

# USC Sustainability Survey 2023 Report

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August 11, 2023

# ASSIGNMENT: EARTH - ENGAGEMENT GOALS



**Assignment: Earth** is USC's sustainability framework for creating a healthy, just and thriving campus and world.

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

**This survey supports our Assignment: Earth engagement goals**

**<https://sustainability.usc.edu/assignment-earth/goals/>**

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

# SURVEY HIGHLIGHTS

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- **2,974** respondents completed the entire survey
- *There is a significant positive effect of sustainability education and engagement on literacy and behavior scores of respondents.*
- *Top-scoring literacy questions indicated high climate change awareness.*
- **> 75%** of respondents *are interested in learning more about sustainability practices.*
- **> 52%** of respondents *‘usually’ reduce energy use, reduce plastic waste, carefully sort waste, conserve water and conserve paper.*
- **38%** of respondents *are interested in getting involved with USC sustainability efforts or groups but have not yet done so.*



# SURVEY RESPONSES

USC Role	USC Population	Survey Responses	% of Sub-Population
Faculty	6,136	261	4%
Staff	18,557	1,161	6%
Postdoc or Visiting Scholar	754	75	10%
Graduate/ Professional	27,982	851	3%
Undergraduates	20,699	722	3%

**Breakdown of the survey respondents by their role and the percent representation of the corresponding USC population.** 3,070 respondents completed the background and sustainability literacy survey sections and 2,974 completed the full survey. *USC population numbers were obtained from USC OIR (Undergraduate and Graduates for Fall 2022), and from HR, iVIP IT and the Postdoctoral Association (Staff, Faculty, Postdocs & Visiting Scholars in Spring 2023).*



# SURVEY SCORING & ANALYSIS

2023 Survey Category	Available Points	Mean (%)	SD (%)	Responses
Literacy	10	63.3	19.9	3,070
Behavior & Culture	46	48.6	14.2	2,974

**Scoring:** Points were assigned to survey responses in the USC Qualtrics<sup>® XM</sup> platform.

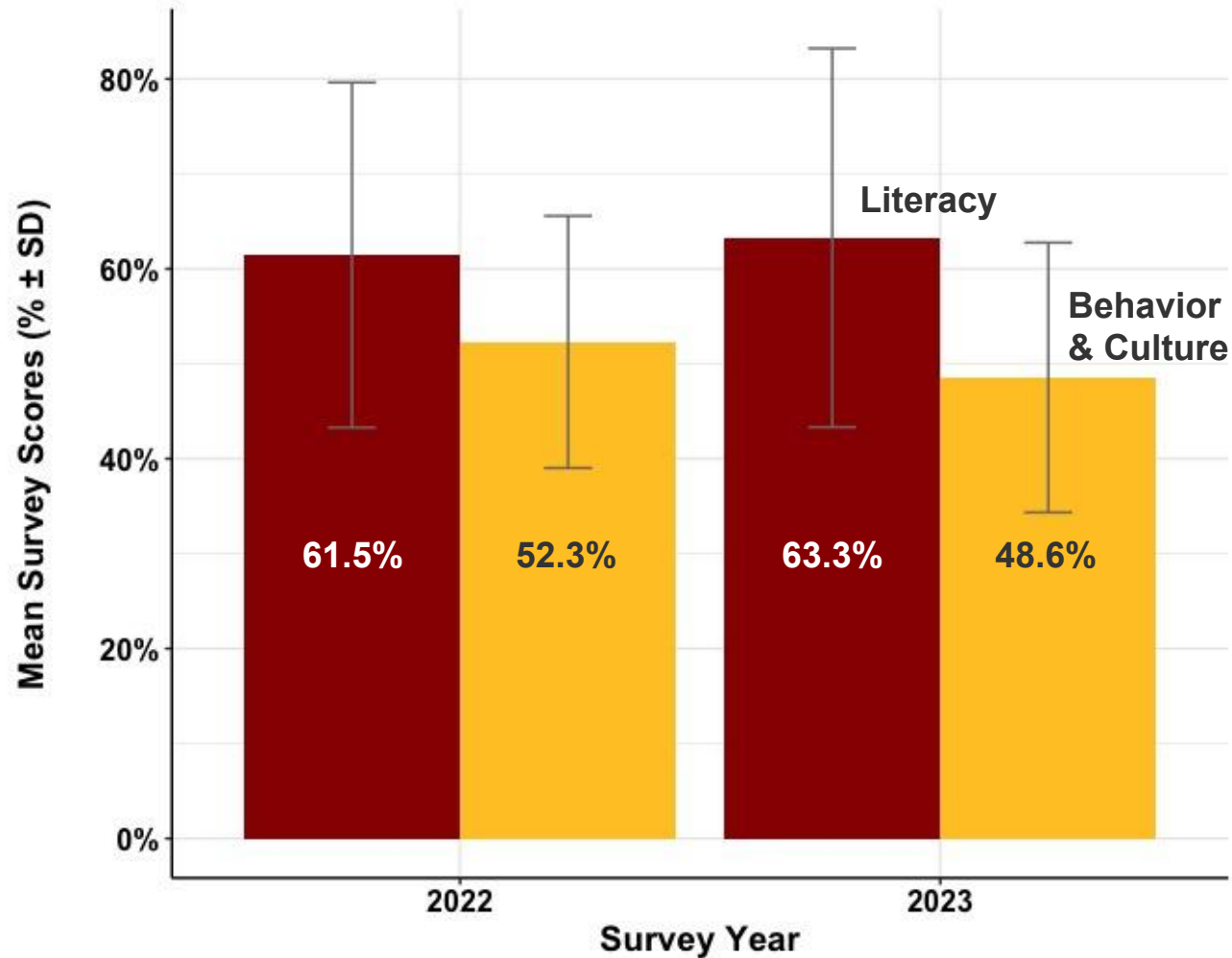
- 10 sustainability literacy questions addressed knowledge of general sustainability focused issues.
- 9 point-based questions in the sustainability behavior & culture survey section comprised of:
  - Culture questions that addressed awareness of sustainability initiatives at USC.
  - Behavior questions on the participation of respondents in sustainability related activities and their frequency of engagement in sustainability related behaviors.

