JOHNS HOPKINS UNIVERSITY

FY13 DIVISIONAL SUSTAINABILITY REPORT

Peabody Institute

September 2013

FAST FACTS:

- *Peabody installed 15 bottle fillers on campus.*
- *GHG emissions have declined by 15% since 2008*
- *Peabody has multiple bottle filling stations around campus to increase bottle reuse (p. 5).*
- *The school signed their first contract with a recycling vendor to improve rates (p. 6).*
- *Peabody purchased 115 fewer cases of paper in FY2013 than were purchased in FY2012.*

YEAR IN REVIEW

In FY2013, Peabody continued to find low hanging fruit opportunities to implement throughout the school. These opportunities have helped to improve energy, water, recycling, and other behavior change metrics. The following report summarizes these initiatives.

FACULTY, STAFF, & STUDENT ENGAGEMENT

The Peabody Green Group (PGG) is the primary organization responsible for sustainability activities at the Peabody Institute. During the 2012-13 academic year, the PGG was considerably more active than it has been in the past. Initiatives included a table at the fall activities bazaar, the addition of a faculty advisor alongside the current staff advisor, regular meetings and communication among the group's leadership, increased use of social media to disseminate information and ideas, and Earth Week events featuring eco-footprint tests, "wear green" day, green resolutions, and bicycle-powered smoothies.

Particular attention was devoted to the promotion of recycling on campus, by way of increasing the number and visibility of bins on campus, ensuring that all offices order paper with recycled content, mounting a campaign of printed and online recycling memes, and holding a recycling competition in the dorms with dessert from Vaccaro's for the winning floor. PGG received significant support from Peabody's Student Affairs Office, as well as from Plant Operations, which was also responsible for eco-friendly changes such as the installation of water fountains with bottle fillers and lights with motion sensors.

PGG looks forward to building on these efforts this coming year, with an emphasis on increasing student membership, working with Sage Dining Services on composting, creating community gardening opportunities, and improving coordination with other divisions through the Office of Sustainability.

