LCGCC Recommendations submitted by Dee Eggers (Findings) - February 5, 2010

Findings

General Findings

1. Within the scientific community, there exists a level of consensus on climate change indicating that it presents a threat to the future economic health of North Carolina, the physical well-being of its residents, and its natural resources.

2. The North Carolina General Assembly is justified in taking action aimed at reducing greenhouse gas emissions, increasing sequestration to sinks, promoting economic opportunities afforded by climate change, and preparing to adapt to the effects of climate change.

Specific findings as bases for policy recommendations

1. According to reports generated for the Utilities Commission, North Carolina can achieve a 14% reduction in electricity consumption at no cost and meet a 10% renewable energy portfolio standard by 2017 at no increased cost in utility rates.

2. North Carolina's annual CO_2 emissions are increasing faster than those of any other state except Arizona.

3. North Carolina already ranks 24th in the world for GHG emissions if one regards each state in the U.S. as if it were a country, and then compares all states and countries.

4. North Carolina ranks 46th in the nation on energy efficiency spending per capita.

5. With 300 miles of coastline and a low coastal plain, North Carolina is highly vulnerable to rising sea levels. Over the next 100 years, sea-level rise will affect North Carolina more than any other state except Louisiana.

6. North Carolina imports virtually all of its energy, exporting from the state economy over $12 billion per year for petroleum, natural gas, coal, and nuclear material.

7. Annual vehicle miles traveled, and related greenhouse gas emissions, are increasing at a rate faster than the population due to low-density, uncoordinated land use.

8. North Carolina has significant undeveloped alternative energy potential from solar thermal, solar photovoltaic, natural gas from anaerobic decomposition of organic material, and wind.

9. North Carolina power utilities have invested little to no money in renewable energy, efficiency, or conservation due to their guiding language.

10. NC Green Power is not financially competitive with other renewable energy credit programs nationally for either large or small users.

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11. Energy efficiency and conservation programs will result in a net increase in jobs in North Carolina, according to the State Energy Office, and cost less per kWh saved ($0.03) than construction of new power plants that would otherwise have to be build to meet increased demand ($0.07 –).

12. Buildings account for 40-48% of electricity used.

13. Over 50% of state spending on electricity is accounted for by the UNC system.

14. State agencies have neither incentives nor financial support for investing in conservation and efficiency. In fact, such investment is unintentionally disincentivized by state policies.

15. According to the Stern Review of the economics of climate change, every dollar invested in addressing GHG emissions will save five dollars.

16. The sign-up process for net-metering remains burdensome.

17. The utility purchase price for electricity from renewable sources is low in comparison to other states where generation is expanding rapidly.

18. North Carolina farmers may have significant economic opportunities to participate in carbon markets by offering carbon sequestration services, a.k.a. emission offsets, from conservation tillage.

19. North Carolina farmers have significant economic opportunity for carbon sequestration and soil improvement through bio-char, however, additional research is needed to better understand this opportunity.

20. North Carolina businesses and local governments has significant economic opportunity (e.g., through profit or fuel price stabilization) for biodiesel production from micro-algae, however, additional research is needed to better understand this opportunity.

21. Local planners often identify DOT road building as the most powerful factor predicting the location and density of future growth. Currently, NC DOT long-range planning directly extrapolates existing growth patterns, which are urban sprawl patterns, with little or no public transportation. As a result, DOT constructs and expands roads based on plans that support and promote increased urban sprawl.