**Analysis:** Anonymized data were analyzed in R version 4.1.2.

- We conducted data quality checks, cleaned text entries and reformatted the data for analysis.
- To analyze behavior & culture, data was subset to the 2,974 respondents that completed the full survey.
- Raw (unweighted) data were used for analyses and visualizations.

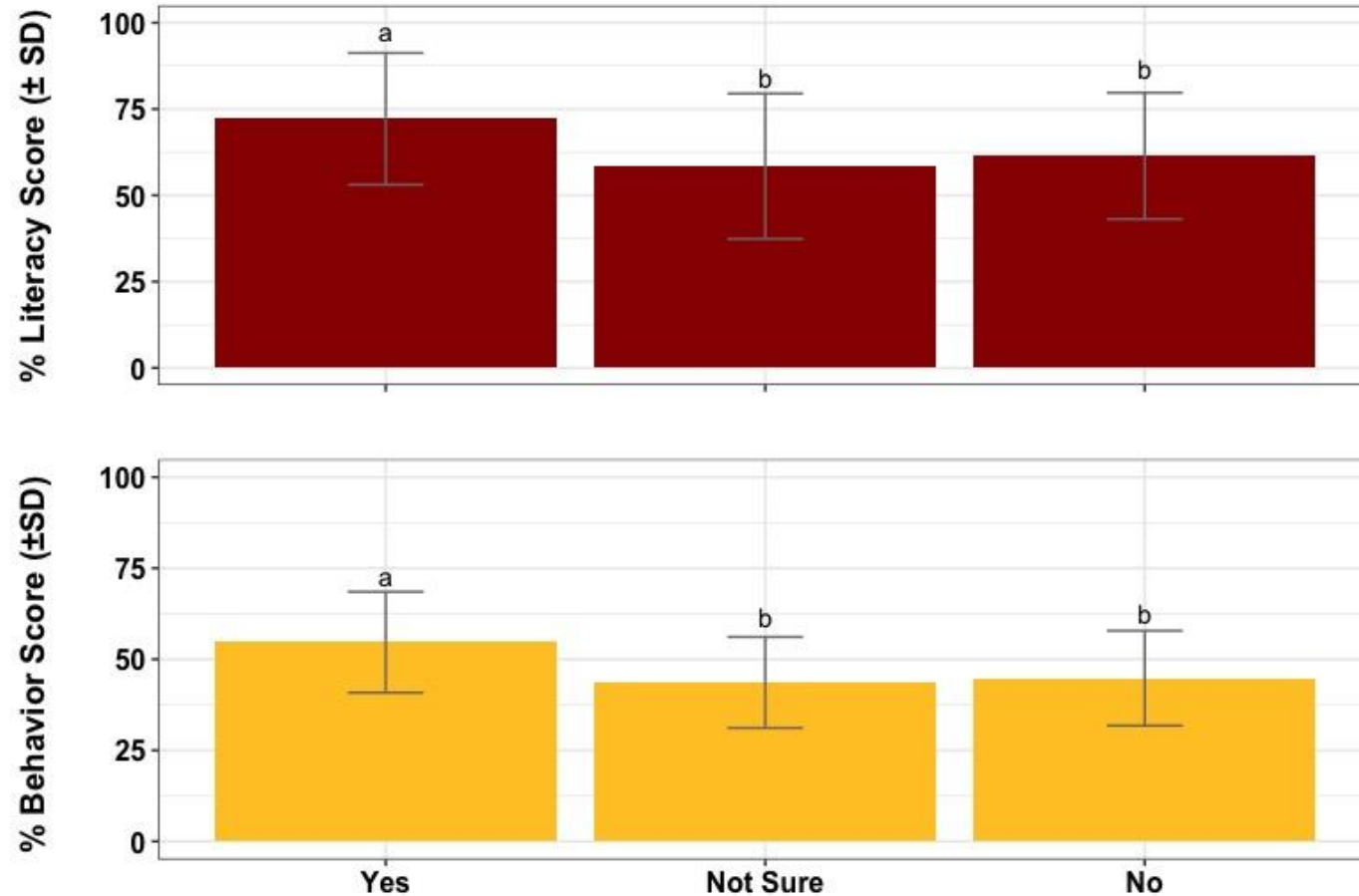


# SURVEY SCORES (2022 vs 2023)



**Literacy scores increased while Behavior & Culture scores decreased (compared to 2022)**

# SUSTAINABILITY EDUCATION ASSOCIATED WITH HIGHER SCORES

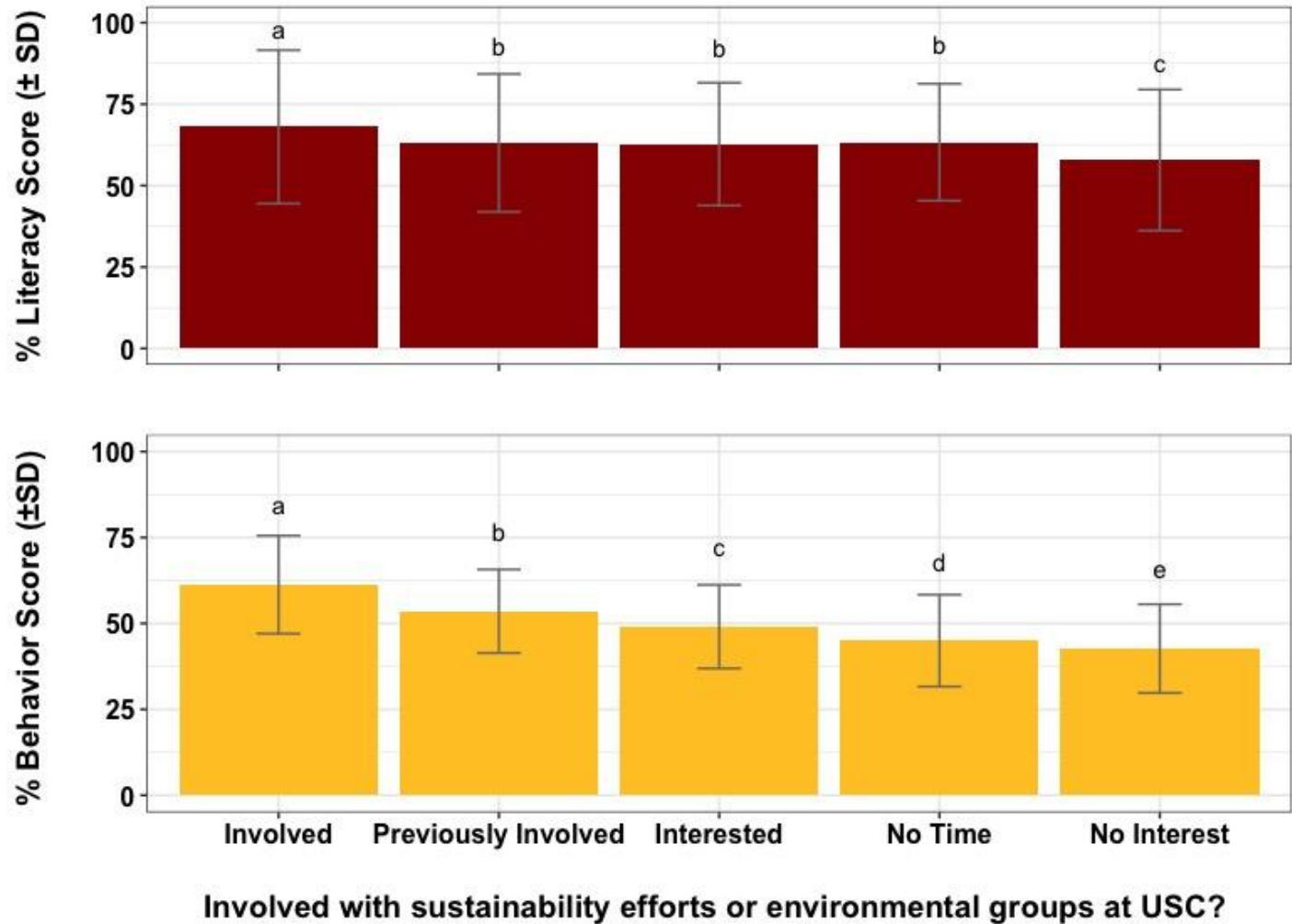


Have you taken or taught a sustainability related course?

**Students and faculty who took or taught a sustainability related course had significantly higher sustainability literacy and behavior scores compared to those that did not.** (Kruskal Wallis Test, Literacy Scores:  $\chi^2 = 139.22$ ,  $df = 2$ ,  $P < 0.001$ ; Behavior & Culture Scores:  $\chi^2 = 201.14$ ,  $df = 2$ ,  $P < 0.001$ ).

Figures: Mean scores (% ± SD) of student and faculty respondents. Scores from the literacy section (top) were analyzed separately from the behavior & culture scores (bottom). **Letters above the bars represent significant differences** among the respondent groups for each survey section. (Dunn Test,  $P < 0.001$ ).

