

SUSTAINABILITY AT STANFORD 2022 - 2023

YEAR IN REVIEW



OPENING LETTER

Stanford University, along with other higher education institutions, play a vital role in addressing climate challenges – attracting government, corporations, and individuals to collaborate and develop scalable, global solutions together. This past year has seen great transitions in laying a strong foundation for upcoming opportunities for advancing coordinated campus sustainability efforts to reach beyond Stanford boundaries.

As the steward of sustainability efforts, otherwise known as Sustainable Stanford, the Office of Sustainability continues to oversee progress toward the three sustainability targets laid out in the Long-Range Vision. The university completed its first full year of 100 percent renewable electricity from when its second solar plant went online in 2022. Stanford continues to explore new innovations to improve the reliability of our system and to further reduce Scope 1 and 2 emissions to 80% below peak levels by 2025. Furthermore, to improve infrastructure resiliency and limit disruption to teaching and research during heat waves from the past summers, the university nearly doubled its energy system cooling capacity.

Due to more extreme weather events like last winter's continuous atmospheric river conditions that filled Lake Lagunita, climate action planning is essential more now than ever. The process to update the university's Climate Action Plan has been initiated with the identification of campus stakeholders and experts across more than 20 focus areas in the themes of mitigation, adaptation, resilience, and climate justice. We are assessing our current climate goals, quantifying baseline emissions that will always be a part of our operational footprint, and developing a comprehensive road map to emission reduction and planning for our climate future.

A key milestone for the Office of Sustainability was entering into a new waste contract with long-time partner and family-owned business, Peninsula Sanitary Service Inc. (PSSI), that provides multiple benefits and new services to achieve our Zero Waste by 2030 goal (defined as having a 90% diversion rate or higher). To make larger strides towards a zero-waste campus, we've increased convenience and access to all three major waste streams (recycling, compost, and landfill) to more than half of the campus and launched three task forces around events, cafes, and custodial services. Other wins regarding waste include Residential & Dining Enterprises (R&DE) completing the rollout of Cardinal Clean machines across all undergraduate housing complexes—ensuring that the free, versatile green-cleaning solution is widely accessible. Along with this, Cardinal Clean received the CRRA's 2023 Outstanding Waste Prevention Award.

A major highlight for the Office of Sustainability this past year was the completion of a multi-year process for an internal strategic plan. The undertaking consisted of listening sessions and

a roadshow for strategic campus partners, community members, and other involved students, faculty, and staff—and arrived at 5 key focus areas: Zero Waste, Campus as a Living Lab, Storytelling, Climate Action, and Climate Resilience.

In an effort to engage even further with Stanford's local and national community, last winter and spring, the Office of Sustainability participated with the Office of Community Engagement (OCE) in co-hosting the inaugural Climate Action Summit for San Mateo County with local community organizations and represented the institution at the White House Forum on Campus and Community-Scale Climate Change Solutions in Washington, D.C. Stanford also hosted the Pac-12 Sustainability Conference, emphasizing athletics as the key partner and champion to transform campus sustainability because of its high visibility, massive audience, and power of influence.

As a Platinum-rated institution through the Sustainability Tracking, Assessment, & Rating System (STARS) from the Association for the Advancement of Sustainability in Higher Education (AASHE), Stanford is featured in the 2023 AASHE Sustainable Campus Index as a top performer in Diversity & Affordability (1st), Energy (4th), Food & Dining (5th), Curriculum (6th), Water (tied for 8th), and Doctoral institutions [overall] (10th). We are grateful for all the individuals and campus departments that make critical decisions to position Stanford as a role model for others.

The next level of sustainability builds upon current efforts—anchoring all of our campus systems in sustainability and resilience—and involves the creation of new pathways for fostering a stronger culture and mindset of sustainability. I hope you'll join me in celebrating all of the incredible progress we've made together that is documented in this past year's Sustainability at Stanford: Year in Review.



Kristin Parineh

Kristin Parineh
Director, Office of Sustainability

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THINKING GLOBALLY, ACTING LOCALLY

