

HOUSING SUSTAINABILITY Report

STRATEGIC PLAN: STEWARDSHIP OF RESOURCES

University Housing's 2010 Strategic Plan identified stewardship of resources as critical to our long-term success. According to the plan, stewardship of resources means "University Housing will demonstrate intentional and transparent stewardship of the financial, physical, and human resources of our entire organization. We will seek to use and conserve our resources in an effective manner that meets the needs of our residents and customers seeking and expecting excellent value."

While University Housing had already initiated a number of sustainability efforts, the University developed the Illinois Climate Action Plan (iCAP) in May 2010, identifying new sustainability mandates with which Housing will need to comply. Additionally, the Student Sustainability Committee (SSC) was asking for support on multiple initiatives.

As a result, University Housing identified the need to pool our sustainability resources through a single point of contact and formed the Housing Sustainability Council.

HOUSING SUSTAINABILITY COUNCIL

Established in January 2011, the Housing Sustainability Council (HSC) was charged with reviewing internal operations to identify and recommend solutions to help Housing operate in a more financially and environmentally sustainable way, and to create and distribute educational materials that build awareness around sustainability issues and encourage employees to take action.

The Council supports the current strategic plan of University Housing and aims to establish sustainability practices that will endure beyond the current strategic plan.

The HSC, which meets biweekly, consists of eight University Housing staff members and one student representative from the Student Sustainability Committee.

OUR VISION OF SUSTAINABILITY

In 1987 the United Nations World Commission on Environment and Development published a report called "Our Common Future," also known as the Brundtland Report. This report defined sustainability as "...development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

We are looking at sustainability on three fronts: procedural, educational, and physical. The procedural aspect includes streamlining current business processes and procedures to eliminate inefficient work practices. Educationally, we will continue to promote the benefits of sustainability. On the physical side, University Housing will look at assets such as buildings, vehicles, and equipment, to increase efficiency and minimize our carbon footprint. Ultimately, we are striving to create a leadership culture of sustainability.



CURRENT SUSTAINABILITY INITIATIVES

business & technology services

SERVER VIRTUALIZATION

Technology staff members have been moving forward with server virtualization to consolidate space and conserve power. So far 15 servers have been eliminated: 10 in FY10 and 5 in FY11. Projected power savings from consolidating and elimination of these physical servers is 271,000 KWH/year or approximately \$19,000.

DATA CENTER COOLING UPGRADE

In Clark Hall we have moved away from cooling the entire datacenter space, and instead just cool the servers by using in-row cooling units. Two of these units efficiently pull a maximum of 8 amps and, on average, only 7 amps (versus 20 amps for the old whole-room unit), for an estimated power savings of \$17,000 per year. The FAR datacenter will be converted over before the end of FY11.

HARDWARE CONSOLIDATION

In addition, we are consolidating technology hardware such as printers and copiers. To date, 6 copiers and 12 ink-jet printers have been eliminated. One hundred percent of new technology equipment purchased is Energy Star-rated.



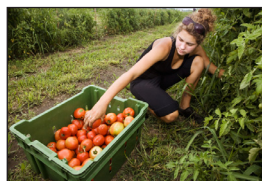
dining services

LOCAL PURCHASING

Twenty-five per cent of Dining Services' purchases can be defined as local (items produced or processed within 180 miles of Champaign-Urbana). Eighteen percent of total purchases are produced or processed within 100 miles.

CAMPUS FARM AND COMPOSTING

Dining Services receives a supply of produce from the University of Illinois Sustainable Student Farm. The farm, which utilizes organic methods, is located on 10 acres at Lincoln and Windsor Roads. The use of high tunnels allows for year-round production, beginning with salad greens, leaf lettuce and braising greens in March 2010. This summer five acres will be devoted to lettuce, peppers, herbs, tomatoes, bok choy, squashes, cucumbers, eggplant, and melons.



CONSTRUCTION

LEED silver certification

University Housing's newest residence hall, Nugent Hall, was awarded LEED Silver certification as established by the U.S. Green Building Council. The adjoining Student Dining and Residential Programs Building (SDRP) is also seeking LEED Silver certification. The Leadership in Energy and Environmental Design (LEED) organization provides a rating system to certify buildings for their commitment to environmental sustainability.

what makes the buildings green?

RESPONSIBLE MATERIALS

- More than 20 percent of the materials used for the project were manufactured and harvested within a 500-mile radius from the site, including the concrete and brick. Using regional materials helps support the local economy and reduces transportation costs and environmental impacts.
- More than 10 percent of the products used in the construction of Nugent Hall, and more than 20 percent in the SDRP, contain recycled content.
- Over 50 percent of the wood-based materials used in the SDRP were FSC-certified, which means the wood comes from responsibly managed, sustainable sources.

INCREASED EFFICIENCY

- The white reflective roof on Nugent Hall and the SDRP was designed to reduce solar heat absorption, keeping the environment cooler and using less energy for air conditioning.

Currently, biodegradable pre-consumer food waste gathered from the Ikenberry Dining Center is composted across the road from the student farm. We plan to expand our composting program to all residential dining facilities. The student farm's composting project is supported by a \$100,000 grant from the Sustainability Technology Center.



