

Assignment: Earth FY23 Annual Report

July 1, 2022 – June 30, 2023 USC Sustainability Data

Assignment: Earth FY23 Annual Report Introduction

In 2022, USC President Carol Folt announced **Assignment: Earth**, USC's ambitious sustainability framework to guide its efforts through the LA28 Olympics and beyond. Assignment: Earth includes 27 goals organized under five domains; this annual report covers progress on the entirety of its scope.



Education



Research



**Equity and
Inclusion**



Operations



Engagement

It's a big assignment. We're all in!



Photo Credit: Gus Ruelas



USC Sustainability



Education

Notable Education Highlights:

- **Increased Undergraduate Courses:** USC offered **122 sustainability-focused courses** to undergraduate students in AY23, with **6,858 undergraduates enrolled**.
- **Increased Faculty Capacity:** USC's **Sustainability Across the Curriculum Initiative (SACI)** expanded with the SACI Faculty Development Workshop in Spring 2023.
- **Experiential Learning and Research:** USC's flagship **President's Sustainability Internship Program** grew from **13 students** in FY22 to **16 students**.



Photo Credit: USC

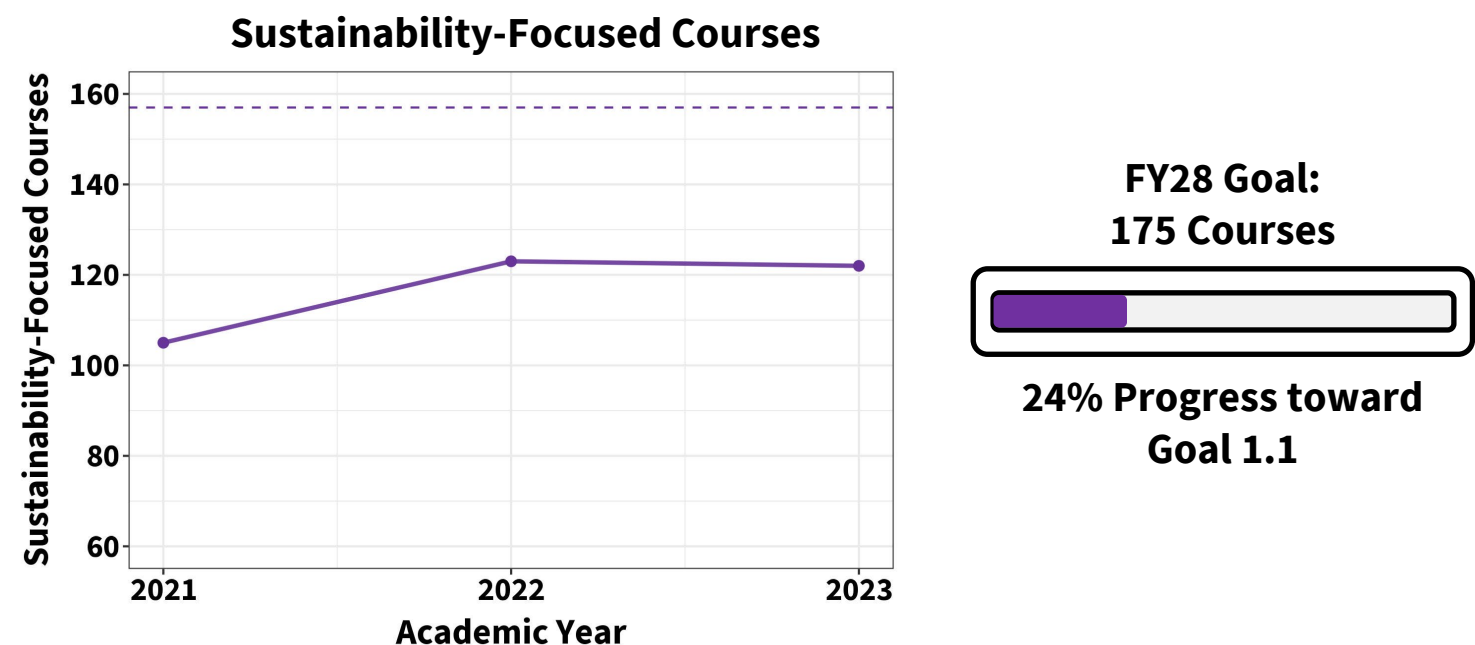


USC Sustainability



Goal 1.1: Increase Sustainability Courses

1.1) Increase core undergraduate **sustainability courses** by 10 per year through 2028, plus develop new interdisciplinary certificates, minors and majors.



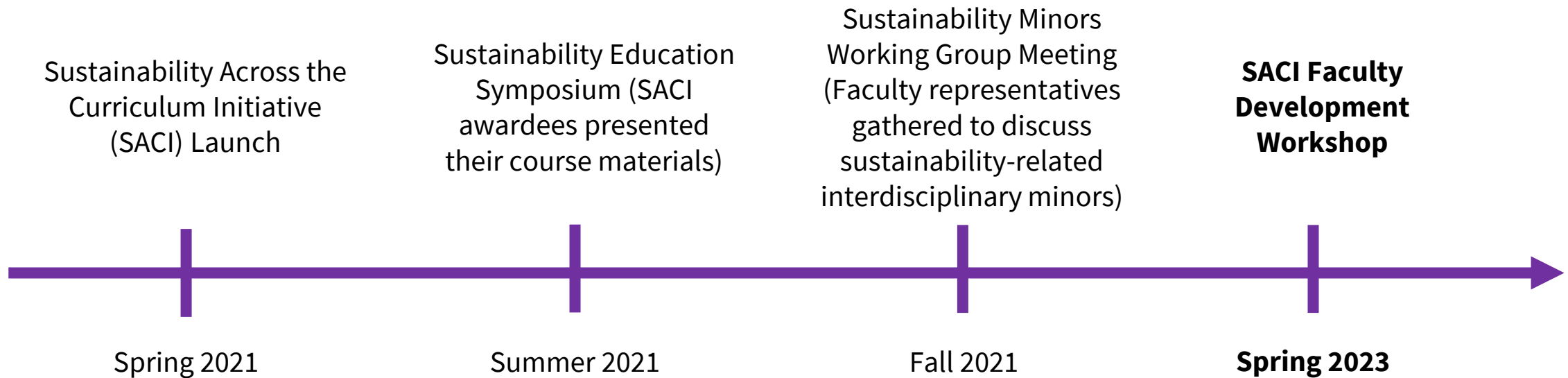
Dashed line represents FY28 goal. Goal 1.1 progress is based on the number of new courses added per year since the 2021 baseline.





Goal 1.2: Increase Capacity to Teach Sustainability

1.2) Increase **faculty** capacity to teach sustainability courses—both didactic and experiential—through a focused faculty hiring approach that increases the number of faculty with expertise in sustainability.



Goal 1.2 progress is based on the implementation of programs, symposiums and workshops that facilitate the capacity of faculty to teach sustainability courses.



Goal 1.3: Elevate Sustainability Experiential Learning & Research

1.3.a) Elevate sustainability-focused **research** and **experiential learning** through implementation of a plan and pilot program for experiential course development.

1.3.b) Elevate sustainability-focused **research** and **experiential learning** through new sustainability research partnerships between students and faculty.

1.3.a Experiential Course Development

The **Experiential Learning in Sustainability Symposium** occurred in Spring 2022 and received over 70 attendants interested in experiential learning and sustainability education.

1.3.b Experiential Learning and Research

USC's Presidential Sustainability Internship Program (PSIP) connects students with co-curricular learning and research opportunities that advance university sustainability.

