

*“UC Berkeley
is in the business of
educating students,
not only in the classroom,
but also in the realm of
citizenship...The campus
should provide leadership
in recycling*

— Robert M. Berdahl,
Chancellor UC Berkeley



A Waste Reduction Case Study

From the undeliverable mail in the Administration building to the food scraps from the student cafeteria, a program is in place to make sure that the University of California, Berkeley (UC Berkeley) recycles as much as possible. Not only do these recycling programs benefit the environment, they save UC Berkeley about \$60,000 a year.

The University's recycling program involves many different groups including: Campus Recycling and Refuse Services (a group within the University's Physical Plant-Campus Services Department), Berkeley Worms (a student-sponsored, collectively run composting program), and Students Organized for Using Resources Conscientiously and Efficiently.



JUST THE FACTS

Over 30,000 students are enrolled and 20,000 people employed at UC Berkeley. This was California's first University, founded in 1868. The campus contains over 130 buildings with approximately 13,000 offices, as well as student residence halls, campus restaurants, laboratories, athletic facilities, and a health center.

Environmental Business Practices

Alameda County businesses and public agencies realize economic benefits from environmental business practices by cutting solid waste, conserving energy and water, and reducing wastewater discharge. These practices have proven to be cost-effective and are essential components of long-term profitability. They also offer opportunities to keep valuable materials out of our landfills, reduce pollution, and conserve limited resources.

***The Bottom Line : Annual Savings from
Environmental Programs: \$60,000***

ACCOMPLISHMENTS

One of the strengths of UC Berkeley's waste reduction program is that it addresses practically every source of waste on campus.

Recycling

PROJECT: Paper and Beverage Container Recycling. UC Berkeley has made paper recycling a priority. All campus buildings have a mixed-paper and cardboard recycling program in place. Most staff on the campus put their paper in a desk-side bin, custodians then collect the paper along with refuse and deliver it to the service area.



Beverage containers are also collected in centralized recycling containers. A converted rear-load packer truck picks up and delivers the materials to off-site recycling vendors. UC Printing has a paper collection system that uses negative air pressure to load a large

baler. Undeliverable mail from the Mail Services facility is recycled in bins provided for this material.

PROJECT: Recycling in the Dorms. Five separate residence halls house over 5,500 students. All students have access to mixed paper and mixed beverage container recycling; some via converted laundry chutes on each floor and beverage container collection in each bathroom, and some via clustered collection receptacles at several locations.

PROJECT: Public Recycling Bins. As they stroll from class to class, students can place their empty beverage containers and old newspapers into any of the 55 sets of strategically placed mixed paper and beverage container receptacles.

PROJECT: Physical Plant-Campus Services Corporation Yard. UC Berkeley recycles its corporation yard scrap metal (ferrous and non-ferrous) in a 20 cubic yard mixed metal debris box.



Mixed paper from campus buildings is collected in two-wheeled-carts.

2001 RECYCLING REPORT CARD	
PROJECT	ANNUAL TONS DIVERTED
Recycling	
Paper & Cardboard	1,970
Beverage Containers	40
Scrap Metal	140
Miscellaneous	110
Composting	
Green Waste	620
Food Waste	65
Reuse	55
Total	3,000
TONS DIVERTED FROM THE LANDFILL	

ENVIRONMENTAL BENEFIT from Recycling: Recycles 1,970 tons of paper, 140 tons of scrap metal, 40 tons of mixed beverage containers, and sends a strong educational message about the importance of recycling. Recycling 1,970 tons of paper conserves 13,790,000 gallons of water, saves 6,000 barrels of oil and reduces 120 tons of carbon dioxide emissions. Recycling 140 tons of metal conserves 380 barrels of oil, and reduces 210 tons of carbon dioxide emissions.



“Next steps in waste reduction at UC Berkeley include organics recycling (including composting of: pre- and post-consumer food waste, soiled paper towels, and additional green waste) and in maximizing mixed paper collection.”

— Lisa Bauer, Recycling and Refuse Manager, UC Berkeley

WASTE REDUCTION PROJECTS

Composting

PROJECT: Green Waste. Throughout UC Berkeley's campus, green waste, clean wood waste (including pallets and crating) and dirt are collected and chipped or composted. Gardeners and grounds workers deposit material into one of the two cubic yard bins placed throughout the campus. A converted packer truck delivers this material to the City of Berkeley's composting transfer site. Some locations have larger 15 or 20 cubic yard debris boxes designated for green waste recycling. Local haulers collect and compost these materials. Additionally, some tree trimmings are chipped and used for mulch on campus.

PROJECT: Food Composting.

Finding a way to recycle food waste can be one of the biggest challenges for a recycling program. Berkeley

Worms developed a way to divert some of this material from UC Berkeley's waste stream. Five dining halls and five campus restaurants save their food scraps for worm and pile composting by Berkeley Worms. They have an automated collection system that features a specially designed grinder truck.

ENVIRONMENTAL BENEFIT from Composting:

About 620 tons of green waste and 65 tons of food waste are composted each year. Composting not only conserves landfill space, it creates a valuable amendment that can return nutrients to the soil.



Reuse

PROJECT: Excess, Surplus and Salvage. A reuse/resale arm of the University collects and sells furniture, office equipment, computer and lab equipment from campus departments. The sales are open to the public. Materials that cannot be sold or donated for reuse are recycled if possible.

PROJECT: ReUSE. The University has opened a reusable materials exchange to provide an opportunity for staff, faculty and students to drop-off or pick-up free small reusable office, lab or household items such as: calculators, printers, and typewriters.

PROJECT: End-of-Semester Super Recycling Day. The University and the City of Berkeley work

jointly to offer extensive recycling and reuse opportunities for students to use while they are moving out at the end of the semester. Materials collected include: clothing, couches, mattresses, books, small appliances, housewares, paper, cardboard, and other materials. These are placed at curbside on designated days for collection. Used class readers and notebooks are also collected for redistribution or reuse.

ENVIRONMENTAL BENEFIT from Reuse: About 55 tons of material is reused every year. Tonnage promises to increase as these new programs develop.



“Starting with pilot programs is less scary to staff and management, and allows you to work out the kinks new programs always have.”

— Lisa Bauer, Recycling and Refuse Manager, UC Berkeley

The StopWa\$te Partnership

This case study is part of a series that highlights the accomplishments of organizations participating in the StopWa\$te Partnership. The Partnership is a free, technical assistance service dedicated to improving the environmental performance and reducing the operating costs of Alameda County businesses and public agencies. The program provides expert assistance to help prevent waste, conserve water and energy, and use all resources more efficiently.

StopWa\$te is sponsored and operated by the Alameda County Waste Management Authority & the Source Reduction and Recycling Board in partnership with Pacific Gas & Electric, the East Bay Municipal Utility District, and the Economic Development Alliance for Business.

StopWa\$te offers a number of services, including:

- Comprehensive environmental assessments for large and medium-sized facilities
- Funding assistance
- Activity based cost-benefit analysis

The StopWa\$te Partnership has helped many Alameda County organizations to reduce operating costs, identify opportunities for environmental improvement and enhance competitiveness.



Call the **StopWa\$te Partnership** and get started on your environmental business efficiency projects **TODAY!**

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Improve Your Bottom Line: 1-877-STOPWASTE
www.stopwaste.org/partnership