

GREEN BUILDING



The Challenge of a Lifetime

by David Eisenberg

I am thrilled to be writing this first column for the new Green Building section of *Building Safety Journal*. In future issues, ICC Senior Staff Architect Allan Bilka and I will alternate using this space to present a broad spectrum of ideas, information and opinions about the world of green building and building codes. My aim in this inaugural entry is to convey the importance and uniqueness of this moment in time and the crucial role I believe the building codes community can play in addressing some of the more pressing challenges we are likely to face.

First, however, I wish to acknowledge the visionary leadership provided over the past year by ICC CEO Rick Weiland and Immediate Past Board President Wally Bailey, along with the commitment demonstrated by the Code Council's Board and staff to sustainability and green building. From the issuance of a Green Building Policy Statement in January 2007; to entering into an MOU with the U.S. Green Building Council; to the move into new green headquarters in Washington, D.C.; to the creation of a dedicated green building webpage (www.iccsafe.org/news/green); to cosponsoring the Green Codes Summit with the American Institute of Architects; to participating in the development of American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 189, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*; to partnering with the National

Association of Home Builders to develop the *National Green Building Standard* for residential construction; to the August *Building Safety Journal* sustainability feature issue; and more, ICC has demonstrated that it is serious about this endeavor. This is a great start and congratulations are in order.

Defining the Challenges

Many of you will recall that among Wally Bailey's key goals during his term as President were raising the profile of building officials in the public eye and promoting sustainability and green building, and 2008 ICC Board President Steven Shapiro has made it clear that he intends to continue to pursue these efforts. What may not be so obvious is how closely related these two initiatives may prove to be.

There are few more crucial challenges than those we are beginning to comprehend related to climate change and the world's demand for, and supply of, energy and water. A recent meeting of the world's petroleum experts found them in basic agreement that we are rapidly approaching the moment when the demand for petroleum will outstrip the capacity of the planet to supply it, and the effects and rate of climate change documented around the world have greatly alarmed the scientific community, with projections about sea rise previously formulated in centuries now being discussed in terms of decades.

Now consider recent studies indicating that, taken together, building construction, operation and

maintenance have as powerful an impact on the environment as any other human activity on the planet. This means that the design, development and construction sector will need to play a central role if we hope to see a significant improvement in the outlook for the world's future. Broad and deep changes will be required and building codes will be the gateway for many of them, with code officials the gatekeepers.

The nature of the changes taking place in the world today will soon overtake any remaining skepticism about the seriousness, permanence or importance of the green building movement. It is already widely acknowledged to be not just a passing fad but a rapidly maturing evolution of theory and practice, and my first-hand experience with the codes community as a genuinely caring group of professionals whose overriding concern is public welfare, health and safety makes me optimistic about the continued merger of the parallel aspects of safeguarding building occupants and safeguarding the living world.

Attitudes and Outlook

The realities of climate change, resource shortages, degradation of the planet's living systems, and the associated economic and social equity ramifications will keep green building and sustainable development on the front burner for the foreseeable future. Rather than viewing this as a doom-and-gloom scenario, however, I invite you to recognize it as our generation's opportunity to do truly world-changing work—the most important work many of us will do in our lifetimes. This will take some conscious effort. Emergent crises are often perceived to drive undesired changes and many of us tend to be highly critical of anything new and different that comes along, even under the best of circumstances. As a result we may not ask the right questions, focusing on what something new will cost or otherwise impact rather than thinking about what the costs and impacts are of what we are now doing.

If you take a few minutes to think about where the energy used in your community comes from, for example, you will very probably come to the realization



View of the Capitol from the roof of the National Association of Realtors building in Washington, D.C., home of the Code Council's new headquarters.

that much of the revenue leaves the local economy. In fact, that figure is somewhere between seventy and eighty cents of every dollar spent on energy in most U.S. communities. Think about it: something like three-quarters of the money spent on energy is drained out of your community, yet discussions about energy efficiency and renewable energy focus almost exclusively on implementation costs. What we should be asking is what it costs to continue to build and operate energy-deficient buildings dependent upon nonlocal, nonrenewable sources. The reality is that energy efficiency and renewable energy represent the most powerful local economic development engines communities have available to them today. Coincidentally, this is also where the low-hanging fruit is when it comes to rapidly addressing climate change and the emerging energy supply crisis.

This is just one example of why we should view the transition to green building and sustainable

development as a set of no-regrets choices for positive change. If we choose for whatever reason to ignore the potential threats and turn out to be wrong, we run the risk of facing unprecedented catastrophe and human suffering. If we choose to act as if the threats are real and serious and we are wrong, we will end up with more economically viable communities; higher quality, more efficient and valuable buildings; and a healthier environment.

Where We Stand

What is most important for you as members of the building codes community to realize—and communicate to your peers, communities and other stakeholders—is that the shift to incorporating these larger risks and responsibilities is perfectly in keeping with what you already do. Above all, building and fire safety officials are in the business of assessing risk and making decisions based upon the best overall interests of the public.

We are faced today with a much broader range of risks associated with buildings, and until fairly recently we have had only a limited grasp of their magnitude. Consequently, there has been a limited—sometimes even negative—response to addressing them, especially in areas we perceive to be outside of our range of responsibility. Returning to the subject of energy efficiency, associated regulations were viewed for many years as distractions from the “real work” of protecting people in the built environment. Today, however, we can see the relation to life safety not only in terms of the improvement of the durability of structures and the indoor environment, but because buildings that use more energy than necessary are directly detrimental to the local and global climate as well as national self-sufficiency and security. We can also see, by the way, how by failing to communicate the context within which energy regulations could be understood to relate to life safety goals, their proponents often generated resistance where they might have found much ready support.

Whether one believes in the science behind them or not, big changes are coming. Will there be winners and losers in the marketplace as a result? Absolutely. Will those positioned to lose stand steadfast for the status quo? Without a doubt. The question you need to ask yourselves is, as public officials, is it your responsibility

to preserve the interests of small but vocal—and perhaps influential—minorities who do not recognize or resist the imminent need for change?

The politics, public processes and other mechanisms that drive this transition will often be complex, and sometimes downright messy. The good news is that a rapidly growing body of evidence shows that well-designed green buildings and developments are higher quality, more cost-effective, healthier and more valuable than their non-green counterparts. Many are proving to be more profitable to build as well, not to mention the larger community benefits.

In future columns, Allan and I will explore some of the research supporting the points that I have touched on here. We will also be addressing issues such as “greenwashing,” green building programs, product certification and much more. My ultimate goal in contributing to this column is to help accelerate and smooth the transition to a sustainable built environment, and the best way I know to accomplish that is to help my friends and associates in the building industry recognize the opportunity we have to act on behalf of those without voices in the decision-making process, including and especially children—our own and those who follow them. I genuinely believe that what we do now matters more than any one of us knows or fully comprehends, but I am no less certain that together we can meet the challenge with honor and integrity. ♦

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To learn more about DCAT, visit its website at www.dcat.net.