

# 'Value' Underlies Green Movement

Christine Ervin served as assistant U.S. secretary of energy during the Clinton administration, then as president and CEO of the U.S. Green Building Council (USGBC) from 1999 to 2004. During this period, the USGBC emerged from a start-up organization with three staff members to a global organization that is leading a market transformation.

Ervin was interviewed recently by ASHRAE Journal on issues affecting the movement towards sustainable buildings, and the future of the movement.

**Journal: The building industry's interest in sustainability seems to have accelerated in the last few years. What do you see as driving this interest?**

**Ervin:** Two forces are at play. One is timing. As Victor Hugo said "An invasion of armies can be resisted; but not an idea

whose time has come." It's hard to believe that little more than five years ago, we had no common protocol for green buildings, few green buildings or tools for their design, and relatively few professionals practicing integrated design. But market-savvy tools, technologies, and expertise are converging at just the right time—when the global case for sustainability is undeniably compelling.

Decades of individual efforts are paying off as sustainability expands from the circle of innovators to a larger, mainstream industry.

Still, we would not be seeing this kind of growth were it not for the strong value proposition underlying green buildings. This market is not fueled by deprivation, crisis, or wrenching trade-offs. It's about

adding positive value—enhanced health and productivity, operational savings, increased property values, environmental protection, stronger communities, and more. It's no wonder that industry interest is accelerating.



*Ervin*

**Journal: The USGBC has had tremendous impact. What are some challenges ahead?**

**Ervin:** I've worked with many market-based programs during my career, but LEED® is the single most powerful. So powerful, in fact, that it has spurred just the kind of challenges an organization doesn't mind having: how to manage exponential growth.

USGBC has launched an exceptionally ambitious agenda of new products and programs over the last several years. Part

*Advertisement formerly in this space.*

of the challenge in delivering results can be met by continuing to streamline workload, franchising, and outsourcing. Creative partnerships with local chapters and other organizations will play a large role too. But the Council also will benefit from a laser-focus on top priorities amid all the enticing opportunities available. It may not be necessary—or even possible—to please everyone interested in green buildings, but it is essential to satisfy those most critical in transforming the market. Who those customers are will change over time as the market expands, diversifies, and becomes more mainstream.

Finally, updating the products to reflect emerging data from life-cycle assessments and regional characteristics will be a challenge, along with integrating all the various products and tools. But Council staff, volunteers, and partners are well equipped to take this on.

**Journal:** In a recent column, you spoke favorably of the technical aspects of the Green Globes assessment tool. How does Green Globes differ from the LEED certification system?

**Ervin:** Green Globes is the industry's first interactive, Web-based assessment tool—so that is a great innovation in itself.

It generates online strategies, impacts and resources according to various project input. Feedback can be tailored to 20 different team roles (e.g., contractor, client) and eight project

**See Green, Page 141**

### IT Upgrades Driving \$20.6 Billion Market

CONCORD, Mass.—A study from the InterUnity Group involving almost 2,000 companies says that \$20.6 billion is spent each year in the U.S. on electrical mechanical infrastructure that supports information technology (IT). Respondents said that new computing technology is driving electrical mechanical upgrades every three years, and 41% said they were planning a major upgrade in the next 36 months. Almost 50% of the 41% said they planned a major upgrade in the next 12 months.

According to the survey, new equipment purchases without concern for power and cooling requirements keep 59% of data center managers (DCMs) “awake at night.” Power densities of new servers and switches concern 49% of DCMs. Power requirements are increasing at 8% a year. More than 40% of DCMs said they were experiencing annual increases of more than 10%.

Insufficient cooling will be a major problem facing 43% of DCMs within two years. Cooling requirements are increasing 8% a year. However, 39% of respondents are experiencing annual increase of more than 10%.

Of new technologies, 56% of DCMs said they were using blade servers.

Visit [www.interunitygroup.com](http://www.interunitygroup.com) for more information. ●

---

*Advertisement formerly in this space.*

## Green, From Page 10

stages (design, planning.) By allowing an entire team to be able to access common project data, it can encourage more team members to experiment with integrated design strategies. I also like the fact that numerical assessments are generated at two project phases: schematic design and construction, which is handy for planning and permit approvals. Details on its actual use in the market, however, are in short supply and much needed.

