

The Greener Side

2009 –Issue #1



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Join WNCGBC or renew your membership online:

www.WNCGBC.org

Participate in the Green Building Forum:

www.wncgreenbuilding.com

WNC Green Building Council News

WNCGBC has been involved in a strategic planning process for the past 6 months, with the goal of creating a succinct three year plan that will help increase the visibility, effectiveness and impact of the WNC Green Building Council. With the funding of a grant from the Community Foundation meant to assist non-profits in expanding their reach in serving their mission, the planning has been facilitated by an outside consultant.

We'd like to thank all of you who participated in our survey which has been a cornerstone of our work so far. On February 7th, the Board participated in a day long planning retreat to identify specific goals and tasks to be undertaken in the coming 12, 24 and 36 months. The written plan is scheduled to be completed in early April 2009. We are all very excited to expand the reach of the WNCGBC both geographically and within our community. We know that in the coming years it will be even more important for people to understand the positive impacts they can have in new as well as existing buildings when choosing to build green.

As always, thank you for your support of WNCGBC and green building.

Director,
Matt Siegel

Annual WNC Green Building Directory Release Celebration and Networking Extravaganza

Join us on **March 26th from 6pm to 8pm at Pack Place** in downtown Asheville as we celebrate the release of the 2009 WNC Green Building Directory. This is a great opportunity to network with others in the green building industry. The event is **FREE** and open to the public.

Stay connected to WNCGBC! We are updating the WNCGBC website, don't forget to take advantage of this great resource, **www.WNCGBC.org** Now featuring "Green Industry News".

WNCGBC Program Updates

WNCGBC creates weatherization partnership for CDBG grant application

WNCGBC has teamed up with Asheville Green Opportunities (GO!) and Community Action Opportunities to help weatherize low income homes in the West Riverside Weed and Seed neighborhood. The Community Development Block Grant application which included a proposal to insulate, duct sealing and air seal 75 low income residences was submitted to the City of Asheville in January. We are hoping to hear back in March as to whether or not the proposal is accepted.



Appalachian Offsets Update Total tons offset to date: 2636

We continue to work with our local partners to implement projects. To date, volunteers have helped to install a total of 13,000 CFL's in Asheville Housing Authority's low income rental units. The total result for the CFL change outs will be a savings of over \$500,000, 5 Million kWh and reduction of 3,700 tons of carbon being released into the atmosphere. We are excited to start new projects in 2009, including weatherization for low income families. Check our website for updates: www.AppalachianOffsets.org



WNCGBC Board Members

WNCGBC welcomed six new board members in January, bringing the total number of board members to thirteen.

Director, Matt Siegel and WNCGBC Board Members at the strategic planning meeting on Feb. 7th.

Board members include (Back, left to right) Chad Lloyd, Marcus Renner, Paul Reeves, Kevin Ward, Boone Guyton, Isaac Savage. (Front, left to right) Judy Dinelle, Camille Victour, Emily Coleman-Wolf, Nancy MacDonald, Carl Donovan and Daryl Rantis. Not pictured, Hans Doellgast

We want your one-side printed paper.

Help the WNCGBC continue to be as sustainable as possible. We need good reusable paper printed on one side to use for internal printing. If you have some please let us know.

WNCGBC Green Building Updates



The number of homes certified as 2/15/09 of is 248

The number of homes in progress is 679

For a list of all registered builders visit:

www.HealthyBuiltAsheville.org

HealthyBuilt Homes Continues to Grow

In 2008, the number of HealthyBuilt Homes certified doubled, bringing the total to over 200 homes. Along with the increase in homes certified and registered, the program geographically expanded as well. Winter Sun Construction certified Macon County's first HealthyBuilt Home.

Asheville Area Habitat for Humanity has also committed to HealthyBuilt Homes Certification for 100% of their homes. They have certified 12 homes so far with have 8 more on the way!

