

## Introduction

What is climate change and how is it affecting our planet?

Climate change is the change in our global and regional climate patterns. The level of carbon dioxide in the atmosphere has increased over the years largely due to the use of fossil fuels. Global climate change is negatively affecting our planet causing warmer temperatures which are disrupting weather patterns. We are now seeing unusual weather in different areas, more intense storms, heavier rainfalls and some are experiencing drought. As we are very aware, ocean levels are rising, glaciers are melting, and the coral reefs are decreasing at accelerated rates.

Recognizing this issue, the University of California took action in November 2013, which committed the entire UC system to emitting net zero greenhouse gases from its buildings and vehicle fleet by 2025. The initiative builds on UC's pioneering work on climate research and furthers its leadership on sustainable business practices. The UC system is improving its energy efficiency, developing new sources of renewable energy and enacting a range of related strategies to cut carbon emissions.

On April 1, 2019, all of the UCs competed in a friend and educational challenge referred to as the Cool Campus Challenge. It was a four-week long challenge designed to educate and motivate all nine UC campuses to take simple, energy-saving and waste-reducing actions to help the UC system reach its goal of carbon neutrality by 2025. Student, staff, and faculty signed up on the cool campus challenge website where they took pledges and earned points. These pledges gave different ways to learn about their carbon footprint and actions to take to reduce it. These activities were as simple as turning off the lights when leaving a room or commuting on public transportation.

## Materials and Methods

In efforts to engage and communicate with students, staff, and faculty we took a modern-day approach and went digital. Not only was this method effective but we were able to reach large amounts of people as well as reduce the amount of paper being used by printing out flyers. The three methods used were, Social media, Tabling and digital flyers.

1. Social Media: The Facebook platform was highly used due to the easy access to reaching out to students and communicating. Students were able to engage in the post, ask questions and have easy access to the registration link. This is where the digital posters and updates about the challenge were posted.
2. Tabling: During tabling, we were active and present on campus, which allowed students to freely approach us and ask questions. Many students who approached us came out of curiosity, heard from a friend or saw the Facebook post. Here we were able to speak to them about the challenge as well as help them sign up using their smartphone devices.
3. Digital flyers: By using digital flyers we were able to reduce the amount of paper we used as well as reach more students. A digital flyer created easier access to share amongst each other and created a more efficient way to store the flyers.