Additional sustainability research programs for undergraduates include:

- Undergraduate Sustainability Grand Challenge Fellowships Program (USGCF)
- Zinsmeyer Summer Research Program
- Wrigley Institute Environmental Communications Internship Program
- Wrigley Institute Summer REU



Research

Notable Research Highlights:

- **Sustainability Research: 257 sustainability-focused research** articles were published in 2022 (reported in FY23).
- **Public Outreach and Engagement: USC News** averaged approximately **5.5 articles per month** with an average monthly viewership of **3,761 views**.
- **Real-World Impacts: The President's Sustainability Initiative Award was established** to provide faculty research seed funding in areas such as Human Health and Well-Being; Infrastructure and Built Environment; Communications, Policy and Institutions; and Risk Analysis and Economic Impacts.



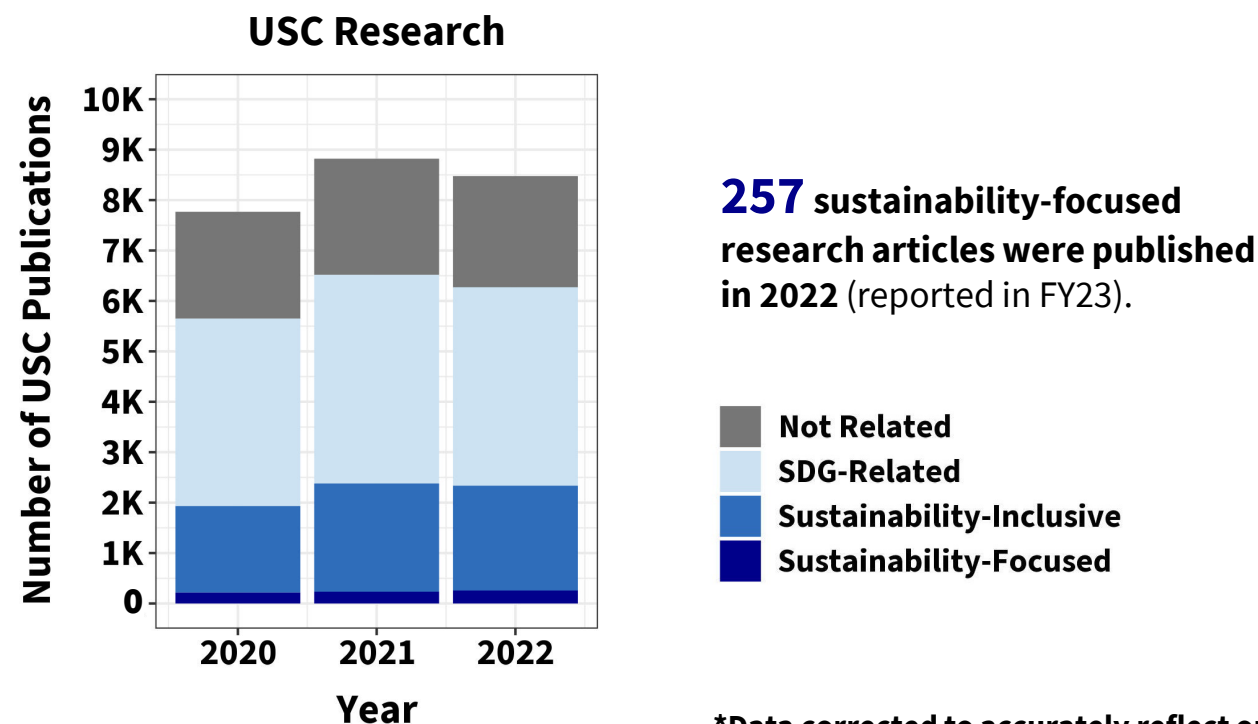
USC Sustainability

Photo Credit: Philip Channing



Goal 2.1: Increase Sustainability Research & Training

2.1) USC will substantially increase its **interdisciplinary research** and research **training** for sustainability and climate change solutions, empowered by world-class scholars in a wide array of disciplines.



*Data corrected to accurately reflect our AE goal 2.1. Goal 2.1 progress is based on the number of new publications per year since the 2020 baseline.
SDG: United Nations Sustainable Development Goals.



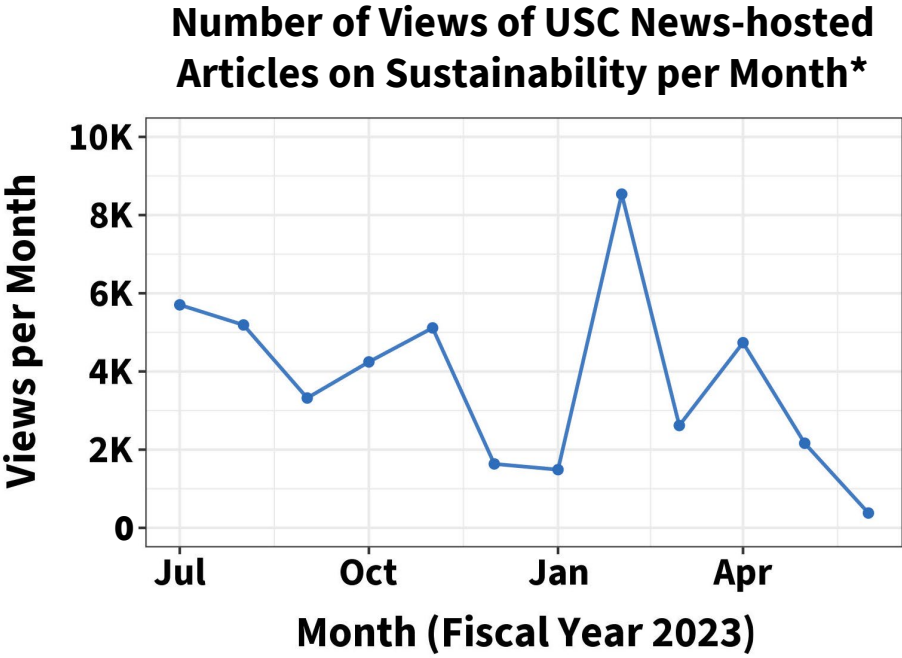
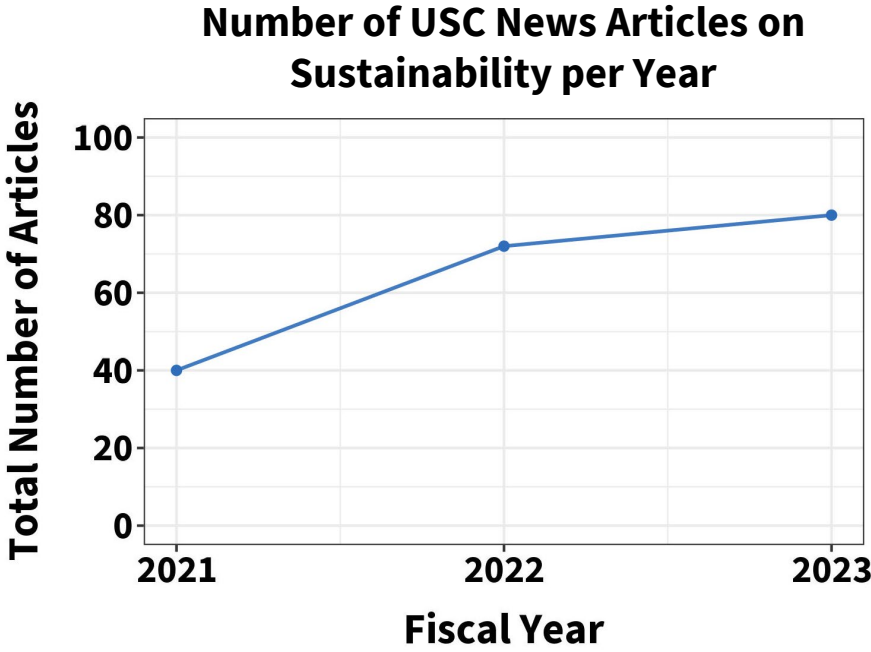
USC Sustainability

Data Credit: USC's Sustainability Research Finder



Goal 2.2: Increase Sustainability Public Communication

2.2) USC will substantially increase its **public outreach, communication and engagement** regarding sustainability and climate change solutions.



