

# Agenda

## Campus-Based Energy Efficiency: Energy Managers Working Group

### **1:00-1:15 Group Introduction and Assignments**

- Charter Discussion
- Sub-Group Initiatives
  - Break into sub-groups
    - Description of sub-groups and leaders
    - Identification of tasks and end of sub-group time deliverable
    - Headcount of who wants to be on specific groups and who is flexible
    - Even up groups and go into sub-group meetings.
  - Discussion
  - Action Items / Resolutions that we can move forward on for annual meeting
- Reconvene
  - Sub- Group Reports – Summarize the above for the larger group.

### **1:15-1:50 Group Introductions and Assignments**

### **1:50-2:00 Reconvene Group**

- Sub-Group Report
- Assignments / Next Steps
- Plans for Annual Meeting

## Sub-Group 1 - Organizational Effectiveness

Team Leads: Steve Sharp and Jerry Marshall (absent)

Participants:

Steve Sharpe, [sharpes@uncw.edu](mailto:sharpes@uncw.edu)

Claudia Powell, [cpowell@ncsu.edu](mailto:cpowell@ncsu.edu)

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Scope: Identify key organizational structure components necessary for successfully meeting programmatic goals. Identify what departments the energy management group needs to interact with frequently and what authority should the energy management group have. Determine what departments should be team members and which should/could be subordinate. Groups under consideration include building managers, sustainability, general maintenance, capital construction, HVAC maintenance, and HVAC controls (others?). Generally Energy Management needs the ability to influence capital projects, preventative maintenance activities, building operations, outreach, education, etc. The deliverable would include a position paper, reviewed and approved (signed) by the energy management group at the annual meeting and distributed through General Administration to the university management.

Additionally the group should determine how to present a financial plan to senior university leadership outlining the cost savings benefits to energy conservation. Making a case (getting more funding) could consider alternatives such as utility surcharges to fund ECMs, increased onsite generation, sustainability policies, student driven initiatives. The deliverable would be an outline of the key components of a successful business plan specific to the issue of avoided costs (vs. savings) with energy efficiency projects.

| Steps:  | Lead:          | Due Date: |
|---|----------------|-----------|
| Create an interactions graphic showing Energy Manager relationship relative to other university positions necessary to successfully perform job function. | Steve Sharpe   |           |
| Examine policies and procedures required to be adopted by University Administration for successful execution of Energy Manager position.                  | Claudia Powell |           |
| Set up follow up meetings   | Steve Sharpe   | 3/7/2014  |
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| Deliverables:  | Lead:        | Due Date: |
|--|--------------|-----------|
| Position paper outlining policies, procedures, relationships and | Steve Sharpe | 7/27/2014 |

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| interactions necessary for successful job execution. Paper can be used at each respective university to identify organizational challenges. |  |  |
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| Parking Lot: |
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## Sub-Group 2 - Explore Opportunities to Enhance Technical Expertise

Team Leads: Chris Martin and Pam Metcalf

Team Members:

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Phillip Powell; [ppowell@ncu.edu](mailto:ppowell@ncu.edu); 919-530-7244  
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Chris Martin; [cmmartin@fac.unc.edu](mailto:cmmartin@fac.unc.edu); 919-843-0456

Scope: Key resources were identified by the group as critical to energy conservation success and yet mostly absent in the marketplace; facility engineering and HVAC controls technicians. This team will identify key areas where focused training will enhance expertise in these two areas.

Specifically:

Explore the following areas and identify recommended skillset enhancements:

- Facility Engineering
  - HVAC system knowledge
  - BAS specification skills
  - Legislative requirements for energy conservation
  - Energy reduction strategies
- HVAC Controls technician
  - Psychometric skills
  - Basic and advanced control sequences
  - Legislative requirements for energy conservation
  - Energy reduction strategies

A successful project would more fully explore the skills listed above and identify educational opportunities to meet these needs including enhanced education at UNC system 4 year institutions, community colleges and training. Assess and report key successful components of other educational programs to be considered for inclusion. This would include in state and out of state universities, community colleges, and private institutions. The deliverable would be a position paper outlining these needs, signed by the larger group at the annual meeting and distributed to the larger Energy Summit committee or perhaps through the educational chain. Coordination with existing efforts led by SEO would benefit the project (Renee Hutchinson).

