



GREENLIGHT

Summer 2011

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Letter from the Editor

The economy continues to dominate the headlines and the construction industry. According to the U.S. Census Bureau, building permits and new housing starts for June 2011 increased from the May 2010 figure and were higher compared to last June's figures (by 6.7 and 16.7 percent respectively). Those were the bright spots. On the other hand, July's housing completions were down 39.3 percent compared to June 2010. Total construction spending during June 2011 was estimated at 4.7% below June 2010.

*As I talk to the practitioners involved in green building, however, I hear through the grapevine what McGraw-Hill's recent construction report, *Construction's Green Outlook 2011: Green Trends Driving Growth*, backed up in numbers: green construction continues to grow and thrive. The report indicates that the value of green building construction starts was up 50 percent from 2008 to 2010— from \$42 billion to between \$55 billion and \$71 billion— and represents one quarter of all new construction activity in 2010. According to McGraw-Hill's projections, the green building market size is expected to reach \$135 billion by 2015.*

Certainly, construction firms are wise to continue being conservative but those that have invested in their green building acumen, developing stronger skills and building a portfolio of green-built structures while continuing sound business practices, are reaping the benefits despite the down-market.

In this issue of GreenLight, three of these firms share how Green Advantage® Certification is part of their good business practices and how Green Advantage (GA) Certification contributes to their ongoing green-building success stories. Pennsylvania-based Wohlsen Construction has used the downturn as an opportunity to commit to sustainability. Part of this commitment is the pursuit of GA Certification among staff. Nabholz Construction, based in Arkansas but active across the central southern states, has also pursued GA Certification for more than 50 staff members. Nabholz has even developed its own exam prep training program and found a way to support the certification costs for Nabholz's own employees! We also hear from a pioneer in green building, Turko Semmes and his California construction company, Semmes & Co. Builders. Even though Semmes has been involved in green building for more than 30 years, he found value in the Green Advantage Certification. Semmes reflects on the need for a holistic approach to green building and underscores the importance of strong communication among staff.

Also in this issue: Information about the New York City Department of Buildings' NEW Sustainable Contractors Designation, articles on a Michigan program to support green jobs including Green Advantage Certification and a fascinating Green Tip on fire sprinklers.

*Finally, a special request: this issue includes information about a 10 minute survey developed by the **Department of Building Construction at Virginia Tech**. Designed to study the perceived value of green construction professional credentials, the department is seeking the participation of **Green Advantage Certified Practitioners**. You may decline answering any questions, responses are confidential, and participation is entirely voluntary.*

Enjoy your summer and this issue of GreenLight!

Kendra J. Briechle
Editor, *GreenLight* newsletter
Green Advantage, Inc.

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Wohlsen Construction: Bottom-Line Sustainability Goals Include Green Advantage

“Dollars well spent.”



That's how William J. Sutton, III, LEED AP, GA-C, Sustainability Coordinator, with Lancaster, Pa., based Wohlsen Construction, describes his company's venture into Green Advantage Certification. That bottom-line focus is the basis of the company's interest in sustainability that has carried through in Wohlsen's green building portfolio and the impact on Wohlsen's clients.

Wohlsen's company-wide commitment to sustainability started in 2008, just as the economy began to falter. Company president, Gary Langmuir, launched the initiative on sustainability, with a primary focus on training and education. Green Advantage® Certification was chosen as Wohlsen's first sustainability program. The president set a goal that 100 percent of the project managers and project engineers and 50 percent of the field supervisors would achieve Green Advantage Certification by the end of 2009. Now, in 2011, Wohlsen is home to more than 50 Green Advantage Certified Practitioners (GACPs).

