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UNIVERSITY OF CALIFORNIA

# Berkeley



Big strides have been made in planning for a sustainable UC Berkeley future. The campus published a comprehensive update to its [UC Berkeley Sustainability Plan](#), setting key stretch goals and strategies reaching beyond systemwide policy.

The plan addresses new intersectional topics, including health and sustainability, and diversity, equity and inclusion in sustainability. The campus also published its first [Green Labs Action Plan](#) and formed a cross-departmental steering group to guide its implementation. And importantly, looking out to 2035 and beyond, sustainability is a cornerstone feature of the [Long Range Development and Campus Master Planning](#) that is underway. This comprehensive effort is engaging many community members in visioning activities to inform climate resilience, active mobility and accessibility, sustainable water and more in the plans.

Led by students aiming for zero waste and eliminating global plastic pollution, UC Berkeley has committed to one of the strongest plastic bans in the country, setting a [comprehensive target](#) to eliminate all nonessential single-use plastic by 2030. Unlike other plastic bans, this initiative goes beyond existing targets focused on foodware and plastic bags, and addresses the spectrum of products and packaging used in campus academics, research, administration and events.

The UC Berkeley community received a number of accolades this year, including again a coveted spot among the top 20 greenest universities according to the Sierra Club. The [Chancellor's Advisory Committee on Sustainability](#) honored [six graduating seniors](#) as change-makers and leaders in climate action, environmental justice, sustainable food, ending plastic pollution and moving UC away from harmful pesticide use.

In 2020, the campus also launched a number of impressive initiatives on climate change solutions. Beginning in fall 2020, the Letters and Science Division is offering an undergraduate [minor in climate science](#). UC Berkeley's new fundraising campaign, Light the Way, includes a [research priority](#) to understand the depths of environmental change, accelerate mitigation and adaptation, and ensure that vulnerable populations can participate in the transition to clean energy. And underway is the former architecturally significant art museum's conversion to a life sciences innovation lab; when open, this will be UC Berkeley's first carbon-free building operating on 100% clean electricity.



## Students Leveraging Sustainability Resources to Respond to the Coronavirus

During spring 2020, many of UC Berkeley's operations and programs were put on hold due to COVID-19 and the subsequent shelter-in-place orders. The [Student Environmental Resource Center \(SERC\)](#) and [The Green Initiative Fund \(TGIF\)](#) at UC Berkeley cultivated resources for students to practice personal and community resilience related to environmental justice issues and initiatives. SERC created [Community Through COVID-19](#), a living tool and community-building document, on March 10, the day that UC Berkeley canceled in-person courses. The document lists a variety of online events and resources that meet community needs, including links to mutual aid programs, study jams and an Understanding & Resisting EcoFacism event put on by SERC staff.



## Students Leveraging Sustainability Resources to Respond to the Coronavirus

Amid the spring 2020 semester, [The Green Initiative Fund](#) committee voted to establish a COVID-19 \$30,000 Emergency Fund to support active TGIF projects that have been affected by the coronavirus crisis. TGIF and SERC are driven and motivated by [Wangari Maathai's story of the hummingbird](#), which emphasizes that small, individual acts can influence large-scale change. In three weeks, the committee designed and structured a (quick) application process and a [rubric](#) for assessing projects, in order to expedite the distribution of funds for projects. TGIF received three emergency fund applications and were able to grant all three, totaling \$14,771.

The three funded projects are:

- [Stormwater Detention and Biofiltration](#)
- [Environmental Education for Students of Color](#)
- [Berkeley Student Food Collective: Decade 2](#)

TGIF has extended the emergency fund beyond spring and hopes to continue supporting projects impacted by COVID-19 into the school year.

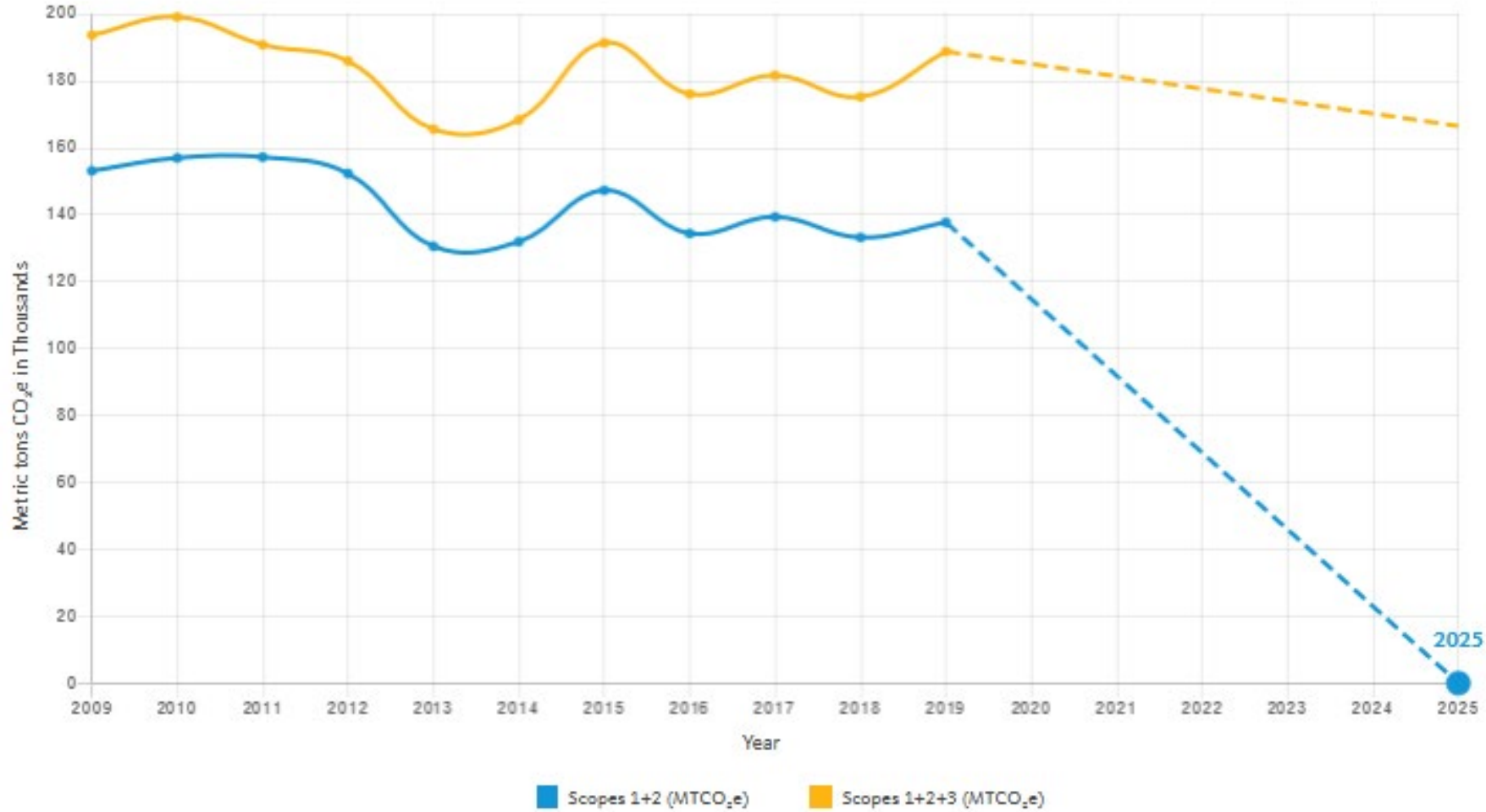
## Returning Used N95 Masks to Duty Quickly — and Safely



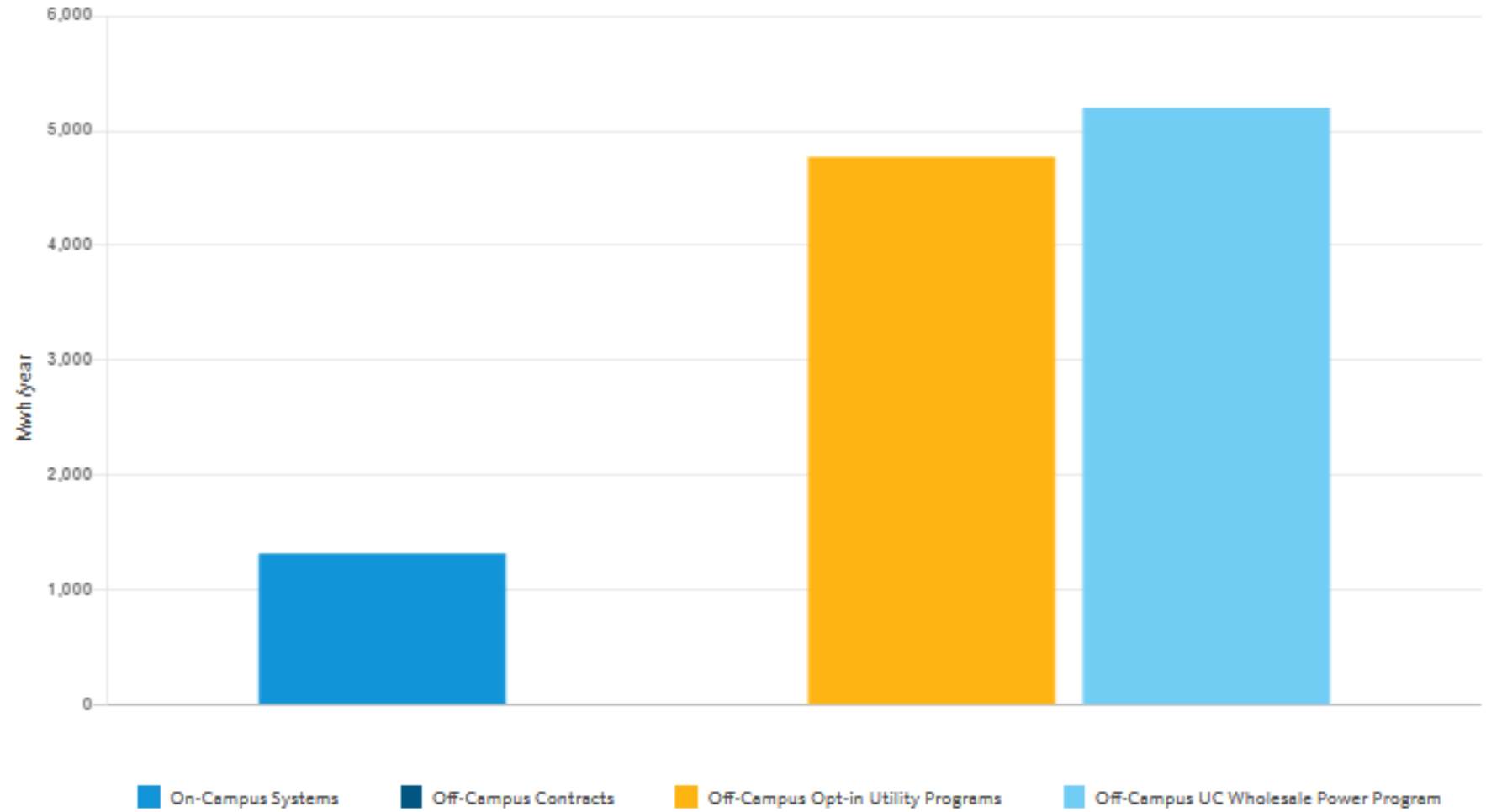
**U**C Berkeley bioengineering professor Amy Herr is part of a multi-university research consortium, [N95Decon](#), providing a scientific consensus on existing and emerging decontamination methods of N95 masks. The consortium is assessing existing research, designing new systems and — importantly — actively debunking misinformation, with the goal of providing health care staff with scientifically proven ways to more safely reuse the masks.

The consortium is focusing on three primary sterilization methods: UV-C light, heat and humidity, and hydrogen peroxide vapor. Fact sheets on those methods are now available on the consortium's website. Herr is head of the research team evaluating the efficacy of UV-C, a shortwave, ultraviolet light that breaks apart the DNA of pathogens.

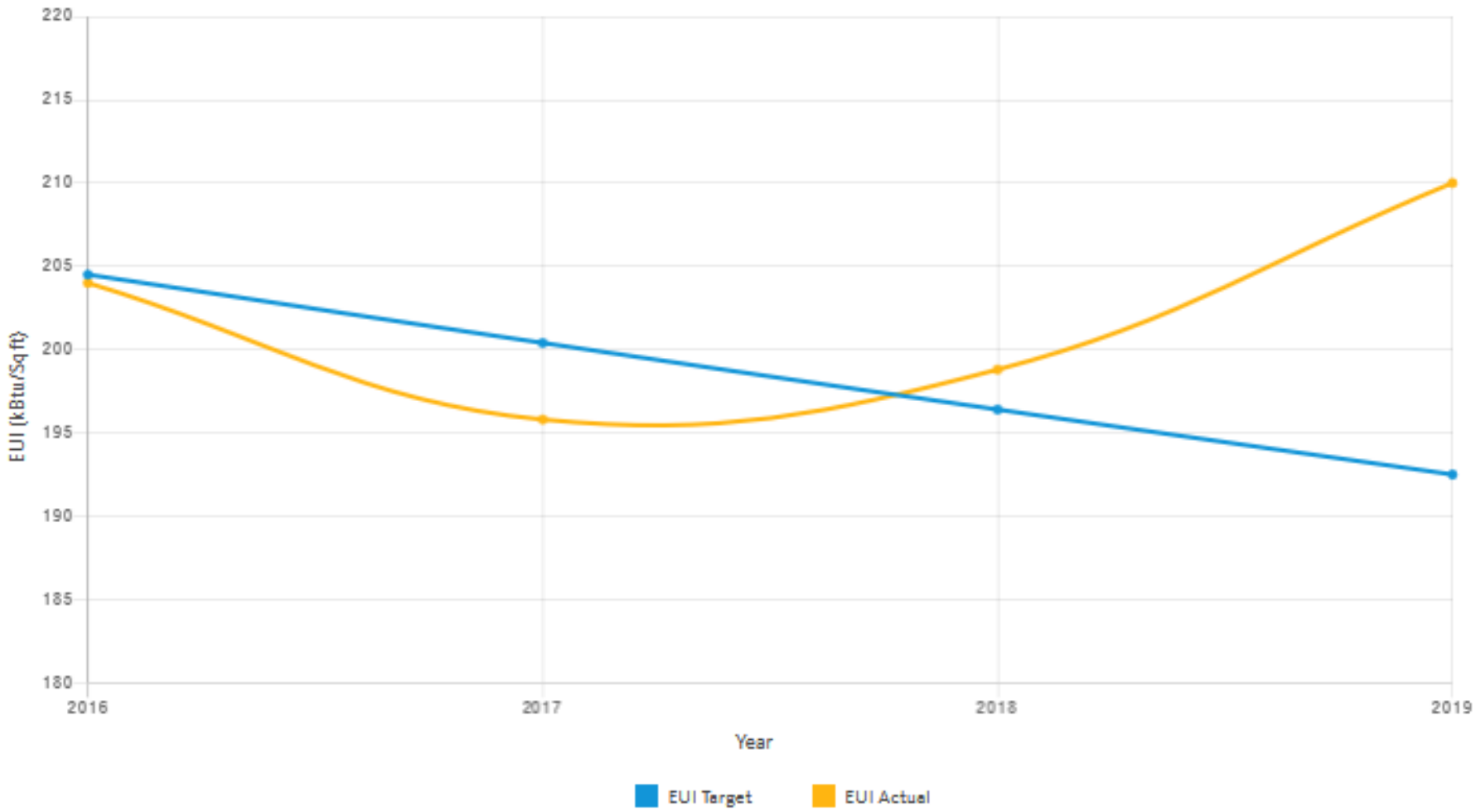
## CLIMATE PROTECTION – EMISSIONS



## ENERGY – RENEWABLE ELECTRICITY GENERATION



## ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

UC Berkeley continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



of UCB employees are utilizing alternative commuting methods



**12**

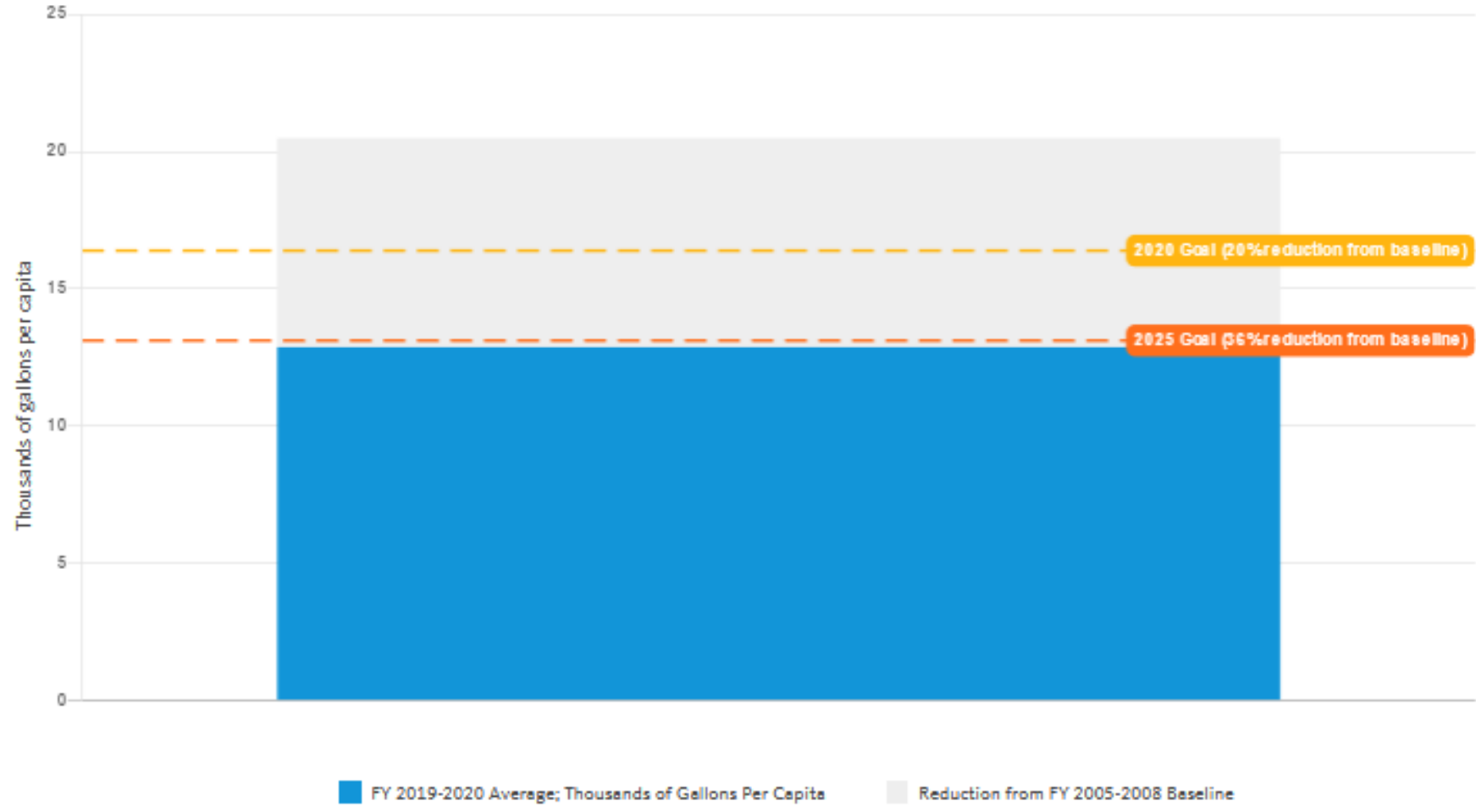
EV charging stations at this location for 2019-2020



**7%**

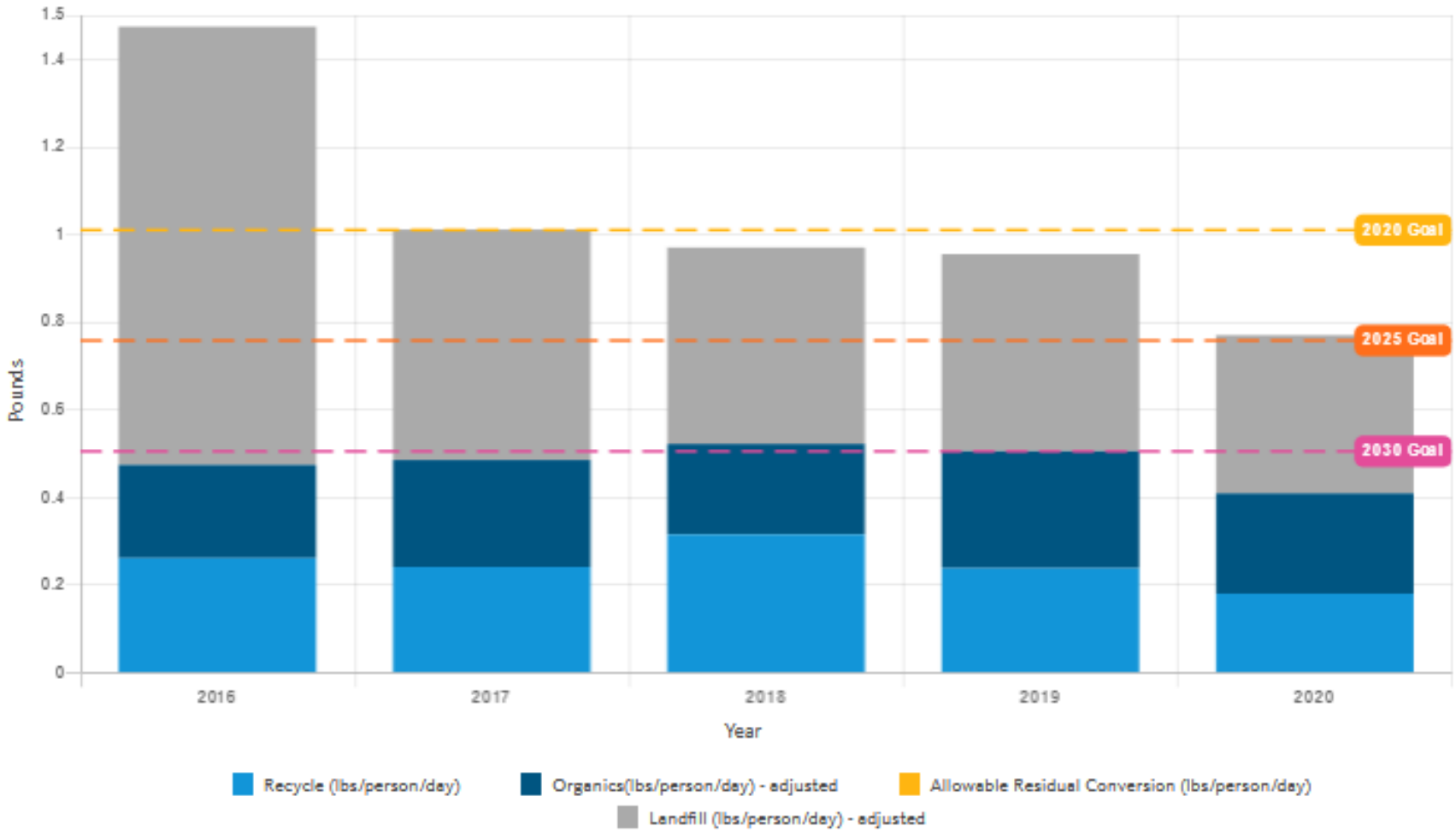
of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

## WATER

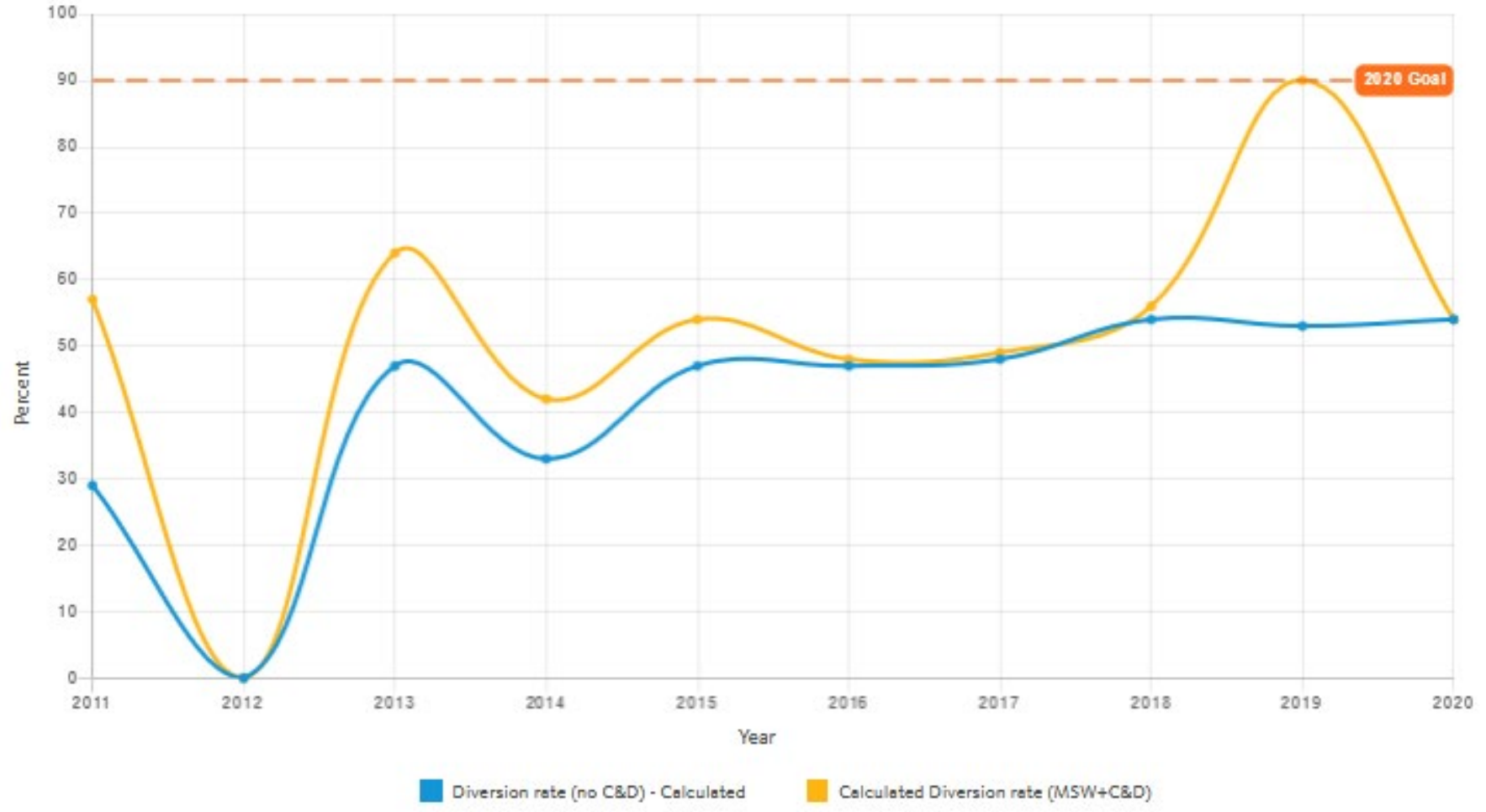




## ZERO WASTE – GENERATED



## ZERO WASTE – DIVERTED



## FOOD



**\$11.3M+**

total spend on food and beverages

**11.5%**

of food and beverage purchases met sustainability criteria in fiscal year 2019-20

UC Berkeley continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

## PROCUREMENT



**98%**

green spend on indoor office furniture



**60%**

green spend on cleaning supplies



**40%**

green spend on electronics

UC Berkeley's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

## GREEN BUILDING

UC Berkeley also received 1 Silver LEED certification in 2020.

2 Platinum, 12 Gold, 8 Silver and 1 Certified

- Total number of LEED certifications

## SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Berkeley has met the goal of assessing three labs.



16

total assessed research labs

## AWARDS

UC Berkeley was the proud recipient of several sustainability awards in 2020.

A full list of awards is [here](#).



[Sierra Cool School](#)



[Princeton Review Green Schools, Top 30](#)



[AASHE STARS Gold rating](#)

UNIVERSITY OF CALIFORNIA

# Davis



Continuing to answer the call to bend the curve on climate change, UC Davis launched a large-scale construction project — [the Big Shift](#) — in spring 2020 that lays the groundwork for ultimately reducing the campus’s reliance on fossil fuels while immediately decreasing energy and water use.

In honor of the 50<sup>th</sup> Earth Day, the Office of Sustainability at UC Davis led campus partners in planning a month-long celebration that transitioned into a [virtual](#) festival featuring events such as the [World Climate Simulation](#) and the [Tempestry Project](#). The UC Davis Arboretum and Public Garden’s Learning by Leading program [went online](#) to keep students involved in learning virtually and by creating content during the pandemic.

The annual [Sustainability Summit](#) also went virtual to ensure that student, staff and faculty champions of sustainability were honored, including the first Diversity, Equity and Inclusion Champion. In July 2019, [UC Davis welcomed its first vice chancellor of diversity, equity and inclusion](#), Renetta Garrison Tull, to oversee the [campus’s plan](#) to ensure that institutional diversity, systemic inclusion and social equity are addressed systematically through support such as at the [Student Community Center](#) and through initiatives such as [Aggie Square](#).

The annual [Sustainability Summit](#) also went virtual to ensure that student, staff and faculty champions of sustainability were honored, including the first Diversity, Equity and Inclusion Champion. In July 2019, [UC Davis welcomed its first vice chancellor of diversity, equity and inclusion](#), Renetta Garrison Tull, to oversee the [campus's plan](#) to ensure that institutional diversity, systemic inclusion and social equity are addressed systematically through support such as at the [Student Community Center](#) and through initiatives such as [Aggie Square](#).

As demonstrated by UC Davis's newest [Gold rating](#) in the Sustainability Tracking, Assessment and Rating System (STARS), UC Davis students, faculty and staff vigorously engage in advancing sustainability. UC Davis Global Affairs launched [Grants for Advancing Sustainable Development Goals \(SDGs\)](#) to support academic projects. Students [announced](#) the establishment of the Environmental Sustainability Student Coalition and [led the effort](#) to garner UC Davis a Fair Trade designation. And UC Davis achieved LEED Gold certification for the Central Cage Wash Facility project, which reduced water consumption by approximately 70% while improving cleaning quality.



## UC Davis COVID-19 Discussion Series

In response to the COVID-19 pandemic, UC Davis Global Affairs organized a series of discussions about the future of international education; co-hosted a panel, COVID-19's Impact on Global Agricultural Supply Chains and the Challenges Ahead; and received funding from the Universitas 21 network to partner with Tecnológico de Monterrey (Mexico) and Shanghai Jiao Tong University (China) on a global classroom project to create a framework for teaching the UN's Sustainable Development Goals.



## Food Unites the UC Davis Community During Campus Closure

In March 2020, many UC Davis operations were suspended in accordance with the state's shelter-in-place order.

The Student Farm, which delivers produce to the UC Davis Dining Services, the Associate Students of UC Davis (ASUCD) Pantry, Aggie Compass Basic Needs Center and about 120 Community Supported Agriculture (CSA) subscribers, continued to function with an essential crew of student employees and staff. The farm, serving as a place for students to practice sustainable agriculture, typically enrolls 60 to 90 student interns each quarter but was able to feed local groups during the coronavirus pandemic with a skeleton crew tending to fields, harvesting crops and planting summer vegetables.

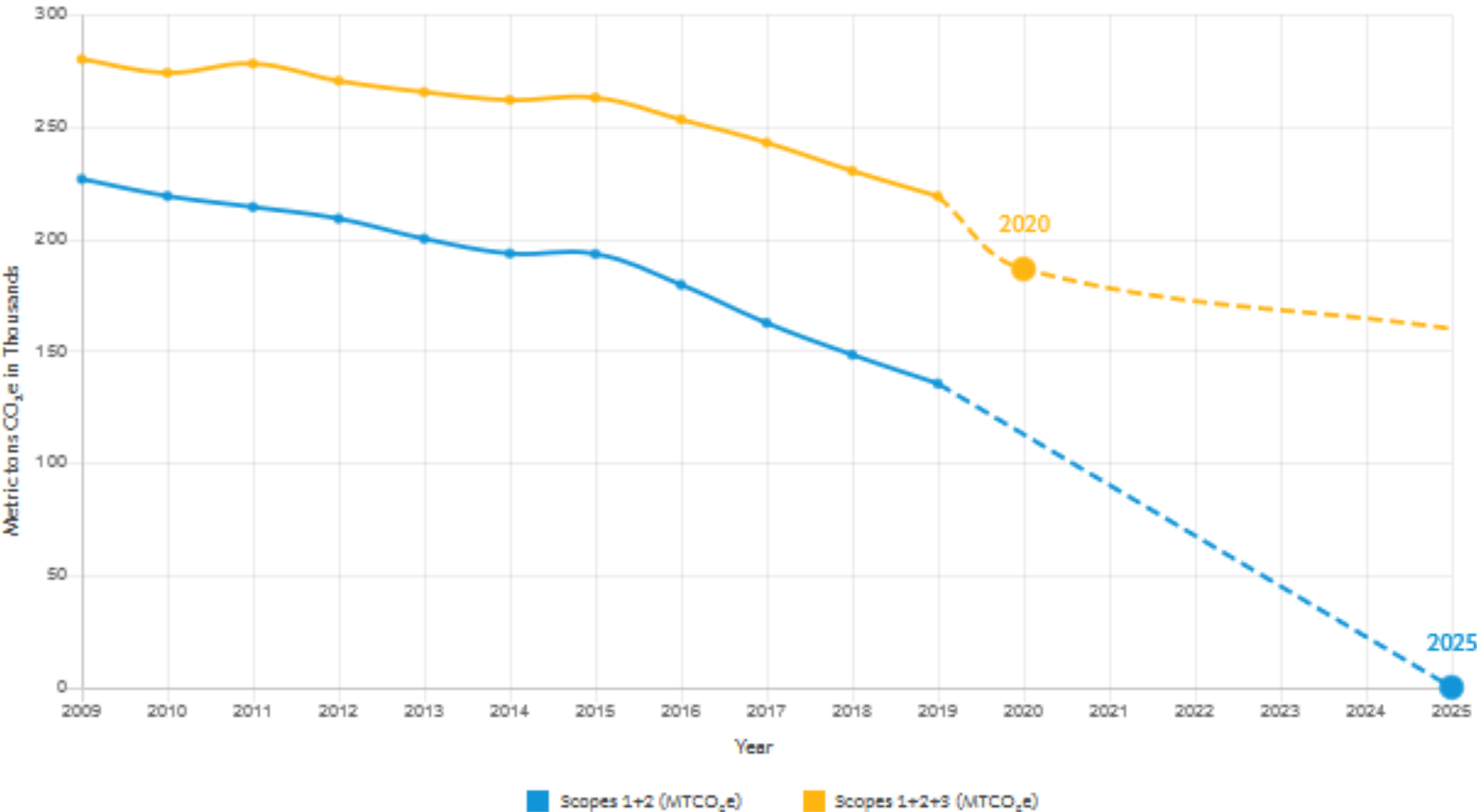


## Food Unites the UC Davis Community During Campus Closure

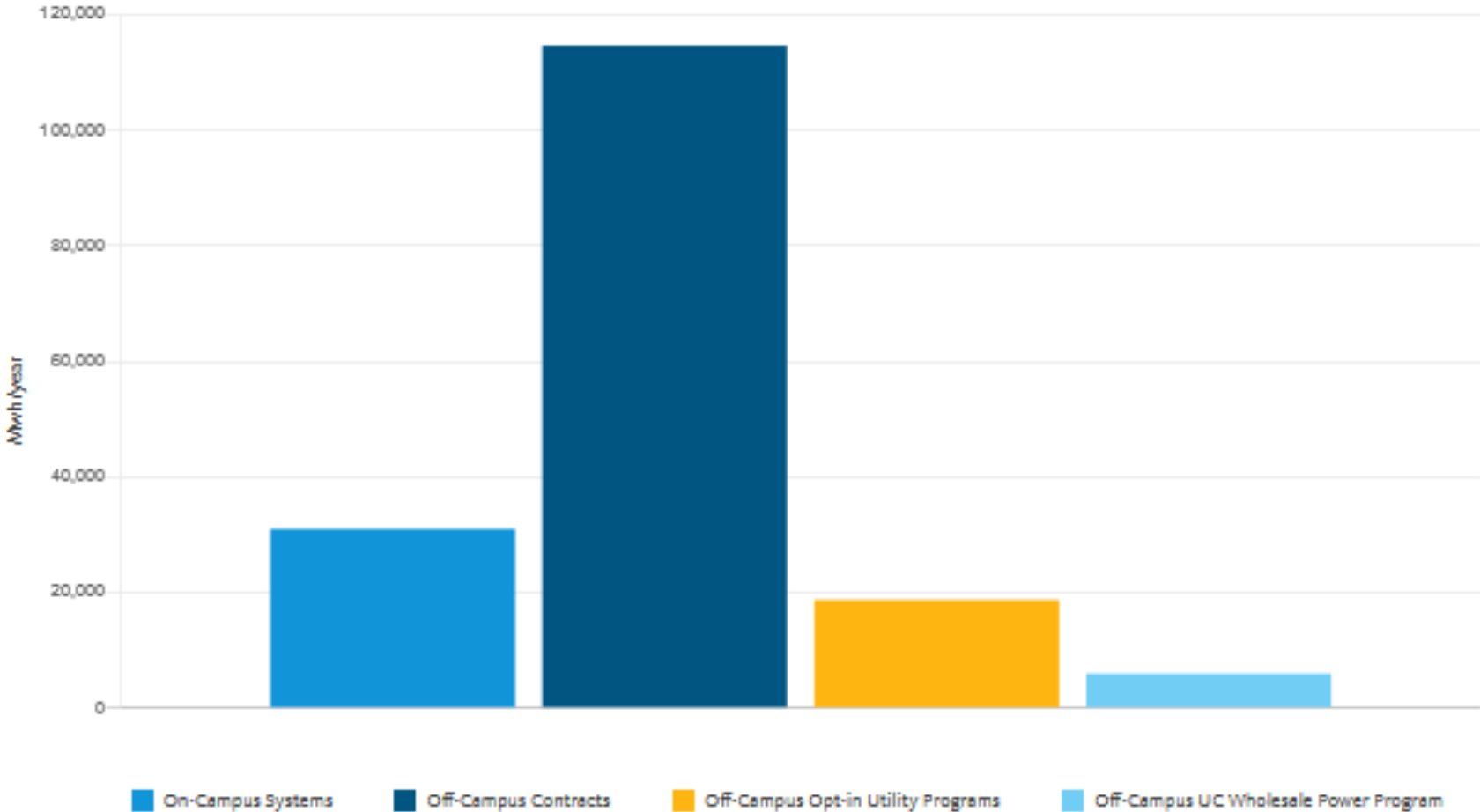
While the UC Davis Picnic Day was canceled in response to California's stay-at-home order, over [6,000 tomato and strawberry plants](#) had already been grown, intended as Picnic Day souvenirs. The College of Agricultural and Environmental Sciences (CA&ES) greenhouse staff and students reached out to local food banks, community gardens and students on campus to find homes for the tiny plants. Recipients of the plants were encouraged to post pictures and videos on Instagram under [#ucdavisplants](#).

Every quarter, CA&ES has a budget dedicated to a study break event during finals week, featuring snacks and coffee for students. Since no in-person finals occurred during winter 2020, [three CA&ES staff members](#) organized an alternative use for the budget to purchase and deliver nonperishable food items to the Aggie Compass Basic Needs Center.

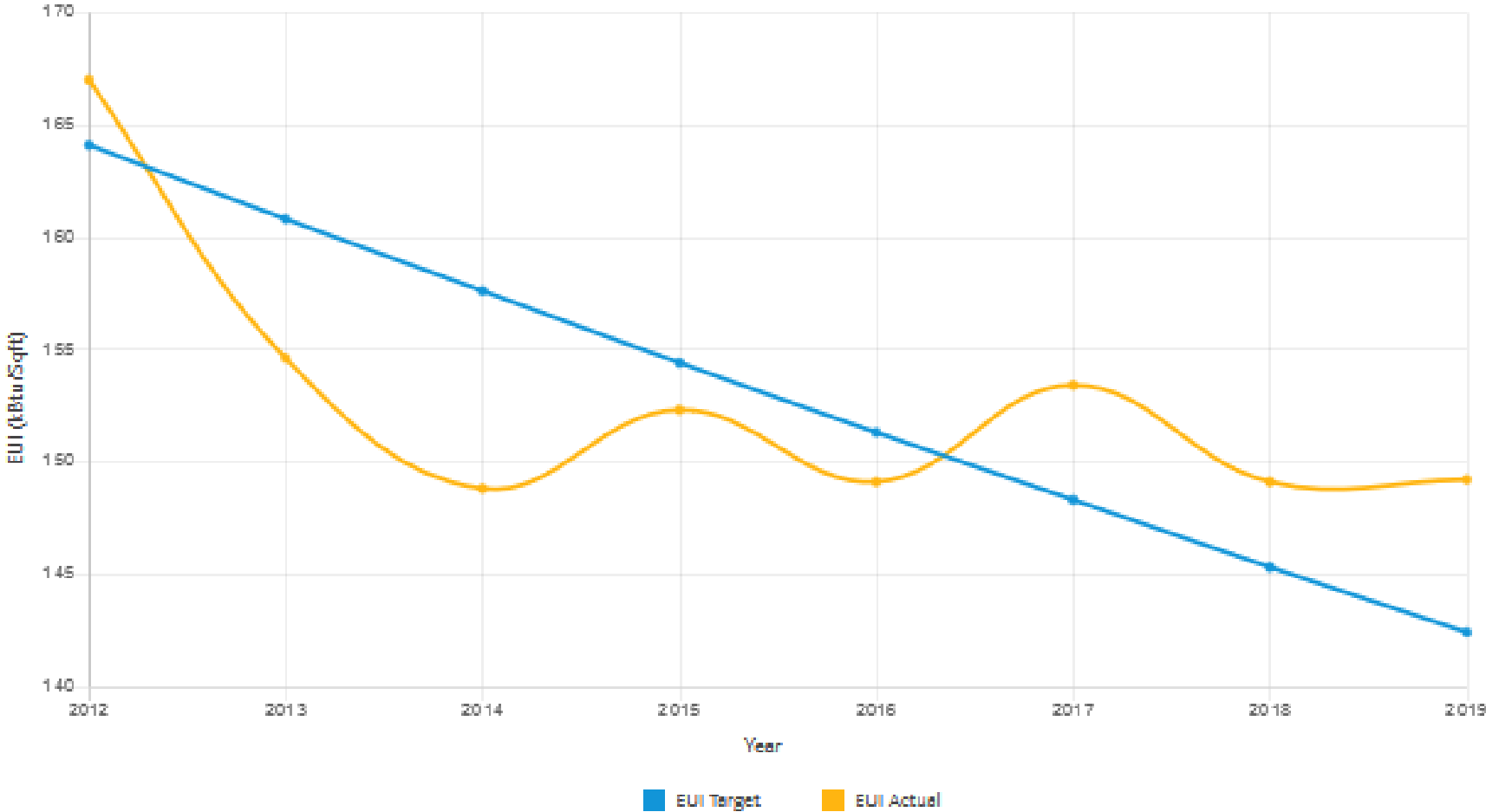
CLIMATE PROTECTION – EMISSIONS



ENERGY – RENEWABLE ELECTRICITY GENERATION



ENERGY USE INTENSITY (EUI)

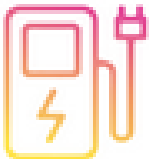


TRANSPORTATION

UC Davis continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



**35%**  
of UCD employees are utilizing alternative commuting methods

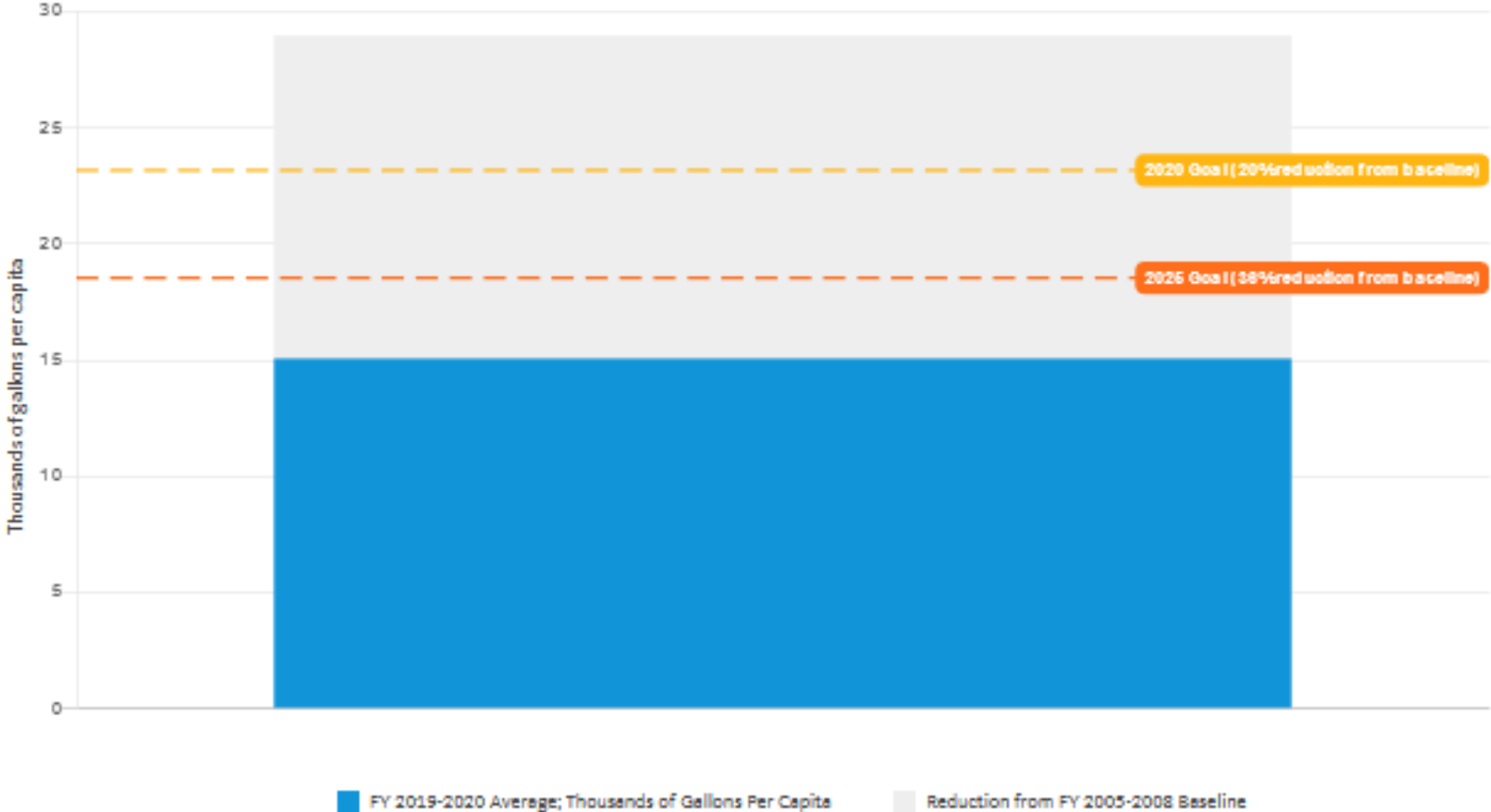


**136**  
EV charging stations at this location for 2019-2020



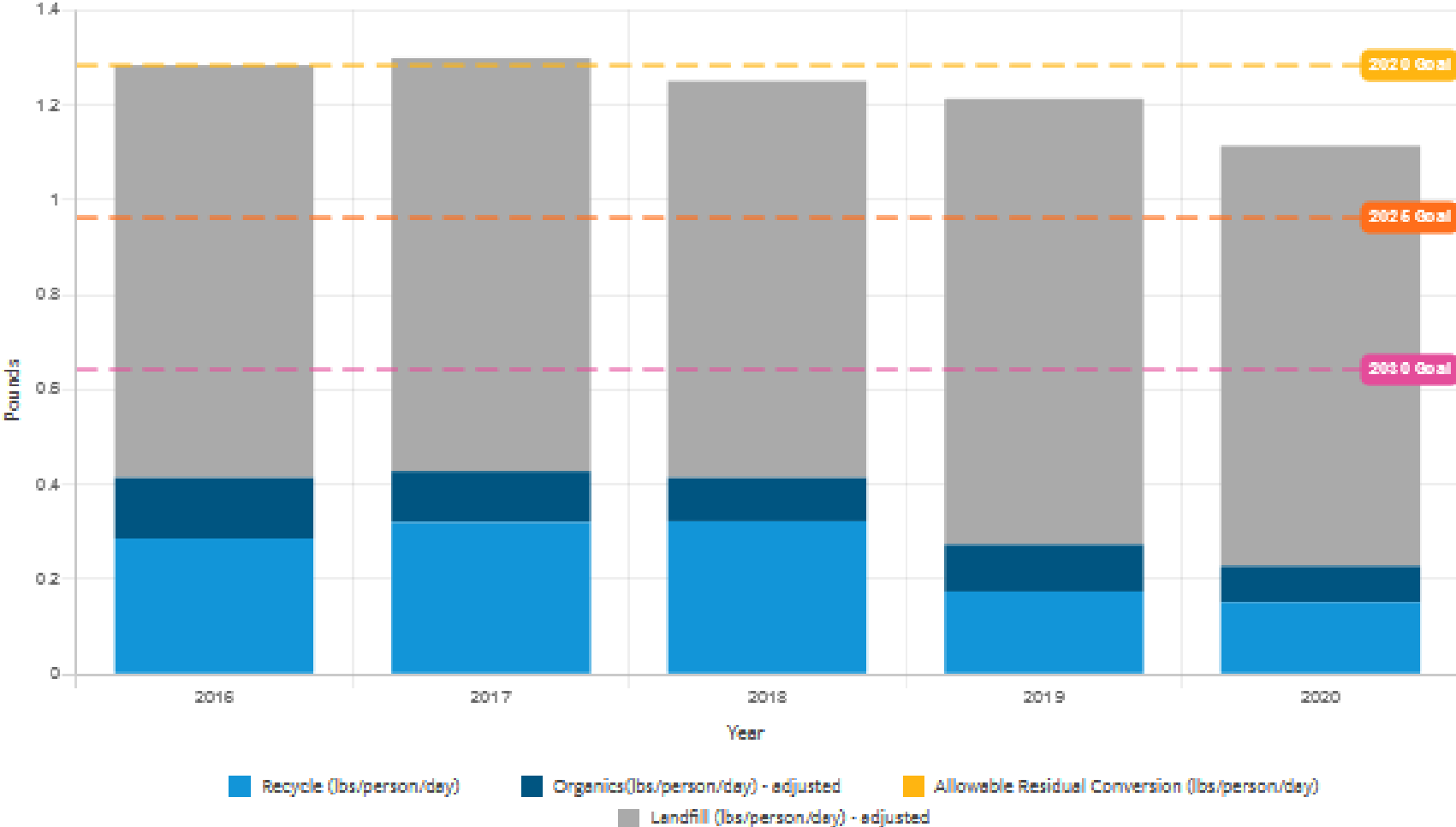
**44%**  
of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

