

BIG AND LOCAL EXPO

FOUNDERS HALL AT CHARLESTOWNE LANDING

FEBRUARY 8, 2012

CHRISTINE VON KOLNITZ COOLEY, MUSC
SUSTAINABILITY MANAGER

MUSC Overview

- MUSC Enterprise
 - University/Research
 - Hospital
 - MUSC Physicians/Outpatient

- Basic Stats
 - 7.8 million Sq Feet
 - 82 Buildings
 - 650 licensed beds in 2 Hospitals
 - > 800 labs
 - 12,000 employees and 3,000 students



Sustainability Focus Areas



- **Energy/ Green Building**
- **Water**
- **Waste Management & Recycling**
- **Transportation**
- **Food**
- **Climate**
- **Academics and Administration**

Energy/Green Building

- LEED Silver Bioengineering Building
 - ▣ 21.5% **energy cost savings**
 - ▣ Occupancy sensors, lighting controls, and task lighting
 - ▣ Wall insulation of R20
 - ▣ High-reflectance R20 roof
 - ▣ Double pane PPG windows
 - ▣ Window and building overhangs
 - ▣ Exterior lighting (savings of 36.1%)
 - ▣ Highly efficient HVAC system with heat recovery



Energy & Water

- Energy Performance Contract
 - Lighting and Lighting Controls (27%)
 - Changed out ~ 49,000 lights
 - Annual savings **\$664,700**

 - Water Conservation Projects (21%)
 - 1815 new low flush toilets, 211 Urinals
 - 2571 Flow Restrictors, 100 Shower Heads
 - Annual savings **\$509,760**



Energy: Education

It's time to save energy:
TURN OFF OR UNPLUG!



*Last one out,
use this
CHECKLIST:*

Calculator
Coffee Pot
Computer*
Computer Monitor
Copy Machine
Lamps
Microwave
Overhead Lights
Power Strip
Printers**
Radio or Stereo
Small Electronics
Space Heater
Surge Protector

TURN
LIGHTS



OFF

muscd.edu/gogreen

MUSC Saves Energy

Energy: Results



- FY 09- \$15.1M
 - ▣ 215 Million KWH
- FY 10- \$16.7M
 - ▣ 213 Million KWH
 - ▣ Opened Dental building 5.5M KWH added
 - ▣ Cost of 1 KWH went up by \$0.0084 on average
- FY 11- \$17.6M
 - ▣ 214 Million KWH
 - ▣ Opened 2 new research buildings 5.2 M KWH added
 - ▣ Cost of 1 KWH went up by \$0.0037 on average

Waste: Reuse

- Reusable Office Supplies
 - Two locations on-campus
 - All items free to students, faculty & staff
 - Pens, pencils, calculators, staplers, rubber stamps, staples, scissors, notebooks, notepads, binders, folders, envelopes, manila & hanging file folders, paperclips, rubber bands, small desk top accessories, laser toners and ink jet supplies



Recycling: Paper Shredding

- 1,458 bins emptied once a week
- Avg shred per week 16,500 lbs



All Paper is
shredded!

- Slim jim – 24 gal
- Console – 30 gal
- Locked Tote – 90 gal

Recycling: Plastic, Glass & Metal

NO Styrofoam
NO Plastic
Wrap



- 661 bins emptied once a week
- Current avg. per week 1 ton



Plastics #1 - #7



Aluminum Cans



Other Steel



Glass Bottles

Recycling: Electronics

- E-Waste
 - Recycling: CD's, floppy disk, cords, plugs, calculators, speakers, printers, phones, random scientific equipment
 - Surplus: monitors, CPU's, tagged property
 - 7 bins emptied as needed
 - FY 11' total collected 15 tons



All MUSC issued cell phones must go back to communications
All hard drives must be cleaned for confidentiality

Recycling: Batteries

- Batteries
 - ▣ 100's of locations
 - ▣ Create free recycling bins from plastic containers we receive from pathology & Environmental Services
 - ▣ Give bins away at all public events, presentations, on-call
 - ▣ Accept lead acid, Li-Ion, Ni-Mh, Ni-Cad, Alkaline
 - ▣ FY 11' total collected 5 tons
 - ▣ Batteries Plus collects for free

Once batteries are collected they are kept in a fireproof cabinet



LARGE:
Five-gallon
bucket



MEDIUM:
Two-gallon jug



SMALL:
compact quart size container
holds over 200 AA batteries

Battery Bin

Selection

To request a bin, University employees call 2-4119/MUHA call 2-5600

Recycling: Results

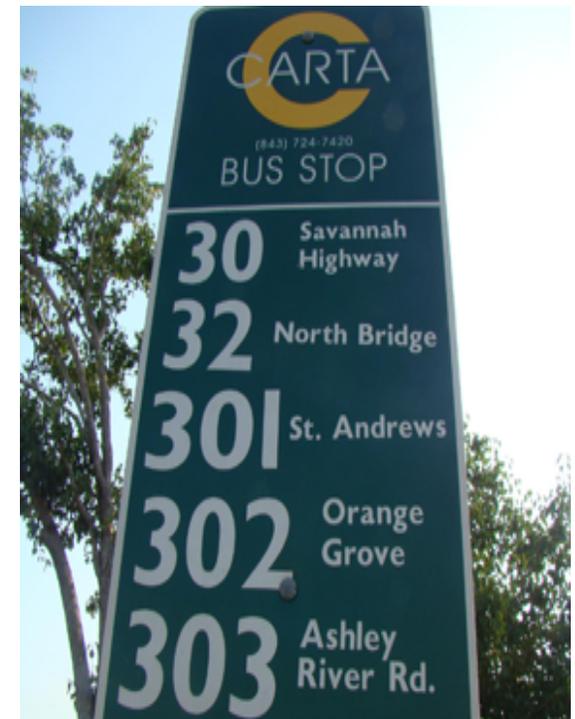
FY 11	Tons
Office Paper	432
Cardboard	295
Yard Waste	111
Scrap Metal	77
Books	65
Plastic, Glass & Steel	38
Wooden Pallets	36
Electronic or E-waste	15
Medical Products	6
Batteries	5

	Tons
Toner Cartridges	5
Fluorescent Tubes	4
Phone Books	4
Restaurant Grease	3
Lab Packs	3
Chemicals	2
Oil	2
Petroleum	.2
Mercury	.01
Total	1,103

Transportation

MUSC has almost 10,000 daily commuters

- ❑ Walk
- ❑ Bike
- ❑ CARTA EXPRESS & CARTA bus
- ❑ Motorcycle
- ❑ Carpool with 2 or more passengers
- ❑ Occasional Parker
- ❑ Single Occupancy Vehicle
- ❑ On-line educational programs
- ❑ carpooling to conference/training
- ❑ Telecommuting instead of travel
- ❑ Videoconferencing and Telemedicine



Food

□ Cafeteria

- Promoting use of Eco-mugs
- Supporting local farmers
- Rainforest Alliance Certified Coffee
- Meatless Monday
- Biodegradable and compostable containers

□ Composting

- Starbucks gives away used coffee grounds
- MUSC's Sodexho, College of Charleston's Aramark, Trident Technical College Culinary Program and Duvall Catering at TTC

□ Harvest for Health Garden

□ Farmer's markets and CSA drop-off points



Thank You



Christine von Kolnitz Cooley

Sustainability Coordinator

843-792-1804

vonkolnc@musc.edu