SUSTAINABILITY NETWORK

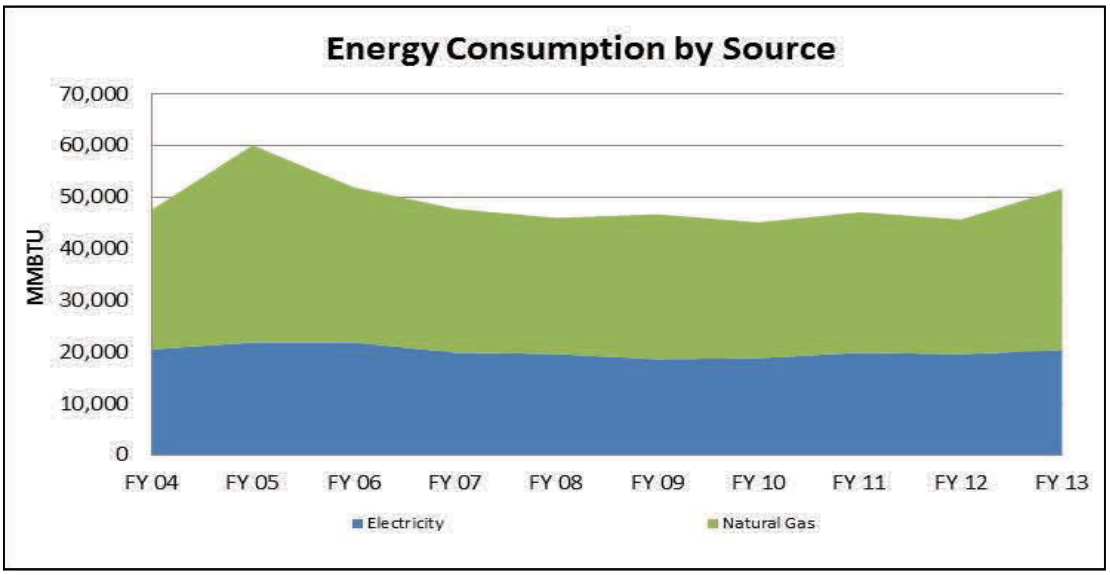
ENERGY

Peabody Summary

Overview

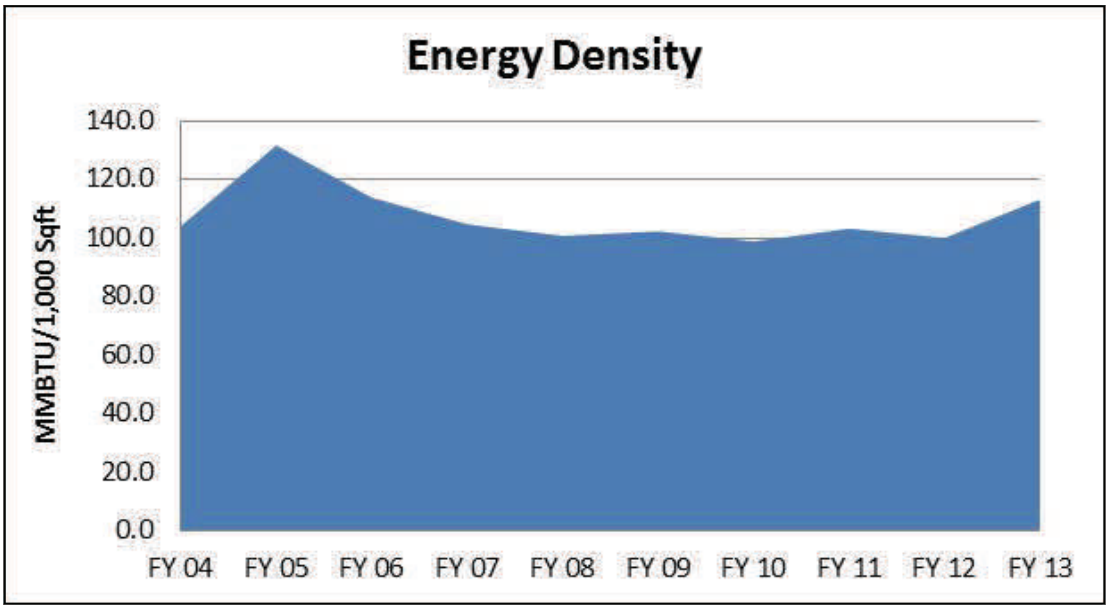
In 2013, Peabody had an increase of 13% in overall energy use, partially due to a colder than typical winter. Energy Density (figure 2) is the measure of energy use per square foot of building space and is used as a metric to compare building performance in LEED and Energy Star.

FIGURE 1: Total Energy use



The 13% increase is due to the 4% increase in electricity and a 19% increase in natural gas usage.

FIGURE 2: Energy Density



ENERGY AND GHG EMISSIONS

UNIVERSITY OVERVIEW

FIGURE 3: JHU Total Energy by Source

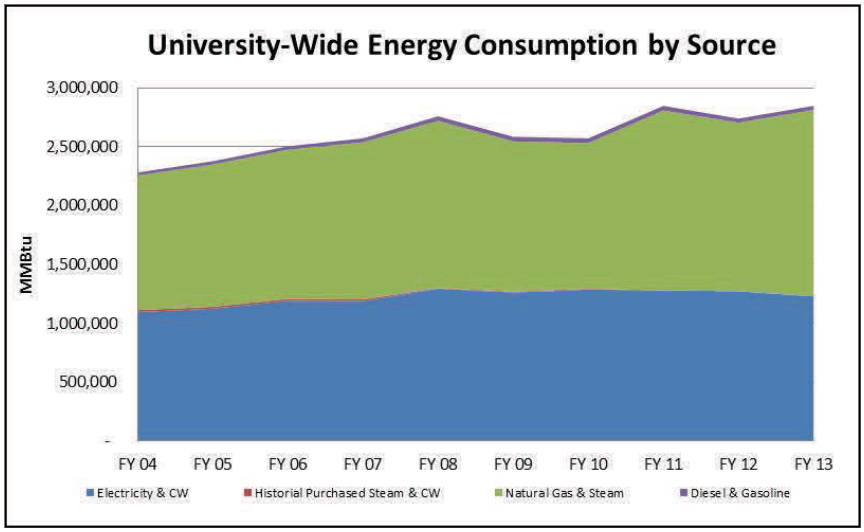
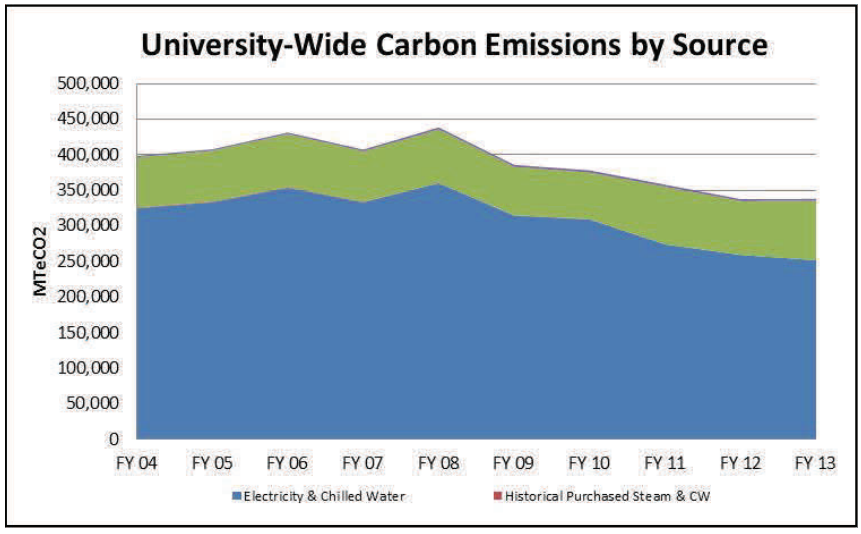