*Views do not include the number of views on redirected articles. Goal 2.2 progress is based on the number of new USC News articles per year that are focused on sustainability initiatives and research at USC. We are currently working on expanding these data to all public events and media outlets regarding USC Sustainability.





Goal 2.3: Achieve Significant Impact in Sustainability

2.3) USC research will have significant **real-world impacts** and address societal needs through solutions that are replicable and scalable. For more information, visit the USC [**Sustainability Directory**](#).

> 25 Research Programs, Institutes and Centers

- AirPollBrain Group
- Annenberg Center for Climate Journalism and Communication
- Arid Climates and Water Research Center
- Center for Advanced Transportation Technologies
- Center for City Design
- Center for Intelligent Environments, Technology and Society
- Center for Risk and Economic Analysis of Threats and Emergencies
- Ershaghi Center for Energy Transition
- Huntington-USC Institute on California and the West
- iLAB Innovation in Integrated Informatics
- Leonard D. Schaeffer Center for Health Policy & Economics
- Loker Hydrocarbon Research Institute
- MADRES Center for Environmental Health Disparities
- Mind and Society Center
- Dornsife Public Exchange
- Southern California Earthquake Center
- The METTRANS Transportation Consortium
- The Southern California Environmental Health Science Center
- USC Behavioral Science and Well-Being Policy
- USC Center for Sustainability Solutions
- USC Center for the Political Future
- USC Change Making Media Lab
- USC Dornsife Center for Economic and Social Research
- USC Equity Research Institute
- USC Institute on Inequalities in Global Health
- USC Schwarzenegger Institute for State and Global Policy
- USC Sea Grant Program
- USC Spatial Sciences Institute
- Wrigley Institute for Environmental Studies and Sustainability

Goal 2.3 progress is based on the number of research centers, programs and institutes that cultivate impactful sustainability research.

Data Credit: USC PWG Research Committee



USC Sustainability



Equity and Inclusion

Notable Equity and Inclusion Highlights:

- **Alumni Sense of Belonging: 84% of all USC Alumni Survey respondents** demonstrated a degree of agreement in having a “Strong sense of connection to USC.”
- **Community-Centric Research and Programs:** USC promotes visibility into community-focused research and programming efforts via the **AASHE STARS Assessment**.



Photo Credit: Gus Ruelas

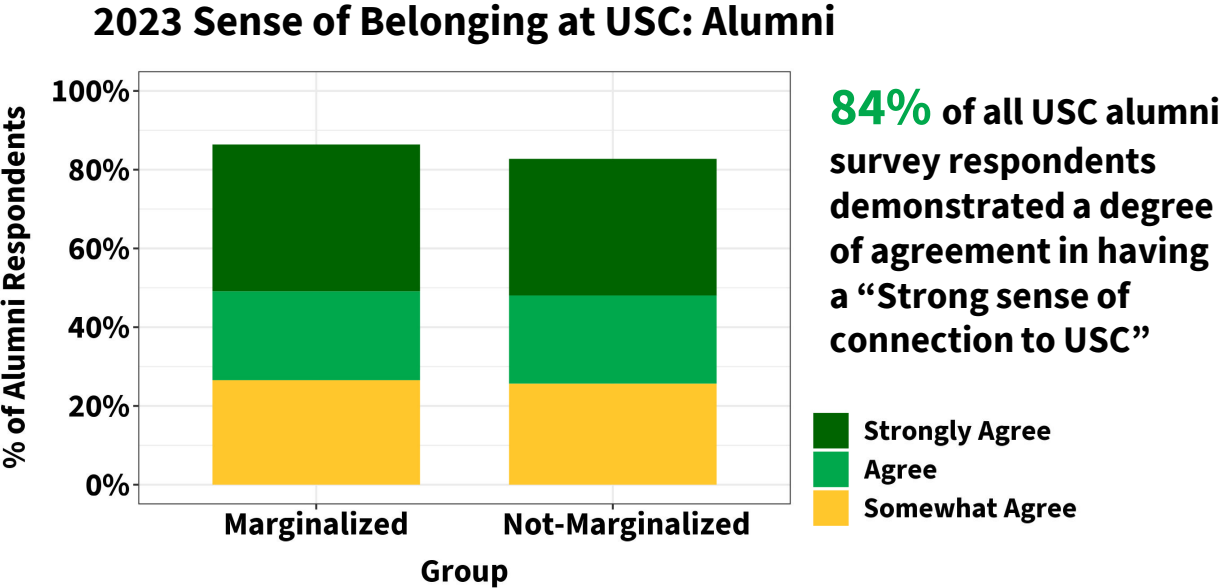
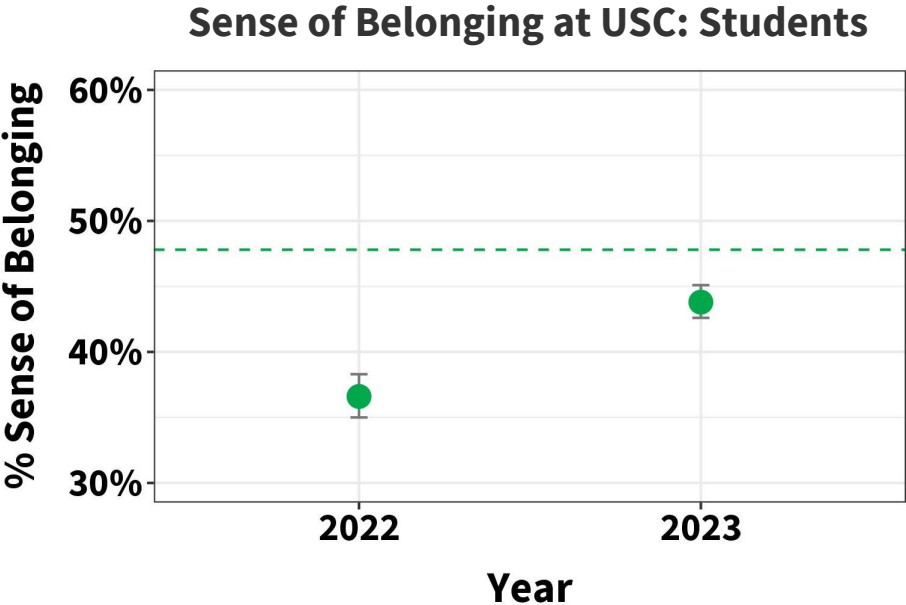


USC Sustainability



Goal 3.1: Higher Sense of Belonging

3.1) Students, faculty, staff and alumni from consistently marginalized groups will report higher **sense of belonging** and being **valued** as members of the university community, measured by annual (or periodic) surveys.



Dashed line represents FY28 goal. Current data reflects aggregated sense of belonging and being valued, rather than data from marginalized groups.

