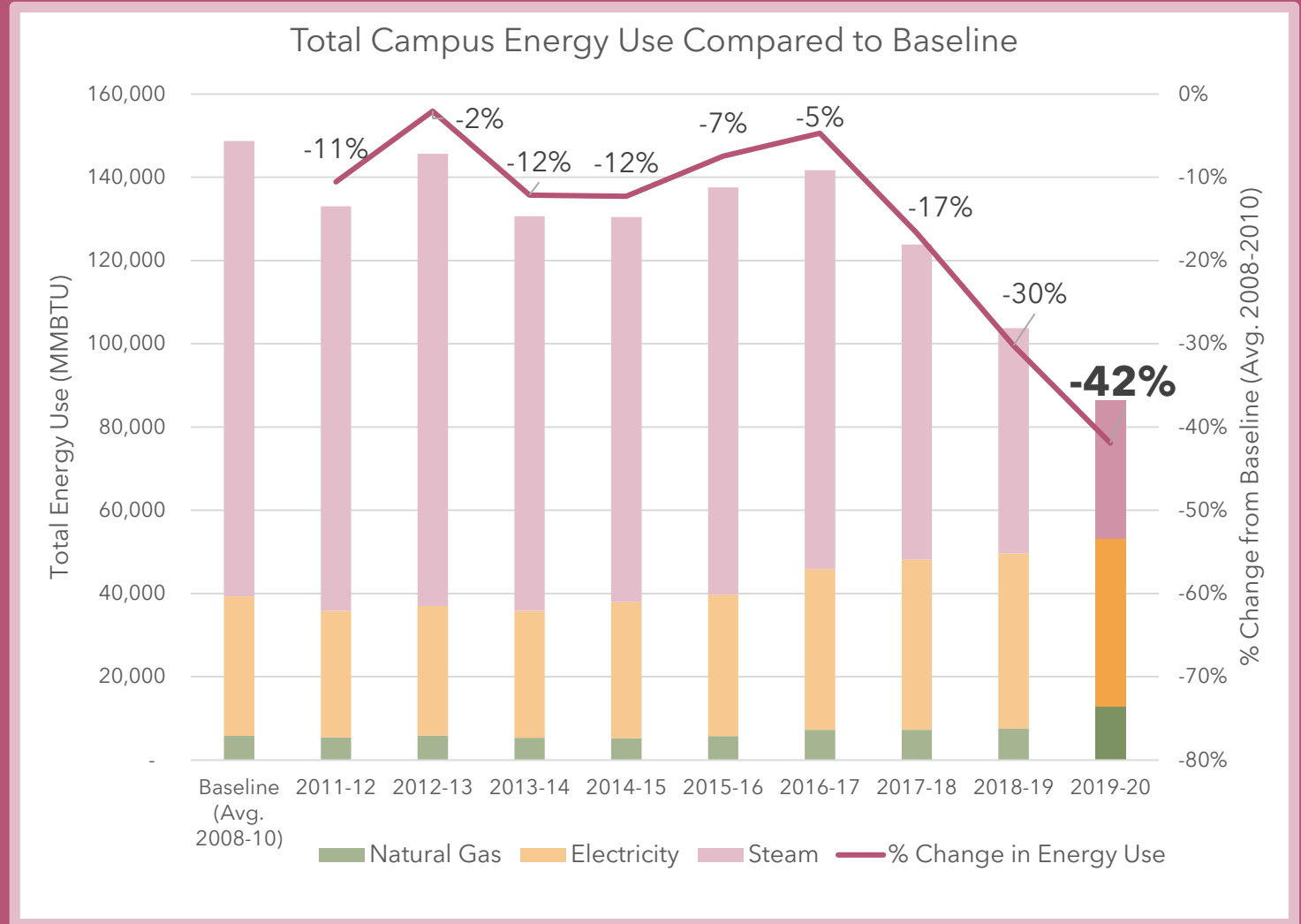
# TOTAL ENERGY

Total energy represents all sources of energy on campus: electricity, steam and natural gas. Electricity is used for lighting, plug loads, cooling and equipment. Historically, steam was used for the majority of heating hot water and space heating on campus. Natural gas was only used in a few buildings for heating hot water, cooking, and space heating. However, in April 2020 CI's Central Plant switched from steam to natural gas for heating hot water and space heating. Our goal is a 25% reduction per FTES in total energy compared to our baseline, which we continue to surpass.



