A Special Research Report from National Real Estate Investor and the U.S. Green Building Council

Exclusive 2010 Green Building Survey

Despite the harsh economy, companies are more committed than ever to green initiatives.

NATIONAL REAL ESTATE Investor

U.S. GREEN BUILDING COUNCIL USGBC

Sponsored by

NYU SCPS

SCHOOL OF CONTINUING AND PROFESSIONAL STUDIES

2010 Green Building Survey

Despite the harsh economy, companies are more committed than ever to green initiatives.

By Denise Kalette

Despite lingering effects of the nation's harrowing recession, which cost thousands of jobs throughout the commercial real estate industry, companies are overwhelmingly committed to investing in energy efficiency in their buildings. That commitment is a central finding of the 2010 Green Building Survey conducted by National Real Estate Investor in partnership with the U.S. Green Building Council (USGBC).

As firms try to recover, scarce capital for growth, reinvestment, and maturing loans has left many property owners leaner than they were last year. In 2009, one out of four (25%) of corporate respondents to the NREI survey boasted a commercial real estate portfolio of 20 million sq. ft. or more. This year, only 9% of corporate respondents retain a portfolio of that size.

Across the board, the percentage of corporate respondents holding portfolios of at least 1 million sq. ft. plummeted. The decline in portfolios measuring 1 million sq. ft. to 4.9 million sq. ft. is striking, dropping from 16% last year to about 5%.

Despite the financial scars, the principle of energy efficiency is now deeply embedded in the culture of commercial real estate. An overwhelming 95% of corporate respondents stress that green design is important in the site selection process. Many corporate executives are passionate about protecting the environment and saving energy: 82% say energy efficiency is important this year in selecting green buildings to buy or lease, compared with 63% last year.

Yet developers are markedly less enthusiastic than corporate executives. Half say green design is more important now than two years ago, while 43% report no change from last year, and 7% say it's less important. Only 19% view green design as extremely important in future projects compared with 37% last year. Developers face distressing odds as they seek new projects amid a scarcity of funding, and some are eager to take on any project, green or not.

Overall, the green movement has transformed the American landscape, says Doug Gatlin, vice president at the U.S. Green Building Council. Tenants and investors now demand Leadership in Energy and Environmental Design (LEED) certification by the Council or a high rating through the government's Energy Star program, which promotes energy efficiency. "If you're trying to market a property as a Class-A property, you really better have that LEED certification or you're probably not going to attract tenants as well as you would otherwise."

Still, many commercial property owners have dragged their heels when it comes to the green movement. "People have known about the energy-saving potential of some of these technologies for quite a while. And yet the commercial real estate industry has been pretty sluggish to respond. They've made good profits just continuing on as usual," says Gatlin. But tenants and buyers are forcing the hand of reluctant owners, he adds. "They're starting to make profound changes."

In a growing number of locales, the transition to energy-efficient buildings is no longer voluntary. Washington, D.C. and San Francisco now mandate green building standards, says Gatlin. About 150 state and local initiatives support green building through financial incentives to property owners, such as tax incentives and/or rebates. One in five government officials responding to NREI's survey say their jurisdiction has a green code or policy in place for the private sector.

Clamoring for help

A whopping 77% of corporate respondents say they would find tax incentives the most beneficial among enticements for retrofitting green buildings. And 66% say rebates and discounts on environmental products, such as those the Energy Star program provides, would help them out. Half the corporate respondents want grants, including subsidized fees, and 43% say reducing permit and zoning fees also would provide welcome benefits.

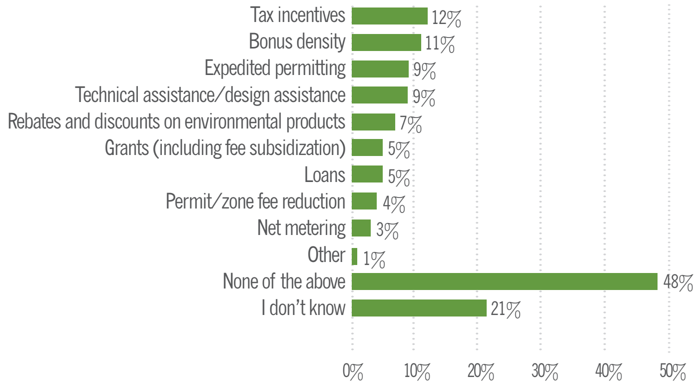
Federal and state tax credits are popular among developers. A third of responding developers say their companies have used or received federal tax credits, while nearly as many (32%), say they have received state tax credits. A smaller portion of developers (11%) have used or received local tax credits and the same percentage has obtained grants. Some respondents received multiple credits involving various government levels.

