

Campus Sustainability at SLU



SLUustainability

Saint Louis University

Annual Report

2012-2013



[TABLE OF CONTENTS]

Scope & Purpose.....	2
Introduction.....	3
Planning, Administration, & Engagement.....	6
Coordination & Planning.....	6
Diversity & Affordability.....	10
Human Resources.....	11
Public Engagement & Recognition.....	11
Education & Research.....	13
Education.....	13
Research.....	16
Co-Curricular Education.....	17
Operations.....	20
Buildings.....	21
Energy & Water.....	23
Dining Services.....	26
Grounds.....	27
Purchasing.....	31
Transportation.....	33
Waste.....	35
STARS Categories Definitions.....	49

INTRODUCTION



Lawrence Biondi, S.J.

"I am proud to report that SLU has made progress on a number of initiatives that can lessen our environmental footprint..." Father Lawrence Biondi, S.J.

In his October 2012 message to the campus community, University President, Father Lawrence Biondi explained how sustainability ties to our Jesuit principles. He noted the importance the Society of Jesus has placed on sustainability in recent years:

In 2008, the Society of Jesus celebrated the General Congregation 35. The Congregation explored a number of issues, including sustainability. The Society noted that "care of the environment affects the quality of our relationships with God, with other human beings, and with creation itself. It touches the core of our faith in and love for God." Peter-Hans Kolvenback, S.J., Superior General Emeritus of the Society of Jesus, also challenged all "Jesuits and those who share our mission to show ever more effective ecological solidarity in our spiritual, communal and apostolic lives."

To access Father Biondi's complete October 2012 message visit <http://www.slu.edu/Documents/facilities/Sustainability/President's%20October%202012%20Message.pdf>



INTRODUCTION

MESSAGE FROM THE CHIEF SUSTAINABILITY OFFICER

Dear Reader,

I am excited to share this year's Annual Campus Sustainability report as it celebrates a year of great growth and development in Saint Louis University's sustainability initiatives. As you read, you will see the economic, social, and environmental strides the sustainability movement is making at SLU. As you will be able to gather from reading this report, SLU is well on its way to becoming an increasingly sustainable campus.

With the establishment in 2010 of the Center for Sustainability and the strong partnership with Facilities Services, we have expanded our initiatives and programs on campus. Among these strides is our sustainability advisory council. Unifying our campus' sustainability strategic direction, goals, and initiatives will increase our progress in our initiatives and programs.

Other highlights in the past year include growth in our academics with the addition of new faculty in the Center for Sustainability and with the establishment of a director for the Center for Sustainability. In our operations section you'll see a heightened focus on our waste and recycling programs, which includes the expansion of our single-stream recycling program to include new re-purposed exterior recycling containers, as well as obtaining a grant for



—Kathleen Brady—Vice President for Facilities Services & Chief Sustainability Officer

refreshing the recycling program at Chaifetz Arena. With all of these improvements it was vital for us to properly train our campus community on our single-stream recycling program.

You will also notice that our report reflects the framework that assists in the measurement of our efforts, STARS. As of today, 254 colleges and universities in the United States and Canada participate in STARS. As a transparent, self-reporting framework to measure sustainability performance, this has been a great tool for SLU to use in developing sustainability on campus. I encourage you to check out the bronze rating we received in October of 2011 to better understand how the rating system works. Next year, we will submit updated data to reflect our progress and hopefully earning additional points, increasing our rating to a silver status.

I also wanted to let you know that the Green Billiken has developed many online resources to help you stay connected and involved in SLU sustainability. Visit greenbilliken.slu.edu on the web, follow him on Twitter (@greenbilliken), or send him an email at greenbilliken@slu.edu. He welcomes your feedback and encouragement!

Thank you for taking the time to update yourself on our sustainability efforts. I look forward to working with you as we strive to make SLU an even greener place to visit, learn, and work.

As of today, 254 colleges and universities in the United States and Canada participate in STARS.



SCOPE & PURPOSE

THE SCOPE AND PURPOSE OF THIS REPORT

The purpose of this report is to provide community members with an annual review summarizing Saint Louis University's sustainability achievements throughout the 2013 fiscal year. These stories cover sustainability related events and accomplishments completed by SLU community members (students, faculty, and staff) on SLU's Midtown campuses (Frost and/or Medical School) between July 1, 2012 and June 30, 2013.

Each story is categorized according to AASHE's (Association for the Advancement of Sustainability in Higher Education) STARS (Sustainability Tracking, Assessment & Rating System), which is outlined in the table of contents and described in greater detail under STARS Categories at the end of the report. STARS provides a comprehensive list of measures that cover planning, administration, and engagement; education and research; and operations—all areas tailored to sustainability on university and college campuses. AASHE sponsors STARS and has helped it emerge as the primary reporting mechanism for sustainability in higher education.

Related online coverage, such as postings on Newslink, are provided with each story as an opportunity to connect you with additional information.

If you have questions, comments or concerns about any material in this report or have suggestions regarding the presentation, please send us an email at greenbilliken@slu.edu.

Activities commenced after June 30, 2013 but prior to publication of this report will be included in next year's review.



*The Bronze level is
SLU's current ranking
in STARS*

PLANNING, ADMINISTRATION & ENGAGEMENT

[COORDINATION & PLANNING]

SUSTAINABILITY ADVISORY COUNCIL FORMED (Oct '12)

Over the summer of 2012, a small group of faculty, staff and students, including Kathleen Brady, Vice President for Facilities Services and Diana Carlin, Interim Director of the Center for Sustainability, met to recommend the formation of a campus advisory council on sustainability. The group reviewed and discussed various membership models and decided to implement a similar model from the University of Kansas (<http://www.sustainability.ku.edu/>). This model was chosen due to the breadth of representation amongst key stakeholders.

The SLU Sustainability Advisory Council, which reports to senior administration, serves as a resource that advises and supports the integration of sustainability into education, research, service, administration, and operational practices. The Council is charged with assisting the Center for Sustainability in the development and implementation of a comprehensive strategic plan for sustainability at Saint Louis University. Throughout the 2012-13 academic year, the Sustainability Advisory Council met three times to discuss SLU's past, present, and future sustainability initiatives.

A special guest speaker, Lois Sechrist, LEED AP ID+C, Environmental Sustainability Analyst - Ascension Health, and Chair of the Green Practices Commission for University City, MO, attended the third meeting to share her experiences with leading corporate and grassroots efforts to promote sustainability.



PLANNING, ADMINISTRATION & ENGAGEMENT

COUNCIL MEMBERSHIP

Assistant Director Housing & Residence Life
 Assistant VP Marketing/Communications
 Assistant VP University Advancement
 Associate VP Academic Planning & Budgeting
 Associate VP Development
 Associate VP Graduate Education
 Associate VP Service Operations
 Associate VP University Event Services
 Director Center for Sustainability
 Director Financial Planning & Budget
 Director Student Development/Business Administration
 Director Sustainability & Benchmarking
 Faculty Senate Appointee (2)
 Graduate Student, Center for Sustainability (2)
 Manager Business Services
 Project Analyst Service Operations
 Student Government Association Appointee
 Staff Advisory Council Appointee (2)
 Undergraduate Student Appointee (2)
 VP Facilities Services
 VP Information Technology Services
 VP Mission & Ministry

SUSTAINABILITY ADVISORY COUNCIL

During the summer of 2013 a volunteer sub-group of the council joined together to focus on defining sustainability for SLU, developing vision elements, and creating proposed action teams for the following year. This information will be reported to the full council for adoption at the first meeting of the academic year.

The Sustainability Advisory Council represents a cross-section of campus leadership. Members are appointed to the Council according to their position they hold.



SLUustainability

The council adopted the 'Green Billiken' and 'SLUustainability' as images for the university's sustainability initiatives.

