



GLOBAL CLIMATE CHANGE GAINS A NEW CHAMPION

The New IGCC Offers Ways and Incentives for Reducing Harmful Emissions

A problem is something that requires a solution. If there is no solution, it's not a problem—it's something we have to live with. Fortunately the problem of climate change has a solution. In order to avoid the undesirable effects of climate change, a consensus of environmental scientists recommends substantial reductions in our output of global greenhouse gas (GHG) emissions.

Currently buildings consume 40% of our nation's energy and produce 40% of our carbon emissions. The structures in which we live and work make the most demands for materials that produce by-product greenhouse gases. In order to keep global warming under control, we must slow the growth rate of GHG emissions and reduce the energy consumed by buildings. And we've been warned: we have to act immediately.

You don't have to be a tree hugger to embrace efforts to reduce GHG emissions. Such reductions can bring immediate and tangible benefits. And with good design, going green doesn't even have to be expensive; especially when you consider that the costs can be recouped quickly in energy savings.

Forewarned Is Forearmed

Measures for keeping global warming under control are already in progress, with important initiatives leading the way. [The Architecture 2030 Challenge](#), for example, calls for carbon neutrality by 2030 and spells out the critical energy-consumption and emission reductions we need to take. Influential associations have joined forces in support of green construction. Their efforts are now available in the International Green Construction Code (IGCC), which has been presented for public comment and aims for adoption in 2012.

Meant to accompany the International Building Code, the new IGCC will be focused on the design and performance of commercial buildings. Written to guide contractors, building owners, and building inspectors, the new code will be specific, reliable, and enforceable. As the nation's first code to address green commercial buildings and high-performance buildings, it will aim to guide green code regulations for commercial buildings.

More importantly, wide acceptance of the IGCC promises to reduce energy usage and the carbon footprints of commercial buildings in line with the ambitious goals of the Architecture 2030 Challenge.

Building green, according to a study by Fireman's Fund Insurance Company, "increases building value, decreases operating expenses, and increases the ability to attract and retain quality tenants." Likewise, as more buildings gain notoriety for their LEED certifications, more owners will feel better about boarding the green bandwagon. But right now owners need to know that not going green will make new not-so-green construction obsolete, that is, less valuable more quickly.

IGCC Supporters and What They Propose

American Institute of Architects (AIA)
American Society for Testing and Materials (ASTM)
Green Building Initiative
International Code Council (ICC)
National Green Building Standard (NGBS)
United States Green Building Council (USGBC)

According to the [IGCC FAQ](#), the new code will:

- Reflect the AIA 2030 Carbon Neutrality Challenge
- Apply to traditional commercial and high-performance buildings
- Provide criteria to measure compliance
- Address energy- and water-use efficiency
- Address materials and resource use
- Account for local conditions
- Provide criteria to measure compliance

Regular updates on the progress of IGCC developments will be posted on the ICC [website](#)

According to [CoStar Group Inc.](#), green buildings command higher rents and tend to have fewer vacancies than similar counterparts. And, of course, building green also qualifies building owners for tax breaks.

Leading Our Green Initiatives

Steven Schaefer Associates encourages support, participation, and adoption of the IGCC as well as initiatives such as the Architecture 2030 Challenge. Project Manager Tom Moore is chair of the Education & Training Committee for the [Structural Insulated Panel Association](#) (SIPA). He has also been involved in the development of the IGCC, speaking on behalf of SIPA, for Structural Insulated Panels (SIPs) to be included in the new code. A late change in the development of the IGCC has eliminated the section where specific materials were covered. However, the SIPA has expressed support for Moore's suggestion to be active in the upcoming public comment stage in the development of the IGCC.

"Every builder who adopts SIPs saves time, money, and labor," says Moore. "They also help achieve the sustainability goals of the IGCC and the National Green Building Standard."

Steven Schaefer Associates' Senior Project Manager Robert Rogers is chairman of the [American Concrete Institute's Committee for Insulated Concrete Forms](#) (ICFs), another green construction product. ICFs greatly increase energy efficiency and sound insulation. They also provide ease of construction, wind and fire resistance, durability and strength.

Our firm is helping design professionals and building officials grow more comfortable with green construction products such as SIPs and ICFs. We work to educate builders and contractors on their immediate benefits and specific installation procedures and requirements. We were one of the first structural firms in the country to recognize and specify thermal isolators, which prevent heat and cold transmission through exterior metal components into supporting structural steel frames.

Jim Miller, president of Steven Schaefer Associates, Inc., sums up the company's support for green initiatives this way: "It's been said that we need to change the way we look at building codes. Instead of just looking at how wind, snow, and earthquakes affect buildings, we need to also look at how buildings affect the environment. The IGCC will help us integrate this way of thinking."