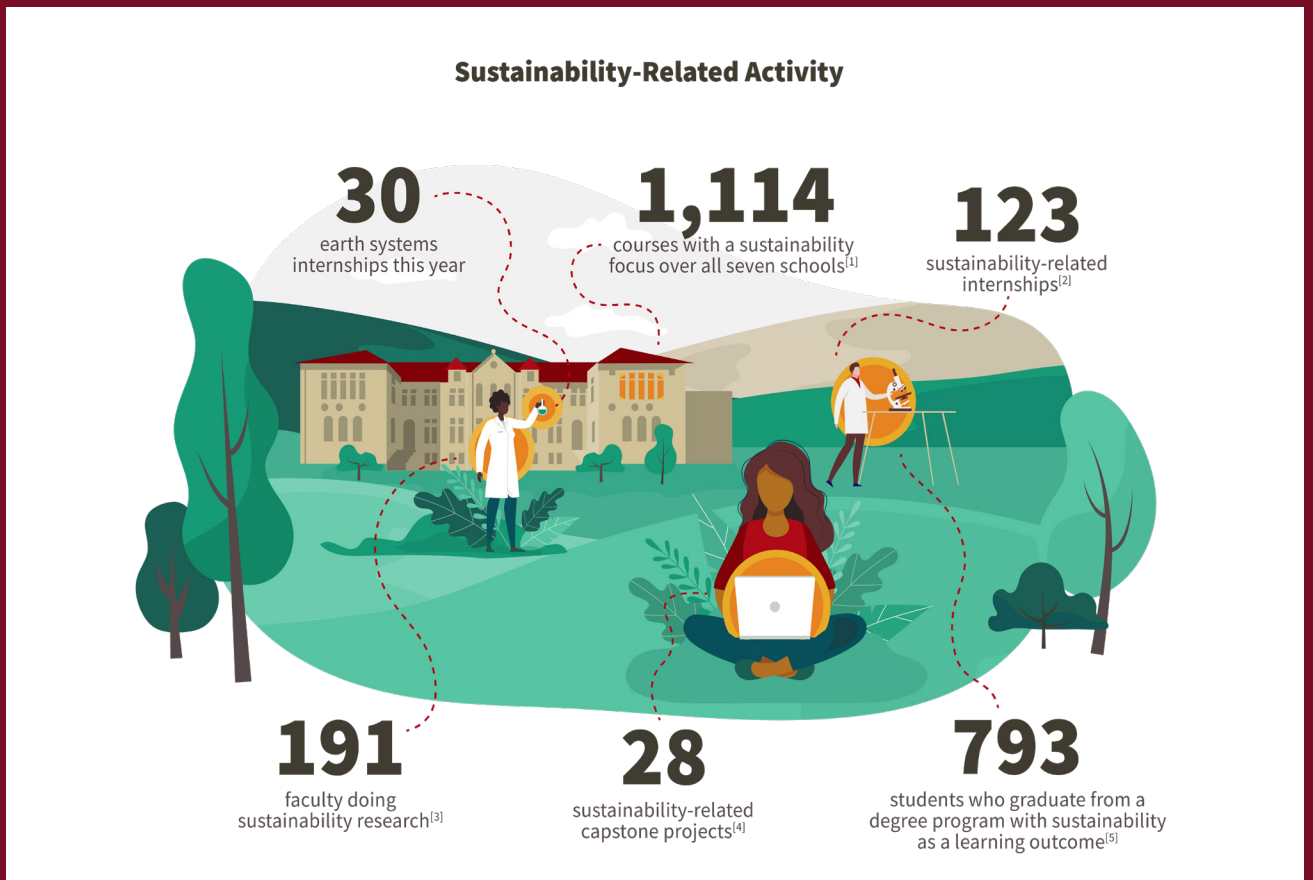


In 2015, the United Nations adopted a plan to help create a prosperous future for the planet and guide the UN's work through 2030. The agenda establishes 17 Sustainable Development Goals (SDGs) toward which countries are working. The SDGs cover a broad range of topics and help countries and industries consider the impacts of their operations in a uniform manner. Throughout this report, you will see icons where Stanford's work to innovate solutions maps and aligns with the SDGs.

ACADEMICS

Strengthening Academic and Operational Partnerships

Through academics and research, the university continues creating avenues for positive change in local communities and for on-campus operational sustainability goals with strong partnerships.



ACADEMIC PARTNERS

- [Stanford Woods Institute for the Environment](#)
- [Precourt Institute for Energy](#)
- [Haas Center for Public Service](#)
- [Hasso Plattner Institute of Design](#)
- [Freeman Spogli Institute for International Studies](#)
- [Graduate School of Business](#)
- [Graduate School of Education](#)
- [School of Earth, Energy & Environmental Sciences](#)
- [School of Engineering](#)
- [School of Humanities and Sciences](#)
- [School of Law](#)
- [School of Medicine](#)
- [Stanford Doerr School of Sustainability](#)
- [Environmental Justice Working Group](#)
- [Stanford Doerr Celebration](#)



New partnerships and growth were defining features for the 2022-2023 academic year. The Stanford Doerr School of Sustainability (SDSS) celebrated its one-year anniversary, launched its Flagship Destinations with its **first focus area** of greenhouse gas removal, and created a new oceans department. The powerful potential of academic and operational collaboration was formalized in a new memorandum of understanding (MOU)

between SDSS leadership and Land, Buildings & Real Estate (LBRE). This new MOU, signed in the summer, will enhance collaboration in key areas such as sustainability communications, construction, and university climate action planning. It will also strategically activate the campus as a living laboratory by catalyzing project collaborations to tackle pressing operational sustainability challenges, in ways that produce co-benefits for SDSS and LBRE, drive speed and scale in sustainability innovation, and develop the next generation of leaders to impact systems change.

In addition, the **Sustainability Accelerator housed within SDSS** funded its first cohort of teams whose projects will advance sustainability through partnerships on local, regional, and global scales. Also galvanized by a partnership with SDSS, the **Stanford Graduate School of Business (GSB) plans to expand resources** towards sustainability and climate action through new curriculum, research, and impact-focused programs and projects.

The growing partnership between SDSS and the Environmental Justice Working Group (EJWG) also empowers change and new opportunities for the coming year. Planning is underway to transition the EJWG into an Environmental Justice Center housed within SDSS. Within the new center, EJWG will continue to expand interdisciplinary initiatives, including those in the arts & humanities involving environmental justice (EJ) music, eco-theater, community art-making, an inaugural EJ anthology, and more.

Building strong partnerships with local and regional communities is a priority for Stanford as well. In the classroom, students in thirty-three sustainability focused **Cardinal Courses** were able to tie coursework with community engagement and experiential learning by developing environmental solutions for community partners. Highlights from these partnerships include air quality monitoring and data analysis for a grassroots partner, PhD-level research on San Mateo County flood and sea level rise risks, and development of training materials to conduct local climate vulnerability assessments. Strong community partnerships, as well as collaborations within Stanford, will be a key factor in continued success in reaching sustainability goals.

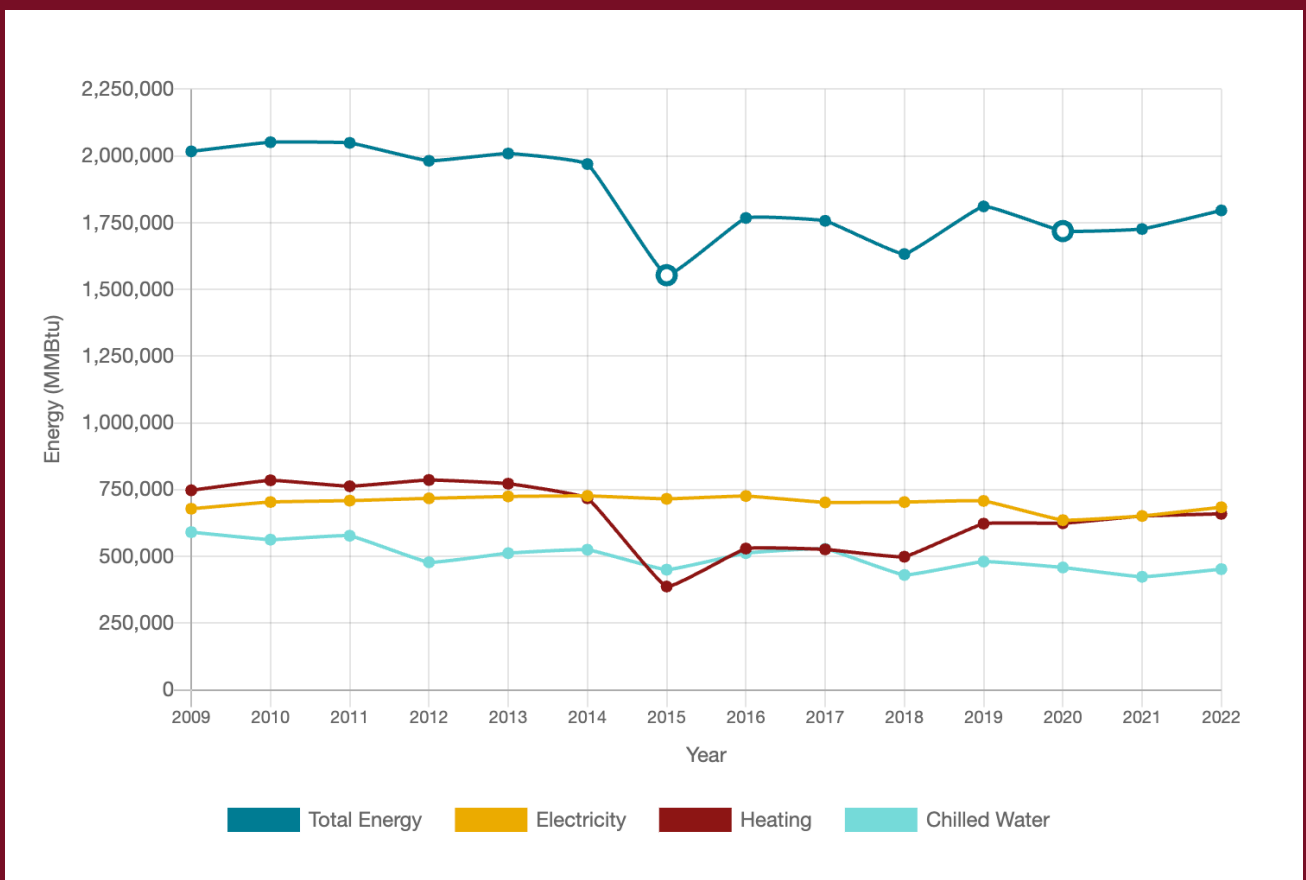
Partnerships for Climate Justice in the Bay Area (PCJ in the Bay), an initiative through the Haas Center for Public Service that connects local environmental justice organizations to a whole suite of curricular and co-curricular programs at Stanford, continued to connect Stanford students with local organizations through community-engaged courses, fellowships, research, and volunteer opportunities. Due to the strength of partnerships created through PCJ in the Bay and Cardinal Courses, the Haas Center and the Office of Community Engagement became sponsors of the first annual Climate Summit for San Mateo, launched by Thrive Alliance and other local community partners in October 2022. This summit is one of many campus and regional efforts that focus on climate impacts to frontline communities and support local partners in developing community-developed solutions. These types of solutions are a key component of the learning and intended outcomes from unique opportunities that Stanford offers, such as Cardinal Courses.