2ND GRAD ASSISTANT JOINS FACILITIES TEAM (Sept '12)

Facilities Services hired its 2nd graduate assistant in September to join Caeden Sweet, who had been continuing his graduate assistantship since January. Caeden and Kelley, both masters students in the Center for Sustainability, served as Sr. and Jr. Sustainability Coordinators, respectively. Kelley brought strong instructional experience from her six years of teaching high school Social Studies. With her assistance, Facilities Services was able to improve and promote wonderful educational materials, such as brochures and webpages, for SLU's recycling program. Her comfort with public speaking helped the division deliver presentations to nearly 1,000 students, faculty and staff throughout the school year. Meanwhile, Caeden maintained his contributions through grant writing, STARS data collection, and program development. Combined, with their expertise and passion for sustainability, Caeden and Kelley expanded the division's vision of what SLU can do, motivating Facilities Services and the University to become a more "SLUustainable" campus. The cost of filling both graduate assistant positions in Facilities Services was assumed by the Office of Graduate Education.



Sustainability Graduate Assistants, Kelley Krejnik and Caeden Sweet, help plant trees near Ritter Hall.

BOARD OF TRUSTEES LEARNS ABOUT STARS (Sept '12)

During the September Buildings & Grounds Board of Trustees Committee meeting, representatives from Facilities Services highlighted the emphasis of planning and reporting sustainability while sharing copies of the first annual campus sustainability report.

In addition, they provided an overview of how various divisions on campus had been incorporating sustainability into the application of the University's Strategic Plan and division specific plans. Attendees also learned about STARS and how this framework will help SLU measure its sustainability progress.



PLANNING, ADMINISTRATION & ENGAGEMENT

[COORDINATION & PLANNING]

SLU ADOPTS AASHE TOOL FOR DATA COLLECTION (Feb '13)

At the beginning of 2013, Facilities Services began using the Association for the Advancement of Sustainability in Higher Education's (AASHE) "Campus Sustainability Data Collector" tool to streamline the process of disbursement of data to third-party sustainability evaluators. With the hope of reducing the unnecessary duplication of information, this tool allows AASHE members to enter data into one common place from which additional interest groups can access pertinent information. For example, both the Princeton Review Green Rating and Sierra Magazine's Cool Schools may utilize this tool.

Annually, Facilities Services intends to update sustainability data through the Campus Sustainability Data Collector to ensure that efforts to track, monitor and report become an integrated practice over time, contributing to strategic decision making on campus. By establishing a routine for annual sustainability reporting, the data has already improved in accuracy, ease of collection and comprehensiveness.

Institution Name Saint Louis University	Participation Level STARS Participant	Current Rating Bronze
STARS Subscriptions		Previous Reports
Subscription Period		Date
Feb. 22, 2013 - Feb. 22, 2014		Oct. 9, 2011
Feb. 20, 2012 - Feb. 19, 2013		
Aug. 20, 2010 - Feb. 19, 2012		
		 Bronze

The Campus Sustainability Data Collector keeps an updated dashboard of information to help facilitate record keeping.

[DIVERSITY & AFFORDABILITY]



CENTER FOR GLOBAL CITIZENSHIP OPENS (Jul '13)

"Saint Louis University's Catholic, Jesuit mission calls us to make a world of difference, not just here at home, but also around the globe. This project demonstrates our commitment to international education and is a clear sign that SLU truly has become a global university."

*-University President
Lawrence Biondi, S.J.*

Saint Louis University strives to bring people together in developing global citizenship. SLU's new Center for Global Citizenship, which is adorned with 101 international flags, places the Office of International Services, the International Studies Program and the English as a Second Language Program in one convenient location at the heart of Frost Campus. Along with these services and programs, the center is a gathering place where students can study, hang-out and access television outlets from around the world. The social dimensions of international and social justice programs are prevalently noticed when walking throughout the building. Programs such as the Center for Service and Community Engagement, as well as, the Cross Cultural Center were relocated into the building as well.

- ⇒ 1,000 students representing 77 countries attend SLU
- ⇒ 24% of the Class of 2014 are international or multicultural
- ⇒ 112,002 alumni live in all 50 states and 138 countries
- ⇒ In the 2011 U.S. News & World Report, Saint Louis University was ranked as a Best College for Study Abroad





PLANNING, ADMINISTRATION & ENGAGEMENT

[HUMAN RESOURCES]

FACILITIES SERVICES EDUCATES EMPLOYEES

Facilities Services held multiple environmental awareness seminars this past Fall. These seminars were targeted by the Facilities Services' strategic action team, Environmental Resource Optimization, to educate and get the university community involved in sustainability topics. Topics included recycling, waste management, SLU's AASHE STARS program, and Water Resources. Charles Johnson, a member of the ERO team, coordinated these events in collaboration with Brandon Verhoff, Caeden Sweet, and Kelley Krejnik.

In addition, Facilities Services is presenting at SLU's monthly new employee orientation to educate incoming faculty and staff on recycling. This effort strives to communicate the division's goal of reaching a 30% waste diversion rate.

[PUBLIC ENGAGEMENT]

SLU SERVES THE COMMUNITY

Between service clubs and fraternities such as Habitat for Humanity and Alpha Phi Omega and events such as Make a Difference Day and Showers of Service, the students, faculty, and staff at Saint Louis University are known for service. Over the past two years, they have logged over 2.5 million hours of community service!

2012: 1,182,730 hours

2013: 1,405,188 hours

[RECOGNITION]



(from left): Joe Reagan, President and CEO of the St. Louis Chamber; Brandon Verhoff, Project Analyst for Facility Services; David Webb, Program Manager for Center for Sustainability; Glenda Abney, Director of the Earthways Center at the Missouri Botanical Garden. Photographs by Bueltmann Photography.

SLU EARNS RCGA'S STAR CIRCLE OF EXCELLENCE AWARD DEC '12

The Center for Sustainability received a Star Circle of Excellence award at the 2012 St. Louis Chamber Green Business Challenge awards ceremony held on December 18. The St. Louis Chamber honored 84 companies, institutions, and governments for their achievements in adopting sustainable business practices that help grow the St. Louis region's green economy. The Star Circle of Excellence is the highest achievement award category in the challenge.

The St. Louis Green Business Challenge inspires businesses to form green teams and implement strategies to expand sustainability programs that reduce energy and waste and have a positive impact on the environment. The Challenge requires participants to complete strategic sustainability activities tracked on a scorecard organized by categories including outreach, energy reduction, indoor environmental quality, waste reduction, and transportation. Participants earn points for the number of activities attempted and the extent to which they are completed. In 2012, 285 points were possible with extra credit points given for activities deemed "innovations." The Center for Sustainability earned an impressive 218 points this year—an 86 point increase over 2011—thanks in large part to our strong partnership with Facilities Services.



EDUCATION & RESEARCH

CENTER FOR SUSTAINABILITY ADDS NEW FACULTY & DIRECTOR

By the start of fiscal year 2013, just over two months after the Center's second birthday, the Urban Planning and Real Estate Development Program (UPRED) moved from Public Policy Studies to the Center as a second degree program. With it came two full-time faculty members, Dr. Sarah Coffin and Dr. Joanna Ganning. With an increased emphasis on sustainability within planning programs, this move positioned both degree programs to share resources and to provide the only planning program housed in a sustainability center.

Along with UPRED, the Center for Environmental Sciences (CES), which is directed by Dr. Jack Fishman (Earth and Atmospheric Sciences) and co-directed by Dr. Jason Knouft (Biology), moved to the Center to further enhance research efforts. Dr. Fishman and Dr. Knouft were granted secondary appointments in the Center.

Dr. Abuduwasiti Wulamu, Assistant Research Professor and Chief Architect for GIS systems in the Center for Environmental Sciences, also joined the Center for Sustainability with a primary appointment as assistant professor and head of the graduate certificate program in Advanced Remote Sensing and Geographic

Information Systems (GIS).

The integration of UPRED and CES into the Center for Sustainability has broadened and significantly enhanced our teaching, research, and engagement efforts. In addition to internal mergers, the Center brought in resources from outside of SLU. In August of 2012, Robert McNair joined the Center as Grants Administrator and later that year Damon Hall left the University of Maine to accept a full time position in the Center as an assistant professor.