# TOTAL ENERGY

In addition to the impressive reduction in energy use per full time equivalent student, CI has also **reduced absolute energy use 42%** compared to the baseline. As a growing campus, achieving energy savings is a complex task. These savings are a testament to the hard work of Facilities Services staff to optimize building and equipment operation, and to the entire dolphin community for conserving energy on campus. Every unit of energy saved is more money that can be invested in the university.



# ANNUAL ENERGY OVERVIEW

## METRICS SUMMARY

⚡ **ACHIEVED GOAL** to **reduce total energy usage per FTES by 25%**

⚡ **41% REDUCTION in electricity** per FTES

⚡ This reduction equates to more than \$450,000 in avoided electricity expenses

⚡ Used **72% LESS total energy** per full time equivalent student

## CONSERVATION TIPS

⚡ Set your air conditioner to 78°F or higher.

⚡ Line dry clothes, if possible. If using a dryer, use dryer balls to improve efficiency.

⚡ Unplug chargers and other electronics when not in use. Yes, they are still drawing power!

⚡ Close drapes or blinds in spaces that receive direct sunlight on hot days.

# WASTE

## Section Key Terms

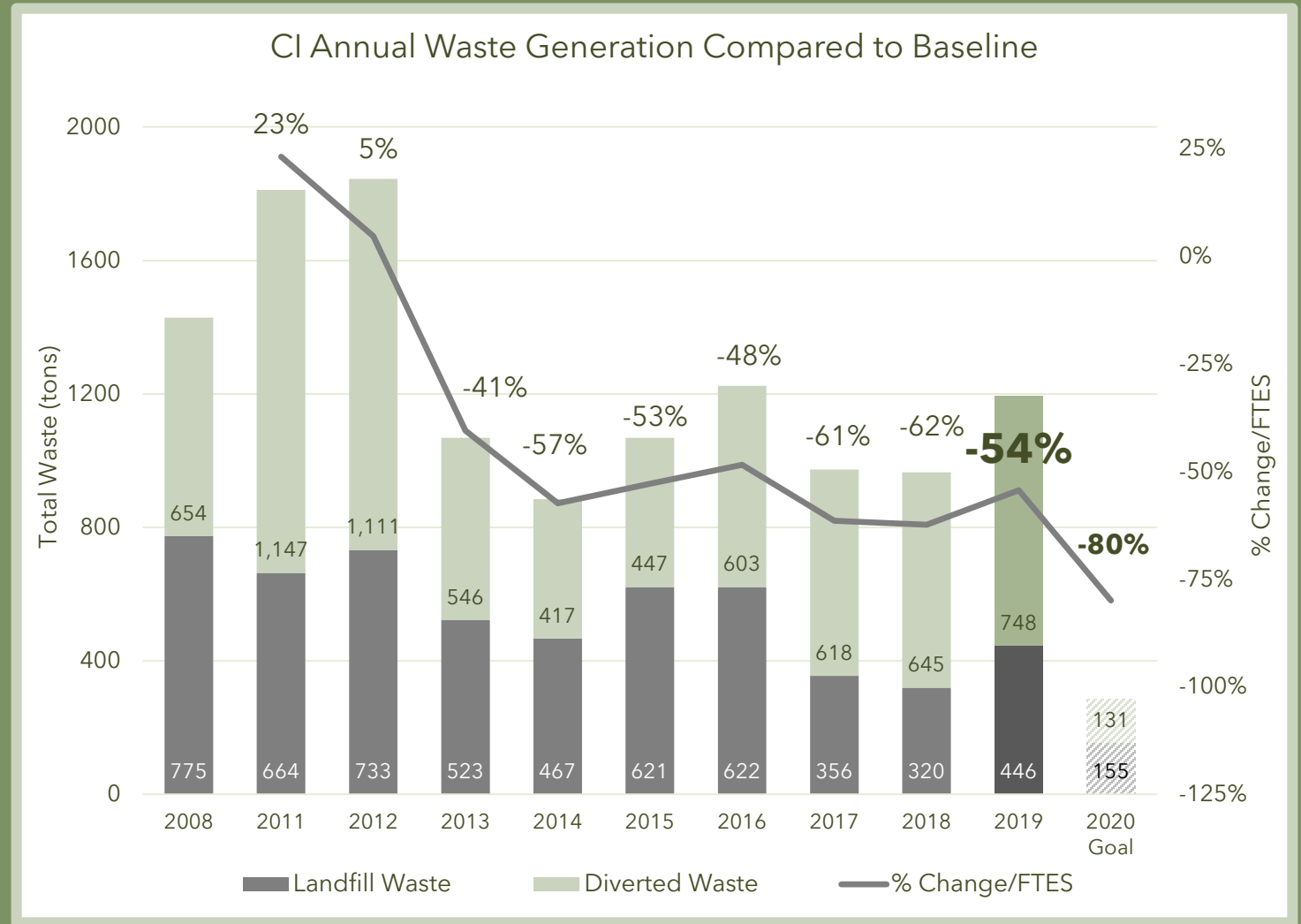
**Waste Disposal:** all waste that is collected on campus, including trash, compost and recycling

