Sustainability is a core value and a way of life at Stanford and R&DE. We achieved substantial gains, earned significant savings, advanced research objectives, garnered accolades, and grew partnerships, reflecting our vision to be a sustainable and fiscally responsible steward of University resources.

**Results**

**Living Laboratory**

**Partnerships**

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**Results**

- We successfully transitioned Midrise apartments and Escondido Village Graduate Residence waste services from university provider Peninsula Sanitary Service, Inc. (PSSI) to UG2, cutting annual service costs by $195,000.
- On the heels of the Winter Closure Energy Reduction Program, which began in 2016, we saved $272,000 compared to 2016, bringing the four-year savings total to $551,678.
• Since 2016 we have reduced landfill capacity serviced in R&DE by 25% (not including COVID-related reductions). In the last several years, we have decreased our total cost on waste services from the previous year despite a continued 10% rate increase each year.
• We discovered and corrected $152,000 in billing errors from university partners.
Living Laboratory

- We removed the landfill dumpster at Roble's waste enclosure to study the psychological effects of having a large dumpster on diversion rates -- the first study of its kind at Stanford supporting zero waste efforts. The pilot led to a $5,000 reduction in waste service costs at Roble, bringing Roble's waste cost per student down to $41 as compared to over $85 per student in all other undergrad residences. We reduced landfill service by 83% from September through March.

- We launched a new Cardinal Comfort campaign that collected more data points on student comfort than ever before, tripling the normal yearly average. We achieved a 10.5% reduction in hot water usage from September through mid-March, saving R&DE $105,000 in hot water costs.

- We supported 19 student interns and accepted interviews from students from the McCoy Family Center for Ethics in Society and the Sustainability Science and Practice Master’s Program. We also mentored three students completing their Senior Capstone Projects in the School of Earth, Energy and Environmental Sciences and the Stanford d.school.
Partnerships

- We built a strong relationship with LBRE's Energy and Facility Automation Teams.
  - The team disbursed $20,000 to support our AWAIR Program’s expansion, which involves temperature and indoor air quality sensors.
  - We received $45,000 in rebates for smart thermostats in Munger and lighting replacements.
  - LBRE supported a consultant that provided estimates to convert Roble, Lagunita, and Cluster I to hot water instead of natural gas.
  - We completed our buildings’ migration to the Niagara framework platform, paving the way for our smart building's future.
- We partnered with Student Housing, MCP, and various campus partners to open and plan EVGR, integrating sustainability features throughout the complex. [https://sustainable.stanford.edu/campus-action/buildings](https://sustainable.stanford.edu/campus-action/buildings).
Cardinal Clean gained national attention at “Transforming the Way We Clean,” an event hosted by the Association for the Advancement of Sustainability in Higher Education (AASHE). Over 200 attendees representing 50 different universities attended the event.

An AASHE attendee said, "The work that you have done at Stanford is bold and lays the groundwork for the rest of us to follow, a real service."

Cardinal Clean also garnered accolades from visiting guests from Facebook, UCSF, UCLA, and the University of California Office of the President. Cardinal Clean is expanding to Stern, Wilbur, Florence Moore, Cluster I and II, and the Row Houses.