What prompts the call for tax incentives, in part, is the cost of investing in energy-efficient retrofits, which can run into millions of dollars for a high-rise. Some respondents say environmental advocates have underestimated the real expenses. "The cost to do this is still not cheap despite what USGBC says," wrote one survey respondent, a developer. "As a construction professional, engineer and architect, I see cost inflated to go green. One thing the USGBC fails to bring into concern is the cost of maintenance."

But developers and corporate owners, managers and tenants may be wasting their time trying to wrest incentives from some cities and counties. Nearly half of government respondents (48%) reveal that their city or county doesn't offer any tax incentives or special benefits including bonus density, expedited permitting, technical or design assistance, or rebates, among other incentives [Figure 1].

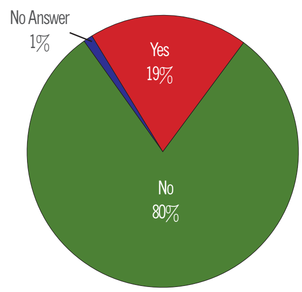
Still, in attracting development, even non-financial incentives can play a major role, as they help companies streamline the entitlement process, saving time, and therefore, money. Chicago has had expedited permitting incentives in place for at least the last three years, says Gatlin. "Chicago had the largest number of LEED-certified properties

FIG. 1. SOME 48% OF GOVERNMENT RESPONDENTS SAY THEIR MUNICIPALITY DOESN'T OFFER ANY OF THE INCENTIVES LISTED



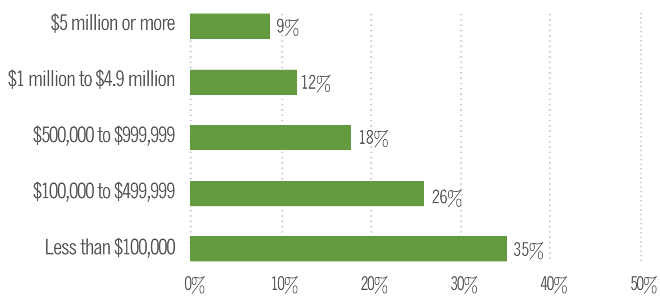
Base: All government respondents

FIG. 2. APPROXIMATELY ONE IN FIVE GOVERNMENT RESPONDENTS SAY THEIR LOCAL JURISDICTION HAS PASSED MEASURES TO CONTROL GREENHOUSE GAS EMISSIONS



Base: All government respondents

FIG. 3. CORPORATE RESPONDENTS HAVE SPENT A MEDIAN OF $366,666 ON GREEN INITIATIVES IN THE PAST THREE YEARS



Base: Corporate respondents who have retrofitted their space of any city anywhere. I think a good portion of that is from the proactive policies from the city government."

With or without government assistance, many companies are forging ahead with green designs and retrofits. Some are taking small steps such as suspending Saturday or nightly cleaning service, and switching to daylight hours during the week to reduce utility costs by roughly 10%. Some install controls in conference rooms to reduce electricity use when the rooms are empty. Bigger projects could require replacing boilers or moving walls.

Stellar projects

A trio of recent, high-profile greening programs serve as models for corporate owners and managers, and developers.

- The Empire State Building: A $20 million retrofit program upgraded the New York icon's 6,500 windows, overhauled furnaces, chillers and air handlers, and improved lighting. The annual anticipated savings is $4.4 million in energy costs.
- One Boston Place: The Class-A tower in Boston's financial district is owned by TIAA-CREF and SITQ. They installed a high-efficiency irrigation system, recycled water to computer room air conditioners and took other steps to reduce water consumption by 50%, saving 12 million gallons per year.
- FBI regional office, Chicago: The FBI, a tenant in a building owned by USAA Real Estate, installed low-flow fixtures, along with rain gauge monitors and other upgrades. The effort was rewarded with LEED platinum status from the Green Building Council.

When it comes to government structures, cities and counties are tougher on themselves than on the private sector. Nearly 500 state and local governments have adopted executive orders or requirements to improve energy efficiency and pursue LEED certification.

Nationally, there are important reasons for reducing energy use. Buildings, including housing, represent 40% of the nation's total energy consumption, with commercial structures responsible for nearly half that percentage. According to a report by New York-based management consultant McKinsey & Co., the U.S. could reduce energy consumption by 23% over the next decade through low-cost, energy-efficient steps.

