

# Report

## North Carolina's Code Adoption Process: Recommendations for Possible Improvements

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### Executive Summary

Over the past 5 months the State has embarked on an aggressive education program on the provisions of the North Carolina Energy Conservation Code. Throughout the project, Mathis Consulting Company (MC2) reviewed the process of code adoption. In particular, we have focused on how North Carolina adopts new building codes, why code adoption can be delayed, and how consumer interests are represented during code adoption debates.

This report provides several ideas for consideration by state leaders, policy makers, Building Code Council members, Legislators, as well as staff from the Departments of Insurance, Commerce, Utilities Commission and other state agencies involved in the state's building codes.

Key items for consideration include:

1. Automatic adoption of the I-codes
2. Increased focus on education and compliance, versus code development
3. Free downloadable copies of all NC codes, eliminating the number one impediment to code compliance
4. Invest in Code Compliance Assessment
5. Promote and Support Code Compliance Locally
6. Institutionalize a Beyond Code Appendix for the NCECC

$E = mc^2$

*Disclaimer*

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**Recommendation 1: Make Code Adoption Automatic**

North Carolina should shift its focus from code adoption to code compliance. One key action that would enable that process is to move to “automatic” code adoption. Rather than wrestle with a decision about a new code each code cycle, automatic adoption of the national model code would enable the state to focus its limited resources on improving code enforcement, compliance, and energy education for everyone in the building trades.

**Recommendation 2: Shift Focus from Code Development to Code Education and Compliance**

The requirement for 90% compliance with an improved energy code by 2017 looms on the horizon. The compliance survey conducted as a part of this project showed serious deficiencies with some of the most fundamental provisions of the energy code. Compliance with current energy code provisions requires attention. Compliance with the requirements of an improved energy code (such as the 2012 IECC) will require a new and focused approach to ensuring compliance.

Critical to these compliance objectives is basic code education. The demand for more education on code provisions – across all aspects of the building industry – is a necessary first step for achieving any improved compliance objective.

**Recommendation 3: Make Copies of the Code Available to Everyone**

The single largest and simplest impediment to understanding the provisions of the code is the lack of a copy of the code. For very low costs, North Carolina can license the code and a free download of the code could be made available to everyone in the building industry.

**Recommendation 4: Invest in Code Compliance Assessment**

The Building Code Council should engage in a study of compliance with the state’s energy code provisions. No compliance goal can be reasonably met without developing appropriate techniques and metrics for compliance assessment.

**Recommendation 5: Promote Code Compliance Locally**

The State Energy Office has regional representatives that assist with regional projects and objectives. In the spirit of “Train the Trainer” the BCC and SEO could develop a pool of local experts and resources to assist with code education and compliance. The notion of an experienced “energy circuit rider” could assist builders, building inspectors and others in the building industry with code education and compliance. The SEO could also engage the state’s community colleges in this regional support task.

**Recommendation 6: Institutionalize a Beyond Code Appendix for the NCECC**

The Building Code Council should make a beyond code appendix as a standard part of each new energy code for both residential and commercial buildings, making information easily accessible on how to go 10%, 20% or more beyond the minimum efficiency levels in the code creates an environment of continuous improvement and encourage greater investment in NC buildings. Furthermore, because the advanced appendix would be optional and above minimum standards, it would continually create possibilities for utility programs, tax programs, mortgage programs and other incentives.

