

## Comments about Draft Energy Strategies received from Wake County Sustainability Task Force at May 19, 2011 meeting.

STF comments from are underlined and red if reading this in color.

*WECO responses are italicized and blue if reading this in color.*

*General WECO response:*

*We will clarify and define the terms used. We feel that will go a long way towards answering many of the questions posed in the comments. We will reorganize the recommendations to allow for the differences and similarities among new and existing buildings, and the relationship to audits, retrofits, commissioning, maintenance and other energy specific terms.*

### Wake County Sustainability Task Force

#### Energy Goals:

1. Wake County achieves and maintains EPA's air quality attainment by reducing ozone and particulate matter.
  - ...air quality attainment standards by...
  - Wake County has no choice - must meet EPA standards.
  - I think it's OK to state this. Some things need to be clear, especially if we have strategies that support it. We do have a choice on whether we attain or not. We choose to attain.
  - Is this per capita?

*WECO response:*

*EPA national ambient air quality standards will be explained. Whether it is a choice or a mandate, we suggest leaving it as a goal based on interest of a majority of STF energy subcommittee members.*

2. Adverse impacts to water, land, and air - from the production and consumption of fuel and energy - will be minimized
3. Clean technology businesses are a thriving industry cluster in Wake County's economic development strategy.
  - It's a statement, not a goal.
    - Goals are supposed to be a statement of a desired state.
  - Too general

*WECO response:*

*STF goals are written as end results, while strategies are written as action items.*

4. Citizens are independent of foreign fuel sources.

- This is out of our control. Imported fuel is primarily petroleum which we use for transportation. Is this a goal that all citizens need to convert to electric vehicles?
- Or natural gas?
- This goal is about transportation by all, but the strategies are about electric generation and building efficiency
- Already important in electricity except for wind turbines built overseas.
- Must open up US areas to drilling for oil and natural gas.
- Too general
- I'm not sure this is achievable, especially if you consider that strictly interpreting it rules out using any natural gas from Canada.

*WECO response:*

*Independence from foreign fuel is mainly related to oil imports used for transportation, not electricity production. This may need to change to 'Citizens are more independent (or less dependent) on foreign fuel sources than in 2011.'*

5. Wake County government reduces energy costs from buildings and fleet operations.

- Yes
- Add, without raising other costs.
- change "costs" to "costs and consumption".

*WECO response:*

*The strategies address the need for audits and cost/benefit analysis. The goals discussed and agreed upon by the STF are about achieving better economic, environmental, and human health and well-being. Reducing consumption is a potential objective on the way to reaching the goals- we have not heard the majority of STF members wanting to reduce consumption for reducing consumption's sake.*

## **DRAFT Energy Strategies**

A. Evaluate existing policies and regulations to identify limitations to, and opportunities for, energy efficient building design and both indoor and outdoor lighting design.

- Building Codes -mimic water doc
- Evaluate and eliminate policies and regulations that limit opportunities to... (no new regulations and policies)

- Also include adherence to accepted standards, i.e. - ASHRAE 90:1 [www.ashrae.org](http://www.ashrae.org)
- Ask state for authority to implement more stringent building codes - to ensure that new building stock is more energy efficient
- Urge state to adopt most energy efficient/ up to date international building code council standards.

*WECO response:*

*The majority of the energy subcommittee and Task Force has expressed the preference that new policies be considered as possible. To attempt to balance between STF interests, we suggest using language similar to that in the analogous water recommendation, and not specifying a level of stringency in the policies possible. We'll compare with the water recommendation for similar language.*

B. Educate the citizen, commercial, and industrial sectors about energy conservation and energy efficiency.

- Education is a big deal! YES!
- Public not citizen. Citizen sounds limiting.
- Start with "Using sound science and economics, educate...."
- Add "about the benefits of using energy."
- YES

*WECO response:*

*We will replace citizen with public. We will refer back to the water education strategy to incorporate similar language r.e. science based, as that topic enjoyed much discussion and many edits, and is as close to consensus as we will likely achieve. The term "science" was discussed by the TF to intend to encompass all sciences, including economics. We are unsure whether adding "about the benefits of energy" would erode the support of the STF majority for this strategy or not, as members have not discussed the benefits of energy as an educational topic.*

C. Partner with others to participate in energy demonstration and research projects.

- What does partner mean?
  - [Does it mean] financing, publicity, education? Who pays for it? Who are "others"? [Are they] corporations? NGO's? Individuals?
    - All of the above [are the answers] Share costs between partners.