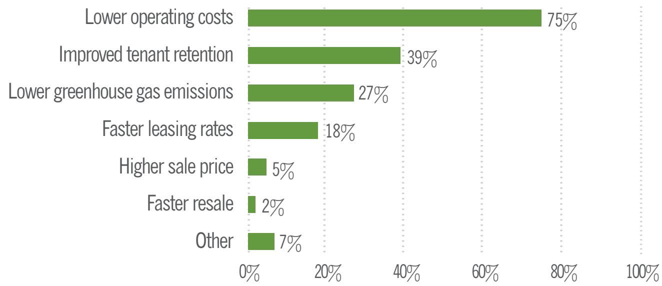
As companies hired specialty firms to retrofit their facilities, the new hiring would stimulate the economy, McKinsey points out. Across many industries, the approach would yield gross energy savings worth more than $1.2 trillion, McKinsey calculates. But change comes slowly. Only about one in five government respondents say their city or county has passed measures to control greenhouse gas emissions [Figure 2].

Through the lean years, commercial real estate companies have been forced to make hard choices with regard to investment at a time rife with bankruptcies among retailers, hoteliers and other firms, exacerbating the financial pressures on corporate owners and developers.

A study by Atlas Hospitality Group shows that 478 California hotels were in default or foreclosure in the second quarter of 2010, an 18% rise from the first quarter and 132% increase from the second quarter of 2009. In many locations, the worst is not yet over for commercial real estate.

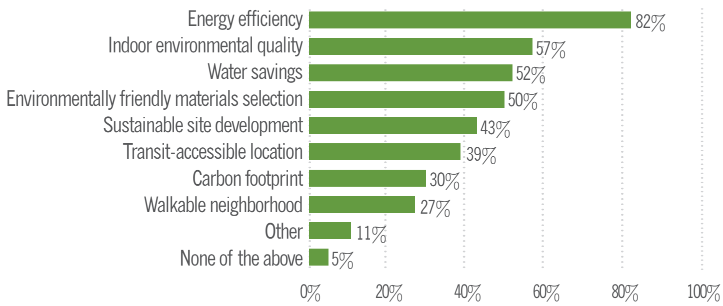
And in these troubled times, every dollar counts. Still, corporate respondents have invested a median of $366,666 in green initiatives over the past three years to retrofit their properties [Figure 3]. And 21% of the respondents spent at least $1 million on green upgrades.

FIG. 4. THREE OF FOUR CORPORATE RESPONDENTS SAY LOWER OPERATING COSTS ARE THE BIGGEST BENEFIT OF GOING GREEN



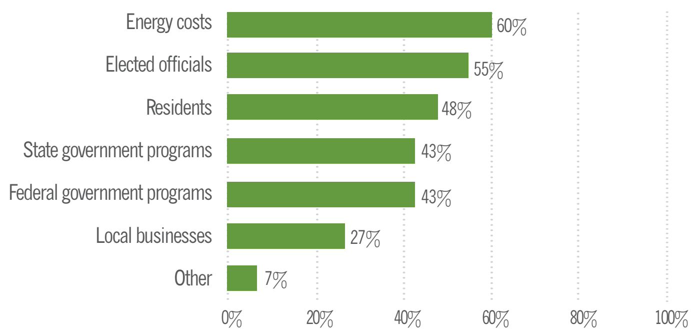
Base: All corporate respondents

FIG. 5. THE MOST IMPORTANT ATTRIBUTE OF A GREEN BUILDING TO CORPORATE SPACE USERS IS ENERGY EFFICIENCY



Base: All corporate respondents

FIG. 6. ENERGY COSTS ARE THE BIGGEST FACTOR IN THE DEVELOPMENT OF GREEN INITIATIVES IN LOCAL JURISDICTIONS



Base: All government respondents

New frontier: Bulgaria?

Capital for ground-up construction remains so scarce in the United States that some developers have traveled overseas to pursue new projects. Tishman International Cos., a management and development firm based in Los Angeles, is developing the $39 million LEED-certified Sofia Airport Center complex with GE Capital Real Estate.

Tishman International which designed the complex, paid a 3% premium, or roughly $1 million, to bring the center up to LEED standards, says Alan Levy, company chairman. "Given the economic conditions in the world, the pipeline is kind of shut at the moment for development," he says. But the Sofia project comprises 1.8 million sq. ft., with 500,000 sq. ft. in the first phase.