The company first found out about Green Advantage through the Associated Builders & Contractors. William Sutton was the first of the company's employees to undertake the training and pass the Green Advantage Certification Exam. He took notice of the ability of the Green Advantage to provide the fundamentals of green building while focusing on implementation. Sutton notes that, ***“Green Advantage delivered. It helped to eliminate risk, ensuring that the company understood the dynamics of green building to avoid the possible pitfalls”.***

That thrust was in line with the company's emphasis on sustainability from the top down to the field forces on the job. Wohlsen now has 20 LEED projects to their credit; each of the projects had a GACP on the job. Wohlsen also received the LEED Innovation Credit for use of GACPs on the Cargas Systems Corporate Headquarters building. Green aspects of the project included brownfield site reclamation, recycling of construction debris, trombe walls to store heat and stabilize temperatures, energy recovery unit for HVAC system, white PTO roof, water source heat pumps, and solar panels.



Green Advantage Certification has also helped Wohlsen respond to bids and open doors for jobs. Since many of the Wohlsen professionals have earned Certification, staff doesn't need to rush out and pursue green training. Many look to Wohlsen as a leader in the green building industry... and the numbers support this. According to Sutton, in 2010 Wohlsen did \$50 million worth of green building business. In the first six months of 2011, Wohlsen doubled that. And as the economy picks up, "every project we get is requesting green." Sutton points to the savings that result in lower operating costs and better life savings. In addition, codes are changing, becoming more stringent. Sutton notes, "We are aware that we can do better." The company's priorities have shifted to pride in "responsible green", staying away from exotic materials, and instead focusing on conservation, efficiency and the best return and best product for every job.

One example of that focus is the **Campus Square project in Harrisburg**. This LEED-Gold project had a 1 to 2 % premium but, when stacked against the green incentives and the use of geothermal, solar and white roofing, the project has achieved savings of 30 % in operating costs, a 50% reduction in water use, and a 98% reduction in landfill debris during construction. The building owner



will reach payback in three to four years, and then will start to see a significant return on their investment.

Wohlsen's Harrisburg office is located within Campus Square and Wohlsen just opened a brand new **LEED Silver Operations Center in Lancaster, Pa.** Wohlsen benefits from working in recognized green buildings because the company shows that it truly "walks the walk" and can easily demonstrate techniques to prospective clients as well as staff.

Sutton finds that workers have a different attitude and commitment when working on green projects resulting in lower absenteeism and a greater satisfaction with the final building. A true believer, Sutton himself presents to ABC to promote Green Advantage.

In closing, Sutton mused that Green Advantage Certification was Wohlsen's first commitment to sustainability. That commitment, while a major culture shift and investment, would be "great for any company".

For more information, contact William J. Sutton at Wohlsen Construction wsutton@wohlsen.com / 717-635-9290 or visit the company's website at <http://www.wohlsenconstruction.com>.

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Basics of Sustainable Construction, the Nabholz Way

A popular adage in the fundraising realm is that, “Money follows good ideas.” In some cases, however, those with good ideas go out, chase down money or resources, and make them happen. Such necessity led to innovation at Arkansas-based Nabholz Construction and its creative approach to supporting the Green Advantage® Certification of 51 of its staff. Another 20 or so are awaiting the Certification exam.

The leader behind this venture is Mary Laurie, LEED AP, GA-C, Director of Sustainable Initiatives at Nabholz. In 2007, Laurie attended GreenBuild and first heard of Green Advantage. Green Advantage appealed to Laurie because the program met the needs of workers. Laurie also saw how the program could help inform those who thought green buildings were an expensive fad. In 2008, Laurie earned her Green Advantage Certification-Commercial. As interest in green building was growing, Nabholz needed some “troops” and Laurie was called upon to help the company meet the training demand. In 2010, Laurie developed the Basics of Sustainable Construction training to prepare Nabholz staff to sit for the Green Advantage Exam.



New to writing curriculum, Laurie used the fundamentals from the Green Advantage Exam Overview™ and Open Book Exam Reference™, and then tailored the program to meet the needs of workers in the mid-South. The resulting program includes an introduction to sustainability and global issues; an explanation on how the built environment uses and consumes resources; the green building fundamentals; an overview of equipment and materials; contractor roles and responsibilities; and building rating systems and credentials.