FIGURE 4: JHU Total Emissions by Source



University GHG Reduction Goal

Johns Hopkins University continues to strive to reach their 2025 greenhouse gas goal to reduce emissions 51 percent from 2008 levels by 2025. This section of the report reflects on the University as a whole and assess the current progress based on cumulative energy usage and greenhouse gas emissions.

Progress as of FY2013

FY13 marks the sixth year of data collection and assessment since the initial 2008 baseline. When comparing FY12 to FY13, JHU increased their total energy consumption by 3.9%. The increase is due to the increase in natural gas and steam. Since the university did see a 3.4 percent reduction in electricity and chilled water over the year, total emissions did not increase as much as energy. JHU's total emissions increased by 0.1 percent from FY12 to FY13. Since 2008, JHU energy use increased by just over 3 percent and emissions decreased by almost 23 percent. A large amount of the emissions reductions can be attributed to the cleaner regional electricity grid and the addition of large CHP units.

Moving Forward

The Office of Sustainability and former members of the Climate Action Plan Task Force are assessing JHU's progress thus far. The group will decide what changes, if any, should be made to the plan or it's targets. They are reviewing site energy and emissions and the impact of electric grid emissions, how to better account for growth, and establishment of a better business as usual trend which was not fully banticipated in the original plan.

GREENHOUSE GAS EMISSIONS

Peabody DATA

Overview

In FY2013, the Peabody Institute saw an increase in total emissions due to the more traditional Maryland winter. Over the year, the campus increased total emissions by 8.7%. There was a 4.8% increase from electricity and 20% increase in natural gas. The natural gas increase is not as highly reflected in the overall emissions increase because these fuels do not have as high of a carbon content as electricity.