John Wooschlager, Ph.D., was named the new director of the Center for Sustainability at Saint Louis University, effective July 1, 2013. Wooschlager was part of the original faculty team that planned the Center's curriculum and he has continued to lead the faculty advisory team in refining and expanding program offerings. Wooschlager has a Ph.D. in Environmental Engineering from Northwestern University.

[EDUCATION]



John Wooschlager, Ph.D.



Damon Hall, Ph.D.



Sarah Coffin, Ph.D.



Abuduwasiti Wulamu, Ph.D.



EDUCATION & RESEARCH

LMI ACADEMIC PARTNERSHIP (Apr '13)

As part of its outreach efforts, the LMI Research Institute runs a formal academic partnership program that brings leading universities together with LMI's own innovative programs. In April of 2013, Saint Louis University became an official partner when the Center for Sustainability received \$19,731 from LMI for a research study. Dr. Nitish Singh, Associate Professor of International Business in the John Cook School of Business, is leading the research study for the University. With assistance from graduate students in the Center for Sustainability, Dr. Singh is conducting a comparative analysis of various sustainability reporting frameworks and indices such as the Global Reporting Initiative (GRI) and Carbon Disclosure Project (CDP). The goal of the research study is to review relevant Executive Orders and advise federal agencies on the strengths, weaknesses, limitations, and applicability of the various approaches to sustainability measurement and reporting.

SLU HOSTS GRI TRAINING (Apr '13)

On April 18-19, 2013 the Center for Sustainability, in collaboration with the John Cook School of Business, hosted the first Global Reporting Initiative (GRI) training course in sustainability reporting. Certified training partners from BrownFlynn and ISOS Group instructed a class of nearly 50 participants—comprised of Saint Louis University students, faculty, and staff along with professionals from several regional organizations—on how to effectively manage and report sustainability performance using the GRI Framework. Upon conclusion of training, participants received an official GRI Certificate of Completion.

GRI is the world's leading framework for sustainability reporting. It helps individuals and organizations develop systematic approaches to corporate responsibility and sustainability reporting. <https://www.globalreporting.org>



[RESEARCH]

NAFSA COLLOQUIUM ON INTERNATIONALIZATION & SUSTAINABILITY (May '13)

On May 31, the Center for Sustainability hosted the 2013 Colloquium on Internationalization and Sustainability, part of the larger 65th NAFSA Annual Conference and Expo held May 26-31 in St. Louis.

The colloquium attracted global leaders in higher education who came together to outline best practices, explore key issues, and discuss strategies for developing internationally focused sustainability programs. "Having a key role in four colloquia, including the first one on sustainability, was an excellent way to showcase our strengths in law, business, medicine, public health and sustainability. SLU's globalization efforts will profit from our involvement in NAFSA" said Diana Carlin, Ph.D., associate vice president of Graduate Education.



John Woolschlager, Ph.D. and Diana Carlin, Ph.D., participated in NAFSA's inaugural Colloquium on Internationalizing Sustainability-Focused Degree Programs. Photos by Robert McNair.

EDUCATION & RESEARCH

FIRST ANNUAL SUSTAINABILITY WEEK (Oct 24–31 '12)

Facilities Services & the Center for Sustainability launched the University's first annual Sustainability Week as a development of AASHE's Campus Sustainability Day in order to educate the campus community about SLU's sustainability initiatives and programs. Members of SGA's Sustainability Committee joined forces with graduate assistants in Facilities Services and leadership in the Center for Sustainability to promote sustainability initiatives and awareness on campus. The week incorporated events related to educating the SLU community on the expansion of single-stream recycling, the Sustainable Disaster Recovery Conference, Tree Campus USA, and Make a Difference Day.

Facilities Services emphasized its role in sustainability across campus, by championing recycling. The division constructed and placed a large recycling receptacle in the Quad, conducted a live waste audit, hosted an Environmental Awareness Seminar, and set up information tables where representatives were available to answer questions and disseminate recycling literature to passing visitors, students, staff and faculty.



<http://www.slu.edu/1024-1031-sustainability-week>

<http://www.slu.edu/x68455.xml>

<http://www.slu.edu/news-sustainability-week-begins-1023>

<http://www.slu.edu/facilities-services-home/slusustainability/news/u-news-sustainability-week-at-slu>

<http://giving.slu.edu/s/1264/giving.aspx?sid=1264&gid=1&pgid=2846>

[CO-CURRICULAR EDUCATION]



Great Issues Committee Invites Bob Hirschfeld to Satirize Sustainability (October 25)

Through the efforts of the Great Issues Committee, Bob Hirschfeld, “the World’s First CyberSatirist and EcoSatirist” visited SLU during Sustainability Week and presented a humorous take on sustainability. Rather than depend on doom and gloom to scare people into being green, Hirschfeld used jokes and personal anecdotes to show how being green is not only necessary but may be even fun.



Arbor Day Observance (October 26)

With a commitment to the environment and to providing a tree-friendly atmosphere for the campus community, Facilities Services used the opportunity for an arbor day observance day to educate and demonstrate the need for trees on SLU’s campus. Trees were planted on October 26, 2012 during Campus Sustainability week and also on April 25th for Arbor Day. For these events, flowering dogwood trees were planted near the fountain just east of Grand Avenue across from DuBourg Hall and also on the south side of DuBourg Hall in the Quad.

EDUCATION & RESEARCH

Make a Difference Day (October 27)

Saint Louis University hosted another record-breaking Make a Difference Day on Saturday, October 27, with nearly 3,400 students, faculty, staff, parents, alumni and community members registered to take part in the University's annual day of service. Make a Difference Day participants provided service at 136 locations across the St. Louis area, which is the highest number of sites served in the event's history. The theme for 2012 was "Sustainability" and was held in conjunction with the University's first ever Campus Sustainability Week. As part of the event's sustainable efforts, all volunteers received reusable water bottles and lunches packed in 100 percent biodegradable materials. This alone helped to keep more than 20,000 pounds of waste and greenhouse gases from polluting the environment.

Students plant perennials and spread mulch at Brightside's Demonstration Garden, which features all Missouri native plants and sustainable landscaping practices. More than 1,000 volunteers assisted with projects that directly supported the environment. Photo by Anne Marie Apollo-Noel



Sustainable Disaster Recovery Conference (October 29-30)

The Center for Sustainability held its first annual Sustainable Disaster Recovery Conference for over 250 participants from across the nation and world. The group represented expertise in emergency response, disaster recovery, urban planning and development, government, policy, architecture and design, public and private enterprise, green building trades, higher education, and sustainability. The two-day conference featured a line-up of speakers and exhibitors sharing experiences, expertise, and resources on how to sustainably plan for, respond to, and recover from natural disasters.



[CO-CURRICULAR EDUCATION]

"We feel it is important for SLU to properly promote and put in place alternatives to purchasing bottled water."

- Beth Alberty,

Current SLU Graduate Student

'BOTTLED WATER FREE SLU' LOBBIES FOR CHANGE THROUGH EDUCATION

Bottled Water Free SLU is an initiative started in 2012 by recent 2013 graduate, Beth Alberty. Through the initiative, Alberty hoped to rally SLU students to propose a referendum that would eliminate bottled water from SLU's campuses. Alberty and supporters campaigned for the cause throughout the school year.

In an attempt to promote awareness regarding the economic, environmental, and social justice impacts of bottled water production and consumption, champions of the initiative held a "Tap Water Challenge". The Challenge had SLU community members blindly drink different types of bottled water and St. Louis tap water, discovering that in many cases, the tap water tasted the freshest and the cleanest. This taste-test experience was designed to encourage people to drink water from the tap and fill-up reusable bottles and cups instead of purchasing disposable bottled water. Alberty also led a presentation focusing on the social justice aspects of bottled water during ATLAS Week on April 8, 2013.



