LCGCC Recommendations submitted by Michael Regan (Building Energy Codes) - February 5, 2010

Date: February 5, 2010
To: Mariah Matheson, Commission Assistant
From: Michael Regan

Re: Building energy codes

Environmental Defense Fund recommends that the Legislative Commission on Global Climate Change (LCGCC) endorse **House Bill 1443, "Green Building Code"**[1]. This legislation was introduced by Representative Harrison et al in the 2009 session. It has been referred to the House Energy and Energy Efficiency Committee and from there will be referred to the House Committee on Commerce, Small Business, and Entrepreneurship.

This legislation 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). Currently, the North Carolina Energy Conservation Code requires compliance with IECC standards set in the previous three-year cycle. For example, the 2009 North Carolina Energy Conservation Code requires buildings to meet the 2006 IECC.

The standards would apply to new and renovated commercial buildings and to new residential buildings. (The state has already implemented stringent energy and water conservation requirements for state buildings.) This means that commercial and residential buildings would be required to meet the 2009 IECC standards and that the state code would be updated on the same cycle as the IECC. Both the CAPAG final report and the interim recommendations of this commission include recommendations for North Carolina to adopt more stringent building codes for residential and commercial buildings.

Impact on greenhouse gas emissions

As the CAPAG report notes,

> *"As energy use in buildings in North Carolina accounts for about one-third of North Carolina's current gross [greenhouse gas] emissions, amending State and/or Local Building Codes to make the requirements for minimum energy efficiency levels in buildings more stringent will have a considerable immediate and ongoing impact in reducing building-sector GHG emissions.*[2]*"*

Economic impact

[1] http://www.ncleg.net/gascripts/BillLookUp/BillLookUp.pl?Session=2009&BillID=h1443
[2] RCI-6, http://www.ncclimatechange.us/capag.cfm

The Center for Climate Strategies identifies stringent building energy codes as one of the twelve "super options" that will achieve the greatest greenhouse gas reduction at the lowest cost[3].

Ancillary benefits

Adopting more stringent building energy codes will reduce the amount of energy needed for heating, cooling and powering buildings. This will improve air quality by reducing the amount of energy produced through fossil fuel combustion. Reducing energy use in residential and commercial buildings will also reduce the consumption of water used for cooling and to produce steam for turbines in electricity generation.

[3] From Tom Peterson presentation to LCGCC, 11/17/09