

WKU OFFICE OF SUSTAINABILITY

2013 REVIEW



PREPARED BY THE WKU OFFICE OF SUSTAINABILITY

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Office of Sustainability 2013 review

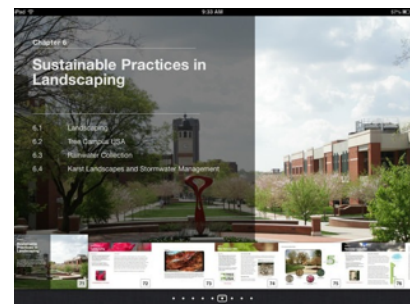
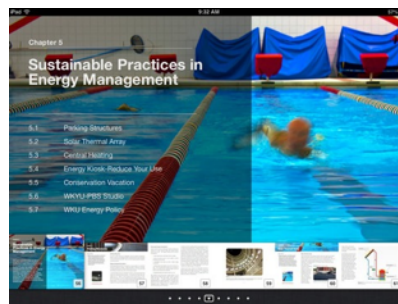
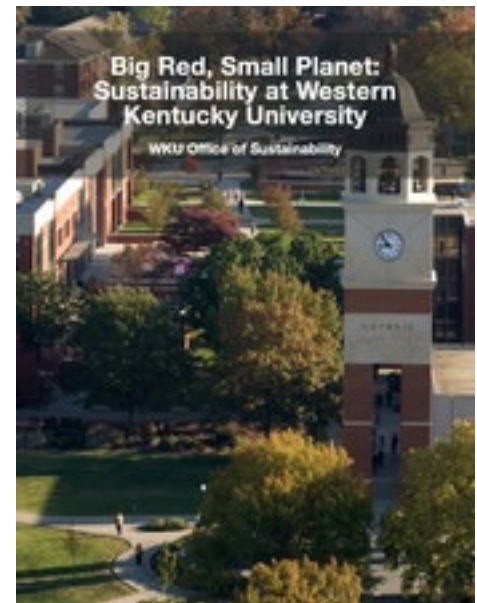
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Introducing the WKU Sustainability e-book!

The WKU Office of Sustainability and Hoffman Environmental Research Institute partnered in 2013 to create the first WKU Sustainability e-book, *Big Red, Small Planet: Sustainability at Western Kentucky University*, published by Apple and available for download with iBooks on mac or iPad, and with on iTunes on computers.

The e-book is interactive and allows readers to dig as deep as desired into topics from Education for Sustainability at WKU to best practices in campus operations and facilities. Photo galleries, videos, and even audio files tell the story of sustainability at WKU.



The 2013-2012 WKU Sustainability Report can be [viewed as a pdf](#) or as an [interactive e-book at the iTunes bookstore](#).

Local Food for Everyone

2013 was the second year of the two-year USDA local food promotion grant, which funded the *Local Food for Everyone* initiative, a collaboration between WKU, the Community Farmers Market, and the WKU Agriculture Department.

What happened in year two:

The first issue of [eat.], the local food directory, was published in Spring 2013 with great celebration and release party at the Office of Sustainability in April 2013. Both the Spring and Fall 2013 editions are absolutely beautiful and filled with information on local food.

The Mobile Market idea was finally realized. Working with Rustic Nail and Company, we obtained a reliable old school bus, and turned it into our mobile market, so that food can be taken to those who can't come to the market. The Mobile Market debuted at the AASHE conference in Nashville, where it received much attention.

The grant allowed the Community Farmers Market to receive training and equipment to accept SNAP, EBT, and WIC payments, a practice that began in summer 2013.

The Community Farmers Market moved into a new home for winter market 2013/2014. Giving the old formerly-known-as Heritage Building at 2319 Nashville Road a new life, the Community Farmers Market has secured a \$1 per year lease for the WKU property. The market made many improvements to the building and operates there on Tuesdays and Saturdays.