As of now, the lobbying for a "bottled water free SLU" will continue to build support in hopes of one day eliminating bottled water from campus..

<http://bottledwaterfreeslu.tumblr.com/>



OPERATIONS

MAJOR RENOVATIONS

Center for Global Citizenship (May '13)



The Center for Global Citizenship opened May 2013 after renovation of the West Pine Gym was complete. The \$8 million, 70,000 square foot project had St. Louis-based Fox Architects design the space and McCarthy Buildings Co. Inc. serve as construction manager for the project. Improvements to the space included new lighting throughout the facility, dimming and lighting controls, renovation of office areas, installation of a new fire alarm and pump systems, and a new HVAC system. The overall design concept was to leverage the beauty and unique qualities of the

existing structure. To increase the indoor environmental quality and energy efficiency, previously boarded up windows located at the top of the bowl were exposed to allow natural lighting into the common area. Water conservation and waste reduction were also kept in mind with the installation of low-flow water closets and water bottle filling stations.

The highlight of the renovation was the blending of old and new through the restoration of the gym's hardwood flooring which transformed the space into a student commons and a 1,000-seat adaptable auditorium with multi-screen technology.



[BUILDINGS]

Scott Hall (May 2013)

Scott Hall, located at 100 N. Tucker, is the new downtown location of SLU's Law School. In May, the Lawrence Group and Clayco began renovating and expanding the existing 260,000 sf building, with an additional 12th floor to provide for a 300 seat courtroom, pavilion and outdoor patio. Much of the existing mechanical equipment was repaired and/or reconfigured to improve efficiency. Outdated electrical systems have been updated to include lighting controls and sensors, as well as LED and CFL fixtures. Over 90% of the existing building core and shell has been maintained, conserving 1,400 tons of steel and 4,225 tons of concrete. With 90% of the flooring in the building being carpet, Shaw earth tone carpet was chosen as aesthetically pleasing while also using recycled content carpet tile that would make maintenance and replacement easier. Finally, low-flow plumbing fixtures and water bottle filling stations were installed to reduce water consumption and waste.

**Pevely Project (Oct 2012)**

In October 2012, Saint Louis University and Ahrens Contracting teamed up to recycle nearly 400 tons of structural steel, 40 tons of piping, 25,000 tons of concrete, and 500 tons of brick from the demolition of the Pevely project. Furthermore, 80 tons of metal siding and structural steel were reused along with 250 tons of brick. Approximately 13,000 cubic yards and 25,700 tons of material have been diverted from the landfill.



OPERATIONS

LIGHTING INSTALLATIONS

Schwitalia Hall (Aug '12)

Ty Dennison, Kevin Manley, and Dale Kuehn replaced 128 old ducted light fixture units with new T-8 non ducted units in the M400 practical anatomy classroom to help properly pressurize the space to eliminate formaldehyde odors while improving the energy efficiency of the lighting system.

Carlo Auditorium and the Sinquefield Room

Keith McCune, Dan Swegel George Randolph, and Matt Patton installed lighting retrofits in Carlo Auditorium (Tegeler Hall) and the Sinquefield room (DuBourg Hall). The replacement LED lights will reduce wattage by 17,095 while maintaining lumens.

Allied Health Building (Jun '13)

Ty Dennison, Matt McEuen, Kevin Manley, Dale Kuehn, Chuck Goedde, and Jeff Strawn replaced forty-four T-8 lamps with 12 LED dimmable, light fixtures. The original lighting over-powered the room, so changing to LED not only improved comfort but also reduced energy consumption from 1408 to 552 watts. This provides annual energy savings while extending the life of the lamp from 3 to 20 years.



WATER CONSERVATION

Frost Campus Water Meters (Jul '13)

Andy Reeves, in partnership with the Frost Plumbing Mechanics, developed and initiated a plan to locate, identify and document all water meters on the Frost campus. This information is stored through FAMIS and electronically documented on campus maps to help verify readings and address repairs.

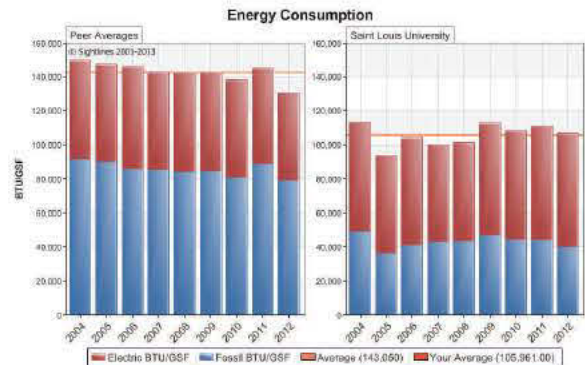
[ENERGY & WATER]

ENERGY CONSUMPTION (Jul '12)

Facilities Services has been initiating energy initiatives and lighting retrofits throughout the past years as well as those noted in this report.

In monitoring consumption levels over the past 9 years and comparing them to peer institutions within our climate zone, SLU's energy consumption is much lower than the average energy consumption of peer institutions (see graph).

A focus for future years will be to develop stronger and more detailed data to further our analysis on building efficiencies.



SLU Peer Institutions: Brown University, Kutztown University, Missouri S&T, Oregon State University, Portland State University, John Hopkins University, Thomas Jefferson University, University of Missouri — Columbia, Kansas City, & St. Louis, University of Rhode Island, Wesleyan University, West Chester University

OPERATIONS

[ENERGY & WATER]

WATER & ENERGY SYSTEM IMPROVEMENTS

Dreiling-Marshall, Learning Resource Center, School of Nursing buildings all had improvements made to their domestic water heaters.

Griesedieck Hall and Walsh Hall had improvements made to their water tank and steam heat exchangers that supply hot water to the Griesedieck Hall kitchen and Walsh Hall laundry room.

These replacements were part of a priority planning process to upgrade our equipment, increasing energy efficiencies.



[DINING
SERVICES]

LOCALLY SOURCED FOOD

27% of food purchased by Chartwells for Billiken Dining Services is grown and processed within a 250 mile radius. Food is sourced locally from 16 local family farms and 4 local processors throughout the bi-state (Missouri and Illinois) region.

Additionally, SLU's food service contractor, Chartwells, has implemented food sourcing policies for purchasing sustainable and, whenever possible, locally grown and organic food products including 100% certified seafood, cage-free shell eggs, hormone and antibiotic-free chicken, turkey, pork, grass-fed beef and rBGH free milk.



OPERATIONS

SLU recognized as a 2012 Tree Campus USA

In February 2013, Saint Louis University was recognized as a 2012 Tree Campus by the National Arbor Day Foundation. Launched in 2008, the national program honors colleges and universities and their leaders for promoting healthy trees and engaging students and staff in the spirit of conservation. SLU became one of five institutions in Missouri, and only the second Jesuit institution to earn the distinction.



The Arbor Day Foundation has several recognition programs to inspire people to plant, nurture and celebrate trees. Two such programs are Tree City USA and Tree Campus USA. The Tree Campus USA certification program recognizes excellence in campus tree management, as well as student and community involvement across the nation. Saint Louis University put together a Campus Tree Advisory Team and developed a plan to achieve the required standards of the Tree Campus USA program. To obtain this distinction, Saint Louis University met the five core standards for sustainable campus forestry required by Tree Campus USA, including establishment of a tree advisory committee, evidence of a campus tree-care plan, dedicated annual expenditures for its campus tree program, an Arbor Day observance and the sponsorship of student service-learning projects.

111 new trees were planted in 2012.

[GROUNDS]

GREEN GARDENING

SLU's Grounds team composts yard waste—tree branches, weeds, leaves, other natural plant trimmings and debris—allowing them to keep and reuse the majority of yard waste on site. Composting yard waste helps generate needed nutrients and fertilizer for the flower beds around campus. The Grounds team turns to organic fertilizers, such as Earthworks and Nature Safe with preparing flower beds around campus.



56 tons of yard waste
was composted on
campus last year!