Strong community partnerships, as well as collaborations within Stanford's ecosystem, will be a strong factor in continued success towards sustainability goals.

ENERGY

Fine-Tuning for Energy Optimization

Land, Buildings & Real Estate developed an ongoing commissioning (OCx) program to identify and implement measures to improve energy performance. In 2023, OCx resolved more than 100 issues across the Thornton, Wallenberg, Havas, and Varian buildings.



ENERGY HIGHLIGHTS

- [A Friendly Reminder for People and Planet](#)
- [Ongoing Commissioning \(OCx\)](#)
- [Green Library East – Return Temperature Optimization Program \(RTOP\)](#)
- [Forsythe Hall Optimizes its System to Cut Energy Costs](#)
- [Proper Use of Lab Chemical Fume Hoods](#)
- [Energy Efficiency of the Stanford Research Computing Facility](#)



When it comes to energy, the little actions make a big difference. That's why this year Stanford focused on updating, optimizing, and reimagining energy demand solutions at every level, as well as considering sustainability at every level of the built environment – from construction to daily use.

Focused analysis revealed that in Forsythe Hall, a major data center and one of the campus buildings with the highest energy use, a crowded underfloor was receiving uneven airflow distribution. The university responded by integrating the control systems of the central air handler units with outside air economizers and computer room air handlers, for estimated savings of over \$90,000 per year.

The Green Library energy system was also updated. This historical building utilized old-fashioned, pneumatic-controlled heating and cooling valves. These valves were replaced with sustainable, pressure-independent electric control valves. Pressure-dependent systems lead to both excessive and insufficient space conditioning, given that the incoming pressure varies. Using pressure-independent valves in the renovation saved energy and increased thermal efficiency.

To build on these successes, Land, Buildings & Real Estate developed an ongoing commissioning (OCx) program to identify and implement opportunities to improve energy performance. The OCx team tackles one building at a time in month-long phases, looking for and implementing low-cost, high-outcome efficiency improvements. In 2023, OCx resolved more than 100 issues across the Thornton, Wallenberg, Havas, and Varian buildings. Many of these improvements were achieved through programming changes, which required no new hardware or space modifications. For example, over \$4,000 per year was saved at Wallenberg with no-cost changes to the control systems.

Outfitting interior building spaces is also critical to creating a sustainable campus. In some lab spaces, for example, the air must be temperature controlled and cannot be filtered or reused due to the use of hazardous chemicals. Thus, chemical fume hoods are an essential, energy-costly tool present in many laboratories. When not in use, the fume hood window, called a sash, should be closed to conserve energy. While many researchers are conscientious about shutting the sash, it can be easy to forget. This year, Facilities Energy Management investigated improvements to this situation using a device developed at Massachusetts Institute of Technology. The system keeps a lookout for open hoods with no one standing in front of them and sounds an alert tone until someone comes back and shuts the sash. Genetics researcher Caroline Horn volunteered to test a sash alert in her lab last spring and found it very helpful.

Optimizing for sustainability also comes into play when planning for future construction and infrastructure. This year, Stanford is expanding research computing capacity for the university through building a second module of the **Research Computing Facility**. This new facility was planned during the development of the original Research Computing Center in anticipation of the growing needs of the community, which helps to contribute to sustainability goals by planning for expansion in the original infrastructure strategy. This means the utilities, except for minor tie-ins, are all in place and additional underground utility work will not be required. This detailed planning ahead for future needs helps avoid the traditional sustainability compromises associated with expanding and integrating different systems.

When it comes to sustainable buildings, it's important to consider the whole picture – inside and out, start to finish.

PURCHASING

Mindful Consumption

Over the last year, new initiatives were developed to increase supplier diversity, strengthen community partnerships to support Black farmers, measure embodied carbon in vendor partnerships and construction materials, and decrease emissions from food purchasing.



When it comes to purchasing, each member of the Stanford community has choices that can have a meaningful impact on the world. Choosing the types of goods and services that the university purchases, how they are packaged and delivered, and the types of suppliers to engage with are all powerful decisions. The **Responsible**

Purchasing Guidelines summarize key steps to making more sustainable purchases.

All university purchases consist of raw materials that were extracted, turned into a manufactured product, and transported from origin to destination. The cumulative carbon footprint of these activities is referred to as a good's "embodied carbon." This embodied carbon can be measured and compared with that of similar products. This year, the **Scope 3 Emissions Program**, housed within the Office of the Vice President for Business Affairs, developed a strategy for ongoing measurement of embodied carbon in purchased goods that centers around supplier and vendor partnerships. Through an initial pilot with multiple vendors in key industries, the university will begin collecting specific data on climate and sustainability measures taken by each vendor and will provide resources for interested campus purchasers to help them identify the lowest-emissions vendors with whom to do business.

Financial Management Services has launched a vendor management pilot to help ensure the university has exceptional and diverse vendors aligned with the university's values and strategies. Co-sponsored by the **Office of Institutional Equity, Access and Community**, the **Supplier Diversity Initiative** has completed its discovery stage and is now moving into a pilot with schools and units to test new tools and practices that could be implemented university-wide.