WNCGBC named LEED for Homes Provider



The US Green Building Council (USGBC) has named the WNC Green Building Council as a LEED for Homes Provider. There are currently 31 other providers throughout the country.

Launched by the nonprofit USGBC in December 2007, LEED for Homes is a national, third-party certification system for green homes. LEED Certified homes must complete a rigorous on-site third party inspection process to verify performance in energy efficiency, water conservation, material efficiency, indoor air quality and other sustainable features. To date, more than 1200 homes received LEED. LEED for Homes Providers help homebuilders, architects, and designers use the program to build new homes, and offer the rating and verification inspections required by the program. For more information about the program visit www.GreenHomeGuide.org or contact Maggie@wncgbc.org.

Asheville Green Real Estate is thriving!

A report by Patreecia Spaulding

The green market is improving. Below is a very general comparison I did of the regular real estate market and the certified WNC Healthy Built Homes market in May 2008, December 2008 and January 2008. I also included a current snapshot of the market. I used WNC Regional Multiple Listing Service statistics for both.

I think it is very interesting to compare the ratios and trends in general. There are more HealthyBuilt Homes on the market than there were. There are fewer regular homes than there were. There could be many different reasons for both, some good and some bad. In general there has been an increase in the number of homes because they simply aren't selling as fast as they are coming on the market, which is not a good thing. For HealthyBuilt Homes it is good that the number has increased because it shows that more homes are getting certified and being built according to the higher standards.

More homes in both categories have expired in the last six months. For the market in general that is typical everywhere because fewer people are buying. They either don't want to risk a major purchase in this economy or they can't get a loan. It also means the homes that are available are not what people want who are buying. They are either in an undesirable location, in poor condition or over-priced. There have been some green spec homes on the market that were simply not built for the pocketbooks of those who would be likely to buy them. They will sit on the market for a long time and expire or be withdrawn. Gradually, the price may come down and eventually someone will buy.

Finally, look at the pending ratio. This is technically what determines if you have a buyers' or a sellers' market. There are more than three times as many pending green homes in December and January!

And the ratio reflects that. The green market is technically a sellers' market at present. That's unheard of in this economy! So what does that mean? Does it mean the sellers can start building whatever they want and charging whatever they want? No, it's just a statement of what the statistics are showing us.

The days on market for residential under \$500,000 compared \$500,000 is much less, so builders need to pay attention to that. If they want their homes to sell, they will build what's selling.

I predict that green homes are going to become the standard very soon. Any builder who isn't building sustainably is going to be left behind. More sustainable building practices that are third-party inspected and more practical, durable, healthy homes that encourage community are going to take over the market. The site plan is just as important as the house plan.

Do you have any questions? Feel free to call or email me, Patreecia at 828-545-1990 or tree@kw.com. Green is my passion and I love helping people plant their roots.

January 31, 2009						
Active	Expired last 6 months	Expired to active ratio	Closed last 6 months	Closed to active ratio	Pending	Pending to active ratio
HealthyBuilt Homes						
107	8	7.5%	32	29.9%	39	36.4%
All Homes						
2794	1010	36.1%	495	17.7%	207	7.4%

December 11, 2008						
Comparison of residential, condos, townhomes and preconstruction homes in Buncombe County						
Active	Expired last 6 months	Expired to active ratio	Closed last 6 months	Closed to active ratio	Pending	Pending to active ratio
HealthyBuilt Homes						
147	8	5.4%	32	21.7%	47	32%
All Homes						
3157	883	28%	1201	38%	340	11%

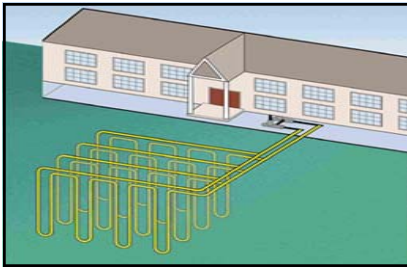
May 22, 2008						
Comparison of residential, condos, townhomes and preconstruction homes in Buncombe County						
Active	Expired last 6 months	Expired to active ratio	Closed last 6 months	Closed to active ratio	Pending	Pending to active ratio
HealthyBuilt Homes						
130	2	1.54%	17	13%	15	11.5%
All Homes						
3303	794	24%	1316	39.8%	495	15%

Schools: Geothermal case studies

Padgett and Freeman Architects has designed several green schools in WNC. They have had the opportunity to compare the overall utility costs for three schools, one utilizing geothermal heat pumps for heating and cooling and two with conventional heating and cooling systems.