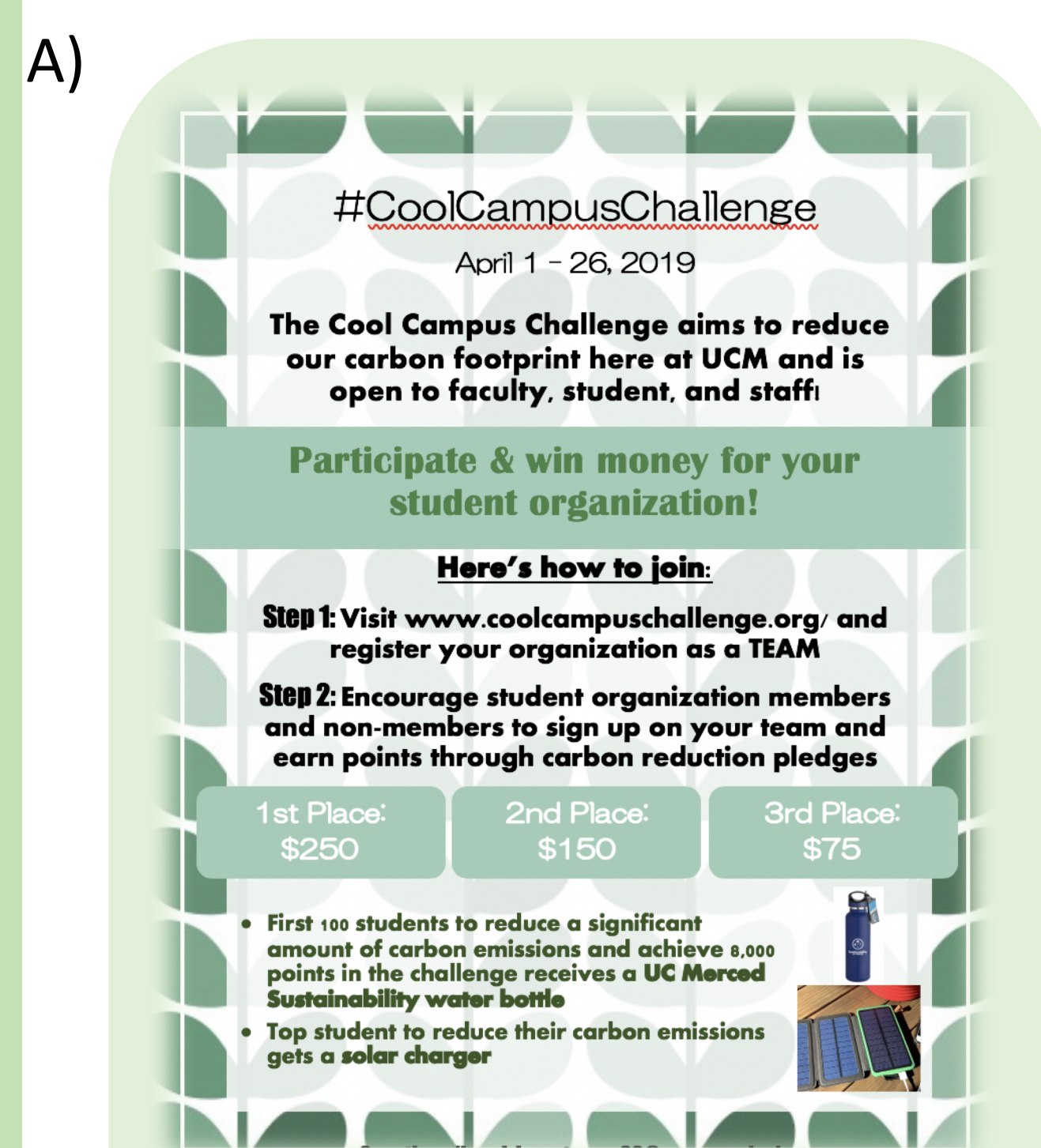


Figure 1: Flyer used to promote the Cool Campus Challenge. Created by Amira Ringgold, UCM Student