OPERATIONS

MASTERS OF SUSTAINABILITY STUDENTS PROMOTE NATIVE AND NATURAL LANDSCAPING

Each semester, SLU's Graduate Student Association (GSA) offers allocation awards to every academic unit on campus based on the number of graduate students in their respective departments. In fiscal year 2013, students in the graduate program in sustainability elected to use their GSA funds to purchase a rain barrel for campus. The rain barrel aids in water conservation by harvesting rain water that would otherwise be lost as runoff; it can also help reduce water usage and decrease costs. Additionally, the barrel will draw

attention to the native plant garden located opposite the installation site behind Beracha Hall and, ideally, increase awareness of the types of solutions available to help reduce our collective impact on the environment. To students in the graduate program in sustainability, the rain barrel represents the social, environmental, and economic dimensions of sustainability, also commonly referred to as the triple bottom line.



Rain barrel and native wildflower garden behind Beracha Hall. Photos by Stephanie Simowski and David E. Webb.

[GROUNDS]

CHICKENS PROVIDE FRESH FOOD, GARDEN MAINTENANCE, AND COMPOST

Donors James and Janelle Criscione contributed six new chickens to further the Nutrition and Dietetics Fresh Gatherings program. The chickens will help with maintaining the garden while providing fresh eggs for cooking. Furthermore, their waste adds nutrients to the compost that Fresh Gatherings Café generates and turns into fertilizer.

<http://www.slu.edu/news-chickens-donated-to-slu-514>



Nutrition and Dietetics received six Rhode Island red hens.



OPERATIONS

FACILITIES SERVICES SEEKS OUT GREEN PRODUCT ALTERNATIVES

Green cleaning products

SLU's custodial service department is striving to be as environmentally friendly as possible and prides itself in purchasing green cleaning chemicals instead of synthetic chemical cleaners.

24% of expenditures purchased through Custodial Services in FY12 were either Green Seal and/or EcoLogo certified cleaning products.

Green products are selected based on efficacy and certification. Custodial Services uses Green Seal certified products, with the aim of increasing the amount of certified products over time.

The following is a list of green cleaning product vendors used on campus: Claire Manufacturing, Diversey, GOJO industries, PITT Plastics, SCA, & GP.

Recycled content Paper Towels, Tissues, and Napkins

Custodial Services over the past year placed EcoLogo™ stickers on Tork® paper towel dispensers in restrooms across campus in order to spread awareness of environmental choices that were made in the selection of these products. Tork paper products (towel, tissue and napkin) used on campus are certified by EcoLogo™ - the "Environmental Choice"



The EcoLogo™ program is a product certification program that is recognized as a Type-I Eco-label by the International Organization for Standardization (ISO), certifying environmental leaders using sustainable products. To receive certification, products are compared to others within specific categories and scientifically tested by relevant criteria throughout their lifecycle.

[PURCHASING]

RESEARCH SUPPLY VENDOR SHOWS (MAR & APR '13)

Biomedical research requires large amounts of materials, some of which can be recycled but much of which must be discarded due to chemical or biological contamination. Efforts to reduce the amount of waste generated as a result of research on the medical campus began with the showcasing of vendors who carry product lines manufactured and/or packaged in a more sustainable manner. Two “green product shows” were organized for the medical campus on March 21 and April 11, 2013, and for the Frost campus on March 21.

Greater sustainability in the production and distribution of research materials may be achieved by using reusable or recyclable packaging, using post-consumer materials where possible, providing recycling programs, and manufacturers using renewable energy sources. Vendors developing such sustainable practices were highlighted in the green product shows. The shows generated much interest among researchers, and resultant orders therefore benefited the vendors as well.

Labcon Product Show- April 11th, Barn-11:30



Donuts, Bagels, and Coffee
Come see what makes us
different from the rest!!



VWR Sustainable (Green) Labware
Made in America by Labcon
A Green Sustainable Company
Reduce, Reuse, Recycle



VWR Corning Tubes in Purple Rack

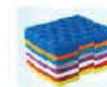


VWR Corning Tubes in Purple Rack



VWR Light Green Corning Tubes in Purple Rack

RECYCLING CAN BE OUR FUTURE



Recycle/Recycle Rack in Green/Blue Rack



Rack with EPDM plates (24" x 36" x 1/4")



VWR Rack (24" x 36" x 1/4")



VWR Rack (24" x 36" x 1/4")



VWR Rack (24" x 36" x 1/4")



VWR Rack (24" x 36" x 1/4")

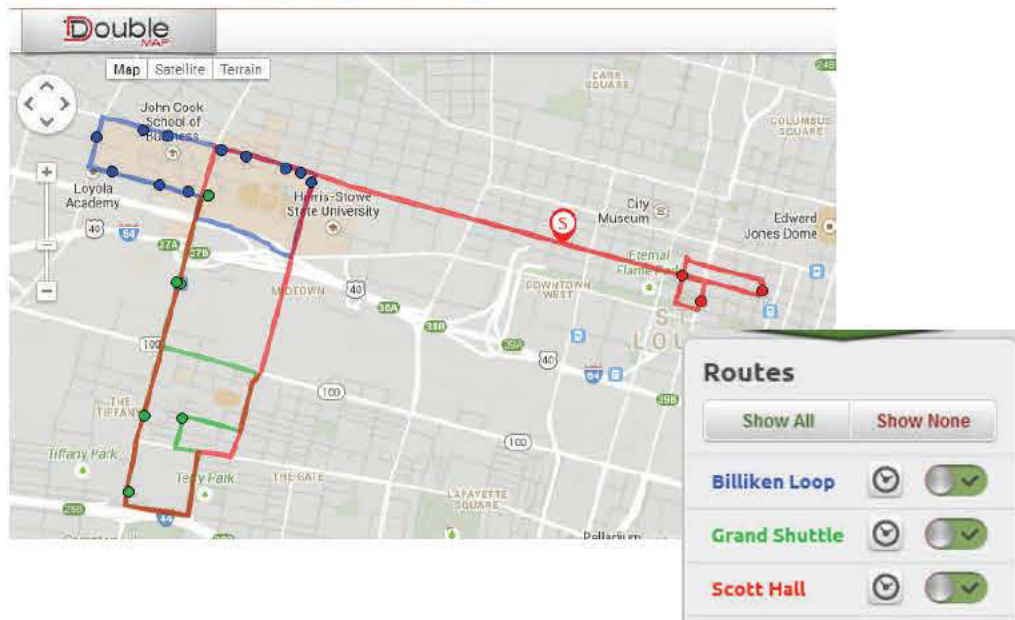
Order can be placed through www.vwr.com or 800-422-0000

OPERATIONS

PLANS TO IMPROVE SHUTTLE SERVICE (Spring '13)

The SGA Civic Affairs committee approached Transportation Services with the idea to incorporate a new digital shuttle tracking system into the Billiken Shuttle program. The committee wanted riders to have up-to-date access to shuttle bus routes and arrivals times, through a smartphone or web application. Planning for this service took place throughout the Spring and into the Summer months. With increased access to shuttle schedules and arrival times, it is anticipated that students will more frequently use the shuttle service to travel around campus, thereby eliminating additional cars and fossil fuels on campus.

Check out m.slu.edu to download the SLU mobile app



[TRANSPORTATION]

BIKE RACKS

Over the past year, SLU added several bicycle racks around campus to encourage people to embrace alternative transportation and make riding to and around campus safer and more convenient. Bike racks have been placed in covered parking garages, outside community buildings such as Pius XII Library and Simon Rec, and alongside residence halls.



Locking your bike on racks in garages, such as this one located in Laclede, assures that your bike will be under 24 hour surveillance.

Furthermore, as part of the effort to reduce bike thefts, DPSEP is registering all bikes on campus. While supplies last, U-shaped bike locks are being offered free of charge to students at the time of registration. Bike registration is available for faculty and staff, too. For registration dates and times consult SLU Public Safety on Facebook, SLUSAFETY on Twitter, contact 314-977-3000 or register anytime by visiting the DPSEP office at the Marvin and Harlene Wool Center between 8 a.m. and 6 p.m., Monday through Friday.