Becoming a Bicycle Friendly University

In 2013, the Office of Sustainability's Big Red Bikes teamed up with Dr. Jennifer Tougas and Helen Sievers to complete the League of American Bicyclists "Bicycle Friendly University" application. The application process was arduous, but in fall 2013, WKU was awarded Bicycle Friendly University status at a Bronze Level. This is WKU's first time to receive this award, and we are only the third university in the commonwealth to receive this recognition.



See the press release here: <http://wkunews.wordpress.com/2013/11/14/bike-friendly/>

In 2013, Big Red Bikes Coordinator student Madonna May wrote a proposal for the Kentucky Bicycle and Bikeway Commission's Paula Nye Memorial Bicyclist and Pedestrian Education Grant. We were awarded funds totaling \$10,400, allowing for update of equipment in the bicycle shop to help keep up with rental demand. The grant funds were also used to purchase and install bicycle repair stands on campus to benefit bicyclists who pass through or ride on campus.

Reflecting on 2013, Big Red Bikes has been a great service to WKU students, faculty, and staff by offering free bicycle rentals. Big Red Bikes has also earned national and local press coverage for our successes, and will be featured in the February 2014 *Kentucky Living Magazine*.

In 2013, the Office of Sustainability rented 203 bicycles to students, faculty, and staff.



Troy Hearn from Kentucky Bicycle and Bikeways Commission stopped by to visit Madonna and the home of Big Red Bikes.

503 Regents Ave - best practices demonstrated.

October 2013 marked our one year anniversary in the house at 503 Regents Ave. The house offers wonderful space for the Office of Sustainability activities, including the Big Red Bike shop, interns' office, herb garden, and yet to be developed best practices for the sustainable home. Before putting ideas into practice, we wanted to develop a one-year baseline for utility use, and to gather some other baseline data.

We installed a smart meter on the house early in the year to track utility usage, and the WKU Engineering students worked with faculty Robert Choate and C&W Insulation to perform cold and warm weather blower door tests and record thermal images to illustrate air leaks. Now, after one year of occupancy with no improvements, we have begun the transformation of 503 Regents to demonstrate best practices for home owners.

Signature Blinds installed insulated blinds throughout the house at material cost, improving looks and performance.

WKU Information Technology installed digital signage so that we can acknowledge our sponsors, share information on our project, and track energy use and solar production in real-time.

Capital Window and Door donated and installed all new windows for the house in October 2013! The windows include several varieties featuring various levels of efficiency so that we can demonstrate differences between types with thermal images and interpretive signage. The windows instantly made the house look and feel much better!

WKU students have initiated *Project Grow*, to create a community garden in the back yard of 503 Regents that will be supported by the Ecology Club, Student Government Association, GreenToppers, AID, and a variety of course projects.

All furniture in the house has been source from **WKU Surplus** and refurbished as needed by volunteers.

The front yard herb garden features sage, lavender, thyme, and rosemary. **The garden was installed by WKU Grounds and Gardens in Spring 2013** utilizing herbs leftover from a student course project.

Coming in Spring 2014:

A **photovoltaic solar array** will be installed by Solar Energy Pioneers, made possible in part by a grant from the Alliance to Save Energy and Tennessee Valley Authority. The array will generate more electricity than we will use at 503, allowing us to feed energy to the grid for which we will earn credit from the utility company.

Work will begin on the backyard **community garden**, which will demonstrate growing techniques including Hugelculture, permaculture, and other methods of backyard food production.



Helping to Host AASHE

The Association for the Advancement of Sustainability in Higher Education hosted their annual conference in Nashville in October 2013. WKU embraced the opportunity to support our favorite higher education sustainability organization by being a Master Sponsor. Our WKU logo was proudly displayed in all conference materials and signage, and Dr. Ransdell welcomed

guests with a warm letter in the conference schedule. But most importantly, approximately 25 faculty, staff, administrator, and student representatives were able to attend the conference, sharing our campus accomplishments and learning much from our peers.