WATER

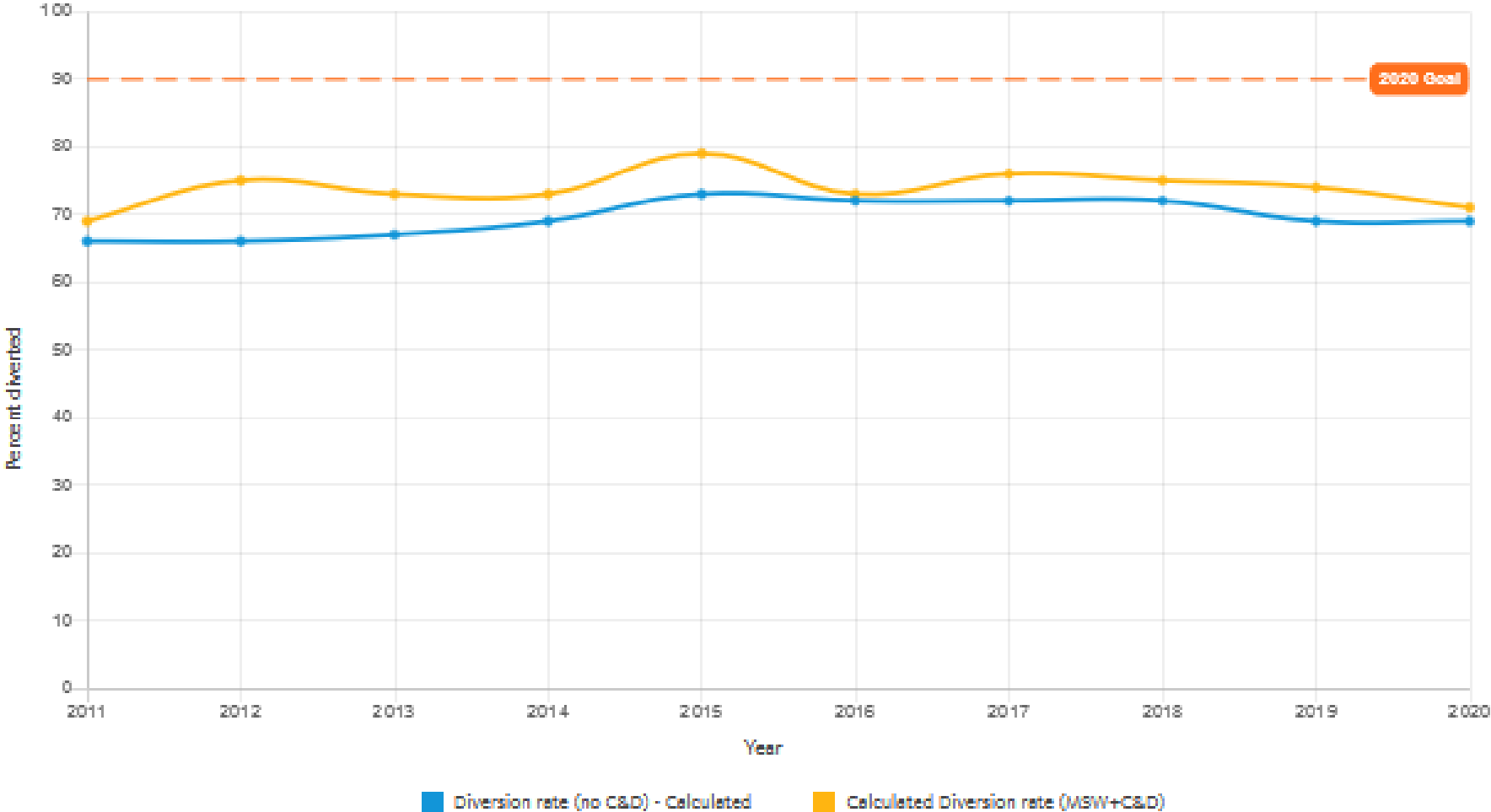




ZERO WASTE – GENERATED



ZERO WASTE – DIVERTED



UC Davis continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

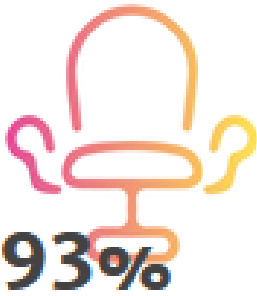
FOOD



**\$11.1M+**  
total spend on food and beverages

**12.3%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

PROCUREMENT



**93%**

green spend on indoor office furniture



**59%**

green spend on cleaning supplies



**79%**

green spend on electronics

UC Davis's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

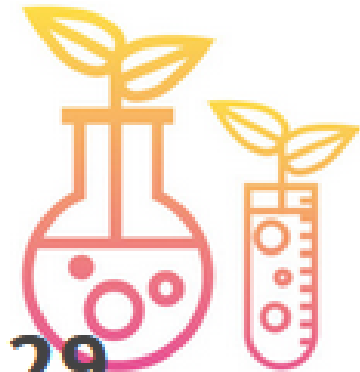
GREEN BUILDING

UC Davis received 4 Gold LEED certifications in 2020.



SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Davis has met the goal of assessing three labs.

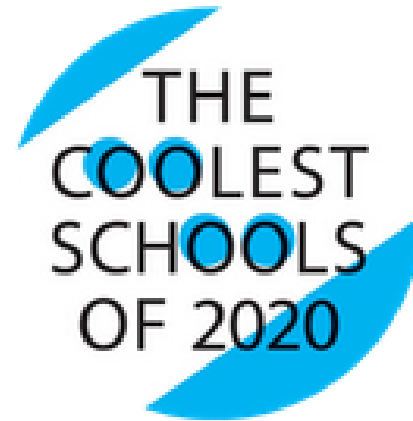


total assessed research labs

## AWARDS

UC Davis was the proud recipient of several sustainability awards in 2020.

A full list of awards is [here](#).



[Sierra Cool School](#)



[AASHE STARS Gold rating](#)

UNIVERSITY OF CALIFORNIA

# Davis Health



UC Davis Health is committed to advancing sustainability as a pillar of the Sacramento community. This commitment is reflected in numerous awards and honors.

In 2020, UC Davis Health achieved multiple distinctions for sustainability — it was [honored with multiple Practice Greenhealth](#) awards for environmental excellence, recognized as [One of America's Best Employers for Diversity](#) and earned the [Best Workplaces for Commuters National Standard of Excellence](#).

Other awards included the [James Beard Foundation's](#) Smart Catch Leader designation. UC Davis Health is for the second year in a row the only hospital in the nation to achieve this recognition, due to continual increases in the procurement of local and sustainable fish. Also, UC Davis Health was named to the [Good Food 100](#) restaurants list, which aims to measure how restaurants contribute to their local economies and are building better food systems.

On another front, UC Davis Health exceeded its fiscal year 2020 goal of reducing red bag waste by 2% (or 26,000 pounds) by achieving a 14% reduction (or 182,000 pounds).

In the past year, UC Davis Health completed several projects that will reduce its water use by more than 2 million gallons a year. These projects included converting toilets to dual-flush, converting faucets to low-flow, [replacing a once-through cooling medical air system](#) and improving the efficiency of the campus's cogeneration plant.

Last fall, UC Davis Health, in partnership with the Sacramento Municipal Utility District, hosted a successful [California Clean Air Day](#), which offered an all-electric ride-and-drive event with the goal of reducing local ground-level ozone air pollution caused by car and truck emissions. And, after two years of planning and preparation, this year the health system unveiled an all-electric, zero-emission [bus service](#) connecting the Davis and Sacramento campuses.



## The Causeway Connection: An All-Electric Bus Service



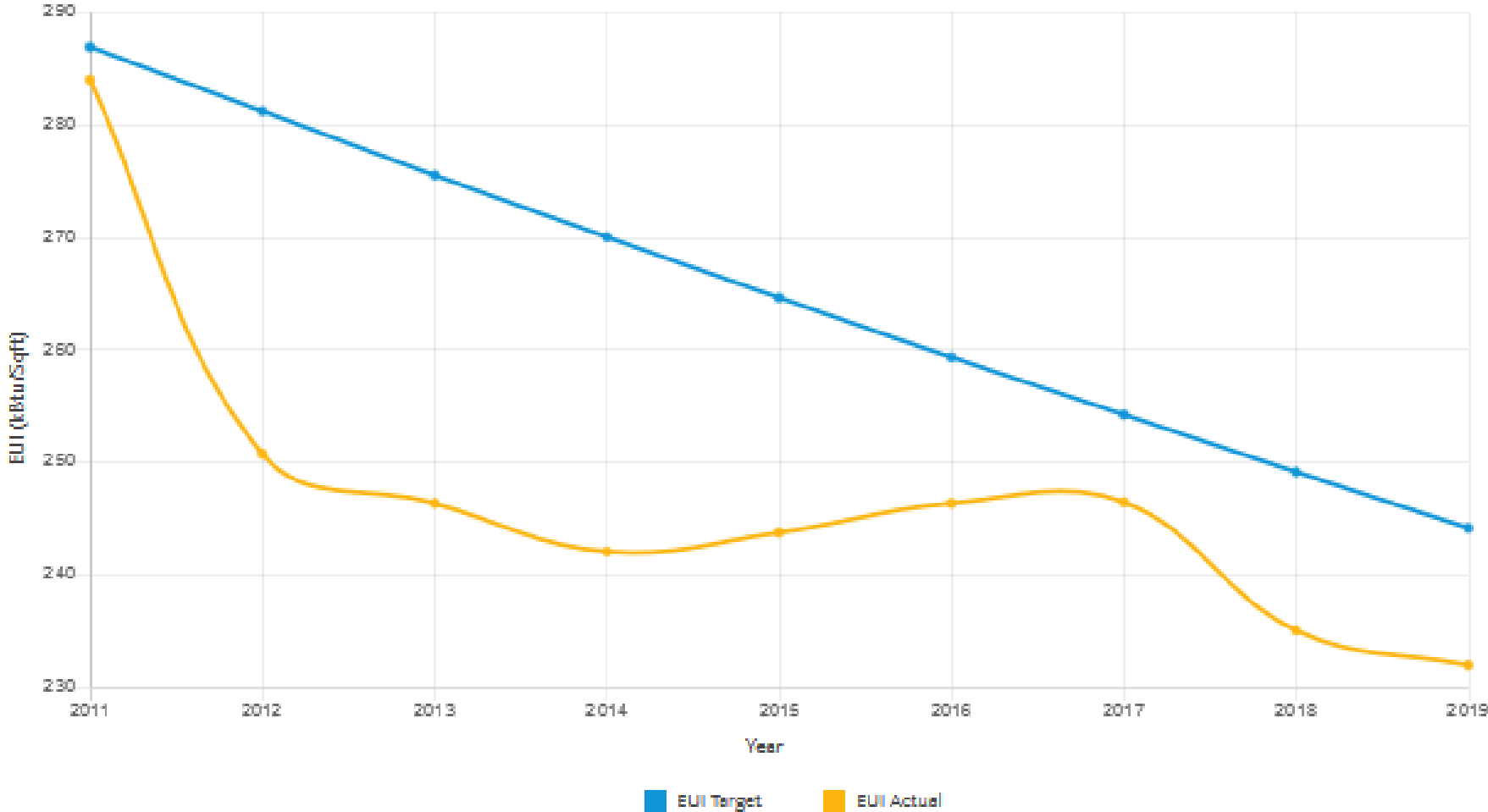
The pandemic did not slow down green transportation options for Sacramento-based UC Davis Health, which partnered with the UC Davis campus in May to launch an all-electric bus service — the [Causeway Connection](#) — linking the two sites, which are divided by 18 miles of highway. By switching from diesel to electric buses and offering expanded route timing, regional emissions and congestion on the I-80 Causeway will be reduced.

## The Causeway Connection: An All-Electric Bus Service

The Causeway Connection was made possible through a partnership with SacRT and YoloBus, regional transportation entities, which, together with UC Davis Health and the UC Davis campus, were awarded Electrify America funds to purchase 12 zero-emission buses. These new buses offer WiFi, USB charging ports at each seat and real-time tracking so riders can follow a bus along its route. When fully ramped up, the buses will make 52 trips daily between the UC Davis and UC Davis Health campuses.

In light of the COVID-19 crisis, operators of the Causeway Connection have been diligent about keeping their fleet clean and sanitized for all riders and bus operators, and urged riders to follow scientific guidelines to protect themselves against infection of the coronavirus. This milestone is yet another example of UC Davis Health's commitment to sustainability, the reduction of greenhouse gas emissions and air pollution, and the [Green Commuter](#) program, which includes carpooling, vanpooling, biking and walking.

ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

UC Davis Health continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



**21%**

of UCD Health employees are utilizing alternative commuting methods



**18**

EV charging stations at this location for 2019-2020



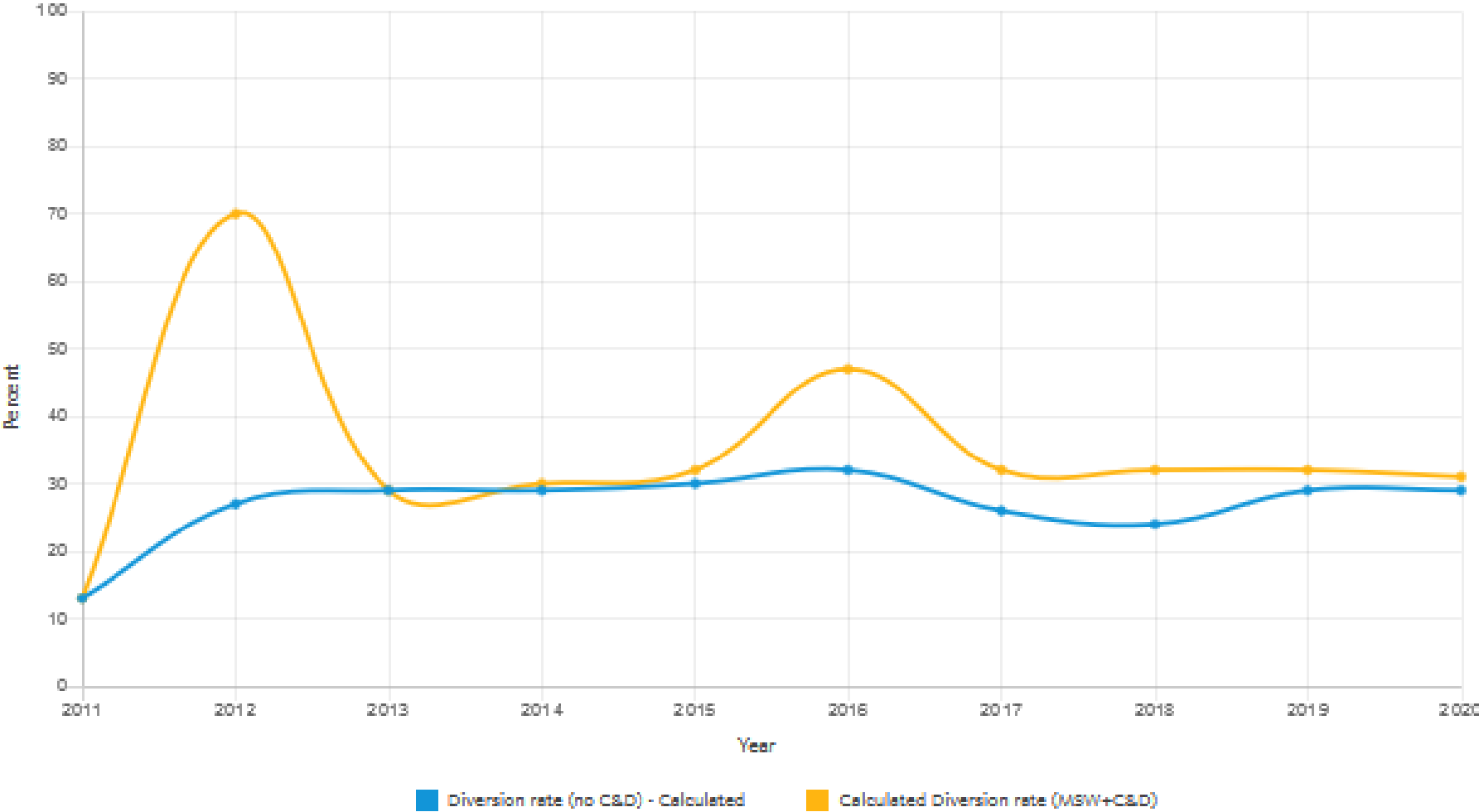
**77%**

of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

WATER



ZERO WASTE - DIVERTED



UC Davis Health was the proud recipient of a Practice Greenhealth Emerald Award in 2020.

A full list of awards is [here](#).



[Practice Greenhealth Emerald Award](#)

FOOD



**\$6.4M+**  
total spend on food and beverages

**42.3%**  
of food and beverage purchases  
met sustainability criteria in fiscal  
year 2019-20

UC Davis Health continues to set ambitious goals, with a goal for 2030 of 30% spend on sustainable food and beverages.

UNIVERSITY OF CALIFORNIA

# Irvine





This past year, UC Irvine has demonstrated its ongoing commitment to the goals outlined in the [UC Sustainable Practices Policy](#), as evident in its perseverance to achieve sustainable progress in the midst of the COVID-19 crisis.

The construction and completion of two new student housing projects highlight UCI's creativity and innovation in green building design. [Plaza Verde Student Apartments](#) opened to over 1,400 students in fall 2019 and is the campus's first all-electric student housing project, eliminating the need for natural gas by utilizing heat pump water heaters and an electric outdoor grill system. The [Middle Earth Towers](#) house 500 first-year students in a project with LEED Platinum certification that incorporates features such as a 50-kilowatt photovoltaic system, natural ventilation and stormwater treatment systems that include green roofs.

UCI also participated in the procurement of electricity for direct access accounts through the [UC Power Program](#), which is 100% carbon-free. Additionally, in a collaborative greenhouse research project, 7,500 square feet of turfgrass was replaced with native and nonnative drought-tolerant plants, saving approximately 75,000 gallons of water per year.

As the campus shifted to remote learning and work due to the escalating global pandemic, sustainability champions across campus quickly adapted to developing virtual tools and resources. [The Sustainability Spot](#), a student-run blog, serves as an outlet for sharing research, experiences and hopes for the future. [The Sustainability Corner](#) was created to provide a behind-the-scenes look into campus operations and to empower greater sustainable behavior while working remotely or on campus. [The Sustainability Resource Center](#) built a [Virtual Earth Week Platform](#), showcasing a breadth of programs and opportunities around the world, receiving over 600 visits throughout the week.

**Orange County Health Equity  
Community-Academic Partnership with  
UC Irvine Trains Community Members to  
Conduct Contact Tracing**



The coronavirus pandemic has exacerbated long-standing social, economic and political inequities in the U.S., with disproportionate morbidity and mortality from COVID-19 in low-income communities of color. In May 2020, the [Orange County Health Equity COVID-19 Community-Academic Partnership](#) was formed to assert a health equity approach to mitigating and eliminating the effects of COVID-19.

Over the summer, [UCI Community Resilience Projects](#) connected the partnership with [UCI Public Health](#) to ensure that local contact tracing training prioritizes issues of health equity. The monthlong curriculum trained 300 health practitioners, students, community leaders and residents in English and Spanish to:

## Orange County Health Equity Community-Academic Partnership with UC Irvine Trains Community Members to Conduct Contact Tracing

- Gain foundational knowledge of COVID-19 health science and health equity as an outcome and approach to response efforts.
- Build essential COVID-19 response skills.
- Help shape and communicate a proactive narrative around the causes of and strategies to address COVID-19 as part of a larger effort for racial equity.
- Engage the community in navigating current systems and structures and in transforming the conditions that have led to disproportionate impacts on Black, Latinx, Asian American, Pacific Islander, immigrant and Indigenous communities.

Participants believe that building local resilience is not about returning to pre-pandemic conditions; rather, it means moving forward to create the public health and safety interventions needed for health equity. UCI Community Resilience Projects uses this approach to support community-driven climate resilience strategies. It is now poised to harness the health equity training infrastructure to inform efforts to transform local climate policies and practices that put health and equity for all people at the center of sustainability work.

## FRESH Basic Needs Hub Creates Innovative Food and Housing Security Solutions During the Pandemic

The UCI [FRESH Basic Needs Hub](#) is dedicated to supporting students with basic food and housing security through the provision of resources, tools and accessibility. Deemed an essential service, FRESH has continuously demonstrated resilience and its commitment to students during the COVID-19 pandemic.

FRESH quickly adapted its programs and resources during the pandemic to align with social distancing and safety guidelines. Designated [pantry food distribution](#) dates were established and organized through an online appointment system, enabling staff to reduce lines and limit the amount of time students spent picking up orders. Students pre-request food boxes, with options from produce, dairy, protein and nonperishable staples boxes. From April to August 2020, the pantry food distributions received over 2,700 visits, and continue to operate through the academic year.

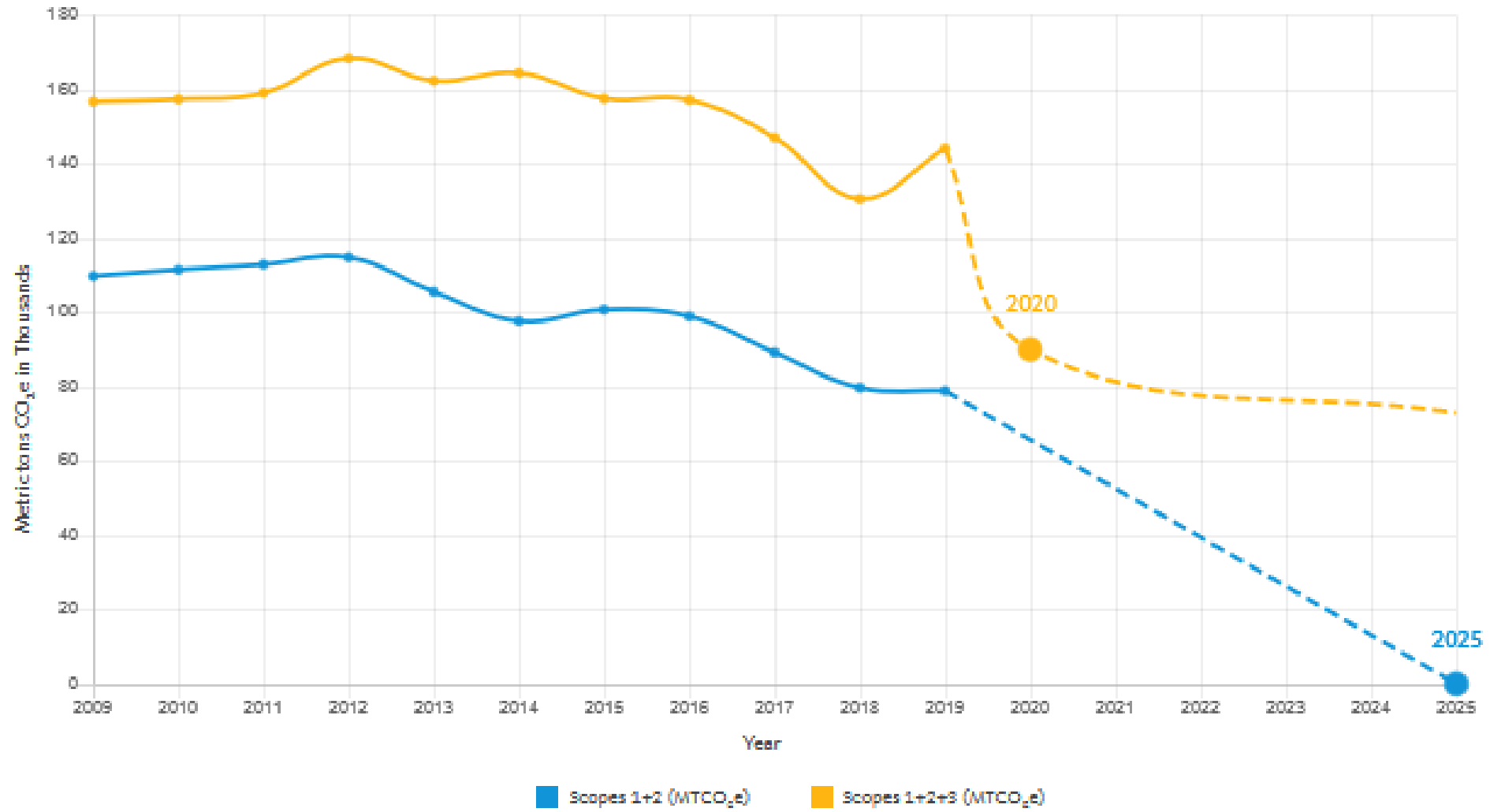


## FRESH Basic Needs Hub Creates Innovative Food and Housing Security Solutions During the Pandemic

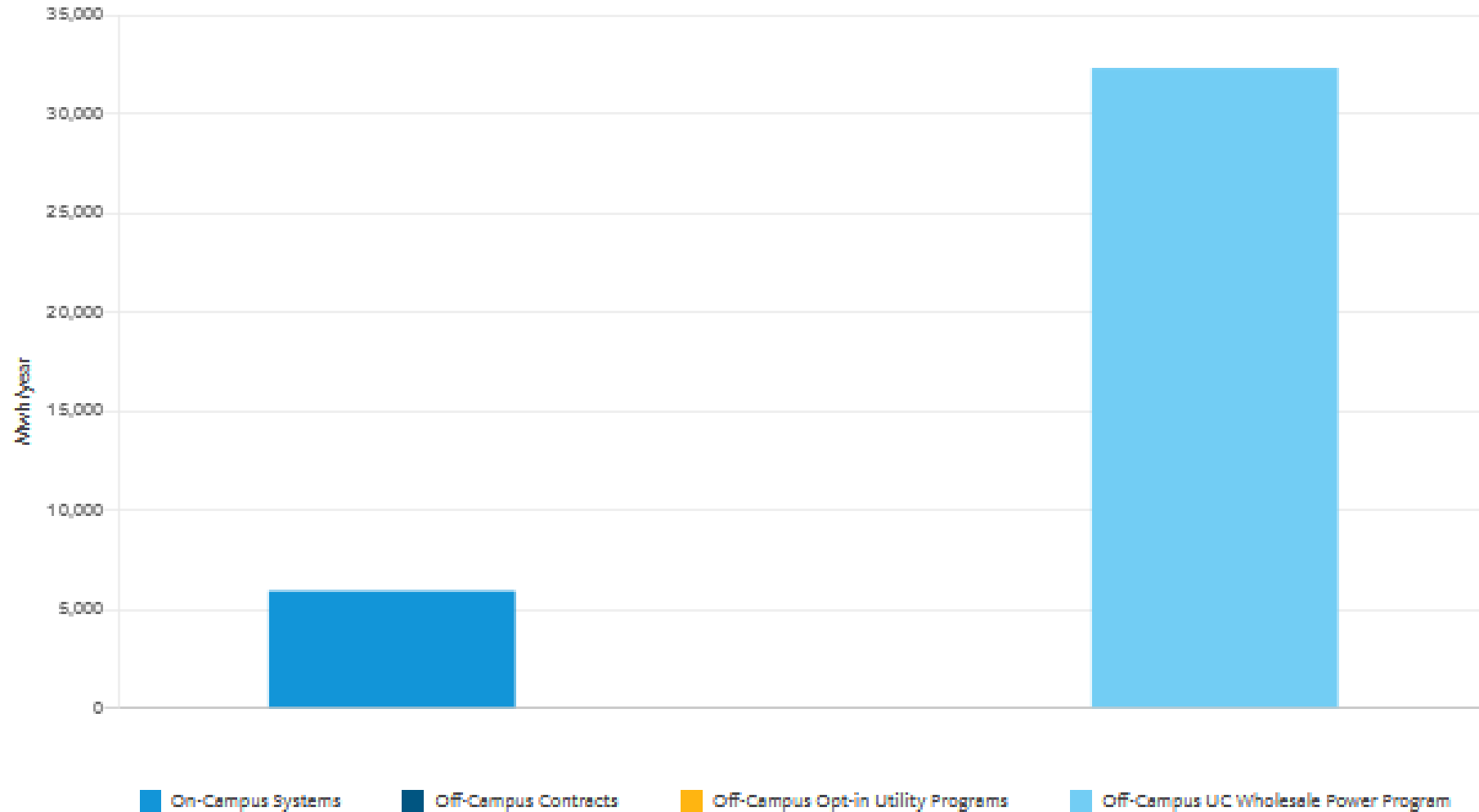
Additional access to fruits and vegetables was developed through a community partnership with Tanaka Farms, located three miles from UC Irvine's campus. The [Farm-to-FRESH Produce Voucher Program](#) provides students up to four monthly \$30 vouchers at Tanaka Farm's drive-through stand. Over 4,700 produce vouchers were redeemed during the span of five months, with the program continuing to serve to this day. Also, UCI's Ants in Your Plants Garden was recently certified as a food donation site in partnership with ASUCI and FRESH.

FRESH also plays a crucial role in promoting housing security opportunities during the pandemic, including by offering the [Off-Campus Housing Support Grant](#). This grant helps alleviate financial pressure for students paying for off-campus rental housing within Orange County, allowing one-time requests of up to \$2,000. In spring 2020, the grant supported 340 students, with a total of \$321,485 awarded.

### CLIMATE PROTECTION – EMISSIONS

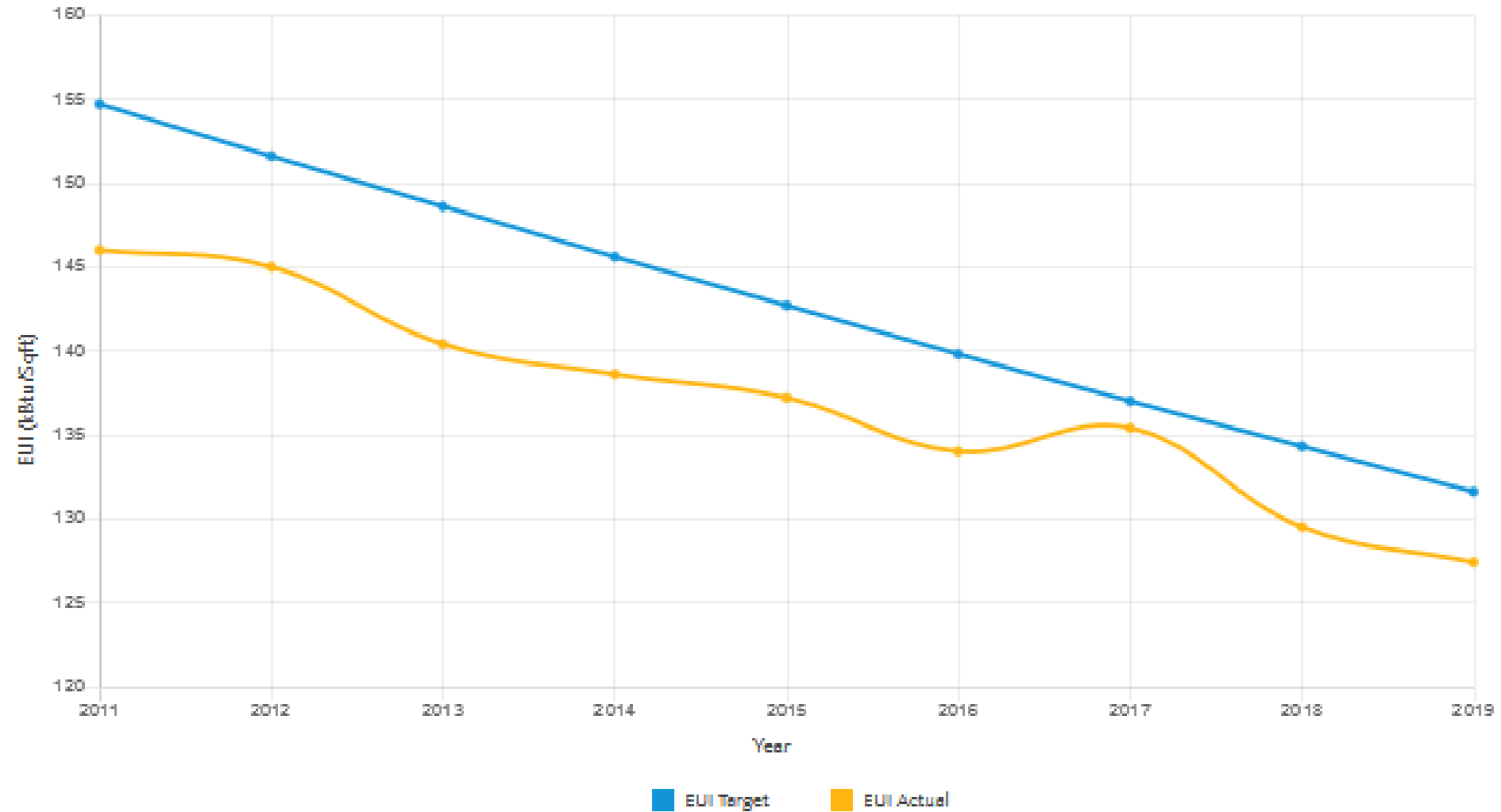


ENERGY – RENEWABLE ELECTRICITY GENERATION



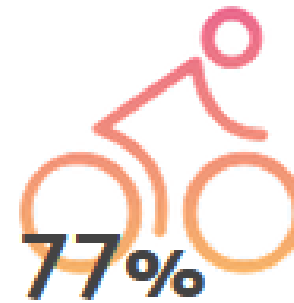


### ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

UC Irvine continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



**77%**  
of UCI employees are utilizing alternative commuting methods

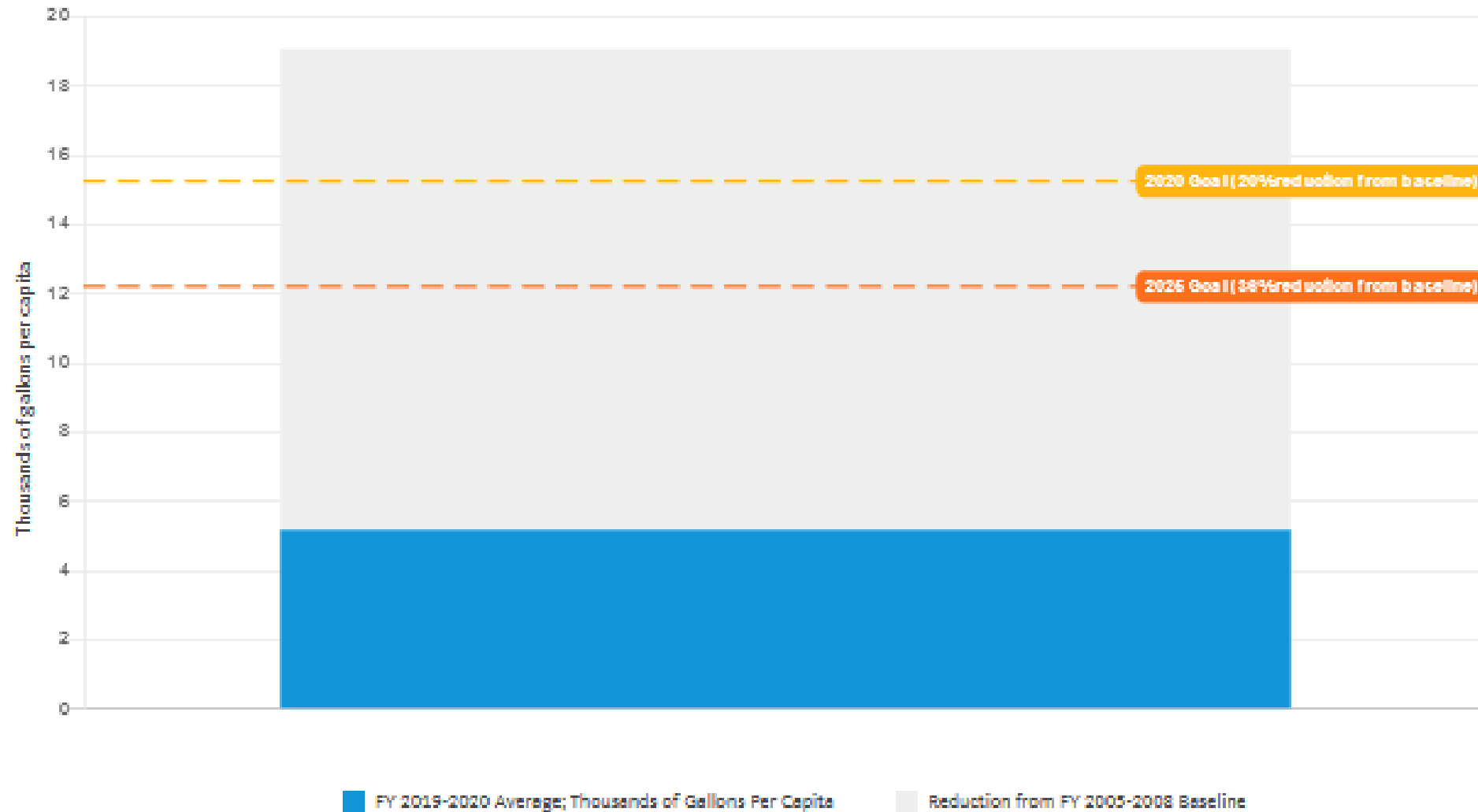


**181**  
EV charging stations at this location for 2019-2020

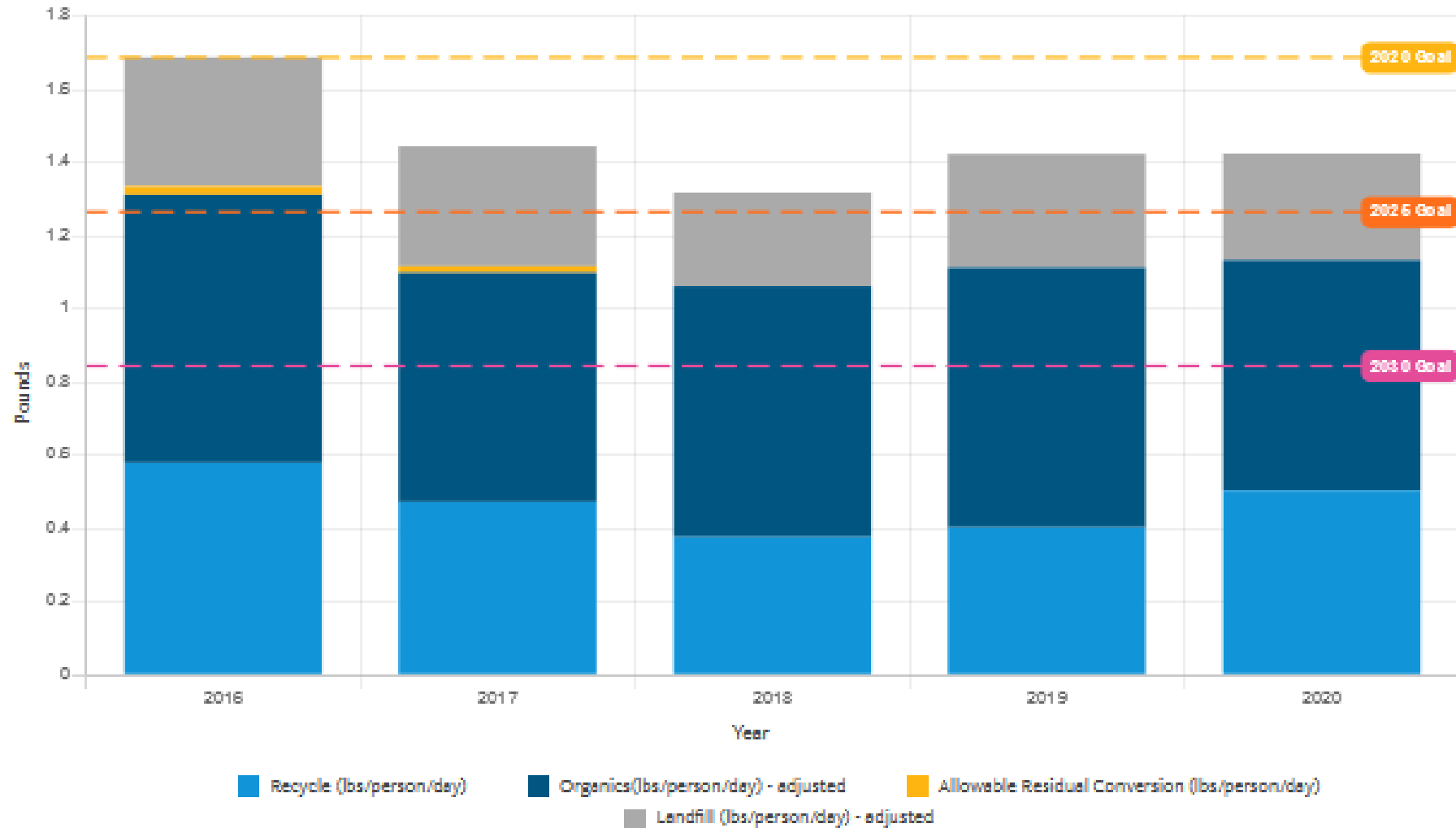


**97%**  
of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

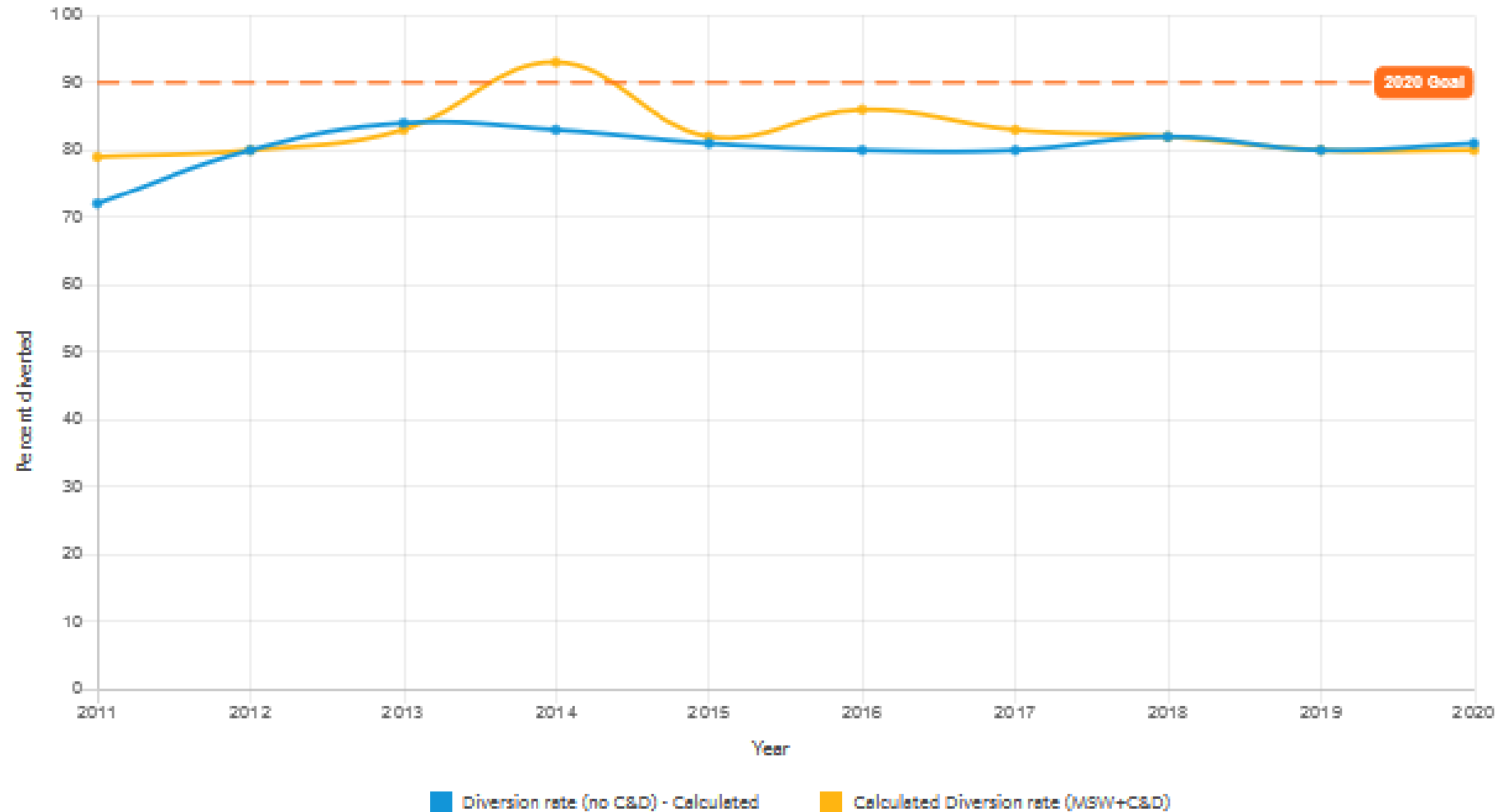
### WATER



ZERO WASTE – GENERATED



### ZERO WASTE – DIVERTED



UC Irvine continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

## FOOD



**\$7.7M+**  
total spend on food and beverages

**13.7%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

## PROCUREMENT



**32%**  
green spend on indoor office furniture



**37%**  
green spend on cleaning supplies



**72%**  
green spend on electronics

UC Irvine's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

## GREEN BUILDING

UC Irvine received 1 Platinum LEED certification in 2020.