Several of Arkansas' two-year colleges were interested in expanding their programs to meet the growing need for green collar workers and expressed an interest in licensing the curriculum. Although there were no initial plans to take this step, Nabholz agreed and offered the program at a price that would cover costs and be affordable to educational institutions. The University of Arkansas Community College in Morrilton and Pulaski Technical College in Little Rock/North Little Rock have been able to use green job stimulus funds to license the program and provide participants the opportunity to sit for the Green Advantage Exam.

Licensing fees enable Nabholz to cover training costs for their staff, increasing the number of people who could participate and ultimately earn Green Advantage Certification. Importantly, the program reaches individuals at all levels – in the office and at the job site. Laurie points out that “people are getting it” based on the good class discussion and feedback that helps strengthen the curriculum further.

Green buildings are transforming the way we think and build, and represent a significant societal change. The demand for green buildings continues to grow as more people understand that it doesn't necessarily cost more to build sustainably, and in fact can save significant operation and maintenance costs over the life of the structure. Laurie cites recent information from the US Green Building Council that ranks Arkansas 9th in terms of commercial and institutional green buildings per capita, based on the U.S. 2010 Census. That illustrates growth of the green building market which is good news for Arkansas and members of the construction industry. Green Advantage will play an essential part in meeting current and future demand for a qualified workforce.

In Laurie's words: ***“Green Advantage is a program that makes sense and prepares people with real-world, down-to-earth knowledge. For those on the job site, it helps them understand what green buildings are, how they work, and focuses attention on the responsibilities they share in constructing buildings that are good for people, the planet, and the bottom line.”***

For more information on Nabholz Construction, see <http://www.nabholz.com> or contact Mary Laurie directly at Mary.Laurie@nabholz.com or at 501-505-5879.

The cited information from the USGBC is available online at <http://www.dispatchmarketinginc.com/eReports/SustainableAECVitalData/SustainableAECArticles/tabid/4856/articleType/ArticleView/articleId/1019/USGBC-releases-list-of-top-states-for-LEED-certified-projects-in-2010.aspx>

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GREEN TIP from George Church of Rowe Sprinkler Systems, Inc., Middleburg, PA: Fire Sprinklers are GREEN!

George L. Church, Jr. shared his Green Tip explaining why fire sprinklers should be part of any green building:

“Fire sprinklers are GREEN! Less water needed to control a fire in a home, and a 99% decrease in greenhouse gases when a fire strikes are reasons for LEED points to be granted

for the installation of residential sprinkler systems--if protecting the residents from dying in a fire isn't enough!

For those looking for a document on commissioning fire protection systems, NFPA 3 Recommended Practices for the Commissioning of Fire Protection and Life Safety Systems will be out soon, and the document is available in draft form, appended to the Report on Proposals from the technical Committee's last meeting, at <http://www.nfpa.org/Assets/files/AboutTheCodes/3/3-A2011-ROP.pdf>. This document is the Fire Protection/Life Safety component for NIST's Total Building Commissioning, and until it is formally released as an NFPA Document by their Standards Council, this is what is available.”

George also shared several articles and resources including information on a recent research report by The Home Fire Sprinkler Coalition and FM Global to evaluate the environmental impact of fire. The results demonstrate that fire sprinklers reduce greenhouse gas emissions in a fire by 98 percent. The study also found that fire sprinklers reduce the amount of water pollution released into the environment, reduce fire damage by up to 97 percent, and reduce water usage to fight a home fire by as much as 91%. To view the report, see <http://www.homefiresprinkler.org/images/FM-Global-Environmental-Study.pdf>.

Other resources include:

<http://nfpa.typepad.com/firesprinklerinitiative/are-sprinklers-green/>

<http://www.fmglobal.com/page.aspx?id=04010300#>

<http://www.homefiresprinkler.org/newsletter/builders-fall10/article3.html>

<http://greenbuildingfiresafety.org/PDF/SQ20100304Green.pdf>

George L. Church, Jr., CET, GA-C, is president of Rowe Sprinkler Systems, Inc., serving customers in Pennsylvania and Maryland. For more information visit <http://www.rowsprinkler.com> or contact George Church at 570-873-7647 or glc@rowsprinkler.com.

