

**Comments on the Draft LCGCC Report submitted by Michael Regan – March 22, 2010**

**MEMORANDUM**

**Date:** March 22, 2010

**To:** The Honorable Representative Pricey Harrison and the Honorable John Garrou, co-chairs, Legislative Commission on Global Climate Change

**From:** Michael Regan, Environmental Defense Fund

**Cc:** Tim Dodge, Mariah Matheson

**Re:** FINDINGS FOR LCGCC REPORT RECOMMENDATIONS

I respectfully submit the following “findings” for inclusion in the Final Report to the General Assembly and the Environmental Review Commission. Thank you for your consideration.

**“Beyond Code” Incentives and Targets (Buildings)**

North Carolina’s residential sector consumed 715,851 billion Btus of energy in 2007. The commercial sector consumed 573,467 billion Btus in the same year.<sup>1</sup>

**Building Energy Codes (Res/Com to follow IECC)**

If enacted, North Carolina House Bill 1344, “Green Building Code,”<sup>2</sup> requires commercial and residential buildings in North Carolina to meet the latest edition of the standards in the International Code Council’s International Energy Conservation Code (IECC).

**Energy Efficiency Recommendations for Government Buildings**

North Carolina has already enacted legislation to require energy and water efficiency improvements in new and retrofitted state buildings, but there is room to go further. For example, a recent analysis identified ten no-cost or low-cost energy efficiency investments that could cut North Carolina Central University’s energy costs by 65%, saving the university \$13 million over five years. These investments would avoid 27,000 tons of carbon dioxide per year.<sup>3</sup>

---

<sup>1</sup> EIA, North Carolina energy profile, [http://tonto.eia.doe.gov/state/state\\_energy\\_profiles.cfm?sid=NC](http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=NC)

<sup>2</sup> <http://www.ncleg.net/gascripts/BillLookUp/BillLookUp.pl?Session=2009&BillID=h1443>

<sup>3</sup> Energy Efficiency and Conservation at North Carolina Central University, report for EDF Climate Corps by David Fox and Sahil Thaker, 2009.

## Comments on the Draft LCGCC Report submitted by Michael Regan – March 22, 2010

Public universities face a major financial hurdle limiting their ability to invest in energy efficiency. Current law requires that all utility cost savings be returned to the state's General Fund at the end of each fiscal year. House Bill 695, introduced last year, would allow universities in the UNC system to keep savings reaped from efficiency improvements for reinvestment in additional energy and water saving measures.<sup>4</sup> These schools account for over half of North Carolina's state building energy use.

### C-Fund to Convert Hog Farms

Manure management activities are the largest contributor (approx. 50%) to North Carolina's agricultural greenhouse gas emissions.<sup>5</sup>

Primary emissions from manure management are methane (CH<sub>4</sub>), which is 19 times more potent than carbon dioxide, and nitrous oxide (N<sub>2</sub>O), which is 281 times more potent than carbon dioxide.<sup>6</sup>

Swine producers can generate income by capturing methane emissions and using them to produce energy, using anaerobic digestion technology. There is also an emerging market for carbon offsets, emissions reductions achieved in industries unlikely to be regulated by climate policy. Nationally, agricultural and landfill methane capture projects represent the largest supply of carbon offsets and the greatest number of projects.<sup>7</sup>

### Sustainable Utilization of Biomass

NC Environmental Management Commission report, *Evaluation of the Natural Resource Impacts of the Woody Biomass Industry in North Carolina*<sup>8</sup>, states that without "proper protections," the use of woody biomass for energy can have significant impacts in the areas of "land use..., soil nutrient deterioration, water quality degradation, destruction of wildlife habitat, ecosystem disruption, air quality and ash deposition." The report includes the following findings:

- 1) The use of woody biomass for energy production has a broad range of potential impacts.

---

<sup>4</sup> <http://www.ncleg.net/gascritps/BillLookUp/BillLookUp.pl?Session=2009&BillID=h695>

<sup>5</sup> Revised Draft North Carolina Greenhouse Gas Inventory and Reference Case Projections, 1990-2020, <http://www.ncclimatechange.us/ewebeditpro/items/O120F8235.pdf>

<sup>6</sup> Ibid and USEPA Greenhouse Gas Equivalencies Calculator, <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

<sup>7</sup> EcoSecurities, memo to LCGCC, November 30, 2007

<sup>8</sup> Environmental Management Commission, [http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=90b750f0-81ff-4410-aaab-10cec70fdd8c&groupId=61581](http://portal.ncdenr.org/c/document_library/get_file?uuid=90b750f0-81ff-4410-aaab-10cec70fdd8c&groupId=61581)

**Comments on the Draft LCGCC Report submitted by Michael Regan – March 22, 2010**

- 2) The differing interpretations of the statutory definition of “renewable energy resource” as applicable to biomass results in uncertainty and confusion.
- 3) There are currently no standards or guidelines that require the sustainable management of the utilization of woody biomass.
- 4) Current funding sources for forestry and landowner incentive programs may be inadequate.
- 5) State policy on woody biomass utilization for electricity production should apply equally to utilization of woody biomass for biofuels production.
- 6) Current data collection is inadequate to inform state policy makers and regulators.
- 7) Oversight of the impacts of the woody biomass market is currently spread across a number of state entities and agencies.

These findings led the EMC to recommend that the General Assembly should both “clarify the definition of ‘renewable energy resource’ in relation to woody biomass” and “require the adoption of forest management guidelines or adoption of third party sustainability standards.”