18 Platinum, 12 Gold, 4 Silver and 2 Certified

– Total number of LEED certifications

## SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Irvine has met the goal of assessing three labs.



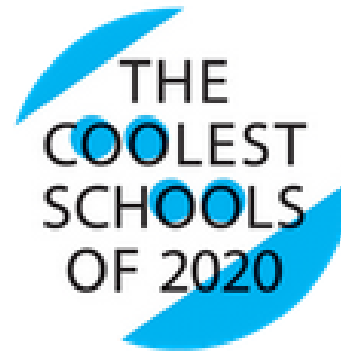
5

total assessed research labs

## AWARDS

UC Irvine was the proud recipient of several sustainability awards in 2020.

A full list of awards is [here](#).



[Sierra Cool School](#)



[Princeton Review Green Schools, Top 30](#)



[AASHE STARS Platinum rating](#)



UNIVERSITY OF CALIFORNIA

# Irvine Health



In 2020, UCI Health was awarded the [Practice Greenhealth Partner Recognition](#) award for progress toward environmental performance goals. UCI Health continues to focus on expanding all sustainability programs.

For example, UCI Health's [Water Management Program](#) continues to save water in its new central chiller plants. The hospital campus's water reduction per capita is 44%, an 11% decrease from last year. UCI Health continues to implement a water monitoring program and reduce potable water consumed for irrigation. Ongoing capital projects centralizing HVAC systems are estimated to reduce water demand by 1.5 millions of gallons per year.

UCI Health's current energy management program includes a recently completed 1.9-megawatt energy storage system. This storage system will allow UCI Health to divert energy from the grid to batteries during periods of peak demand and expense. Projects like these enable UCI Health to support local grid resiliency by reducing demand when the grid is near capacity due to higher temperatures, outages due to wildfires or other local conditions that create the likelihood of power outages. UCI Health also continues to purchase 100% carbon-free electricity for direct access accounts through the [UC Clean Power Program](#).

UCI Health recently established a Waste Reduction Committee and has rolled out the first phase of a recycling infrastructure project. In addition to installing dual-station smart bins throughout the medical center campus, the hospital campus has reached a diversion rate of 50%. Reducing waste in the operating rooms is a priority for UCI Health; last year, the hospital campus reprocessed over 12,000 pounds of medical devices and plans to enhance the program next year. The health system continues to donate outdated and unused medical equipment and supplies to Not Just Tourists, diverting over 3,500 pounds last year.

In April 2019, UCI Health contracted with a new food management company that has implemented small-batch cooking to improve quality and reduce waste, rolled out the Waste Not program (donating over 1,500 pounds of suitable leftovers so far) and partnered with Chefs to End Hunger, a program that supports local food banks.

Finally, like many health systems across the country, COVID-19 consumed UCI Health's operations and required innovation and adaptation to an unprecedented situation. UCI Health implemented a variety of innovative programs that included using surgical wrap to make masks and collecting and reprocessing personal protective equipment.

## TRANSPORTATION

UC Irvine Health continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



of UCI Health employees are utilizing alternative commuting methods

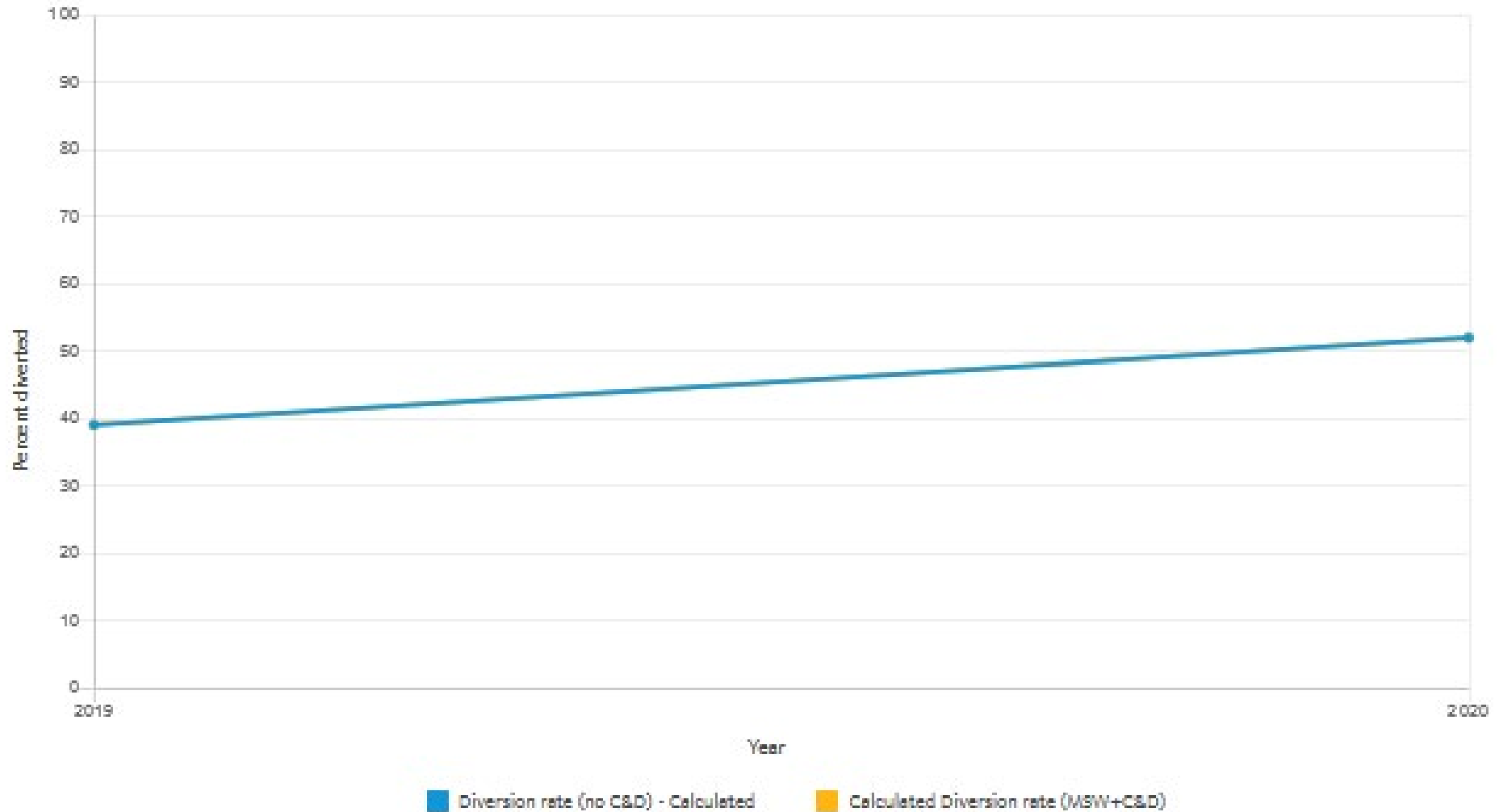


EV charging stations at this location for 2019-2020

WATER



### ZERO WASTE - DIVERTED



## FOOD



**\$3.8M+**

total spend on food and beverages

**9.7%**

of food and beverage purchases  
met sustainability criteria in fiscal  
year 2019-20

UC Irvine Health continues to set ambitious goals, with a goal for 2030 of 30% spend on sustainable food and beverages.

## AWARDS

UC Irvine Health was the proud recipient of a Practice Greenhealth Partner Recognition Award in 2020.

A full list of awards is [here](#).





UNIVERSITY OF CALIFORNIA

UCLA



In 2019, UCLA significantly expanded renewable energy through a historic rate agreement with the Los Angeles Department of Water and Power for 10 megawatts of off-site solar.

In a study supported in part by the [Sustainable LA Grand Challenge](#) and published in Nature Sustainability, researchers described a pathway for California to achieve [net-zero greenhouse gas emissions by 2050](#).

UCLA's Grand Challenge, which includes research and recommendations from over 150 faculty members and researchers, also released the only comprehensive analysis of the [region's water systems](#), the [Sustainable LA Grand Challenge Report Card on Los Angeles County Water](#). Additionally, UCLA researchers published the [Biodiversity Atlas of Los Angeles](#), a new website to help scientists and residents better understand Los Angeles' unique environment and see how [native, nonnative and endangered species](#) are distributed across the county.

UCLA improved its [water reclamation program](#), bringing total gallons saved to almost 40 million annually, and initiated a pilot program in chemistry labs to reduce water consumption. The Green Labs program also assessed 22 laboratories, certified four labs and engaged hundreds of campus researchers in sustainability.

UCLA's new parking permit system, [Bruin ePermit](#), replaced physical permits with license plate recognition, reducing waste and giving commuters flexibility to participate in sustainable transportation programs and pay for parking as needed. The League of American Bicyclists awarded UCLA the [Gold Bicycle Friendly University designation](#), placing UCLA among the top 15% nationally.

In dining, Café 1919 received a three-star certification from the Green Restaurant Association. The Impossible Foodprint Project, launched in fall 2019, introduced plant-based meat and transparency about the [carbon footprint of various menu items](#). Low-carbon and high-carbon menu icons were added to residential restaurant menus.

To advance zero waste goals, UCLA developed a [single-use plastics policy](#) with timelines ahead of the systemwide policy. Housing and Hospitality expanded composting by repurposing landfill chutes to compost chutes and adding in-room compost bins in all residence halls.

## An Opportunity for Green Commuting



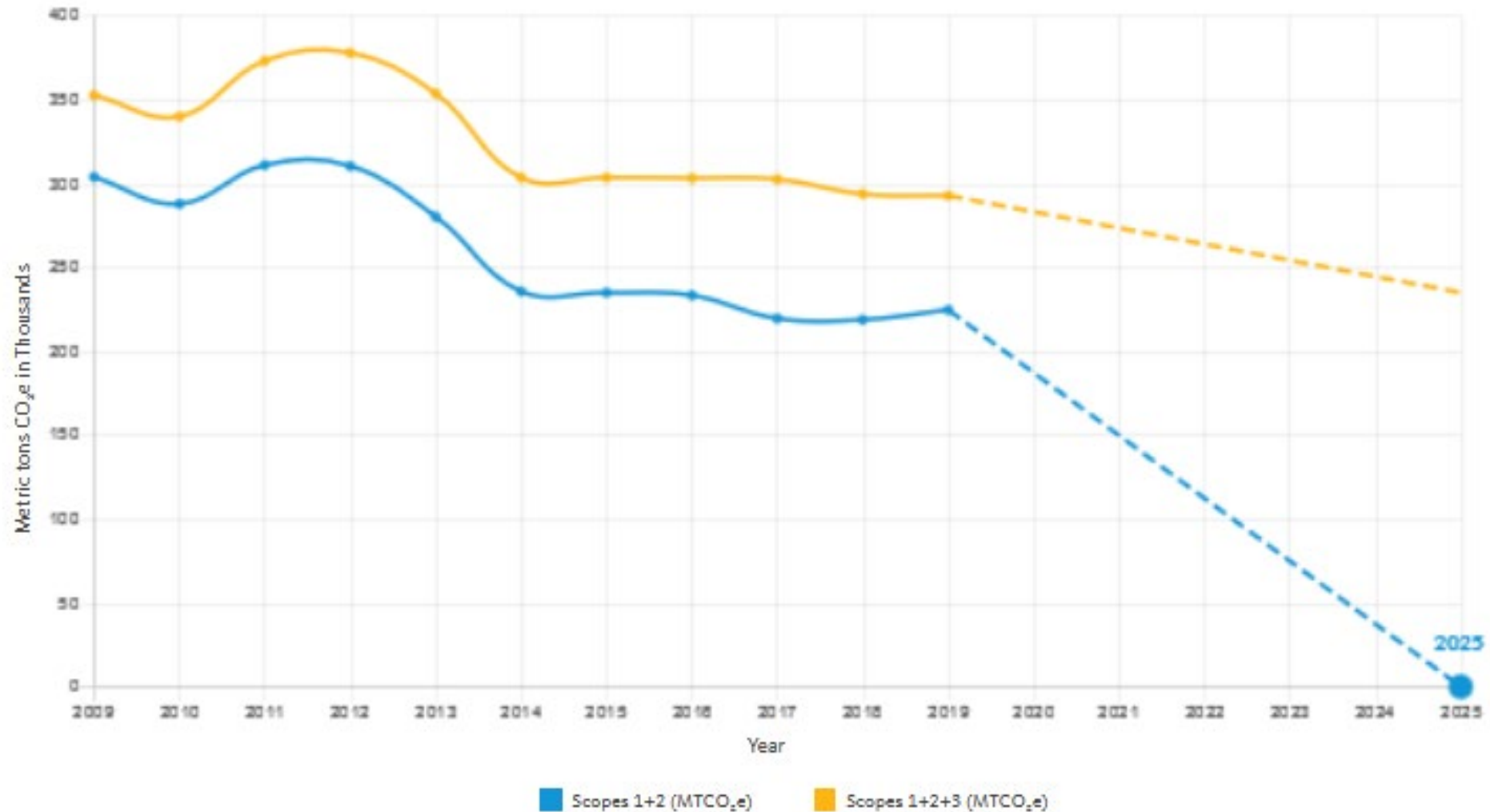
In this podcast, Dr. Wendy Slusser chats with Renee Fortier, the executive director of UCLA Events and Transportation, about how UCLA has responded to ensure safe transportation during these uncertain times.

## UCLA Fielding School of Public Health Team Leading California State Study of Air Pollution and COVID-19

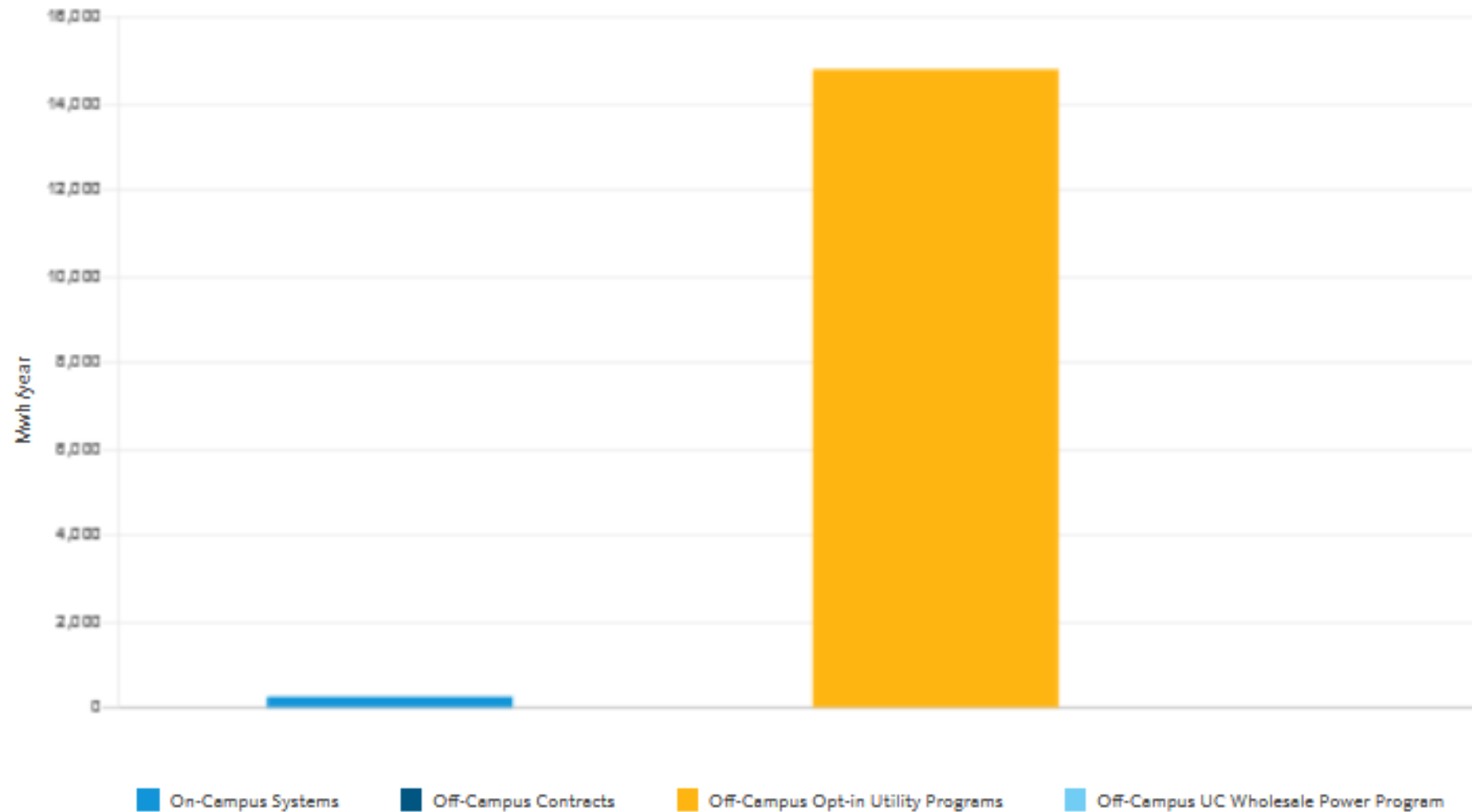


A research team led by [UCLA Fielding School of Public Health](#) faculty has been awarded a contract by the California Air Resources Board to study connections between air pollution and the COVID-19 pandemic.

### CLIMATE PROTECTION – EMISSIONS

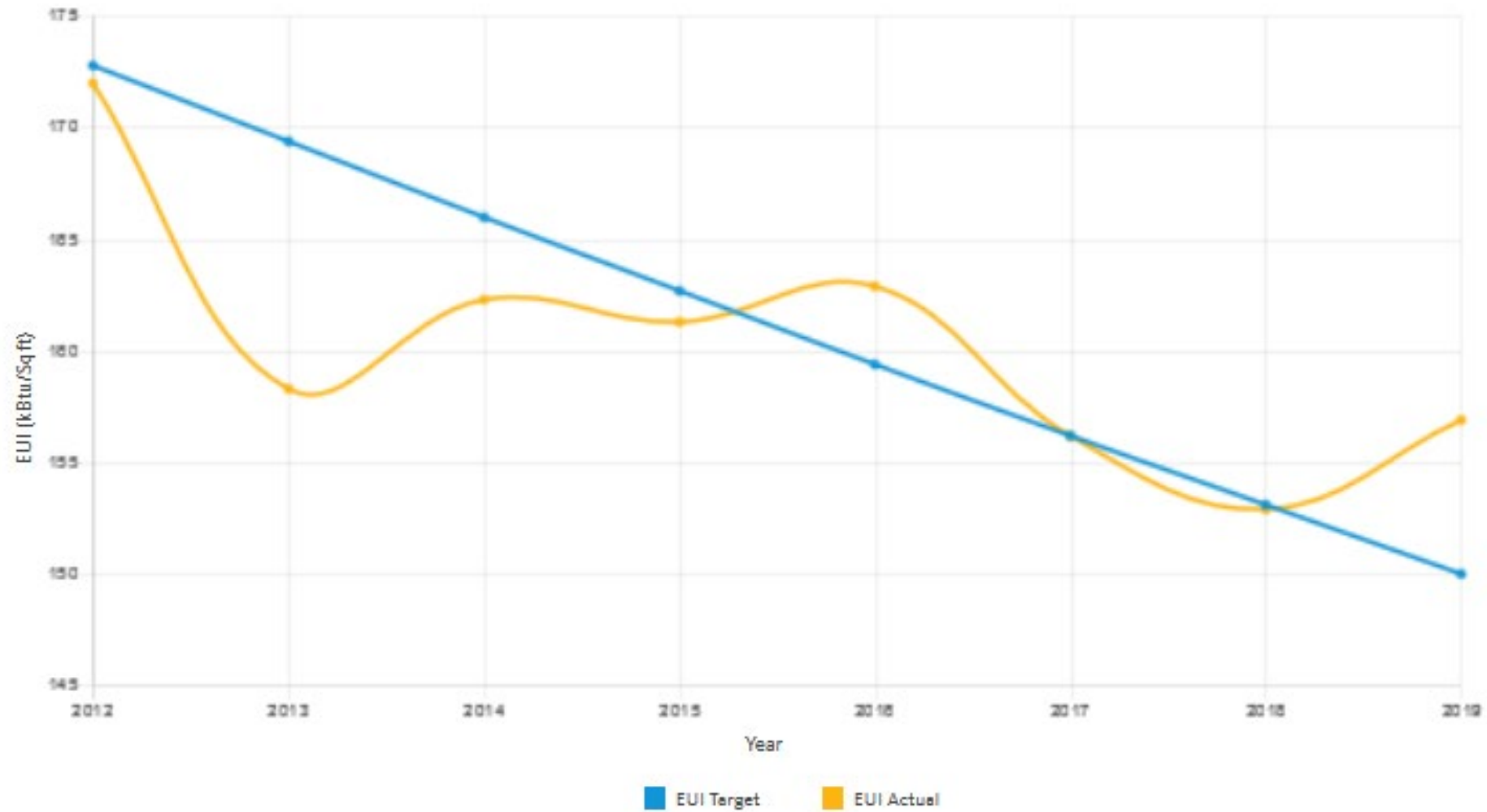


### ENERGY – RENEWABLE ELECTRICITY GENERATION





### ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

UCLA and Ronald Reagan Medical Center continued to make strides in their efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



**52%**

of UCLA employees, including those at Ronald Reagan Medical Center, are utilizing alternative commuting methods



**442**

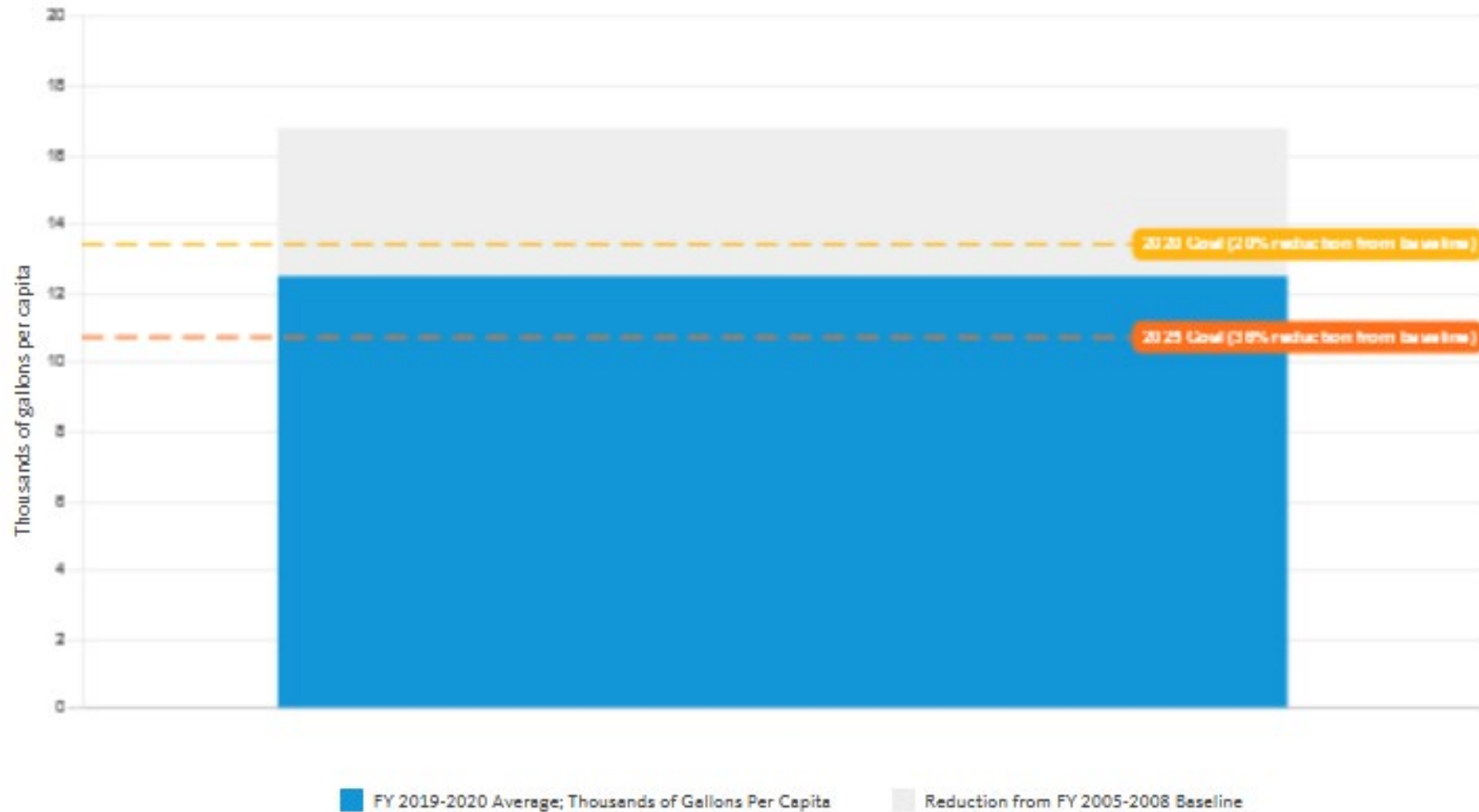
EV charging stations at this location for 2019-2020



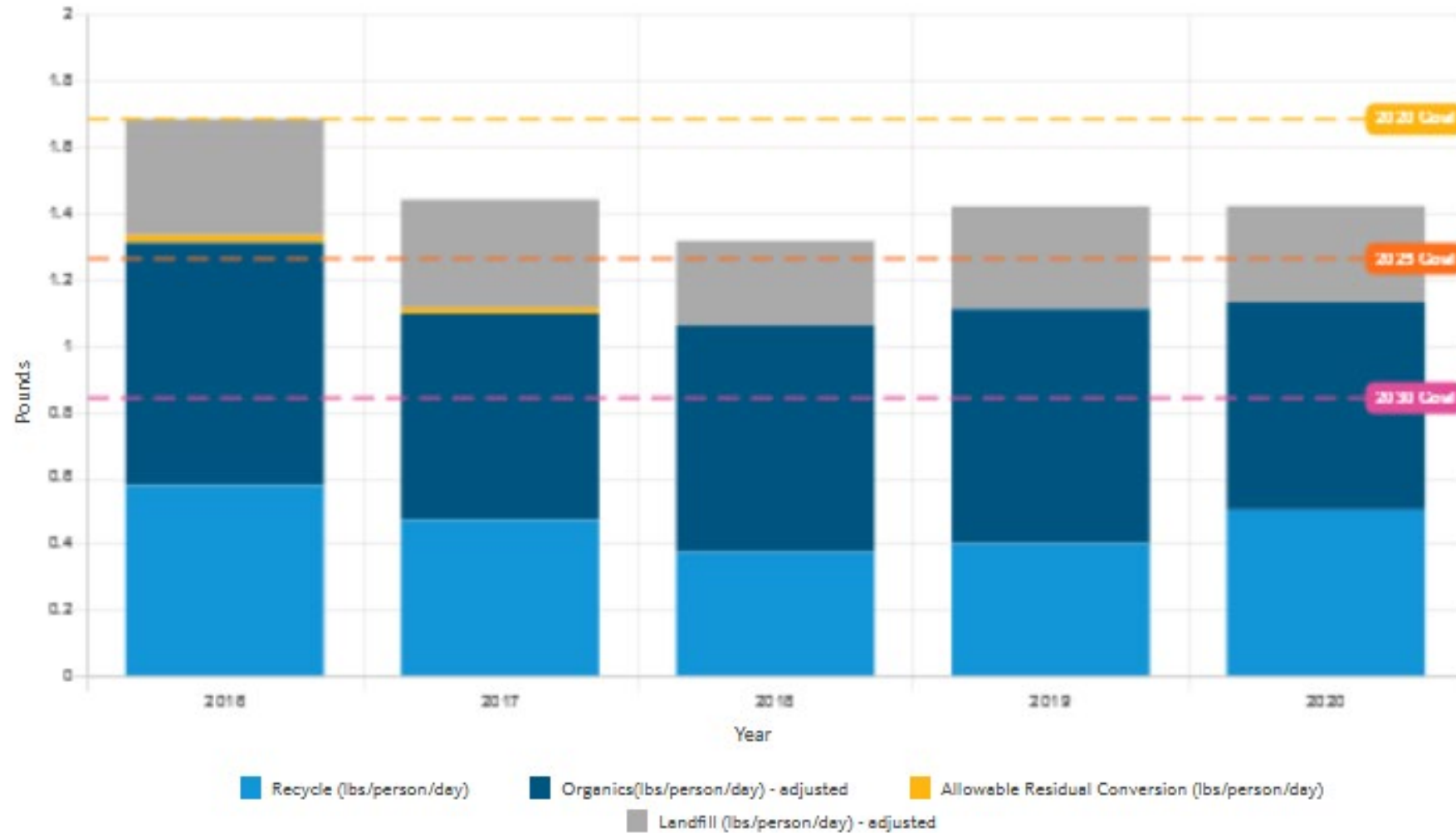
**57%**

of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

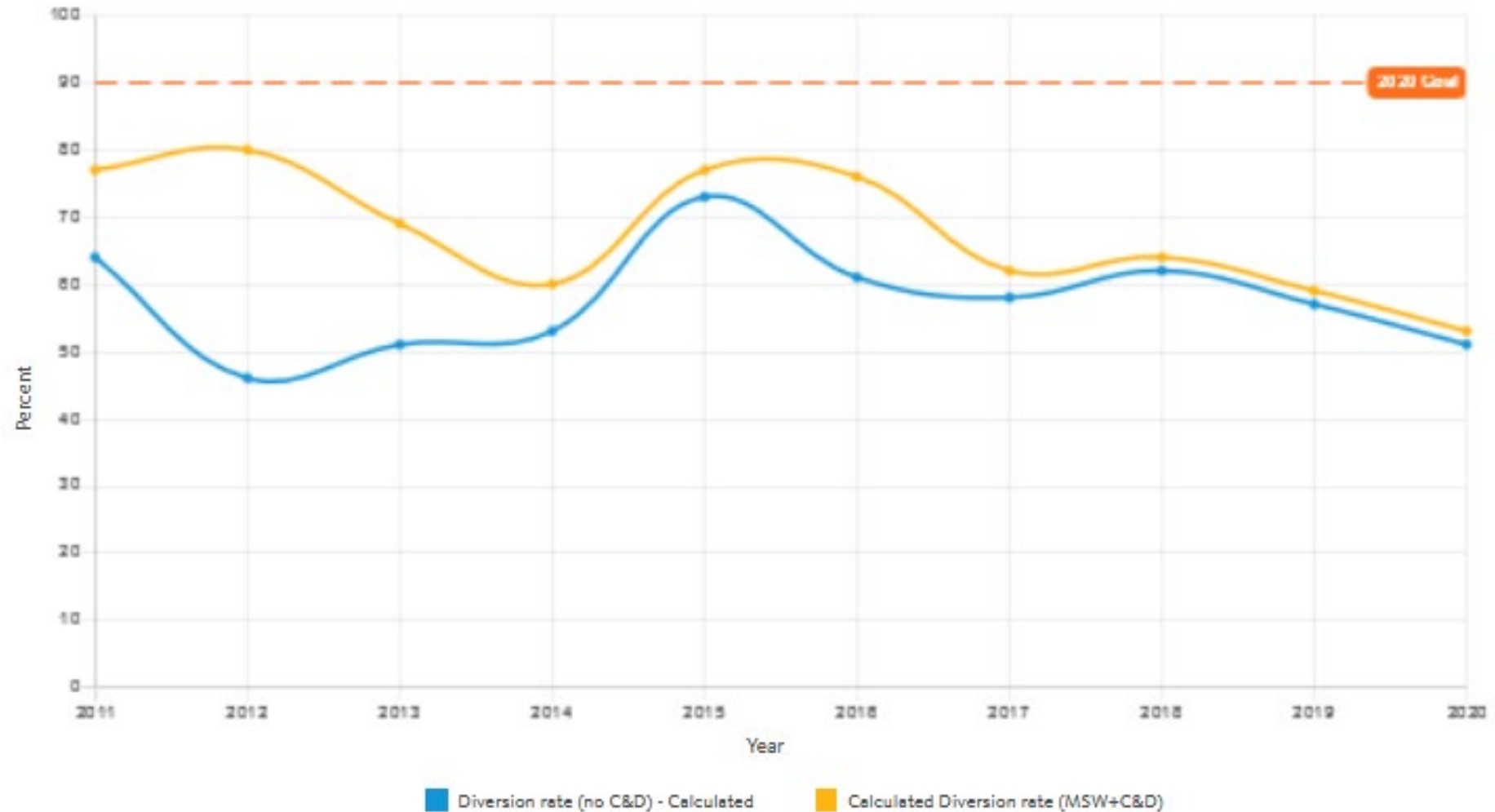
### WATER



ZERO WASTE – GENERATED



### ZERO WASTE – DIVERTED



UCLA continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

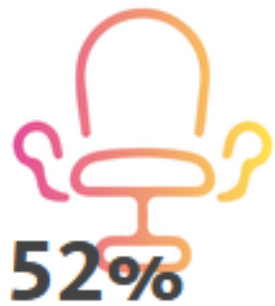
## FOOD



**\$19M+**  
total spend on food and beverages

**7.4%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

## PROCUREMENT



**52%**

green spend on indoor office furniture



**46%**

green spend on cleaning supplies



**63%**

green spend on electronics

UCLA's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

## GREEN BUILDING

UCLA received 1 platinum and 3 gold LEED certifications in 2020.

16 Platinum, 27 Gold and 10 Silver

- Total number of LEED certifications

## SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UCLA has met the goal of assessing three labs.



## AWARDS

UCLA was the proud recipient of an AASHE STARS Gold rating in 2020.

A full list of awards is [here](#).



[AASHE STARS Gold rating](#)



UNIVERSITY OF CALIFORNIA

# UCLA Health



UCLA Health was awarded the Practice Greenhealth (PGH) [Top 25 award](#) in 2020 for its Ronald Reagan Medical Center, and Emerald Award for its Santa Monica Medical Center.

UCLA Health was also recognized for its Greening the Operating Room initiatives and green building practices through PGH. (PGH is the industry body for sustainability in health care.)

Like many health systems across the country, COVID-19 impacted UCLA Health's sustainability efforts, specifically in waste diversion. However, its staff implemented a variety of innovative programs that included collecting and reprocessing personal protective equipment such as N95 masks and face shields for reuse, expanding its reusable isolation gown program and upcycling its surgical wrap to create masks through a community partnership.

UCLA Health continued to purchase 100% renewable energy for its Santa Monica hospital through the Clean Power Alliance. It was able to reduce the number of operating room cases where desflurane — the most potent greenhouse gas anesthetic — was the primary gas from 15% to below 2%. It also saved \$340,000 through its medical device reprocessing program, sourced 33% of its food from sustainable sources and completed LED retrofits in two of its Santa Monica facilities.

Integrating sustainability into education for nursing and medical students remains a priority for UCLA Health. In addition to participating in guest lectures for nursing and medical students, UCLA Health has created a Nursing Sustainability Champions Committee to share best practices across the health system. It also continues to partner with the Fielding School of Public Health to address climate-vulnerable populations in the greater Los Angeles area.

## Responding to PPE Shortages

In the early weeks of the COVID-19 pandemic, hospital supply chains were significantly impacted and personal protective equipment (PPE) became increasingly scarce.

UCLA Health's operating room staff have for years collected and recycled surgical blue wrap — a paperlike material that protects surgical instruments — and, given PPE shortages, UCLA Health's leadership encouraged a plan to upcycle the material into surgical masks. Partnering with volunteer sewists from the International Alliance of Theatrical Stage Employees union, over 3,000 masks were created and put in circulation, which helped meet demand until supply chains recovered. Unlike single-use disposable masks, these masks were created from more durable material and could be cleaned for multiple uses. These masks also provided better filtration protection than normal surgical masks. The UCLA Health team plans to continue to upcycle the material through a partnership with UC Irvine Health.



## Responding to PPE Shortages

Stores of N95 masks and face shields were also impacted by global supply chain shortages. UCLA hospitals worked with Infection Prevention and the Materials Management and Transportation departments to collect masks from 44 hospital units to be sterilized through large UV light equipment. As of August 2020, over 80,000 masks had been cleaned and put back into circulation in the hospitals. UCLA Health is evaluating whether this program can be expanded to help divert unused excess medical supplies that end up in the landfill.

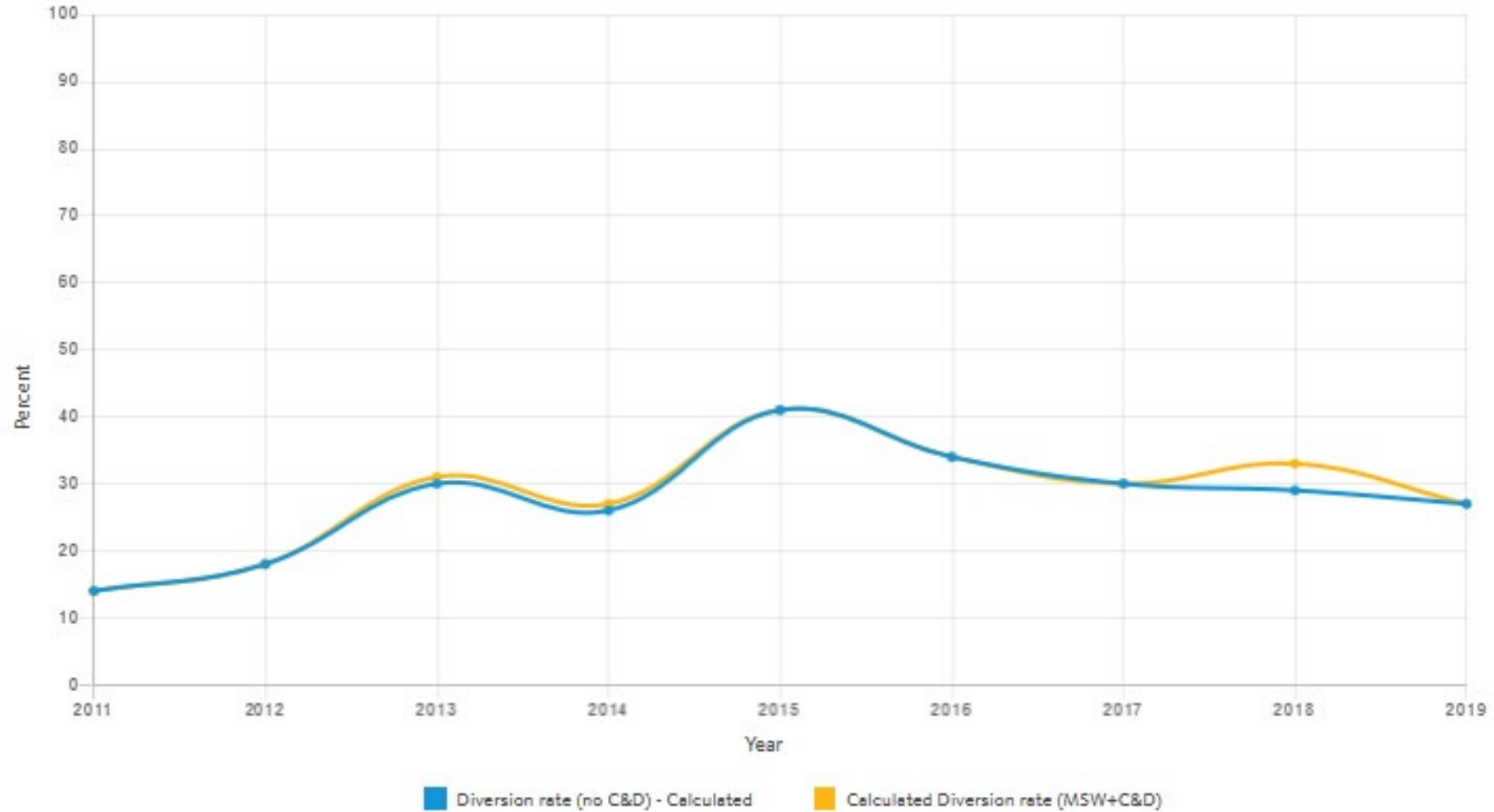
## TRANSPORTATION

UCLA Health continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles this year.



of employees at the Santa Monica Medical Center are utilizing alternative commuting methods

ZERO WASTE – DIVERTED



FOOD



**\$9.4M+**

in sustainable food and beverage purchases

**28.3%**

of food and beverage purchases met sustainability criteria in fiscal year 2019-20

UCLA Health continues to set ambitious goals, with a goal for 2030 of 30% spend on sustainable food and beverages.

AWARDS

UCLA was the proud recipient of a Practice Greenhealth Top 25 Award in 2020.

A full list of awards is [here](#).



[Practice Greenhealth, Top 25 Award](#)



UNIVERSITY OF CALIFORNIA

# Merced



UC Merced has made significant progress toward achieving its sustainability goals as outlined in the systemwide [Sustainable Practices Policy](#) and the campus's [Sustainability Strategic Plan](#).

Most notably, the campus [achieved carbon neutrality](#) 7 years ahead of the UC system's 2025 goal. The portfolio of solutions for this achievement includes a campus solar array system that mitigates carbon emissions, an additional on-site solar installation and reductions in the carbon intensity associated with green power purchases. The portfolio also includes the purchase of offsets. (Because this data was independently verified late in 2020, UC Merced's climate data does not reflect this achievement.)

UC Merced has a total of 24 LEED certified buildings under New Construction and Existing Building Operation & Maintenance. The last certification was the Sustainability Research and Engineering (SRE) building, which earned a Platinum rating in new construction. This is one of 13 buildings from the [the Merced 2020 project](#) project that will achieve a Platinum rating.

To combat food insecurity and reduce food waste, UC Merced has implemented the successful No Food Left Behind (NFLB) program. NFLB is a text messaging service open to all UC students, staff and faculty to ensure catered food left over from events is not wasted and instead feeds the UC Merced community. Members of the campus community who opt into the texting service receive a text usually 24 hours before an NFLB event. The leftover food either must be stored properly or consumed immediately, and participants have only 15 minutes after the scheduled event to collect leftovers.

## The Pop-Up People's Pantry: Feeding Merced's Community in Need and Reducing Food Waste



**F**or the last three years, a UC Merced staff member has worked with the regional food bank to rescue food from the local farmers market each week to get items to those in need. When the coronavirus pandemic first hit, the farmers market was forced to move locations and UC Merced's partnership with the food bank became challenging. Finding itself with surplus food and facing an ever-increasing food insecurity rate in the area, UC Merced partnered with a local community garden to start the Pop-Up People's Pantry, which serves fresh, free food to the community every Saturday. The pantry was an instant success, serving an average of 35 people per week. Community members also began donating surplus produce from their gardens as the weeks wore on.

## Saving the Food and Feeding Essential Workers and the Community

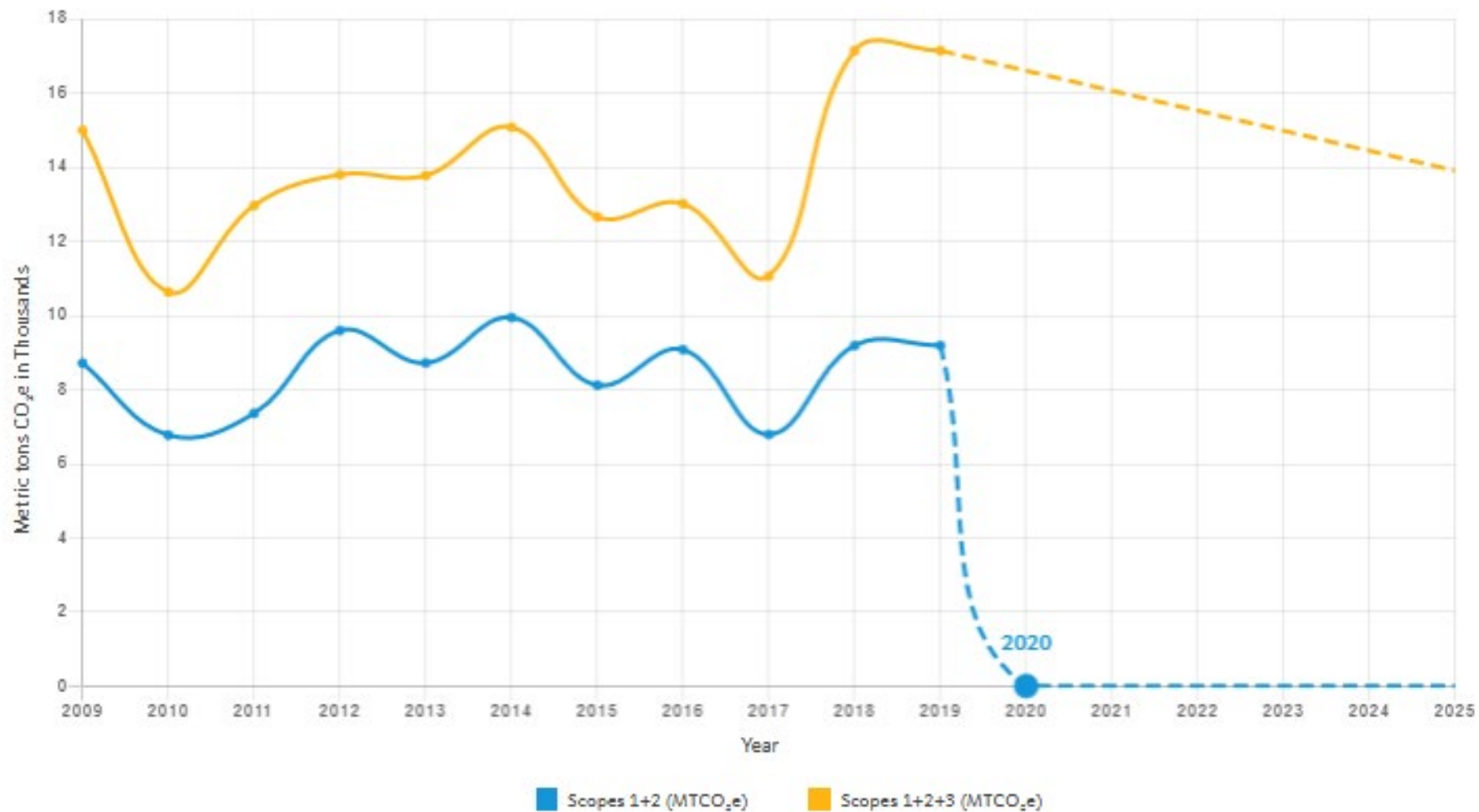
Through the Bobcat Eats Food Waste Awareness and Prevention Program, student staff, career staff and volunteers pick up surplus food and take it to those in need at various shelters, pantries, migrant camps and other sites. A great deal of this food went to the D St. Shelter, a 24-hour homeless shelter. In early summer, when the shelter stopped taking donations from the public to limit contact with others during the pandemic, the program coordinator had to quickly find a home for the food picked up from local flea markets. Numerous challenges arose in finding a new recipient, particularly one that could accept the large volume of produce (300-600 pounds) collected each week.