SEAFOOD PURCHASING PREFERENCE

Fifty-five percent of seafood purchases meet the Monterey Bay Aquarium's Seafood Watch Program, which recommends sustainable, responsible seafood choices.

VEGETARIAN AND VEGAN OPTIONS

Nutritionally complete vegetarian and/or vegan options are available at every meal. Vegan food supplements available at dining locations include Brewer's yeast, soy cheese, amino acids, almond milk, and rice milk.

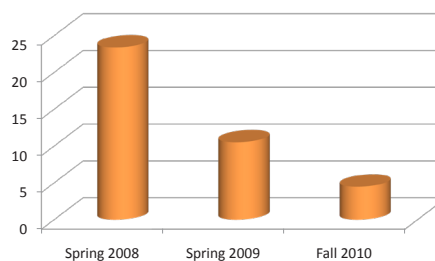


BIODEGRADABLE COMPOSTABLE DISPOSABLES

Biodegradable compostable items are used for a la carte locations and dining events where disposables are needed, such as Convocation.

WASTE REDUCTION

All locations in residential dining facilities are trayless as of fall 2010. As a result, we have seen an 80 percent reduction in post-consumer food waste, or 6,000 pounds daily. Annual water reduction is equivalent to 1.4 Olympic-sized swimming pools. Through a waste study conducted in our dining units, we have also found that the average food waste per student per day has dropped from 23.4 ounces (Spring 2008), to 10.5 ounces (Spring 2009), to 4.47 ounces (Fall 2010). See the chart on the right illustrating waste reduction.



Additionally, meat fats are utilized by a local farmer in bovine feed, and waste vegetable oil is collected for use as biodiesel. Experimentation is in progress on using a byproduct of the biodiesel process (glycerin) to create soap for ware washing.

CONSTRUCTION, CONT'D

- The wall and roof insulation was selected for its ability to keep cold or hot temperatures out, promoting a comfortable temperature inside, saving energy, and lowering the heating/cooling costs.
- Walkways around the buildings were made with white color concrete, which reflects the sun's heat and keeps the surrounding area cooler.
- The landscape is designed with native and drought-tolerant plants to reduce dependency on potable water. Low-flow plumbing fixtures were also utilized to reduce water consumption by over 20 percent in Nugent Hall and over 30 percent in the SDRP.
- Both the SDRP and Nugent Hall were designed to meet ASHRAE requirements. ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) promotes sustainability and green building practices. The SDRP will exceed ASHRAE requirements by over 10 percent.
- Light fixtures throughout the SDRP and Nugent Hall use low-energy wattage lamps to conserve energy, and many of the rooms have motion sensor light fixture control. In the SDRP, the large 500-seat multi-purpose room has individualized control and dimmer switches, which reduces energy usage.

RECYCLING

- More than 75 percent of the waste from the Illini Orange, which used to stand on the construction site, was recycled.
- Over 80 percent of the construction waste was recycled, reducing landfill waste.

facilities

EXTENSIVE RECYCLING EFFORTS

University Housing has a longstanding recycling program. Everything we recycle is combined with the remainder of campus. Items that can be recycled:



- Paper
- Plastics
- Cardboard
- Aluminum cans
- Metal cans from Dining areas
- Lamps, via the University's recycling processes

GREEN CLEANING

Biodegradable hand and surface cleaning products are being utilized as well as cold water only/biodegradable floor cleaning chemicals. Many of our cleaning products are Green Seal Certified.



ENERGY SAVINGS

To help save energy, motion sensor light switches are installed where applicable. Since 1984 we have been replacing all bulbs with fluorescent lights and compact fluorescent lamps (CFL bulbs) whenever and wherever possible. To date, approximately 95-98% of our bulbs are 40 or 60 watt CFLs, with an efficiency rating of T-8. [Efficiency scale; T5 = highest (\$5.50ea.), T8 = High (\$1.75ea.), T12 = old inefficient (\$1.25ea.)]



WATER CONSERVATION

We have instituted a pilot program for water conservation through installation of low-flow shower heads and low-flow lavatory faucet aerators.

SALVAGE DRIVE

Each year before move-out, we promote a salvage drive for clothing and useful items. Items are donated to charities within the Champaign-Urbana community.

residential life

ECO REPS PROGRAM

The Eco Reps Program, currently located in Lincoln Avenue Residence Halls and Allen Hall, encourages sustainable behaviors that lead to decreased resource consumption and reduced costs for Housing. The program also provides



CONSTRUCTION, CONT'D

IMPROVED AIR QUALITY

- Indoor Air Quality measures were implemented during the construction process to achieve a high level of cleanliness and air quality.
- Low-VOC (volatile organic compound) products, including paints, coatings, adhesives, and sealants, were chosen to increase indoor air quality.