"When we first planned our Sofia airport project about three years ago, LEED certification in Europe and the whole concept of greening was just starting to take place," says Levy. When the new building opens next spring, he projects that the utility and operational cost savings could be as high as 35% annually compared with a non-energy efficient structure.

"It shows that the added premium to get the LEED certification is not that great. A lot of things are just common sense, particularly during the construction period where you reuse materials. You try not to export materials from the site and use as much as you can from the site," notes the chairman.

Tishman International has no

Sofia Airport Center in Bulgaria.

immediate plans to develop projects in the U.S., but it will welcome domestic developments when lenders free up capital, says Levy. "Once the banks find the combinations to their vaults and start putting money back into the system," Tishman International will return to the U.S. market, he asserts.

Lending creates jobs, which spur demand for offices for accountants and lawyers and others, and enables consumers to spend money, he explains. "It's the whole generator of the economy. We have to get our people back to work."

During the 1980s, Tishman International pioneered many green projects as it developed or managed buildings such as a 1.5 million sq. ft. bank building in Los Angeles, and later the 21st Century Insurance Co. headquarters. Tishman International undertook retrofits to improve energy efficiency in high-rises at a time when such efforts were rare. "We were the leader of that era," when it came to realigning operations to improve energy performance, says Levy.

Before 333 South Hope Plaza in Los Angeles became the Bank of America Center, the 55-story, Class-A structure was the headquarters of Security Pacific National Bank. When Tishman began to manage the building about 12 years ago, its engineering staff devised ways to reduce electrical consumption, says Levy. At the time, the Department of Water and Power (DWP) in Los Angeles encouraged landlords to become energy efficient by offering rebates. "We qualified for the largest rebate DWP had issued up until that time in recognition of our energy conservation — it was very close to $1 million."

Now, in 2010, many public companies refuse to lease space that is energy inefficient, observes Levy. Numerous Fortune 500 firms and accounting practices have adopted the same policy.

Payoff: Lower operating costs

Reducing operating costs is a theme that resonates among corporate respondents. Three out of four cite lower operating costs as the biggest benefit of going green. Green buildings have a better record in retaining tenants and tend to lease up more quickly, according to the corporate executives [Figure 4].

The biggest benefit of a green building is energy efficiency, an overwhelming 82% of the corporate participants say [Figure 5]. A majority (57%) also point to indoor environmental quality and improved health as an important result. According to the Green Building Council, studies show that people in green buildings have up to 60% fewer incidents of asthma, flu, and colds because of their superior ventilation systems, access to fresh air, and use of non-toxic paint and furniture.

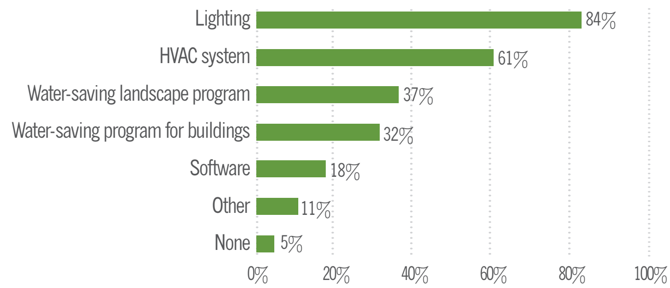
When it comes to developing green initiatives in U.S. cities and counties, energy costs play the greatest role, say government respondents [Figure 6].

Companies steeped in the tradition of impressive, spacious offices, such as law firms, have been loath to abandon their energy-consuming ways. However, a new report by real estate services firm CB Richard Ellis (CBRE) shows that the green movement is taking hold even among attorneys. "Historically, law firms are perceived to be relatively conservative — a rigorous meritocracy in which tradition, hierarchy and dedication are valued, and confidentiality reigns supreme," the report notes.

That means high square footage per attorney, massive file storage and library requirements, and sky-high lighting costs since employees spend many evenings and weekends poring over legal tomes at their sprawling offices, which require a generous heating and cooling budget. But the new trend is to shrink attorney space with open floor plans, shared work stations, and team environments. So, in general, the space allotment is shrinking from the traditional range of 800 to 1,000 sq. ft. per attorney to 500 to 700 sq. ft. per attorney, according to CBRE.