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Green Advantage Certification Continues to Build Opportunities in Grand Rapids

A few months ago we shared with you the terrific efforts to prepare the workforce for Green Advantage® Certification at Grand Rapids Community College (GRCC). These efforts have recently hit the blogosphere, with Grand Rapids resident Lindsay McHolme, attracted to GRCC's partnership with the Literacy Center, highlighting the Pathways for Prosperity program.

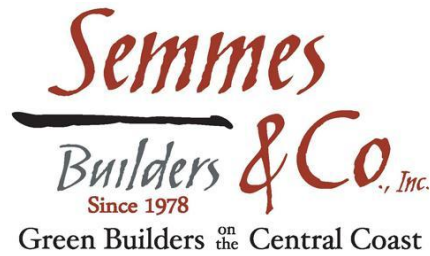
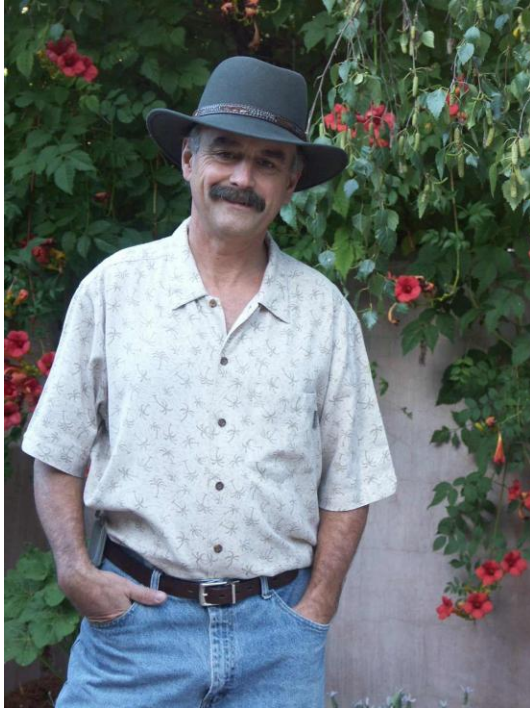


In her words, “Pathways to Prosperity is an initiative that makes training and education accessible for community members looking to obtain employment, and also places graduates into emerging "green" jobs. Participants learn the soft skills they need to reduce their personal carbon footprint and to contribute to a sustainable workplace.” Depending on the skill set--assessed by staff--some students move into the preparatory class for the Green Advantage Certification exam--which is offered at GRCC.

Read more about the terrific connection taking place between literacy and green jobs in Lindsay McHome’s blog, RapidBlog, at

<http://www.rapidgrowthmedia.com/features/03242011lmcholme.aspx>.

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Green Advantage for a Green Building Pioneer: Semmes & Company Builders

While many in construction have recently discovered green building, Turko Semmes and his company, Semmes & Company Builders, Inc., have had a commitment to passive solar construction since the late 1970s. In its 32 years, Semmes and Company have built very

unique energy efficient homes, some commercial construction projects, wineries, a medium size school, spec houses, and over 300 new homes and remodels.

Today, Semmes & Company keeps humming along, busier than many other builders along the Central Coast of California. Two years ago, the pioneering company discovered Green Advantage Certification and the value it could provide the company. Almost half of Semmes & Company's 20 employees became Green Advantage Certified Practitioners and now, Turko is pursuing training other California practitioners for the Certification.

Turko Semmes, GA-R, a licensed general contractor from San Luis Obispo County, is one of the foremost experts in straw bale construction and green building techniques. After studying Construction Engineering at Cal Poly State University in 1978, Turko founded his own company, specializing in energy efficiency and sustainable building techniques.