## Saving the Food and Feeding Essential Workers and the Community

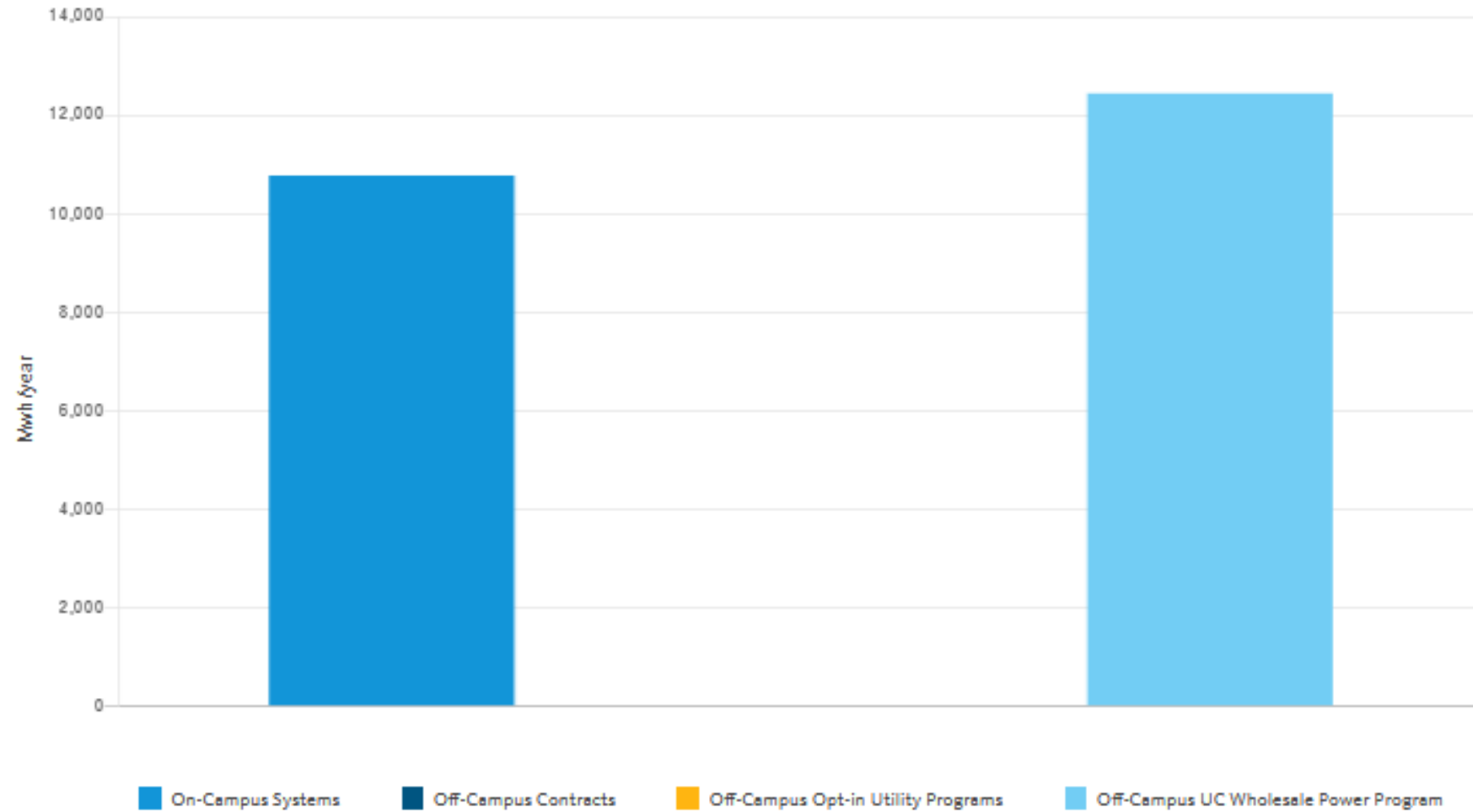
After some creative problem-solving, the coordinator reached out to Merced County fire stations to see if the essential workers needed food for their families. They agreed to take 10 boxes per week. Any additional produce would then be distributed in smaller quantities to a women's shelter, local migrant camps and among UC students. Through this test in patience and resilience, the program has truly lived up to its slogan: Save the food. Feed the people.

CLIMATE PROTECTION – EMISSIONS



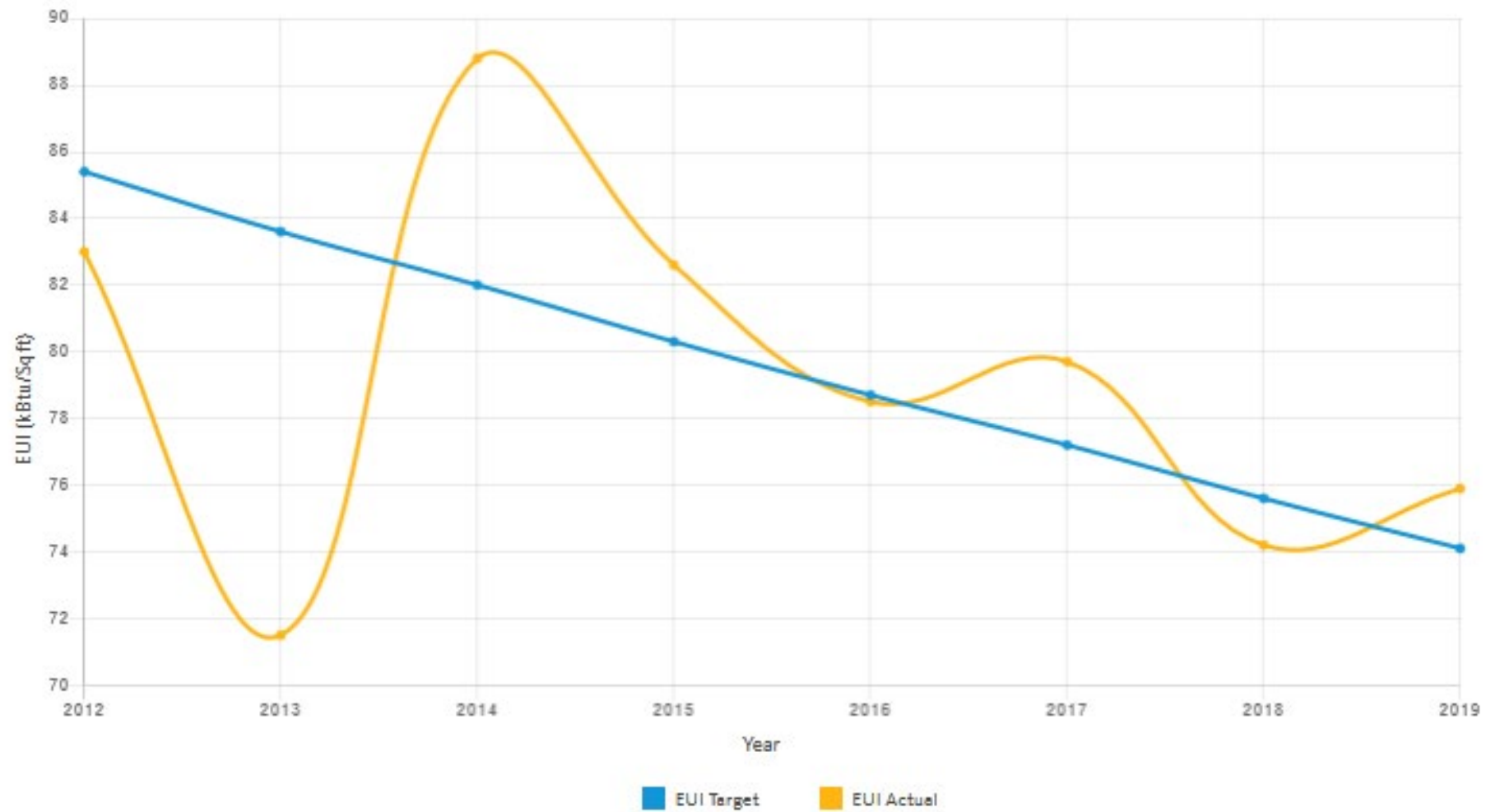


ENERGY – RENEWABLE ELECTRICITY GENERATION



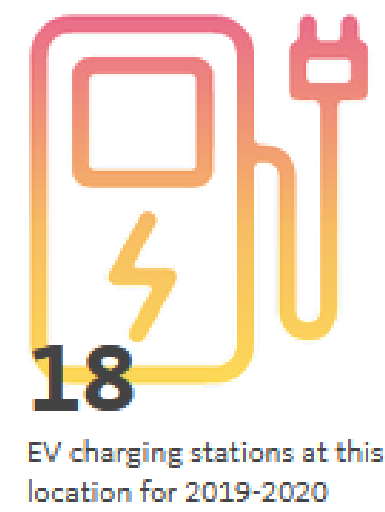
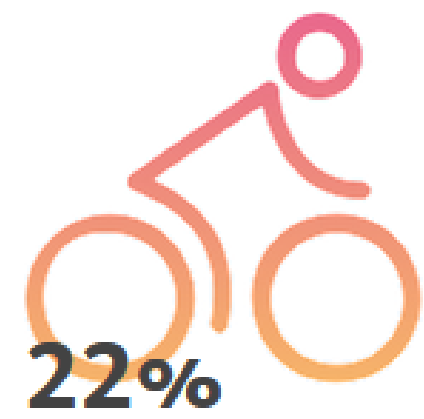


## ENERGY USE INTENSITY (EUI)

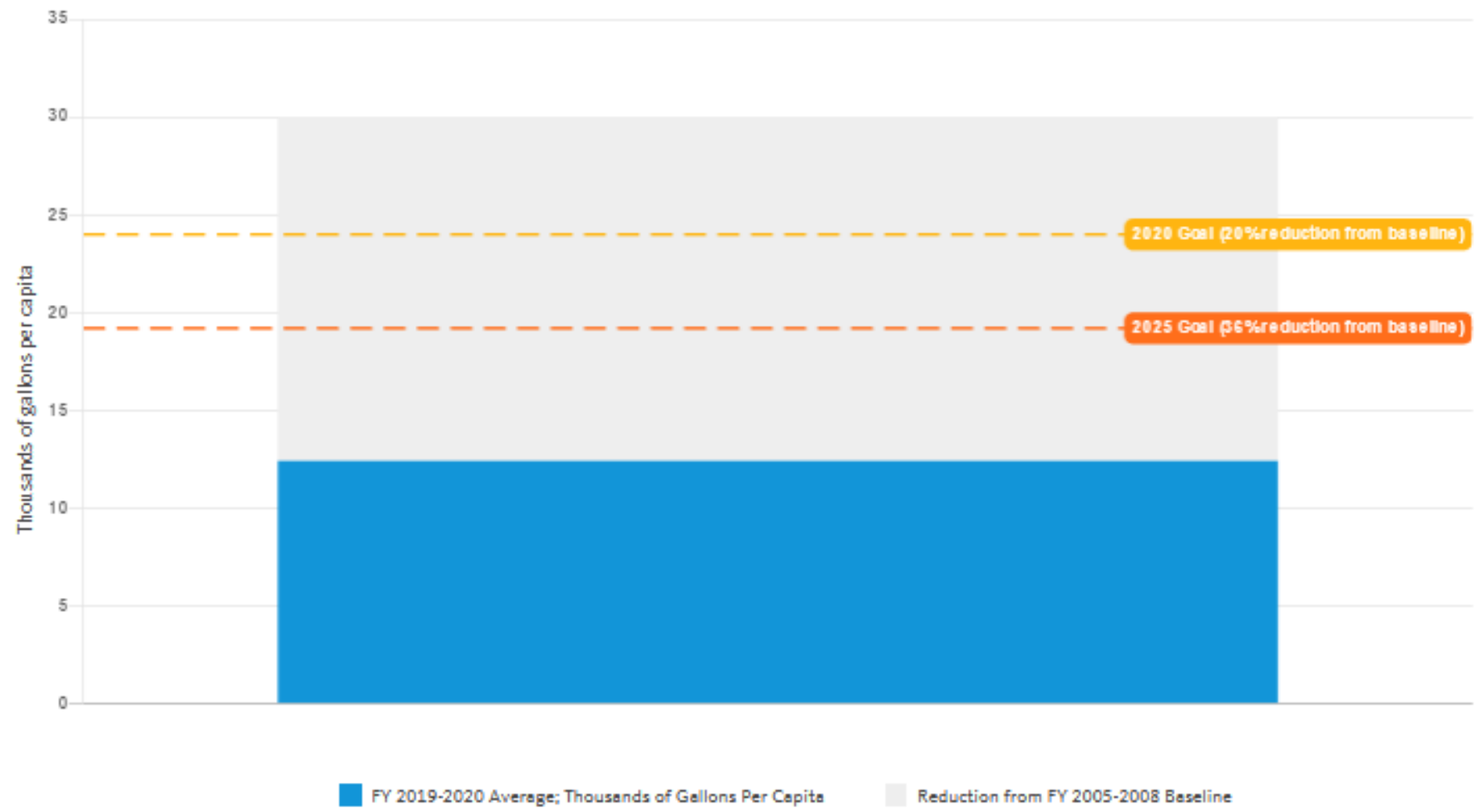


## TRANSPORTATION

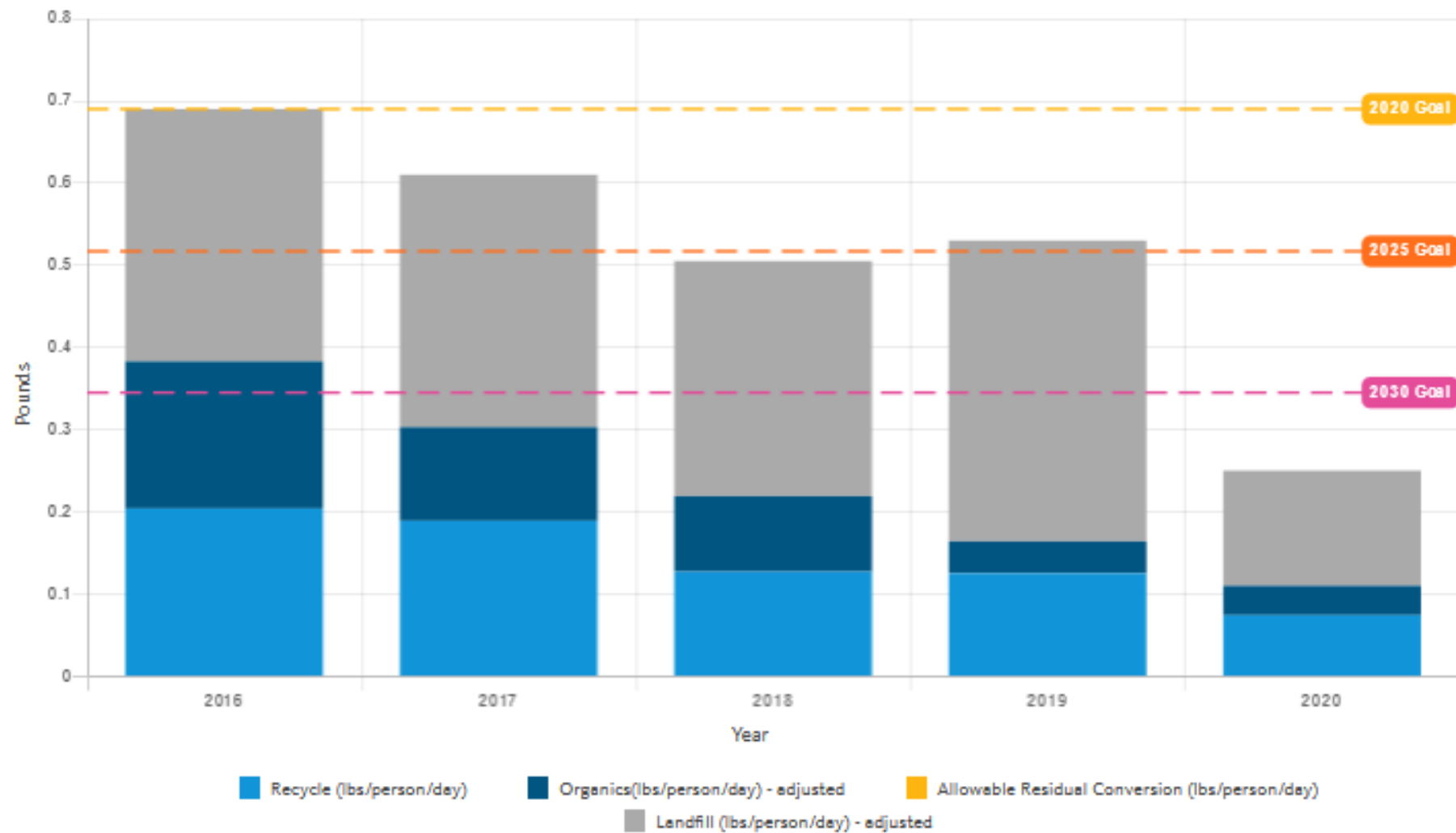
UC Merced continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



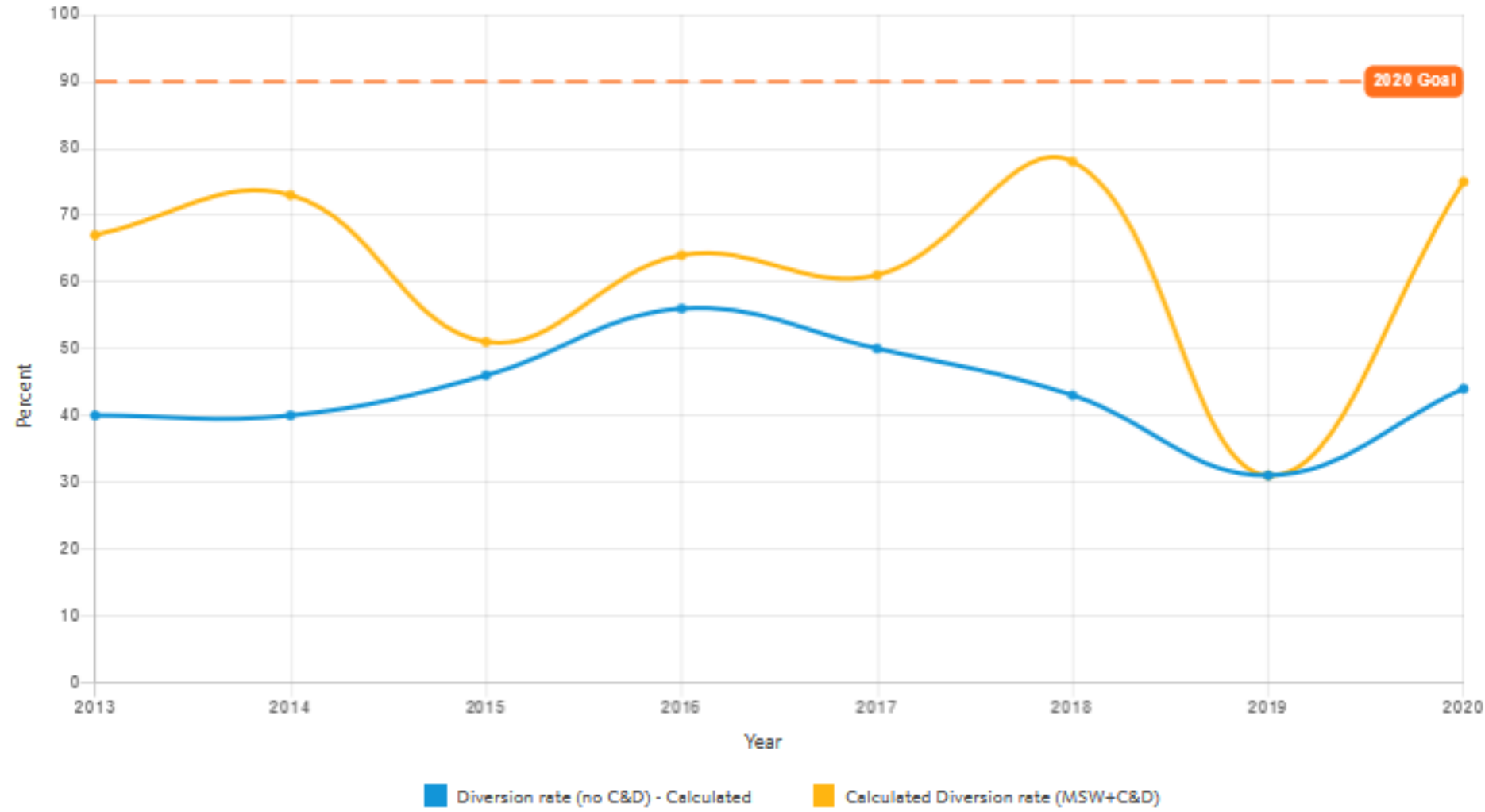
### WATER



ZERO WASTE – GENERATED



ZERO WASTE – DIVERTED



FOOD



**\$3.1M+**  
total spend on food and beverages

**N/A**  
percentage of food and beverage purchases that met sustainability criteria in fiscal year 2019-20

UC Merced continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

PROCUREMENT



**100%**  
green spend on indoor office furniture



**82%**  
green spend on cleaning supplies



**58%**  
green spend on electronics

UC Merced's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

## GREEN BUILDING

UC Merced received 2 Platinum LEED certifications in 2020.

12 Platinum, 10 Gold and 2 Silver

- Total number of LEED certifications

## SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Merced has met the goal of assessing three labs.



**11**

total assessed research labs

## AWARDS

UC Merced was the proud recipient of several sustainability awards in 2020.

A full list of awards is [here](#).



[Sierra Cool School](#)



[Princeton Review Green Schools, Top 30](#)



[AASHE STARS Gold rating](#)



UNIVERSITY OF CALIFORNIA

# Riverside



This year, UC Riverside has made significant progress toward achieving the goals set forth in the systemwide [Sustainable Practices Policy](#).

This included meeting two goals five years early:

- A reduction in per capita waste generation to 0.74 pounds, well below the 2025 target of 1.04 pounds.
- A reduction in per capita water use, to just over 45% from the baseline against the goal of 36% from the baseline by 2025.

Overall, the campus saw a reduction in greenhouse gas emissions of just over 13.5%, largely driven by a reduction in commute emissions by over 39% over the last four years and the work of the local public utility provider to find cleaner sources of energy. This year, solar generation provided close to 9% of UC Riverside's total electricity usage, and plans are underway to add additional solar photovoltaics to campus rooftops in the coming year. This year also marked the start of construction on Riverside's first all-electric building, the [North District](#).

UC Riverside's campus food service efforts have continued to improve. In fiscal year 2019-20, about 6% of the campus's food procurement was sustainable, a 1% increase over last year, and 20% of spend was on plant-based foods. Additionally, Dining Services on campus recovered 17,720 pounds of food for donations this year, with distribution to the [R'Pantry](#), the campus food pantry, and to a local nonprofit.

The transportation sector has seen significant reductions due to initiatives like a vanpool program that recorded nearly 1.3 million miles driven, with an average of 4.7 passengers per trip. Another initiative, the U-PASS program with the Riverside Transit Agency, which allows students, staff and faculty to ride public transit for free, saw an increase of 18% over the past year, with a total of 626,699 boardings.

## From UC Riverside's Garden to Students' Tables



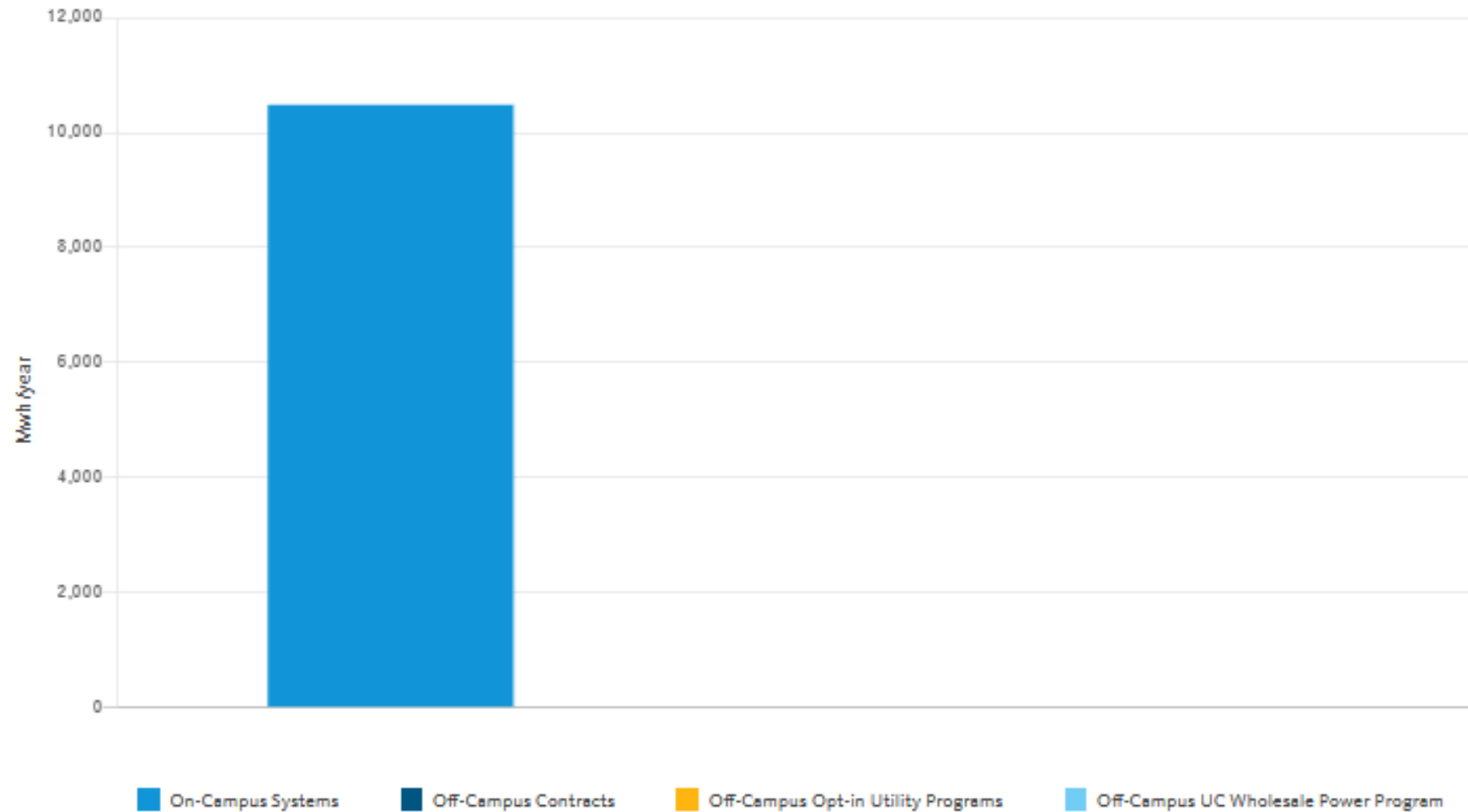
COVID-19 has left most of the campus closed, but the harvesting has continued at [R'Garden](#), and fresh fruits and vegetables are going to students who have remained on campus.

Anthony "Tony" Ruiz, a fourth-year student majoring in ethnic studies and one of two Green Campus Action Plan interns working at R'Garden, said he feels enormous pride when he sees students picking up [R'Pantry](#) grocery bags that include fruit or vegetables he helped to harvest. Ruiz's internship was supported by [the Green Campus Action Plan](#), which provides sustainability internships for undergraduates at UCR.

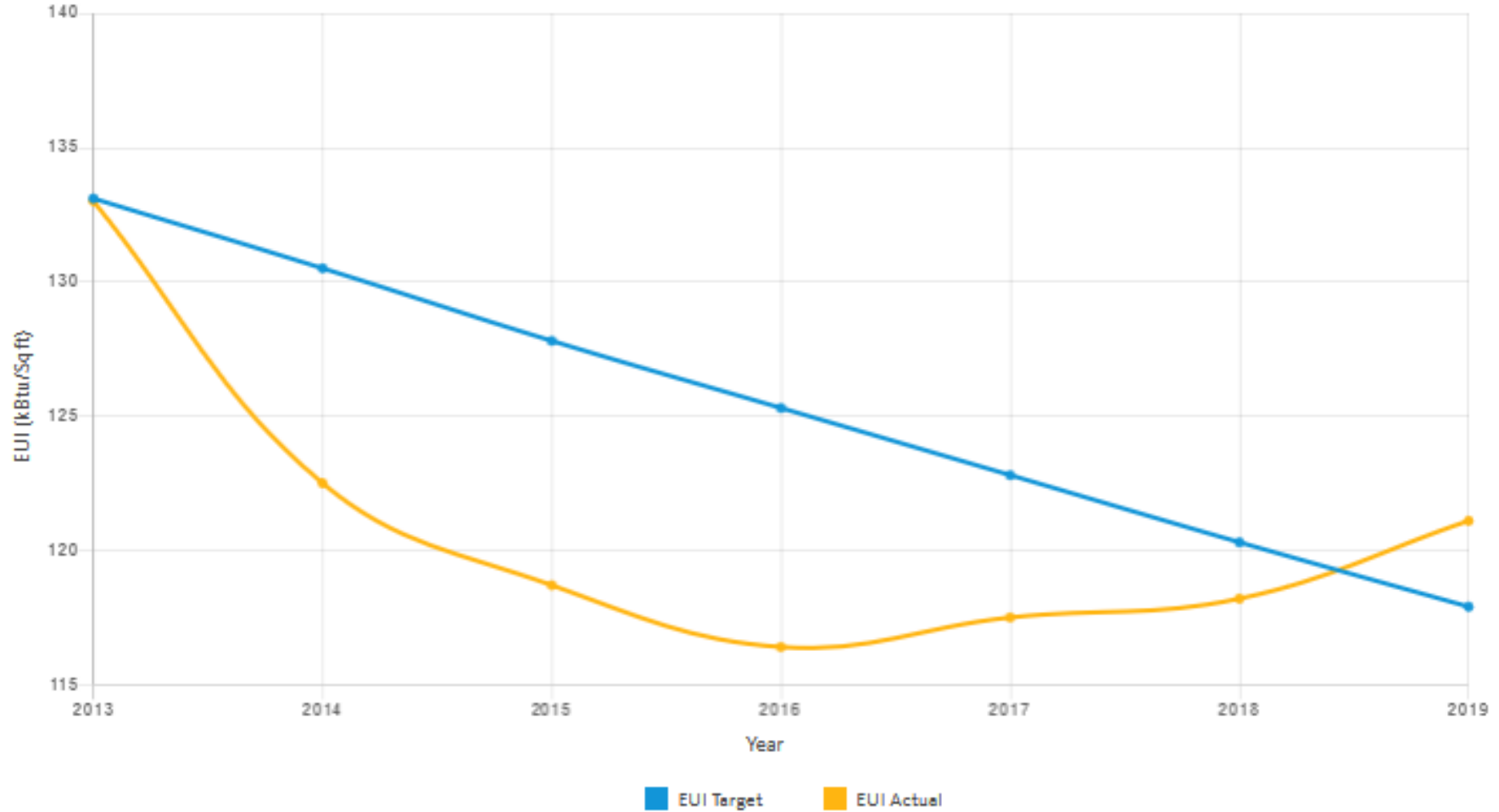
## CLIMATE PROTECTION – EMISSIONS



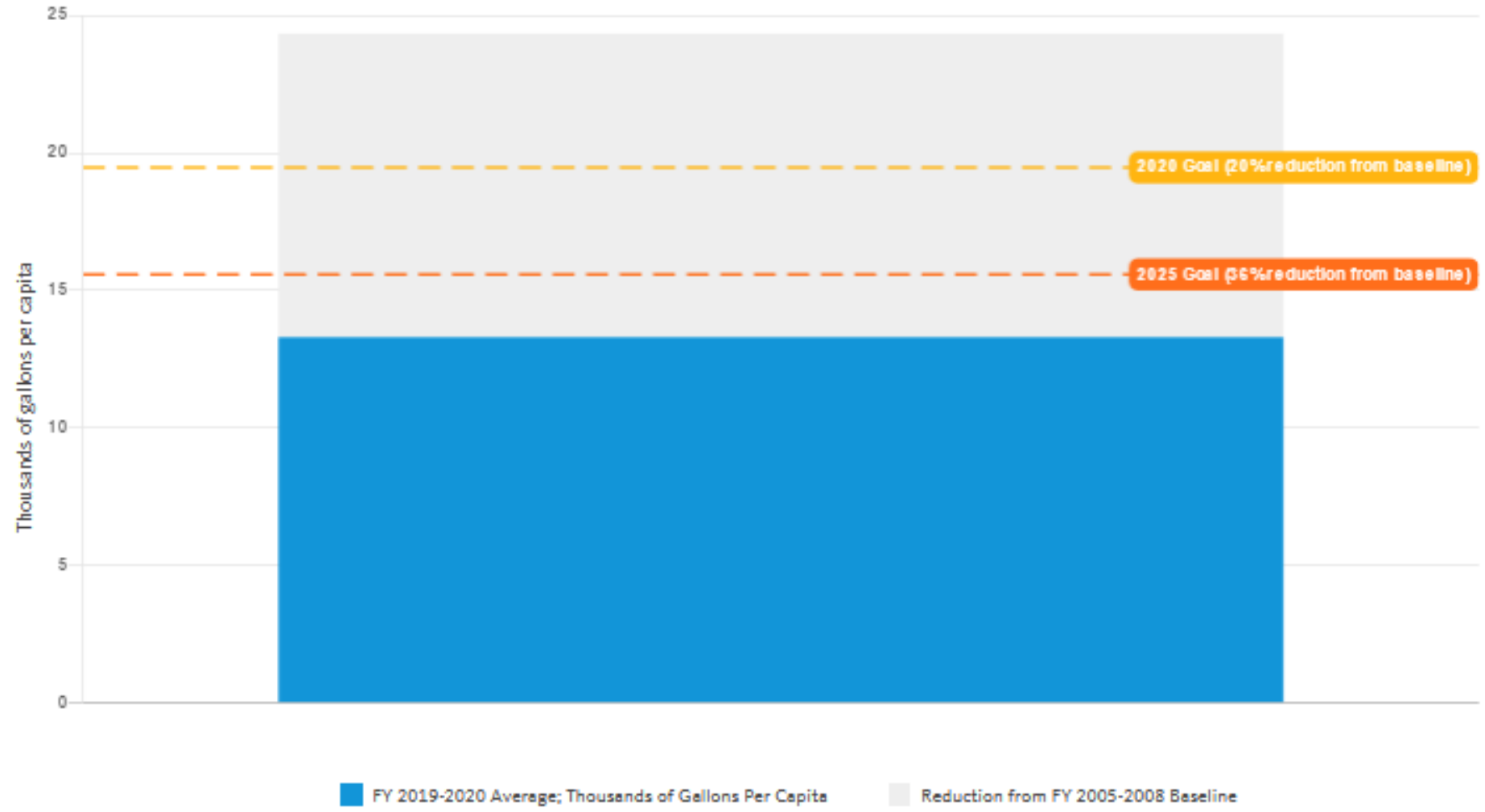
ENERGY – RENEWABLE ELECTRICITY GENERATION



ENERGY USE INTENSITY (EUI)

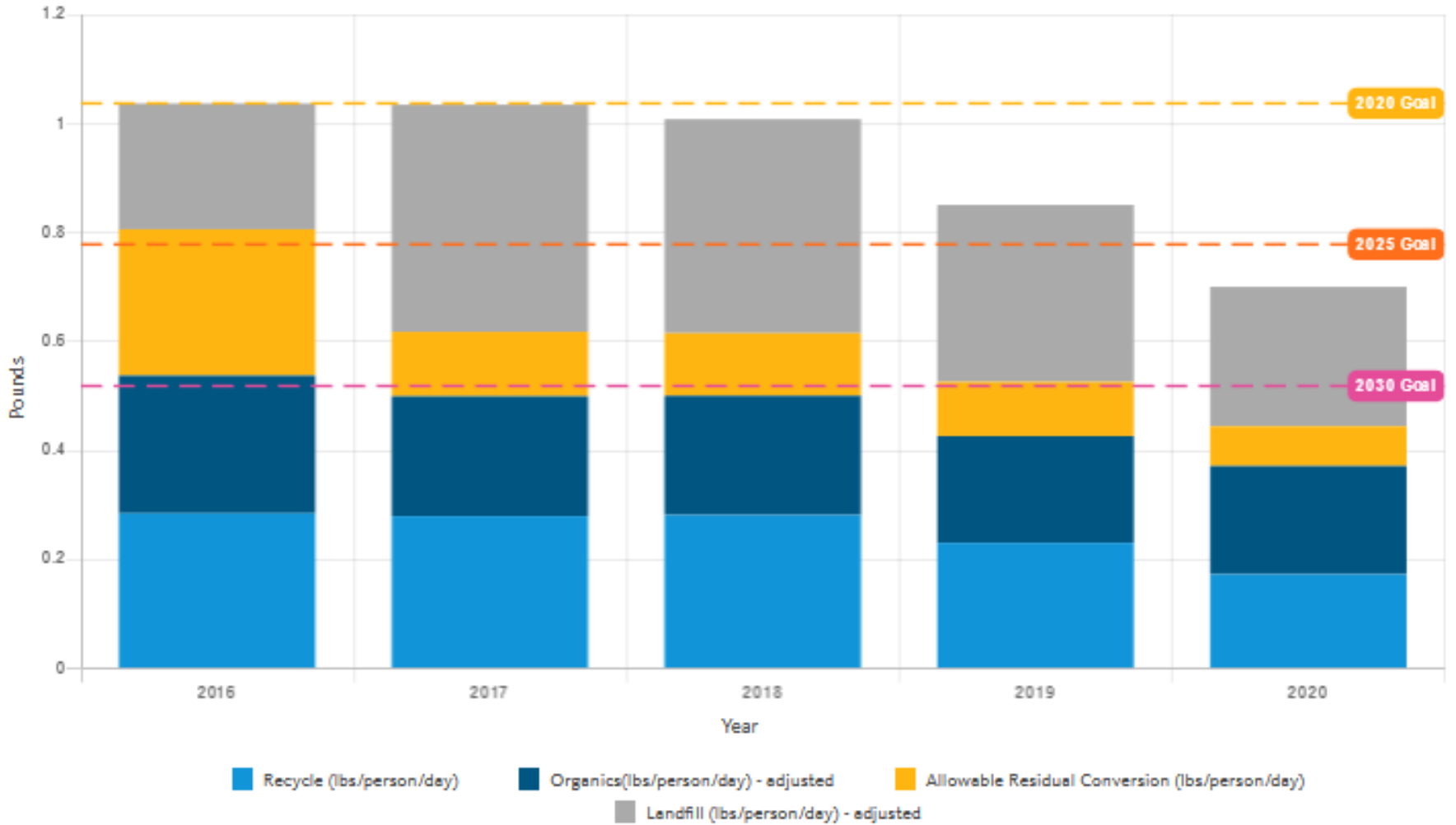


## WATER

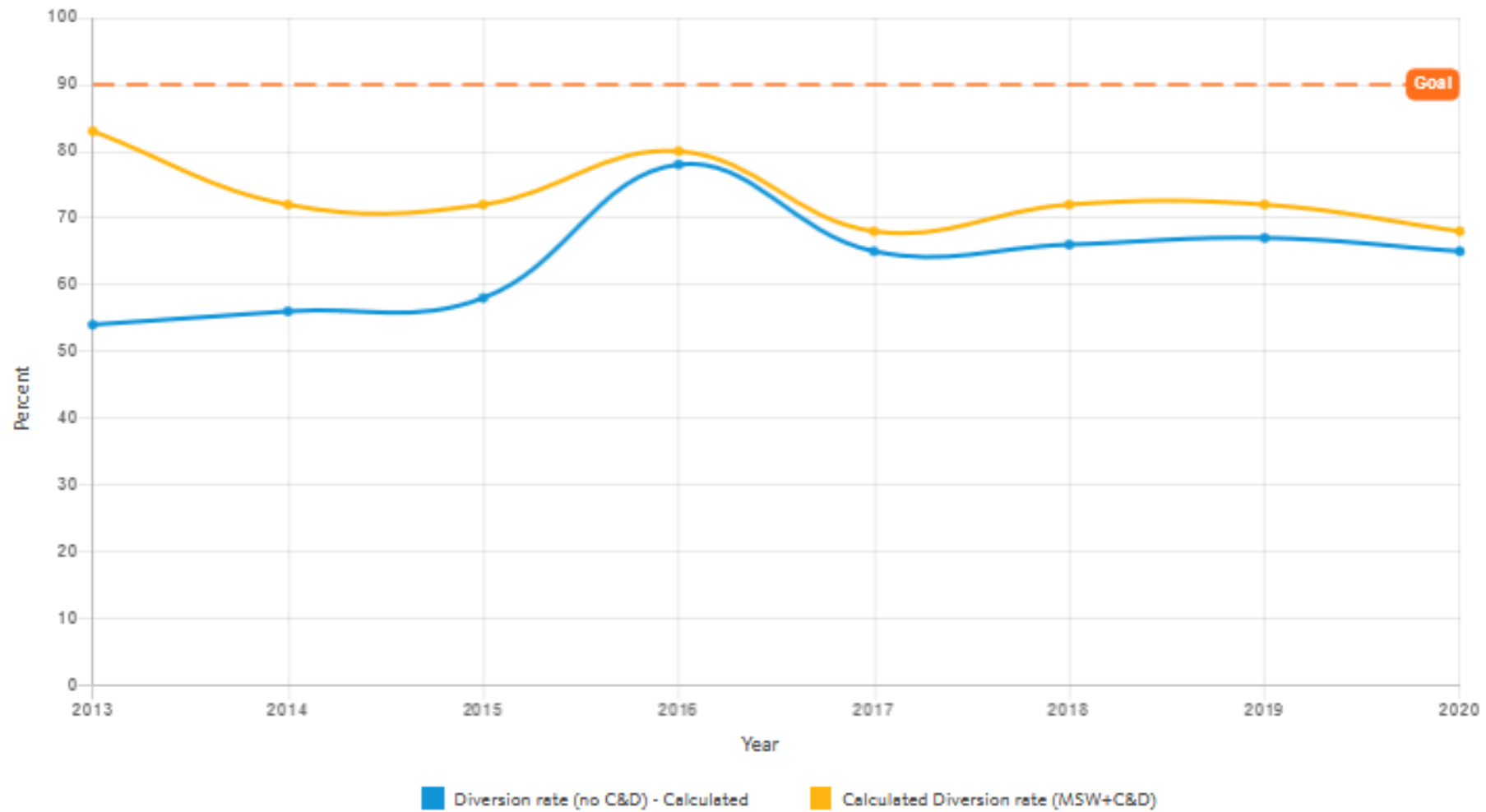




## ZERO WASTE – GENERATED



## ZERO WASTE – DIVERTED



## TRANSPORTATION



**34**

EV charging stations at this location for 2019-2020



**31%**

of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

UC Riverside continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.

# Riverside

UC Riverside continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

## FOOD



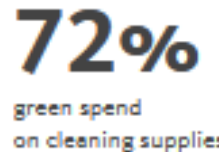
**\$4.4M+**  
total spend on food and beverages

**6%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

## PROCUREMENT



green spend on indoor office furniture



UC Riverside's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

UC Riverside's total LEED certifications speak to its commitment to sustainability.

**1 Platinum, 4 Gold, 1 Silver and 1 Certified**

– Total number of LEED Certifications

SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Riverside has met the goal of assessing three labs.



## AWARDS

UC Riverside was the proud recipient of an AASHE STARS Gold rating in 2020.

A full list of awards is [here](#).



[AASHE STARS Gold rating](#)

UNIVERSITY OF CALIFORNIA

# San Diego



To support the University's zero-waste goal, UC San Diego developed new guidelines for [hosting zero-waste events](#) and worked with departments and organizations to implement them.

With more than 3,500 staff members attending, the 2019 Staff Association's Annual Staff Summer Celebration became UC San Diego's largest zero-waste event, achieving a 97.4% diversion rate. The Housing • Dining • Hospitality Department, which hosted its annual WellFest with 1,000 students, achieved a 99% diversion rate, and the Annual Staff Association Holiday Breakfast, with 1,500 staff members, attained 94%.

Recovering leftover food from campus events not only reduces waste, but it helps to support students who experience food insecurity. Student Affairs launched a [food notification app](#) to alert students when free food is available after department events, giving students another resource in addition to the [Triton Food Pantry](#), which served nearly 5,000 students in fiscal year 2019-20.



The [Condensate Recovery Project](#), completed in July 2019, captures condensation from air conditioning systems in four large buildings. The collected water is pumped into the campus reclaimed water distribution system for nonpotable use, including landscape irrigation, to save roughly 4 million gallons of water annually.

Transportation Services expanded its [pay-by-plate](#) program for all pay stations via the [Parkmobile](#) app. Using license plates as parking credentials allows compliance staff to verify fee payments electronically. The license plate becomes the parking permit and eliminates the need to produce, ship and distribute plastic and paper permits. The app also allows customers to extend payment remotely.

UC San Diego quickly adapted to the campus closure fueled by the pandemic by transitioning to remote work. It hosted the [12th Annual Sustainability Awards ceremony](#) virtually to honor outstanding individuals and groups in addition to highlighting green certification programs. The Green Labs Program team continued to certify labs virtually and celebrated a milestone by certifying UC San Diego's 100th lab.

## Providing Food for Students in Need During the Pandemic

When the COVID-19 pandemic hit campus in March 2020, several groups, including the [Triton Food Pantry](#), the [Student Sustainability Collective](#) and the [Food Recovery Network](#), came together to ensure that students maintained food security during the closure.

The Triton Food Pantry continued to recover food from local grocery stores and harvested produce from campus community gardens. The Student Sustainability Collective and Triton Food Pantry acted quickly to establish pickup window service and arrange additional mobile food pantry locations so that students sheltering in place could have convenient access to nutritious food. During the 2019-20 academic year, the Triton Food Pantry was visited 19,753 times by 4,979 students.

