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**Title:** Huge Energy and Dollars Savings in University Labs

**Abstract:** The use of prompts and recognition is behind the success of two UCSF Office of Sustainability energy projects, the Adopt-A-Spot Campaign and the Ultra-Low Temperature (ULT) Freezer Rebate Program. By promoting energy-saving behavior, these projects reduce UCSF's carbon footprint and achieve substantial financial savings, ultimately helping UCSF to serve its mission of advancing health worldwide. The Adopt-A-Spot campaign's message is simple: Get rewarded for highlighting best practices that reduce energy use from lab equipment. Best practices entail powering down or unplugging benchtop equipment when not in use. Adopted Spots are identified with fun character stickers to remind their "parents" that their Spot needs some rest in the evening. Targeted equipment include VAV fume hoods, centrifuges, PCR, water baths, heat blocks, and lights from biosafety hoods and microscopes. Sustainability Fellows perform weekly audits to ensure compliance and award participants with weekly raffle prizes. Enrolling 41 participants and 81 pieces of equipment, the 2018 Fall Adopt-A-Spot campaign saved UCSF an estimated 27,000 kWh over its six-week period, the time needed to reap long-lasting change. The 2018 campaign is expected to save over \$42,000/yr in energy costs. An iPad grand prize was awarded to Illya Gordon of the Roy Lab, who adopted nine pieces of equipment, saving over \$100/week or \$5,200/year. Another successful program helps labs to replace old, energy hog ultra-low temperature (ULT) freezers with new, energy efficient ones. Recognition of their savings is shared. UCSF's 1,200 freezers are estimated to emit 13,00 metric tons of CO<sub>2</sub> annually, costing over \$3M from plug load energy not including reduced HVAC cooling requirements. Participants receive \$4,500 to replace an old ULT for a new ENERGY STAR ULT. A \$2,000 rebate is offered for JUST purchasing a new ENERGY STAR model. A \$500 incentive offered if they increase the set point to -70 instead of -80. Studies show this saves 25-30% more energy. This year, 40 ENERGY STAR freezer rebates were awarded for a total of 82 ULT freezers since 2014, saving \$89,000 in energy costs each year or \$250,000 savings since program inception. This doesn't include the indirect savings of ~50% for reduced building cooling needs. If all UCSF ULT freezers were replaced with ENERGY STAR, UCSF would save an ~\$2.1 M in energy, enough to power 2,300 Bay Area homes and avoid 8,400 Metric tons of CO<sub>2</sub> emissions.