# SUSTAINABILITY ENGAGEMENT INCREASED SCORES

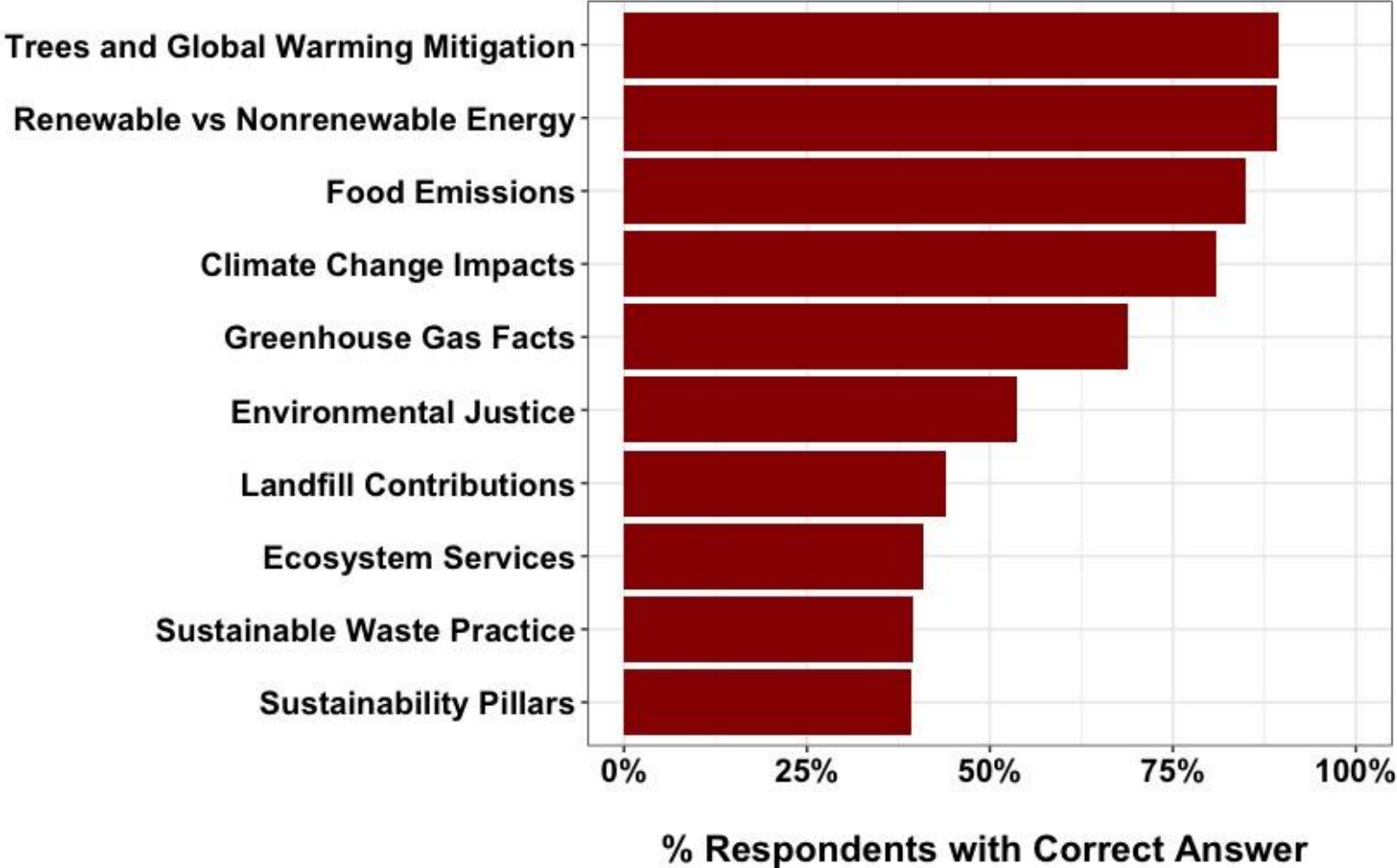


**Respondents who were more engaged in sustainability related efforts and groups affiliated with USC had higher sustainability literacy and behavior scores.** (Kruskal Wallis Test, Literacy Scores:  $\chi^2 = 49.14$ ,  $df = 4$ ,  $P < 0.001$ ; Behavior & Culture Scores:  $\chi^2 = 439.87$ ,  $df = 4$ ,  $P < 0.001$ ).

Figures: Mean scores (%  $\pm$  SD) of student and faculty respondents. Scores from the literacy section (top) were analyzed separately from the behavior & culture scores (bottom). **Letters above the bars represent significant differences** among the respondent groups for each survey section. (Dunn Test,  $P < 0.02$ ).



# TOP-SCORING LITERACY QUESTIONS

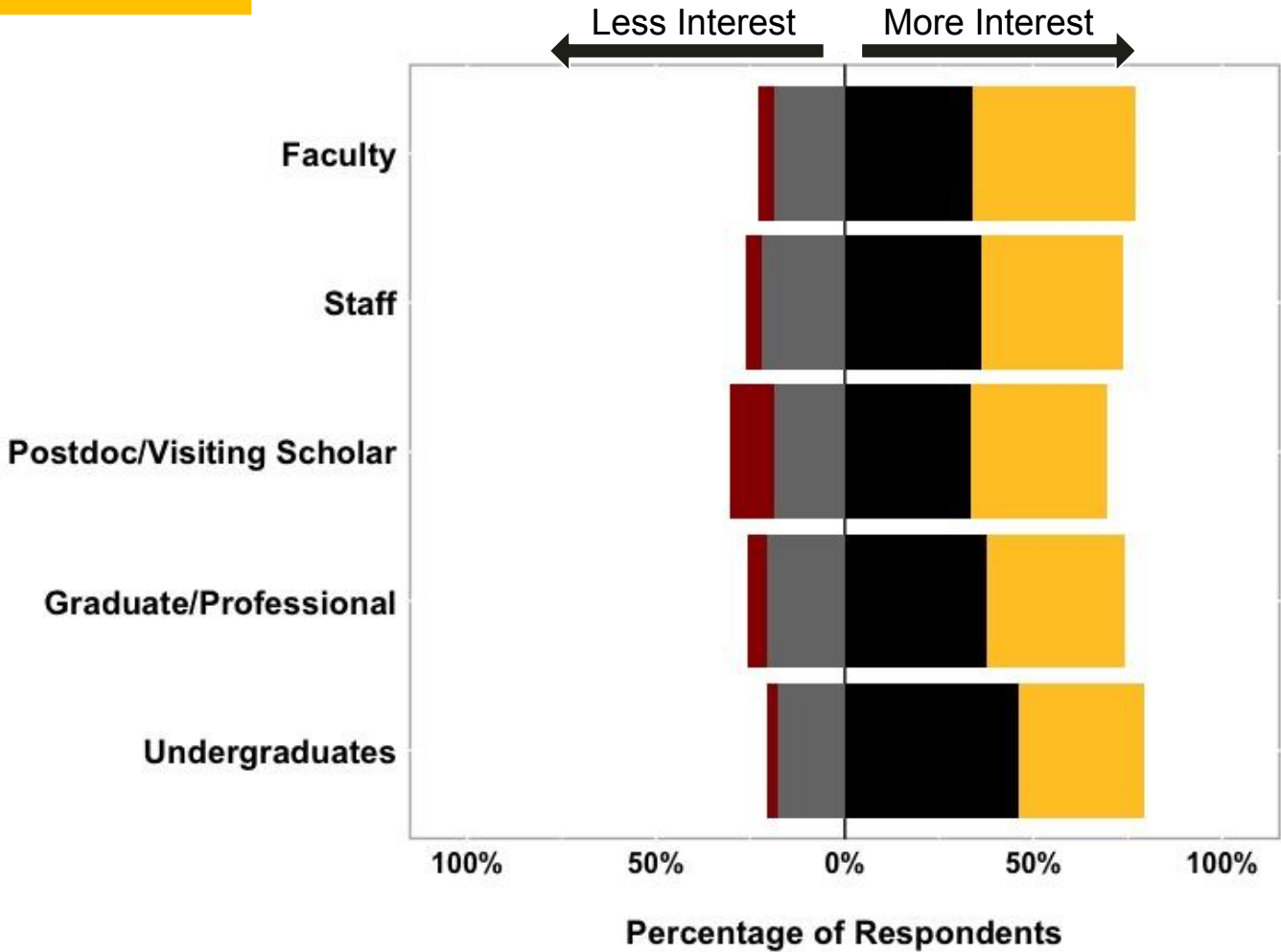


**Top-scoring literacy questions** related to energy, greenhouse gases and climate change, **indicate high climate change awareness.**

Figure: % of respondents that provided the correct answer for each of the 10 sustainability literacy questions.