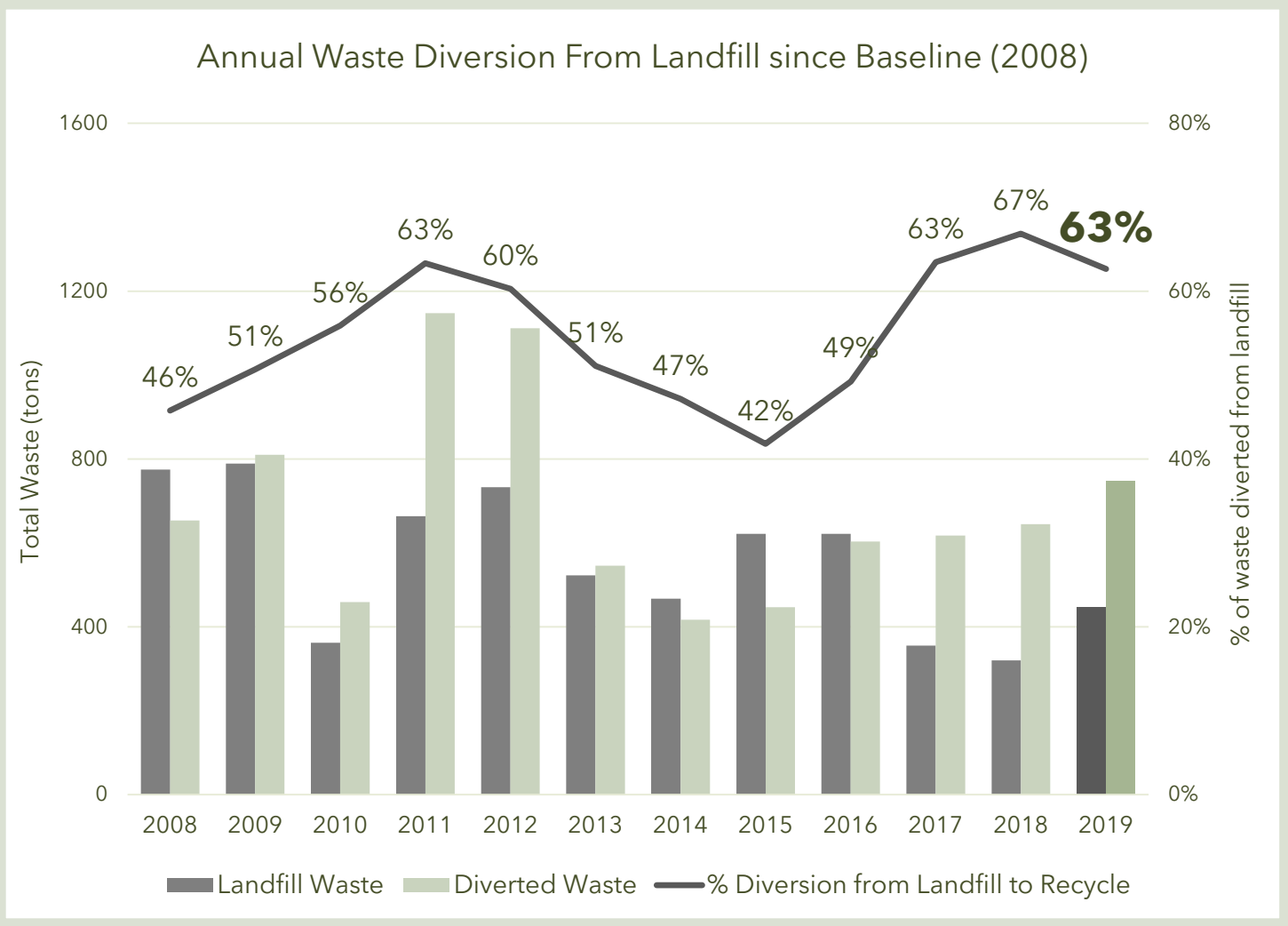
**Waste Diversion:** waste that is recycled or composted