Data Credits: USC Well-being Collective and 2023 USC Alumni Association Survey



Goals 3.2 and 3.3: Community Partner Inclusion and Community-Centric Research & Programs

- 3.2) Community partners** from consistently marginalized groups will be more included and valued in joint programming, planning and decision-making processes at USC, as measured by annual (or periodic) surveys.
- 3.3)** By June 2023, develop a comprehensive catalog of the sustainability research and programs at USC that work with **local communities disproportionately impacted** by environmental disruptions and risk exposures, measured by document review and other measures. Updates to the catalog will be done using these and other metrics.

3.3 Sustainability Research with Local Communities

> **105** USC scholars published scholarly work between 2020 and 2022 from sustainability-focused research programs working with local communities in Los Angeles

3.3 Community Partnerships Program Catalog

University of Southern California
EN-10: Community Partnerships

Status	Score	Responsible Party
✓	3.00 / 3.00	Elias Platte-Bermeo Sustainability Program Assistant Office of Sustainability

Documentation Fields Credit Info

Overall Rating: Silver
Overall Score: 3.00/3.00
Liaison: Julie Hopper
Submission Date: July 29, 2021

STARS v2.2

REPORT PREFACE

INTRODUCTION

PRE-1: Executive Letter
PRE-2: Points of Distinction

INSTITUTIONAL CHARACTERISTICS

PRE-3: Institutional Boundary
PRE-4: Operational Characteristics
PRE-5: Academics and Demographics

ACADEMICS

Does the institution provide financial or material support for the partnership?:
Yes

Which of the following best describes the partnership timeframe?:
Multi-year or ongoing

Which of the following best describes the partnership?:
Sustainability-focused

Are underrepresented groups and/or vulnerable populations engaged as equal partners?:
Yes

Goal 3.2 has not started.

Data Credits: USC University Relations and AASHE STARS





Operations

Notable Operations Highlights:

- **Climate Neutrality:** USC achieved a **43% reduction in Scope 1 and 2 emissions** (2014 baseline) and a **32% reduction in Scope 3 emissions**.
- **Zero Waste:** USC **diverted 55% of municipal solid waste** (MSW) from local landfills.
- **Water Reduction:** USC achieved a **21.5% reduction in potable water use** per square foot of total campus building space (2014 baseline).

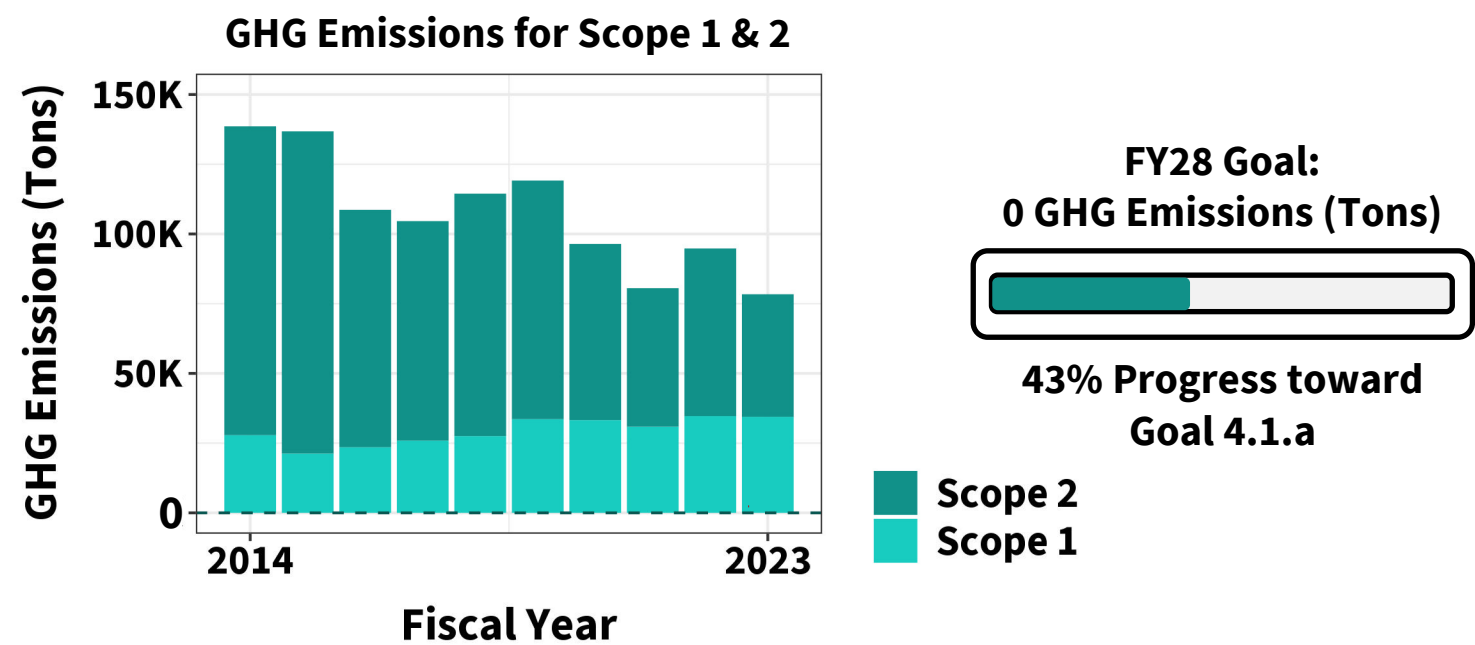
For more information, visit the USC Sustainability [Reports](#) page.





Goal 4.1: Mend Our Climate

4.1.a) USC will achieve **climate neutrality** for annual **Scopes 1 & 2** emissions for FY25 and beyond while seeking to minimize the use of carbon offsets.



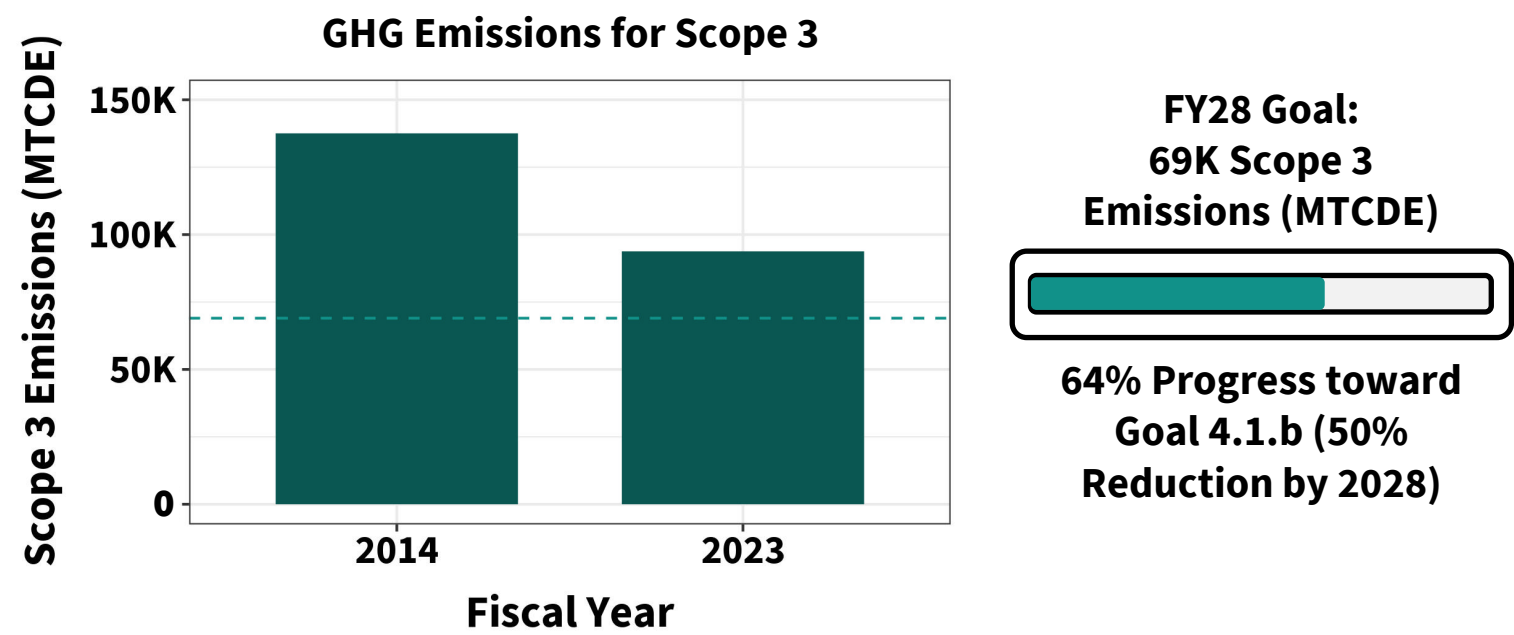
Dashed line represents FY28 goal.