Geothermal heat pumps take advantage of the Earth's constant temperature of between 55-65 degrees F to remove heat from the ground (in the case of winter heating) or dump heat (in the case of summer cooling) which is much more efficient than air source heat pumps.

The result after one year of utility bills is a **40% savings** in total Btu's per square foot for Bethel elementary where the geothermal system was installed.



Bethel Elementary, 102,000 square feet: All electric with geothermal heat pumps.

Electrical consumption: 1,092,000 kWh (10.71 kWh/sq ft)

Gas consumption: 0

Total energy consumption: 36,500 BTU/sq ft/yr

Clyde Elementary, 78,000 square feet: Natural gas boiler; outdoor packaged chiller; 4 pipe, gas kitchen;

Electrical consumption: 765,600 kWh (9.81 kWh/sqft)

Gas consumption: 20,950 therms (equivalent to 614,000 kWh)(7.87 kWh/square foot)

Total energy consumption: 60,400 BTU/sq ft/yr

Hazelwood Elementary, 82,600 square feet: Natural gas boiler; outdoor packaged chiller; 4 pipe, gas kitchen;

Electrical consumption: 815,800 kWh (9.88 kWh/sqft)

Gas consumption: 21,388 therms (equivalent to 627,000 kWh)(7.59 kWh/square foot)

Total energy consumption: 59,600 BTU/sq ft/yr

Home Advantage Program

By: Brad Wood of Progress Energy

Home Advantage is Progress Energy's new, residential construction program that offers cash rebates and other incentives to builders and developers who build ENERGY STAR® certified homes and multifamily residences in its North Carolina service territory. Incentives are also available for additional energy efficiency measures that can be added to the ENERGY STAR certified home, as well as advertising and sales support.

ENERGY STAR homes are at least 15 percent more energy efficient than homes built to standard code. The Home Advantage program is designed to increase the number of energy efficient ENERGY STAR certified homes in the Progress Energy Carolinas service territory (3% of new homes in 2007). This will result in the reduction of electricity use, especially during periods of high demand, which can help delay the need for new power plants.

At its base level, **Home Advantage awards a \$400 cash rebate to builders or developers for each ENERGY STAR** certified home that includes a minimum 14 SEER rating for HVAC equipment. Manufacturers of manufactured homes receive a \$300 rebate per certified home; retail sales lots receive \$100 for each home sold. These rebates help defray additional costs for meeting program requirements.

As this area continues to experience a high level of new residential construction for the foreseeable future, it is critical to everyone's energy future that these new homes be as energy efficient as possible.

For more information on the Home Advantage program, upcoming ENERGY STAR workshops and to learn how to apply, please visit:

www.progress-energy.com/carolinashA

The 2030 Challenge

Green Building + Global Warming Movement = Economic Recovery

Written by: Duncan McPherson

"The road to energy independence, economic recovery and reductions in greenhouse gas emissions runs through the Building Sector." -Edward Mazria

As prominent and important as the global warming movement has become, it is easy for it to be overshadowed by the current economic downturn. It is daunting to say the least to consider solving the largest environmental problem in modern society during a time of economic recession and uncertainty. Fortunately, like most things, these issues are interconnected and when solving for one concern, the other must be taken into account as well. Architecture 2030, a non-profit organization established by architect Edward Mazria, seeks to bring green building and the global warming movement into the conversation of reviving the economy.