# INTEREST IN SUSTAINABILITY PRACTICES

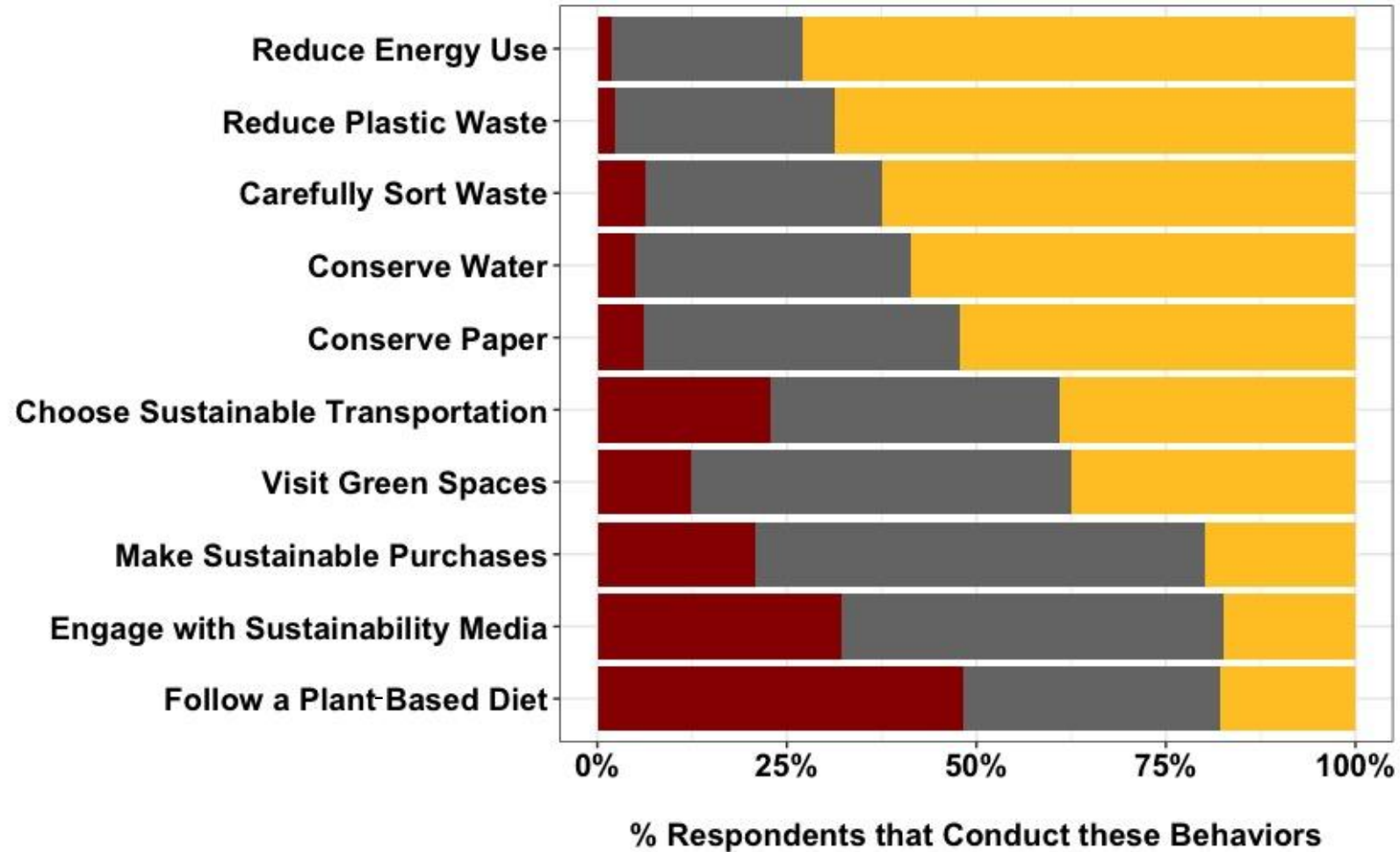


**> 75%** of respondents have either a **moderate or strong interest** in learning more about **sustainability practices**.

- Not at all interested
- A little bit interested
- Moderately interested
- Very interested