Another department showcasing leadership in both supplier diversity and embodied carbon is **Residential & Dining Enterprises Stanford Dining, Hospitality & Auxiliaries (SDHA)**. The department's commitment to climate action is manifested in the goal set this year to **reduce greenhouse gas emissions from food purchases by 25% by 2030**. Additionally, its commitment to supplier diversity is reflected in its **Equitable Harvest program, Black Farmers Initiative**, which seeks to leverage SDHA's purchasing power to engage and support Black farmers. This year, with funding from the Stanford **Office of Community Engagement** and in collaboration with Oakland-based community partner Farms to Grow, Inc., the R&DE Stanford Food Institute co-produced two open-source toolkits to help Black farmers and foodservice professionals increase access for Black farmers to institutional distribution channels.

Everyone in the Stanford community has a role to play in sustainable purchasing, from students receiving packages and faculty members booking flights, to lab managers purchasing chemicals and staff ordering office supplies. All purchases make a difference.

PURCHASING HIGHLIGHTS

- [Sustainable Purchases Through Amazon](#)
- [Responsible Purchasing Guidelines](#)
- [Sustainable Purchasing Leadership Council](#)
- [Scope 3 Emissions: Purchased Goods & Services and What You Can Do!](#)

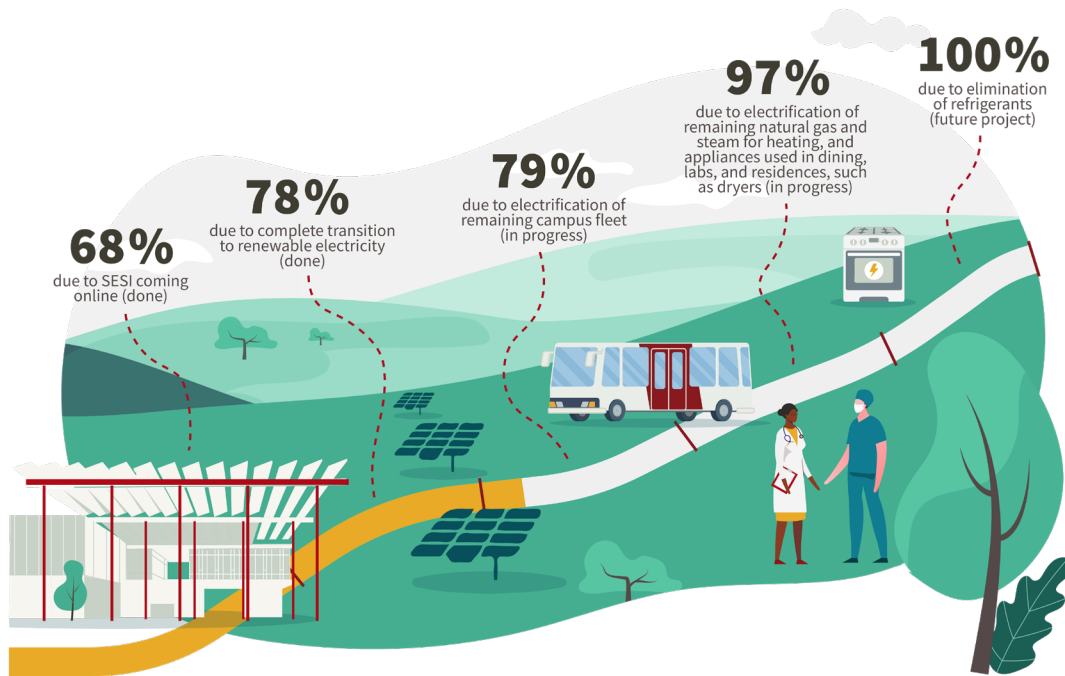


CLIMATE

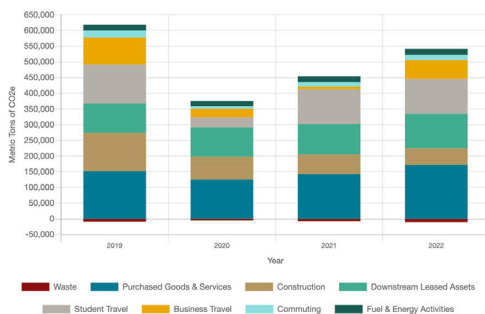
Climate Action, Resiliency, and the Next Frontier

After the completion of a full year of 100% renewable electricity, Stanford announced new goals to eliminate construction and food-related emissions by 2030.

Stanford's Scope 1 & 2 Emissions Path to Net-Zero Operations

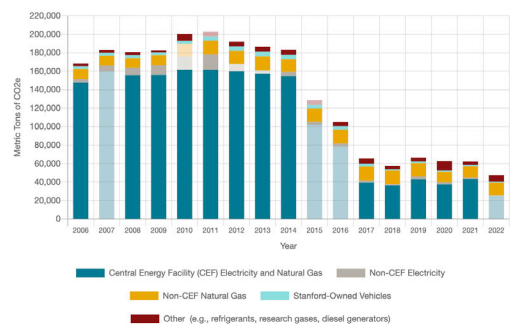


SCOPE 1 & 2



This chart depicts baseline emissions (from calendar year 2019) across all scope 3 emissions categories measured to date. These are preliminary estimates and are subject to change. In coming years, additional categories will be measured and emissions will be calculated on an annual basis.

SCOPE 3



This chart depicts Stanford's publicly reported and third-party verified Scope 1 and 2 emissions over time, which capture emissions associated with Stanford's building energy consumption, fleet fuel usage, and process and fugitive emissions. It does not include indirect Scope 3 emissions, which are currently under evaluation by the university's **Scope 3 Emissions Program**.



As more extreme weather events occur, the university continues to look ahead to improve the reliability and resiliency of our energy systems. At the beginning of the last academic year, the university completed a major expansion project at the Central Energy Facility to increase **chilled water capacity** nearly twofold in the latest development of **Stanford Energy System Innovations**.

After achieving 100% renewable electricity production for a full year, the university looks to target Scope 3 emissions in order to achieve net zero emissions by 2050. Scope 3 emissions, greenhouse gas emissions that are not produced by the university but are indirectly associated with Stanford operations, are the vast majority of remaining emissions for the University. Scope 3 emissions will demand great community collaboration over the coming years to rethink university wide policies, systems and processes. The campus community will be invited to engage in the university's climate action planning endeavor to plan how the institution's collective emissions can be further reduced.

This year, two goals were announced that will help Stanford reduce its scope 3 emissions and move towards its objective of achieving net zero emissions across all scopes by 2050. The first goal – set by the Department of Project Management – addresses embodied carbon in construction and building materials, targeting a 20% reduction from the industry averages for all future major projects. The second goal – set by Stanford Residential & Dining Enterprises – addresses food-related emissions, targeting a 25% reduction in emissions from food purchasing by 2030.

