

*The University of North Carolina Energy Leadership Challenge*

**Breakout Session Notes- July 29-30, 2014**

**High Performance Campus Design**

**Charged with envisioning and executing plans for designing the campuses of the future that are both energy efficient and environmentally friendly while promoting and inspiring our core purpose, higher education.**

**RMI Resource:** Roy Torbert, Rocky Mountain Institute

**Team Leaders:** Rosalba Ledezma, Winston-Salem State, Director Design and Construction

 Cameron Smith, NC State, Director Capital Projects

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| **Topic Introduction, Progress and Updates** |
| **An intangible benefit of summit participation is the sharing of experiences and ideas to enhance sustainability. Group discussions centered on campus initiatives, challenges, and successes in the planning, designing, and constructing of sustainable buildings have been collaborative and engaging.** **At last year’s summit, the group decided to capture the discussion output in a deliverable: the Best Practices Guideline. We propose to submit this document to General Administration to fulfill the requirement of the UNC Sustainability Policy, which requires an implementation of best practices be developed, endorsed by the President and reviewed/revised every two years. With this end in mind, the final draft was edited by the participants, collaborating by topic (master planning, design, and construction) in groups.** **SB668 primer and updates were presented by Renee Hutcheson, Energy Architect NCDENR Environmental Assistance and Customer Service. Goals for new construction and major renovations were reviewed, recent developments (H628, H201) that modify compliance and reporting requirements based on life cycle cost analysis. Common themes and reasons for discrepancies between modeling and performance of buildings’ energy consumption were reviewed.**  |
| **Future Opportunities** |
| **Future opportunities exist at the intersection with other working groups; transportation goals and energy generation initiatives should be incorporated in master plans.** **In implementing energy solutions, the disposal of items at the conclusion of their useful life should be determined and planned at inception. (For example, what is the true cost of photo-voltaic components, factoring in the disposal of these?)** **Campuses to plan for resiliency. Princeton cited as an example of a campus that has a closed system that functioned properly when faced with a recent energy emergency.** **Micro-grids… what are the challenges? How do we make this a possibility for our campuses? Relationships with utilities are important. Let’s consider steps (not an “all or nothing” scenario) and find common ground with Duke Energy.****Zero waste … how can our facilities better accommodate this as a program requirement? Large volumes of space are required for recycling (compost handling, for example). Campus-wide strategizing is necessary. System-wide – who will have the first Net Zero facility? Lowest EUI in 50s.****Engage students and faculty (and donors??) … relate energy cost avoidance to comfort and values. Can operational savings be utilized for academic programs, furniture replacements, and other direct benefits? What are other ways to capture powerful voice of these constituents? (Dashboards, education, visibility in everyday actions as well as in ribbon-cutting, involve in design committees, etc.)** **Project Manager tools … to counter value-engineering of energy initiatives.**  |
| **Next Steps and Responsible Parties** |
| **Final version of Best Practices Guidelines should be distributed by General Administration to representative colleagues at the universities for campus endorsement prior to formal submittal and publication. Cameron and Rosalba to complete final version and forward with recommendations to Miriam Tripp.****New Team Leaders, John Fields (East Carolina University) and Tim McMullen (NC Central University), will seek feedback from group membership regarding future opportunities (listed above) and topic of discussion for the next summit meeting(s).**  |