GREEN LIVING

- The SDRP was built with eight staff showers so that Housing staff members can take advantage of alternative forms of transportation, such as biking or walking to work.
- The facility's cleaning and maintenance policy will limit the environmental impacts of hazardous and unfriendly cleaning products and solvents, while also providing a healthier working environment for the building's workers and residents.
- A built-in oil-reclaiming system in the SDRP will send used fryer oil to a holding tank on the loading dock to be processed into biodiesel for the campus motor pool. The non-toxic, biodegradable fuel generates fewer emissions and saves the campus money on fuel costs.
- The Ikenberry Dining Hall features trayless dining, which greatly reduces energy costs and food waste. Local ingredients, including produce, are included in daily meals.

leadership opportunities and education for our students (both Eco Reps and non-Eco Reps), which may increase satisfaction with their Housing experience and their likelihood of reassigning to University Housing. Nine Eco Reps from Allen and LAR dedicate 3-5 hours per week and are lead by program coordinator Eric Holthaus, a graduate student in Urban Planning. Laura Haber provides assistance from Residential Life, and the SSC provides financing, guidance, and an intern.

family & graduate housing

GARDEN PLOTS

Family & Graduate Housing offers both residents and community members an opportunity to grow flowers and vegetables in a large community garden space. The residents are also provided an opportunity to sell their excess produce to other Orchard Downs residents at miniature “farmers markets” held on site.



LENDING ROOM

We provide the space for a lending room, where new residents can borrow basic household items that previous residents have donated.

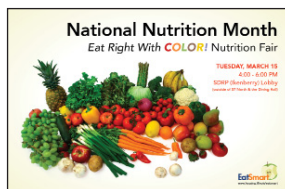
SUSTAINABILITY RESIDENT ADVISOR

The graduate upper-division halls are hiring a sustainability resident advisor position for Sherman and Daniels for fall 2011. This is a permanent position with the responsibility of developing educational programs and events related to sustainability.

marketing

PAPERLESS COMMUNICATIONS

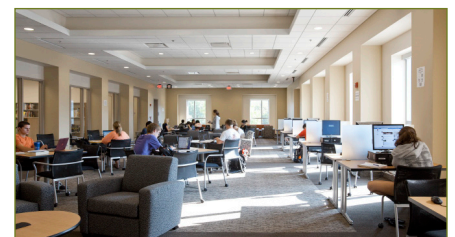
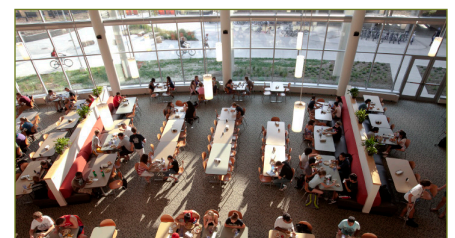
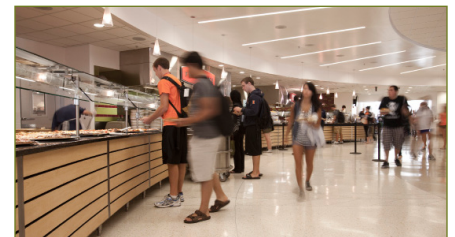
The Marketing department has increased efforts to move towards paperless communication channels when possible, focusing efforts on the website, email, Facebook, Twitter, YouTube, and a blog on the Admissions website. As an example, we saved paper by discontinuing printing *Welcome to Your Neighborhood* and dining hall table tents. At the Student Dining and Residential Programs building, all promotions are paperless as we take advantage of the ample digital signage.



(SDRP Digital Signage)

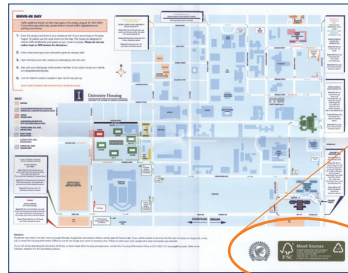
the future of ikenberry commons

We are continuing our dedication to green building as we work towards our next phase of construction. Phase C of Nugent Hall will be opening fall 2012, and work is about to begin on Residence Hall #2 (suite-style), which will open fall 2013.



RESPONSIBLE PRINTING

On many of the print pieces we do continue to produce, we work with our print vendors to select paper certified by the Forest Stewardship Council (FSC). The FSC promotes well-managed and responsibly harvested forests. According to the FSC website, in order to receive certification, the "...product must have flowed through the FSC 'chain-of-custody' from the FSC-certified forest, to a paper manufacturer, merchant, and finally printer who have FSC chain-of-custody certification."



(2010 Movin' In mailer)



PROMOTING HOUSING EFFORTS

Marketing also works to promote the sustainability measures already in place in University Housing, such as posters and video about the impact of trayless dining, and a brochure about the earth-friendly elements of our new buildings that will lead to LEED certification.



FUTURE GOALS

Moving forward, the Housing Sustainability Committee will begin addressing goals outlined in iCAP by developing a process for the selection of new sustainability projects. The process will incorporate:

- Initiatives proposed by the SSC
- Ongoing and planned projects within University Housing
- Successful projects already implemented by other campus units
- Projects and guidelines outlined in iCAP

The committee will also be looking for ways to quantify the success of sustainability measures, especially in water, electric, and gas usage per resident, but also for the non-utility efforts made by our departments.