The university is currently tracking scope 3 emissions under eight categories including business and student travel, fuel and energy activities, waste, employee commute, construction, purchased goods and services, leases, and food purchases. Though there is still a lot of work to do to reduce Stanford's scope 3 emissions, the two goals announced this year indicate significant progress in the university's understanding of and capacity to reduce scope 3 emissions. Not only do these goals reflect the establishment of sophisticated emissions measurement strategies that will be employed to track reductions over time, but they also highlight climate action as a core value for the departments that set them and manifest close collaboration on sustainability university-wide.

CLIMATE HIGHLIGHTS

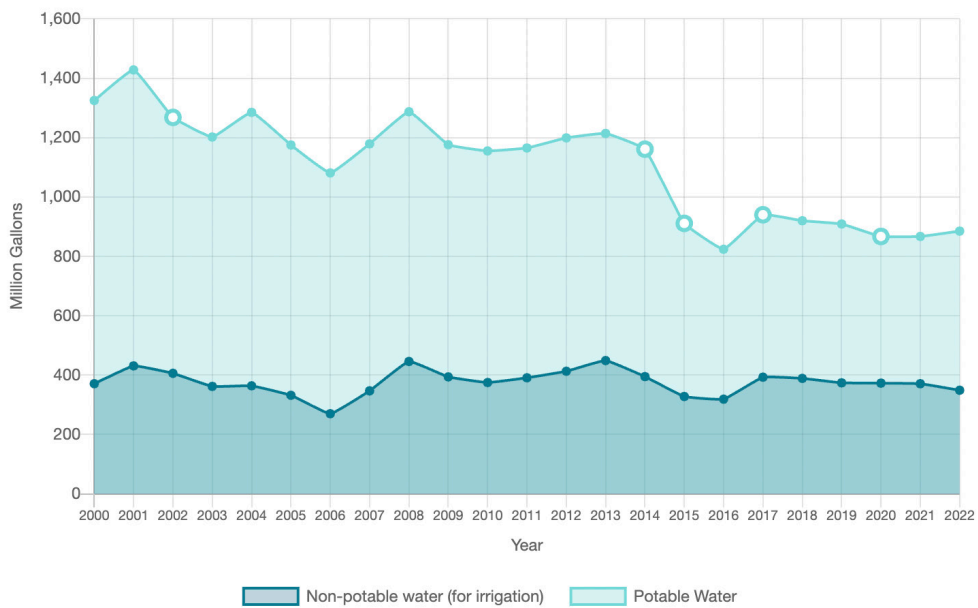
- [Stanford Embodied Carbon Benchmarking Study & Mitigation Strategies Report](#)
- [Scope 3 Emissions from Food Purchases](#)
- [Scope 3 Emissions from Construction](#)
- [Addressing Climate Change One Bite at a Time](#)
- [Reducing Campus Emissions Focus of New Stanford Program](#)
- [Scope 3 Emissions Web Portal](#)

WATER

Protecting Water and Wildlife

During a year of intense rainfall, the university focused on rehabilitating local aquatic ecosystems while continuing to reduce campus water usage.

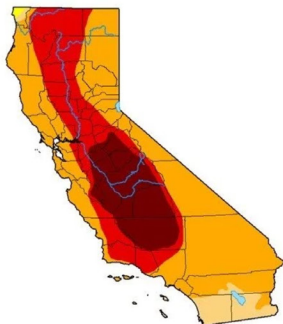
WATER CONSUMPTION



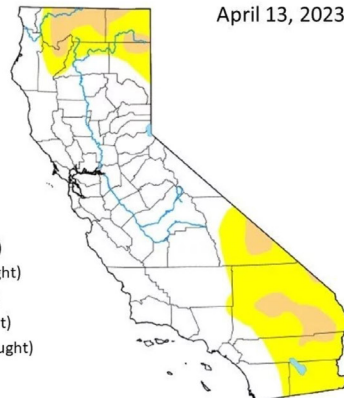
The individual point labels on this chart reflect non-potable and potable water consumption totals, respectively. Together, they comprise total water consumption.

US Drought Monitor

September 27, 2022



April 13, 2023



- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data



The Bay Area received record rainfall during the winter and spring of 2023, and the Stanford community saw the usually dry Lake Lagunita filled with water for several months. Lagunita previously operated as a reservoir for irrigation and recreational uses, but now serves as flood control and protected habitat for endangered species. In addition to supporting local ecosystems, Lagunita recharges local groundwater supplies as the water it receives percolates downward.

In a further effort to restore habitat for native wildlife and reestablish natural waterways, Stanford officially proposed the [Searsville Watershed Restoration Project](#) in February 2023. The project will involve building a tunnel in the current Searsville Dam, located within the [Jasper Ridge Biological Preserve](#), a university-owned nature preserve located in the foothills above Stanford's campus.

The dam was originally built in 1891 to create a reservoir that would provide water for residents of the area, but it was not an effective source of drinking water due to sediment in local creeks that fed into Searsville Reservoir. After 132 years, the gathering sediment now occupies 90% of the dam's capacity.

Creating a tunnel in the dam will ensure that the build-up of sediment is gradually flushed out through San Francisquito Creek into the bay, renewing local free-flowing creeks and allowing fish to pass through the base of the dam. This will restore upstream riparian habitats and marshes. Once the proposal undergoes state and federal environmental review processes, construction is estimated to take two years.

While most state drought restrictions were rolled back following the increased rainfall this past year, water conservation remains a way of life in California and at Stanford, and this will continue in the coming years. The statewide ban on potable water irrigation of non-functional turf in commercial, industrial, and institutional areas (including multi-family residential properties) remains in effect. The university also made further efforts to save water this year. In one example, Stanford Water partnered with Residential & Dining Enterprises to install 10 ultra-low flow toilets in six campus buildings. These toilets will perform as well as others, and their installation will save Stanford an estimated 50,000 gallons of water annually!

