



# SUSTAINABILITY SPOTLIGHT

May 2013

## Climate Change, Sustainability, and the Food We Eat

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Human-caused climate change is a biophysical indicator that we are moving away from sustainability on a global scale. This is bad news if you like to eat, for agriculture and climate are intricately tied. Climate is a necessary resource for agricultural production. Yet, according to a recent study by Vermeulen and colleagues, agriculture contributes between 80-86% of our global food system emissions and between 14-24% of total global emissions responsible for climate change.



To gauge our food's climate impact, we can ask questions like: How much energy and water were used to produce it? What was the scale of production? And, how low is it on the food chain? As long as the food is not transported by air, how far the food traveled to get to our table may not contribute as much to emissions as previously thought. An analysis by Weber and Mathews in 2008 found that for the overall global carbon footprint of food 11% was related to food miles and 83% was related to how the food was grown.

Researchers and organizations that attempt to do full life-cycle accounting for carbon and water footprints of global food products find that it is not a simple task, as agricultural production methods, transportation routes, and material prices fluctuate over time. Foodprints vary from region to region and country to country, and leakage impacts make it difficult to quantify which locale is contributing more or less to sustainable food production. For example, Vermeulen and colleagues found that 51% of China's production-based food chain greenhouse gas emissions are related to agriculture and 29% are related to fertilizer manufacture. In the UK, 40% of emissions are related to agriculture but only 1.65% are related to fertilizer manufacture. At the same time, a study by Peters and colleagues found that in 2007 alone Europe imported 104 TgC (teragrams or  $10^{12}$  of carbon) in goods and services from China produced by the consumption of fossil fuels. Likewise, the US imported 102 TgC in goods and services from China.

Fossil fuel inputs and prices influence food production through direct costs associated with energy use and indirect costs associated with fertilizer, herbicides, insecticides, and irrigation. While we may know that the “big five” commodity crops in industrialized agriculture - corn, cotton, rice, soybeans, and wheat - are subsidized, we need to remember that the fossil fuels used to produce them are also subsidized. Consequently, we are not paying the real cost of food. Unless we are purchasing food produced without fossil fuel inputs, we can be sure that we are not paying for externalities associated with environmental degradation and climate change.

Climate-smart agricultural practices and landscapes offer a solution to both mitigate human-caused climate change and help move our food systems back toward sustainability. The Food and Agriculture Organization defines climate-smart agriculture as “adopting an ecosystem approach, working at landscape scale and ensuring intersectoral coordination and cooperation.” Climate-smart agriculture aims to build and restore agricultural systems to increase food security, enhance rural livelihoods, and enable climate change mitigation and adaptation. It relies on the principles of integrated landscape management with a high level of diversity and practices that include maintenance and enhancement of soil carbon stocks, best practices for water-use efficiency, and integrated nutrient management through livestock manure, green manure and nitrogen-fixing cover crops.

For those of us who cannot help build and maintain climate-smart agricultural landscapes, we can take actions that will encourage others to do so. As consumers, we have the power to send a market signal to invest in our future through careful selection of the food we eat. Eating less meat and dairy products, giving preference to truly organic products, and eating seasonal local will help us all be prepared to pay for the real cost of real food, while mitigating climate change and supporting more sustainable agriculture. Visit the [CCAFS site](#) for more information on global agricultural emissions.



## Interested in Becoming a Sustainability Ambassador?

Serve as a Sustainability Ambassadors for your departments, administrative units, or student organizations. The ambassador network strives to create a more sustainable KU through generating new ideas, establishing partnerships, and sharing information about sustainable research and practices with the campus community. For more information visit [www.sustainability.ku.edu/ambassadors](http://www.sustainability.ku.edu/ambassadors) or email [sustainability@ku.edu](mailto:sustainability@ku.edu).