In 1996 Turko co-founded the California Straw Building Association, a group of architects, engineers, builders, and activists which has worked to promote straw bale building throughout California and to help it become acceptable practice within the Uniform Building Code. He has taught classes and workshops on sustainable building systems to community groups, building organizations, and to students at the elementary, secondary, and university level.

Over the last five years Turko has helped develop the green training program for the Journal of Light Construction at their JLC live events. This includes teaching builders and architects how to make their buildings more energy efficient, conserve resources, and improve the indoor air quality.

Turko Semmes' long-standing interest and experience in green building led to his introduction to Green Advantage® Certification two years ago. David Johnston, author of Green Building from the Ground Up and a fellow green building advocate, introduced Semmes & Co. to Green Advantage Certification. Now, nine of 20 Semmes' employees, including Turko, are Green Advantage-Residential Certified.

To Turko, the benefits of Green Advantage are the knowledge and common language that have "opened the door" to stronger communication throughout the firm, on job sites, and also between office and field. Within Semmes & Co., Green Advantage Certification has also strengthened interaction with subcontractors, architects, and other key residential consultants.



The consideration of all aspects of the construction process included within Green Advantage Certification fit well within Semmes & Co. Turko Semmes points out that given its focus on passive solar, Semmes & Co. needs to think holistically about a range of issues during the design process, ensuring that these issues are deliberately addressed and incorporated early on before individual systems are planned and construction begins. Semmes & Co. staff follows an approach that first considers a building's orientation, ventilation, insulation and mass (OVIM), followed by planning modern high-tech mechanical systems. Semmes & Co. Builders looks at all

mechanical systems as back-up to passive solar. In contrast, the conventional construction model tends to think about individual systems first, separate from OVIM issues. Green Advantage Certification relies on such a holistic approach.

And it provides a new opportunity within Semmes & Co. In keeping with his philosophy of inclusion and training the next generation of green builders, Turko is gradually transitioning daily operations of the company toward a core group of employees as he uses his expertise to offer green building training on a national level. As part of this transition, Turko expects to be more involved in training, perhaps training others to prepare for Green Advantage Certification! His passion continues for passive solar, with an eye to the need to “futureproof a home”, doing all that one can to survive at home, starting with a basic energy audit, and then, robust implementation of green strategies that demonstrate better living and better value.

As he embarks on this new chapter, Turko reflects on some myths of green building:
Myth #1: Green building costs too much. Turko notes that cost is no longer much of an issue for green building. Green building today typically costs the same or just slightly more than traditional building, but green-built homes and buildings provide a payback through energy savings and efficiencies, and they hold their value longer. Semmes notes that with passive solar homes he can show--and guarantee--the return on investment and the immediate payback that stems from that faster ROI.

Myth #2: Green building is all about implementing technical solutions. All too often, construction is framed as either-or between technical versus practical solutions with an immediate rush to the mechanical solutions. Instead, green building requires first, that Semmes or another builder or practitioner start with the basics, such as evaluating the lot layout.

Myth #3: Anything that is green is good. Semmes points to the difficulties associated with greenwashing. The construction trades, production and custom builders, as well as building owners and the public need to know what is truly green and not fall for green words and promises.

Green Advantage Certification is one tool that helps tackle all these myths, making builders like Semmes & Co. more effective and demonstrating its worth to construction practitioners.

For more information, view the Semmes & Company Builders Web site at <http://www.semmesco.com/> or contact Turko Semmes at 805-466-6737, Ext 202 , or via email at: turkos@semmesco.com.

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NAHB Points to Trends in Housing for 2015



The National Association of Home Builders (NAHB) has released their forecasted housing trends for 2015 in the publication *Housing Economics*. Not surprisingly, green features are prominent among the trends. With the combined housing and economic downturn, homeowners are seeking lasting value and more conservative and money-saving features.