The Mobile Market bus made its debut in the AASHE conference Expo Hall

As a Master Sponsor, WKU had the opportunity to host a university tour, which was attended by approximately 30 attendees from universities and organizations around the world. Our guests were from China, Japan, Australia, Canada, Africa, and all around the United States. They thoroughly enjoyed the WKU Green Tour, which kicked off with a welcome by Dr. Ransdell and ended with lunch in the Lost River Cave. Since the tour many of our guests have contacted me to tell me how inspired they are by our efforts and accomplishments!

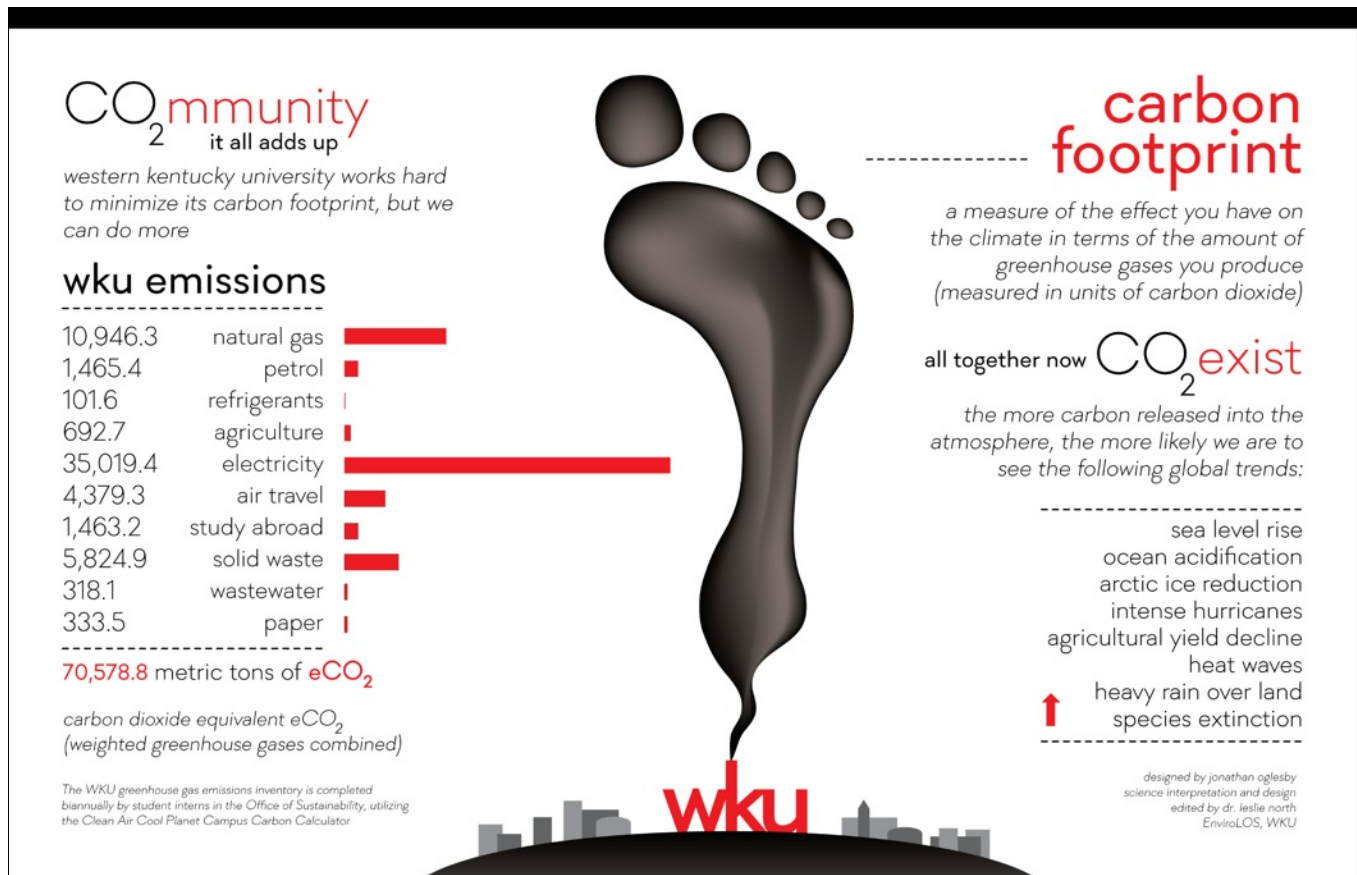


Guests enjoy a local lunch in the Lost River Cave ballroom.

