



# energize South Carolina

*Independence through Innovation*

## AN IMPROVED BUILDING CODE ENERGY STANDARD FOR SOUTH CAROLINA *7% Electricity Savings and 5% Natural Gas Savings by 2020*

### **What is South Carolina's building code energy standard?**

The state's energy standards are established by the legislature and adopted by the South Carolina Building Codes Council (SCBCC) for all municipalities.<sup>1</sup> These codes go a long way toward reducing energy consumption for new construction in our state. They also establish a base line of minimum performance to compare the effects of energy saving measures promoted by government, utilities and other organizations.

### **Why revisit the energy standard?**

South Carolina law specifies energy standards established in the early 1990's that supersede requirements of the current codes.<sup>3</sup> As a result, every time the building codes have been updated and adopted by South Carolina over the past decade and a half, the energy efficiency provisions for residential construction have been deleted. By specifying dated standards in the law, state and local code enforcement officials are unable to enforce provisions of the modern building code that would help the state save energy.

### **How can the state's standard be improved?**

The solution to ensuring that South Carolina receives the full benefit of the energy conservation measures included in the building code is to clarify that the building code adopted by the Building Codes Council establishes minimum energy efficiency standards for all building construction in South Carolina.

### **How would an improved energy standard benefit South Carolina?**

An improved standard will annually save the average new or renovated South Carolina home approximately \$547 through 2015, increasing to \$1146 thereafter. While improving residential codes could increase home construction costs slightly, over a ten year period the average homeowner would realize over \$7,000 in savings. By 2020, this change will generate approximately \$1.7 Billion in energy savings statewide. Cumulatively, it will save nearly 8 million megawatts of energy – equivalent to 3 power plants that each has a 600 megawatt capacity, or enough energy to power over 500,000 homes. Carbon dioxide emissions reductions would accumulate to 35 million metric tons – equivalent to taking over 725,000 automobiles off the road.<sup>4</sup>

Annual Cumulative Energy Savings <sup>2</sup>		
Year	Electricity Savings (%)	Natural Gas Savings (%)
2009	0.3%	0.2%
2010	0.8%	0.5%
2011	1.2%	0.8%
2012	1.6%	1.0%
2013	2.0%	1.3%
2014	2.4%	1.5%
2015	3.3%	2.1%
2016	4.0%	2.6%
2017	4.9%	3.1%
2018	5.6%	3.6%
2019	6.4%	4.1%
2020	7.1%	4.6%

<sup>1</sup> The SCBCC has adopted the 2006 editions of the International Residential Code, the International Building Code, and the International Energy Conservation Code.

<sup>2</sup> Center for Climate Strategies.(2008). Final Report. South Carolina Climate, Energy and Commerce Advisory Committee.

<sup>3</sup> S.C. Code § 6-9-50 and § 6-10-30

<sup>4</sup> Center for Climate Strategies.(2008). Final Report. South Carolina Climate, Energy and Commerce Advisory Committee.