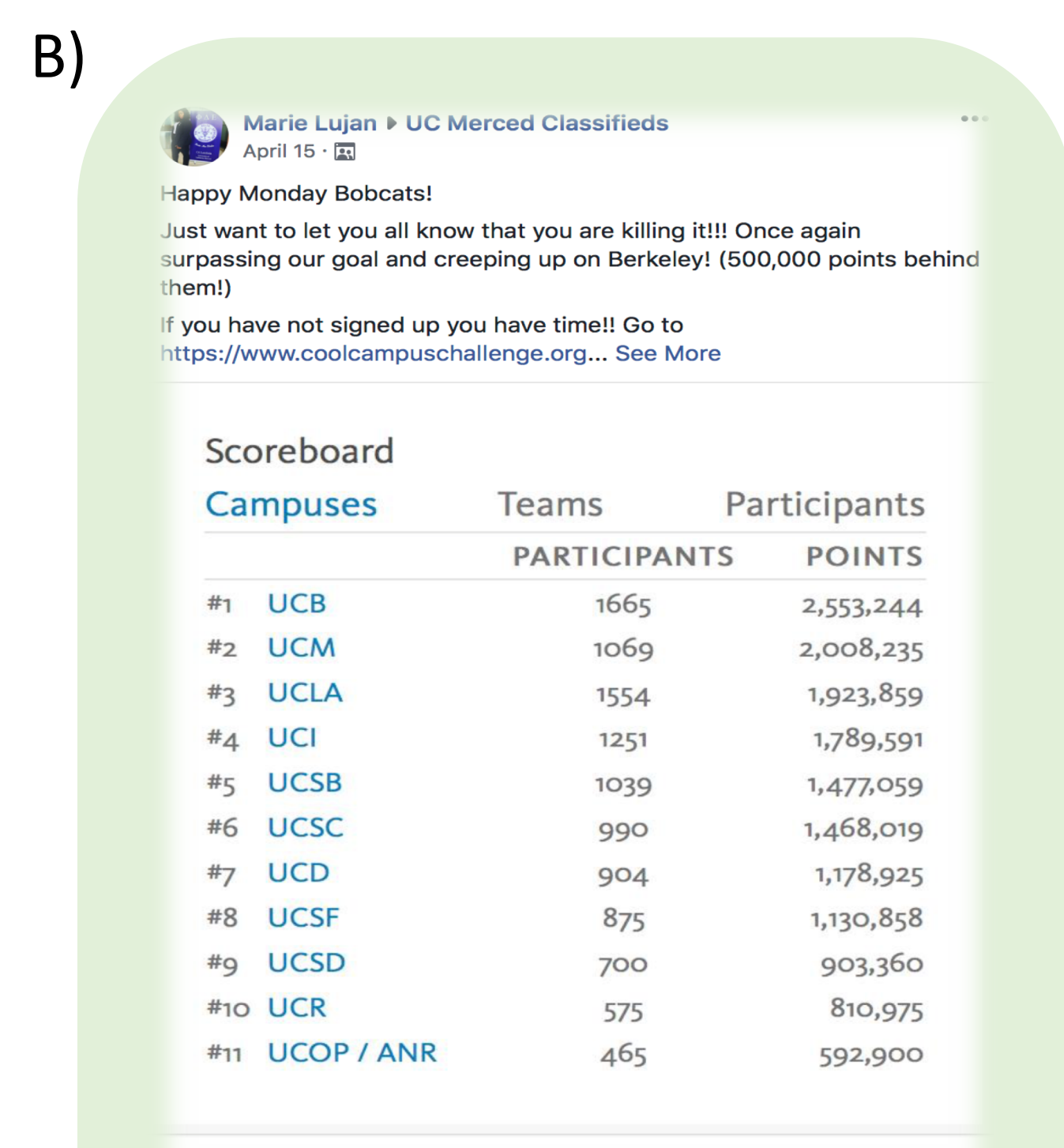


Figure 2: Social media communication. Facebook was to promote and engage with students about the cool campus challenge.



Figure 3: Tabling. Tabling was used as another method of communicating the challenge with students, staff and faculty on campus.

## Project Goals

The goal of the Cool Campus Challenge was to educate and challenge students, staff, and faculty on the carbon neutrality initiative. Along with educating them about the carbon neutrality initiative students, staff and faculty learned to reduce their carbon footprint and become more cognizant of their waste. This helps bring UCM closer to obtaining the CNI goals by 2020 and UCOP by 2025.

## Results

In result, over 22,000 participants system-wide took an average of 9 actions each with a total of 200,00 completed actions. About 7.6% of the entire UC system participated in the cool campus challenge. Together we reduced 10,220 metric tons of CO<sub>2</sub> in self-reported actions with is equivalent to taking 2,170 cars off the road for a year. Overall, UC Berkeley was the winning campus based on total points, with UCLA and UC Irvine and UC Merced coming in 4th place.

Although UC Berkeley was the overall winner with total points, UC Merced is the smallest campus in the UC system but was awarded for its efforts in the challenge of having the largest participation rate (18%).

Collectively the students, staff, and faculty at UC Merced saved more than 2.3 million pounds of carbon dioxide through sustainability actions. The campus also had the largest pounds of carbon emissions savings per participant than any other campus. More than thirty-five (35) teams were created by student organizations and campus departments.