Measuring WKU's carbon footprint

Every other year the Office of Sustainability conducts a study of WKU's carbon footprint. We look at greenhouse gas emissions resultant from university related travel (air, fleet, and shuttles), on-site use of fossil fuels, purchased electricity, fertilizer used in grounds maintenance, and other sources. In 2013 Office of Sustainability interns Ashley McCloughan and Sophia Sterlin gathered and interpreted data from across the university. Using the Clean Air Cool Planet campus carbon calculator, they determined WKU's carbon footprint for 2012.

The results are illustrated below in a beautiful infographic created for us by Jonathan Oglesby in the Hoffman Environmental Research Institute.



Sustainability Scholarship and Student Engagement

In 2013, the Global Pathways to Sustainability Scholarship was initiated, to encourage and support sustainability research, engagement, and scholarship. The scholarship is sponsored by the Department of Diversity and Communities Studies' graduate program in Social Responsibility and Sustainable Communities, the Office of Sustainability's Green Fund, and University College.

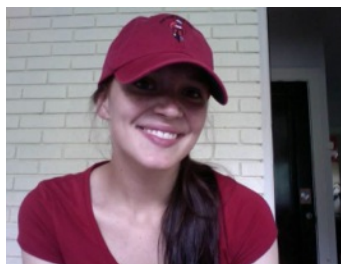
The first recipients were Katelyn Highbaugh and Andrew Salman. Highbaugh, a sociology major at WKU-Glasgow, is a member of the WKU-Glasgow Greentoppers, participated in the "Awakening the Dreamer" symposium and conducted research on a feed-in tariff system for solar energy during an internship with Kentuckians for the Commonwealth.

Andrew Salman, a student in the Honors College at WKU who is majoring in political science and biology, has served as a teaching and research assistant in WKU's Institute for Citizenship and Social Responsibility and presented his Honors thesis on "Building a Better Office of Sustainability: Documenting Sustainable Change at WKU" as part of the recent Association for the Advancement of Sustainability in Higher Education conference.

Check out the news release [here](#).

Office of Sustainability Student Staff

Interns Ashley McCloughan, Mary Boothe, Mary Newton, and Sophia Sterlin assist with all things "energy", including planning for Campus Conservation Nationals, research carbon emissions data, and energy conservation education and awareness activities.



Honors thesis advised by the Sustainability Coordinator completed and in progress:

In Spring 2013, Honors College Biology Major Ashley McCloughan defended her Honors Thesis: *Rainwater Harvesting: Examining the Potential of Rainfall Collection as a Stormwater Best Management Practice and Supplement to Municipal Water at WKU* with Honors. Available for full download [here](#).

Social Responsibility and Sustainable Communities Masters student Beth McGrew is using the backyard of 503 Regents as her Thesis project, engaging students across campus to create a campus community garden educational and edible landscape.

Andrew Salman, Biology and Political Science Major, will complete his Honors Thesis: *Building a Better Office of Sustainability: Documenting Sustainable Change at WKU* in Spring 2014. Andrew earned his LEED Green Associate Accreditation in Summer 2013.

WKU Americans for an Informed Democracy were busy in 2013. In February they partnered with the Office of Sustainability and GreenToppers to host the first Farm to Campus Convergence and their signature annual 100-mile dinner which was attended by more than 100 hungry guests. The Farm to Campus Convergence was open to students from all over Kentucky.

The 100-mile dinner was sponsored by the Office of Sustainability, Office of Research, and WKU AID. Home Cafe Chef and Owner Josh Poling assisted students on food menu and preparation. O'Daniels Farm, Esters Farm, JD Bakery, and Need More Acres provided local food.