<http://www.slu.edu/x67902.xml>

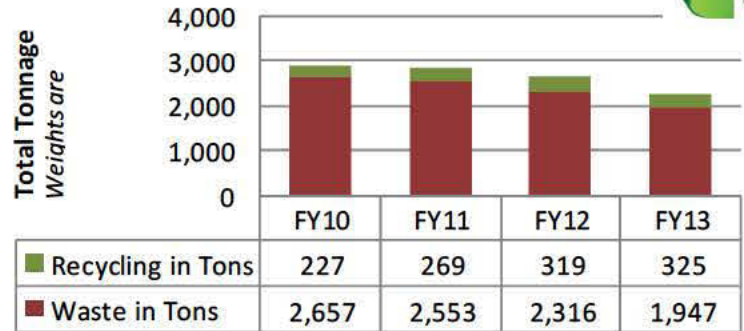
<http://www.slu.edu/Documents/facilities/Sustainability/Bike%20News.pdf>



OPERATIONS



Waste & Recycling in Tons



Over the past four years SLU has decreased its total waste and recycling disposal by 612 tons or a decrease of 21%.

Waste & Recycling Expense



Over the past 7 years our waste and recycling expenses have dramatically decreased by 27%

[WASTE]

The following waste streams are measured as landfill diversions:

- ⇒ Single-stream recycling
- ⇒ Yard/Food compost
- ⇒ Donations and reused items such as furniture and apparel

**Although SLU recycles electronics, waste from construction and demolition projects, and responsibly manages hazardous/chemical waste, these streams are not included in STARS diversion rate formula. They are measured separately.*

Facilities Services Sets Goal to Divert 30% of Waste

Facilities Services established a strategic goal for FY13 of reaching a waste diversion rate of 30%. In order to accomplish this goal the action plan team under Environmental Resource Optimization developed various recycling initiatives to increase the awareness of the recycling program on campus. Efforts to reach this goal involved expanding awareness and improving access. The division also performed a thorough analysis of waste diversion utilizing the STARS formula, (see left). Applying this formula to the data collected over the past four years allows the division to more accurately compare numbers and measure performance. Final Waste Diversion rate was 23% which was a increase of 2 % over the previous year.

Custodial & Maintenance Staff Trained in Recycling (Oct 15 – 31 '12)

As part of the exterior expansion of single-stream recycling, Waste Management helped train all custodial and maintenance staff on the best practices of recycling at Saint Louis University's Frost and Medical Center campuses. Team members learned about the wide variety of items collected through single-stream and the methods by which they can facilitate collection. They also received single-stream reference items and watched demonstrations to emphasize the potential for SLU to increase its recycling on campus.



OPERATIONS

In total, over 1000 “Green Billikens” representing the following groups learned about recycling in the past year:

- ⇒ Business Managers
- ⇒ Business School Student Government Association
- ⇒ Community & Family Medicine
- ⇒ Council of Academic Deans
- ⇒ Custodial Services
- ⇒ Doisy College of Health Sciences Staff Committee
- ⇒ Facilities Management
- ⇒ Faculty Senate
- ⇒ New Employees during Orientation
- ⇒ President’s Coordinating Council
- ⇒ Residence Hall Coordinators and RAs
- ⇒ School of Professional Studies Staff & Faculty
- ⇒ SLU 101 Trainers
- ⇒ Staff Advisory Council
- ⇒ Student Government Association
- ⇒ Sustainability Advisory Council
- ⇒ Sustainable Planet Learning Community

Educating the Campus Community (Oct ‘12 – Aug ‘13)

Taking advantage of her teaching background, Facilities Graduate Assistant, Kelley Krejnik, toured the campus to educate students, faculty and staff about the single-stream recycling program on campus. She designed a multitude of presentations to reach a varied audience of students, faculty, and staff. She supported her presentations with informational brochures to help community members understand how to maximize their daily recycling potential. (All single-stream presentation materials are available online.) A key aspect in this training was reaching all new-comers to the campus including new employees and incoming students. Accordingly, Kelley Krejnik and Brandon Verhoff presented Single-Stream Recycling during New Employee Orientation each month and stationed a booth at the SLU 101 Resource Fair for incoming students over the summer. Their presence at these activities assures that new community members are aware of the recycling programs here at SLU and are equipped with the knowledge required to participate and contribute to a more sustainable campus.

For more information go to recycling.slu.edu and click on single-stream or for news related items click on the navigation bar ‘news’.



[WASTE]



108 recycling receptacles, such as this one, were added to outside areas around campus.

Exterior Recycling Receptacles Unveiled (Oct '12)

At the close of FY12, Facilities Services diligently worked to draft an exterior recycling plan that was fiscally and environmentally responsible. After consulting with the SGA president and gathering other student input, the plan proposed pairing one recycling receptacle with every trash container on campus. To accomplish this, Facilities reduced the total number of trash containers by 40%, repainted the containers blue to identify them as recycling receptacles and purchased 36 new blue recycling receptacles. Repurposing existing containers saved the University money, approximately \$22,032 (repainting cost was \$187/can vs. \$493/can new), and reduced the transport and use of raw materials involved in the purchase of new receptacles. Vinyl labels were affixed on all recycling receptacles and trash containers to indicate the items that were acceptable to place in each container. These labels were introduced to educate and bring awareness to the recycling program.

St. Louis Green Ranks SLU among the 2012 Top Ten Contributors to "Furniture and Metal to Food" (Feb '13)

Distribution Services continued their practice of donating gently used furniture to St. Louis Green this past year, keeping it from entering a landfill. In fact, SLU received recognition in February 2013 for ranking among the Top Ten Contributors to St. Louis Green's "Furniture and Metal to Food" by donating 129,877 lbs. of furniture throughout the year. <http://stlouisgreen.com/furniture-and-metal-to-food/>

SLU donated
129,877 lbs. of
furniture to St.
Louis Green.



OPERATIONS

RecycleMania (Feb—Mar '13)

Facilities Services' Environmental Resource Optimization team amped up campus involvement in Recyclemania for the third year in a row. Jeff Macko managed the measuring and reporting of single-stream recycling while Keith McCune monitored the e-waste collections. By the end of eight weeks of competition, SLU had contributed 202,321 lbs. of single-stream recyclables and 68,038 lbs. of e-waste recyclables.

All of SLU's activities and results related to Recyclemania are now maintained online through Facilities Services SLU sustainability website at recycling.slu.edu.

In areas related to single-stream recycling, Facilities Services introduced an intra-collegiate rivalry titled, "Adopt-A-Spot," to improve collections of paper, metal, plastic, and glass recycling at SLU. Graduate assistant, Kelley Krejnik, organized the competition which encouraged staff and students to form teams and adopt different areas on campus where they improved the set-up, signage, and participation in single-stream recycling for that location. Team Biology Department took Grand Prize for their success in Macelwane Hall, while Team



Just Earth took second place for making improvements around Au Bon Pain (see above). Members of the winning teams took home prize packages that included movie tickets, Metro passes, and reusable water bottles, thanks to a stipend awarded by Recyclemania.

To further bolster SLU students' recycling IQ, Facilities collaborated with the Center for Sustainability, who hosted the first ever Can-Can Film Festival during the month of February. Graduate assistant, Stephanie Simoswki, helped program manager, David Webb, showcase four different recycling and waste related films followed by viewer discussions and Recyclemania trivia.

[WASTE]

E-Waste Drive (Mar '13)



Annually, Facilities Services hosts an e-waste recycling collection drive at Chaifetz Arena where SLU and local community members can drop off obsolete and beyond-repair electronics and appliances. SLU works with Missouri Recycling Center, an R-2 certified company, to assure that all collected items are safely recycled.

This year's drive, held on March 1, allowed Facilities Services to collect 19,361 lbs. of electronics and appliances from local community members plus an additional 48,707 lbs. from campus contributors. This effort led SLU to take 4th place in Recyclemania's E-Waste competition.