# FREQUENCY OF SUSTAINABILITY ACTIONS

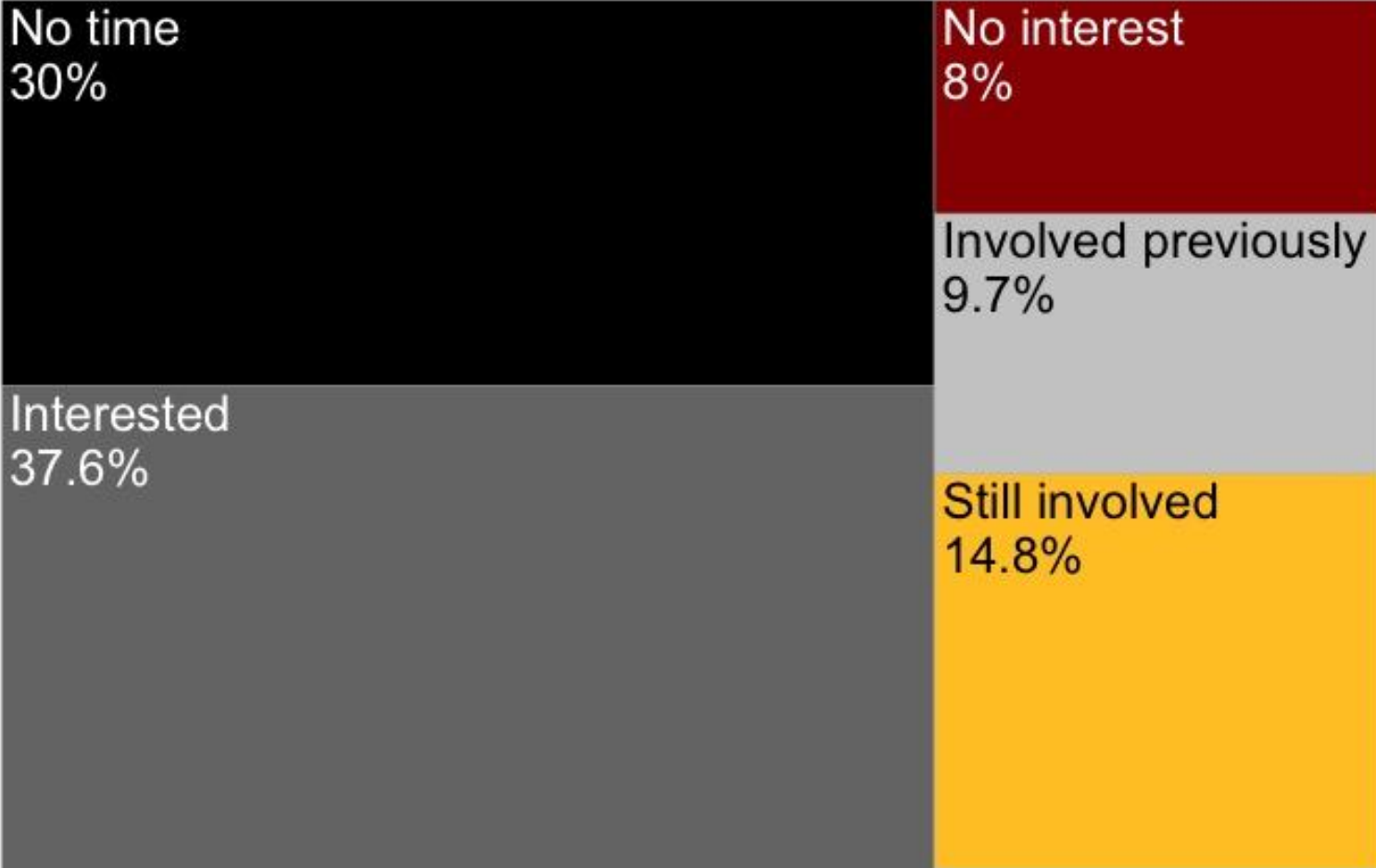


**> 52%** of respondents ‘usually’ reduce energy use, reduce plastic waste, carefully sort waste, conserve water and conserve paper.