In Fall 2013, eleven AID students attended Power Shift, an annual youth environmental conference, in Pittsburgh. The trip was made possible with funding support from SGA, the Office of Sustainability, the Institute for Citizenship and Social Responsibility, the Office of Research, and the Kentucky Student Ecological Alliance.

Upon their return, student attendees hosted a "Sustainability Teach-In" at the Institute for Citizenship and Social Responsibility to lead discussions on various environmental issues, such as fracking, mountaintop removal, tar sands, local food, permaculture, the school to prison pipeline, how to organize around these issues, and how to overcome these challenges on campus and in the community.



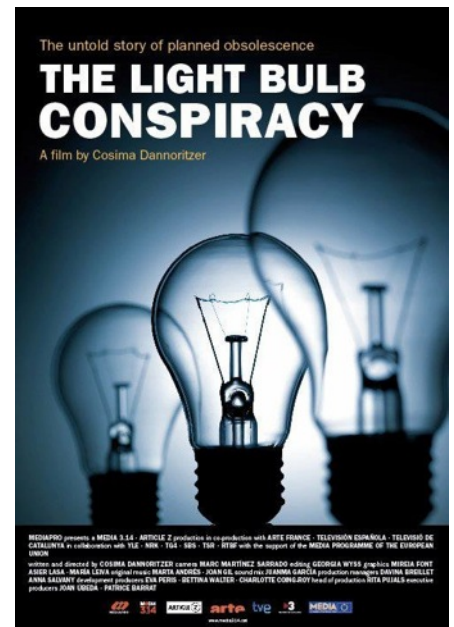
Campus Conservation Nationals - Bluegrass Unplugged



In 2013 WKU participated in the Campus Conservation Nationals for the first time, engaging in a regional competition with Berea, University of Kentucky, and University of Louisville dubbed *Bluegrass Unplugged*. The goal: to conserve the most energy in a three week period over your own baseline. The winner: Hilltoppers with 3-week savings of kWh.

The WKU PowerSave Interns supported the competition through awareness and education activities. To kick off the event they hosted an acoustic concert in the Kentucky Building. The coffee shop style event was a huge success, featuring local talent, Fair Trade coffee, and a great vibe! Additionally, the interns hosted a mini-

film series of resource conservation related films including The Lightbulb Conspiracy. They offered a green campus scavenger hunt during Earth Hour, with glow sticks and great prizes and hosted a sustainability themed open mic night.



Acoustic concert-

left: Three People (photo credit John Scarpa)

below: Buffalo Rodeo (photo credit Kendra McCloughan)



Open mic impromptu performance, "Hard Times are to Come" - fantastic!

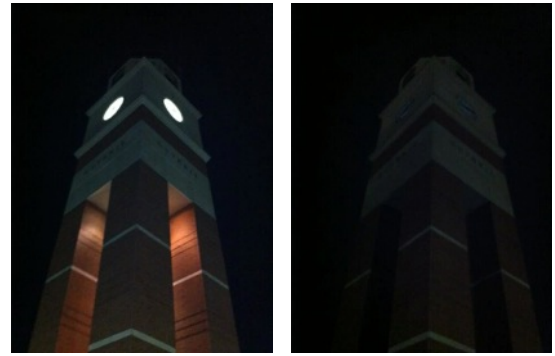
Earth Hour...Earth Week... Earth Day!

For the very first time, **WKU participated in Earth Hour on March 23, 2013**. Iconic lights went out for the hour all around campus, symbolizing WKU's commitment to sustainability.

Earth Week *Switch* film screening

WKU's Department of Geography and Geology and the Office of Sustainability presented a screening of *Switch*, an award-winning documentary on what it will take to switch from current sources of energy to a future powered by more sustainable sources of energy.

Following the screening was a question-and-answer session with a panel of WKU faculty and staff experts including: Dr. Fred Siewers, associate professor of geology; Christian Ryan-Downing, sustainability coordinator; Dr. Michael May, professor of geology; Dr. Kevin Schmaltz, professor of engineering; and Dr. Jennifer Tougas, director of WKU Parking and Transportation.