WATER HIGHLIGHTS

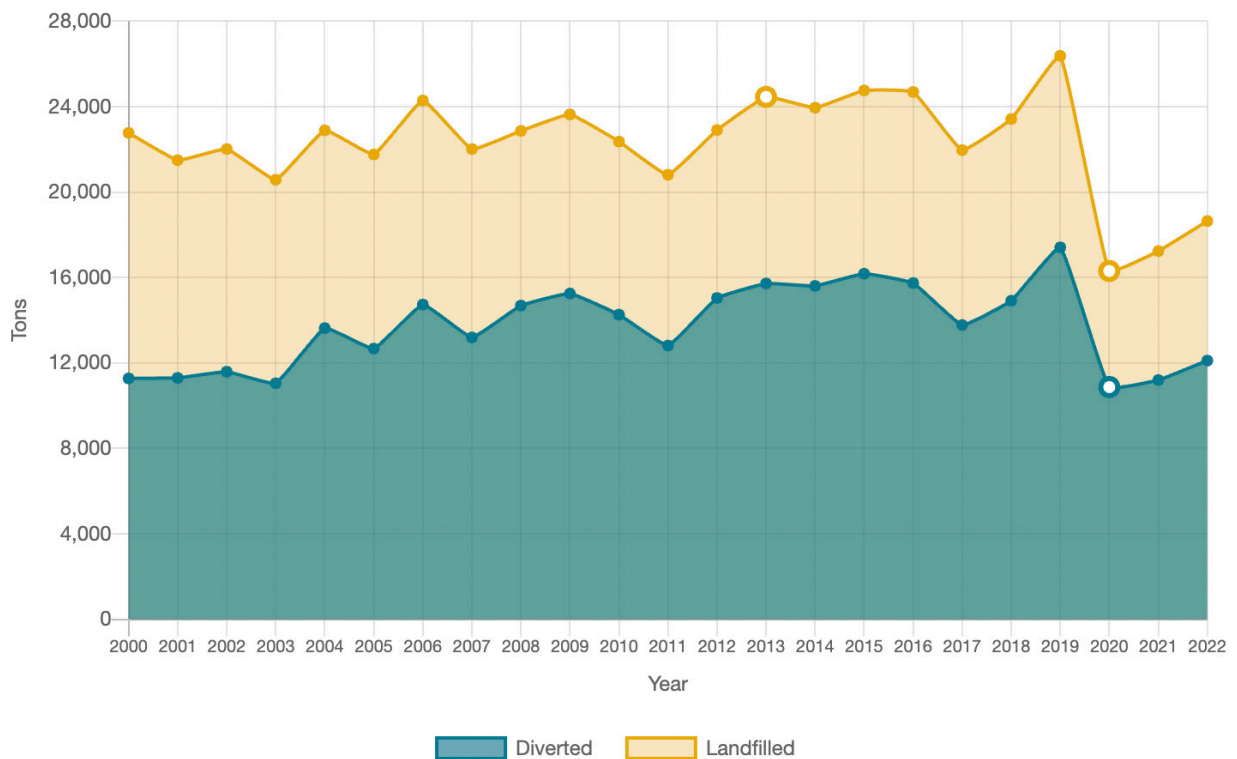
- [Current Water Supply Conditions](#)
- [Water Conservation Tips](#)
- [Water Planning & Stewardship Hosts Service Day at Arizona Cactus Garden](#)

WASTE

Racing to Zero Waste

In 2022, Stanford recovered over 12,000 tons of waste, including 446 tons of reusable materials, 2,994 tons of recyclables, 7,779 tons of organics, and 796 tons of construction and demolition material.

WASTE MINIMIZATION



WASTE HIGHLIGHTS

- [Stanford's Renewed Partnership on Waste](#)
- [Stanford Wins First Place in the Campus Race to Zero Waste](#)
- [Upgrading Infrastructure for Zero Waste](#)
- [Scope 3 Emissions from Waste](#)



In the past year, Stanford achieved significant milestones in reducing waste. To further support the university's Zero Waste by 2030 goal, the Office of Sustainability negotiated a new contract with long-time waste service provider Peninsula Sanitary Service Incorporated (PSSI). PSSI has been serving Stanford for over 80 years, and after a three-year competitive bid process, was awarded a new 10-year contract to continue waste operations on campus and provide new services that offer multiple benefits to the campus community. The new contract with PSSI brings new technology – an industry-leading, fleet management system that uses cameras and sensors on collection trucks to ensure safe driving practices, monitors equipment to increase efficiencies, and reduces liabilities in real time. Cameras will also be used to record material emptied into the trucks and, with the help of AI, provide critical data on the top contaminants. Collection vehicles will operate on compressed natural gas, resulting in 321 metric tons of greenhouse gasses (MT CO₂e) being avoided, equivalent to the emissions from 40.5 homes worth of energy use for one year. In addition to climate change mitigation, this switch to natural gas will result in the reduction of particulate matter emissions, improving local air quality and reducing community health impacts.

By changing the way waste moves through a building and improving infrastructure, the new waste contract makes recycling and composting easy and accessible for the campus community. The new process, referred to as the Zero Waste Building System, relies on centralized waste stations, with color-coded recycling, compost, and landfill bins that are strategically located across buildings. Custodians are responsible for the interior collection of materials from centrally located areas rather than from individual desks. Over half of the campus was transitioned to the new waste system last year with the remaining half on track to be completed in 2024. By helping to reduce contamination and increasing the amount of material diverted from the landfill, these infrastructure improvements are a critical step in achieving zero waste. As part of this change to our waste system, the Office of Sustainability partnered with researchers from Stanford's Graduate School of Business to explore how communications that highlight specific motivations for performing sustainable actions may impact intentions and interest in sustainable behavior – specifically waste sorting. The resulting findings help to inform outreach strategies and engages with scholarship on how messaging can drive sustainable behaviors – a key ingredient to create a zero waste campus culture.

The university has continued to prioritize zero waste education and training and, for the second year, has offered a waste sorting training to new students, which reached 1,240 people last year. The Office of Sustainability also had ten zero waste interns helping to implement waste reduction programs and engage students and staff through trainings, outreach events, and social media. Zero waste student interns also helped educate the campus community by serving as “bin monitors” at various campus events to reduce waste and increase recycling and composting.

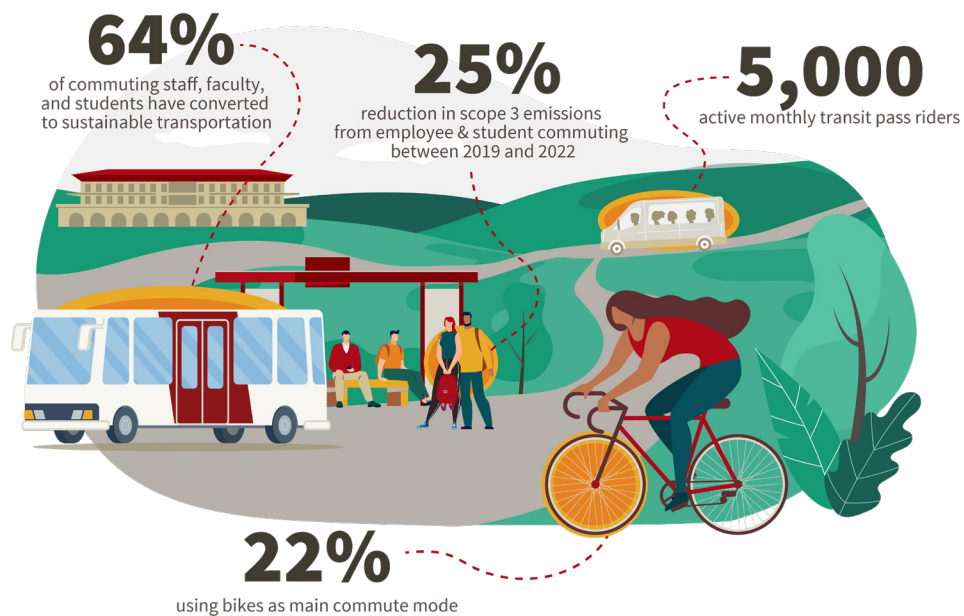
Stanford was recognized for its success in food waste diversion and per capita recycling in the **Campus Race to Zero Waste**, winning first and second place, respectively, in these categories. The Office of Sustainability also partnered with Athletics to present at the Pac-12 Sustainability Conference to showcase how the partnership has led to a 17% increase in diversion. Additionally, to propel waste reduction efforts and engage the campus community, a Zero Waste Working Group and three task forces were launched across campus to focus on reducing waste from cafes and events and enhancing coordination and collaboration with custodial partners. This builds off the success of the Zero Waste Campus Committee that was launched the previous year to bring together diverse stakeholders across campus to help guide waste reduction efforts. These initiatives, paired with the increase in staff dedicated to zero waste, demonstrate Stanford's commitment to achieving its zero waste goal and promoting sustainability throughout the campus community.