# WASTE DISPOSAL

The Chancellor's Office has set a goal for all CSU campuses to **dispose of 80% less waste by 2020**. This is an ambitious goal that cannot be achieved without the entire CI community. In FY 2019-20, CI disposed of **54% less waste per student** compared to 2008. In order to achieve the 80% waste reduction goal, the campus must focus on eliminating single use items, expanding reuse programs, and reducing food waste.





# WASTE DIVERSION

In 2019, CI **diverted 63% of all waste** from the landfill. That 63% is comprised of recycling, composted food waste, and composted landscaping debris. State law requires all state agencies to divert at least 50% of solid waste from landfills. In addition to complying with state law, keeping waste out of the landfill saves the university money, conserves resources, and reduces greenhouse gas emissions that contribute to climate change.

# ANNUAL WASTE OVERVIEW

## METRICS SUMMARY

- ↻ **REDUCED WASTE 54%** per FTES
  - ↻ Goal to reduce waste 80% by 2020
- ↻ **DIVERTED 63%** of waste from the landfill
- ↻ **Significant work is needed** to achieve the 80% waste reduction goal and to improve the waste diversion rate

## CONSERVATION TIPS

- ↻ Choose durable, reusable items instead of single-use, disposable items.
- ↻ Invest in reusable face coverings that can be washed after each use.
- ↻ Get to know the recycling guidelines where you live, work, and study (they can be different everywhere!).
- ↻ Shop at thrift and consignment shops first, before buying new.

# SUSTAINABILITY IN ACTION

# CI RATES GOLD

In March 2020, CI received a **Gold STARS rating** from AASHE, the Association for the Advancement of Sustainability in Higher Education. STARS, the Sustainability Tracking, Assessment and Rating System, is a transparent, self-reporting framework used by higher education to measure sustainability performance.