Guthrie goes dark for Earth Hour 2013.



Seventh Annual Earth Day Festival

The WKU Office of Sustainability and GreenToppers will host the seventh annual WKU Earth Day Festival on April 26 in the Centennial Mall on the main campus. The festival featured sustainability demonstrations, art, music and food from campus and community. The more than 30 participants include campus student organizations, university departments and classes, community organizations and local businesses, and more.

This year's festival featured a Free T-shirt Trade sponsored by the WKU Store and a Free Recycling Event sponsored by WKU Recycling. Also new this year, 100 percent of the electricity used

to host the festival was matched with renewable energy generated in the Tennessee Valley, provided by Bowling Green Municipal Utilities and TVA's Green Power Switch program.

Other Sustainability Events and Advances...

Sam Avery author lecture

The Office of Sustainability partnered with the Social Responsibility and Sustainable Communities program and University College to present Sam Avery, author of *The Pipeline and the Paradigm: Keystone XL, Tar Sands, and the Battle to Defuse the Carbon Bomb* in the fall of 2013. The dinner, lecture, and following question and answer session were well-attended and a great success.

Chad Pregracke - Campus Sustainability Day

The Office of Sustainability and University College hosted Chad Pregracke, founder of Living Lands & Waters and one of the top ten CNN Heroes of 2013, for Campus Sustainability Day.

Food Day

The second annual Bowling Green Food Day was hosted by WKU's Office of Sustainability, Barren River District Health Department, Local Food for Everyone initiative and the Community Farmers Market, on October 24, 2013 at WKU's L.D. Brown Agricultural Exposition Center.

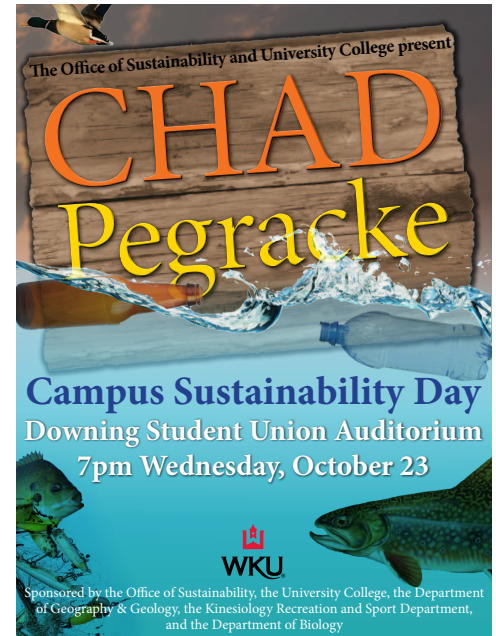
Food Day activities included keynote speaker Brigitte Nguyen, Cooking Channel and Kentucky Proud Kitchen Host; morning sessions on healthy eating, backyard gardening and small-scale farming; presentation of 2013 Food Day Awards and an afternoon Kentucky Café networking session with regional and state experts. The event concluded with WKU Farm Tours, hay rides with Big Red and a Farmers Market.

LEED building

In 2013 WKU earned LEED Silver certification for its second new building, the FAC Music Recital Hall.

Food waste composting in Fresh Food Company

In 2013, as part of the Fresh Food Company DSU renovation, a food waste pulper and collection system was designed and installed. Pre and post consumer food waste will be pulped and taken to the Baker Arboretum to be finished as soil enriching compost to be used on-site. The food waste composting program will reduce the university solid waste significantly, consequently reducing waste costs and WKU's carbon footprint.



The Green Tour Grows

The students in Dr. Leslie North's 2012 GEOG 455 *Global Environmental Change* course researched and prepared content and design for two new WKU Green Tour signs: Gary Ransdell Hall LEED Gold certification and Tree Campus USA. The signs were installed in April 2013.



Accolades...

WKU is included in the Princeton Review's Guide to Green Colleges for 4th consecutive year.

The Office of Sustainability was recognized by the WKU Office of Research with a 2013 "Most Prolific Proposer by College" award for number of grant proposals written and submitted.