TRANSPORTATION

Strides for Sustainable Commuting

In 2022, Stanford's drive-alone rate for commuting hit a new low at 36%, and bike commuting reached a new high at 22%+.

Reduced Environmental Impact from Transportation



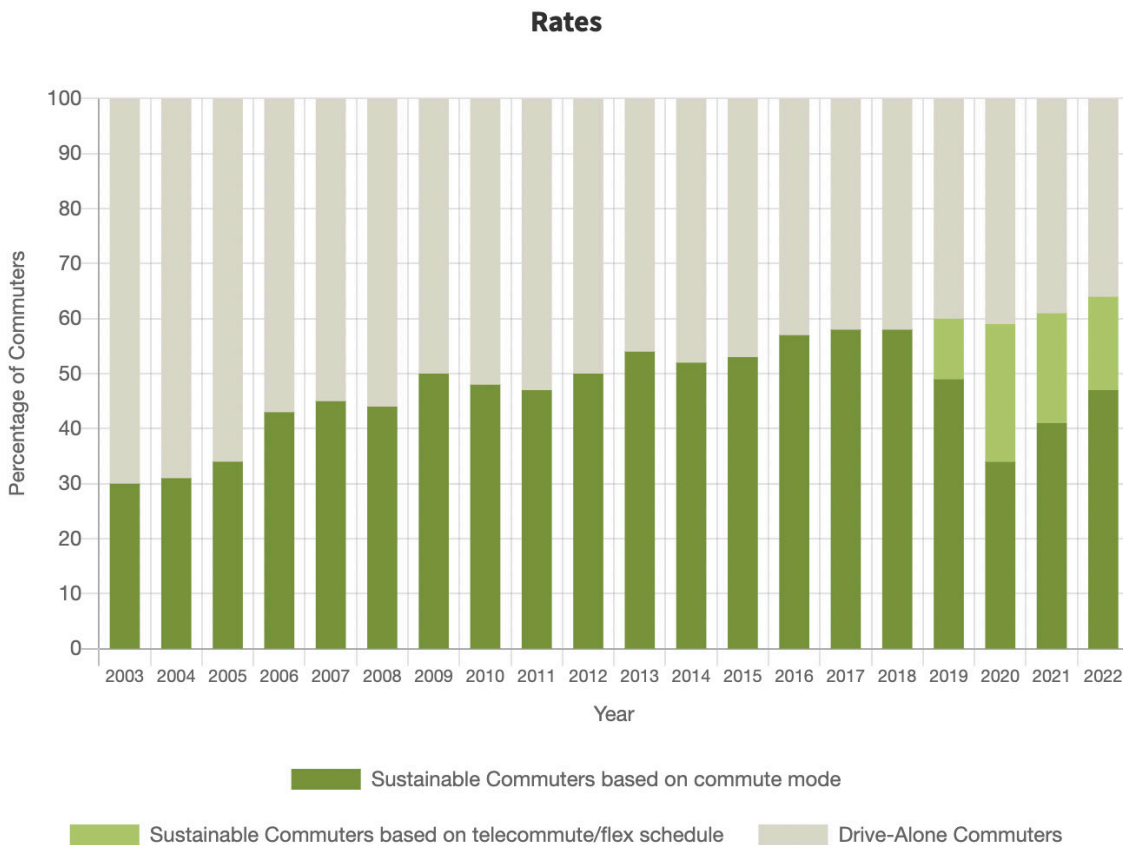
TRANSPORTATION HIGHLIGHTS

- [Stanford Transportation Received 2022 TDM Excellence Award](#)
- [Stanford Leads the Way Among National Bike Programs](#)
- [Best Workplaces for Commuters 2002-2022](#)
- [Transportation 101 Series: Why Do We Send An Annual Commute Survey?](#)
- [Pedaling Forward: 2022 Report on Bikes at Stanford](#)
- [2022-23 Year at a Glance](#)
- [Scope 3 Emissions from Employee & Student Commuting](#)

In alignment with Stanford’s commitment to reducing drive-alone and peak-hour commute trips and lowering its community’s carbon footprint, Stanford’s **Transportation Department** provides one of the nation’s leading university sustainable commute programs. This **award-winning program** includes efforts to increase accessible commuting by **bike**, carpool, subsidized vanpool, and subsidized transit, encouraging these options over driving alone. Since 2003, the number of commuters who drive alone to Stanford has decreased by nearly 50%, showing the effectiveness of increased access as well as a major campus community culture shift to sustainable commuting options. These **must-read human interest stories** highlight transportation efforts, program highlights, and folks around campus who are committed to sustainable commutes.

Stanford is also the only university to receive the **Bike Friendly University Platinum award** four consecutive times. It was the first university to receive this award in 2011, and the current designation extends through 2027.

Whether documenting adventures on **Bike to Work Day** in spring 2023 or advocating for increased access to sustainable commuting, the Transportation Department never stops working to make sustainable transportation more convenient, economical, and fun for the university community.



In 2019, Sustainable Commuters data began being parsed by telecommute data and commute mode. The percentage of Sustainable Commuters did not decline from 2018 to 2019.