*WECO response:*

*We will define partner or use another word to help explain it. The energy subcommittee and STF did not discuss particulars about what types of projects or which collaborators would do what. Those are details that would need to be determined by Wake County staff during implementation.*

D. Audit Wake County facilities, including schools.

- Need to specify recommended ROI - 5 yrs?
  - While there is discussion about benefit/cost benefit, the payback period may exceed expectations/building useful life, energy savings should be sought because it's the right thing to do.
    - Referencing above - Maybe, on the other hand, the resources may be better used in an area where the cost/benefit ratio is better. There are always tradeoffs!
  - consider adding retro-commissioning for current facilities
  - ...to find ways to conserve energy (the audit is for energy)
1. Implement group relamping process. (based on results of a benefit cost analysis or comparable research findings)
    - Checkmark
    - Clarify, so as not to encourage a throw away mentality - replace only when no longer working, leave working bulbs in place.
      - Referencing above - Yes.
    - Delete implement and substitute evaluate, drop the parenthesis.
  2. Implement motor management policy. (based on results of a benefit cost analysis or comparable research findings)
    - Checkmark
    - Yes
    - Delete implement and substitute evaluate, drop the parenthesis.
  3. Implement and support retrofits. (based on results of a benefit cost analysis or comparable research findings)
    - Checkmark
    - Yes. (see comment for G - Most of the buildings we will have in the future are already built.)
    - Implement and support energy efficient retrofits
    - Delete implement and substitute evaluate, drop the parenthesis.
  4. Evaluate Energy Performance contracting for installing energy conservation measures.

- Checkmark
- Measures, including HVAC, lighting, daylighting design, etc..
  - Referencing above - Yes
- Add, guaranteed savings to add more teeth and permit entities to avoid utilities costs in the future.

*WECO response:*

*This strategy deals with existing buildings, versus new buildings. We will clarify and include definitions. We will rewrite to include 'evaluation based on analysis'.*

E. Provide incentives to promote the use of energy efficient appliances and the construction and operation of energy efficient buildings.

- Is it sustainable to replace a perfectly good condition, but older applicnace with an energy efficient one? I feel it contributes to our "throw away" mentality... Should we only replace something is no longer working/reparable? Or does this strategy only apply to new construction...?
  - Referencing above - 2 checkmarks
- We should look at retrofitting first (see comment for G - Most of the buildings we will have in the future are already built.) Retrofits are the way to go.
- ) How about incentives for retrofits?
- Cannot support. Us of incentives means that what is supported is less efficient.
- Define incentives. What type? Rebates? Tax money? Allowing companies to go to the front of the line to bid for contracts?
- Energy star program
- OR - Use strong building codes (or ask for authority for them) to require these measures in new construction.
- Incentives would be vastly different for appliances versus entire construction. Perhaps this needs to be broken into two separate statements.

*WECO response:*

*We will separate appliances from building construction and suggest language to avoid a "throw away" mentality. Since the energy subcommittee touched on but did not discuss in detail the different types of incentives, we suggest rewording the strategy to reflect that more investigation is needed.*

F. Buildings built or supported by Wake County should require enhanced commissioning, which is 3<sup>rd</sup> party verification.

- Is 3<sup>rd</sup> party verification necessary?

- What is missing is the maintenance. Deferred maintenance is the enemy of commission of any type. Adequate resources (financial and technical must be available) and capital improvement plans should also address renovation and repairs that affect energy savings (i.e., roof and window replacements.)
- Delete - Cannot support. Too vague - what 3<sup>rd</sup> parties?
- Enhanced commissioning also provides LEED points
- Shouldn't the audit identify if something like this needs to be done?

*WECO response:*

*We will add a recommendation specific to building maintenance. See definition for enhanced commissioning in glossary- it's a set of best practices to ensure that building systems perform as intended by the owner. As an example, the U.S. Dept. of Defense requires it on all new buildings. We agree the "3<sup>rd</sup> party verification" comment is out of place and does not express the definition of enhanced commissioning accurately, and suggest including the full definition in the recommendation.*

G. Support and encourage energy audits, retrofits, and performance contracting for private & public buildings.

- ...encourage, such as through incentives, energy audits...
- Yes
- Most of the buildings we will have in the future are already built. Retrofits are the way to go.
- 2 Checkmarks
- Go. Add "only after cost/benefit analysis shows least cost.
- sounds very vague. What about seeking legislation to provide credits/tax incentives?