## Student Move Out Finds New Homes for Old Things

In just a few days campus will go from buzzing with students finishing up projects and studying for finals, to a quiet campus on summer break. However, this transition is not made without excess stuff. On campus residents moving out often leave behind furnishings, clothing, and food items that are no longer needed, or just won't fit in truck of their car. The Center for Sustainability, along with KU Surplus and KU Recycling, are helping to find new homes for many of these items and continue the 3 R's cycle. This year, the Center will be working with Habitat for Humanity of Topeka, Planet Aid, and Just Food to collect any items that students no longer need. KU Surplus has set up designated drop locations around campus where students can leave items as they move out of their residence hall. The items then go to the organizations for reuse in a new home. This year the program has also been extended to participating Greek Houses, making KU's reuse impact even greater.



## Recycling & Repurposing Graduation Gowns

Ever wonder what happens to all the graduation gowns that walk through the Campanile each year? For the second year, the graduation gowns that are ordered through KU Bookstore can be given a new life following graduation. The gowns from Willsie Cap & Gown, a small company out of



Omaha, NE, contain recycled polyester created from the recycling of plastic bottles. But the company doesn't stop there. If the graduate wishes, they may return the gown to Willsie where it will be repurposed into a large bag. Each bag, called a HÖP™ Sack, will then be donated to Omaha area homeless shelter residents to store and carry their belongings. A [video](#) by the company showcases the recycled content gowns and the bags they are later converted into.

## National Bike Month

Did you know that May is National Bike Month?

National Bike Month is a time to get out on the pavement and celebrate the reasons why we ride. Whether you're riding to work, to the park, or just riding to enjoy the great outdoors. Biking saves money on gas, promotes healthy living and family togetherness, and encourages us to experience our surroundings.

In honor of National Bike Month, here are 10 tips for bike commuting. These tips will get you on your way to being a commuter, and are also helpful for a leisurely weekend ride. Visit [bike.ku.edu](http://bike.ku.edu) for more information.

### 10 Tips for Bicycle Commuting

1. The shortest route isn't always the best route.
2. Carry a patch kit (or a spare tube); tire levers and a bicycle pump in case of a flat.
3. Leave clothes and a pair of shoes at work so you don't have to worry about bringing clothes every morning.
4. Arrive early enough to work to give yourself enough time to stretch.
5. Start slow and do what you can.
6. Wear bright, visible clothing.
7. When biking in the street, ride in a straight line and in a predictable manner, and follow traffic laws.
8. WEAR A HELMET! No excuses.
9. Do an ABC Quick Check before you set out on your ride.
  - Air
  - Brakes
  - Crankset
  - Quick Releases
10. And most importantly, HAVE FUN!



## End of Semester Clean Out

It's that time of year again! We've finished another semester and office clean out is in full force! Now that you're out of the mad rush that the end of the year brings, it's time to clean out the closets, drawers, and...most dreadfully...the filing cabinets. This year I encourage everyone to sort through the left over files and recycle the paperwork that you no longer need.



Wondering how to get started? First, sort out and file all paperwork that you need to keep on file. Any non-pertinent paperwork that is simply taking up space can be sorted into two categories, confidential and non-confidential. The non-confidential documents can be taken to the closest recycling sort center in your department, or if you have a large amount you can request an additional bin from KU Recycling through the [Online Work Request](#). If you have confidential documents, they will need to be shredded and disposed of properly. The University works with Cintas to provide shredding bins for this purpose, and any documents that you may have can be taken to your department's Cintas bin. If your department does not have a bin, or you would like additional information regarding document destruction, contact the [KU Privacy Office](#).

Want to downsize your files even further? You might consider scanning all of your paperwork into a digital file. This is a great way to free up drawer space and organize files in a way that is easy to access. Just make sure you save a backup copy and the original if you will need a hard copy on hand.

File cleanout is also a great time eliminate any future unnecessary junk mail. As you're going through your files and papers, visit each company's website and select to opt out of mailings or receive notifications via email, eliminating the need to sort these items next year.

Last, set up a file system for all paperwork coming in. A system with 4 files labeled read, act, file and recycle will simplify your process and eliminate any question of what needs to be done with a certain bill.