OPERATIONS

SLU places 4th place in the nation for e-waste Recyclemania competition!

College / University	Rank	Per Capita E-Waste (Pounds)	Total E-Waste (Pounds)
University of San Diego	1	8.198	80,421
Virginia Military Institute	2	4.601	10,734
Maryville University of Saint Louis	3	3.752	12,450
Saint Louis University-Main Campus	4	3.623	68,038
Walters State Community College	5	3.442	19,212
Stony Brook University	6	3.439	120,302
Anna Maria College	7	3.344	4,748
Edmonds Community College	8	2.81	23,667
Illinois Institute of Technology	9	2.553	20,063
Texas A&M University - Kingsville	10	2.355	21,730

[WASTE]

You've asked &
we listened!

Water Bottle Filling Stations

In an effort to reduce our waste on campus and based on student feedback, the University has been placing water bottle filling stations across campus. Many of these stations have been placed in key areas for student access. In new projects, Facilities Services has made an effort to include water bottle filling stations in major renovation projects. They have been placed in DuBourg Hall, Busch Student Center, Simon Rec Center, Pius Library, the Education Union, Center for Global Citizenship, and Scott Hall just to name a few.

This will increase the ability for students to utilize St. Louis' award winning water system around campus, further reducing the need to use disposable water bottles.



OPERATIONS

Gifts & Grants Develop Campus' Recycling Infrastructure

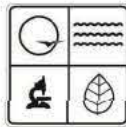
Alcoa Foundation Gifts Recycling Bins (Mar'13)

The University is one of 35 institutions that received a portion of more than 11,500 recycling bins to help strengthen its efforts to increase campus recycling. The Alcoa Foundation has partnered with Keep America Beautiful and the College & University Recycling Coalition to provide 1,548 recycling bins to Saint Louis University as part of the Alcoa Foundation Recycling Bin Grant Program. During the week of March 25th, the University placed two of the bins in every on-campus apartment to make it easier for students to recycle —SLU uses single-stream recycling, so students can put paper, metal, plastic and glass recyclables in the same receptacles.

<http://www.slu.edu/Documents/facilities/Sustainability/alcoa%20foundation%20gift%20release%20march%202013.pdf>



[WASTE]



Missouri Department
of Natural Resources



Grant Funding Greens Chaifetz Arena (May '13)

The St. Louis-Jefferson Solid Waste Management District and the Missouri Department of Natural Resources awarded a \$30,000 grant to expand SLU's single-stream recycling program to Chaifetz Arena. By the beginning of 2013-2014 basketball season, Big Belly Solar trash and recycling receptacles will greet Billiken fans at each of the three public entrances. Plus, the grant will add blue single-stream recycling receptacles, event equipment, and educational signage throughout the complex. Increasing the availability of recycling receptacles and improving marketing should increase the university's total annual recycling to 52 tons. Furthermore, the efforts will educate and encourage patrons from the campus, district and region to increase their recycling habits elsewhere.

Obtaining this grant would not have been possible without the hard work and collaboration of the following individuals: Brandon Verhoff & Caeden Sweet (Service Operations), Jeff Macko (Grounds Services), J.R. Westveer (Global Spectrum), Robert McNair & Abuduwasiti Wulamu (Center for Sustainability), Jeff Hovey & John Koenig (Business Services), and Matthew Krob (SLU Marketing & Communication).

<http://www.slu.edu/news-prof-gets-sustainability-grant-614>



OPERATIONS

Need a recycling
bin for your area?
Place a service
request through
FAMIS @
famisweb.slu.edu

Interior Recycling

With the completion of our exterior recycling plan, our focus has now changed to developing an interior recycling plan. Although still in development stages, an interior recycling plan will include best practices, standardization of bins, placement, and signage.

Steps have taken place to increase the number of bins available for campus users with the addition of a process to request bins through our FAMIS work order system.



CFK E-waste Collection Program

The Student Government Association's (SGA) Sustainability committee took on the task this year of integrating the CFK (Cartridges for Kids) program to collect e-waste items for the residence halls on campus and other major student spaces. Look for a box near you!



[WASTE]

14% of expenditures
of office paper
purchased by all of
SLU in FY12 was
made of recycled
content

The Student Success Center Takes Strides to Save Paper

The Student Success Center on the Medical Campus has succeeded in going all electronic with regard to student record keeping and the processing of forms. This past year, program Director Leslie Lattimore transitioned the office from a system where all student files were kept as hard paper copies to one where each advisor maintains those records on an electronic database via Banner that is accessible by all. This allows them to cut back on unnecessary copying and printing, thus eliminating most paper waste from their operation.

As well as moving to a system of electronic record keeping, the office has begun to originate all their forms and paperwork electronically and has encouraged students and other departments to do the same. They have collaborated with the Office of the Registrar to work on making many documents available online, cutting back on the need for paper documentation of any sort.

By taking the lead in the endeavor to go paperless, the hope is that the rest of the University will follow suit and that in a matter of years, SLU will have significantly reduced consumption and waste, resulting in a cleaner, greener, and more versatile and modern campus environment.

STUDENT  **SUCCESS**CENTER
Medical Center



OPERATIONS

Battle for the Boot

Yvonne McCool, Staff Advisory (SAC) Corresponding Secretary, helped SAC sponsor SLU's second year of participation in a shoe drive to support Shoeman Water Projects. The "Battle for the Boot" is a friendly competition between SLU and Wash U intended to boost the donation of shoes (wearable, no holes, new or used) to be distributed to communities in need. Shoeman Water Projects sells the donated shoes by the pound to distributors who then send them to developing



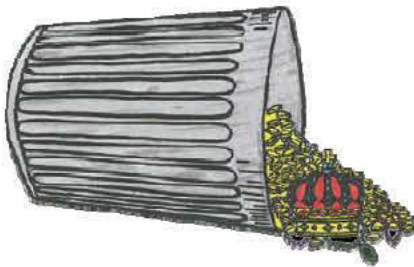
countries in Africa, the Caribbean, and Central America. The "Shoeman," George Hutchings, uses the revenue from the shoe sales to drill for wells and install pumps and purifiers for clean drinking water for communities in need. This season, SLU met its goal to donate at least 7,000 pounds of shoes, marking its second consecutive win against Washington University.

<http://www.slu.edu/news-battle-of-the-boot-award-to-slu-625>



Yvonne McCool Shows heartfelt appreciation for Distribution Service's help with the shoe drive. Distribution Services helped pick up 7,067 pounds of shoes or 5,496 pairs.

[WASTE]



Trash to Treasure contributed 12,823 lbs. of items valued at \$29,758 to local charities, including the St. Vincent de Paul Society, Salvation Army, Campus Kitchen, and the International Institute.

Trash to Treasure Reduces Waste at Move-Out (Dec '12 & May '13)

The Center for Service and Community Engagement worked towards greater sustainability on campus through the Trash to Treasure move-out program. In collaboration with Facilities Services and Housing and Residence Life, the CSCE collected almost 1,000 pounds of unwanted furniture, appliances, clothing, books and unopened food from students who were leaving for Christmas Break. During the Spring 2013 Trash to Treasure program, students leaving campus donated 11,826 lbs. of items with an estimated value of \$28,001.

To collect items, the program strategically set up tents at Reinert Hall, Marchetti West, Griesedieck Hall, Pruellage Hall, Village Apartments, Fusz Hall and in the alley between DeMattias and Marguerite Halls. Collected items were donated to charities in St. Louis like St. Vincent de Paul Society and the SLU Campus Kitchen while unusable items were given to various recycling agencies.

This donation program allows the University to save money on waste disposal and for the surrounding community to reap the benefits. Furthermore, a move-out program such as Trash to Treasure teaches students sustainable behavior and instills in them the importance of environmental stewardship. As society increasingly understands the critical need for environmental protection, the move-out program and other “green” programs will help students to become better citizens of the global community.