### Frequency

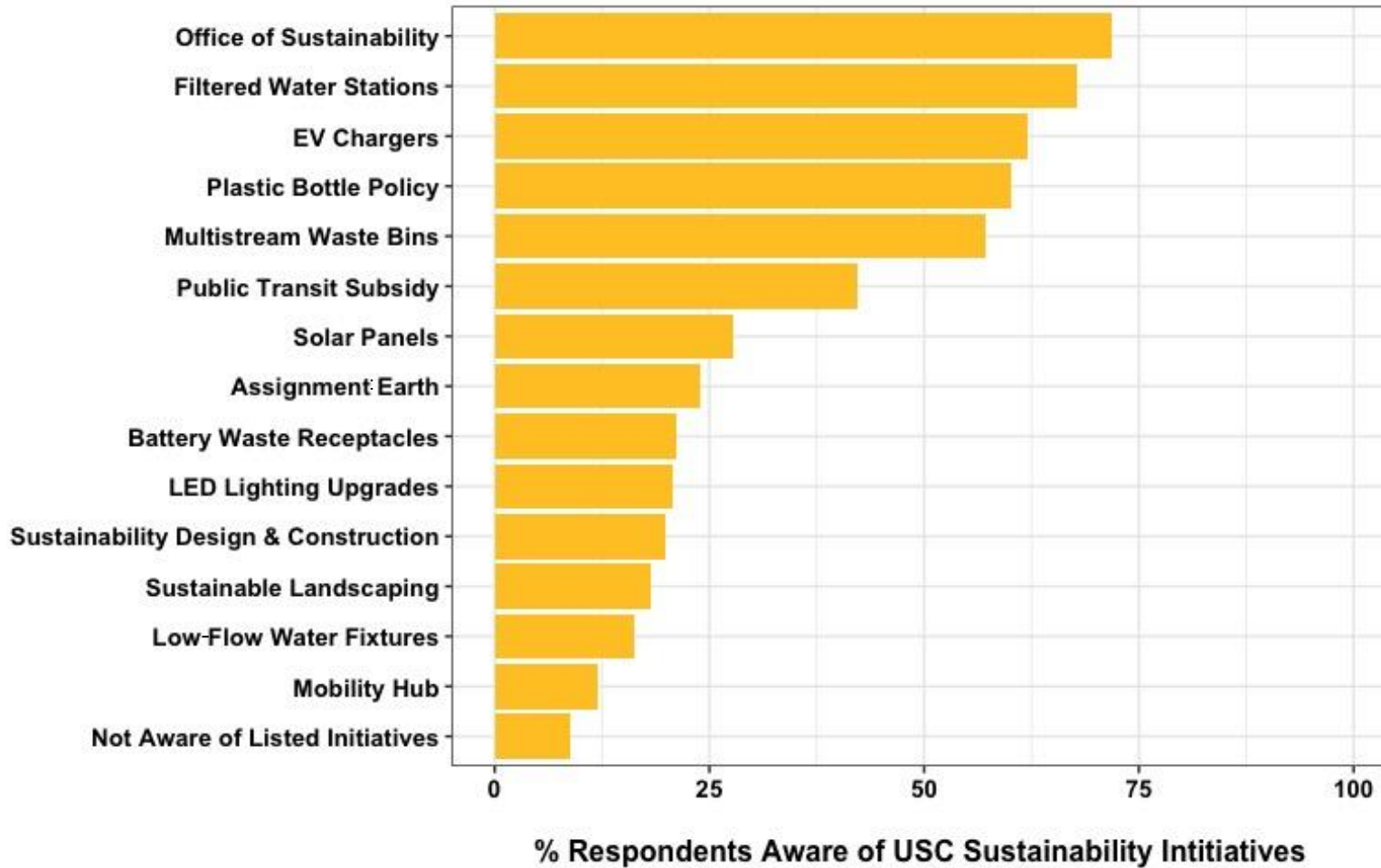
- Usually
- Occasionally
- Never

# INVOLVEMENT IN SUSTAINABILITY EFFORTS OR GROUPS



**38%** of respondents are **interested in getting involved with USC sustainability efforts or groups** but have not yet done so.

# AWARENESS OF SUSTAINABILITY INITIATIVES AT USC



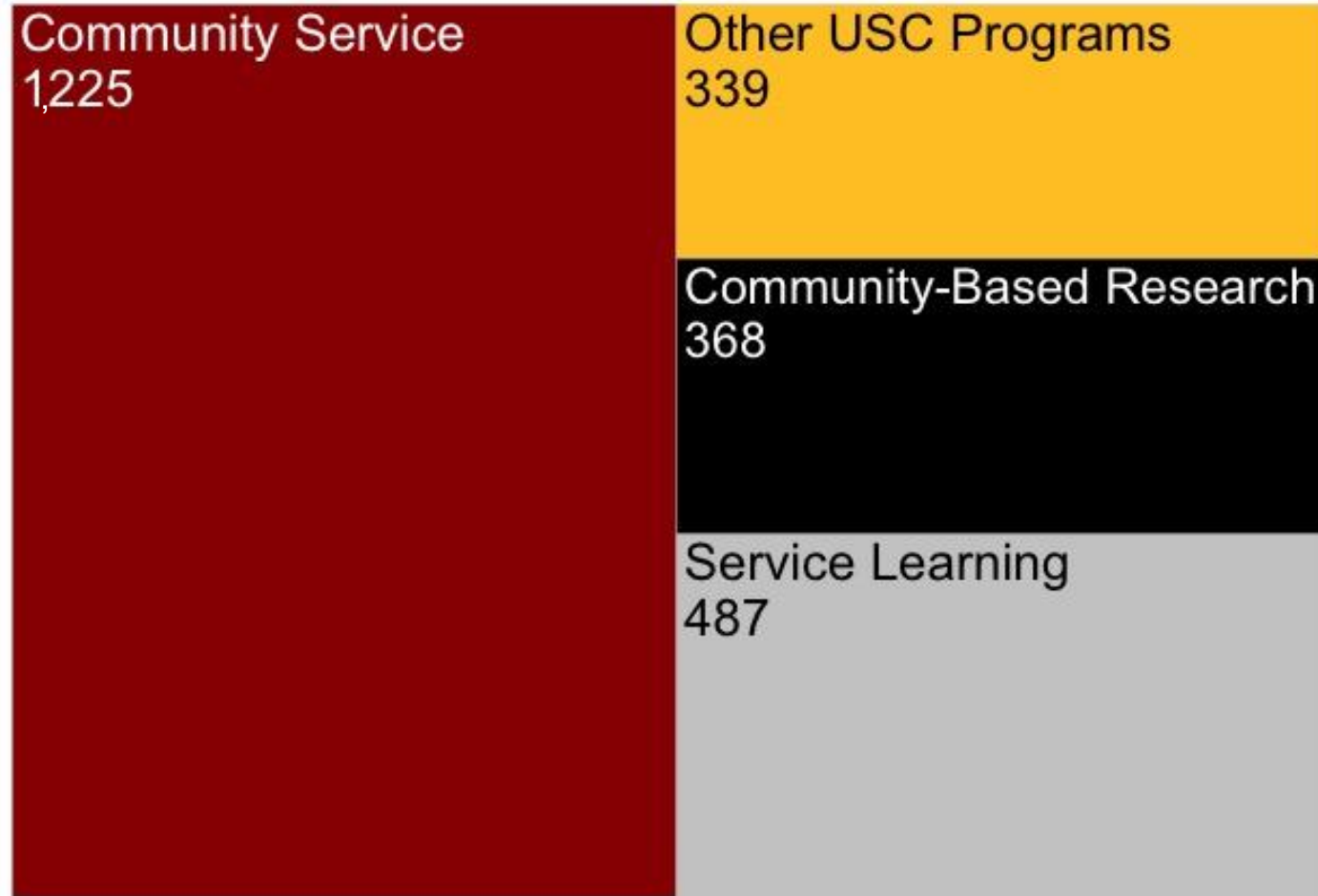
**< 50%** of respondents **were aware of most of these sustainability initiatives**

Check out our Sustainability Resource Page to learn more:

<https://green.usc.edu/sustainability-resources/>



# PARTICIPATION IN CIVIC ENGAGEMENT ACTIVITIES



**> 53%** of respondents participate in civic engagement activities (1,600 out of the 3,045 who completed this question set).

