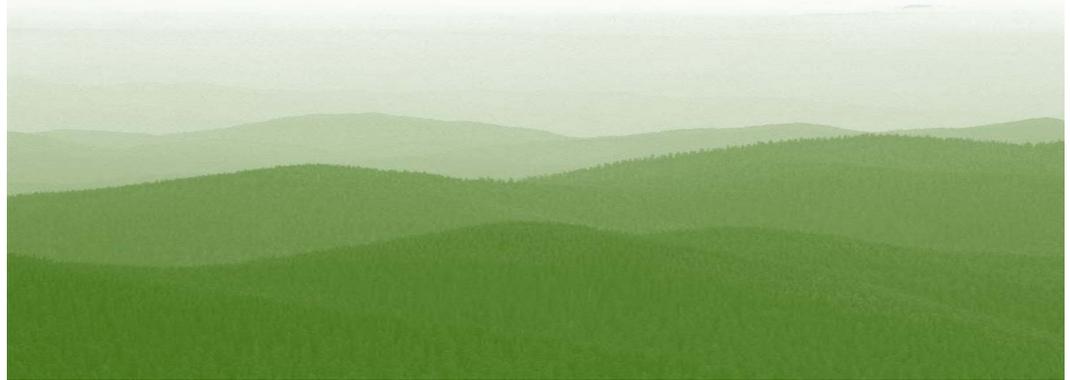


**WNCGBC**

**2008 Issue #1**



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**WNC Green Building Council News**

As many of you know, the 2008 WNC Green Building Directory was released in March. We are very excited about the new edition as well as the new online directory. You can view the online directory at: [www.wncgreenbuilding.com](http://www.wncgreenbuilding.com).

**Green Products and Services Exhibition Review**

With over 120 attendees and 25 exhibitors, this year’s exhibition was a great success. It was a great opportunity for builders and homeowners to find out about the latest and greatest in what is available for green building in WNC. Thanks to Earth Fare for their food donation and the volunteers that helped us pack up. For those of you that weren’t able to make it, we hope to see you at one of our next events.

**Appalachian Offsets gets big boost from bags and mugs**



Thanks to Earth Fare and all of the customers that brought reusable bags in May, Appalachian Offsets will be getting a donation from Earth Fare for almost \$6,000 to offset a portion of their carbon footprint. As part of a new program to encourage everyone to bring their own bags, Earth Fare will be charging \$0.05 for each new bag that customers use and that money will be donated to Appalachian Offsets on a permanent basis.

Another green business in downtown Asheville, the Green Sage Coffeehouse and Café, will be donating \$0.10 each time a customer brings in their own coffee mug.

**HealthyBuilt Homes Update**

The number of homes certified as of 06/01/2008 is 149

The number of homes in progress as of 06/01/2008 is 669

For a list of all registered builders visit:

[www.HealthyBuiltAsheville.org](http://www.HealthyBuiltAsheville.org)



**Sign up to volunteer.**

If you would like to sign up to volunteer at the WNCGBC booth at the SEE Expo Aug. 22-24th, please email [Candice@wncgbc.org](mailto:Candice@wncgbc.org)

Thanks!

*What do you get when you mix a yellow house with a blue house?*

A Green Building.

Have a better green building joke than that? Send it to us....please!

## WNC News and Noteworthy

### Home Town Green Film gets recognition

Home Town Green: One Town's Journey Toward a Sustainable Future was featured on a national green building website: <http://www.igreenbuild.com>.

The 16 minute film was produced by the WNCGBC to assist small towns to green themselves was featured as the video of the week by the national website recently. The film has been a great tool for cities to understand where to start. We heard from towns in Louisiana and Arizona wanting to know if they could have copies of the film and about our successes here.

To view Home Town Green Online visit:  
[www.americangreen.tv](http://www.americangreen.tv)

### Eastern Band of Cherokee Indians to take steps to green their buildings



The EBCI has invited the WNCGBC to consult with them over the coming months with the goal of creating green building standards for all of the buildings

the Tribe constructs. Because of the unique ownership criteria on the Tribe's Boundary, the government does at least 90% of all commercial and residential development on their land. This provides an incredible opportunity to be able to control the building practices on a huge number of buildings.

The WNCGBC will be working with the Tribe to identify particular green design strategies to incorporate as standard building practices in both residential and commercial buildings. With over 200 homes per year planned over the next 4 years and tens of thousands of square feet of commercial construction, this is a great time for the EBCI to make a commitment to build green.

The EBCI hopes that its efforts will be a model for other Native American tribes throughout the country and public entities in general. They have already begun to be a model by constructing their new 500,000 sq ft schools project to LEED Silver standards which is set to open Fall of 2009.

### Green Building Forum now available

Have a question about green building? Want a green job? Have extra materials you want to get rid of? Figure out how to create a zero energy home for only \$100?