FIGURE 5: FY2013 Emission Proportions

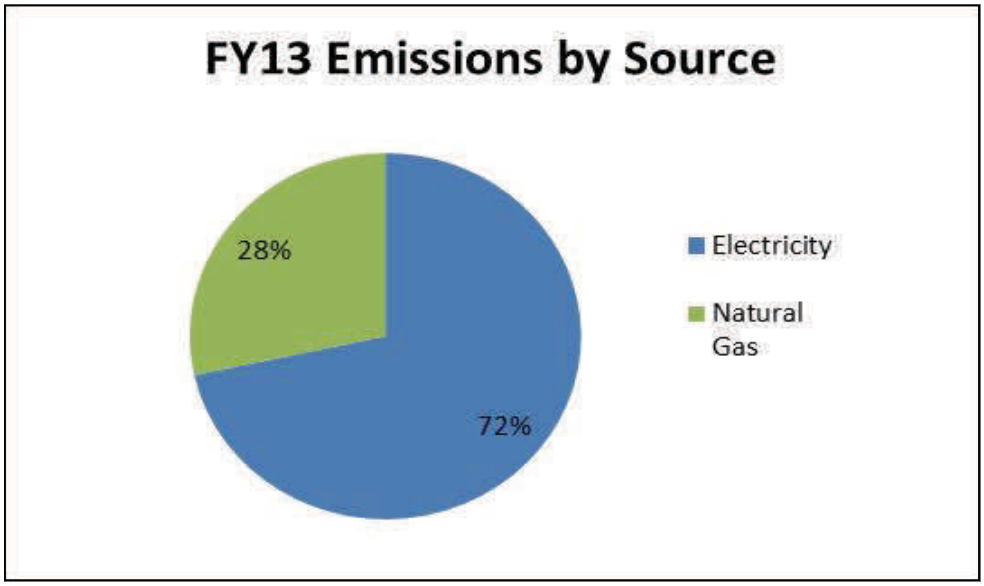
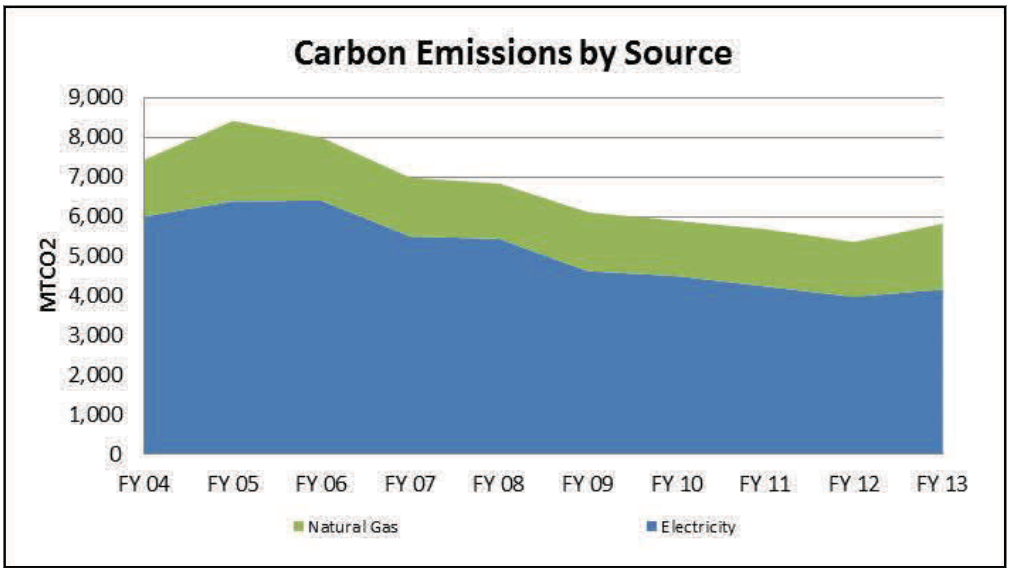


FIGURE 6: Emissions by Source



WATER USAGE

Plant Operations has begun installing shower heads and faucet aerators that conserve water. As toilets and urinals are changed out, low flow units are being installed to conserve water.

FIGURE 10: Bottle Filling Station

BOTTLED WATER

Over the past couple of years, the Office of Sustainability has been encouraging the different JHU divisions to find alternatives to disposable plastic bottle usage at their respective campuses. Some of the alternatives include installation of a Quench system, which filters tap water in an office setting, and the other is retrofitting a traditional water fountain with a goose neck or a bottle filling station. Many of the bottle filling stations are located in student residential buildings, and as budgets allow, more fountains across academic and administrative spaces will be retrofitted.

CHANGING BEHAVIORS

FIGURE 9: Recycling Outreach by PGG

RECYCLING

Recycling Highlights

During FY2013, Peabody began its own fully serviced recycling program with a vendor. In the past, some of Peabody's recycling was sent to Homewood due to their space constraint in Mt. Vernon. For their first six months of service, Peabody recorded a 19 percent recycling rate. The school also recycled 800 pounds of old kitchen equipment. Peabody should see and increase in their recycling rate in the years to come due to better weights and outreach done by the Peabody Green Group.

COPY PAPER

Paper Highlights

FY2013 represents the fourth year of paper collection data from our supplier. The Office of Sustainability strives to encourage faculty and staff throughout the University to purchase recycled content copy paper and to find alternatives to printing but if needed to do so double sided.

The Peabody Institute saw some small changes in their white paper purchasing habits over the year. There was a slight increase in the number of cases purchased in FY2013, while the percent of recycled-content paper decreased from 45 percent to 40 percent. However, some new initiatives currently under consideration may begin yielding results in FY2014. Figure 10 summarizes the data for the year and compares it to past trends.

FIGURE 10: Copy Paper