Of these participants, 51% conducted community service, 20% participated in service learning, 15% conducted community-based research and 14% participated in civic engagement projects sponsored by USC. *\*Some respondents participated in more than one type of civic engagement activity*





# RESOURCES

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Questions About the Survey?  
Email: [OoSData@usc.edu](mailto:OoSData@usc.edu)

Learn More and Take Action:  
<https://sustainability.usc.edu/take-action>

<https://green.usc.edu/about/staff/>



USC Sustainability



# ACKNOWLEDGEMENTS

**USC's Office of Sustainability would like to thank several key organizations and people in the development and distribution of this survey:**

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Ray Gonzales

Bonny Bentzin

Gale Sinatra

Melissa Aparicio

Robin Romans

Camille Dieterle

Jessica Dutton

Miguel Gonzalez

Sarah Hong

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# 2023 Report Appendix

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SURVEY DEVELOPMENT, DISTRIBUTION & ADDITIONAL RESULTS

# APPENDIX: SURVEY DEVELOPMENT

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- This survey was developed by Dr. Julie Hopper and USC's Office of Sustainability (OoS).
- OoS staff and interns reviewed sustainability literacy and cultural surveys from > 30 [STARS-reporting universities](#).
  - Common questions were selected and modified for further clarity and relevance to USC.
  - Additional questions were created and incorporated to best serve USC's sustainability goals ([Assignment: Earth](#)).
- Selected students, postdocs, staff and faculty at USC reviewed the initial and final survey drafts.
- All feedback was incorporated into the survey, which was then sent for external review to sustainability staff at Arizona State University, California Institute of Technology and the University of California, Los Angeles.
- All comments and edits were addressed in the final version of the 2022 survey, and further improvements were made to the 2023 survey.

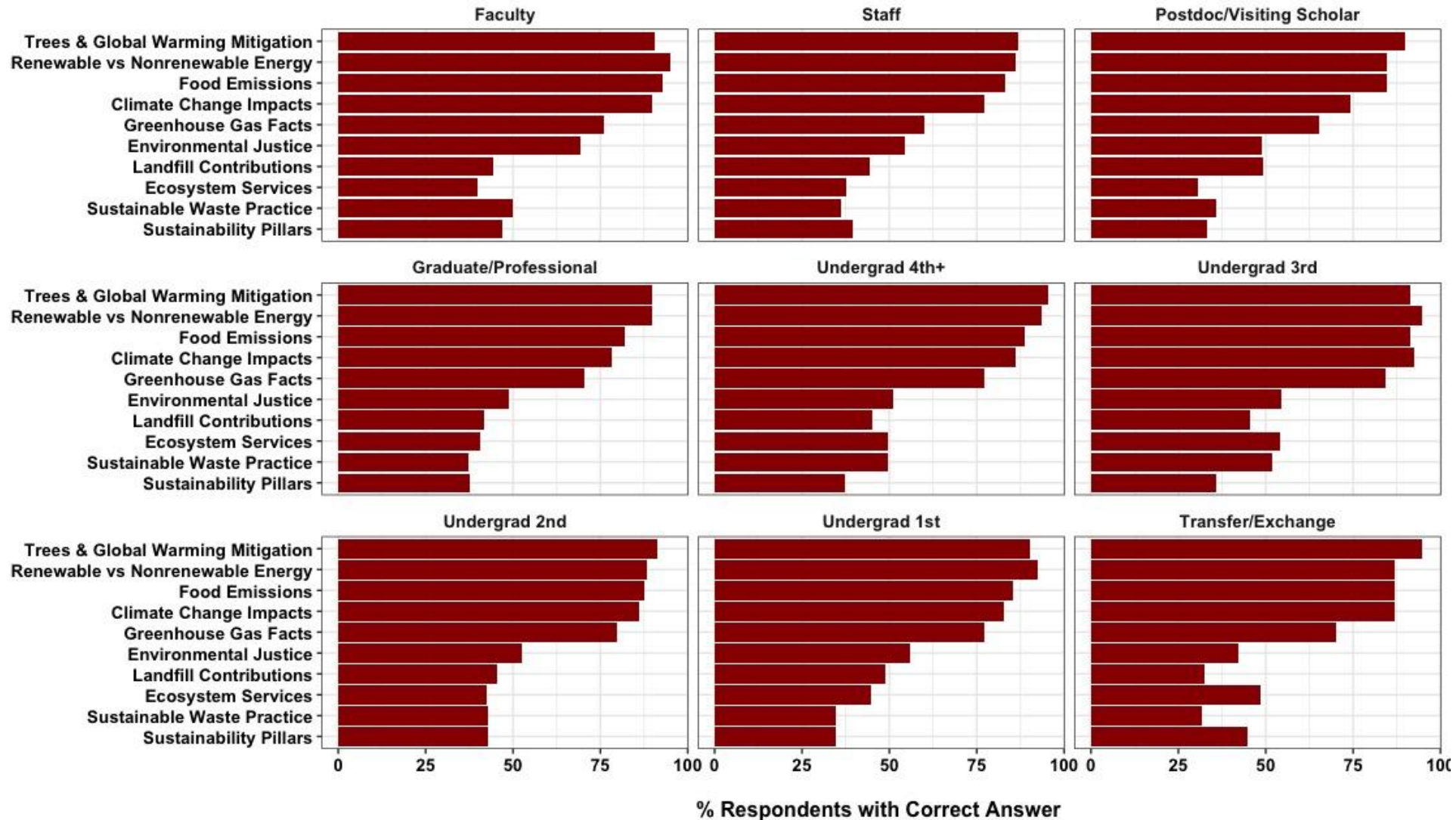


# APPENDIX: SURVEY DISTRIBUTION

- The survey was launched on March 27th, 2023, through USC Qualtrics via an anonymous link.
- Mass emails were distributed to all students, postdocs, staff and faculty (UPC, HSC and satellite campuses) by the Office of the Senior Vice President for Administration, the Office of Sustainability and from the Chief of Operations at Keck Hospital
- Additional emails and fliers were sent out by USC organizations and units to their members. Signs were put up around UPC campus.
- The survey concluded on April 16th 2023.
- Incentives included a chance to win one of twenty \$100 USC Bookstore gift cards. Gift cards were distributed to the 20 lucky survey participants in May 2023. →



# APPENDIX - BREAKDOWN BY USC ROLES: LITERACY QUESTION SCORES



# APPENDIX - BREAKDOWN BY USC ROLES: AWARENESS OF SUSTAINABILITY INITIATIVES AT USC