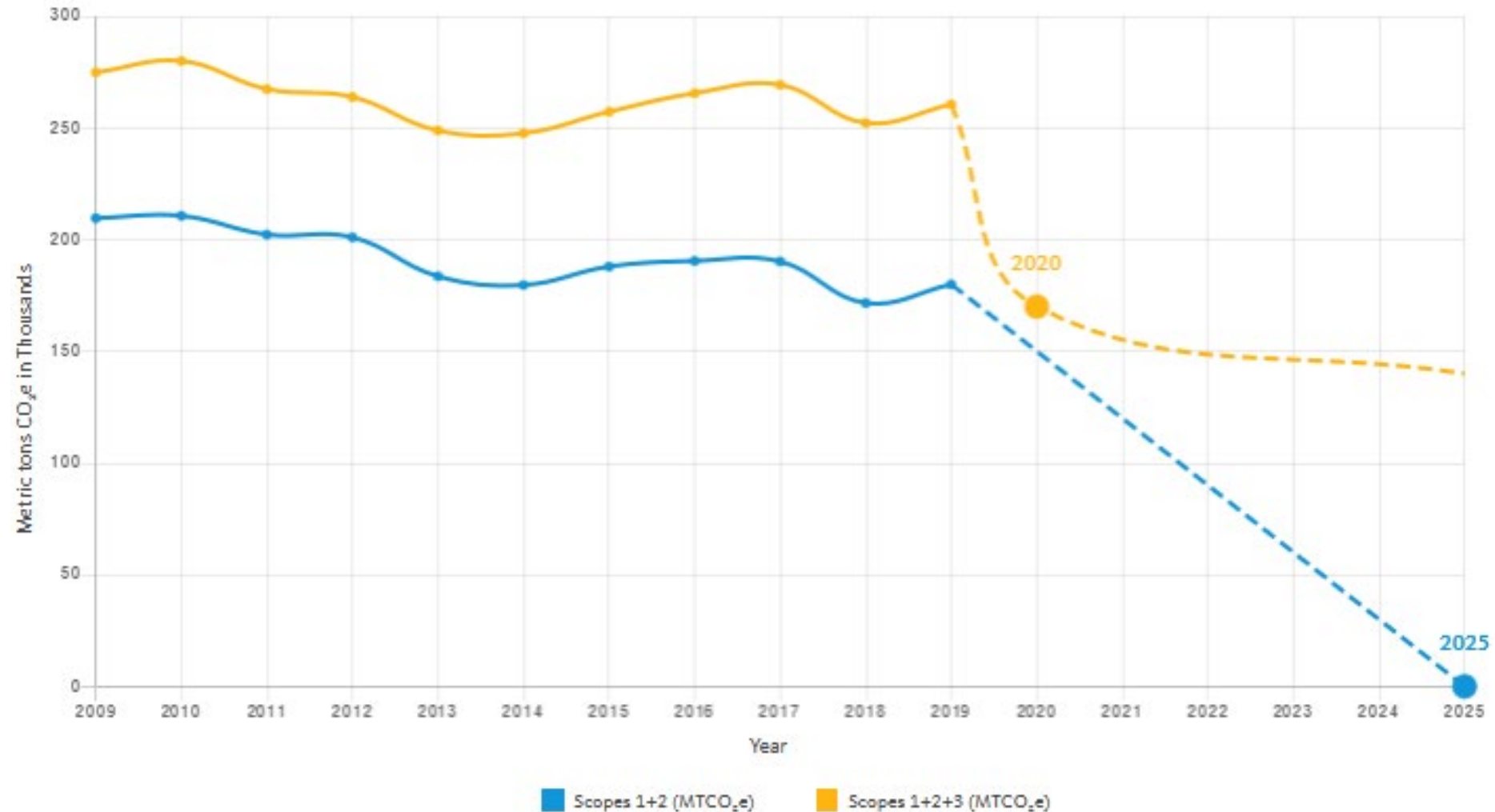


## Providing Food for Students in Need During the Pandemic

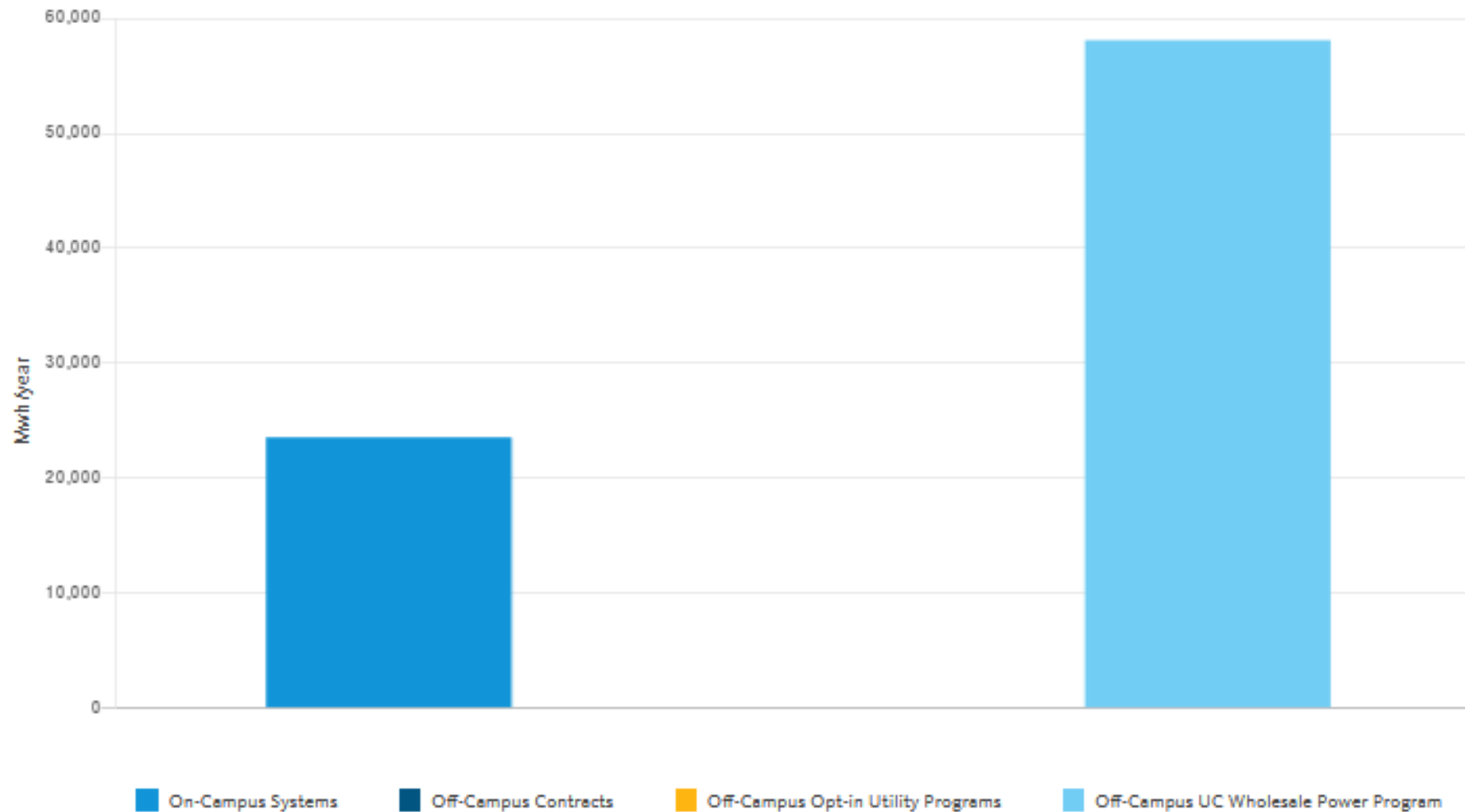
The [Graduate Student Association](#) also began working with the Food Recovery Network and the Triton Food Pantry to organize pop-up food distributions for graduate students to share food recovered from campus dining facilities. In addition to feeding students, dining facility donations prevented wasting previously purchased perishable food.

These dedicated groups worked together to adapt their sustainability and basic needs programs to meet unexpected campus demands. Through their characteristic collaboration and problem-solving efforts, UC San Diego's community of sustainability organizations provided nutritious food to students who were facing academic and financial uncertainty.

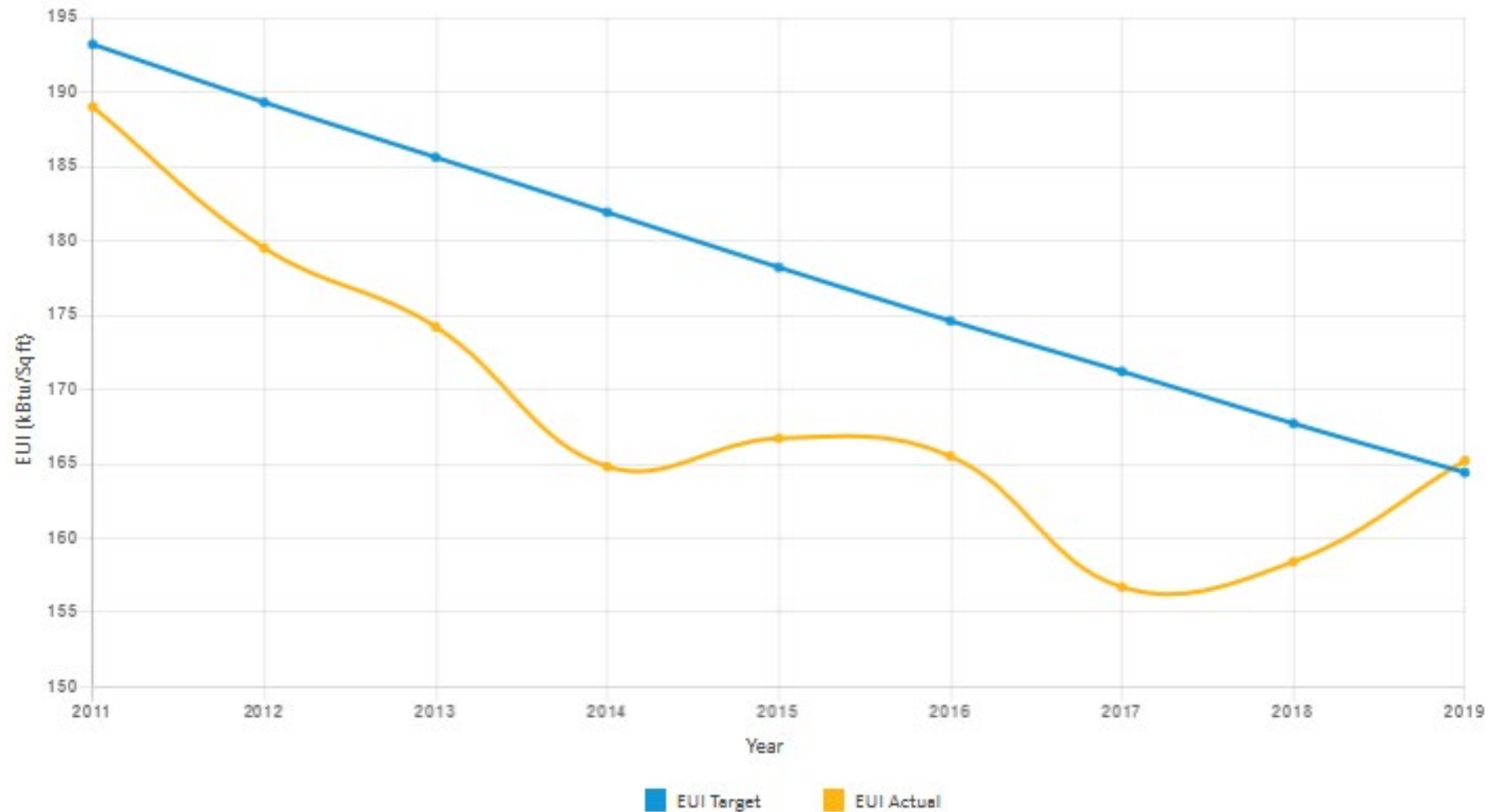
CLIMATE PROTECTION – EMISSIONS



ENERGY – RENEWABLE ELECTRICITY GENERATION



ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

UC San Diego and UC San Diego Health continued to make strides in their efforts to use alternative transportation methods and support the use of electric vehicles in 2020



**42%**

of UCSD employees and students, including those at UCSD Health, are utilizing alternative commuting methods



**237**

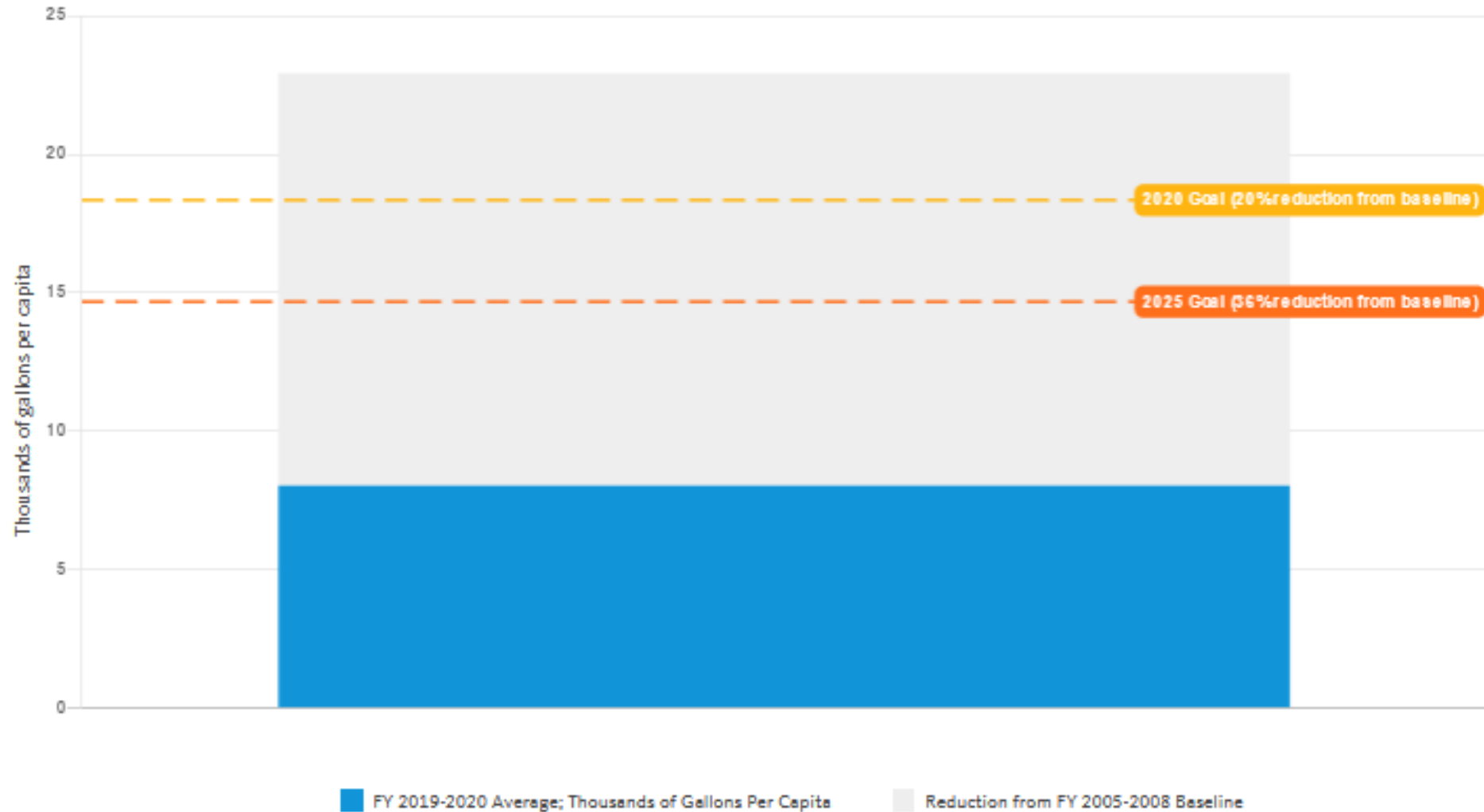
EV charging stations at this location for 2019-2020, including the UC San Diego Health System



**70%**

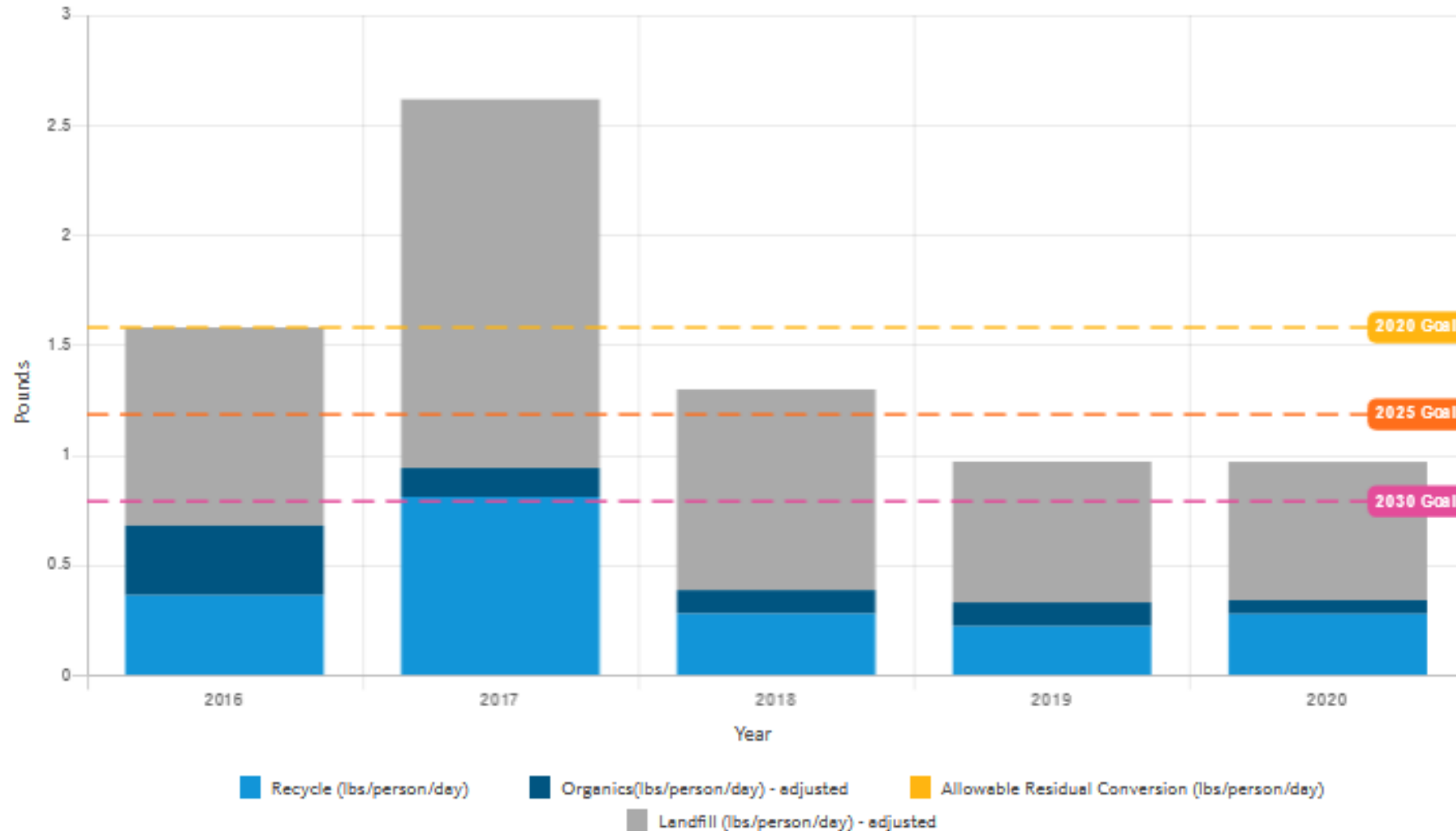
of light-duty vehicles acquired at UCSD and UCSD Health in 2020 were electric (zero-emission) and hybrid vehicles

WATER

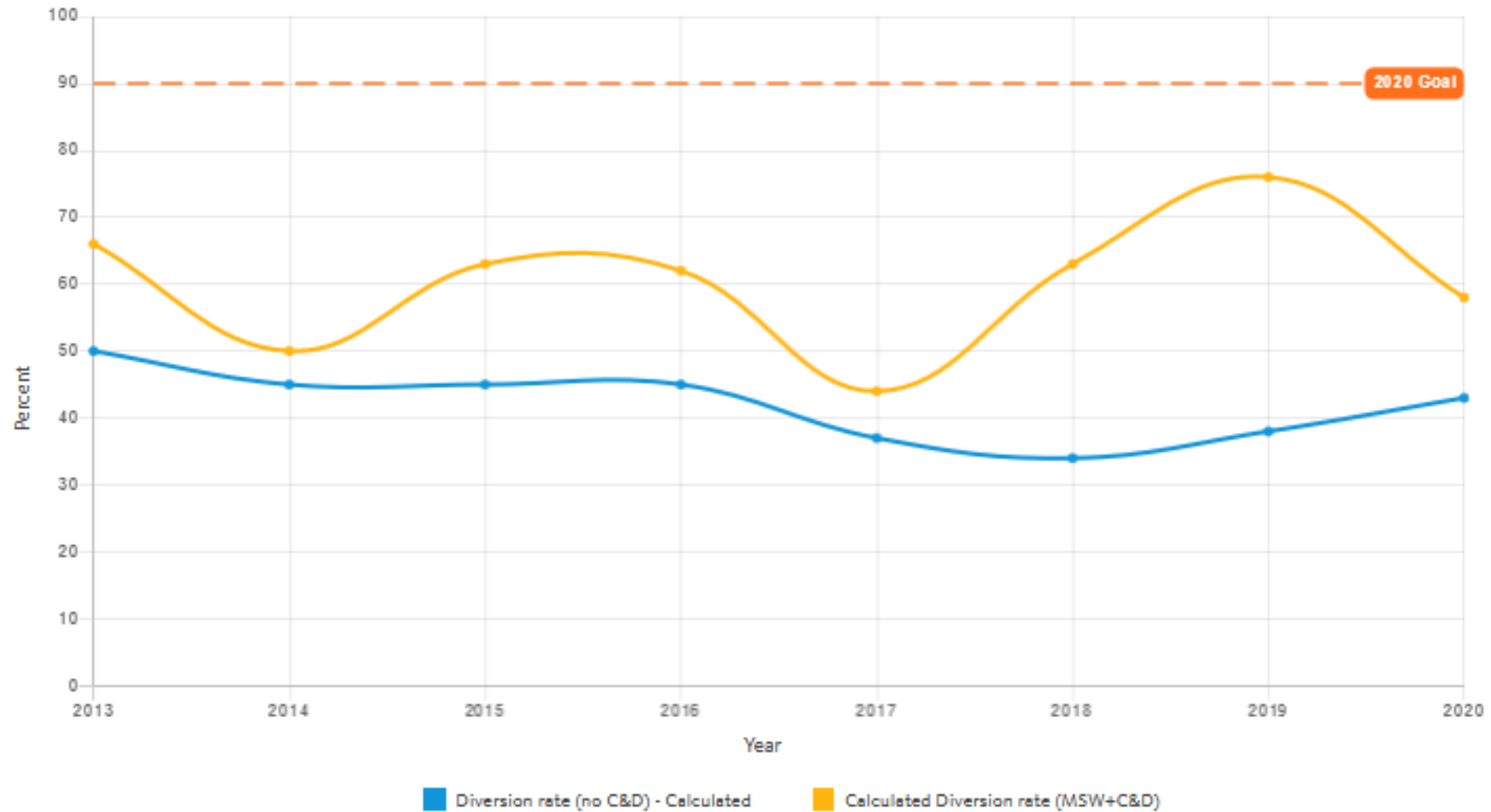




ZERO WASTE – GENERATED



ZERO WASTE – DIVERTED



UC San Diego continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

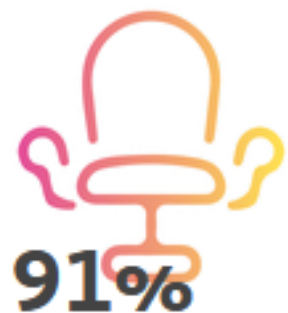
## FOOD



**\$15.7M**  
total spend on food and beverages

**20.9%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

## PROCUREMENT



**91%**

green spend on indoor office furniture



**67%**

green spend on cleaning supplies



**39%**

green spend on electronics

UC San Diego's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

UC San Diego received 2 Gold LEED certifications in 2020.

4 Platinum, 25 Gold, 12 Silver and 2 Certified

- Total number of LEED certifications

### SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC San Diego has met the goal of assessing three labs.



## AWARDS

UC San Diego was the proud recipient of an AASHE STARS Gold rating in 2020.

A full list of awards is [here](#).



[AASHE STARS Gold rating](#)

UNIVERSITY OF CALIFORNIA

# San Diego Health



UC San Diego Health achieved the [Practice Greenhealth Partner for Change Award](#) for the third consecutive year, demonstrating continuous improvement in sustainability programs.

With a 40% waste diversion rate, the health system reduced landfill waste by 6.5% year over year, reduced total waste from 30 pounds to 25 pounds per adjusted patient day and reduced regulated medical waste from 401 to 301 tons, a 25% reduction. In addition, a new contract was signed for controlled substances disposal, eliminating drain disposal of these substances.

Staff in sustainability and procurement offices conducted a comprehensive review of [reprocessing programs](#), which recycle medical equipment, and established a Reprocessing Working Group with clinical representation. With an eye toward strategic implementation and program growth, a contract was awarded with a preferred reprocessing vendor. In the past year, the collection of used items increased to 5.26 tons of materials, resulting in an overall savings of \$94,000 as the health system was able to purchase these reprocessed items back at a lower cost compared to purchasing brand-new versions.

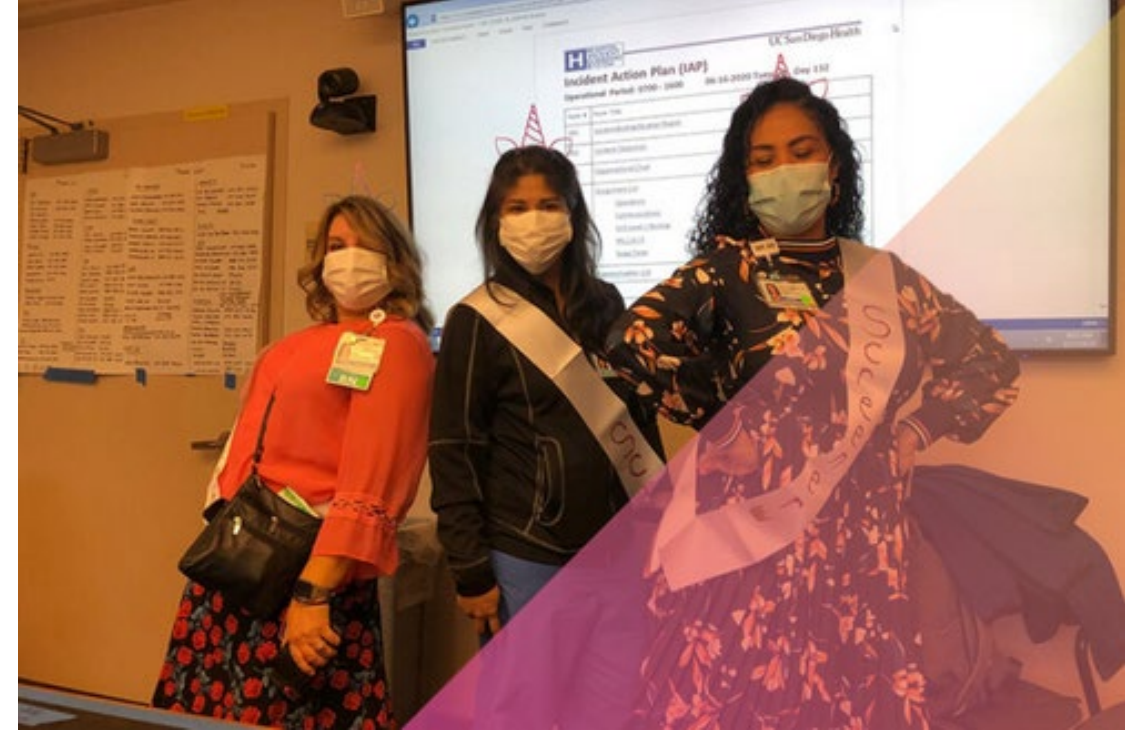
Energy-saving LED lighting was installed in Hillcrest Hospital inpatient corridors. A comprehensive [utility bill analysis](#) resulted in a net \$375,000 rebate for direct access fees and \$220,000 annual savings from rate changes.

Annual paper use was reduced by 4.5%, and close to \$3.5 million was spent for computers, monitors, notebooks and slates, with 35% of that spend going for [EPEAT certified products](#) with life cycle impacts in energy savings, greenhouse gas reductions, waste and water reduction, and avoided toxic substances.

Patient menus were designed to focus on local, seasonal and plant-based foods. An Ornish program was started in UC San Diego Health's cafés, offering vegan or vegetarian entrées during every meal. More than 170 tons of food waste was composted in 2020, and 6.5 tons of food, with a value of \$22,000, was donated to campus food pantry and local nonprofits.



## Precious PPE — N95 Mask Reprocessing



Early in the coronavirus pandemic UC San Diego Health was one of only a handful of organizations across the nation that participated in a pilot with the company Stryker Sustainability Solutions to collect and reprocess vitally needed N95 masks.

Starting in March, while Stryker awaited an FDA Emergency Use Authorization (EUA), and with input from the mask policy group, UC San Diego Health deployed a dual strategy. Stryker would place collection bins and provide collection services and education at both campuses. But when Stryker collected the masks, it only sent half of them to its facility for FDA validation of its process. The balance of the masks were redirected to UC San Diego Health's Sterile Processing Division (SPD). The SPD team utilized existing Sterrad Sterilization Systems and manufacturer protocols to sanitize the N95 masks, after which they were sent to the health system's storehouse as a contingency supply.

At the end of May, and after two months of piloting the program, [Stryker received its FDA EUA](#) to decontaminate N95 masks using vaporized hydrogen peroxide (VHP). With approval from SPD, Infection Prevention Control and Epidemiology, supply chain and sustainability leadership, a decision was made to begin sending all of the masks to Stryker for decontamination. The EUA authorizes Stryker to reprocess each mask up to 10 times, which reduces waste and provides a new source of hard-to-find N95 masks for UC San Diego Health to purchase.

## HEDS — Energy Waste and Viruses Like COVID-19

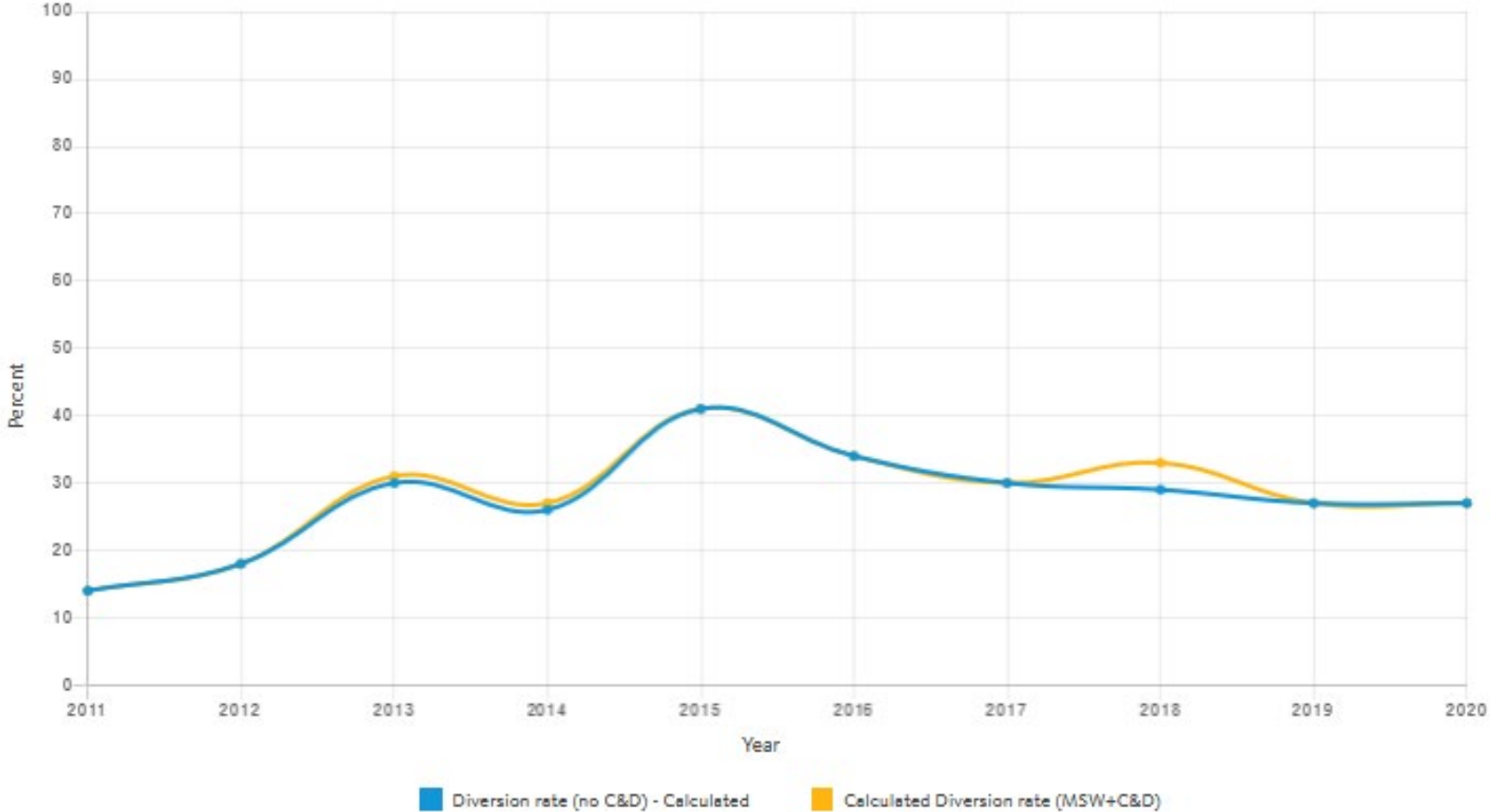
UC San Diego Health [obtained a \\$1.44 million grant](#) for decarbonization in hospitals, in partnership with the Electric Power Research Institute (EPRI). Of that, \$720,000 will be used to purchase two High Efficiency Dehumidification Systems (HEDS) serving seven operating rooms. The HEDS will be equipped with multiple layers of UV-C irradiation; enhanced air filtration, including HEPA final filtration; deep dehumidification; and built-in energy recovery for energy-efficient relative humidity control to reduce the spread of viruses like the novel coronavirus and other pathogens.

HEDS can cool buildings and reduce relative humidity more efficiently — saving energy, resources and money — and have the added benefit of enhanced air filtration. HEDS were developed in 2007 in response to a U.S. Army Corps of Engineers request to create an energy-efficient, cost-effective dehumidification and reheating system that requires no more maintenance than a typical air handling unit, while providing lower life cycle costs than other relative humidity control options. The Department of Defense recommended expanded use of HEDS in its [High Performance and Sustainable Buildings Report to Congress](#) in April 2019.



# San Diego Health

## ZERO WASTE – DIVERTED



# San Diego Health

## FOOD



**\$6.5M+**  
total spend on food and beverages

**10.6%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

UC San Diego Health continues to set ambitious goals, with a goal for 2030 of 30% spend on sustainable food and beverages.

## AWARDS

UC San Diego Health was the proud recipient of a Practice Greenhealth Partner for Change Award in 2020.

A full list of awards is [here](#).



[Practice Green Health, Partner for Change Award](#)

UNIVERSITY OF CALIFORNIA

# San Francisco



UC San Francisco recognizes the urgency of addressing the human health impacts of the climate crisis. This past fiscal year, the institution has made significant strides in integrating the climate-health connection into its graduate health care education, research and patient care mission.

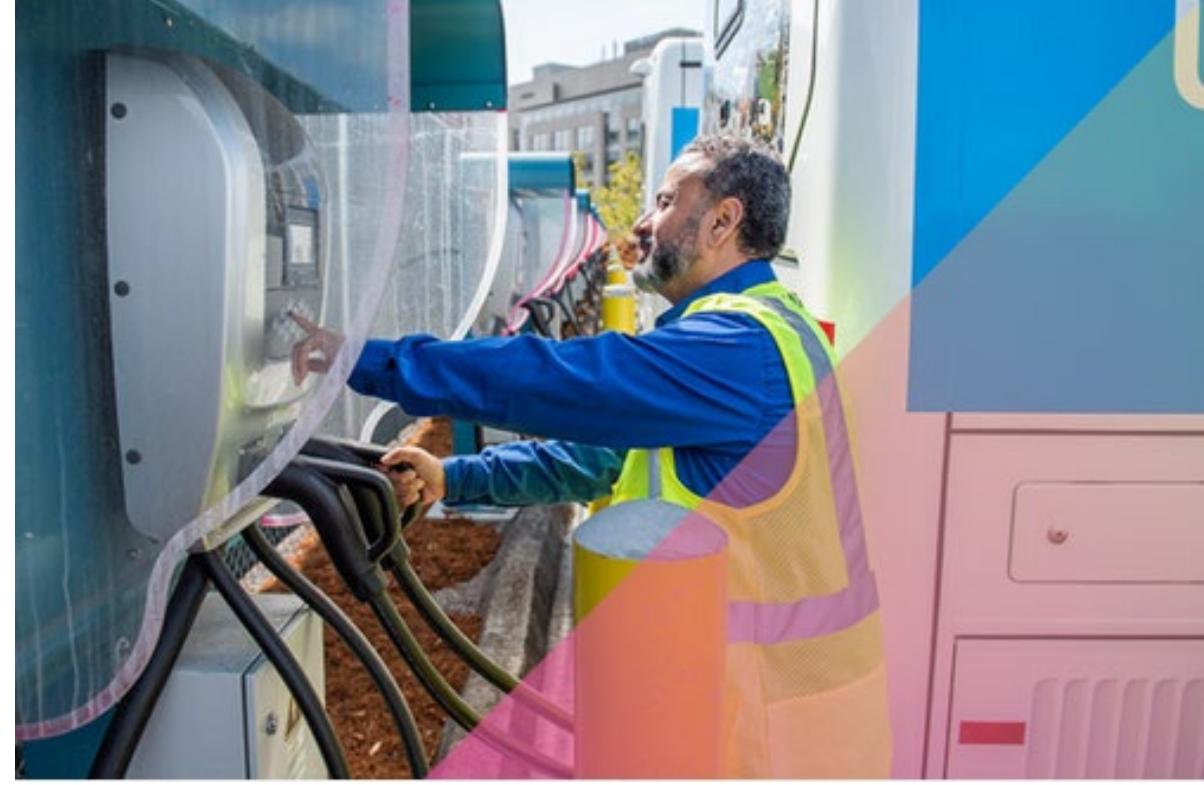
[A Climate Crisis Is a Health Crisis](#), a main feature of the December 2019 issue of UCSF Magazine, focused on six faculty members' pioneering work of linking the physical and psychological costs of climate-related disasters and how they incorporate climate change into the curriculum and guide the health sector to address the issue.

UCSF's newly formed Climate and Health Center is convening a transdisciplinary community of practice to drive cutting-edge climate health research and education, promote health system sustainability and bring health evidence to climate policy in order to improve the health, well-being and equity of all communities. A newly created [EaRTH Center](#), funded by the National Institute of Environmental Health Sciences, is working to integrate environmental health into the medical school curriculum. And the [Human Health and Climate Change student group](#) developed a [Planetary Health Justice Report Card](#) that grades U.S. and Canadian medical schools on how well they address the intersection of health and the environment.

In addition to these academic efforts, climate mitigation of campus and health system operations is ongoing. Sustainability work groups continue to focus on energy efficiency, [green buildings](#) and [smart sustainable campus planning](#). Green Lab campaigns promoted Energy Star-certified freezers, and [the 10th Annual Anniversary Sustainability Awards](#) recognized green champions and work groups. New climate actions this year included the purchase of carbon-free electricity from the San Francisco Public Utilities Commission, installation of the 10th solar project and the construction of UCSF's [first all-electric housing buildings](#).

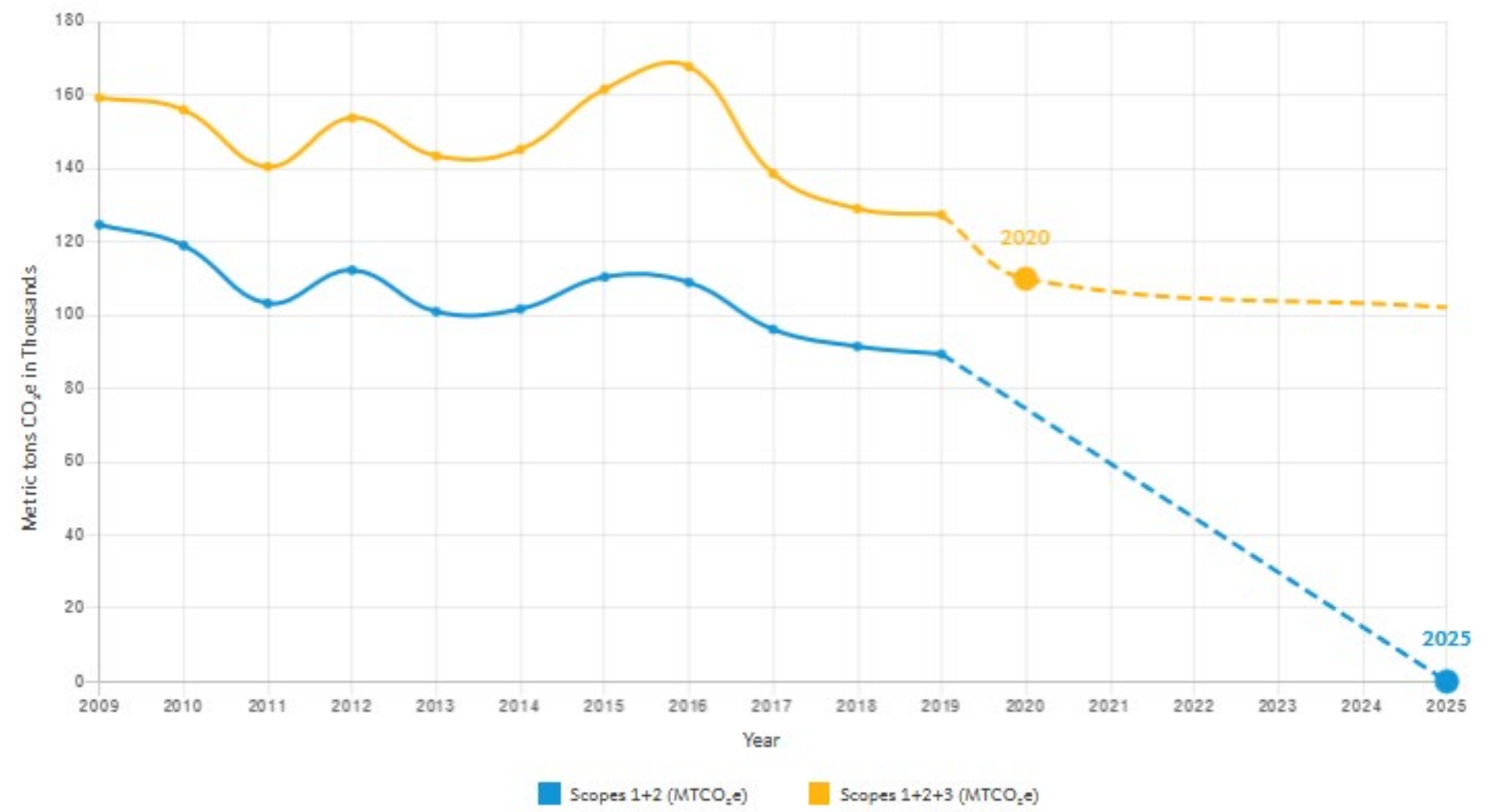


## Preparing for Power Shutoffs

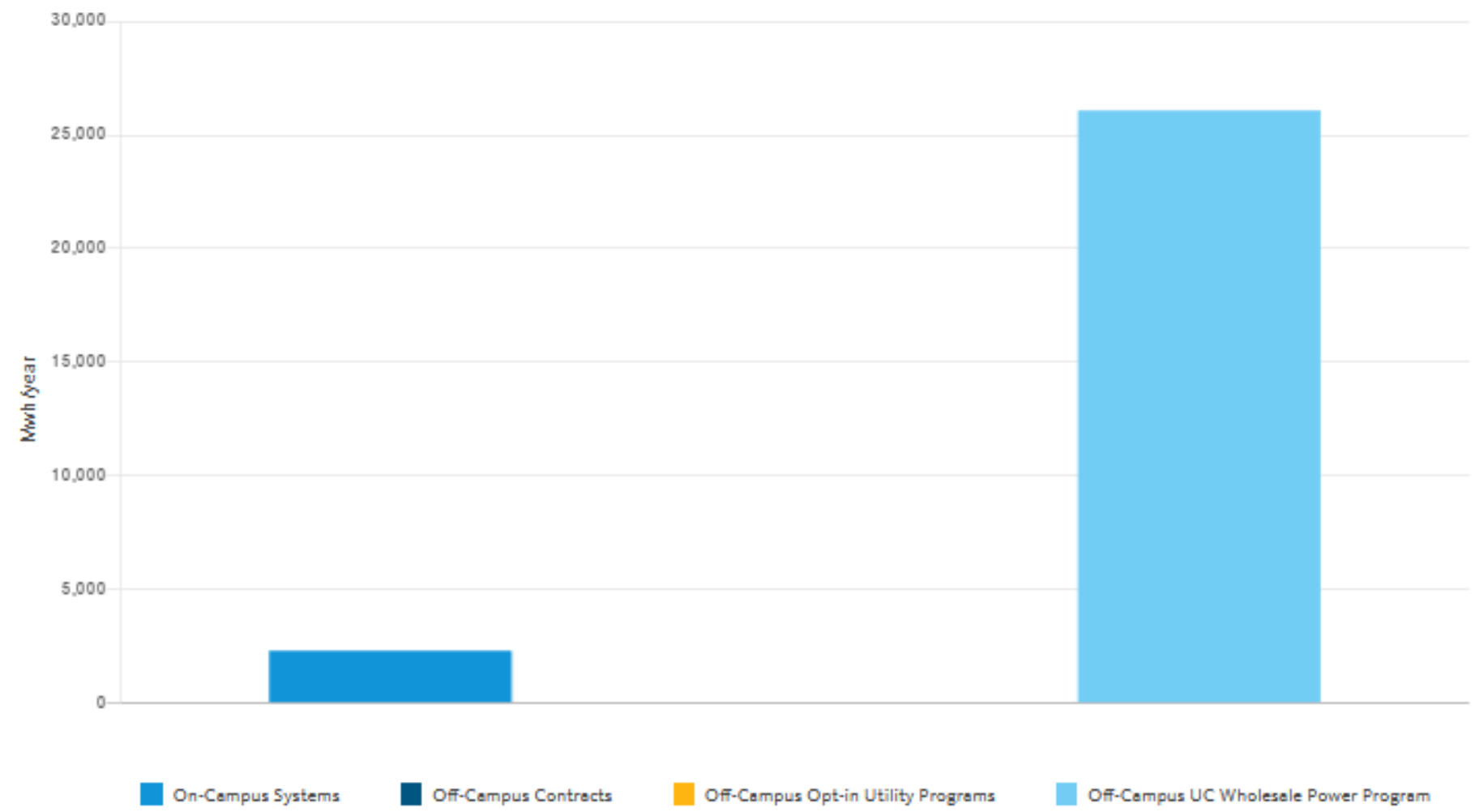


In 2019, Public Safety Power Shutoffs (PSPS) impacted or threatened to impact many campus and health system operations. UCSF created a new Lab Services Initiative to provide centralized lab equipment maintenance, temperature monitoring and bracing to protect UCSF's invaluable research assets. UCSF resilience planning also included the chancellor and other leaders from the UCSF campus and UCSF Health participating in a tabletop drill regarding a wildfire scenario on Mount Sutro. In addition, UCSF participated in a regional PSPS workshop to prepare for climate-induced emergencies.

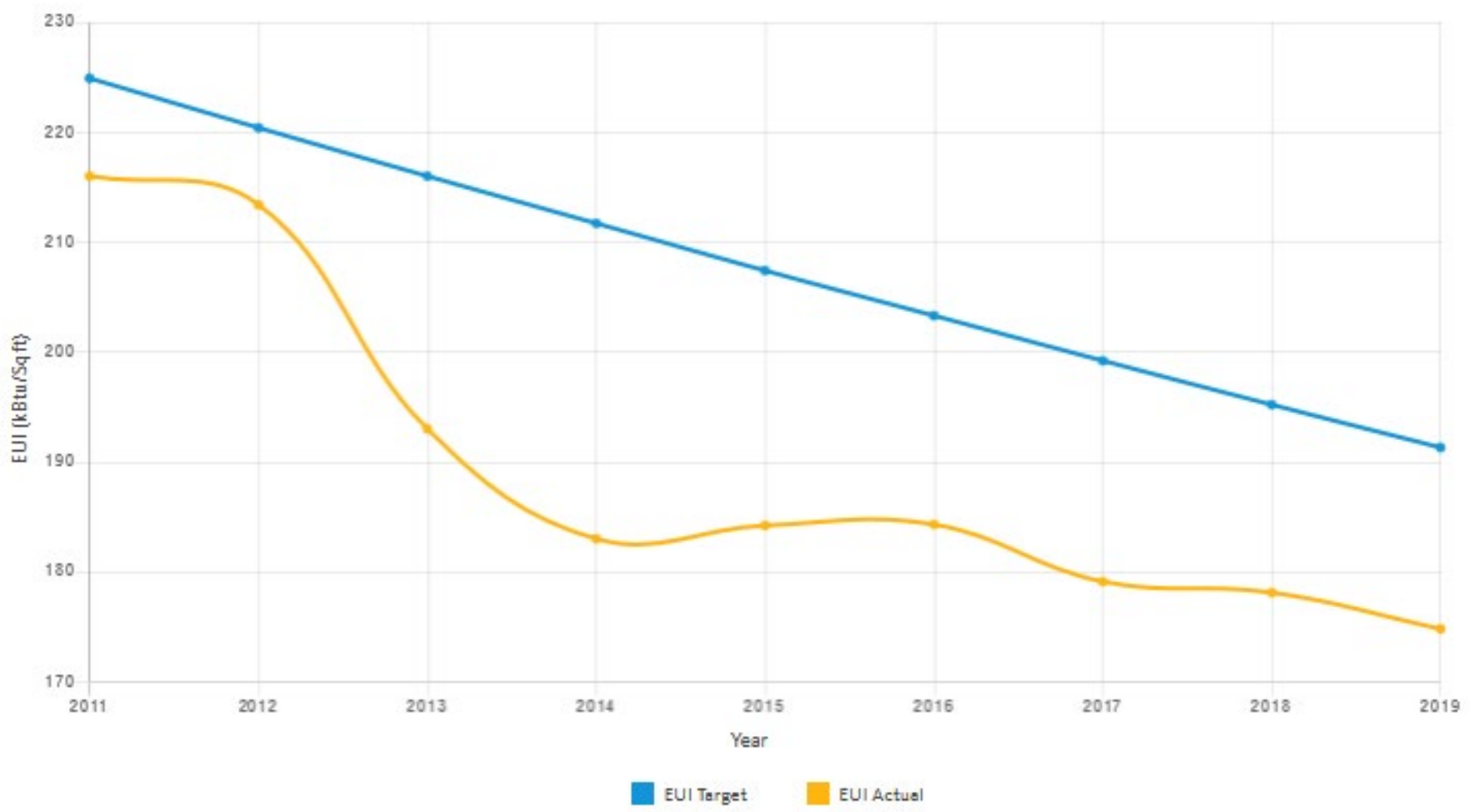
CLIMATE PROTECTION – EMISSIONS



ENERGY – RENEWABLE ELECTRICITY GENERATION



ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

UCSF and UCSF Health continued to make strides in their efforts to use alternative transportation methods and support the use of electric vehicles in 2020.