Ed Mazria has put together an economic stimulus proposal that could be a win, win, win solution for housing, job creation and the environment. The proposal is a mortgage buy-down program to help the housing and commercial building markets while creating green jobs through energy efficiency upgrades of existing buildings. The efficiency upgrades will reduce carbon and environmental impacts of the Building Sector.

Mazria also states that investment in public buildings and infrastructure are important, however, focusing economic recovery only on the public sector will not revive the economy. 93% of the U.S. building stock lies in the private sector, and is therefore the key to generating more jobs and investment. The jobs and spending will create a much larger tax base than public projects can as public building generates little investment or spending. Public buildings will also need to rely on shrinking tax revenues to build, operate and maintain. The scale of private sector provides a much quicker return on any taxpayer investment towards an economic recovery plan.

Architecture 2030 was established in 2002 in response to the global-warming crisis. 2030's mission is to transform the US and global Building Sector from the major contributor of greenhouse gas emissions to a central part of the solution to the global-warming crisis.



The organization issued the 2030 Challenge, which outlines a series of targets to reduce green house gas emissions in new and existing buildings. Architecture 2030's goal is to achieve dramatic reductions in greenhouse gas emissions of the Building Sector by changing the way buildings and developments are planned, designed and constructed. For more information go to:

<http://www.architecture2030.org/>

Architecture 2030 has issued The 2030 Challenge asking the global architecture and building community to adopt the following targets:

All new buildings, developments and major renovations shall be designed to meet a fossil fuel, GHG-emitting, energy consumption performance standard of 50% of the regional (or country) average for that building type.

At a minimum, an equal amount of existing building area shall be renovated annually to meet a fossil fuel, GHG-emitting, energy consumption performance standard of 50% of the regional (or country) average for that building type.

The fossil fuel reduction standard for all new buildings shall be increased to:

60% in 2010

70% in 2015

80% in 2020

90% in 2025

Carbon-neutral in 2030 (using no fossil fuel GHG emitting energy to operate).

These targets may be accomplished by implementing innovative sustainable design strategies, generating on-site renewable power and/or purchasing (20% maximum) renewable energy and/or certified renewable energy credits.

2009 WNC Green Building Education Series

Enjoy discounts on classes with your WNCGBC Membership.

Two thousand and nine marks the fourth year of the council's Green Building Education Series. In 2008, **WNCGBC educated over 800 people** in topics ranging from Green Home Renovation, Renewable Energy and Healthy Crawlspace. Classes were offered in Asheville, Murphy and Hendersonville.

Along with adding a few new instructors and classes this year, we are now offering custom workshops for businesses, professional trades, congregations and homeowner's associations etc. on a wide array of green building themes.

Please call or email Candice for more information at 828-254-1995; Candice@wncgbc.org

Upcoming Classes: March

Building Science: Understanding Your House as a System

When: Tuesday, March 17th 12:30 - 4:30 pm
Cost: \$40 for members; \$50 for non-members.
CEU Credits: 4 AIA HSW (self reporting), 4 ECO Agent credits

Agenda:

This course covers a broad range of building science topics related to residential construction including heat transfer, airflow, and moisture transfer. Testing methods and special building systems are also discussed. The course is directed toward an audience that already has some familiarity with construction terminology, but is appropriate for all audiences including builders, subcontractors, and interested homeowners.

Steve Linton, LEED AP, BPI Certified Building Analyst, is the Green Building Coordinator for Deltec Homes. He has almost a decade of experience in commercial and residential construction and has taught math, science, and engineering courses from middle school through the college level.

Amy Musser has a Ph.D. in Architectural Engineering and has taught University and public courses on building energy and indoor air quality.

HealthyBuilt Home Orientation Training

When: Tuesday, March 31, 2009 12:30-4:30 pm
Cost: \$49
CEU Credits: 4 AIA HSW, 4 ECO Agent credits

All interested homebuilders and building professionals are invited to a half-day introduction to the NC HealthyBuilt Homes (HBH) Program, a statewide green builder program for residential building professionals administered by the WNC Green Building Council in partnership with the NC Solar Center.