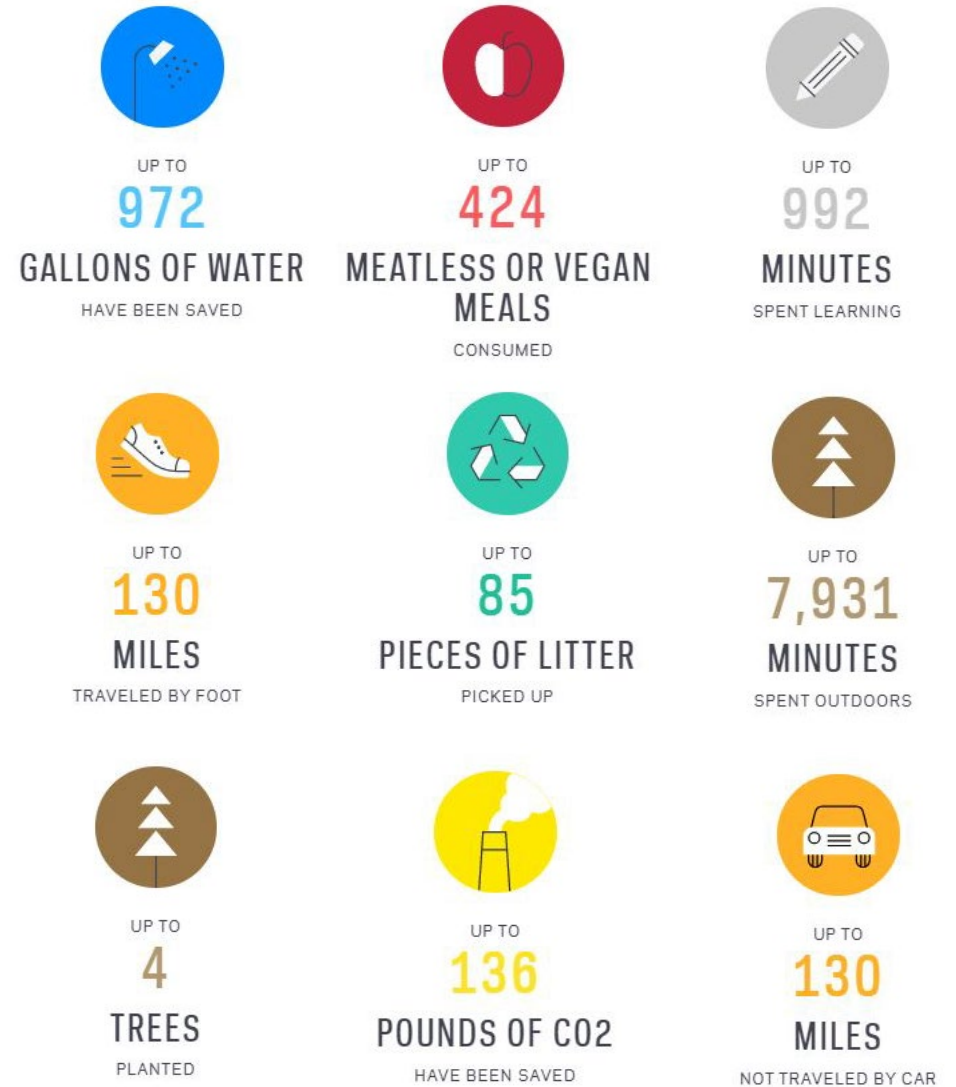
CI last received a STARS Gold rating in 2015. This year's renewed Gold rating reflects CI's continuous improvement, as the rating system is consistently updated to reflect emerging best practices and increased standards for sustainability performance in higher education.

[Click here](#) to view a **summary report** to learn more about CI's rating, including areas of excellence and opportunities for improvement.



# VIRTUAL EARTH DAY CELEBRATION

April 22, 2020 marked the 50<sup>th</sup> anniversary of Earth Day! Groups throughout CI had originally planned to celebrate this momentous occasion with a variety of events throughout the week. However, as we all quickly transitioned to a virtual environment to slow the spread of COVID-19, CI embraced the Earth Day EcoChallenge. Seventy dolphins took part in this month-long challenge to select actions to reduce our impact and support vibrant communities. The participating dolphins had a massive impact, including engaging in advocacy for issues important to them.





## BEES AND TREES

This year, Facilities Services staff partnered with CI students, faculty, and community members to earn renewed designation as both a **Bee Campus USA** and a **Tree Campus USA**.

CI was awarded Bee Campus USA for the second year in a row and is one of only two CSU's to have earned this distinction. The title reflects CI's commitment to protecting pollinators by creating pollinator habitats, practicing integrated pest management, and providing pollinator education.

As a Tree Campus USA, CI follows a Tree Care Plan, invests in the campus tree canopy, offers service learning projects, and hosts an annual Arbor Day celebration.



## ACKNOWLEDGEMENTS

CSU Channel Islands strives to advance sustainability in campus operations every day.

Keep up to date between reports by visiting:  
<http://www.csuci.edu/fs/sustainability/index.htm>

For questions, concerns, or ideas for new sustainability efforts, please email:  
[roxane.bc@csuci.edu](mailto:roxane.bc@csuci.edu)

### **Appreciation goes out to the following contributors:**

- The Department of Facilities Services
- Tom Hunt, Assistant Vice President for Facilities Services
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