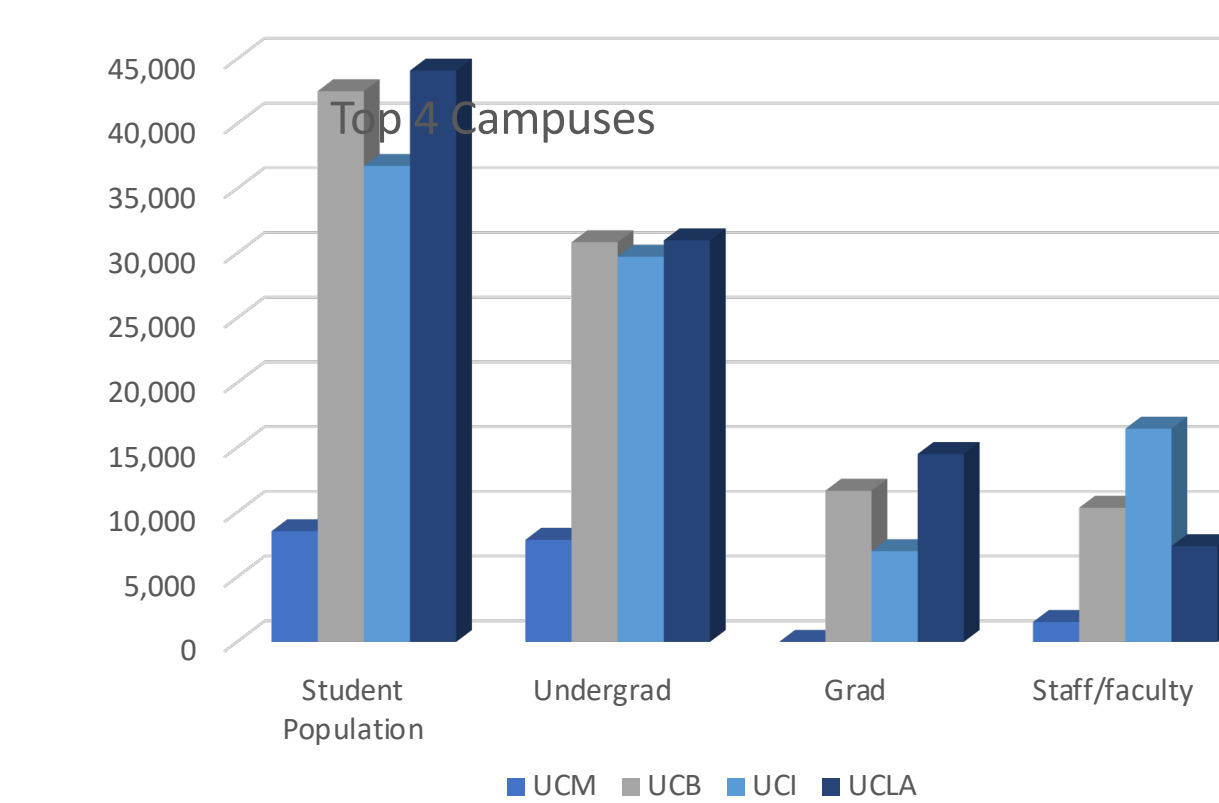
### Scoreboard

Campuses	Teams	Participants
	PARTICIPANTS	POINTS
#1 UCB	1064	1,118,733
#2 UCSB	532	636,190
#3 UCSC	578	620,208
#4 UCSF	721	557,836
#5 UCI	469	534,243
#6 UCLA	527	368,440
#7 UCD	538	360,943
#8 UCOP	305	320,493
#9 UCR	270	255,246
#10 UCSD	391	240,844
#11 UCM	127	132,949