Data Credit: USC Greenhouse Gas Emissions Inventory Summary



Goal 4.1: Mend Our Climate

4.1.b) USC will achieve **climate neutrality** for annual **Scope 3** emissions (air travel, commuting, waste, T&D losses) for FY35 and beyond (achieving a 50% reduction by 2028, using 2014 as the baseline).



Dashed line represents FY28 goal.

Data Credit: USC Greenhouse Gas Emissions Inventory Summary



Goal 4.1: Mend Our Climate

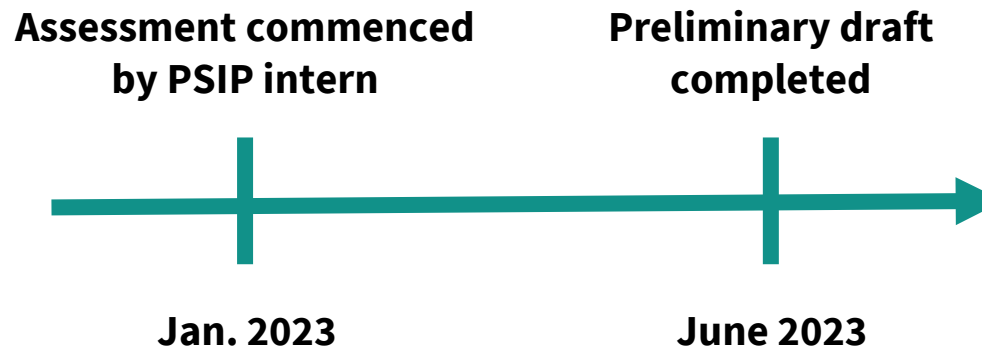
4.1.c.i) USC will complete an assessment of **purchasing-related** Scope 3 **emissions** by FY24.

4.1.c.ii) USC will set a related reduction goal by the end of FY25.

4.1.d.i) USC will complete an assessment of Scope 3 embodied carbon in all new major **construction and renovation** projects beginning construction documents in or after FY23 and will pursue design and construction strategies for reducing that embodied carbon.

4.1.d.ii) For projects beginning construction documents in or after FY25, the projects will offset any remaining embodied carbon.

4.1.c.i Assessment Timeline



Goal 4.1.d.i is underway; see Goal 4.4.b for design and construction strategies. Goals 4.1.c.ii and 4.1.d.ii have not started.

Data Credits: USC Office of Sustainability and USC Facilities Planning and Management



USC Sustainability



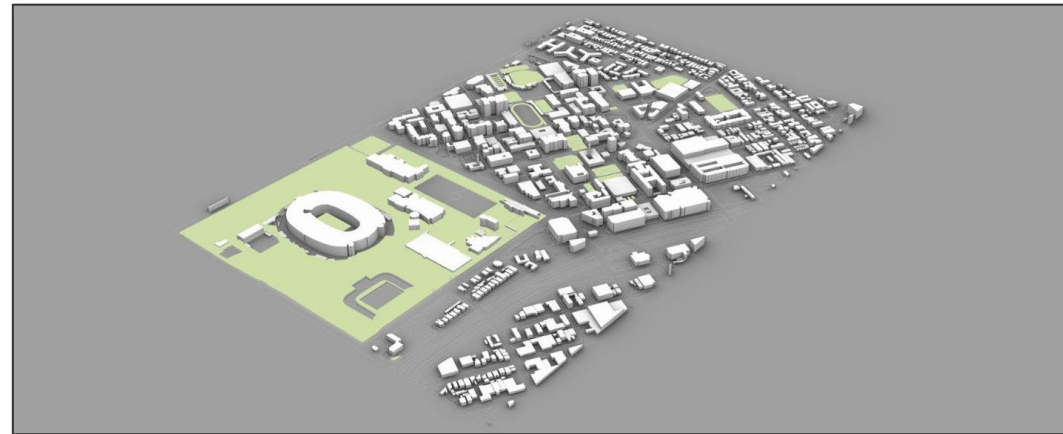
Goal 4.1: Mend Our Climate

4.1.e.i) USC will complete an experiential learning project to model the **embodied carbon** of the existing physical campuses by FY24.

4.1.e.ii) USC will create a goal by FY26 around removing historical embodied emissions.

4.1.f) USC will complete an experiential learning project to model USC's **historical** Scope 1 and 2 **emissions** by FY24 and create a goal by FY26 around removing historical operating emissions.

4.1.e.i Tishya Rao (PSIP intern) and FPM developed an embodied carbon catalog for 400+ USC buildings and structures



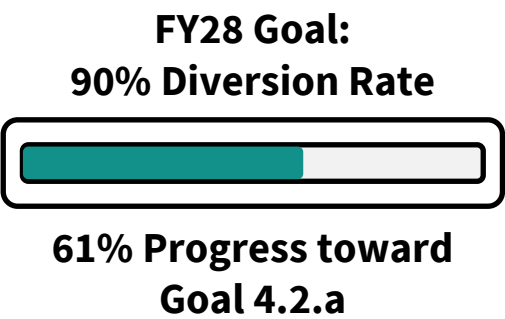
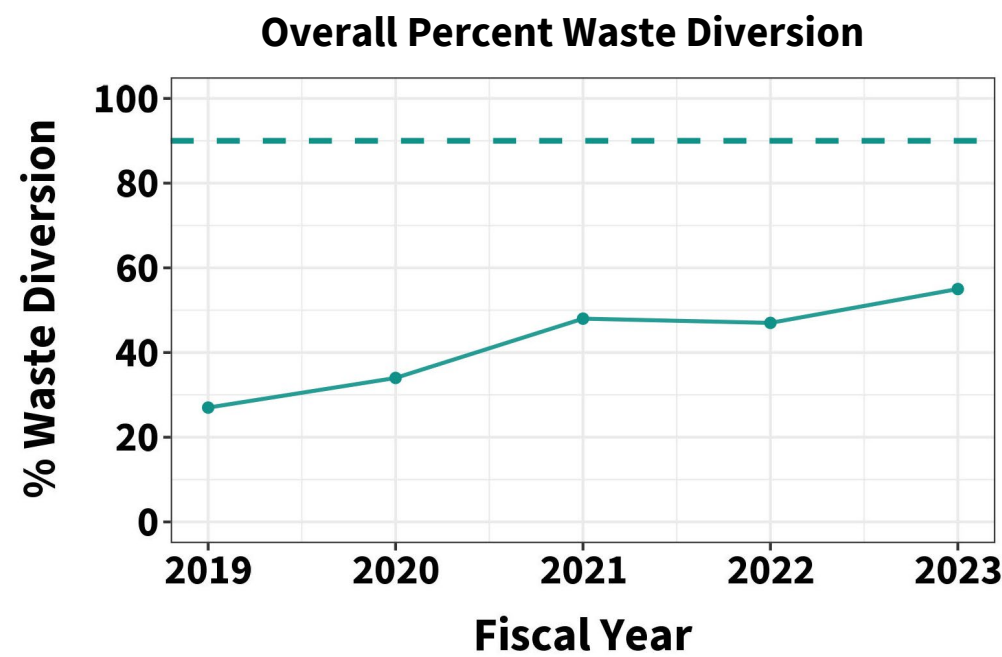
Goals 4.1.e.ii and 4.1.f have not started.