These simple steps will help you recycle more, clean up any clutter and keep additional items out of the landfill. To get more information about where to drop off paper recycling in your area, visit [KU Recycling](#).

## Thank you for another successful Office Supply Swap!

Thank you to everyone who attended the 3rd Annual Office Supply Swap and helped make it a success! This year we had over 35 attendees who reclaimed more than 142 items. This is an estimated cost savings of almost \$1500 to KU Departments!

The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression and genetic information in the University's programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Executive Director of the Office of Institutional Opportunity and Access, [IOA@ku.edu](mailto:IOA@ku.edu), 1246 West Campus Road, Room 153A, Lawrence, KS 66045, (785) 864-6414, 711 TTY.

## 2013 Kansas Green Schools & Environmental Education Conference: Connecting Community through Environmental Education

### July 25-27 in Newton, KS

Join Kansas Association for Conservation and Environmental Education for an educational adventure in the heart of the Flint Hills. Teachers, school administrators & staff, parents, non-formal educators, natural resource professionals, and all who work to expand opportunities for children and adults to learn about and experience nature are invited to register. Visit [www.kacee.org](http://www.kacee.org) for conference information.



## Join Us

For more information about sustainability at KU, visit [www.sustainability.ku.edu](http://www.sustainability.ku.edu) like us on Facebook at [www.facebook.com/KUSustainability](https://www.facebook.com/KUSustainability), or follow us on Twitter [@SustainKU](https://twitter.com/SustainKU).

## Contribute

Is your department or organization contributing to a more sustainable KU? We'd love to hear about it and include your efforts in our next issue of the Spotlight! Send submissions to [sustainability@ku.edu](mailto:sustainability@ku.edu).

# KU RECYCLING SORTING GUIDELINES

May 2013

KU Recycling collects the following materials at most locations.

## OFFICE PAK

**Includes:**

White Paper  
Pastel Colored Paper  
Brochures  
Stapled Books  
Envelopes  
Manila File Folders  
Junk Mail  
Greeting Cards  
Heavy Weight Paper

**Does Not Include:**

Newsprint  
Cardboard or Chipboard  
Paper or Styrofoam Cups  
Napkins or Tissues  
Food Contaminated Paper  
Magazines or Glossy Paper  
Books with Glued Binding  
Paper Bags

## NEWSPAPER

**Includes:**

All Newsprint

**Does Not Include:**

Magazines or Glossy Paper  
Phone Books or Catalogs

## CORRUGATED CARDBOARD

**Includes:**

Corrugated Cardboard Boxes  
Corrugated Packaging

**Does Not Include:**

Soiled Pizza Boxes  
Waxy Cardboard  
Any boxes that have food contamination

## CHIPBOARD

**Includes:**

Other Paperboard Packaging

**Does Not Include:**

Corrugated Cardboard

## MAGAZINES

**Includes:**

Magazines  
Glossy Paper

**Does Not Include:**

Junk Mail  
Phone Directories

## #1 — #7 PLASTICS

Any #1-#7 plastic (salad bar take-out, plastic packaging etc)

## ALUMINUM CANS

**Includes:**

Aluminum cans ONLY

**Does Not Include:**

Foil Food Wrappers  
Steel or Tin Cans

## STEEL CANS

**Includes:**

Steel (tin) cans ONLY

**Does Not Include:**

Aluminum Cans  
Bottles of any kind  
Sheet or Scrap Metal

## TELEPHONE DIRECTORIES & CATALOGS

Includes campus and municipal phone books and catalogs with similar construction (heavy-weight cover with newspaper-like pages)

### Mixed Paper

Grades of paper not listed above, including journals, hard-back books and glue-bound books should be recycled separately from other materials.

### Shredded Paper

Bags of shredded paper should be tied shut to close bag completely. Do not put shredded overheads or any other type of plastics in with the shredded office pak. DO NOT put shredded paper in, or stack on top of or next to the regular recycling bins. Instead, contact KU Recycling for a special collection.