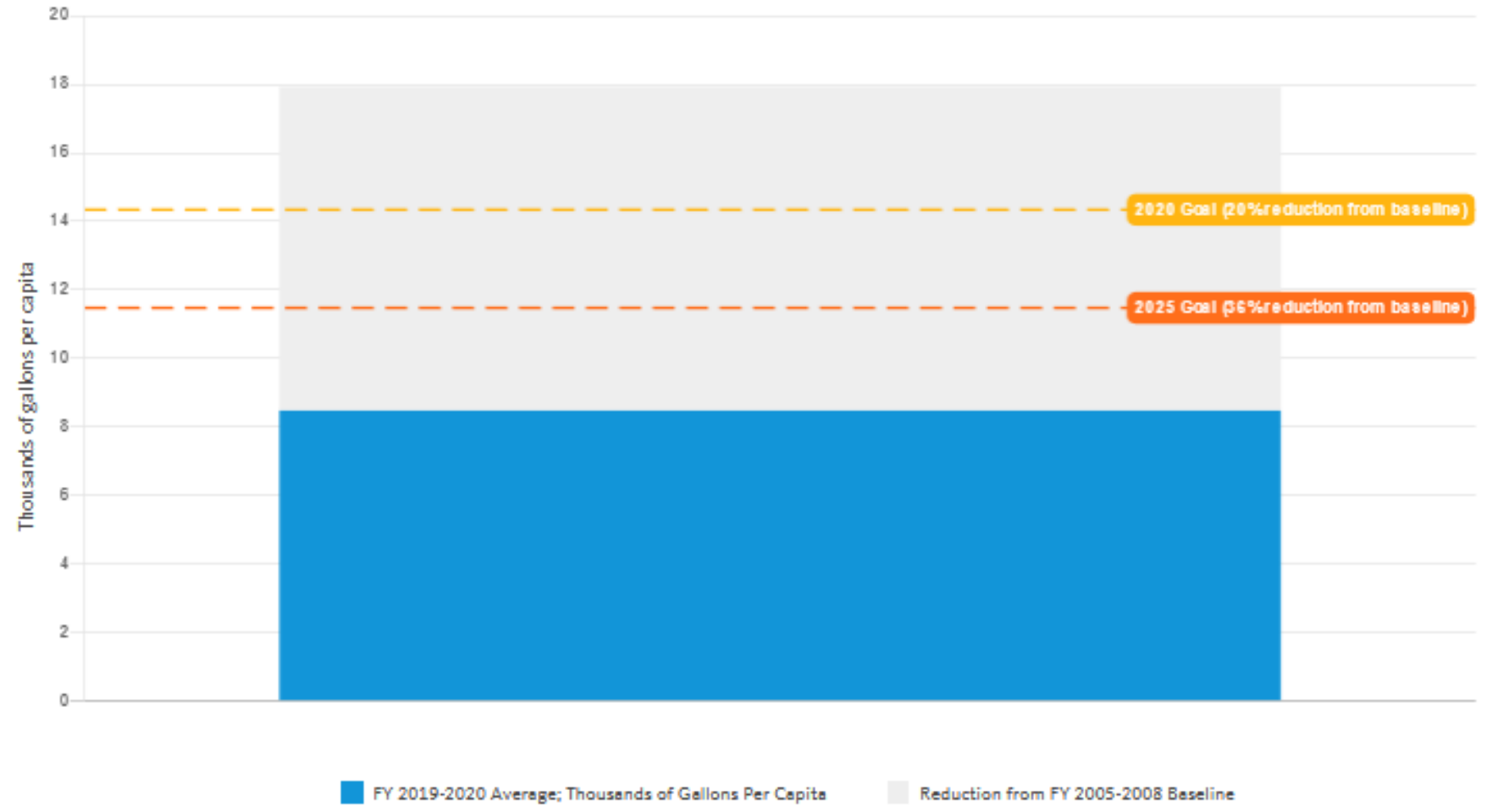


of UCSF employees, including those at UCSF Health, are utilizing alternative commuting methods

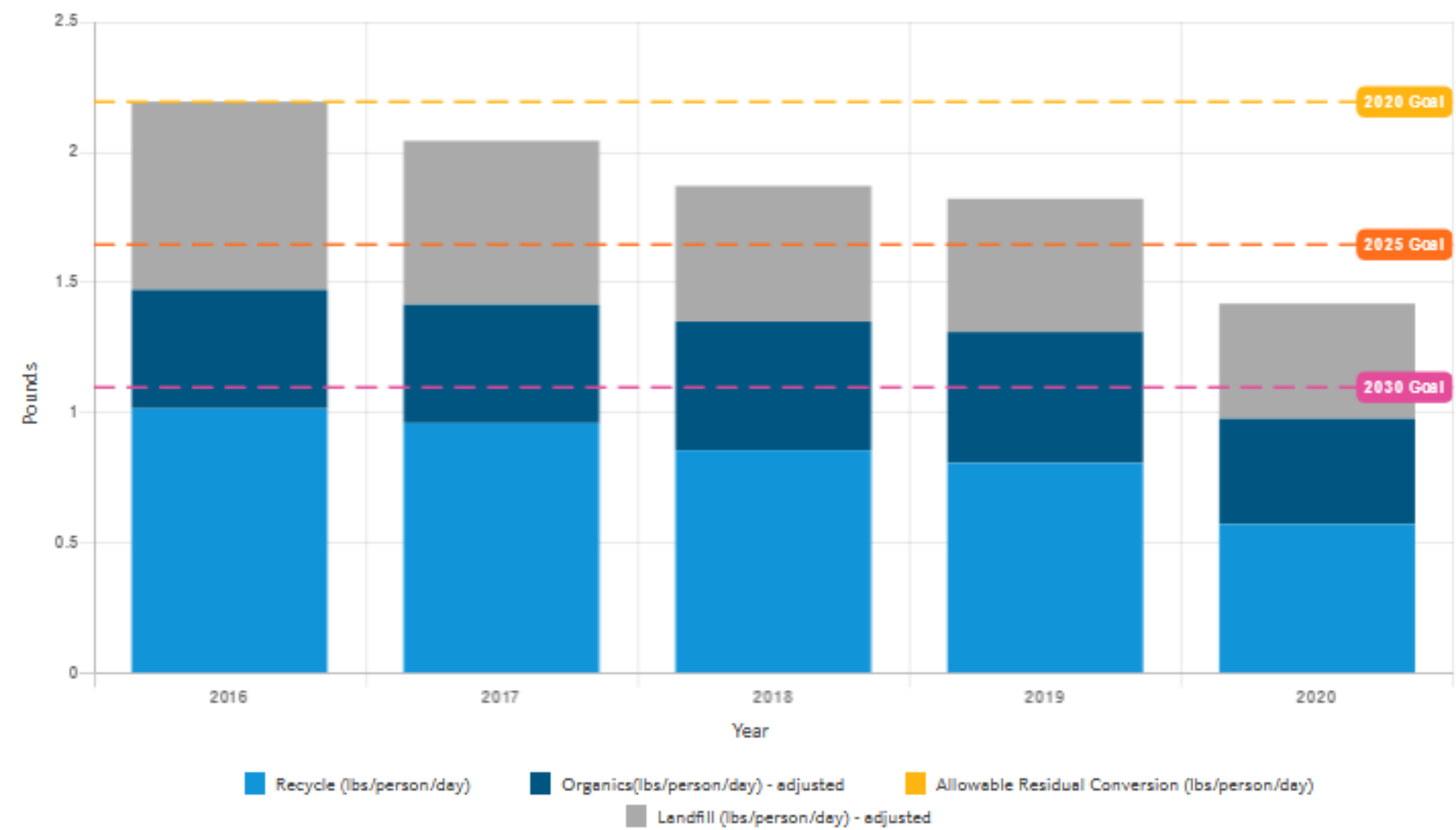


EV charging stations at UCSF and UCSF Health for 2019-2020

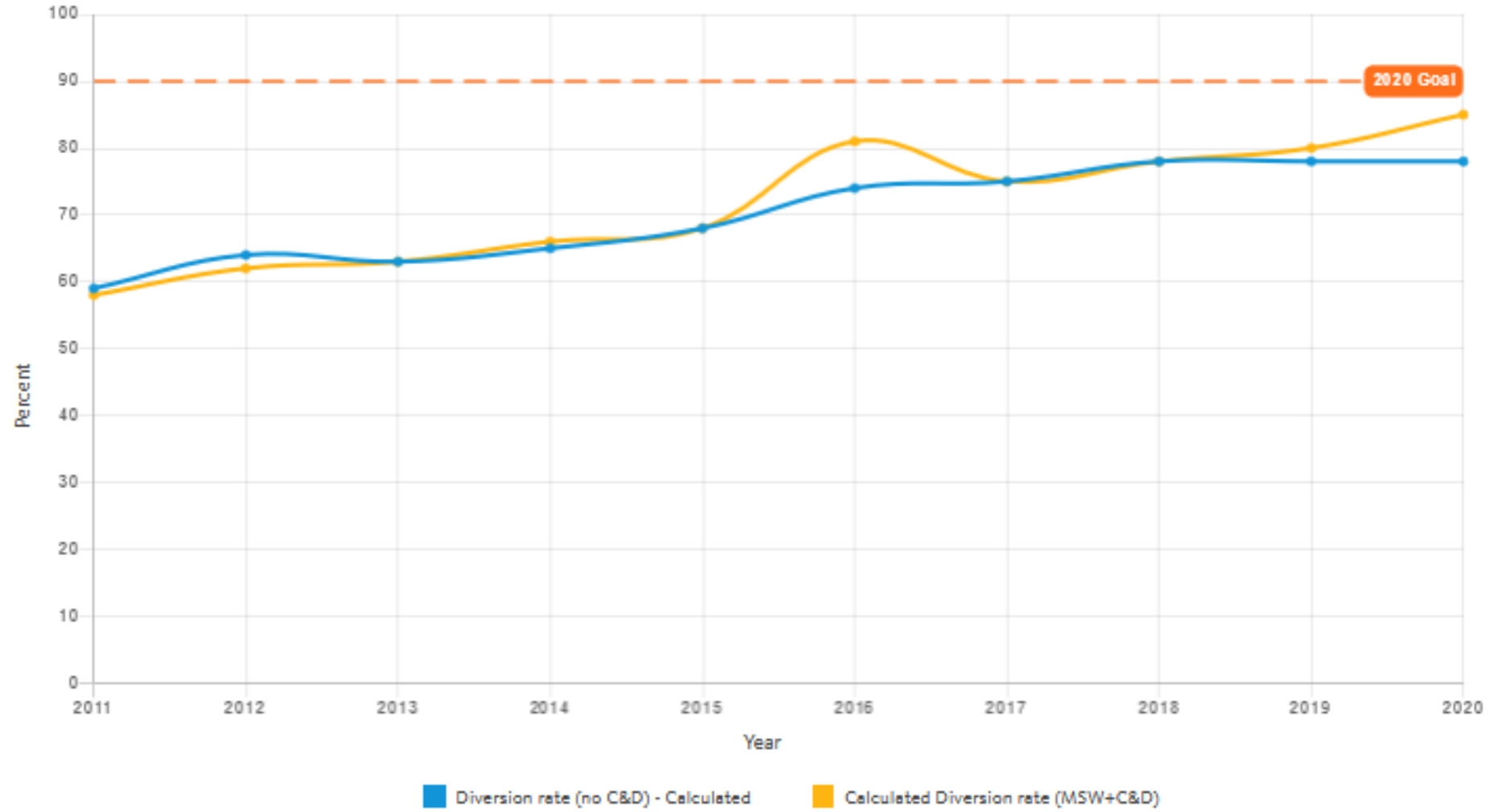
WATER



ZERO WASTE – GENERATED



ZERO WASTE – DIVERTED





UC San Francisco continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.


FOOD




**\$990K**  
total spend on food and beverages

**30.8%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

PROCUREMENT

  
**93%**  
green spend on indoor office furniture

  
**60%**  
green spend on cleaning supplies

  
**27%**  
green spend on electronics

UC San Francisco's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

GREEN BUILDING

UC San Francisco's total LEED certifications speak to its commitment to sustainability.



SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC San Francisco has met the goal of assessing three labs.



UNIVERSITY OF CALIFORNIA

# San Francisco Health



# San Francisco Health

UCSF Health is focused on tackling the most difficult challenges, not only to provide the best possible health outcomes for patients but to push innovation further.

This was demonstrated when COVID-19 hit the San Francisco Bay Area and personal protective equipment immediately became scarce. Supply chain management pivoted from purchasing disposable isolation gowns to buying washable isolation gowns for the emergency departments, COVID-19 unit and isolation rooms. This change is projected to save over \$100,000 per year and divert 120,000 pounds per year from landfill. Confronting limited supplies of N95 masks, UCSF Health marshalled the campus's eight 3D printers to make 8,000 [face shields](#) in a few weeks. The PET recyclable plastic can later be collected, pelletized and extruded into filament for reuse, saving thousands of dollars in the coming years. The Office of Sustainability helped fund the purchase of the extruder to make this closed-loop recycling system possible. Faculty and staff also came together to test ultraviolet light, hydrogen peroxide fog and irradiation to disinfect N95 masks for reuse. Engineering staff worked to provide negative pressurization for COVID-19 treatment areas.

In 2020, UCSF Health focused on waste reduction with the conclusion of an \$85,000 City and County of San Francisco Waste grant, resulting in a reduction of over 92 tons per year of solid waste, exceeding a goal of 72 tons per year. In addition, Dr. Seema Gandhi's team won a \$50,000 Caring Wisely grant, one of three teams selected from 25 applications, for her proposal to focus on operating room and intensive care unit waste reduction by measuring pre- and post-intervention metrics and using [Lean principles](#) to implement changes in practices that reduce waste, save resources and reduce costs. [New waste sorting training](#) was developed to meet local waste diversion ordinances and UC goals.

# San Francisco Health

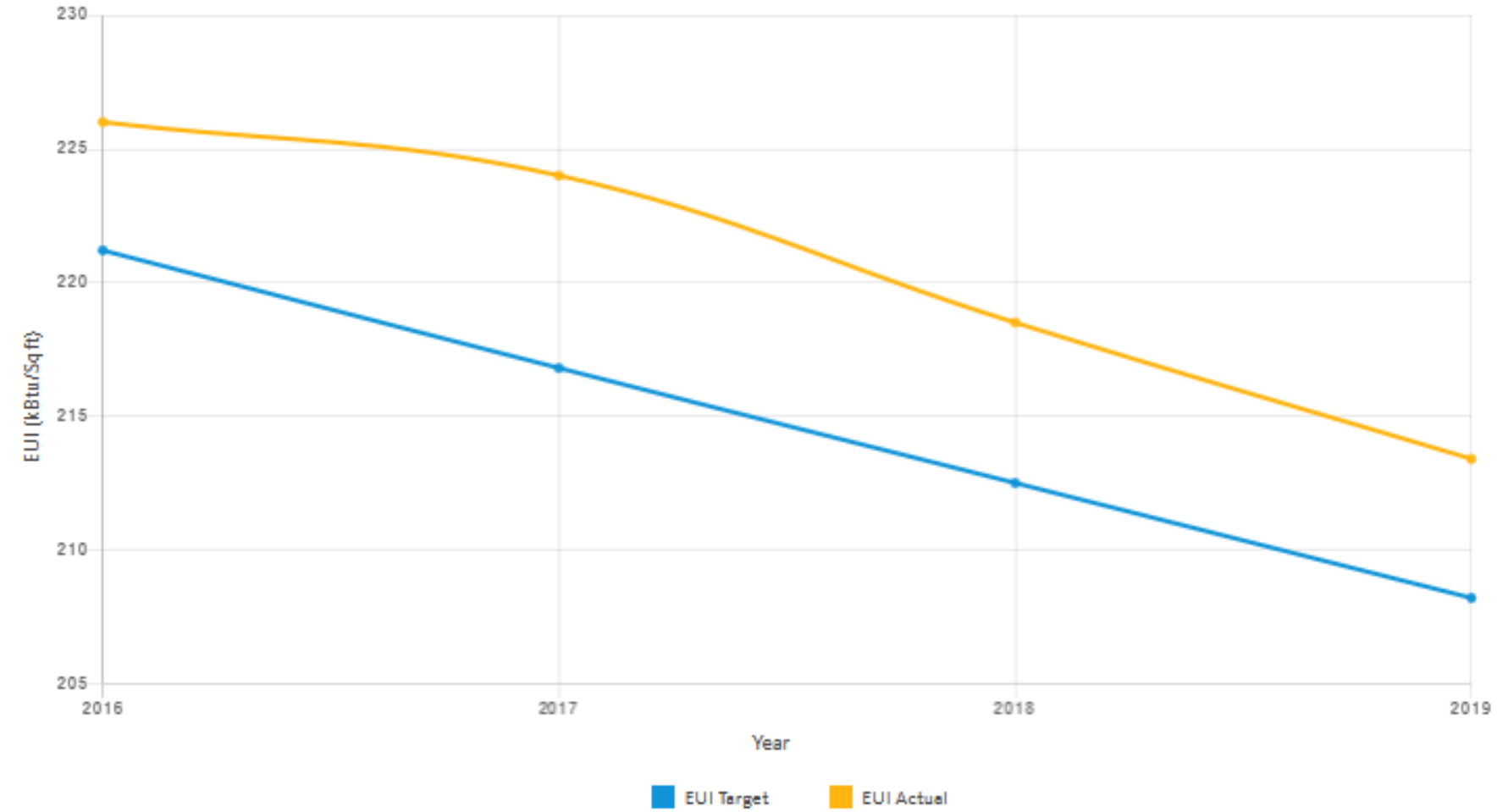
## Resource Savings During the Pandemic

In the first 90 days of the campus shutdown, UCSF saw a total estimated reduction of 12,165 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), which is approximately 9% of its total emissions. Eliminating nonessential business travel reduced scope 3 emissions by an estimated 4,690 metric tons of CO<sub>2</sub>e. Energy and water use reductions saved \$1 million and avoided 875 metric tons of CO<sub>2</sub>e. Use of telehealth, UCSF Health's tool for virtual outpatient visits, increased significantly between February and April, reducing carbon emissions from expected patient travel by 6,600 metric tons of CO<sub>2</sub>e in the first 90 days. Emissions were eliminated from vehicle and air travel from patients who would have come from across the western U.S.

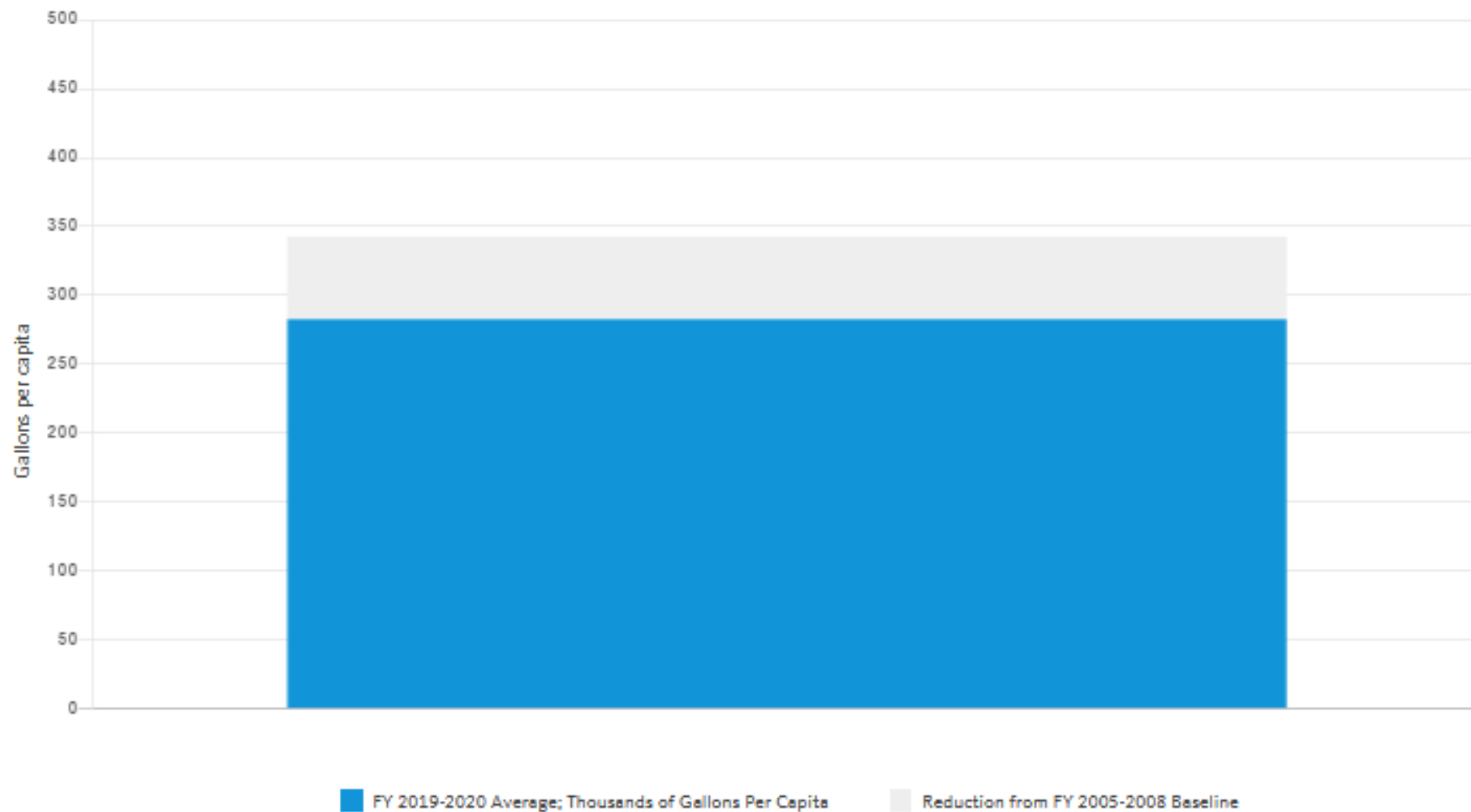


# San Francisco Health

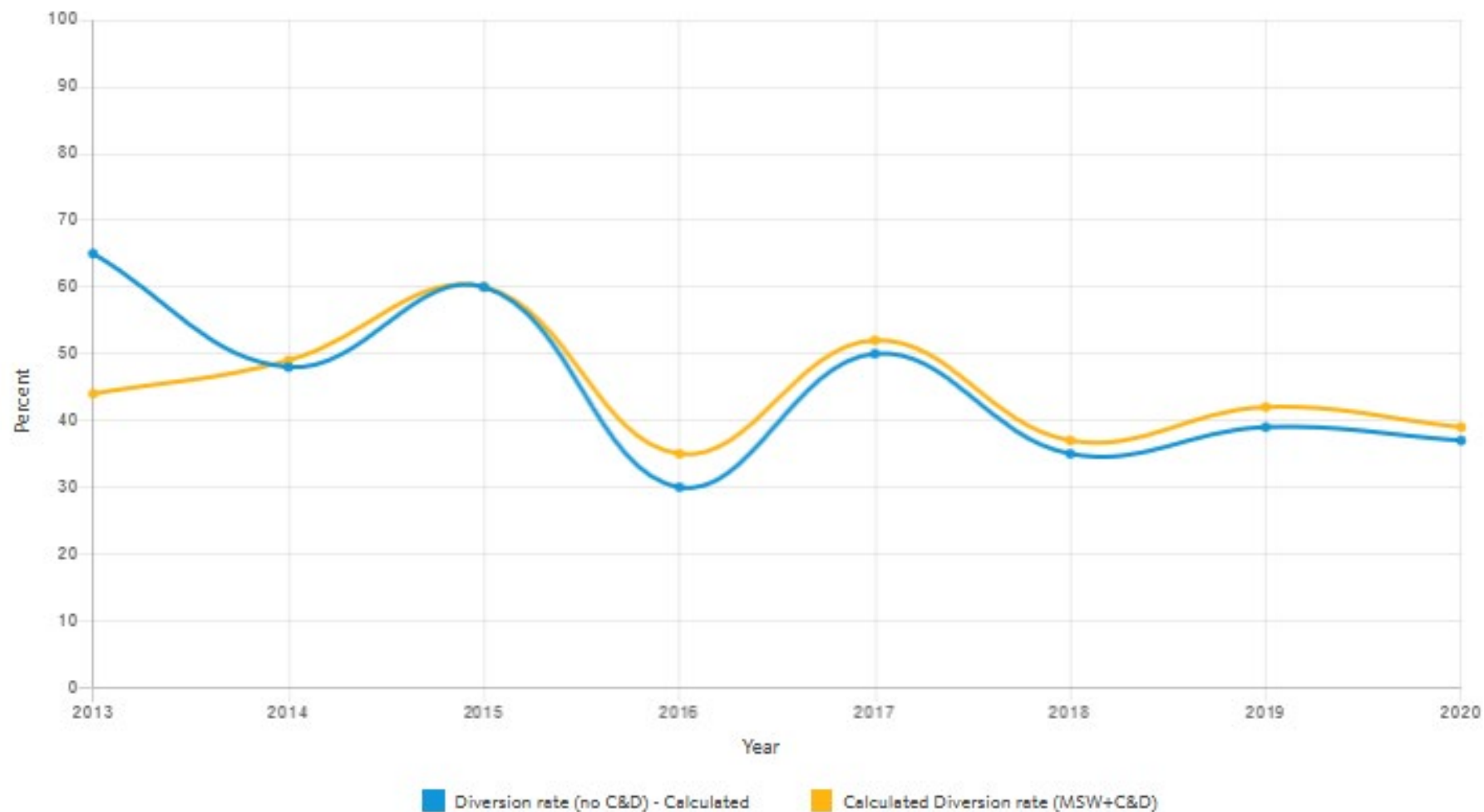
ENERGY USE INTENSITY (EUI)



WATER



ZERO WASTE – DIVERTED





# San Francisco Health

## FOOD



**\$10.5M+**

total spend on food and beverages

**11.6%**

of food and beverage purchases met sustainability criteria in fiscal year 2019-20

UC San Francisco Health continues to set ambitious goals, with a goal for 2030 of 30% spend on sustainable food and beverages.

## GREEN BUILDING

UC San Francisco Health received 1 LEED Gold certification in 2020.

**3 Gold, 2 Silver and 1 Certified**

– Total number of LEED certifications



[Practice Greenhealth, Emerald Award](#)

## AWARDS

UC San Francisco Health was the proud recipient of a Practice Greenhealth Emerald Award in 2020.

A full list of awards is [here](#).

UNIVERSITY OF CALIFORNIA

# Santa Barbara



In 2020, UC Santa Barbara took several sustainability actions that also contribute to positive human health outcomes.

For example, it signed a pledge through the Center for Environmental Health to commit to purchasing safer furniture products to protect the health of the community and the global environment. The campus also replaced nearly all of its gas-powered grounds tools with electric models. This switch not only reduces greenhouse gas emissions but helps mitigate workers' respiratory health issues by reducing the inhalation of exhaust, toxins and dust.

In spring 2020, UC Santa Barbara's Edible Campus Program Student Farm (a partnership of the [Associated Students Department of Public Worms](#), [Associated Students Food Bank](#) and the Sustainability Program) was determined to be an essential service and maintained operations through the COVID-19 pandemic. Portola Dining Commons also launched a food recovery program managed by Housing, Dining, and Auxiliary Enterprises.

Additionally, Santa Barbara's total operational greenhouse gas emissions were about 20% below 1990 levels, despite a near doubling in square footage. The campus expects to see its operational greenhouse gas emissions drop almost 50% in the upcoming year as it procures more clean electricity. In July 2020, UC Santa Barbara joined the [UC Clean Power Program](#), which provides 100% carbon-free power.

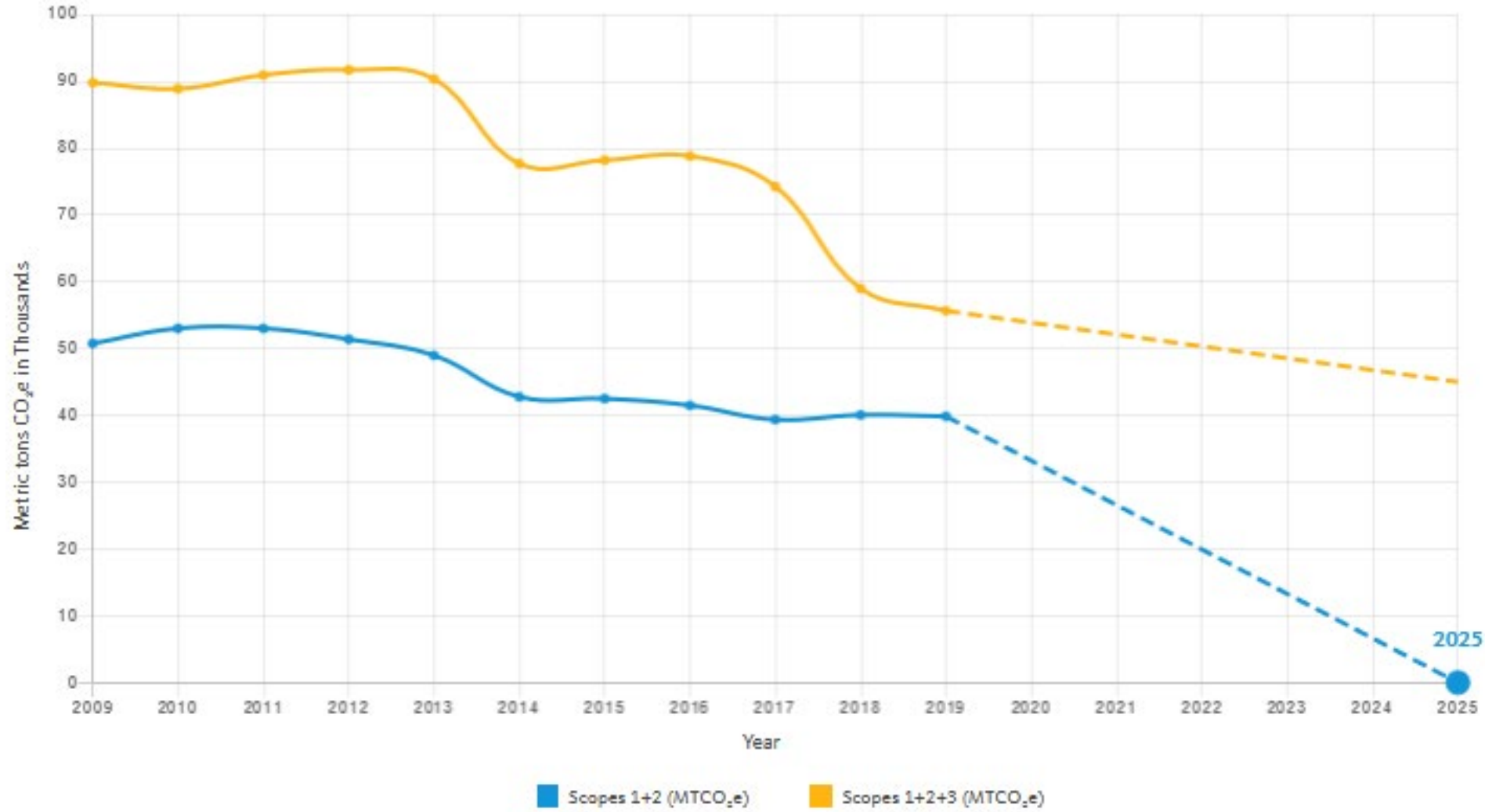
Last year the campus ramped up climate education with the launch of the UC-CSU Knowledge Action Network (KAN) NXTerra Digital Platform and Knowledge Action Network, co-directed by Dr. John Foran, a distinguished UCSB professor of sociology and environmental studies. The UC-CSU KAN for Transformative Climate and Sustainability Education and Action is a collaborative effort of UC and California State University educators to scale and intensify California students' literacy in climate change, climate justice, carbon neutrality, greenhouse gas emissions reductions and critical sustainability.

## Shifting Conference Culture

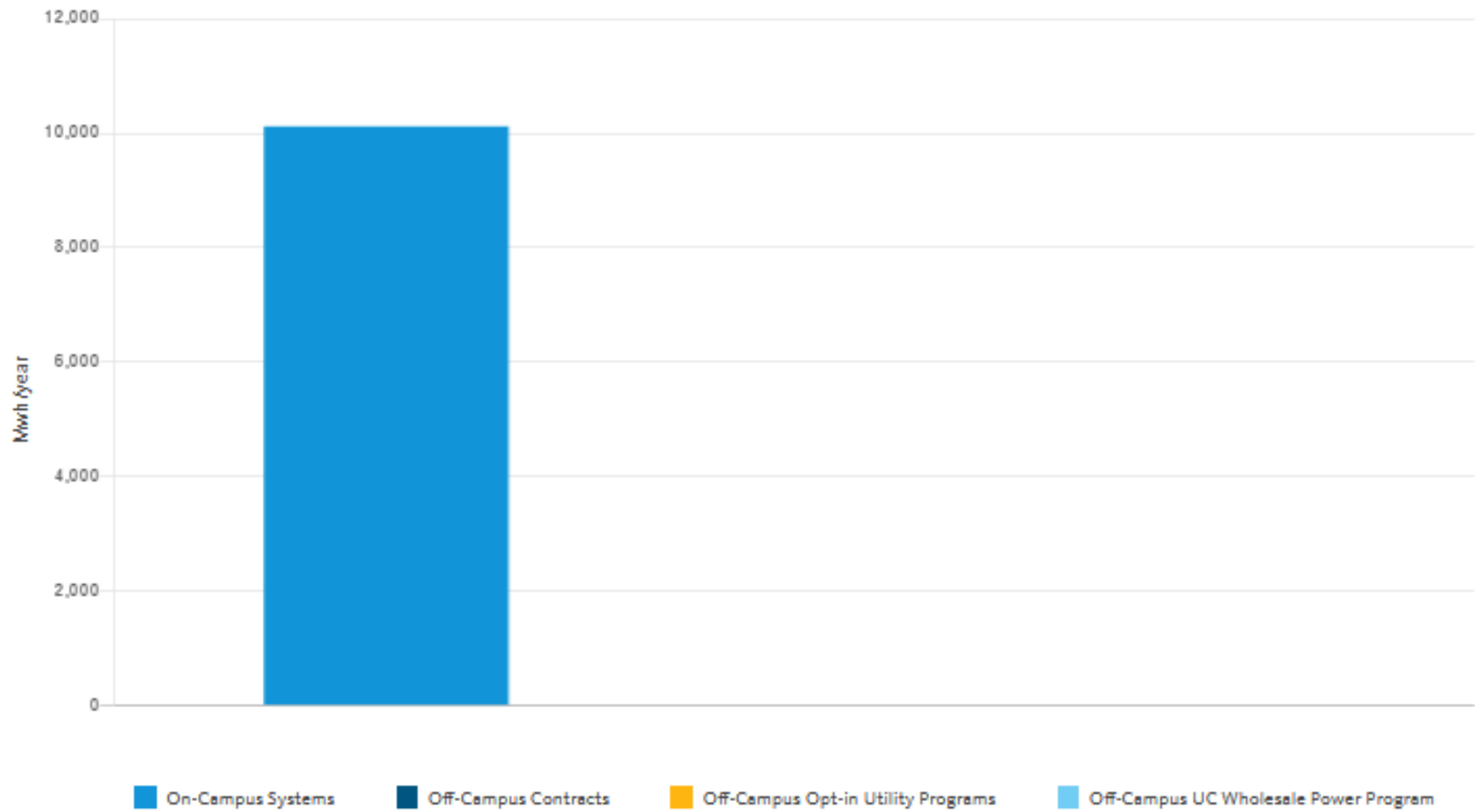


The annual [California Higher Education Sustainability Conference \(CHESC\)](#), typically hosted at UC Santa Barbara, went 100% virtual for the first time in its 19-year history. This rapid change was a direct result of the COVID-19 pandemic. The conference steering committee retooled months of conference planning and challenged all of the assumptions around audience participation built up over almost two decades. Inspired by pioneers such as the UCSB Environmental Humanities Initiative that developed the [Nearly Climate Neutral Conference Model](#), UC Santa Barbara sought to achieve online all that had historically been accomplished through CHESC and hosted several virtual networking sessions, panels and sponsor events.

CLIMATE PROTECTION – EMISSIONS

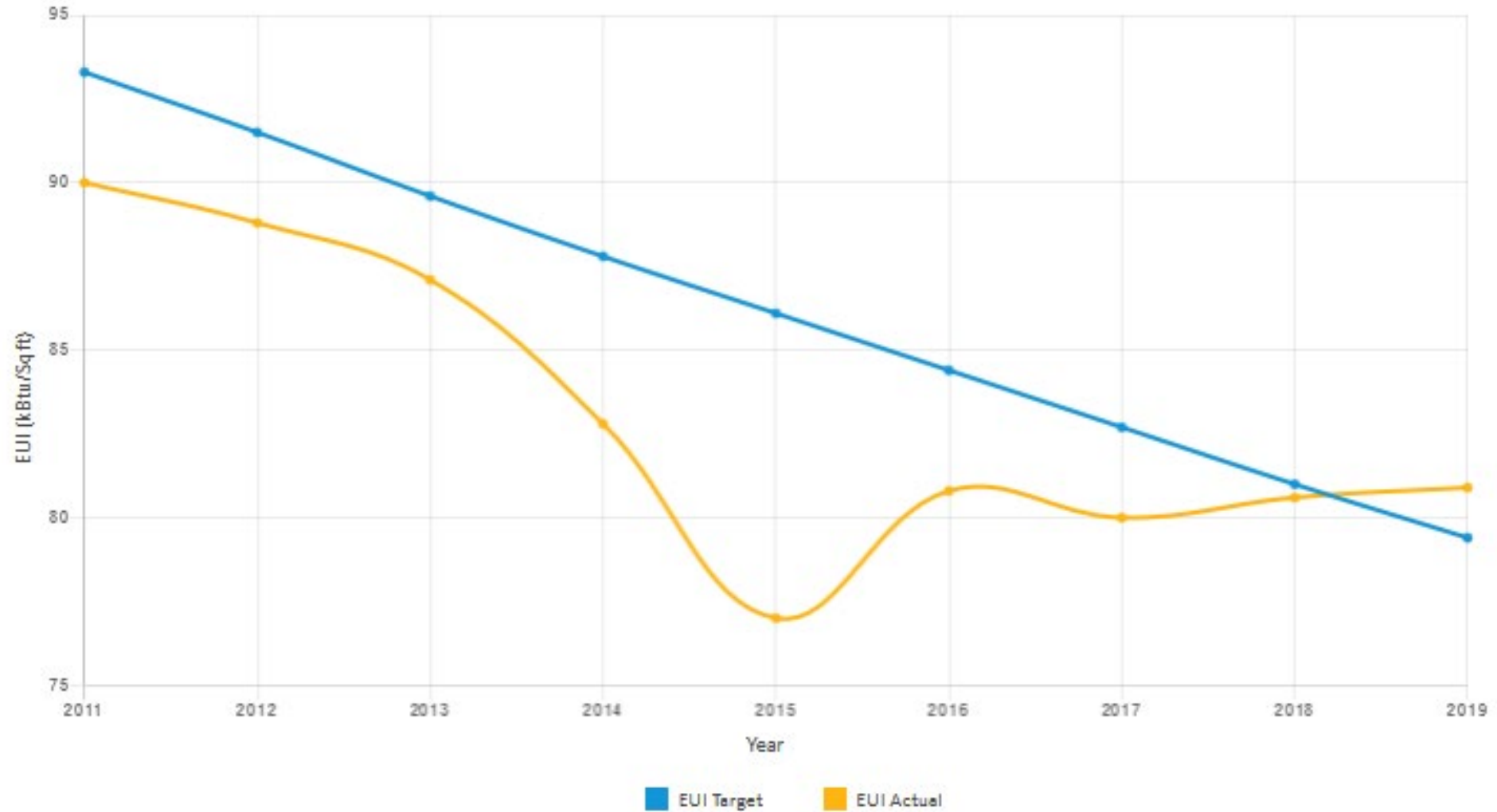


ENERGY – RENEWABLE ELECTRICITY GENERATION





ENERGY USE INTENSITY (EUI)



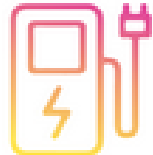
TRANSPORTATION

UC Santa Barbara continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



**39%**

of UCSB employees are utilizing alternative commuting methods



**85**

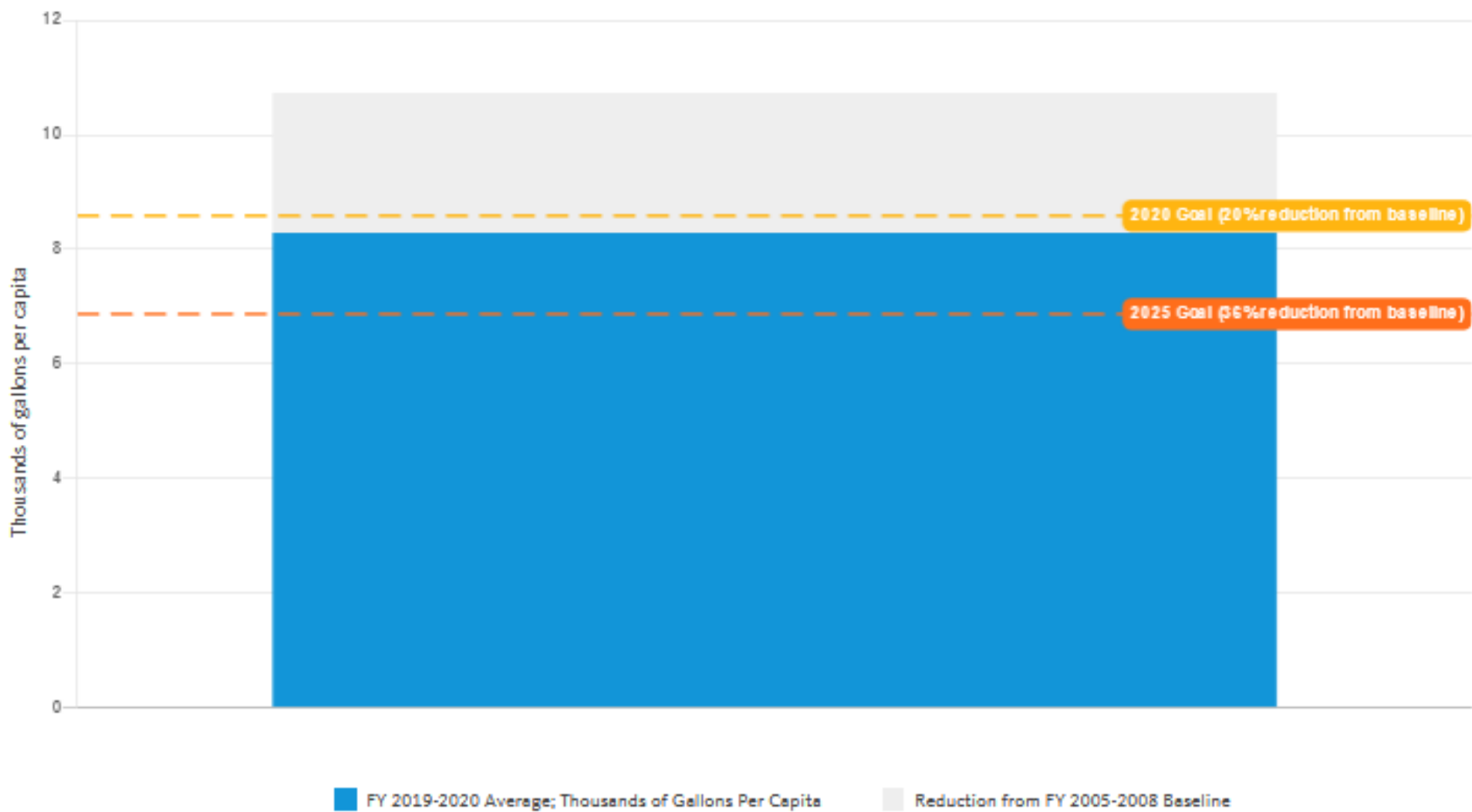
EV charging stations at this location for 2019-2020



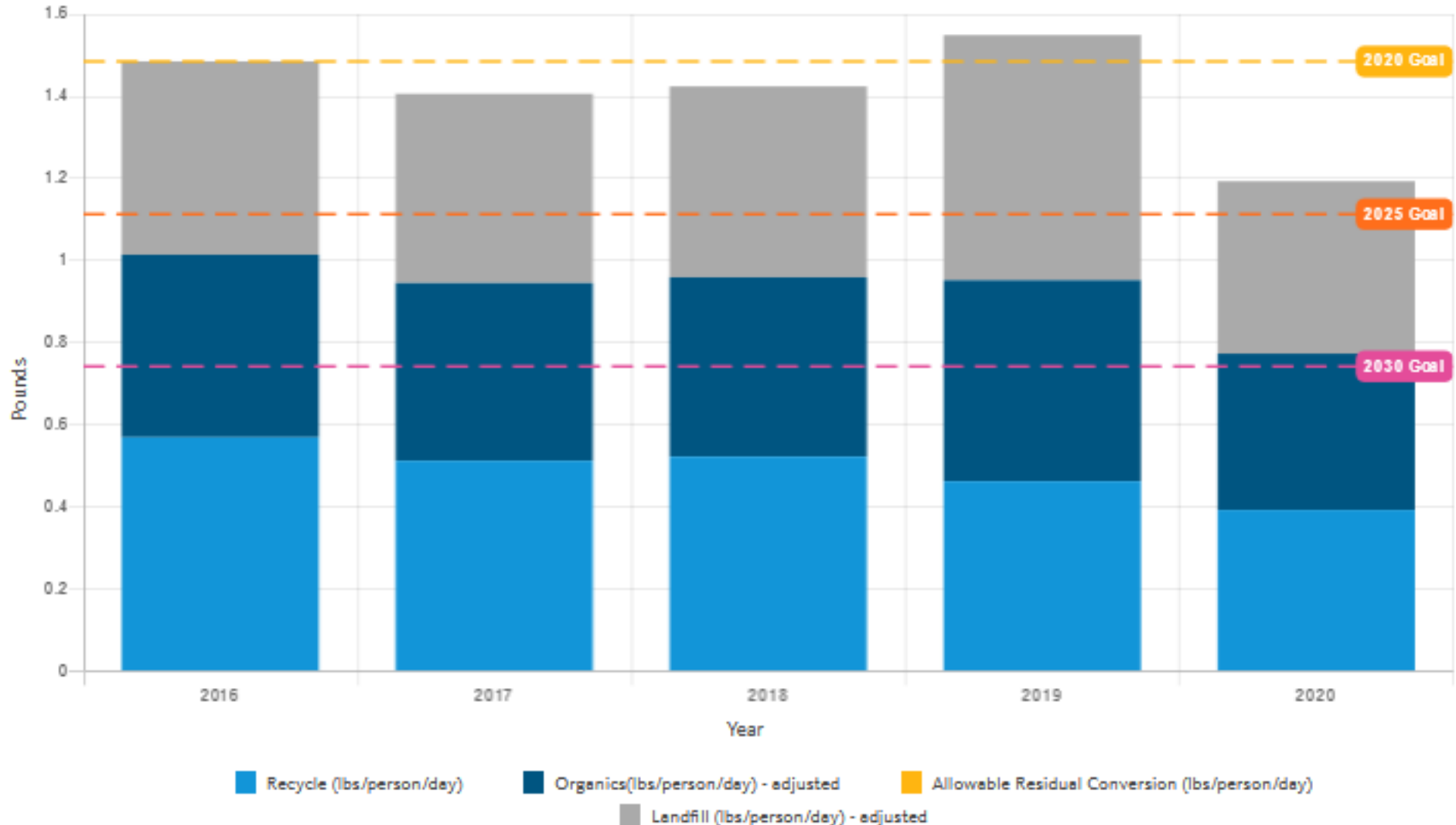
**64%**

of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

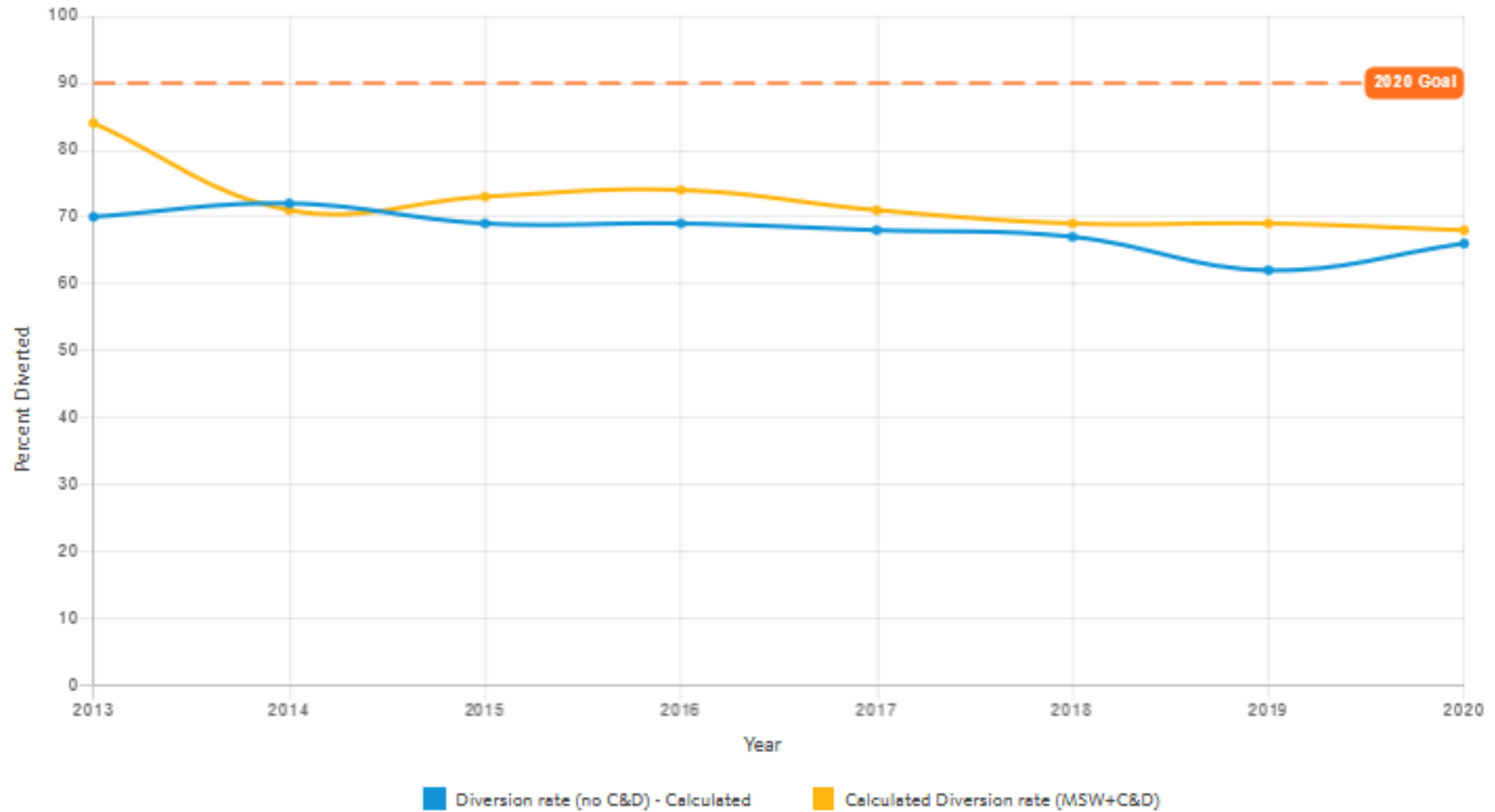
## WATER



## ZERO WASTE – GENERATED



ZERO WASTE – DIVERTED



UC Santa Barbara continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

### FOOD



**\$5.8M+**  
total spend on food and beverages

**19.6%**  
of food and beverage purchases met sustainability criteria in fiscal year 2019-20

### PROCUREMENT

**95%**  
green spend on indoor office furniture



**63%**  
green spend on cleaning supplies

**65%**  
green spend on electronics

UC Santa Barbara's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

GREEN BUILDING

UC Santa Barbara's total LEED certifications speak to its commitment to sustainability.