Data Credit: USC Facilities Planning and Management; Photo Credit: Tishya Rao



Goal 4.2: Build a Circular Economy

4.2.a) Achieve **Zero Waste** (90% diversion rate) by FY28.



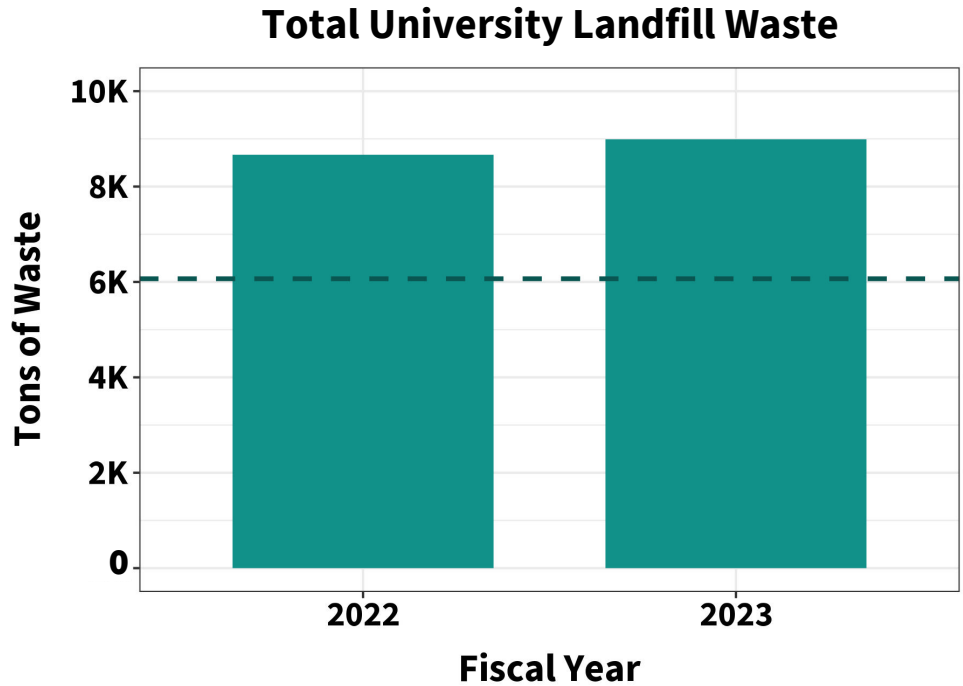
Dashed line represents FY28 goal.

Data Credit: USC Facilities Planning and Management



Goal 4.2: Build a Circular Economy

4.2.b) Achieve **30% aversion** (reduction in total municipal solid waste generated, using an FY22 baseline) by FY28.



**FY28 Goal:
30% Aversion Rate**

**No Progress for
Goal 4.2.b**

Dashed line represents FY28 goal.

Data Credit: USC Facilities Planning and Management



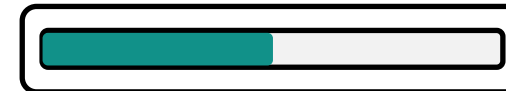
Goal 4.2: Build a Circular Economy

4.2.c) Convert at least two additional material streams annually to more circular or **closed-loop systems**.

USC's Single-Use Plastic Beverage Bottle Elimination Policy enacted in July 2022



Annual Goal:
2 Material Streams

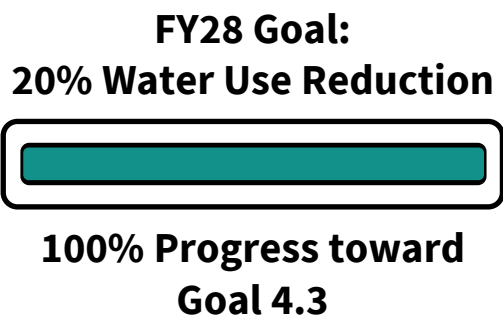
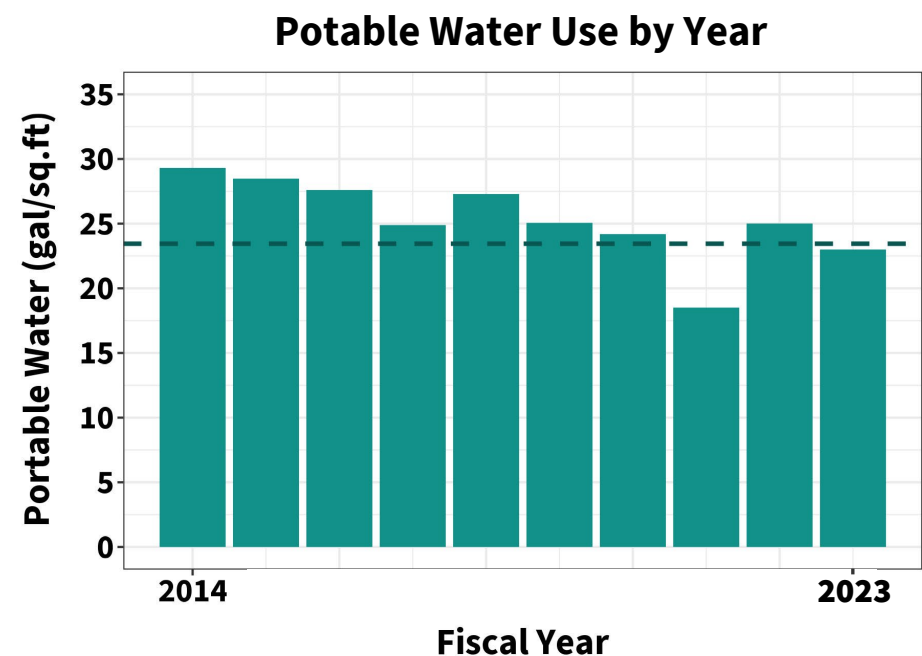


50% Progress toward
Goal 4.3



Goal 4.3: Align with New Water Realities

4.3) USC will achieve a 20% potable **water use reduction** per square foot of total campus building space by FY28 (FY14 baseline).



Dashed line represents FY28 goal.