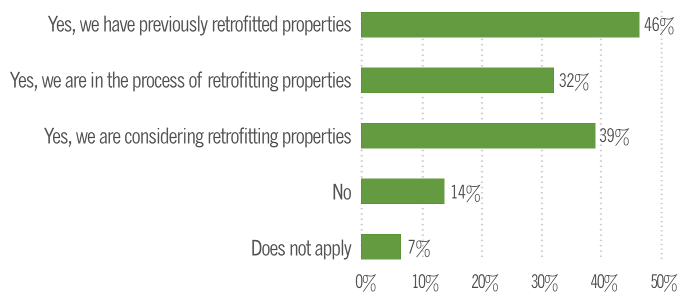
Many legal files now are stored off-site, while new technology reduces lighting costs. Law firms are using wireless HVAC control systems, which shrink installation costs. In Chicago, the law firm Nixon Peabody tore down its walls and started fresh, installing windows along office corridors to let in natural light while protecting the privacy of clients with new techniques for the glass. Investments in lighting and HVAC systems are among the most popular energy-saving features for developers [Figure 7].

FIG. 7. LIGHTING AND HVAC SYSTEMS RANK ATOP THE LIST OF ENERGY-SAVING FEATURES IN BUILDINGS TODAY



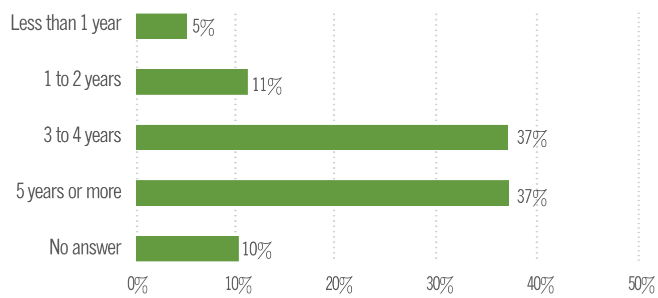
Base: Respondents to the developer survey who have retrofitted buildings

FIG. 8. NEARLY HALF OF CORPORATE RESPONDENTS HAVE ALREADY RETROFITTED PROPERTIES FOR ENERGY EFFICIENCY



Base: All corporate respondents

FIG. 9. IT TAKES DEVELOPERS A MEDIAN OF 3.9 YEARS TO RECOUP THE COST OF ENERGY-SAVING BUILDING RETROFITS



Base: Respondents to the developer survey who have retrofitted buildings

Recouping an investment

Nearly half of corporate respondents (46%) have made changes to existing equipment or structures, known as retrofits, in order to improve the energy efficiency of properties they own, manage or lease. Roughly a third (32%) are

Few cities regulate green measures, but change is coming

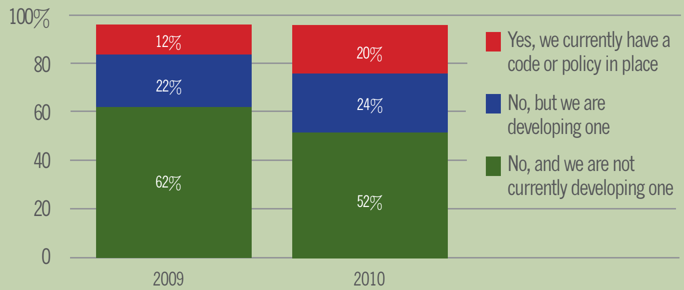
Many corporate real estate executives and developers are wary of government regulation when it comes to green initiatives, according to write-in responses to National Real Estate Investor's 2010 Green Building Survey. They don't mind undertaking green projects voluntarily, but companies don't want to be forced to make energy-saving upgrades.

"I am in favor of green building, but not to the extent of government involvement," wrote one developer. "Let the product market itself, not regulations. Inform the public, but don't push it on them."

Results of the survey, undertaken with the U.S. Green Building Council, however, show that developers have little to fear — for now.

Only one out of five responding cities and counties (20%) have a green building code or policy in place for the private sector, but that percentage has risen sharply from 12% last year.

ONE IN FIVE GOVERNMENT OFFICIALS SAY THEIR JURISDICTION HAS A GREEN CODE OR POLICY IN PLACE FOR THE PRIVATE SECTOR



Base: All government respondents

More than half of government respondents (52%) indicate their municipality has no green building code or policy in place and is not developing one, a decline from 62% last year. However, nearly one in four government respondents (24%) indicate their municipality is developing a code, up from 22% last year.

When it comes to controlling greenhouse gas emissions, a whopping 80% of government respondents say they have not passed any measures to control emissions. However, 18.7% have enacted measures, up from 16.6% in 2009.