| Steps:  | Lead:          | Due Date:    |
|---|----------------|--------------|
| Poll BAS control manufacturers to determine education/experience/expertise requirements for control | Chuck, Charles | May 23, 2014 |

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| technicians and facility engineers. (5 manufacturers)   |                |               |
| Poll facility managers (in state and out) to determine education/experience/expertise requirements for control technicians and facility managers  | Griffin, Pam   | May 23, 2014  |
| Research successful programs to determine curriculum requirements. This includes community colleges, mfg training, etc.                           | Phillip, Larry | May 23, 2014  |
| Gap Analysis – determine what enhancements can be made to existing programs. Draft curriculum requirements for signature at annual energy summit. | Chris, Shaban  | July 18, 2014 |

| Deliverables:  | Lead:      | Due Date:     |
|--|------------|---------------|
| Draft curriculum requirements for 2 year and continuing education requirements to address control technician training deficiencies. This will be review and signed by members of the subcommittee at the annual meeting.                 | Pam, Chris | July 27, 2014 |
| Draft curriculum requirements for 4 year and continuing education requirements to address facility engineering expertise and training deficiencies. This will be review and signed by members of the subcommittee at the annual meeting. | Pam, Chris | July 27, 2014 |
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|  |            |               |

**Sub-Group 3 - Maximize Existing Expertise**

Team Leads: Patrick Richardson and John Parsons

Team Members:

Patrick Richardson, [richardsonpj@appstate.edu](mailto:richardsonpj@appstate.edu), 828-262-4893  
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 Paul McConocha, NCSU, [prmccono@ncsu.edu](mailto:prmccono@ncsu.edu), 919-513-3646  
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 Jon Parsons, FSU, [jparson2@uncfsu.edu](mailto:jparson2@uncfsu.edu), 910-672-1403  
 Reid Conway, NCDENR/DEACS, [reid.conway@ncdenr.gov](mailto:reid.conway@ncdenr.gov), 828-413-5047

Scope: There is a great wealth of experience and expertise across the university system with respect to energy and water conservation. This project will identify ways to increase knowledge transfer and engagement between professionals at NC higher educational institutions (both public and private), NC state agencies, K-12 districts across the state, and NC-based federal agencies and installations. The information exchange between project participants will take place in person at bi-annual meetings and electronically over a new energy professional’s listserv.

| Steps:  | Lead:                          | Due Date: |
|---|--------------------------------|-----------|
| Organize a morning tour of the NCSU Cates Cogen facility and an afternoon Energy Manager’s meeting at the Yarborough Steam Plant Conference Room on the NCSU campus on April 24. This step includes making all the arrangements (Paul) and building a list of invitees and getting the invitations out by 4/1 (Paul and Jon). | Paul McConocha and Jon Parsons | 4/1/14    |
| Set up an Energy Professionals listserv in time to preview at the 4/24 meeting.   | Jessica O’Hara                 | 4/17/14   |
| Develop a draft energy management inventory form for review at the 4/24 meeting.  | Jon Parsons                    | 4/17/14   |
|   |                                |           |

| Deliverables:   | Lead:                          | Due Date: |
|---|--------------------------------|-----------|
| Biannual (?) Energy Managers/Professionals meeting schedule for FY15 to foster cooperation and information exchange amongst NC energy professionals.  | Paul McConocha and Jon Parsons | 7/20/14   |
| A functioning and active Energy Professionals listserv.   | Jessica O’Hara                 | 7/20/14   |
| An easily accessible one-stop electronic inventory of Energy Management POC’s and ECM experiences at participating institutions. The initial deliverable will include a format and location (URL) for upload. | Jon Parsons                    | 7/20/14   |
|   |                                |           |

Parking Lot (items deferred for a later date by the large group):

Retention and recruitment issues are not yet being addressed and this group may address this at a later date.

Improved access to utility data and improved expertise at data analysis.

How do we get Energy Managers tools that help them with their job?

- How the USI report is used by Individual Energy Managers
- Comparative tools and benchmarking
- EPA Portfolio Manager
- AASHE STARS
- APPA
- ???

Determine how to present a financial plan to senior university leadership outlining the cost savings benefits to energy conservation. Making a case (getting more funding) could consider alternatives such as utility surcharges to fund ECMs, increased onsite generation, sustainability policies, student driven initiatives. The deliverable would be an outline of the key components of a successful business plan specific to the issue of avoided costs (vs. savings) with energy efficiency projects.