Data Credit: USC Facilities Planning and Management

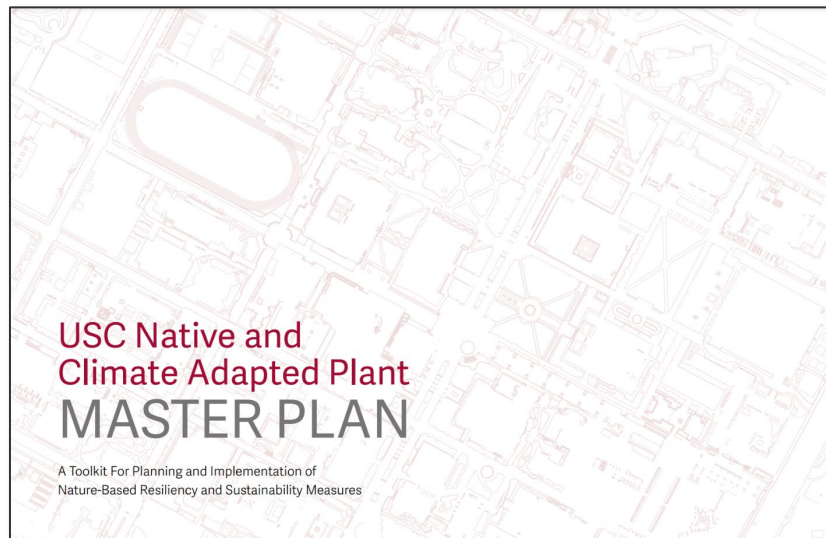


Goal 4.4: Develop Healthy Ecosystems

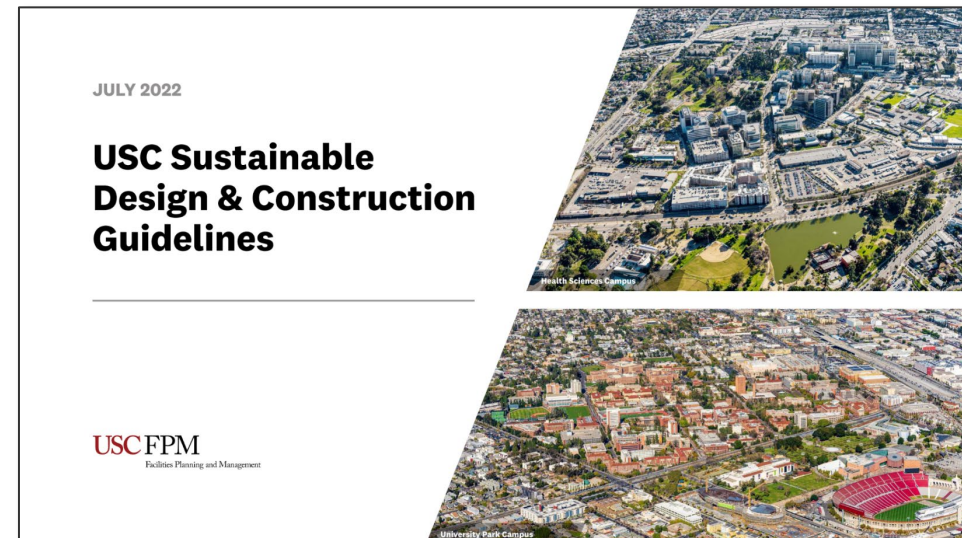
4.4.a) USC will develop and begin implementing a long-term plan for **grounds and landscaping** and strategic planning standards by FY24.

4.4.b) USC will update its **Design Guidelines** to incorporate health and wellness strategies into facilities designs by FY23. USC Sustainable Design & Construction Guidelines were finalized in July 2022 to meet the goal.

4.4.a USC Native and Climate Adapted Plant Master Plan



4.4.b USC Sustainable Design & Construction Guidelines

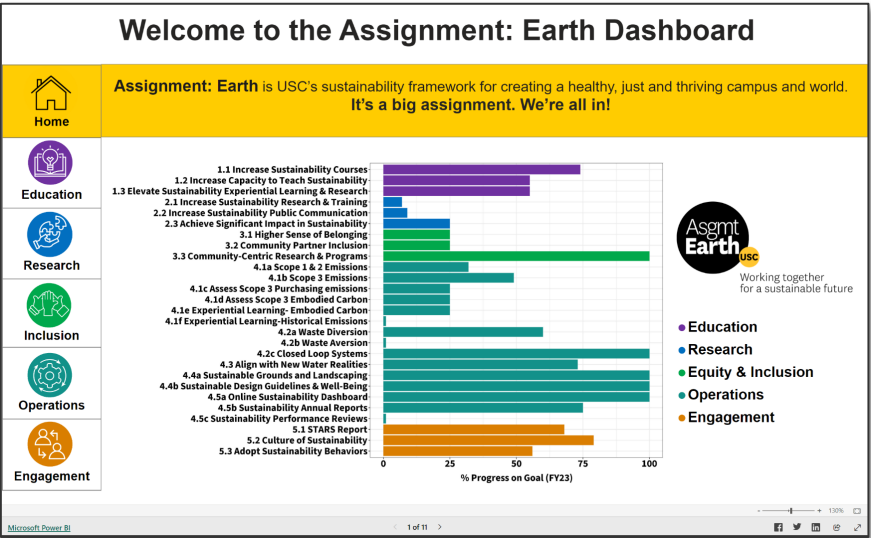




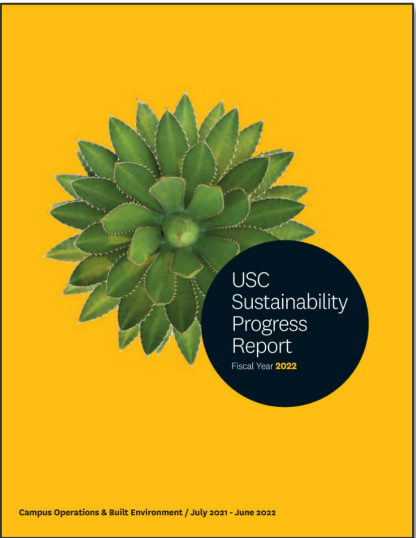
Goal 4.5: Strengthen Transparency and Accountability

- 4.5.a) USC will establish a **publicly accessible online dashboard** to track sustainability resource metrics by FY23.
- 4.5.b) USC will publish **annual reports** on operational sustainability goals progress within six months of the close of each fiscal year.
- 4.5.c) USC will incorporate sustainability criteria into operations **performance reviews** by FY24.

4.5.a Online Dashboard



4.5.b USC FY22 Sustainability Report



Goal 4.5.a Dashboard was created in FY23 but is not yet publicly available. Goal 4.5.c has not yet started.





Engagement

Notable Engagement Highlights:

- **Student Sustainability Training:** USC launched the new **Student Sustainability Online Training** module.
- **Fostering a Culture of Sustainability:** Approximately **63.3%** of **surveyed students, faculty and staff** demonstrate an understanding of sustainability.
- **Adopting Sustainability Behaviors:** Approximately **44.6%** of **surveyed students, faculty and staff** reported that they “usually” or “always” conduct sustainability behaviors on campus and in their daily lives.



USC Sustainability

Photo Credit: Gus Ruelas



Goal 5.1: The Sustainability Tracking, Assessment & Rating System (STARS) Report

5.1) Achieve **STARS Gold** by 2025 and **STARS Platinum** by 2028 by engaging all departments, schools and students on their role in advancing sustainability at USC and empowering them to take actions that support **Assignment: Earth**.