The NAHB survey sheds light on the likely characteristics of the average, new single-family detached home in 2015. Some of the most relevant findings include:

- The average, new single-family home will be smaller and have more green features
- Low-e windows and engineered wood products are the likeliest green features

Out of the 238 respondents, 68 percent indicated that single-family homes are likely to have “green” features, second only to the 74 percent that forecast that homes will get smaller. Respondents expect the average, new single-family detached home in 2015 to be about 2,152 square feet, 10 percent smaller than the average size of single-family homes started in the first three quarters of 2010.

As for green features, respondents ranked low-e windows as “very likely” to be present in the average new single-family home of 2015 (4.5 average rating), as well as engineered wood beams, joists, or trusses (4.4), water efficient features (dual flush toilets or low flow faucets) and Energy-Star rating for the whole home (both with an average rating of 4.1) (Figure 5).

Some of the green features respondents rated only as “somewhat likely” to be present in the average new single-family detached home of 2015 include insulation higher than required by code (3.8), tankless water heater (3.8), and argon gas windows (3.7). Two green features were considered to be “unlikely” candidates for the average new home in 2015: green certification from LEED program (2.7) and other renewable energy sources i.e. geothermal, wind (2.8).

The survey results are available in the report, “The New Home in 2015,” including data on the likelihood of various universal, technology, outdoor, bathroom, and neighborhood features. “The New Home in 2015” report can be found at

http://www.nahb.org/product_details.aspx?forSaleID=3082&fromGSA=1

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**Green Advantage Certified Contractors
Recognized by the New York City
Department of Buildings New Sustainable
Contractor Designation**



Sustainable Contractor Designation

On July 19, 2011, Buildings Commissioner Robert LiMandri launched the Sustainable Contractor Designation Program, a new Department initiative that identifies trade licensees who demonstrate knowledge in sustainable practices through third-party certifications and agree to promote the use of green technologies to their customers. Green Advantage Certified NYC licensees will have an icon in the shape of a green leaf displayed next to their names in the Department's Buildings Information System (BISWeb). Master Plumbers and Electricians with Green Advantage Credentials will be recognized in the next two phases of the Program.

For more information visit Department of Buildings nyc.gov

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Green Advantage LinkedIn Group Grows

Have you joined the Green Advantage LinkedIn group yet? The Green Advantage LinkedIn group helps you keep in touch with other professionals and practitioners in the Green Advantage community! Since 2009, Green Advantage has hosted its own LinkedIn site open to all. Current members post regular updates, news, resources, and kudos. You can too. Check it out... Log in to LinkedIn, search 'groups' for Green Advantage and click join!

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GACP SPECIAL REQUEST: Virginia Tech Department of Building Construction Survey

Dear Green Advantage Certified Practitioner,

The Sustainable Facilities Research Team in the Department of Building Construction at Virginia Tech is administering a survey in an effort to study the perceived value of green construction professional credentials. Credentials such as Green Advantage Certified Practitioner have become increasingly popular in the construction industry, and it is important for both practitioners and organizations to understand their value. We also hope to study the reasons you and your colleagues choose to earn these credentials.

You have been chosen to participate in this study because you are a Green Advantage Certified Practitioner, and your participation is essential to our understanding this credential. We are conducting this research as a survey using the Qualtrics online survey tool. The survey includes general questions regarding the factors you considered when choosing to earn a credential, and your opinion of the value or benefits of holding the credential. For example, “Do you believe that holding the Green Advantage Certified Practitioner credential has increased your opportunities for promotion?” The survey also contains basic demographic information related to education and employment. You may decline answering any questions you do not wish to answer, and participation is entirely voluntary. All responses are confidential, and the results are evaluated only at the group level. Approximately 25,000 of your colleagues in the construction industry have been asked to participate in this study. Our survey will take approximately 10 minutes of your time and the above privacy guarantee was approved through our Institutional Review Board.

If you are willing to participate, please use the following link. If you have any questions or concerns, please contact Jacob Tucker in the Department of Building Construction.

We thank you very much for your time and thoughts.

SURVEY LINK → https://virginiatech.qualtrics.com/SE/?SID=SV_dpqdW7iCrNx8fha

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