14 Platinum, 40 Gold, 15 Silver and 2 Certified

- Total number of LEED certifications

SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Santa Barbara has met the goal of assessing three labs.



**61**

total assessed research labs

## AWARDS

UC Santa Barbara was the proud recipient of an AASHE STARS Gold rating in 2020.

A full list of awards is [here](#).



[AASHE STARS Gold rating](#)



UNIVERSITY OF CALIFORNIA

# Santa Cruz



UC Santa Cruz made major advances toward meeting the [systemwide 2025 carbon neutrality goal](#) with the construction of its largest renewable energy system through a power purchase agreement.

A new 2.1-megawatt photovoltaic array located at the East Remote Parking Lot will replace approximately 20% of grid-purchased electricity, or just over 6% of the campus's total electrical load. This equates to greenhouse gas reductions of 767 megatons of CO<sub>2</sub>e, or 2.6% of UCSC's scope 1 and 2 emissions. This large array will provide covered parking while saving the University approximately \$6 million over the array's 20-year lifetime.

UCSC's Carbon Neutrality Initiative Fellows developed an [energy and emissions roadshow](#) and promoted multiple energy conservation measures, such as the [Million LED Challenge](#) and the [International Laboratory Freezer Challenge](#), which will continue to help educate the campus community and support carbon neutrality in the long term.

Several transportation accomplishments continue to chip away at UCSC's scope 1 emissions. Out of 17 purchased light-duty fleet vehicles, the campus purchased 10 zero-emission vehicles (ZEVs) and two hybrids — the most sustainable year of purchases yet. [Fleet Services](#) received a \$20,000 [UCSC Carbon Fund](#) grant to subsidize the purchase of the next five ZEVs. Additionally, [Transportation and Parking Services](#) worked with the [City of Santa Cruz Metro](#) to establish express bus routes, allowing for better service and increased ridership across campus.

In addition to working on carbon neutrality, the campus elevated the significance of resilience and adaptation planning. UCSC conducted a preliminary resilience assessment across campus, formally incorporated the topic within the work of the Risk Intelligence committee and briefed campus leadership. The campus also identified potential areas of partnership with the [City of Santa Cruz Climate Action Program](#) to continue exploring future climate impacts throughout the local community and across the region.

## Supporting Underserved Student and Community Populations

**U**C Santa Cruz ranked as the fourth best university in the country for social mobility, according to the 2020 [U.S. News and World Report](#) rankings. In 2020, the campus will educate more than 5,700 students from low-income backgrounds.

Compelled by values of social justice and equity, UC Santa Cruz rose to the challenge COVID-19 presented its students and community and took multiple actions to address economic disparities, including:

- Implementing the Slug Tech program, which provided laptops and internet modems to over 260 students.
- Creating the Zoom Student Corps, a service that kept students employed by providing Zoom and virtual class assistance to faculty and provided on-demand support to student attendees.
- Establishing a molecular diagnostics lab and worked with county and community partners to provide COVID-19 testing for low-income patients and members of the campus community.
- Winning a county contract to provide approximately 1,000 daily meals to local shelters and emergency-service operations.

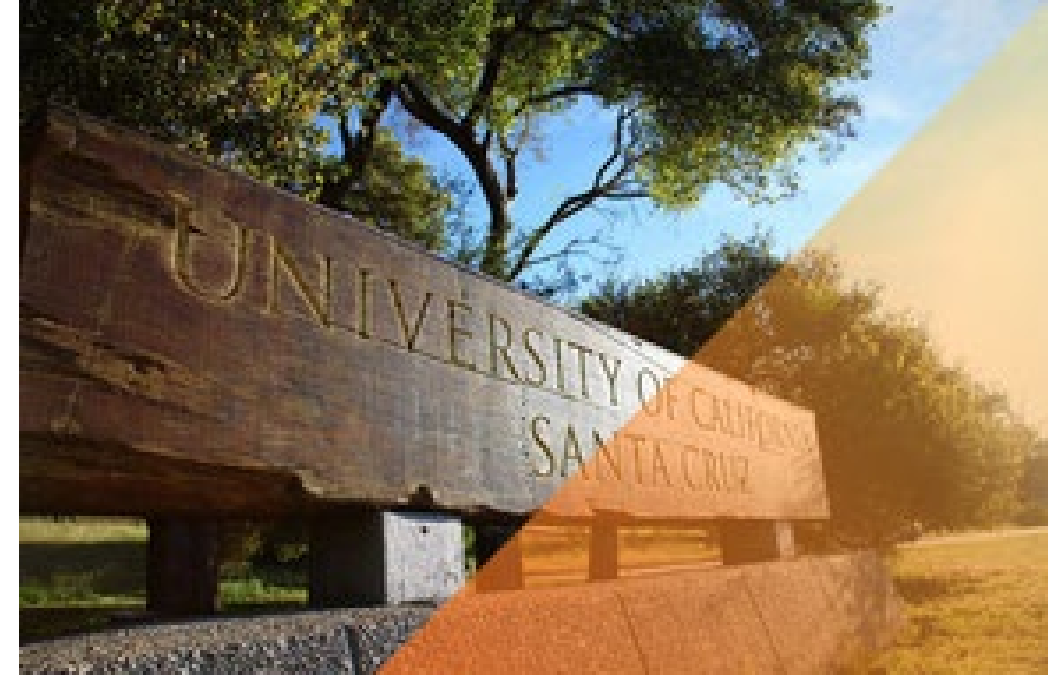


## Zero Waste Solutions That Comply with COVID-19 Health and Safety Practices

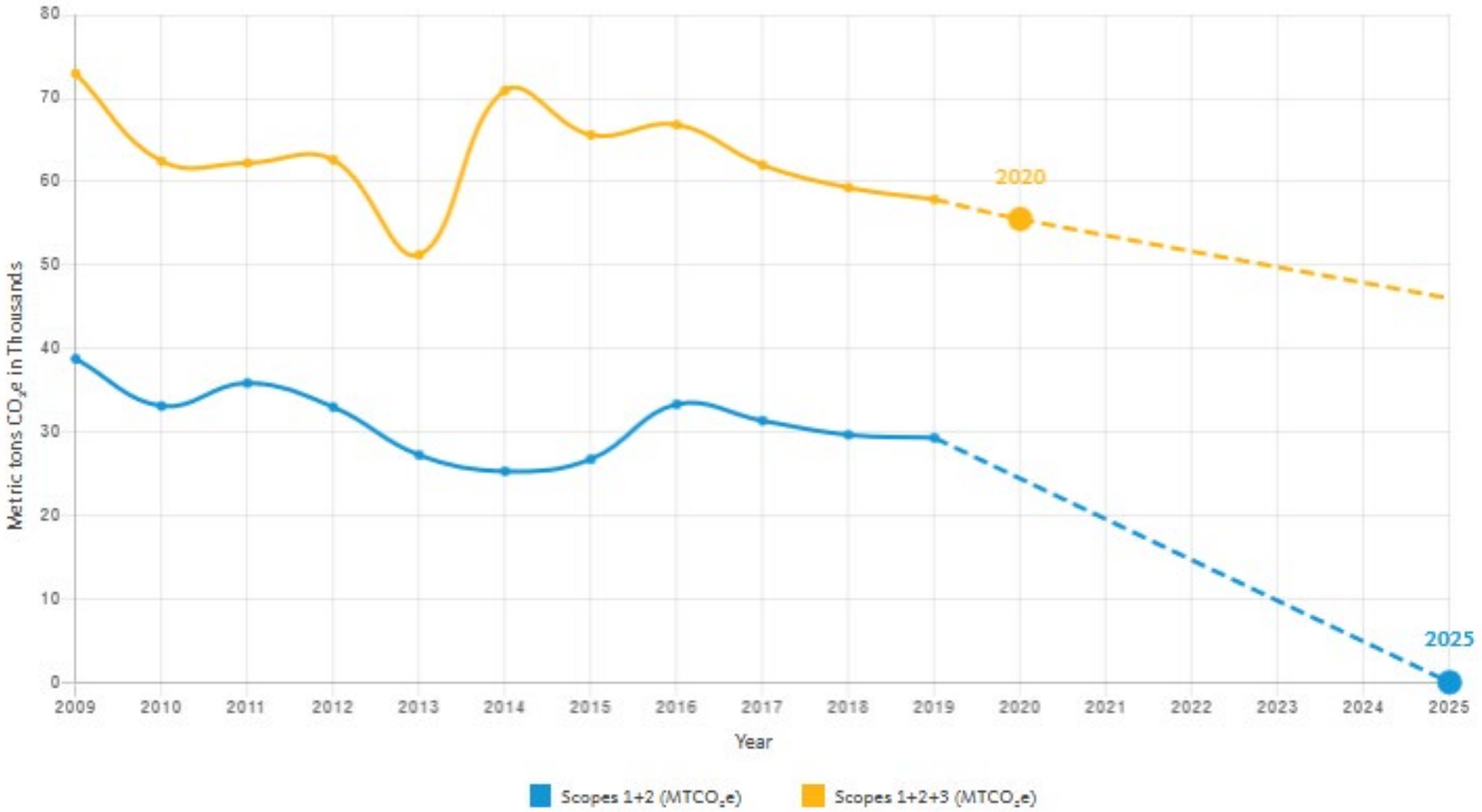
**U**C Santa Cruz's Environmental Health and Safety (EH&S) department pursued creative solutions to support sustainability while implementing effective [health and safety practices in response to COVID-19](#). With just a few days to roll out options to essential employees before the campus shut down, it would have been easy for zero waste activities to fall by the wayside, but EH&S staff remained committed to supporting campus sustainability. Whether by distributing face coverings, hand sanitizer or disinfectant spray, EH&S helped lead the way in reducing the amount of waste produced by single-use solutions.

EH&S's ongoing waste prevention program includes:

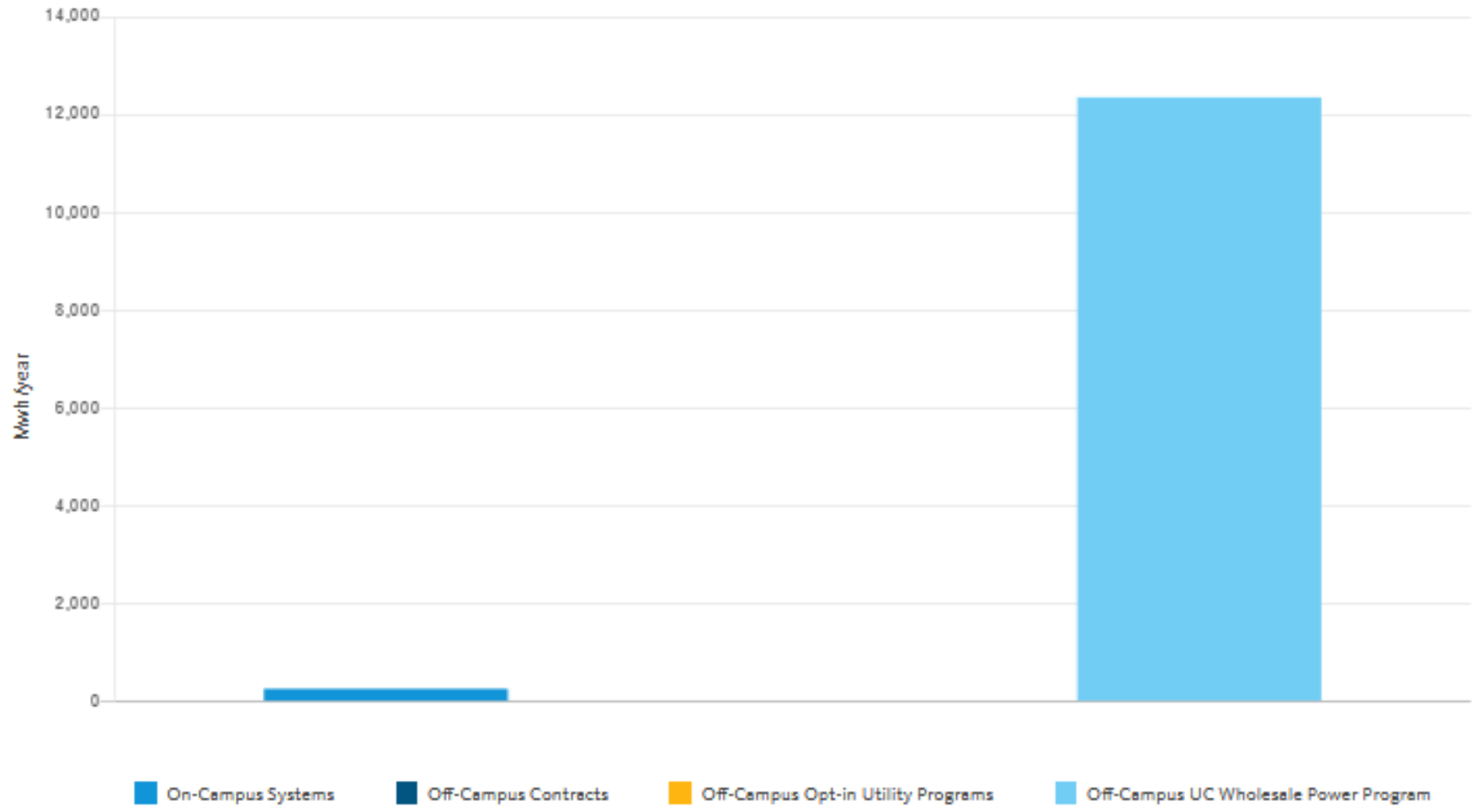
- A partnership with the Theater Arts department to sew reusable, custom fabric masks for all essential employees working on campus.
- Preparing hand sanitizer in bulk in campus laboratories and providing refills for personal-size containers, as well as working with Custodial Services to evaluate refill options for stand-alone dispenser stations.
- Coordinating campuswide bulk purchases of the EPA-registered disinfectant preferred by Custodial Services, then dispensing and refilling spray bottles for users throughout campus.
- Working with departments and Physical Plant Services to ensure effective, but not excessive, use of plastic coronavirus shielding.



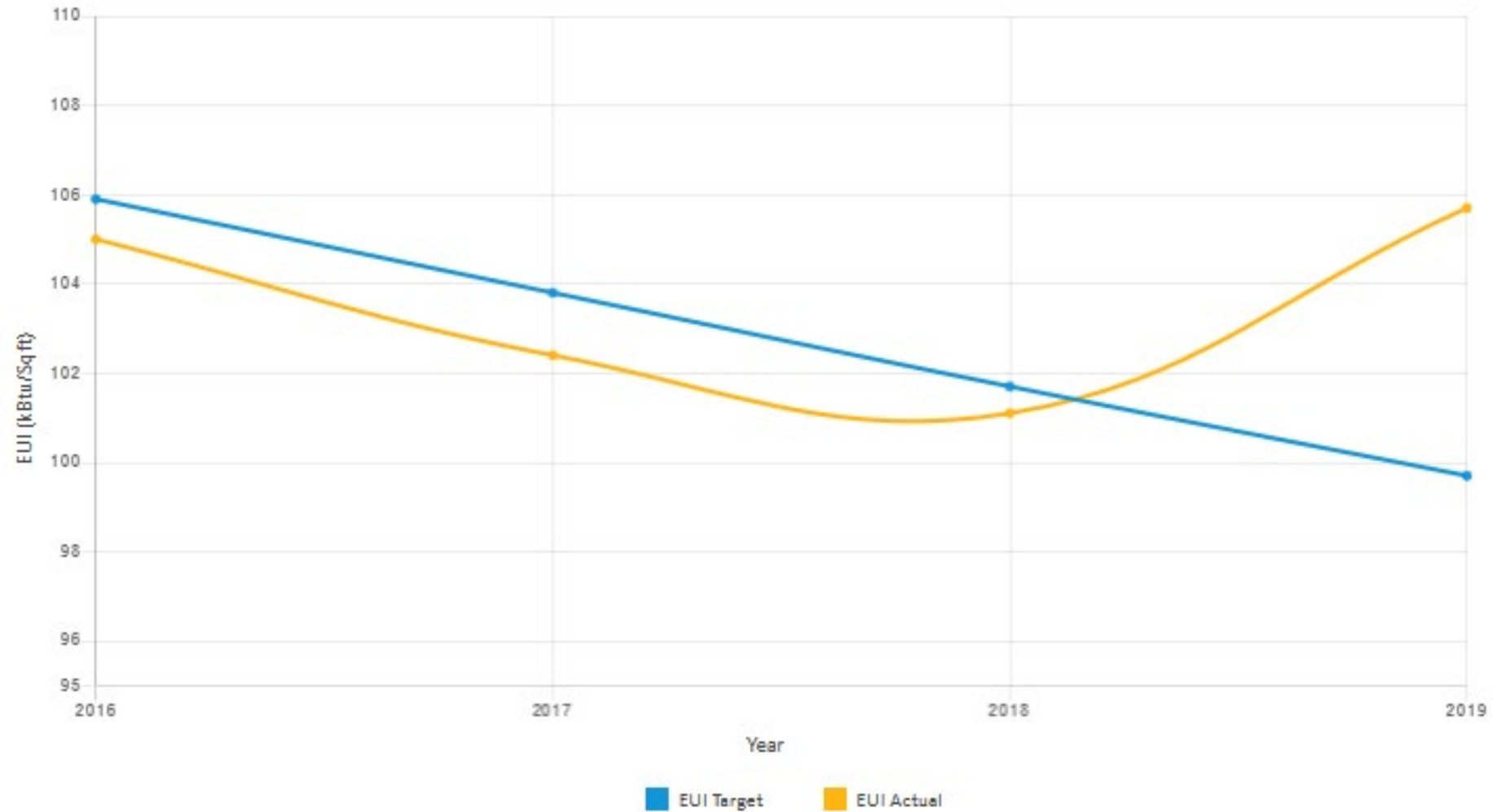
## CLIMATE PROTECTION – EMISSIONS



ENERGY – RENEWABLE ELECTRICITY GENERATION



ENERGY USE INTENSITY (EUI)





## TRANSPORTATION

UC Santa Cruz continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



**49%**

of UCSC employees are utilizing alternative commuting methods



**22**

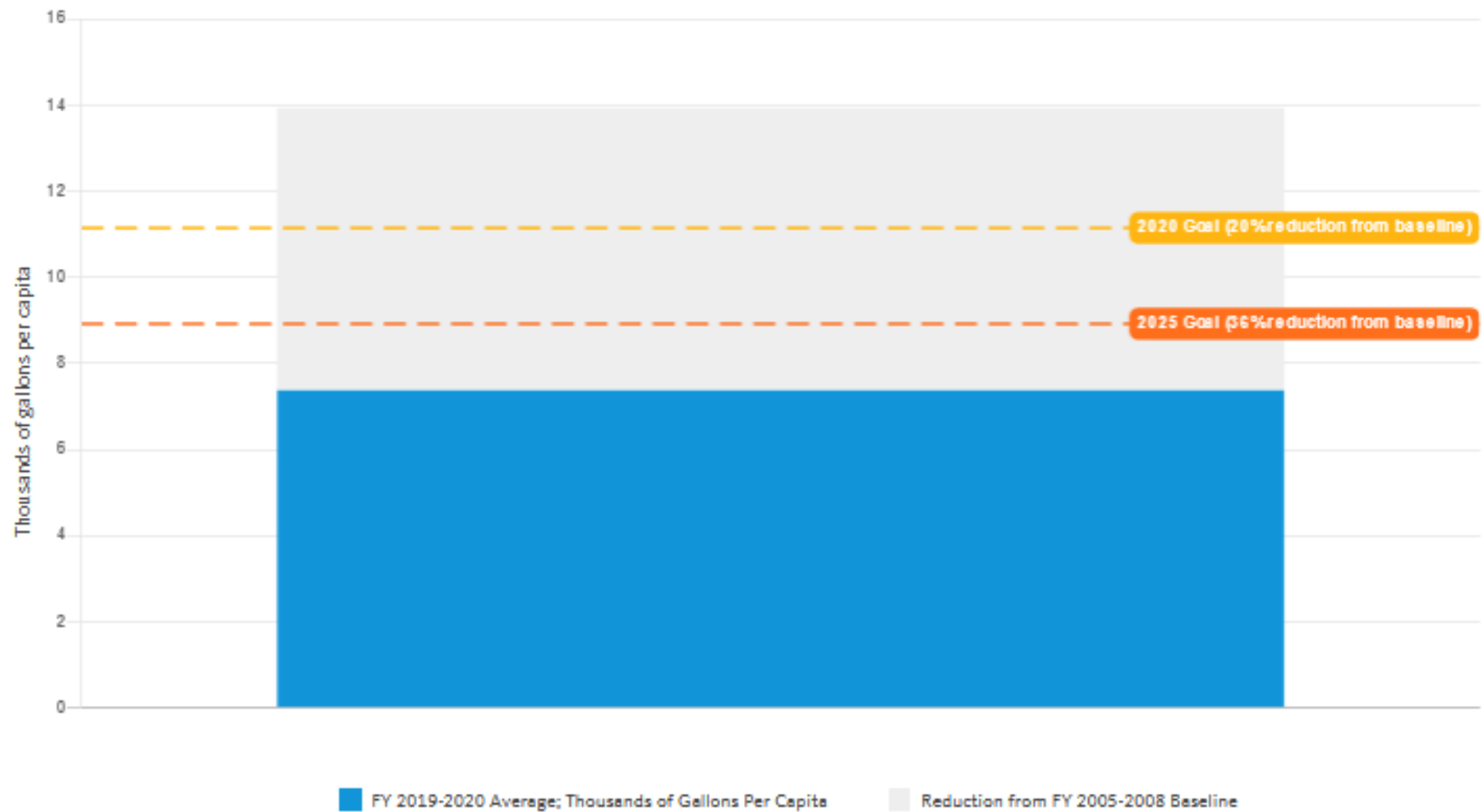
EV charging stations at this location for 2019-2020



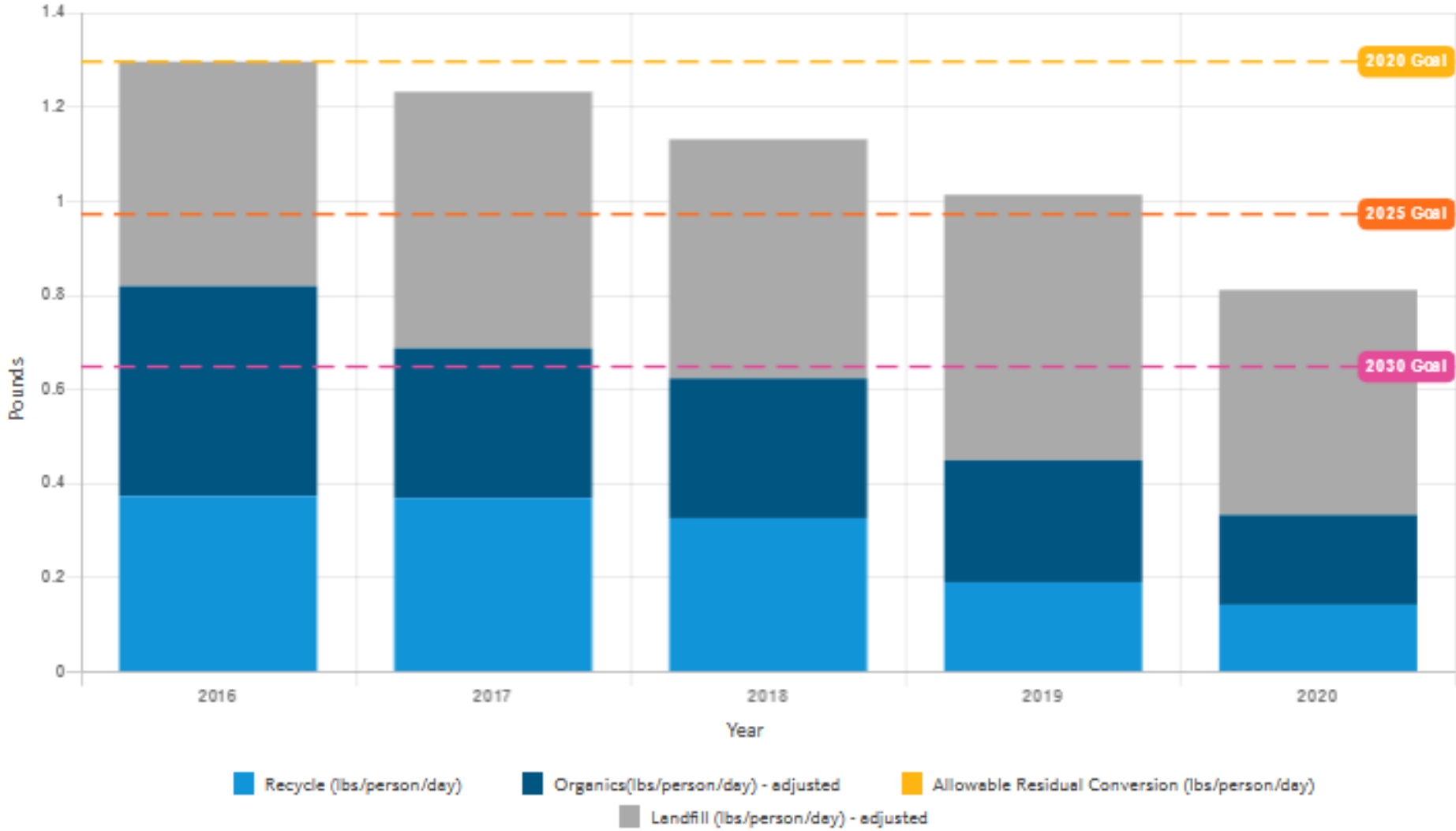
**71%**

of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles

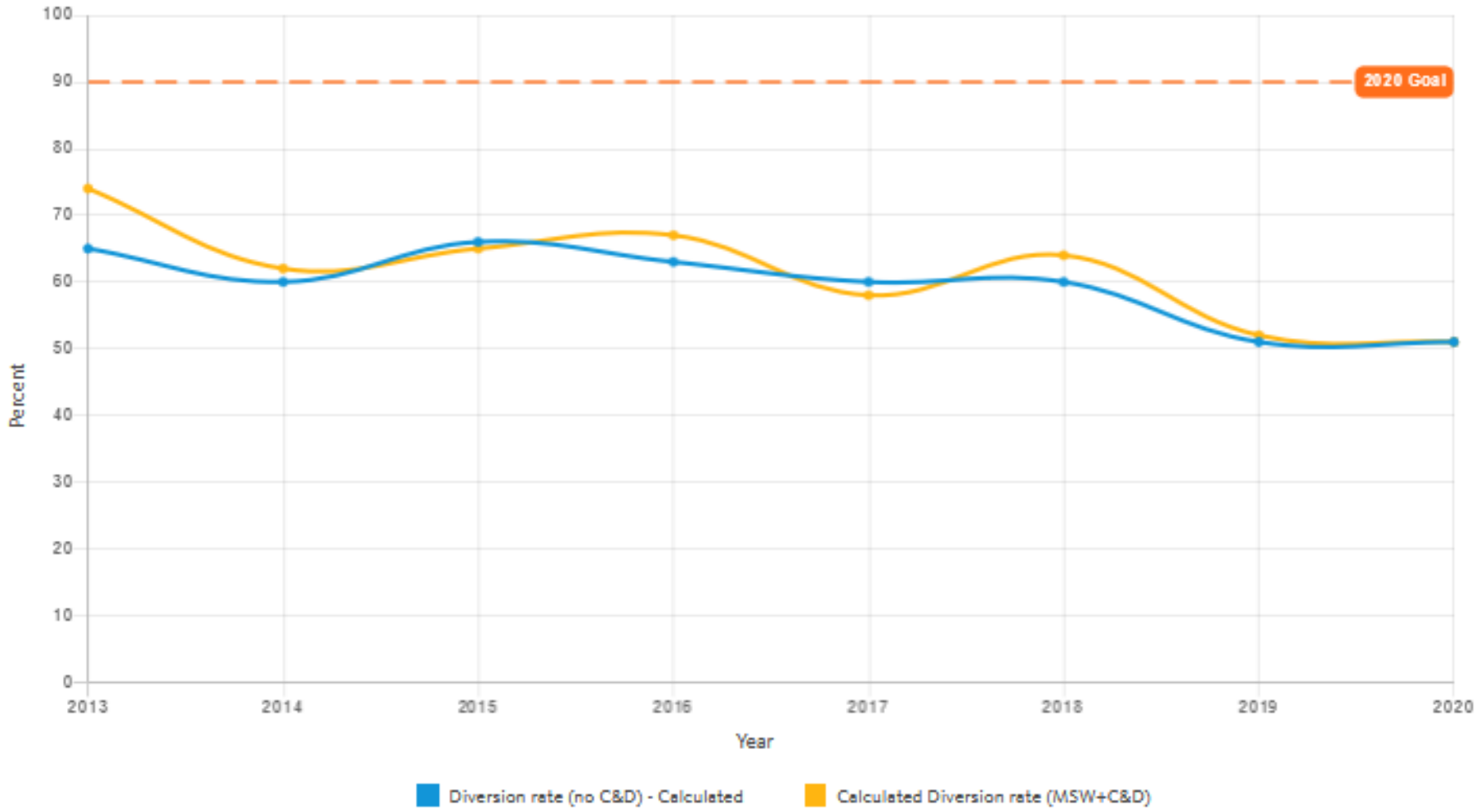
## WATER



## ZERO WASTE – GENERATED



## ZERO WASTE – DIVERTED



UC Santa Cruz continues to set ambitious goals, with a goal for 2030 of 25% spend on sustainable food and beverages.

## FOOD



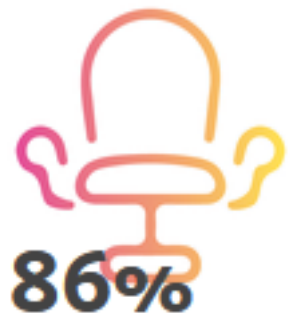
**\$6.3M+**

total spend on food and beverages

**27.1%**

of food and beverage purchases met sustainability criteria in fiscal year 2019-20

## PROCUREMENT



green spend on indoor office furniture



**86%**

green spend on cleaning supplies

**73%**

green spend on electronics

UC Santa Cruz's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

## GREEN BUILDING

UC Santa Cruz's total LEED certifications speak to its commitment to sustainability.

**7 Gold, 6 Silver and 1 Certified**

- Total number of LEED certifications

## SUSTAINABLE BUILDING & LABORATORY OPERATIONS

UC Santa Cruz has met the goal of assessing three labs.



**40**

total assessed research labs

## AWARDS

UC Santa Cruz was the proud recipient of an AASHE STARS Gold rating in 2020.

A full list of awards is [here](#).



[AASHE STARS Gold rating](#)

# Agriculture and Natural Resources





# Agriculture and Natural Resources

[UC Agriculture and Natural Resources \(UC ANR\)](#) delivers the land grant mission for the University and the state of California by developing and promoting practical, science-based solutions to ensure the sustainability of the state's food systems, water resources and natural ecosystems.

During 2020, UC ANR's statewide facilities, including nine Research and Extension Centers, the Elkus Ranch Environmental Education Center and an administrative building, made strides in sustainable practices.

## + Water

UC ANR established a baseline for potable water usage, based on a three-year average (2016-19) of 20 gallons per square foot. In 2020, UC ANR averaged 21 gallons per square foot, partially due to meter installations that improved accuracy, resulting in higher readings. The [South Coast Research and Extension Center](#) reduced nonpotable water usage by 8.8 million gallons, compared to the previous year. The center continues to use reclaimed water for research and landscaping, and [promotes reclaimed water management strategies](#).

# Agriculture and Natural Resources

## + Transportation

Of UC ANR's new light-duty fleet vehicles, 11% were zero-emission (ZEV) or hybrid. Although it is often not feasible for UC ANR to purchase or lease ZEVs or hybrid vehicles given the need for pickup trucks that are not available in those models, when possible, UC ANR purchases or leases flex fuel vehicles, which use alternative fuel. Four newly acquired light-duty vehicles, or 44% of all new vehicles, were flex fuel.

## + Waste

The [Elkus Ranch Environmental Education Center](#), in partnership with the San Mateo County Office of Sustainability, continued to educate visitors about waste reduction through the [waste-free lunches program](#). Nearly 7,000 school-age students visited in the past year, and 1,000 reusable snack bags were distributed.

## + Energy

[UC ANR's LEED certified administrative building](#) continues to make energy-efficiency improvements, including climate adjustments according to occupancy and retrofitting parking lot lights. These improvements have resulted in a 22% reduction in electricity use and 50% reduction in gas use.

UNIVERSITY OF CALIFORNIA

# Agriculture and Natural Resources

UC ANR Helps Build Climate-Resilient  
Communities and Ecosystems



UC ANR contributes to increased preparedness for and resilience to extreme weather and climate change.

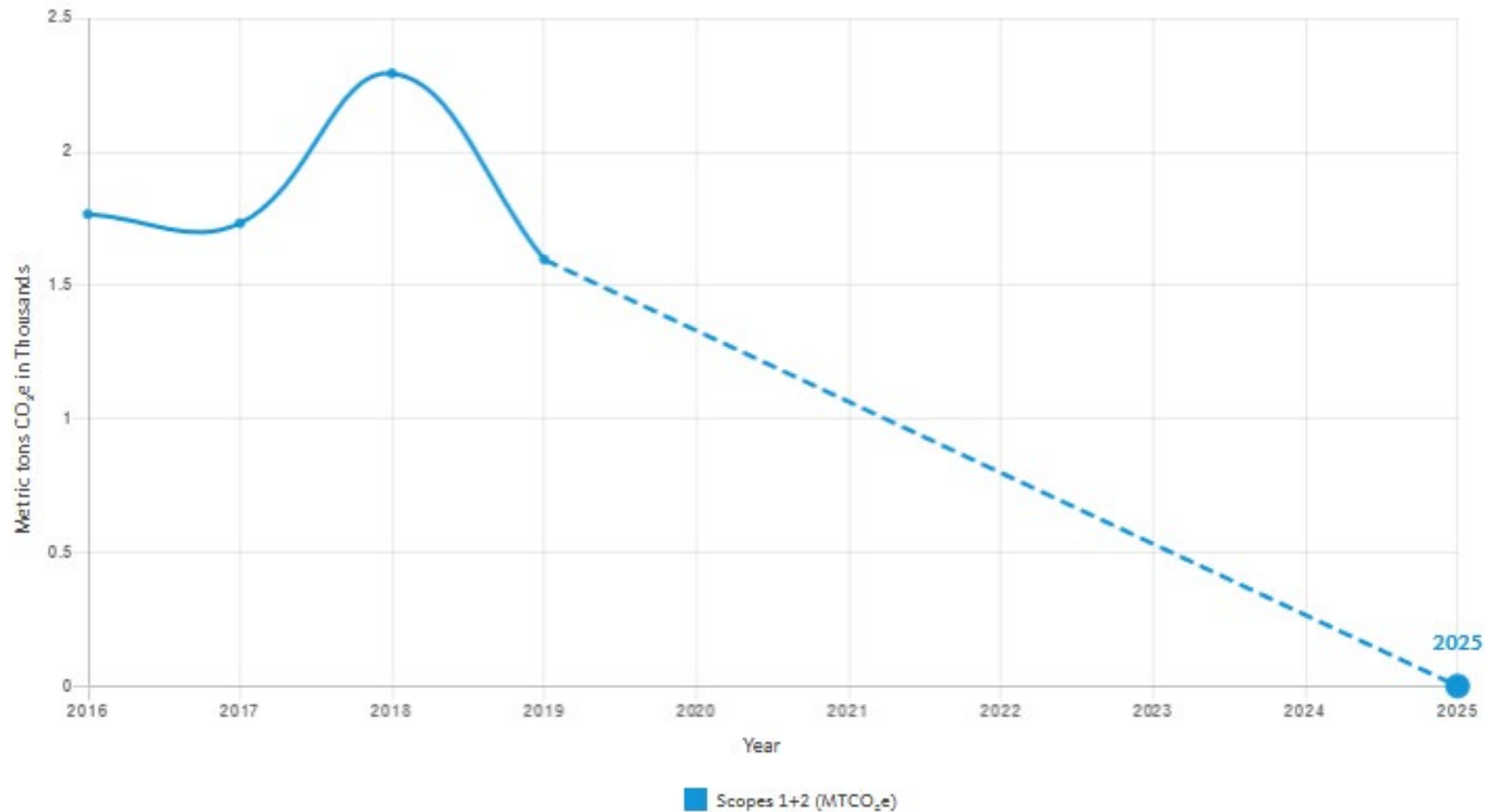
During 2020, UC ANR's [climate smart agriculture programs](#), in partnership with the California Department of Food and Agriculture, provided 125 farmers with grants to help them implement practices that build resilience to climate change and reduce greenhouse gas emissions.

## UC ANR Helps Build Climate-Resilient Communities and Ecosystems

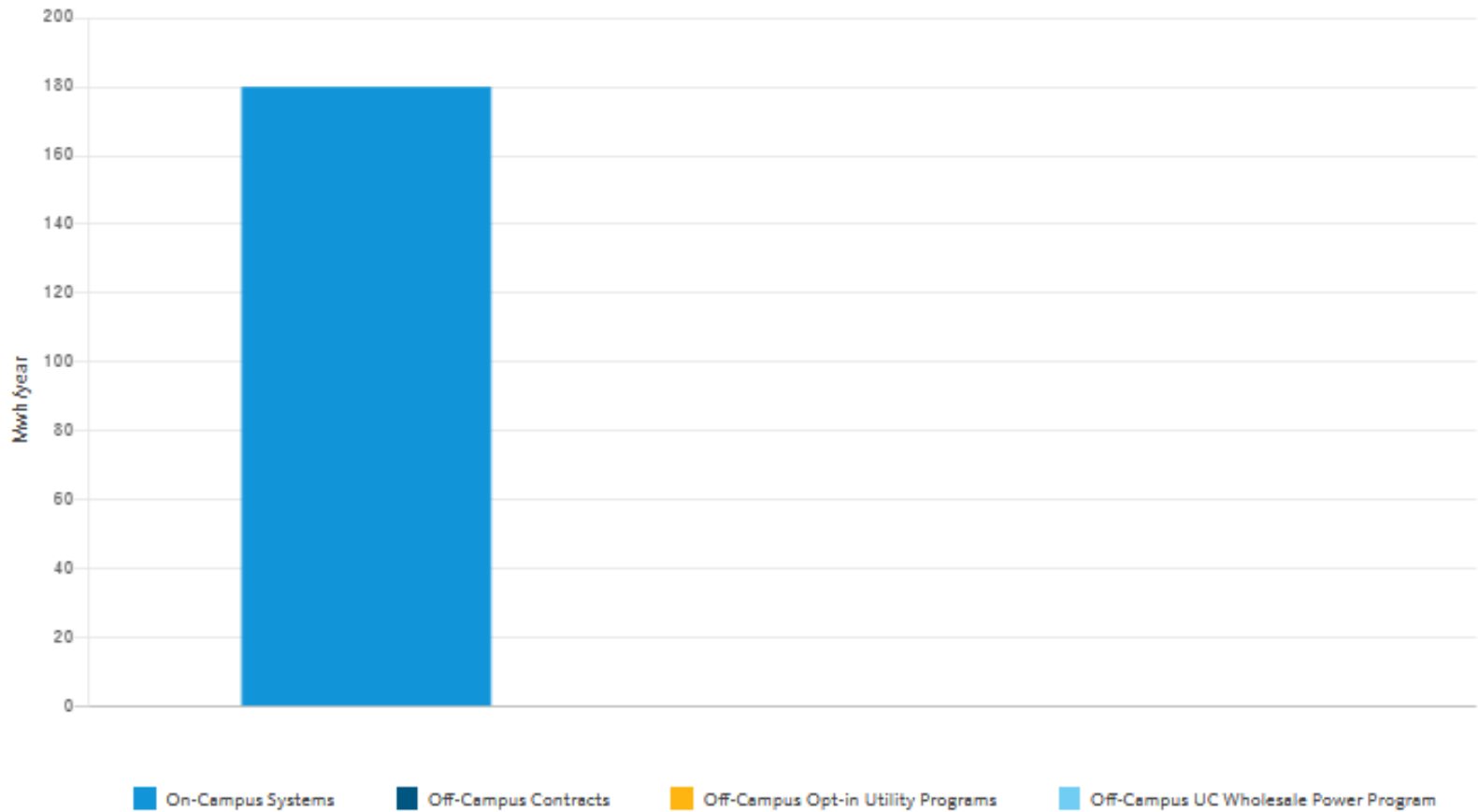
Other climate-related efforts included building fire resilience to address the intense wildfires that result from the changing climate. UC ANR scientists worked with private landowners to demonstrate the techniques and [benefits of using prescribed fire](#) on private lands across the state. They raised more than \$350,000 in grants to support community-based prescribed fire organizations with training, planning and equipment. The momentum informed three bills that were signed into law: SB 901, which includes \$200 million per year for the next five years to fund forest health and fire prevention work; SB 1260, which focuses primarily on prescribed fire; and AB 2091, which mandates the development of new insurance options for prescribed fire.

Another network of UC ANR scientists helped conduct [California's Fourth Climate Assessment](#). As a result of the 2019 North Coast Region workshop, 90% of the 200 participants from local governments, tribes and nongovernmental organizations gained a better understanding of regional vulnerabilities to climate change and 77% learned strategies for local climate action.

CLIMATE PROTECTION – EMISSIONS



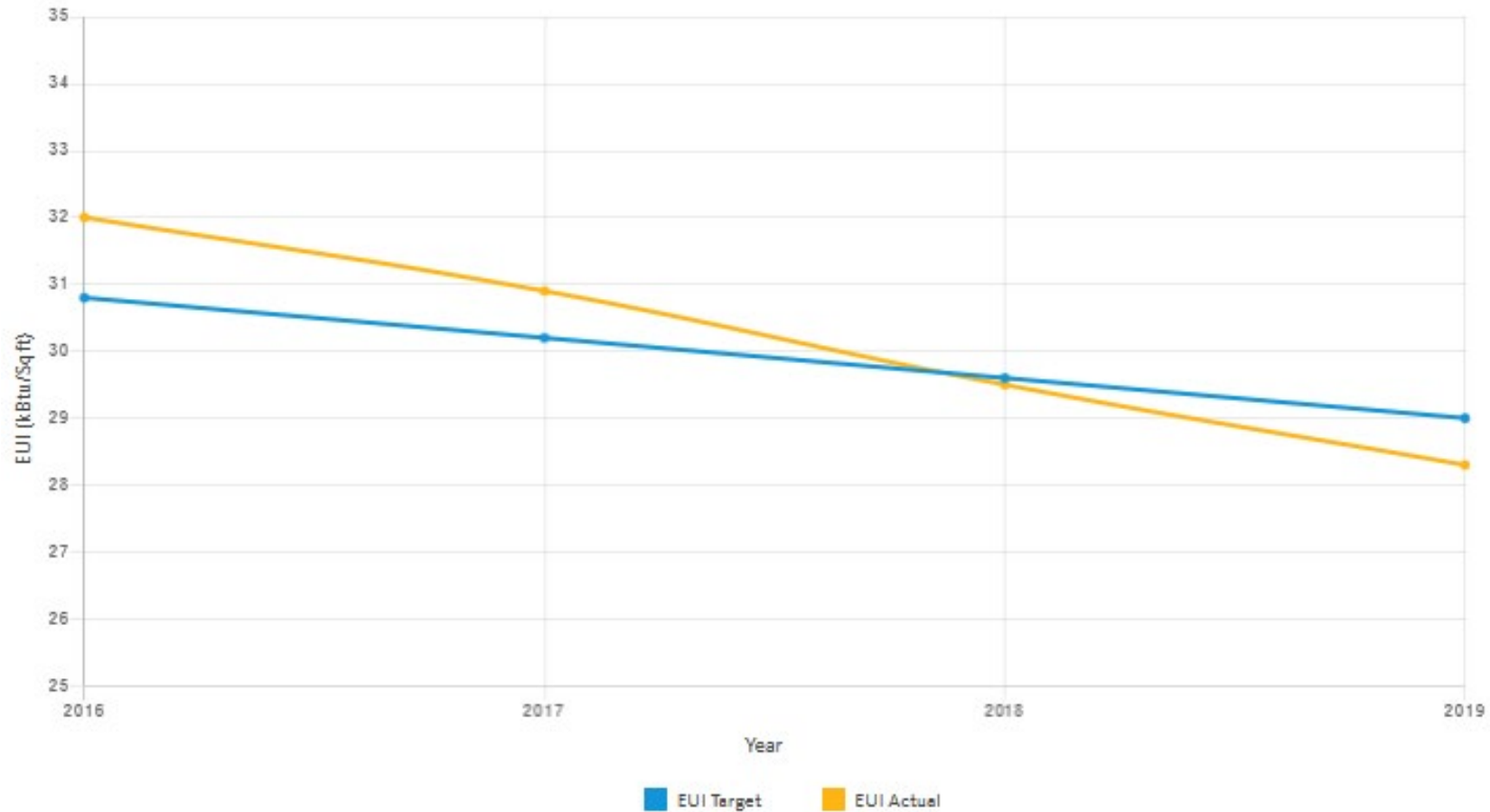
ENERGY – RENEWABLE ELECTRICITY GENERATION



UNIVERSITY OF CALIFORNIA

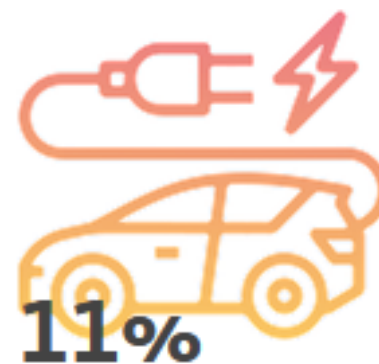
# Agriculture and Natural Resources

ENERGY USE INTENSITY (EUI)



### TRANSPORTATION

UC ANR continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



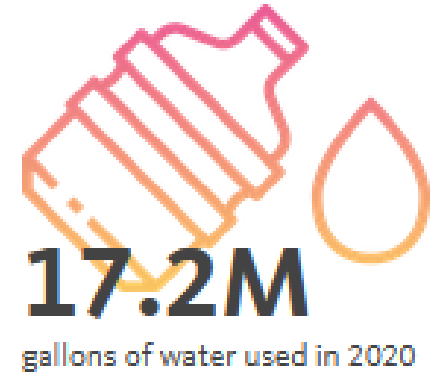
**11%**

of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles



WATER

Sustainable water usage is a major priority for UC ANR. Water usage at UC ANR facilities is mainly for agricultural and research purposes.



