

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2009

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HOUSE BILL 1809*

Short Title: Study Carbon Offsets and Carbon Sequestration. (Public)

Sponsors: Representatives Harrison, Underhill, Wilkins (Primary Sponsors);
M. Alexander, Bryant, Carney, Dockham, Faison, Gill, Hughes, Insko, and
Luebke.

Referred to: Environment and Natural Resources, if favorable, State Government/State
Personnel.

May 19, 2010

A BILL TO BE ENTITLED

1
2 AN ACT TO DIRECT THE DEPARTMENT OF AGRICULTURE AND CONSUMER
3 SERVICES, THE DEPARTMENT OF COMMERCE, AND THE DEPARTMENT OF
4 ENVIRONMENT AND NATURAL RESOURCES TO EVALUATE THE CARBON
5 SEQUESTRATION POTENTIAL OF NATURAL AND WORKING LANDSCAPES IN
6 THE STATE; TO STUDY OTHER OPPORTUNITIES TO DEVELOP CARBON
7 OFFSETS WITHIN THE STATE; AND TO STUDY THE FEASIBILITY AND
8 ADVISABILITY OF ESTABLISHING A CARBON OFFSET PROGRAM IN THE
9 STATE, AS RECOMMENDED BY THE LEGISLATIVE COMMISSION ON GLOBAL
10 CLIMATE CHANGE.

11 The General Assembly of North Carolina enacts:

12 **SECTION 1.(a)** Definitions. – As used in this act:

- 13 (1) "Cap and trade program" means any program that (i) places a limit, or cap,
14 on the total amount of greenhouse gas emissions that is allowed under the
15 specific target for greenhouse gas emissions set under the program, (ii)
16 allocates greenhouse gas emissions as credits to individual businesses so that
17 the total credits allocated equal the cap, (iii) and allows businesses to bank
18 credits for the future or to buy and sell credits based on whether a particular
19 business reduced or increased its greenhouse gas emissions in a given year
20 and the value of the credits in the marketplace.
- 21 (2) "Carbon offset" means the credit given for activities that result in the
22 reduction or avoidance of greenhouse gas emissions, or for the sequestration
23 of greenhouse gases. For the purposes of this act, one carbon offset shall be
24 equal to the reduction, avoidance, or sequestration of one metric ton of
25 carbon dioxide emissions or its functional equivalent in other greenhouse
26 gases.
- 27 (3) "Carbon sequestration" means the absorption from the atmosphere of carbon
28 dioxide by vegetation and soils; and the storage of carbon in vegetation and
29 soils.
- 30 (4) "Greenhouse gas" means any gas that contributes to anthropogenic global
31 warming, including, but not limited to, carbon dioxide, methane, nitrous
32 oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.



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1 **SECTION 1.(b)** Study. – The Department of Agriculture and Consumer Services,
2 the Department of Commerce, and the Department of Environment and Natural Resources shall
3 jointly evaluate all of the following:

- 4 (1) The carbon sequestration or reduced emission potential of all lands,
5 wetlands, and coastal waters, including working and natural landscapes in
6 the State, from the following practices:
7 a. Alternative farming practices.
8 b. Soil carbon management and storage.
9 c. Reduced methane emissions from animal waste management
10 systems.
11 d. Alternative methods of forest management that can increase carbon
12 sequestration, accounting for changes in the mortality and
13 distribution of tree and other plant species, and the extent to which
14 carbon is stored in trees and wood-based building materials.
15 e. Avoided conversion of agricultural and forestlands.
16 f. Protection and enhancement of natural landscapes and diverse
17 ecosystems.
18 g. Preserving and restoring coastal salt marshes, sea grass beds, oyster
19 reefs, and other fisheries habitats.
20 h. Sustainable use of forest resources for biomass energy production.
21 i. Other practices that the agencies find relevant.
22 (2) Current and developing technologies for carbon sequestration, including the
23 potential use of microalgae and biochar.
24 (3) Existing carbon sequestration and carbon offset programs and policies,
25 including voluntary programs.
26 (4) Standards and certification regimes in place for verifying the benefits of
27 carbon sequestration and carbon offset programs, and the feasibility of
28 utilizing State agencies for verification.
29 (5) The anticipated costs for landowners, farmers, foresters, and other interested
30 parties in the State to participate as offset providers in a cap and trade
31 program for greenhouse gas emissions, including the costs of monitoring
32 greenhouse gas emissions, satisfying reporting requirements, and any other
33 costs.
34 (6) The anticipated benefits for landowners, farmers, foresters, and other
35 interested parties in the State to participate as offset providers in a cap and
36 trade program for greenhouse gas emissions, including any likely increase in
37 their annual incomes.
38 (7) Other co-benefits associated with activities related to carbon sequestration in
39 the State, including improved water quality, soil quantity and quality, air
40 quality, and wildlife habitat.
41 (7) The advantages and disadvantages to the State in developing or
42 implementing its own carbon offset certification programs or carbon offset
43 trading systems in the event a federal cap and trade program for greenhouse
44 gas emissions is enacted.
45 (8) Any other issues the agencies consider relevant to this topic.

46 **SECTION 1.(c)** Consultants. – In the conduct of this study, the agencies may
47 employ independent consultants as provided by G.S. 120-32.02 and G.S. 120-70.44.

48 **SECTION 1.(d)** Advisory committee. – The agencies may convene an advisory
49 committee of interested parties to assist in the design and implementation of the study.

50 **SECTION 1.(e)** Report. – The agencies may submit an interim report of their
51 findings and recommendations to the Environmental Review Commission no later than

1 September 1, 2011. The agencies shall submit a final report of their findings and
2 recommendations, including any legislative proposals, to the General Assembly on or before
3 April 1, 2012.

4 **SECTION 2.** This act is effective when it becomes law.