You will learn the benefits, building guidelines and process for you to be a participant in the NC HBH Program. The NC HBH Program provides visibility and certification of homes for residential builders who practice sustainable, high performance building practices. The program also provides third party assistance in learning about and marketing HealthyBuilt Homes.

This event is required orientation to the NC HBH program for all builders who wish to build NC HealthyBuilt Homes

Marcus Renner has taught classes relating to sustainable construction on the university, community

Registration is now open for all 2009 classes. For a list of all classes or to reserve your space today, visit our green calendar at:

Special Thanks to Platinum Members of the WNCGBC!



www.earthtonebuilders.com

We are a leading 'green building' company committed to the highest standards in construction quality and sustainable, healthy living.

Earthtone Builders

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Energy Conservation Specialists

Jonathan Israel 828-713-9433
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Candler, NC 28715

Energy Conservation Specialists is committed to residential and commercial building practices that address energy efficiency, comfort, indoor air quality, and durability. We are a locally owned and operated company that provides the highest quality energy upgrades. Our primary services consist of certified and detailed home energy ratings, closed cell spray foam insulation, solar water heating, and new construction energy modeling and consultation.



Haywood Builders Supply & The Design Center

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Haywood Builders Supply has been serving WNC for over 5 decades. In addition to our Full Service Building Supply in Waynesville, in the last few years we've branched out and now proudly offer our specialized design services in Asheville and Sylva. We're pushing the envelope of our Industry and trying to help our customers be GREEN as well as working to make our own company as GREEN as can be. We try to stay ahead of the pack with technology and innovation and want to help you build the very best homes you can. We're constantly training to better serve you in your building supply/design needs and are proud to announce we have earned the titles of "Certified Green Dealer" and "Entrepreneur of the Year 2008" by LBM Journal.



RCJ Building Inc.

Robert Jacobelly
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Asheville, NC 28804 828-216-4433
rcjbuilding@yahoo.com
<http://www.rcjbuilding.com>

Over ten years of experience in the construction business have taught Bobby Jacobelly much about what the customer desires and needs when acquiring a new home. Bobby's custom home buyers, spec home buyers, and remodel clients will attest to the craftsmanship of his work and the integrity that make him unique in this business. For further information about the homes that RCJ Building has constructed in the Asheville.



Red Tree Builders

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www.redtreebuilders.com

Red Tree is committed to building Asheville, and surrounding Western North Carolina custom, quality, green homes. We are a builder that offers a Change to the old way of building homes; a more efficient, sustainable, smarter, and green alternative with our system-engineered homes.



Sustaining Rain, LLC

Jake Klodt
18 Archwood Drive
Asheville, NC 28806
828-337-4311
info@SustainingRain.com

By utilizing rain, a renewable natural resource, you can help protect businesses and homes from problems created by high water bills, drought, erosion, and non point of source pollution, all the while protecting the environment and reducing your water footprint. Sustaining Rain LLC is a full service rain harvesting company providing consultation, design, installation, sales and service that cater to your residential, commercial or industrial rainwater harvesting needs.



Timeless Mountain Homes

Bill & Cathy Fagan
2 E. Market St
Black Mountain, NC 28711

www.timelessmountainhomes.com

TMH brought together a comprehensive group of designers, architects, developers, builders, suppliers and banks to help simplify the building process. The goal is to provide you with all you desire in your dream home. We work with environmentally respectful designs whether log, timber, panelized or a traditionally built home. We use age old practices and the latest in technological advancements including those designed to minimize energy consumption while maintaining respect for the environment. TMH makes your dream a reality by understanding and respecting your needs and desires by keeping communications open and consistent.

For more information on Platinum membership benefits and to see a full list of WNCGBC Platinum members, visit:

<http://www.wncgbc.org/membership/business.php>