SIGHTLINES GO GREEN PRESENTATION

UNIVERSITY OF ALABAMA

Location: Ancillary Services Building Computer Lab

Time: 2:00-3:30 PM

Date: Wednesday May 4, 2016

Present:

Cheryl Mowdy- Associate VP of Administration

Tony Johnson- Executive Director of Logistics and Support Services

Greg McKelvey- Executive Director of HVAC and Energy Management

George Cook- Assistant, Logistics and Support Services

Jennifier Brown- Director of Specialty Property Management

Bryant Holmes- Warehouse Services Coordinator, Logistics and Support Services

Charlie Boswell- Director of Logistics and Support Services

Gerald Mills- Manager of Logistical Support

Tina Dorroh- Accountant, Property & Inventory Management

April Sanders- Assistant Manager of Facilities Operations, Ferguson Center

Randall Winters- Director of Garage Services

Absent:

Brandon Sevedge- Director of Athletics Facilities

Matt Kerch- Executive Director of Housing Operations

Ryan Hofman- Coordinator of Conferences and Special Projects, Housing

April Sanders- Assistant Manager of Facilities Operations, Ferguson Center

Delphine Harris, Executive Director of Business Process Innovation

Jennifer Greer- Associate Provost of Academic Affairs

Wade Bond- Assistant Director of Risk Management

Milo Crabtree- Associate Director of Procurement Services

Kristina Hopton-Jones- Director of Dining Services, Auxiliary Services

Kathleen Gillan- Director of Greek Affairs

Julie Shelton- Director of Financial Accounting and Reporting

Sightlines Go Green Presentation

Presenters: Tom Guger, Kevan Will & James Ireland

Introduced the Presenters: Tony Johnson

Notes:

1. Presentation was done for Fiscal Year 2015.

2. MTCDE stands for Metric Ton of Carbon Dioxide Equivalent.

3. The sources of campus emissions are:

   Scope 1- Natural Gas/Fuel Oil, Vehicle Fleet, Refrigerants & Agriculture (Direct GHGs)

   Scope 2- Electricity (Upstream GHGs)

   Scope 3- Commuting, Travel, and Waste (Indirect GHGs)

4. The carbon mitigation structure is:

   Avoidance- prevent activities before they start.

   Activity- reduces the existing level of an activity.

Intensity- lessening the carbon intensity of activities.

Offsets- utilizing carbon offsets to neutralize unavoidable GHGs.

5. The peer institutions used for benchmarking are the same as last year.
6. The University of Alabama profile has shown the same massive growth like last year.
7. Over 85% in the populations and over 50% growth of GSF.
8. There are over 300 students per 100,000 GSF.
9. There were significant shifts in the tech rating GSF make-up
10. There is a tech rating of Tech 1-5: Tech 1 is compared to a regular house to Tech 5 which is a high tech lab/building.
11. Over the past decade, Tech 1 has decreased compared to Tech 2, 3, 4, & 5 increasing.
12. High density & complexity drive emissions.
13. The density factor for Alabama was 306 users per 100,000 GSF compared to the peer average of 360 users per 100,000 GSF.
14. These impacts: Energy consumption, Waste output & Operational demands.
15. The tech rating for Alabama is around their peer average.
16. These impacts: Energy consumption, Staffing needs & Capital demands.
17. The space profile is a significant driver of scopes 1 & 2 emissions.
18. 50,000 GSF is the average building size on campus.
19. 54-55,000 GSF is the peers building size average.
20. 19 years is the average age of renovation.
21. The FY2015 emissions profile has not really changed since FY2004.

22. The FY15 emissions by scope were as follows:

    Scope 1- Direct GHGs were 15%.

    Scope 2- Upstream GHGs were 64%.

    Scope 3- Indirect GHGs were 21%.

23. Energy consumption from FY15 made up the majority of total emissions.

24. The FY04 emissions by scope were as follows:

    Scope 1- Direct GHGs were 17%.

    Scope 2- Upstream GHGs were 56%.

    Scope 3- Indirect GHGS were 27%.

25. The tech rating in FY04 was 3.16 and FY15 was 3.36.

26. There was a tech rating increase of 6%.

27. Emissions in the past decade have increase over 14,000,000 GSF.

28. Benchmarking GHG emissions are done for per student and per 1,000 GSF.

29. For students, it’s the Gross GHG emission/Total Student FTE.

30. For 1,000 GSF, its Gross GHG emissions/Total GSF in Footprint x 1,000.

31. Scope 2 utilities of Total Energy Consumption were measured by BTU/GSF (1,000s).

32. In FY2004, the total energy consumption was 90 BTU/GSF (1,000s).

33. In FY2015, it was 105 BTU/GSF (1,000s).

34. The degree days were measured between 4,000 and 5,000.

35. Degree days are a unit used to determine the heat and cooling measures of buildings.

36. Scope 1 for Alabama was below the average compared to their peers being around 3.0 MTCDE/1,000 GSF.

37. The electrical grid of Alabama is getting “greener” since 2007.

38. The grid region of Alabama is with Georgia and they are in the 600-700 MTCDE/1m kWh range.

39. Scope 2 emissions have been lower over the years due to “cleaning” of the grid, going from in FY2004 (80 MTCDE) to in FY2015 (140 MTCDE).

40. Higher needs of electricity consumption drive up Scope 2 emissions.

41. UA benefits from lower fossil emissions their compared peers.

42. UA has more commuters as a % but only traveling shorter distances.

43. UA benefits from increase in campus users when benchmarking against their peers.

44. Alabama continues to perform better than their peers in waste diversion.

45. The total waste stream was 4,000-5,000 tons compared to a diversion rate of 23%.

46. Recycling has helped reduce emissions and there have been other benefits involved with it.

47. The following resources were saved in FY2015:

    13,305 trees

    297,411 gallons of oil

    3,130,640 kW of energy

    5,478,620 gallons of water

48. Total revenue and savings from FY2013-15 have been over $730,000.

49. Scope 3 emissions increased mainly due to student commuting from FY2015.

50. It has steadily increases over the years since FY2004.

51. Total Emissions Summary:

    Scope 2 emissions continue to be the main factor of increase in FY2015.

    UA performs below their peer levels on both Gross Emissions (per Student FTE) and Gross Emissions (per 1,000 GSF).

52. The University of Alabama has continues to compare very well against “Green” Schools in all aspects of the study.

53. The student population has had a massive increase since FY2004; the campus continues to grow more complex; and Scope 2 emissions control the profile of the school.

Concluded the presentation by opening the floor for questions: Tony Johnson