**The University of North Carolina Energy Leadership Challenge**

**Solutions-Oriented Breakouts**

Friday, July 19, 11:00 am – 12:30 pm

_Solutions discussions led by University and industry “Faculty”
All participants self-select_

### 1. Designing and Constructing a Net-Zero Energy Building

How can you incorporate Net Zero Building technology concepts and technologies in your next renovation or new construction project?

**Room # 417 : Beacon Heights : Plemmons Student Union**

**Faculty / Discussion Leaders**

- **Robert Powell**
  Assistant Professor, Energy and Building
  NC A&T

- **Jeffrey Tiller**
  Department Chairperson, Technology and Environmental Design
  Appalachian State University

**Scribe : Michelle Novacek**

**Affiliation**

### 2. Understanding Renewable Energy System Partnering and Finance

Highlight examples of financing mechanisms for renewable energy projects that are relevant to North Carolina that can apply to higher education and business.

**Room # 201-A : Price Lake : Plemmons Student Union**

**Faculty / Discussion Leaders**

- **David Tucker**
  Project Director, Environmental Finance Center
  UNC Chapel Hill

- **Cindy Register**
  Assistant Director
  State Construction Office

- **Vanessa King**
  Renewable Energy Manager
  Biltmore Estate

**Scribe : Walter Putnam**

**Affiliation**
3. Creating and Managing an Energy Savings Performance Contract

Provide examples of Performance Contracts done to date, discussing successes and opportunities. How might performance contracting evolve to best meet our individual and collective needs?

Room # 201-B : Table Rock : Plemmons Student Union

Faculty / Discussion Leaders

Mike O’Connor  
Physical Plant Director  
Appalachian State University

Jorge Quintal  
Associate Vice Chancellor of Facilities  
UNC Greensboro

Scribe : Chris North  
Appalachian State University

4. Legislative Consensus Building for Creating Effective Energy Related Policy

Provide a North Carolina energy policy update, highlight policies that might be most relevant to higher education, discuss how state and UNC-system-level policies are developed, and how our campuses might work together in this expanding effort.

Room # 415 : Rough Ridge : Plemmons Student Union

Faculty / Discussion Leaders

Michael Youth  
Counsel and Policy Director  
NC Sustainable Energy Assn.

Terrance Feravich  
Associate Vice President for Finance  
UNC General Administration

Susan McCracken  
Director of External Affairs and Community Relations  
Appalachian State University

Scribe : Linda Toth  
Appalachian State University

5. Utilizing Energy Performance Data in Campus Communications and Building Automation

How can building and energy performance data aid in communicating successes and needs to our various campus constituents? How can this same data be used to automate building functions?

Room # 137-C : Attic Window : Plemmons Student Union

Faculty / Discussion Leaders

Jerry Marshall  
Physical Plant Engineer, Energy Manager  
Appalachian State University

Len Hoey  
Engineering Manager  
NC State Energy Office

Scribe : Abe McKay  
Appalachian State
6. Integrating Energy and Sustainability into the Academy Experience

How might the activities and the success of the Appalachian Energy Summit be integrated with learning outcomes across our campuses?

Room # 226 : Linville Falls : Plemmons Student Union

Faculty / Discussion Leader

Mary-Ann Ibeziako
Sustainability Director
NC A&T

Aaron Allen
Academic Sustainability Coordinator
Associate Professor of Music
UNC Greensboro

Scribe : Janice Pope
Appalachian State University

7. Smart Grid and Your Campus

What is Smart Grid and how will it impact my campus in the future? Learn about best practices and evolving technologies.

Room # 137-B : Macrae Peak : Plemmons Student Union

Faculty / Discussion Leaders

Liz Bowen
Green Development Coordinator
NC State University

Rogelio Sullivan
Managing Director-FREEDM Systems Center
NC State University

Scribe : Alex Johnson
Appalachian State University

8. Developing Efficient and Sustainable Transportation Infrastructure, Policies, and Processes

Campus transportation, transit and parking experts will discuss opportunities for improving energy efficiency and environmental aspects of their operations, identifying the most relevant metrics to track impacts and success, while seeking opportunities to share resources and ideas across the state.

Room # 137-A : Calloway Peak : Plemmons Student Union

Faculty / Discussion Leaders

Suzanne Williams
Associate Director of Campus Access
UNC Greensboro

Amanda Simmons
Transportation Demand Manager
UNC Chapel Hill

Scribe : Jennifer Maxwell
Appalachian State University
9. Solar Decathlon Europe 2014: An Energy-Plus, Mixed-use, Campus Housing Case Study

A directed brain-storming session to address the applicability of alternative, modular housing solutions and renewable energy systems for campus housing. Based off of Appalachian’s current participating in 2014 Solar Decathlon Europe. This session will feature students interacting with Faculty and Construction Professionals.

Room # 120 : Roan Mountain : Plemmons Student Union

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<tr>
<th>Faculty / Discussion Leaders</th>
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<tbody>
<tr>
<td>Mark Bridges</td>
<td>Appalachian State</td>
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<td>Sustainable Design &amp; Construction Student, Class of 2014</td>
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<td>Scott Hopkins</td>
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<td>Susie Westrup</td>
<td>Balfour Beatty Construction</td>
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<td>Sustainability Specialist</td>
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<td>Tom Planishek</td>
<td>Balfour Beatty Construction</td>
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<td>Senior Manager, Project Solutions</td>
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<td>Robby Lowe</td>
<td>Balfour Beatty Construction</td>
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<td>Director, Strategic Business Development</td>
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<td>Jamie Russell</td>
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<td>Associate Professor, Building Science</td>
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Scribe : Bryce Oakley

Affiliation