# ENERGY MANAGEMENT SWOT Analysis

## STRENGTHS

**HELPFUL**
- Personnel
- Educational reference
- Interest /momentum
- Team approach
- Technical depth
- Wholesale benefits
- Communication Infrastructure
- Faculty research
- FEEDM, Solar Center, & Advanced Energy

**WEAKNESSES**
- Student interests in Energy Research
- EWG authority / expertise and diversity
- We have the data!
- Leadership buy-in
- Supply chain upsets
- Managing “Plug loads”
- HVAC management

## OPPORTUNITIES

**INTERNAL ORIGIN**
- Educating upper management / campus
- UNC Standards
- Going green is “COOL”
- Learn from others / benchmarking
- Raleigh re-use water
- Energy Star
- Regional example

**EXTERNAL ORIGIN**
- Vendor partnerships (CREE et al.)
- By law / State and federal
- Project Greenlight (IT)
- Carbon credits revenue
- Water perception
- Grants available
- U.S. legislation

## THREATS

**HELPFUL**
- Human nature / apathy
  - Habits
- Decreasing budget
- Financial priorities
  - First cost vs. Life cycle cost
- Energy focus vs. water conservation
- Institutional inertia

**HARMFUL**
- EWG (staff heavy), need more diversity
- Information flow to students
- Decentralize IT infrastructure
- Purchasing policies
- Aging infrastructure

**MONETARY Silos**
- Current economy – funding
- GHG inventory / lack of standardization
- Time
CALL ME A FOOLISH VISIONARY, BUT I THINK IT MIGHT JUST BE POSSIBLE TO SQUEEZE THESE THINGS THIN ENOUGH TO FORM A SOFT, FLEXIBLE SHEET WITH WHICH ONE COULD COMFORTABLY BLOW ONE’S NOSE...
CLEAR VISION STATEMENT

- MOTIVATING & ENERGIZING

- BEHAVIORAL AND ACTIONABLE

- VISIONS PROVIDE DIRECTION AND MOTIVATION FOR CHANGE
“It’s not what the vision is, it’s what the vision does.”

-Robert Fritz
**Key Phrases Exercise**: Jot down key phrases that capture the essence of why the team exists.

**Team response...**

- Driving Innovation
- Policy Leadership
- Effecting Change
- Stewardship of Resource
- Providing Direction and Vision
- Establishing Continuity for the CEST Process
- Motivating Campus Community to Promote Individual Change
**Backward Imaging Exercise:** Imagine a point in the future when the team has been very successful. Find words to describe what you would see, hear, feel as you observe key constituents functioning in the new, changed state.

**Team response...**

- Campus (individuals/groups) takes independent action
- Dedicated & protected funding sources
- Reduction (noticeable) in Energy/Water use per capital and/or SqFt
- Realize campus goals/commitments & meet rules and regulations
- Campus (students, faculty & staff) understands benefit, separate from money.
- Campus has become an example
Elevator Speech – Imagine a chance meeting of a CEST Energy Working Group team member and Chancellor Woodward in an empty elevator with 60 seconds to ride. Describe the need for change and the vision of the new state, as one might respond to the question, “Why are we doing this project?”

**Team response...**

“Hi Chancellor Woodward. I’m a member of the NC State Campus Environmental Sustainability Team, Energy & Water Working Group. Our team believes NC State should be the Jewel-of-Raleigh and the innovation center of North Carolina.

Our goal is to reduce campus energy and water use, independent of dollars saved. Currently, we are not meeting our energy reduction commitments, both internally stated (President’s Climate Commitment) and externally mandated (North Carolina energy legislation).

As a leader in innovation and research, we should take steps to reduce our carbon paw print without delay. We need your support to adopt the NC State University Energy Policy. Oh, by the way, adopting the policy will save NC State money!”
In October 2009, the UNC – General Administration issued the *North Carolina State University Sustainability Policy* that applies to all 17 public campuses. The new policy serves as a springboard for our own draft vision statement*.

**New Building Construction and Major Remodels:** Capital project planning and construction processes shall meet statutory energy and water efficiency requirements and deliver energy and water in a manner that minimizes the impact on the environment.

**Operations and Maintenance:** The operation and maintenance of buildings and grounds shall meet or exceed statutory requirements to reduce energy and water use, provide excellent air quality and comfort, improve productivity of faculty, staff and students. Further, priority shall be given to the purchase and installation of high-efficiency equipment and facilities as part of an ongoing sustainability action plan following life cycle cost guidelines where applicable.

**Climate Change Mitigation and Renewable Energy:** The University shall develop a plan to become carbon neutral as soon as practicable and by 2050 at the latest, with an ultimate goal of climate neutrality.

* Note – the Energy and Water Working Group is still reviewing this draft statement.