GREEN BUILDING

UC ANR has 1 LEED certification.



UNIVERSITY OF CALIFORNIA

# Lawrence Berkeley National Laboratory



# Lawrence Berkeley National Laboratory

Lawrence Berkeley National Laboratory (Berkeley Lab) is a Department of Energy Office of Science research laboratory operated by the University of California. Sustainability performance highlights from the last year include:

## + Maintained energy savings

The Lab maintains a portfolio of energy and water savings which currently totals 12.2 million kilowatt hours of weather-corrected electricity and natural gas savings and over 19 million gallons of water savings per year. Much of this savings is being generated through improvements in building operations, driven by a dedicated ongoing commissioning team.

## + Measured energy savings

The Lab's total weather-corrected energy use intensity is 21% lower than in 2015. The Lab has paid particular attention to reducing natural gas consumption: Natural gas energy use intensity is now 28% lower than in 2015.

## + Greenhouse gas emissions

Total reported greenhouse gas emissions are 29% below 2008 levels and 20% below 2015 levels.

# Lawrence Berkeley National Laboratory

## + Water

The Lab reduced its annual consumption of potable water by about 20 million gallons, mostly through efforts to reduce intermittent single-pass cooling.

## + New construction

The Lab opened its [Integrative Genomics Laboratory](#) in November 2019. This building, which won the UC Best Practice Award for Overall Sustainable Design, is designed to meet deep energy-efficiency targets (consuming less than 36% of the energy used by the future occupants at their current facility) and use no natural gas for space or water heating.

## + New policy

The Lab published a new campus-level policy on sustainability standards for operations that clarifies roles and responsibilities related to achieving zero waste, advances management of energy and water, and reduces use of toxic substances. The Lab also updated its Sustainability Standards for New Construction, first implemented in 2013, adding electrification requirements, among other improvements.

# Lawrence Berkeley National Laboratory

## Berkeley Lab Responds to Public Safety Power Shutoffs

After undergoing two Public Safety Power Shutoff (PSPS) events in the fall of 2020, Berkeley Lab is now taking steps to improve the resilience of its energy systems. This effort is raising new requirements for sustainable energy systems as the Lab works toward a unified vision of how renewable generation and storage, along with changes in the way the Lab deploys traditional diesel generators, can form a more resilient energy system.

Change will happen incrementally, guided by a new vision that involves:

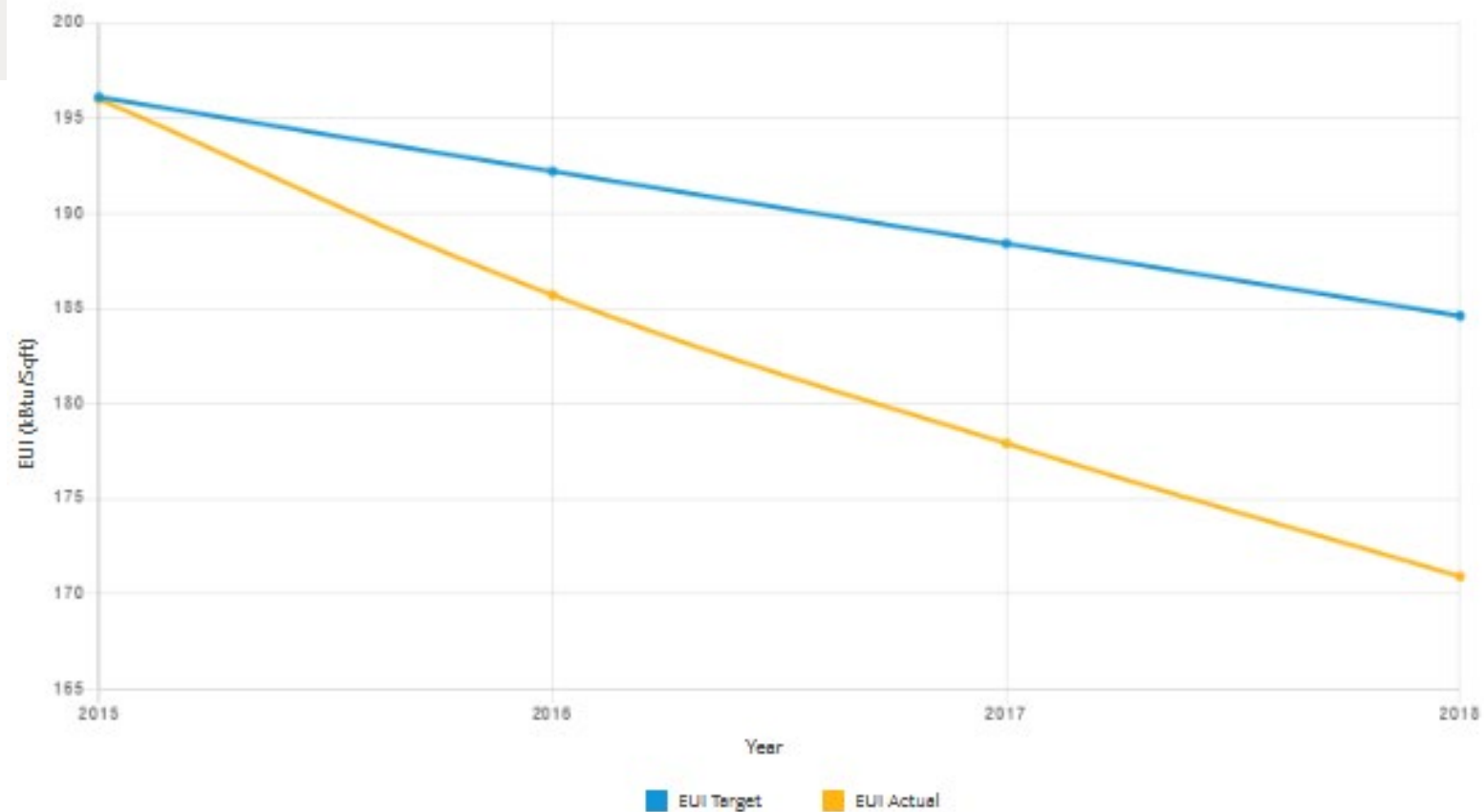
- Thinking beyond the challenge of PSPS events to anticipate a broad range of likely hazards, including earthquakes and wildfires.
- Investigating steps to transform an existing electricity distribution system into an increasingly flexible microgrid.
- Developing distributed generation assets that can provide benefit across multiple facilities able to adapt to unforeseen hazard conditions.
- Developing new implementation strategies for renewables and storage that reduce greenhouse emissions but also meet needs during emergencies.



## CLIMATE PROTECTION – EMISSIONS

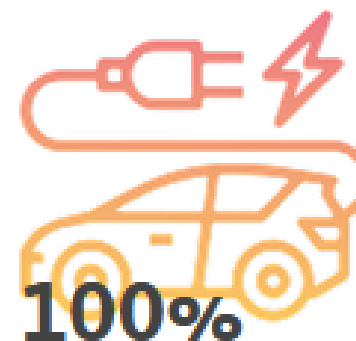


ENERGY USE INTENSITY (EUI)



## TRANSPORTATION

The Lab continued to make strides in its efforts to use alternative transportation methods and support the use of electric vehicles in 2020.



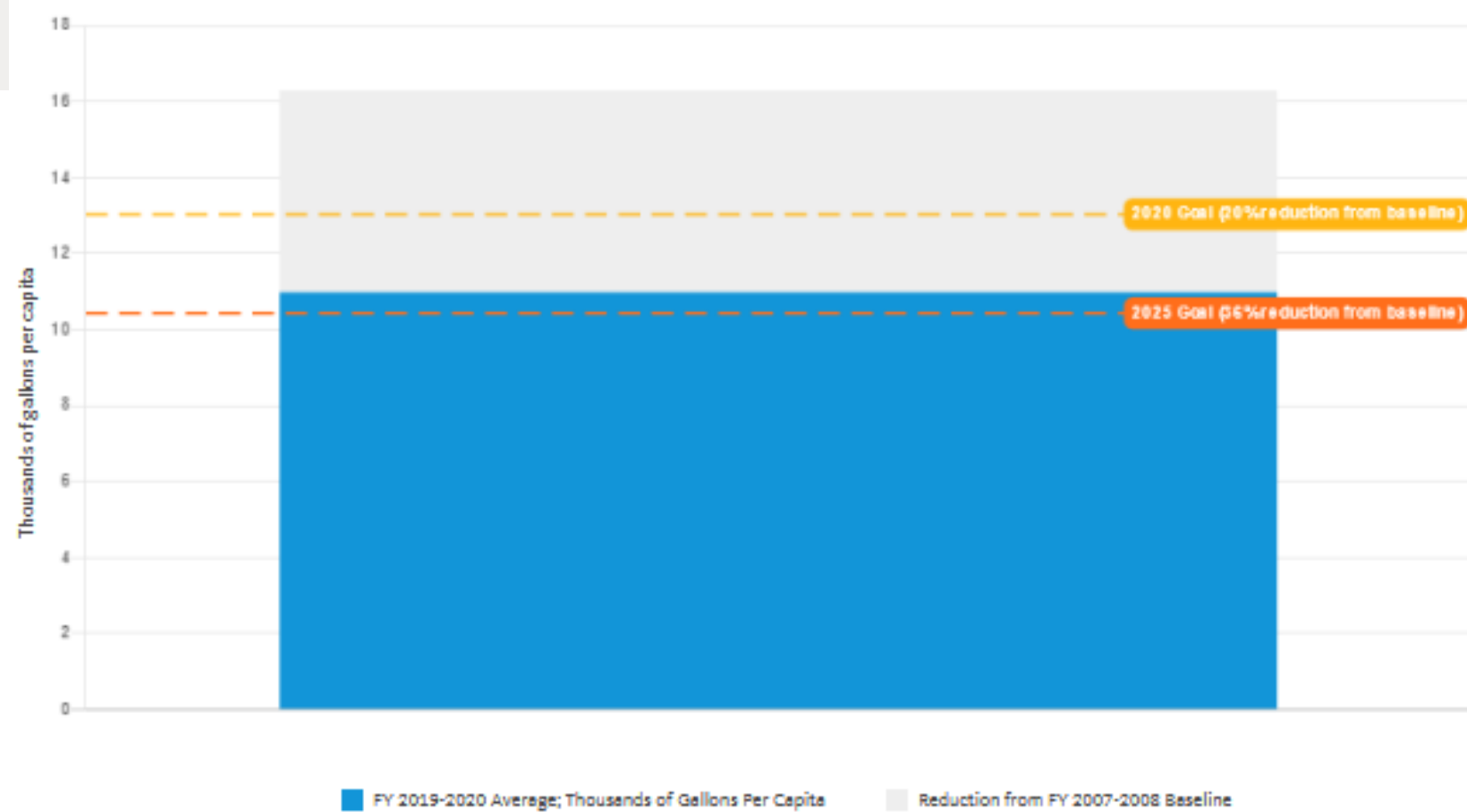
of light-duty vehicles acquired in 2020 were electric (zero-emission) and hybrid vehicles



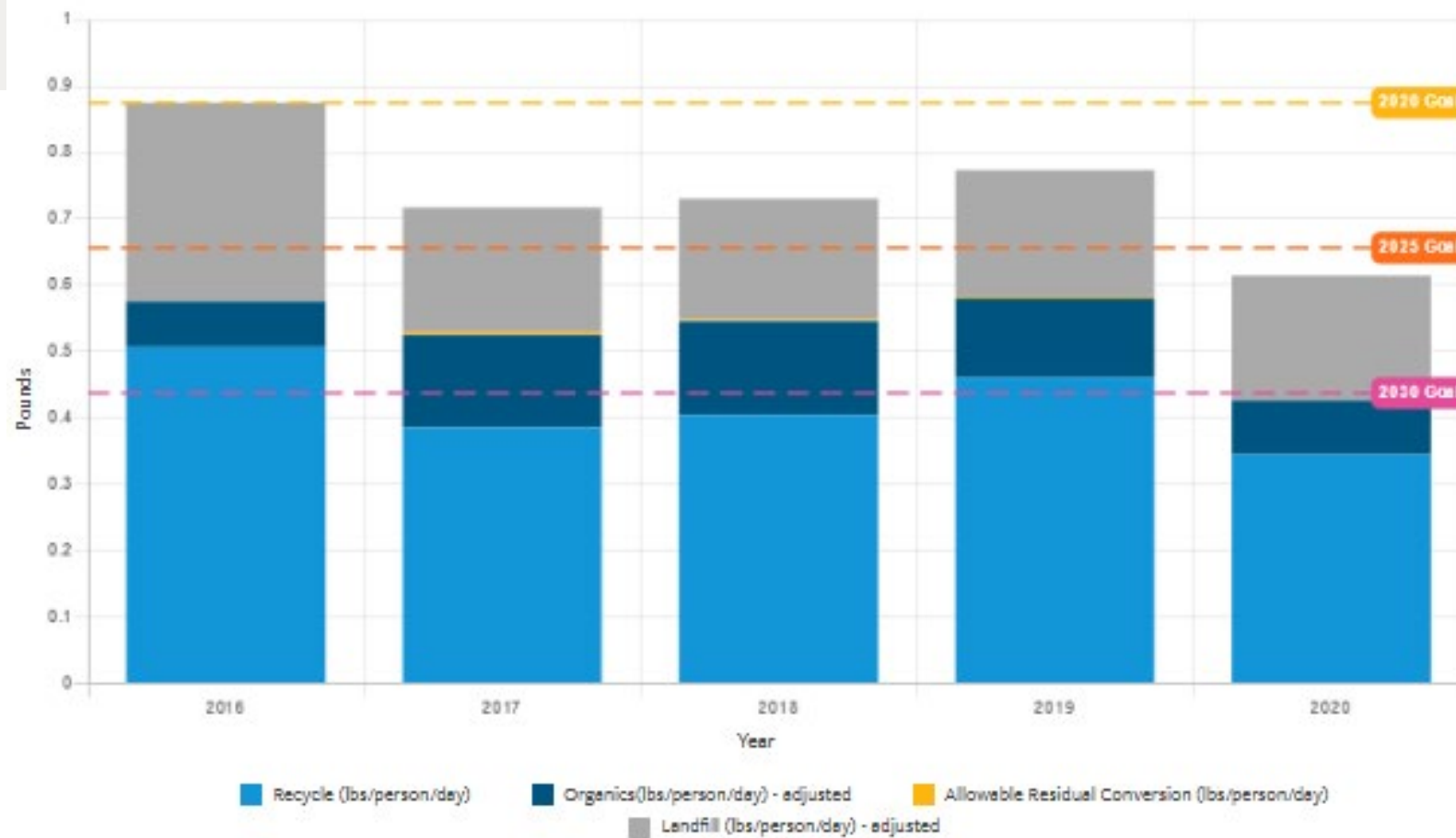
EV charging stations at this location for 2019-2020



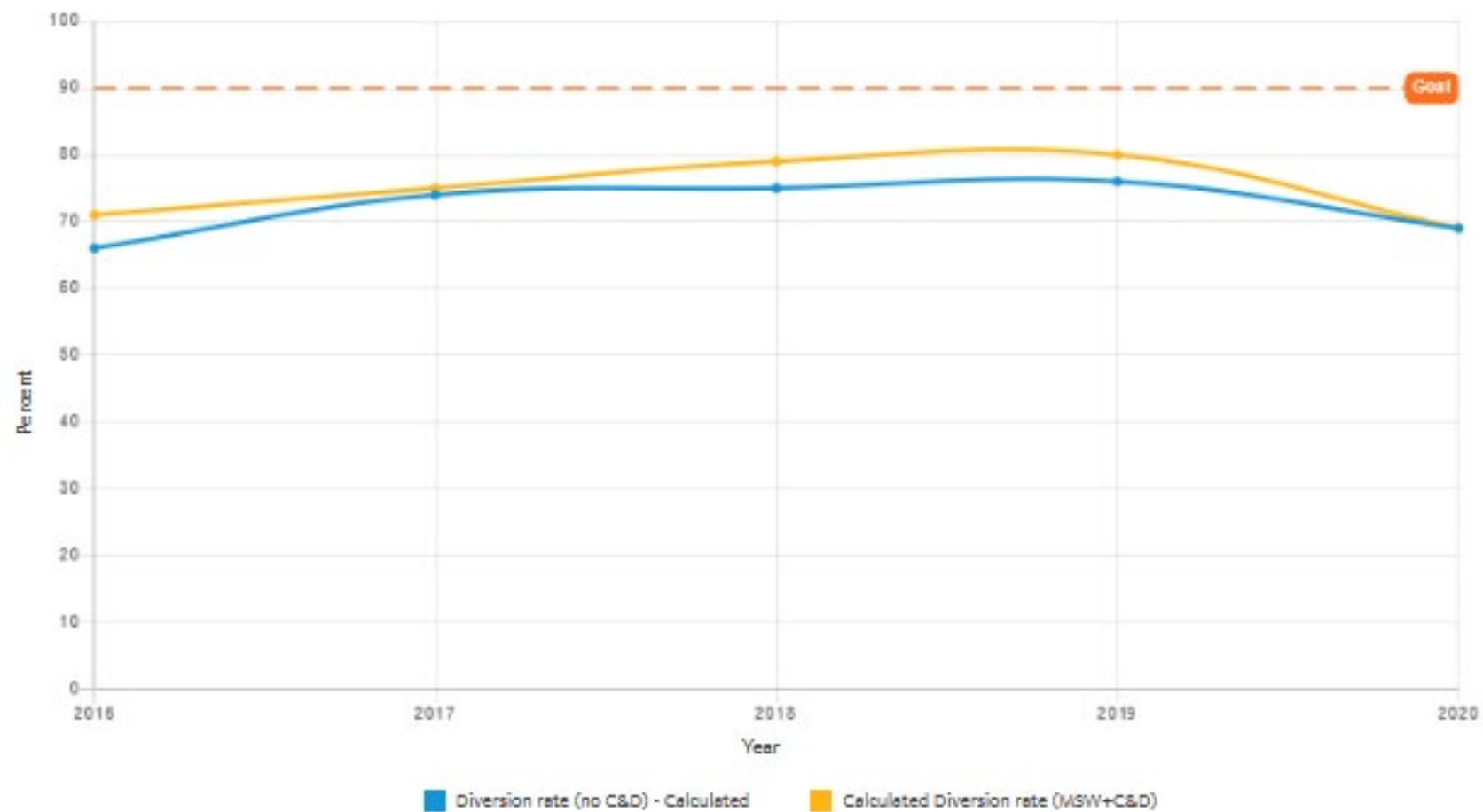
## WATER



## ZERO WASTE – GENERATED



## ZERO WASTE - DIVERTED



# Lawrence Berkeley National Laboratory

## GREEN BUILDING

The Lab's total LEED certifications speak to its commitment to sustainability.

1 Platinum and 5 Gold

– Total number of LEED certifications

## AWARDS

2020 U.S. Department of Energy  
Sustainability Award Winners

The Lab received three [Department of Energy Sustainability Awards](#): the 2019 Accelerating Smart Labs Project Award, the Sustainable High Performance Computing/Data Center Award, and a 2020 Department of Energy Sustainability Award Honorable Mention – Outstanding Sustainability Program/Project-Category.

A full list of awards is [here](#).

UNIVERSITY OF CALIFORNIA

# Office of the President



The UC Office of the President (UCOP) is the systemwide headquarters of the University of California that manages UC's fiscal and business operations and supports the academic and research missions across its campuses, labs and health systems. UCOP owns and leases space primarily in California, but also has properties in Washington, D.C., and Mexico City.

On the climate front, UCOP observed a decrease of more than 13% in greenhouse gas emissions in 2019. This reduction was achieved primarily by increasing the use of carbon-free electricity. For example, UCOP's scope 2 greenhouse gas emissions from purchased electricity dropped 35% due to the carbon-free electricity that UCOP headquarters at 1111 Franklin Street in Oakland and its Washington, D.C., property received. A solar photovoltaic system was also installed at the UCPath Center in Riverside, California.

Other milestones from the past year include the launch of the UCOP Sustainability Affinity Group, an employee-led group focused on monitoring UCOP's sustainability data and increasing sustainability practices within UCOP.

# Office of the President

The COVID-19 shutdown impacted UCOP's sustainability data for this reporting year. For instance, the drop in employee commute rates skews UCOP's commute rate data downward. (Data was reported with the assumption that no more than 10% of employees were commuting to UCOP buildings daily.) While a similar downward trend in water use was expected, UCOP locations observed an increase in water usage in fiscal year 2019-20.

In fiscal year 2020-21, UCOP will consolidate its Oakland offices into two buildings. This consolidation is expected to save money, increase employee well-being and bring UCOP closer to meeting UC's sustainability goals through a smaller office footprint.

# Office of the President

## UCOP Headquarters' Energy Savings During Shelter-in-Place

In March 2020, UCOP transitioned to a telecommute and limited on-site operations status due to the COVID-19 pandemic. This shift left UCOP's offices across California and Washington, D.C., nearly empty. UCOP's headquarters, 1111 Franklin, observed the largest impact from this transition, as more than 700 employees suspended their daily commutes to the building.

UCOP took advantage of the empty occupancy of the Franklin building to improve building operations. Building staff first decreased fan speed to normalize building air pressure. Previous operations caused the building's air pressure to be too high and use more energy than needed. Furthermore, with the decreased occupancy rate, staff shut off Franklin's boilers to reduce natural gas usage and decrease emissions. Additionally, staff changed the operational window of the building to have systems run only from 7 a.m. to 5 p.m. during the work week as opposed to the previous 6 a.m. to 6 p.m. schedule.

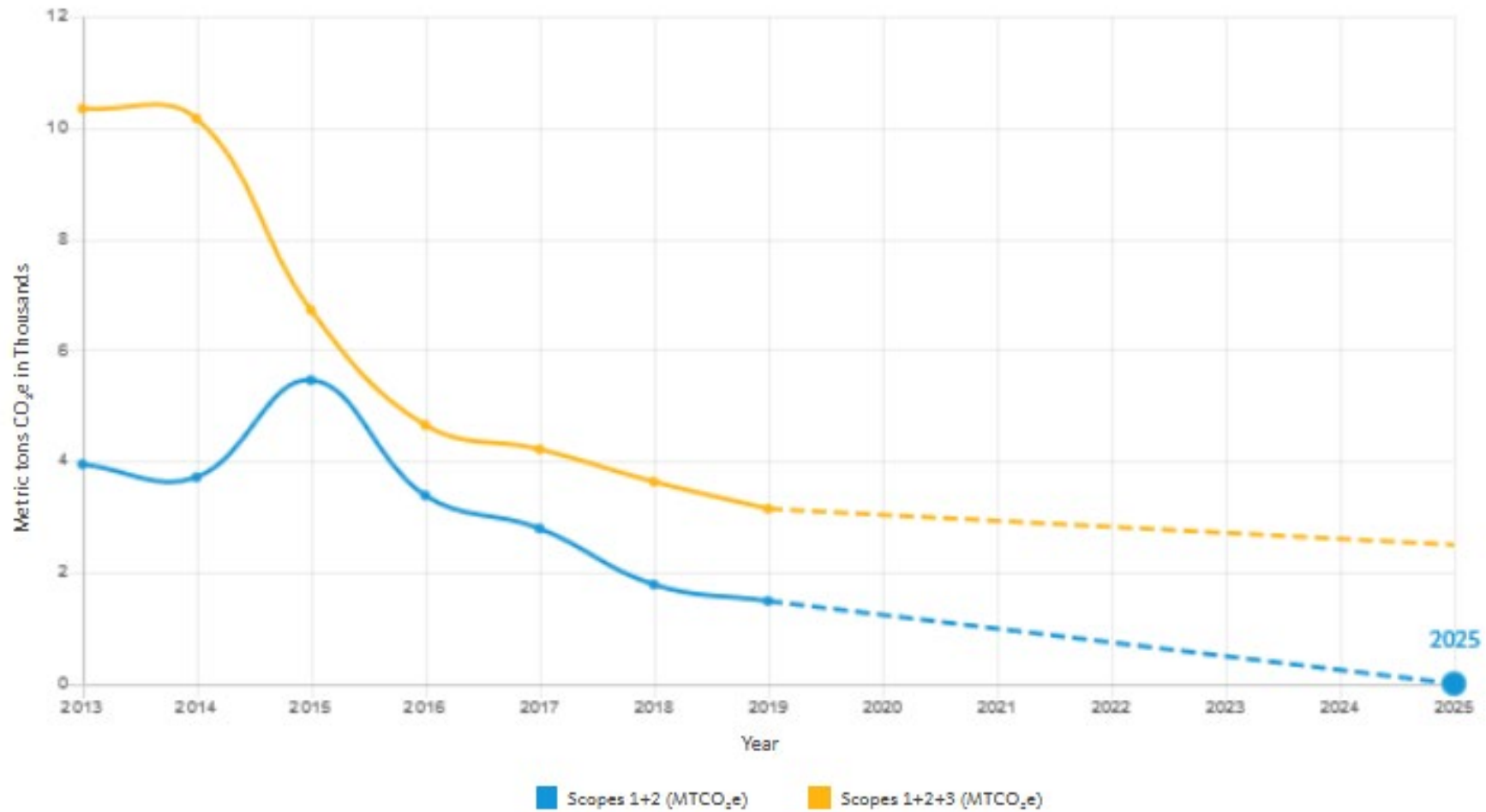




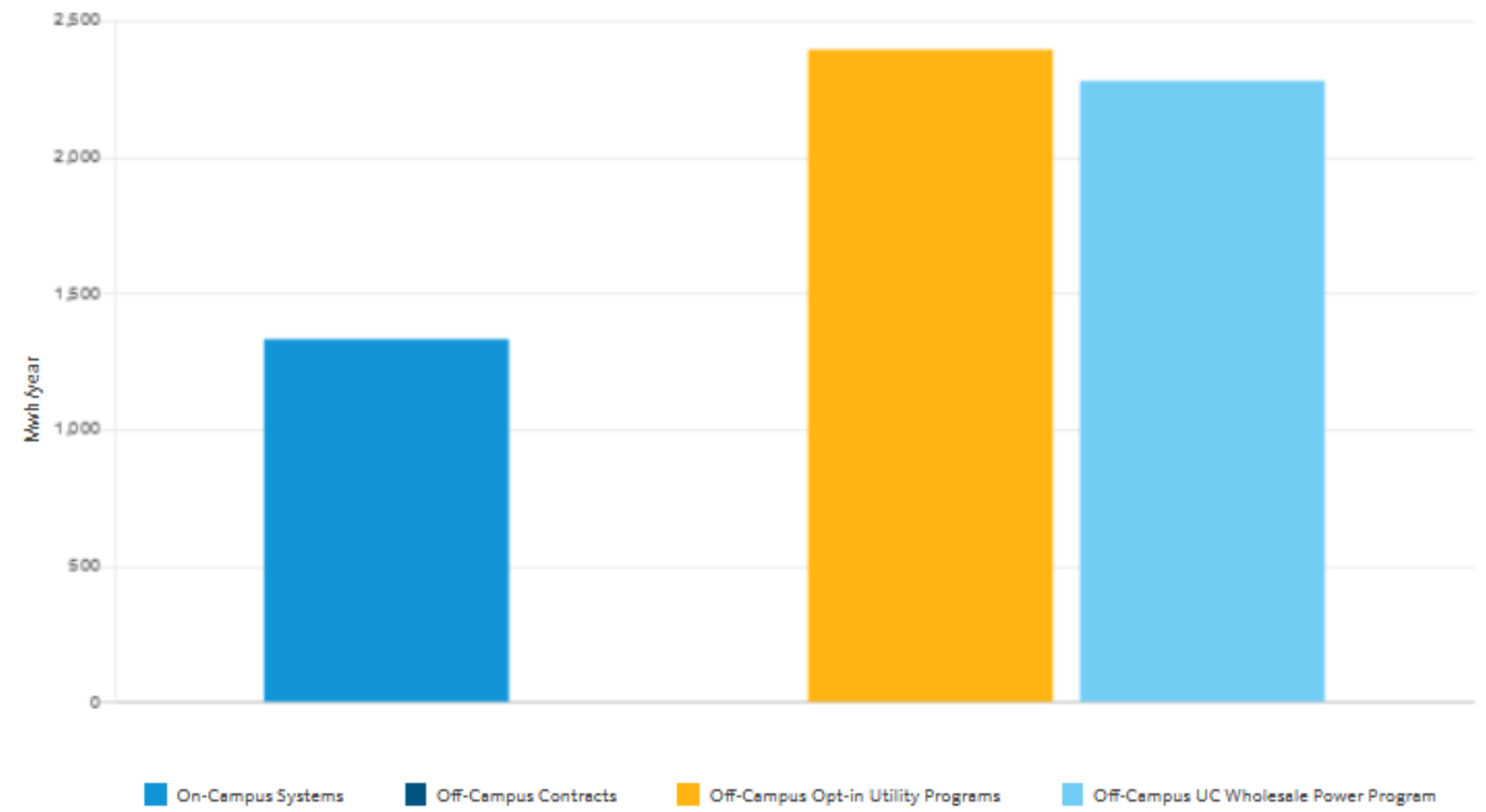
## UCOP Headquarters' Energy Savings During Shelter-in-Place

As a result of these changes in building operations, in just six months, the Franklin building realized almost \$60,000 in energy savings. Furthermore, the Franklin building's emissions dropped almost 40% from March to July 2020 compared to the same period in 2019. Approximately 20% of these savings could be attributed to building operations improvements.

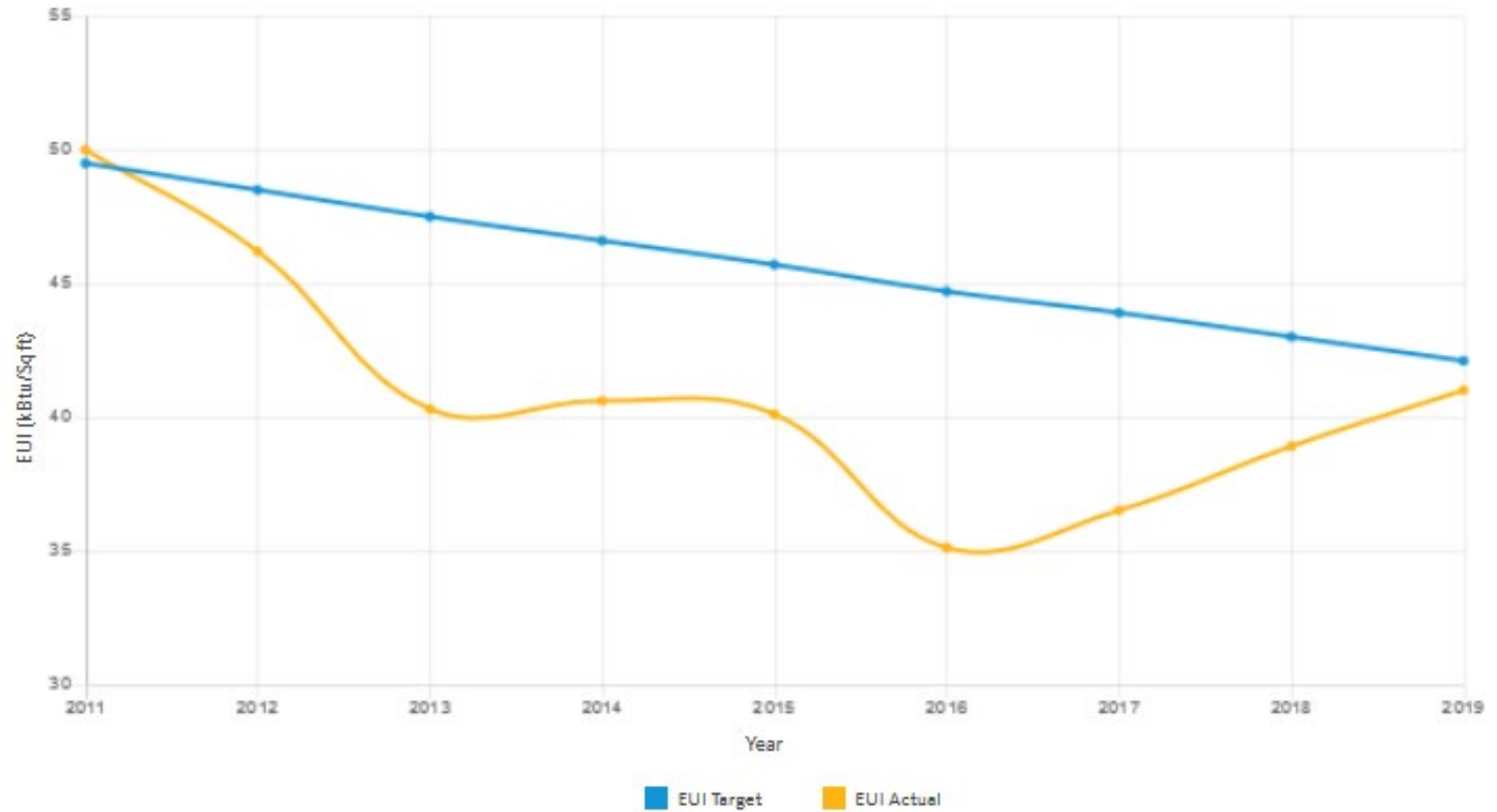
CLIMATE PROTECTION – EMISSIONS



ENERGY – RENEWABLE ELECTRICITY GENERATION



ENERGY USE INTENSITY (EUI)



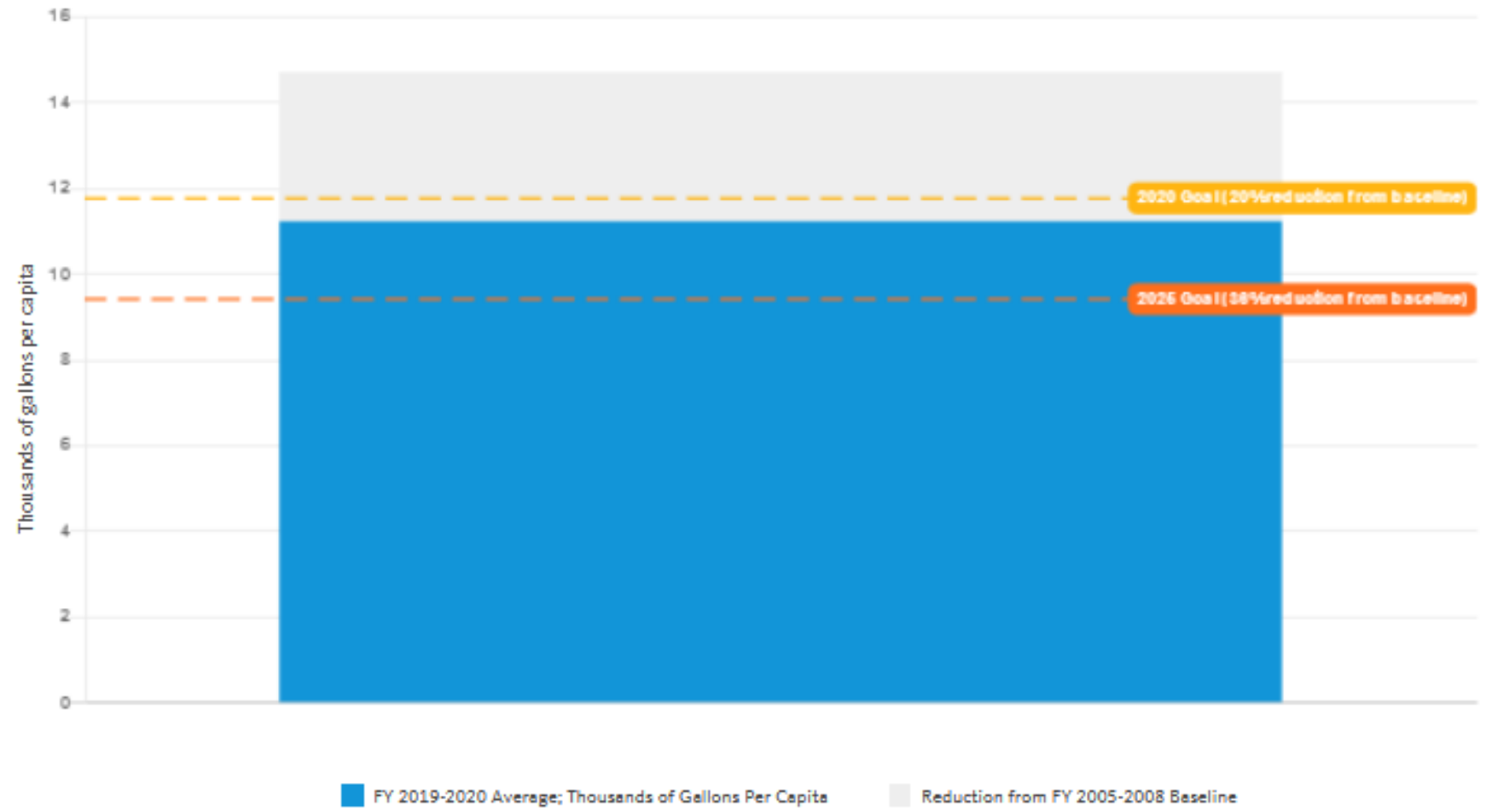
## TRANSPORTATION

The Office of the President continued to make strides in its efforts to use alternative transportation methods.

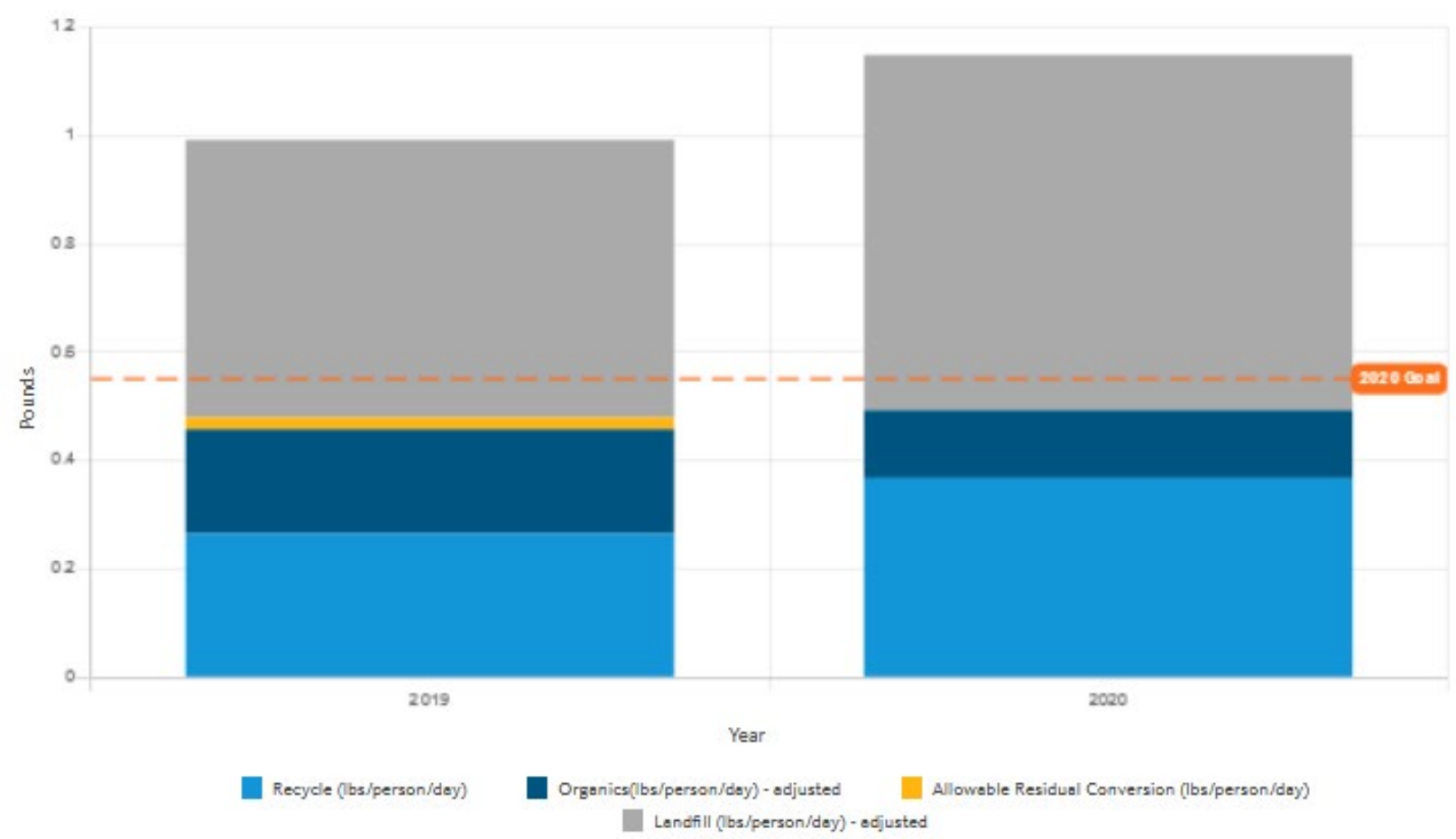


of UCOP employees are utilizing alternative commuting methods

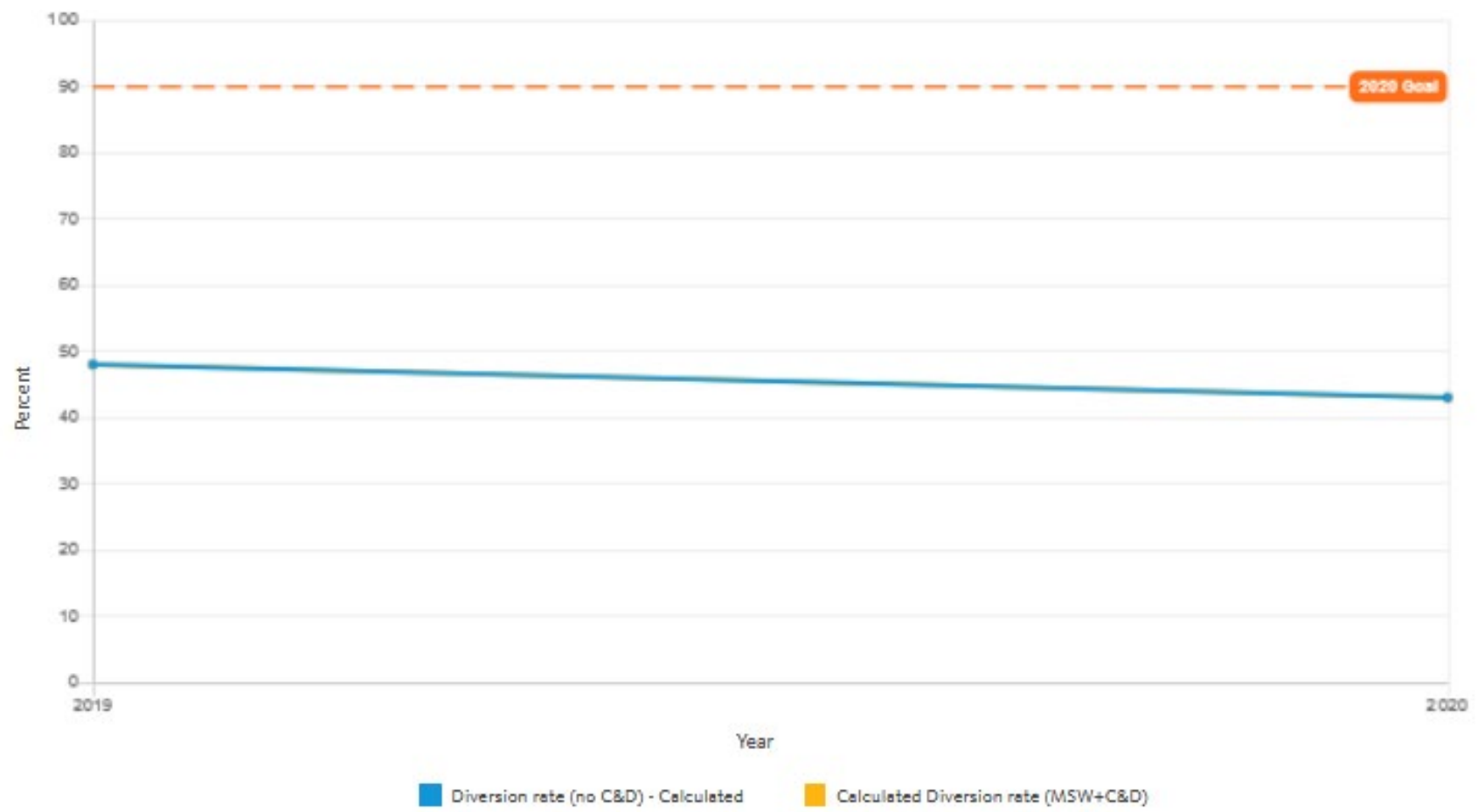
WATER



ZERO WASTE – GENERATED

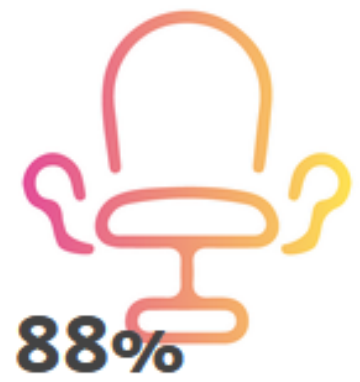


ZERO WASTE – DIVERTED

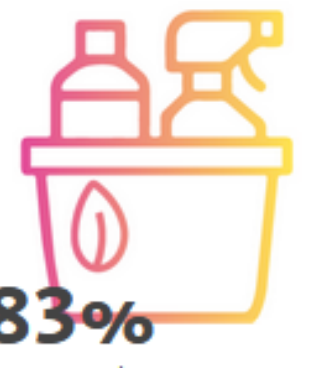




PROCUREMENT



green spend on indoor office furniture



green spend on cleaning supplies

The Office of the President's goals for procurement include 25% green spend on electronics and indoor office furniture, and 75% green spend on cleaning supplies.

GREEN BUILDING

The Office of the President's total LEED certifications speak to its commitment to sustainability.