Of course, the assessment tool is only one part of an effective certification system; so is the organization standing behind it. In the case of the new Green Building Initiative (GBI), which has licensed the Canadian-based Green Globes tool for use in the U.S., we have an organization still in the making. Hence, we know little about its leadership, how it will operate, how it is supported, the roles of members if any, whether or not it can make changes in the licensed tool, nature of public review and comment procedures, nature of the third party review, and so on. (At least those details are not available on the Web site.)

These kinds of governance and transparency issues go a long way in determining the integrity and potential of any certification system, which is why they were among my top priorities at the USGBC.

GBI's recent bid to become accredited by ANSI (the public comment period closed on May 30) will shed more light on procedural questions surrounding standards; but they are just some of the attributes behind a brand that garners respect. Bottom line is that we appear to have a clever assessment tool, but we're a far cry from knowing whether or not it will gain traction as a credible instrument in the green building market.

## Journal: Is there room in the market for two major certification programs?

**Ervin:** That's a great question, to which I must answer a definitive "it depends."

In the early years of LEED, we aggressively "seeded" the market as quickly as we could. By offering a clear focal point around which to build up a body of knowledge and head of steam, industry and media awareness of green buildings jumped off the charts. The strategy wasn't universally popular; some saw it as being too "LEED-centric." But as assistant U.S. secretary for energy, I had seen how a proliferation of programs, labels and constituencies can fragment a market and slow its building a critical mass.

Given LEED's success, there's less worry over reaching that critical mass. Now, as the green building market expands and diversifies, there may well be room for more than one kind of certification program. After all, some competition can be healthy. But, there's a big if. Consumers must know what they are buying into and have comparative information for their choices. That's the purpose of labeling and certification programs after all: to harness informed consumer choice. Otherwise, the programs can wind up becoming *sources* of confusion, even "green wash." Based on the information at hand, GBI and Green Globes cannot be considered remotely comparable to USGBC and LEED.

## Journal: Where do you see the movement toward sustainable buildings in 10 years?

**Ervin:** Several themes come to mind as we look to the future. We should be seeing exponential advancements by then—similar to the innovations that we've come to expect in personal electronics. Systems planning will extend beyond buildings to

Ambler, Pa., for \$24.3 million. Laars is intended to become a wholly owned subsidiary of Bradford White.

**ABM Industries** of San Francisco has closed the sale of its subsidiary, **CommAir Mechanical Services**, to **Carrier Corporation**. CommAir installs and services commercial and industrial HVAC&R systems in California and Arizona. ●

## Industry Roundup

### Survey Shows Concern

NEW HAVEN, Conn.—A Yale University research survey of 1,000 adults nationwide shows that 92% are worried about U.S. dependence on foreign oil. In addition, 93% want the government to develop new energy technologies and require the auto industry to make cars and trucks that get better gas mileage. Complete results are available at [www.yale.edu/envirocenter](http://www.yale.edu/envirocenter).

### Envelope Research Promising

EDMONTON, AB, Canada—A pilot study at the Alberta Research Council (ARC) shows that energy consumption for space heating can be reduced 48% by combining direct solar collection and heat storage technology with existing structural integrated panel systems (SIPS). The research was conducted Feb. 1–May 15 using test modules with solar panels embedded in exterior walls. ●

community infrastructure. Energy systems will be prominent in a carbon-constrained environment, with buildings more commonly generating as much, or more, energy than they consume. (ASHRAE should be thriving.) Water will be treated as the precious resource that it is.

In 10 years, consumers will be as sophisticated about the performance features in buildings as we are with automobiles and computers today. Most products will carry ratings of environmental attributes. Who knows what biophilia and productivity research will reveal by then and how findings will start shaping our built environment? We'll find out faster if we start investing more in R&D. One big challenge will be how to more easily retrofit existing buildings to take advantage of the new technologies and systems.

It isn't really a matter of whether or not sustainable practices will go mainstream. It is inevitable based on human needs, environmental realities, and economics over the long run. The real question is how to accelerate those trends to maximize their benefits. The challenge and opportunity with sustainability is that it's never finished. New opportunities are triggered every time a price signal changes, technology advances, or knowledge expands. The possibilities are infinite. ●

## Transactions

**Johnson Controls**, Milwaukee, has agreed to acquire **USI Companies**, a Stamford, Conn.-based corporate real estate services firm for about \$80 million. USI's customer portfolio includes 30,000 properties.

**Water Pik Technologies**, Newport Beach, Calif., has agreed to sell its Laars® Heating Systems business to **Bradford White Corporation**,