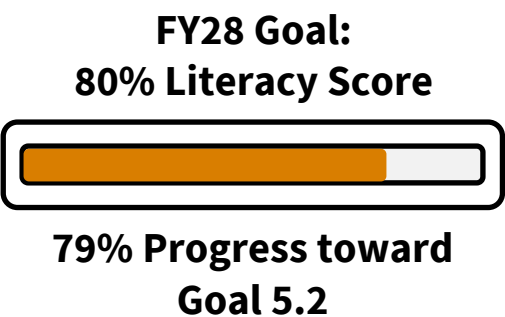
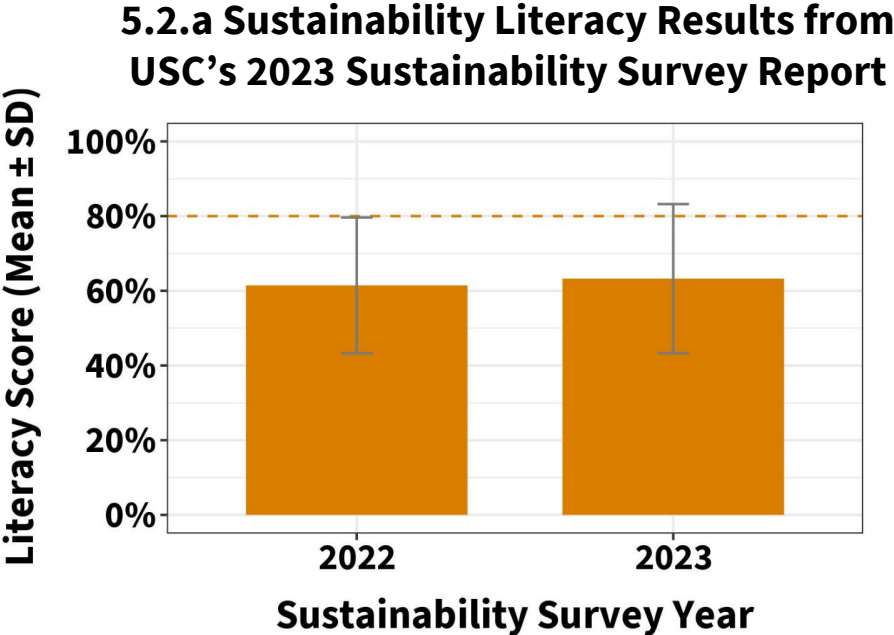
Progress is based on the 58.21 points received in 2021 for USC’s Silver STARS Rating. STARS is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance.





Goal 5.2: Culture of Sustainability

5.2) Achieve a **university culture** of sustainability by 2028, defined as 80% of students, faculty and staff **a)** demonstrating an understanding of sustainability and **b)** perceiving USC as having a culture that cultivates sustainability.



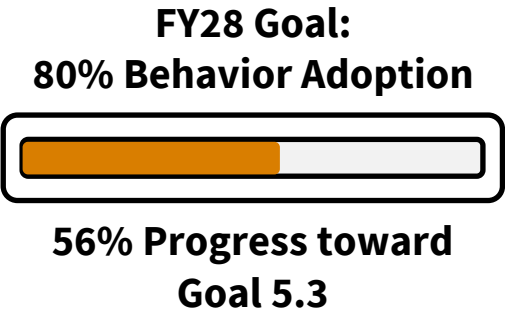
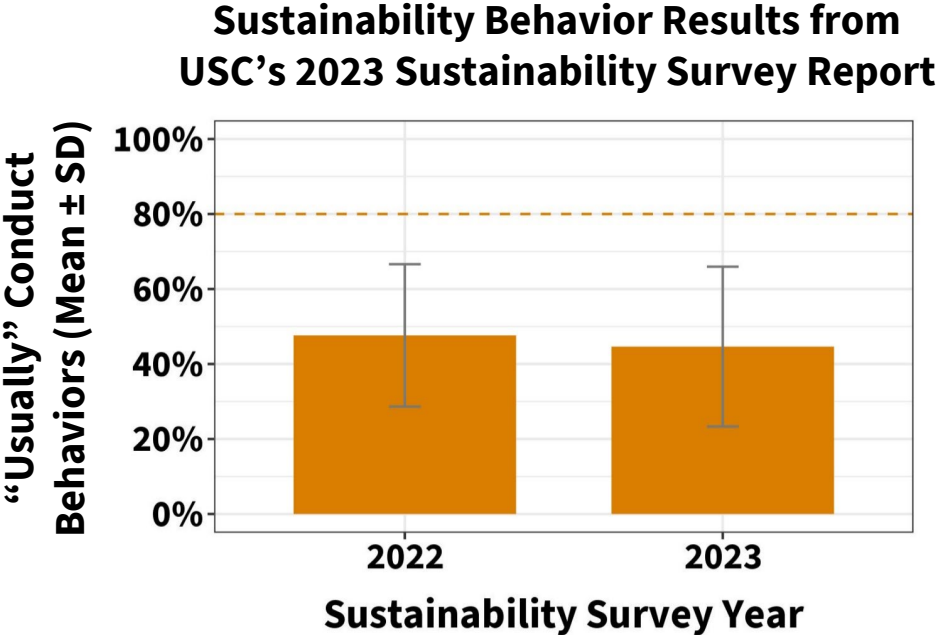
Dashed line represents FY28 goal. Progress for subgoal 5.2.a is based on an average literacy score across all literacy questions and sustainability survey respondents from 2023. Goal 5.2.b has not yet started; please see the USC Student Sustainability Training module to see the latest efforts toward achieving this goal.





Goal 5.3: Adopt Sustainability Behaviors

5.3) Achieve university-wide practice of **sustainability behaviors** by 2028, defined as an average of 80% of students, faculty and staff self-reporting engagement in various behaviors “usually” or “always.”



Dashed line represents FY28 goal. Progress is based on an average score across all sustainability-behavior frequency questions and sustainability survey respondents from 2023.

Data Credits

1.1) Office of the Registrar: Frank Chang (SOC Raw Data); Office of Sustainability (OoS): Julie Hopper (Course Finder/Data Cleaning)

1.2) ENST: Jill Sohm; OoS: Chelsea Graham

1.3) ENST: Jill Sohm; OoS: Chelsea Graham

2.1) Gould School of Law: Amber Madole; OoS: Julie Hopper (Sustainability Research Finder & Scopus Research Database [Elsevier])

2.2) USC Communications: Paul McQuiston

2.3) PWG Research Committee

3.1) Well-being Collective (SWISS Survey): Lauren Martinez; USC Alumni Association: Teresa Verbeck

3.2) PWG Engagement committee; University Relations: Gloria Gonzalez; Julie Hopper (Qualtrics Survey Developer)

3.3) University Relations: Gloria Gonzalez; OoS: Julie Hopper (Sustainability Research Finder & Scopus Research Database [Elsevier])

4.1.a-b) FPM: Blanca Linares, Zelinda Welch

4.1.c) OoS: Brad Haydel

4.1.e-f) FPM: Blanca Linares, Zelinda Welch; School of Architecture: Bhavna Sharma

4.2.a) FPM: Ernesto Padilla, Gina Whisenant; LA Coliseum: Chris Kalaw

4.2.b) FPM: Ernesto Padilla, Gina Whisenant

4.2.c) FPM: Ernesto Padilla, Gina Whisenant; Keck Medical Center: Miguel Gonzalez, Support Services

4.3) FPM: Blanca Linares, Zelinda Welch

4.4.a) FPM: Blanca Linares, Pix Verendia, Zelinda Welch

4.4.b) FPM: Blanca Linares, Zelinda Welch

4.5.a) OoS: Julie Hopper

4.5.b) OoS: Ellen Dux, Julie Hopper, Evan Morris

4.5.c) OoS: Mick Dalrymple

5.1) OoS: Julie Hopper

5.2) OoS: Julie Hopper

5.3) OoS: Julie Hopper

Data Sources & Methodologies are available

