

Shut the Sash Campaign Summary

Description

Laboratories are the most energy-intensive buildings at Cal Poly, and fume hoods are one of the primary drivers of this energy consumption. When open, a single fume hood can consume energy at the same rate as 3.5 homes. To save energy and promote lab safety, fume hood sashes should only be opened to set up or modify an experiment. The "Shut the Sash" campaign at Cal Poly encourages sash closure when fume hoods are not in use to reduce energy waste.

Design

Marketing materials were developed for labs in the Baker building to inform students about the importance of shutting the sash on fume hoods.

- Magnets were placed near the light switch on every hood.
- Marketing and tabling events were organized at the beginning of Winter 2023 and Spring 2023.
- Infographics, flyers, and a video were produced and shared with Mia Gambero, the administrative support assistant in the Chemistry and Biochemistry Department. We requested that these materials be distributed to professors and researchers in Baker. This way professors could present it to their students at the beginning of the quarter or include it in their course module and syllabus.



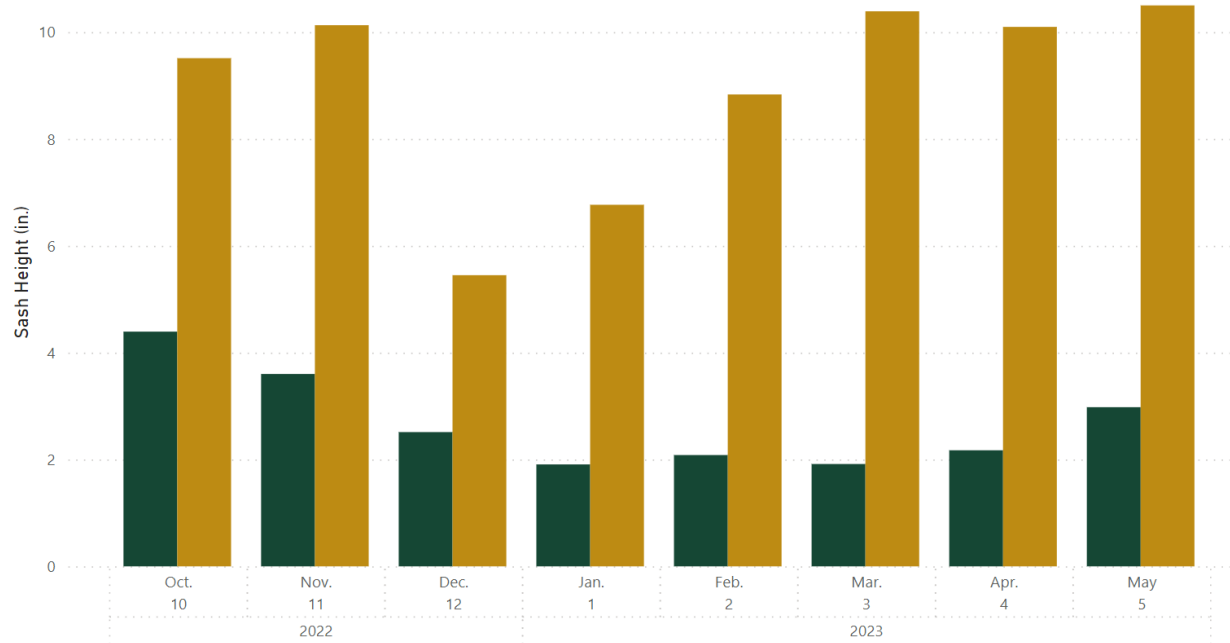
Data

The amount of usable data was limited to a total of 19 fume hoods on floors two and five; 15 of the hoods were on the fifth floor, and the majority occupied the same lab. Our team obtained baseline data from October and November prior to the start of the campaign. The results from the winter and spring quarters are shown in the table below. To ensure the data is comparable across all quarters, we analyzed the same rooms and looked at only two months' worth of data at a time.

| | Fall (Oct.-Nov.) | Winter (Feb.-Mar.) | Spring (Apr.-May) |
|----------------------------|---------------------|-----------------------|----------------------|
| Sash Height (in) | 8.56 | 7.94 | 8.57 |
| Cumulative Energy (kWh) | 17.64k | 19.03k | 18.01k |

Average Sash Height per Month

Floor ● 2 ● 5



Our team concluded that tabling at the beginning of each quarter was effective in reminding students of the “Shut the Sash” practice. We are usure if our marketing materials were implemented by all professors, and hope that putting up flyers would be beneficial for future quarters. The campaign was most effective in Winter quarter, which is when we also had an incentive to give out while tabling and when Mustang News had an article about our efforts.