FOOD & LIVING

Living and Eating Sustainably

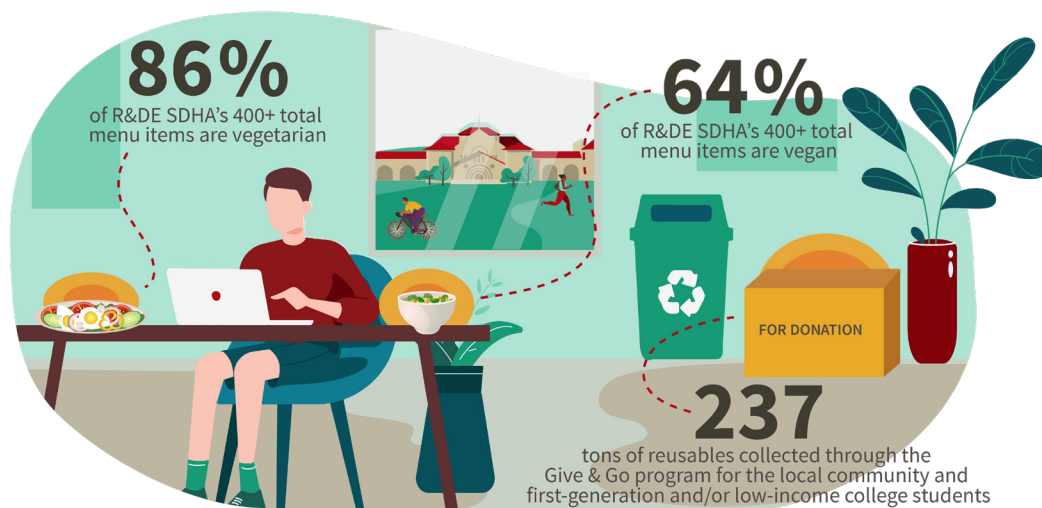
In 2022-2023, SDHA released two groundbreaking toolkits to support Black farmers, became the first campus dining program in the nation to earn the James Beard Foundation's Smart Catch Ambassador Award for sustainable seafood purchasing, and conducted groundbreaking behavioral research with faculty partners in the School of Medicine and Graduate School of Business.



FOOD & LIVING HIGHLIGHTS

- [Stanford Food Institute Leads Research in Campus Dining Halls](#)
- [R&DE Stanford Food Institute Hosts Inaugural Research Symposium](#)
- [Stanford R&DE Earns Smart Catch "Ambassador" Certification](#)
- [R&DE Tackles Climate Change, Bite by Bite](#)
- [Stanford Food Institute Partners with Farms to Grow, Inc. to Support Black Farmers](#)
- [Seed Awards Fund Collaboration on Community Issues](#)
- [Catalyzing Sustainable Seafood Strategies Across the Foodservice Industry](#)

2022-23 Culture of Excellence Achievements



Residential & Dining Enterprises (R&DE) Stanford Dining, Hospitality, & Auxiliaries (SDHA) prioritizes sustainably produced, local, organic, humanely raised, and fairly traded food, as well as food from family-owned farms and sustainable fisheries. R&DE's efforts directly support student

learning and the overall campus culture and impact the students' lives as they move into new communities after graduation.

In 2022-2023, the **R&DE Stanford Food Institute (SFI)** hosted its inaugural **SFI Food Systems Research Symposium**. The groundbreaking symposium featured presentations from over 73 food systems researchers from six of Stanford's seven schools, as well as offices and programs across campus. Project topics ranged from aquaculture to tribal food sovereignty to school food programs and more. Attendees also engaged in spirited discussions on sustainable food topics.

SFI collaborates with faculty and students at all seven schools on campus. SFI's mission is to advance research, education, policy, and business, and to promote a holistic approach to improving what people eat, how they access food, and the role that food plays in our lives. SFI led innovative new studies in campus dining halls this year with faculty partners tackling food waste, meat reduction strategies, and healthy food choices. With the goal of creating a brighter food future that supports a diverse and inclusive community, SFI has a robust initiative to support Black businesses as part of its new **Equitable Harvest** program. With seed funds from the Office of Community Engagement, SFI and its community partner, Farms to Grow, Inc., have co-produced two open-source toolkits to guide direct purchasing from Black farmers and to equip farmers to engage with colleges, universities, and other institutions. Equitable Harvest supports not only racial justice but also climate resilience efforts, because Black farmers have a long tradition of sustainable farming practices.

SFI also launched the Stanford Food Systems Community to bring together students, staff, faculty, and Bay Area neighbors around these topics. SFI hosted an array of dynamic events throughout the past year, including “**Black Farmers’ Plight on the Road to Equity & Inclusion**,” “Sustainability in the Kitchen: Cooking Tips for a Greener Future,” featuring Bay Area celebrity chefs, “Playbooks for Progress: High-Impact Strategies for Climate-Smart Dining,” and an Earth Week webinar featuring SFI’s collaborations with other operational campus departments and academic schools.

R&DE also plays a critical role in achieving the university’s zero waste and climate goals. SDHA has proudly served as a pilot for the university’s Scope 3 Emissions Program. This role builds upon SFI’s leadership of the **Collective Impact Initiative**, a collaboration of 31 colleges and universities to address climate change through their combined purchasing power. R&DE continues to partner with the student-led group Stanford Food Recovery and this year co-created a pioneering food recovery program with its produce distributor, Daylight Foods, in which empty trucks returning from campus transport donations of surplus food from dining halls to food security nonprofits in the area.

Additionally, R&DE completed the rollout of **Cardinal Clean** machines across all undergraduate housing complexes, ensuring that the free, versatile green-cleaning solution is widely accessible. Cardinal Clean received the **California Resource Recovery Association’s** 2023 Outstanding Waste Prevention Award. R&DE also transitioned to a single-stream recycling system, enabling residents to place all recyclables in a single bin. This user-friendly approach resulted in a 52% increase in collected recyclables and an overall 9% increase in R&DE’s diversion rate from the landfill. This year, R&DE’s move-out donation program, **Give & Go**, collected 237 tons of reusable items, ensuring they stayed out of the landfill and were donated to the community instead. As part of this initiative, R&DE contributed 5.4 tons of items to the First Generation/Low Income (FLI) student group during last year’s FLI Drive.

Additionally, SDHA became the first campus dining organization in the country to earn the highest rating from the James Beard Foundation’s acclaimed Smart Catch program. As a Smart Catch Ambassador, SDHA demonstrates high performance and advocates for seafood sustainability. This is the first time the Smart Catch program’s high bar for sustainable seafood has been met by an organization feeding such a large number of people – 25,000 meals served per day in Stanford dining halls, and over 100,000 pounds of seafood purchased per year.

To promote climate-smart dining, R&DE SDHA has long focused on reducing food waste and advancing plant-forward diets—the top two climate solutions globally, according to Project Drawdown. SDHA spoke at numerous conferences to continue amplifying two pioneering publications that debuted in 2022. The **Food Waste Prevention Playbook** captures the full array of strategies SDHA employs to not only reduce food waste but prevent it in the first place. The **Food Choice Architecture Playbook** outlines strategies for promoting a healthier and more sustainable campus food environment, with a focus on enabling plant-forward food choices. The campus food environment is critical to the health and well-being of students and the environmental impact of food programs. Food choice architecture encompasses all aspects of how foods are offered and framed in the dining halls and how these considerations influence food selection. Food choice architecture designs health and sustainability into the dining programs, making healthier and more sustainable choices easier, more prominent, and more desirable while still offering a wide range of food options.

Careful consideration and mindfulness displayed around campus energy use, water, waste, and procurement shows the power of the choices we make around living and eating in creating a more sustainable and equitable world. In the year ahead, community building and shared efforts among campus partners will continue to empower a healthy, sustainable campus.

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