<http://www.slu.edu/facilities-services-home/slustainability/recycling-and-waste-reduction/reuse/trash-to-treasure>



STARS CATEGORIES

The following descriptions are taken from the STARS Version 1.2 Technical Manual.

Planning, Administration and Engagement

Coordination and Planning

This subcategory seeks to recognize colleges and universities that are institutionalizing sustainability by dedicating resources to sustainability coordination, incorporating sustainability into their primary campus plans, and developing plans to move towards sustainability. Staff and other resources help an institution organize, implement, and publicize sustainability initiatives. These resources provide the infrastructure that fosters sustainability within an institution. Strategic and physical campus plans guide an institution and its physical development. These important documents establish an institution's priorities and influence budgeting and decision making. Incorporating sustainability into these plans is an important step in making sustainability a campus priority and may help advocates implement sustainable changes. Sustainability plans and climate plans provide a road map for how to achieve sustainability goals.

Diversity and Affordability

This subcategory seeks to recognize institutions that are working to advance diversity and affordability on campus. In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. People of color and low-income communities tend to suffer disproportionate exposure to environmental problems. This environmental injustice happens as a result of unequal and segregated communities. To achieve environmental and social justice, society must work to address discrimination and promote equality.

The historical legacy and persistence of discrimination based on racial, gender, religious, and other differences makes a proactive approach to promoting a culture of inclusiveness an important component of creating an equitable society. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open through affordable programs accessible to all regardless of race, gender, religion, socio-economic status and other differences. In addition, a diverse student body, faculty, and staff provide rich resources for learning and collaboration

Human Resources

This subcategory seeks to recognize institutions that have incorporated sustainability into their human resources programs and policies. This includes recognition for treating and remunerating their workers responsibly and fairly. An institution's people define its character and capacity to perform; and so, an institution's achievements can only be as strong as its community. An institution can bolster the strength of its community by making fair and responsible investments in its human capital. Such investments include offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers. Investment in human resources is integral to the achievement of a healthy and sustainable balance between human capital, natural capital, and financial capital.

In addition, this subcategory recognizes faculty and staff training and development programs in sustainability. Faculty and staff members' daily decisions impact an institution's sustainability performance. Equipping faculty and staff with the tools, knowledge, and motivation to adopt behavior changes that promote sustainability is an essential activity of a sustainable campus.

Public Engagement

This subcategory seeks to recognize institutions that give back to their communities through community service, engagement, and partnerships. Volunteerism and the sense of compassion that community service helps develop are fundamental to achieving sustainability. From tutoring children to removing invasive species to volunteering at a food bank, students, faculty, and staff can make tangible contributions that address sustainability challenges through community service. Community engagement can help students develop leadership skills while deepening their understandings of practical, real-world problems. Institutions can contribute to their communities by harnessing their financial and academic resources to address community needs. For example, faculty research and courses can focus on how to address community problems. In addition, colleges and universities can offer incentives for their graduates to pursue careers that fill community needs, and schools can use their prominence to advocate for sustainability outside of their institutions.





STARS CATEGORIES

Education & Research

Co-Curricular Education

This subcategory seeks to recognize institutions that provide their students with sustainability learning experiences outside the formal curriculum. Engaging in sustainability issues through co-curricular activities allows students to deepen and apply their understandings of sustainability principles. Institution-sponsored co-curricular sustainability offerings, often coordinated by student affairs offices, help integrate sustainability into the campus culture and set a positive tone for the institution.

Curriculum

This subcategory seeks to recognize institutions that have formal education programs and courses that address sustainability. One of the primary functions of colleges and universities is to educate students. By training and educating future leaders, scholars, workers, and professionals, higher education institutions are uniquely positioned to prepare students to understand and address sustainability challenges. Institutions that offer courses covering sustainability issues help equip their students to lead society to a sustainable future.

Research

This subcategory seeks to recognize institutions that are conducting research related to or focused on sustainability. Conducting research is a major function of many colleges and universities. By researching sustainability issues and refining theories and concepts, higher education institutions can continue to help the world understand sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

Operations

Buildings

This subcategory seeks to recognize institutions that are taking steps to improve the sustainability performance of their buildings. Buildings are generally the largest user of energy and the largest source of greenhouse gas emissions on campuses. Buildings also use significant amounts of potable water. Institutions can design, build, and maintain buildings in ways that provide a safe and healthy indoor environment for inhabitants while simultaneously mitigating the building's impact on the outdoor environment.

Climate

This subcategory seeks to recognize institutions that are measuring and reducing their greenhouse gas emissions. Global warming is expected to have myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are expected to be particularly pronounced for poor communities and countries.

Dining Services

This subcategory seeks to recognize institutions that are supporting a sustainable food system. Modern industrial food production often has deleterious environmental impacts. Pesticides and fertilizers used in agriculture can contaminate ground and surface water, which has potentially dangerous impacts on wildlife and human health. Furthermore, the often long-distance transportation of food to institutions produces greenhouse gas emissions and other pollution. Additionally, farm workers are often paid substandard wages, subjected to harsh working conditions, and exposed to dangerous pesticides. Institutions can use their food purchases to support their local economies; encourage safe, environmentally-friendly farming methods; and help alleviate poverty for farmers. Please note that while dining services can also play an important role in conserving energy and water, reducing waste, and purchasing environmentally preferable materials other than food, STARS measures these impacts across the institution instead of by department; therefore, the benefits of these actions are captured in the Energy, Water, Waste, and Purchasing subcategories, respectively.



STARS CATEGORIES

Operations cont.

Energy

This subcategory seeks to recognize institutions that are reducing their energy consumption through conservation and efficiency, and switching to cleaner and renewable sources of energy such as solar, wind, geothermal, and low-impact hydropower. For most institutions, energy consumption is the largest source of greenhouse gas emissions, which cause global warming. Global warming is expected to have myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are expected to be particularly pronounced for poor communities and countries. In addition to causing global warming, energy generation from fossil fuels, especially coal, produces air pollutants such as sulfur dioxide, nitrogen oxides, mercury, dioxins, arsenic, cadmium and lead. These pollutants contribute to acid rain as well as health problems such as heart and respiratory diseases and cancer. Coal mining and oil and gas drilling can also damage environmentally and/or culturally significant ecosystems. Nuclear power creates highly toxic and long-lasting radioactive waste. Large-scale hydropower floods habitat and disrupts fish migration. Implementing conservation measures and switching to renewable sources of energy can help institutions save money and protect them from utility rate volatility. Renewable energy may be generated locally and allow

campuses to support local economic development. Furthermore, institutions can help shape markets by creating demand for cleaner, renewable sources of energy.

Grounds

This subcategory seeks to recognize institutions that plan and maintain their grounds with sustainability in mind. Beautiful and welcoming campus grounds can be planned, planted, and maintained in any region while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving water and resources.

Purchasing

This subcategory seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, institutions spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.

Transportation

This subcategory seeks to recognize institutions that are moving toward sustainable transportation systems. Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. Due to disproportionate exposure, these health impacts are frequently more pronounced in low-income communities next to major transportation corridors. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally and/or culturally significant ecosystems and may financially benefit hostile and/or oppressive governments.

At the same time, campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage storm water. Institutions may realize cost savings and help support local economies by reducing their dependency on petroleum-based fuels for transportation.

Waste

This subcategory seeks to recognize institutions that are moving toward zero waste by reducing, reusing, recycling, and composting. These actions mitigate the need to extract virgin materials, such as trees and metals. It generally takes

less energy and water to make a product with recycled material than with virgin resources. Reducing waste generation also reduces the flow of waste to incinerators and landfills which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Waste reduction and diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.

Water

This subcategory seeks to recognize institutions that are conserving water and making efforts to protect water quality. Pumping, delivering, and treating water is a major energy user, so institutions can help reduce energy consumption and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation and effective stormwater management are important in maintaining and protecting finite groundwater supplies. Water conservation and effective stormwater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.





SLUstainability

For Questions about this report:

Education & Research

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Operations

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