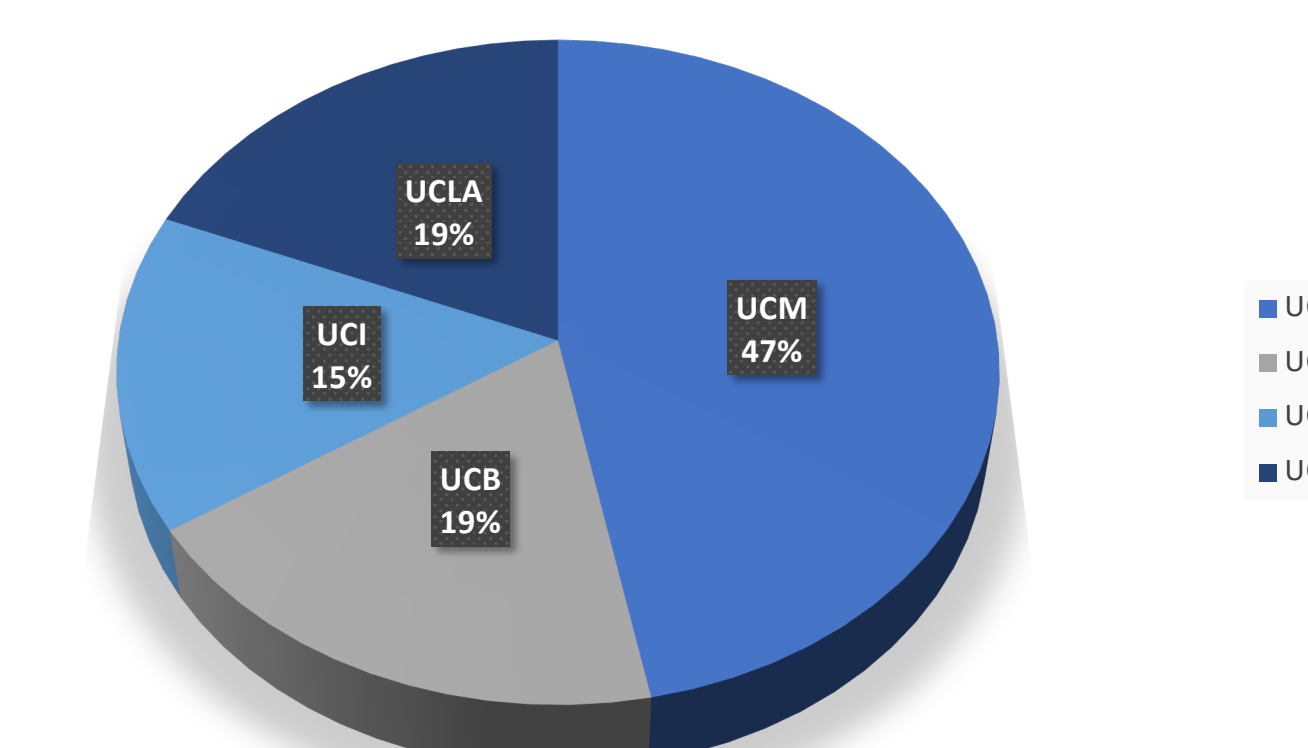
UCM started the challenge in 11<sup>th</sup> place. During the course of the challenge we moved up to 2<sup>nd</sup> place to later take 4<sup>th</sup> place over all in the challenge.

### Scoreboard

Campuses	Teams	Participants
	PARTICIPANTS	POINTS
#1 UCB	3455	6,638,576
#2 UCLA	3564	6,028,889
#3 UCI	2444	4,559,367
#4 UCM	1730	4,084,386
#5 UCSC	1372	3,049,122
#6 UCD	1500	2,864,580
#7 UCSB	1451	2,322,660
#8 UCSD	1164	2,311,049
#9 UCSF	1158	2,139,786
#10 UCR	764	1,355,441
#11 UCOP/ANR	524	932,567



Campus Participation



## Conclusions and Future Directions

UC Merced maybe the smallest campus in the University of California System, but the university is one of three campuses that will take home an award for its efforts in the Cool Campus Challenge, a University of California 4-week friendly competition that motivated the system-wide community to make pledges to reduce their carbon footprint. The competition was an effort to help the UC system reduce its carbon emissions by 2025. UC Merced's plans to achieve Carbon Neutrality by 2020. Systemwide the challenge engaged more than 22,000 students, staff, and faculty. In total, more than 21 million pounds of carbon dioxide were saved. This brings the carbon neutrality initiative to reach its goal by 2025 and UCM by 2020.