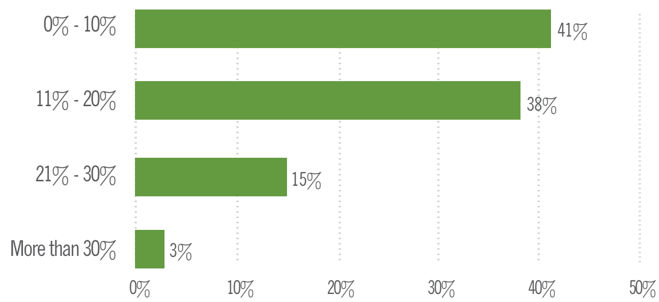
—Denise Kalette

currently retrofitting their properties, while a significant segment is considering a retrofit [Figure 8].

Although retrofitting a building with new equipment can lower utility costs, recouping the cost isn't an instant process. Developers say it takes a median of nearly four years to get back the cost of energy-saving retrofits. And more than a third (37%) say it takes five years or longer to pay back the amount invested [Figure 9].

Is all that work and money worth it? Yes, say many corporate executives. Nearly one in five corporate participants say they saved more than 20% on annual energy costs by retrofitting an existing building. The largest group (41%) say they saved a maximum of 10% by going green [Figure 10].

FIG. 10. NEARLY ONE IN FIVE CORPORATE RESPONDENTS HAS SAVED MORE THAN 20% ON ENERGY COSTS BY GOING GREEN



Base: Corporate respondents who have completed retrofits

Despite the doubters and the foot-draggers among corporate, developer and government groups, there is no stopping the green movement now, says Levy, chairman of Tishman International. "In America, it creates jobs by having people do the [retrofitting and green-related] work. It also saves the economy. It makes us less dependent on fossil fuels and creates other means of generating electricity and energy. It is a snowball effect."

Is going green 'hogwash'? Not everyone thinks so

Creating green buildings is a worthy goal, but only if the buildings pay for themselves within five years. That's a comment by a corporate participant in the 2010 Green Building Survey conducted by National Real Estate Investor in partnership with the U.S. Green Building Council. Here is a sampling of participants' views:

Pro:

- "Green buildings are a measure of quality and ultimately will be how Class-A buildings are defined."
- "The first step for green buildings should be location and site development that promotes interconnectedness, walkability and access to public transit."
- "The greatest overall benefit of green building will be to lessen our dependence on foreign oil and enhance national security, economic and otherwise."
- "The green train has left the station. Minimizing your carbon footprint and being efficient is expected by our customers."

Con:

- "Very few retail tenants who request green are willing to pay the increased cost and expect the landlord to do so."
- "Green buildings need to produce a greater return on investment."
- "[Green is] a lot of hype with very little real impact on the environment."
- "About half of the buzz of sustainability and green is emotional, politically correct hogwash. The other half is legitimate conservation efforts that can benefit cost reduction, natural resource conservation, quality improvement and lessening of pollution."

—Denise Kalette

Survey Methodology

The 2010 Green Building Survey is a benchmarking study conducted by *National Real Estate Investor* in partnership with the U.S. Green Building Council. The survey measures the extent to which the commercial real estate industry benefits from sustainability efforts, and gauges the level of participation among municipalities. Between Sept. 1 and Oct. 18, 2010, Penton Research e-mailed invitations to participate in the online survey to NREI developer and corporate print subscribers and to subscribers of *American City & County*. A survey link was included in NREI e-newsletters. The Green Building Council also promoted the study in two member e-newsletters. The survey yielded 173 total responses. For more information, contact NREI Managing Editor Denise Kalette at denise.kalette@penton.com or (770) 618-0133.

siteScapes

Avondale Recycled Plastic Furnishings

www.sitescapesonline.com | info@sitescapesonline.com

phone 888.331.9464 | fax 402.421.9464

why stewart?

Because we offer a closing process as green as your new project.

For many commercial projects, being eco-friendly is no longer optional, it's an imperative. People want their buildings to be as eco-friendly as possible. But what about the transaction for those properties? With the Stewart Green Initiative, we can provide a green title process – one that enables the entire transaction – from contract to close – to be completely paperless with a reduced carbon footprint. We've even created a rating system to judge and recognize our offices that make the move to green office practices. So now the process can be as green as the property.

Visit **stewart.com/greeninitiative** for more information on our green initiative, where it's available and why Stewart is the right title company for you.

stewart®

(800) 729-1906   stewart.com