H. Support mass transit and multimodal transportation planning & implementation that helps meet EPA's air quality attainment standard.

- Add - and land use planning after the word transportation
- Yes, other benefits too - less congestion, less dependence on foreign oil, etc.
- Build using state "complete streets" framework/design to enhance transit, bicycle, and pedestrian use.
- Bikes

- Goal #1 uses the terms achieve and maintains, shouldn't strategy H substitute achieve and maintains EPA attainment, for 'meet' EPA attainment. This substitution in H will be consistent with goal #1.
- Delete. Carrying 1-3% of traffic and light rail will not change pollution
  - But 10% would?
- I would only agree with this if a cost/benefit analysis was done and supported mass transit as the correct option.

*WECO response*

*We will use language consistent with Goal #1 (air quality attainment) which is used as the qualifier for supporting this strategy.*

- I. Support Waste Management Recommendation 2.5.4 Strategy No. 3– Maximize the Financial and Environmental Benefits of Other Landfill Resources (parts A, B,& C) see end of this document for text
- Yes
  - Checkmark
  - Delete. Programs must be fully voluntary.
- J. Support development of Smart Grid infrastructure and appropriate information security standards.
- Yes
  - To include homeowner ability to monitor their usage online
  - After all the smartgrid discussion, I still can't support it because of privacy concerns, cybersecurity vulnerability, it does not reduce energy consumption just shifts it to different hours, rate payers are forced to pay for the promotion (ads), forces people to buy expensive gadgetry, administrative costs for more regulators and construction, advocates, forces a product on consumers that don't need it, utility companies have too much control
    - But it reduces peaks which delays necessity of additional generation facilities.
  - Need to define Smart Grid. If don't know what it is, how can someone be expected to support it?

*WECO response*

*Will define Smart Grid. Due to support by majority of the STF, we suggest keeping the recommendation.*

- K. Develop and support charging stations for electric cars

- Yes, reduce barriers to voluntary switch to electric vehicles. Charging stations should charge for electricity though.
- Yes. We must.
- Check mark
- Add, “at no cost to taxpayers or rate payers”
- I don’t agree that this is something for the government to do.

*WECO response*

*We will add in “consumer will pay for electricity”. We will add “where feasible” either here or in the opening caveat to the entire set of recommendations.*

L. Support development and use of current and future clean and/or renewable energies (e.g. - solar, wind, geo thermal, methane)

- Add “where economically”
- Consider Return on Investment
- Through economic incentives
- Hemp for biomass
- Replace “support development” with “study the costs and benefits of”
- if cost benefit makes the case for it.

*WECO response*

*We will add “where feasible” either here or in the opening caveat to the entire set of recommendations.*

M. Support economic development strategies to attract high tech companies and energy-related technology companies to Wake County.

- Add, “at no cost to taxpayers.”
- Caveat - must not conflict with waste goals
- “high tech” does not necessarily mean sustainable or energy efficient. Change to “attract companies that focus on sustainability and energy efficiency” or something similar, or add “renewable energy companies.”
- Why only high tech and energy related?
- Farmland preservation- maybe this concept should be in water chapter?
  - More companies that use tobacco plants for pharmaceutical products
  - And, if medical marijuana is ever approved in NC
  - Growing industrial hemp ( could be a replacement for tobacco row crop.

*WECO response:*

*The Energy workgroup discussed the differences between energy related companies and companies that are sustainable. It was decided this was the Energy section and they would focus on energy related companies, while working to incorporate the desire to attract 'sustainable companies' into the overall report. The purpose of this strategy is to help meet the goal of a clean technology business cluster. We will remove 'high tech companies' since the workgroup didn't discuss this. We will define and clarify terms. We will work to add language to the supporting water chapter to include the farmland preservation ideas.*

**General comment:**

The word "support" is used quite a bit. What exactly is meant by the term?

*WECO response:*

*The Task Force is expressing support for the concepts by using that terminology. Wake County staff and/or elected officials will need to further explore possibilities for how they can "support" those strategies where that language is used.*