

# Issue Brief

The American Institute of Architects • Government Advocacy • Current Issue Position and Analysis

# **Key Points:**

- The International Code
  Council (ICC), which develops
  and publishes the I-Codes, is
  the developer of the IGCC,
  with the AIA, ASTM
  International, USGBC,
  ASHRAE, and IES being
  cooperating sponsors.
- The IGCC is being developed using an open, consensus-based process, which ensures that key stakeholders' voices including that of the AIA and many of its members have been heard throughout and will continue to be heard.
- Several state legislatures notably, Maryland, Oregon, Rhode Island, and Wisconsin have made significant progress toward authorizing IgCC adoption, while many city and county governments are actively seeking mandatory green building provisions within their respective jurisdictions.
- Greater energy conservation may be a catalyst for job growth particularly in the construction sector. For example, New York City's new energy code, which took effect July 1, 2010, is expected to create 18,000 new jobs.

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# **International Green Construction Code**

#### **AIA Position**

The American Institute of Architects supports the development and adoption of the International Green Construction Code (IGCC), which provides model code language for states and municipalities to establish baseline sustainable design requirements for new and existing buildings including but not limited to energy and water use efficiency; materials and resource use; indoor environmental quality; building impacts on the environment; site design; and sustainable building owner/facility management education.

# **Action Sought**

The AIA urges state and local government leaders to support legislative and regulatory measures authorizing adoption and enforcement of the IGCC in their respective jurisdictions.

#### **Explanation and Justification**

Why is a new green code better than an existing rating system or standard? The development of a new code occurs when there is a clear need expressed from regulators and others in the A/E/C community. In the case of the IGCC, there has been an increasing call for a model code addressing sustainable design and construction practices. For measurable progress in making the built environment more sustainable, there needs to be a regulatory framework in place, which is only attainable through use of a code. Rating systems are voluntary guidelines for cutting-edge applications of sustainable design, whereas the IGCC establishes minimum requirements for buildings; in simple terms, a green code creates a "floor" of minimum sustainable building requirements, while rating systems create a "ceiling" of green building goals.

Why is the AIA involved and why should architects care? Buildings consume about 40 percent of our nation's energy and produce approximately the same amount of our carbon emissions. The AIA is a cooperating sponsor of the IGCC because we are committed to decreasing energy use and the impact of new and existing buildings on the environment. The AIA has a goal of achieving carbon neutrality in the built environment by the year 2030. The IGCC will act in concert with the AIA's 2030 goals by providing architects with a code book to guide their sustainable design activities as an overlay to the other International Codes (I-Codes); offering the necessary mechanisms and criteria to create a useable and enforceable framework for sustainable design and development; establishing methods for measuring compliance; and driving sustainable building into everyday practice, with the result being safer and more energy-efficient buildings.

Why should AIA be at the table? Model codes affect the way architects perform their work every day. The ICC and its members were set to write the IGCC with or without the help and guidance of the AIA, and it was essential that AIA accept the offer to help draft this first green model code.

During the development process a few concepts were proposed that would have had a significant affect on the practice of architecture in a number of ways. The presence of the AIA during the development of the code helped the dialogue to arrive at a more meaningful and reasonable document. A few key discussion highlights:

• Building Shape

The idea to mandate the most efficient building shape as the code standard was presented; this would have been the base building against which all other building shapes and concepts would have been measured to verify compliance with the code. AIA members educated fellow code writers that building shape, like every other building attribute cannot be normalized to guarantee efficiency, and should not be mandated as a standalone requirement.

#### Commissioning

Some participants argued that architects are too close to their work to provide objective oversight to properly commission buildings. Had this concept been adopted, our clients would have been mandated in the model code to retain another layer of consultants – at their cost – to bring a building to completion, adding to project soft costs unnecessarily while architects are capable of and should have the ability to engage in this work.

#### Design Reports

In one of the early draft versions language was proposed that would have mandated a design report be included with the construction documents that would have defined items including, but not necessarily limited to project scope, goals and objectives, design limits and critical design assumptions and features. The intent was to provide a record of design issues against which building performance could be measured and verified during the commissioning process. However, there was also significant and unnecessary liability exposure to the Registered Design Professional (Architect). This language was removed from the draft at the behest of AIA representatives.

#### Greenfields

The total prohibition of building on greenfields was proposed to the drafting committee with the intent of forcing development into more dense areas, prevention of sprawl, and efficient use of existing transportation and utility infrastructure. It was a well intentioned concept with significant unintended consequences. This requirement would have superseded local zoning ordinances and jurisdictional desires; created a 'takings' situation by preventing anyone that had purchased zoned, developable property from realizing their investment in that property; would have taken control of land use issues from local jurisdictions that know more about their land use requirements, community values, and appropriate use of land than those sitting at the development table. AIA members were directly involved in the dialogue that moved this requirement to its home as a jurisdictional elective rather than a required mandate.

### Energy Efficiency and "Social Engineering"

During discussions in the evolution of the energy requirements in Chapter 6 there were many concepts brought to the surface including the concept that this code – in order to maximize energy efficiency – needed to go beyond prescribing U and R values as that would only get us to a 50 percent reduction in energy use. For this to be a forward reaching document the document should prescribe and educate the use of building systems and the behavior of building users to assure maximum building energy efficiency. While this is an interesting argument, when measured against owner programs, and the inability of any building owner to police occupants, this concept did not find a home in the IgCC.

How does the IGCC differ from other I-Codes and from a federal mandate? One of the values of the IgCC is that it has been designed as an "overlay" code; that is, it will coordinate and integrate with existing I-Codes. The IgCC presents various tiers for jurisdictions to apply to commercial and high-performance building stock, but in a manner that incorporates the health and safety features of the other I-Codes. The model language can, if desired, be adapted to address local conditions and allows for publicly-elected legislative bodies to have the final voice in adoption. Many of the I-Codes are adopted without amendment at the state or local level, while amended versions often take into account local weather and hazard conditions, regional approaches to building design and construction, and other factors.

How can architects advocate for adoption and implementation of the IgCC? The AIA has compiled an online toolkit on IgCC-related advocacy at the state and local levels. It is accessible via <a href="http://www.aia.org/igcc">http://www.aia.org/igcc</a>.