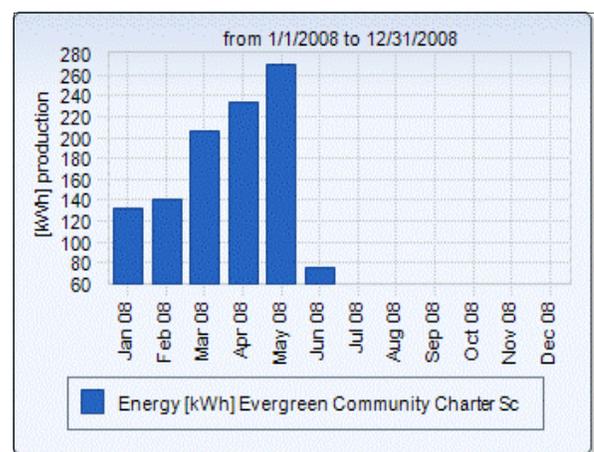
Check out and post your information on the new Green Building online Forums at:

[www.wncgreenbuilding.com/forums](http://www.wncgreenbuilding.com/forums)

### Solar Panels for ECCS

By: Eleanor Ashton

Sixteen photovoltaic modules have been installed on the roof of Evergreen Community Charter School and are now producing electricity. The addition to the school was made possible through a grant from the **National Energy Education and Development Project (NEED)**. Several years ago, Evergreen was selected to become one of North Carolina's "Solar Schools" and through partnership with NEED, it received teacher training, curriculum materials, solar modules and a web-box that allows students to view energy output. Installers from Honey Electric talked with students about the panels and let them ask questions and have a close-up look before placing them on the roof. The students learned that the PV modules each produce 120 watts (about enough to power **ONE** incandescent light bulb or **SEVEN** compact florescent bulbs). Together the panels will produce 1,920 watts of power.



## WNC News and Noteworthy cont...

### AB Tech to initiate enormous Sustainable Technology Initiative



Thanks to a combination of funding sources coming together and the initiative of AB Tech's

Small Business Center Incubator to create a National Center for Sustainability Technologies leveraging over \$1 Million, WNC will be home to a well planned and action oriented program to make it a leading area of green industry and education.

The goals of the Initiative are to:

- Establish a demonstration center/best practices/clearinghouse for sustainability technologies.
- Serve as a hub for regional sustainability practices, including construction, land use, and renewable energy.
- Develop a community-focused, multi-faceted educational program to raise awareness of the benefits of sustainable technologies.
- Develop state-of-the-art laboratories for the teaching of sustainable technologies.
- Develop seamless school-to-work education programs to train and retrain the workforce.

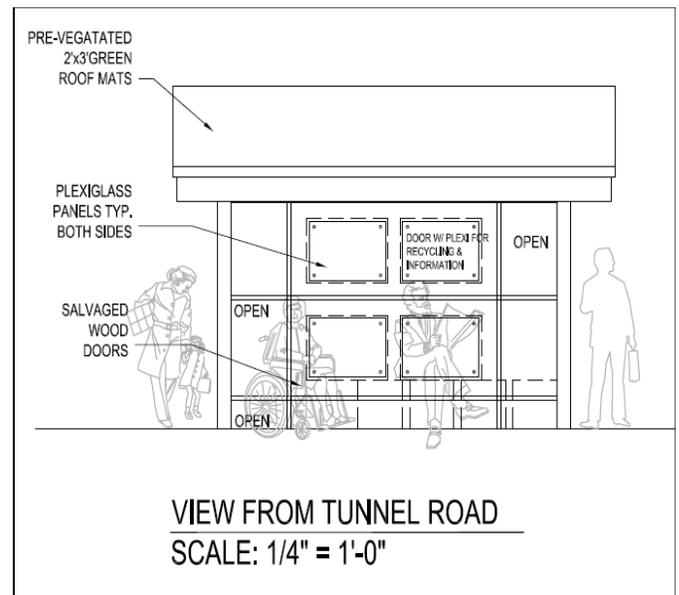
The WNCGBC will be working with AB Tech throughout the next three years to assist in furthering the growth of the green sector in the region through K-12 education, creation of sustainable curriculum for green workforce training and additional educational outreach including green building demonstration facilities.

### Green Bus Stops Update



The plans for the first two green bus stops have been designed and submitted to the City for review. The bus stops will feature green, durable materials as well as solar panels that will power LED lights for safety lighting and possibly a radio to make using public transit that much more enjoyable. We are hoping to get them built by the end of the summer and then work to get even more designed and built throughout our community.

Below: *Proposed Green Bus Stop design by Padgett and Freeman Architects, P.A.*



### Green Ideas & Networking Presentations: New Location and Time

In response to the April survey, we have decided on a new location and time for Green Ideas. In August, we will begin having the monthly Green Ideas and Networking Presentation gatherings at the **Green Sage Coffee House and Café**. The meetings will continue to take place the **first Wednesday of every month**, but the time has changed to **6pm**. We hope to see you there!

## Asheville Opportunities

### Ready, Set, GO!

*Pilot program to train green-collar workforce*

By: Dan Leroy

The Clean Air Community Trust is teaming up with local partners to launch the **Asheville Green Opportunity Corps (Asheville GO)**, a job training and leadership program designed to inspire and equip disadvantaged young adults (ages 16-24) to pursue green careers.

The ten-month program, set to launch this fall, is part of a growing national movement to ensure that the dramatic gains in the green economy “lift all boats” by bringing jobs and prosperity to struggling communities. According to advocates, so-called, green-collar jobs—most often defined as manual labor jobs in enterprises that improve environmental quality—represent “pathways out of poverty” because they don’t require advanced education or training, they can’t be out-sourced, and because they typically offer a living wage, benefits and advancement opportunities.

Asheville GO will prepare its members to access green-collar jobs by engaging them in service projects that have a meaningful impact on the causes and consequences of climate change. Whether they are improving household energy efficiency, breaking ground on a new community garden, or rebuilding after a natural disaster, GO members will play a vital role in helping our community address and adapt to climate change. In the process, these members will earn stipends and gain the technical skills and life experience they need to access good, green jobs.

In the second half of the program, corps members will pursue community college coursework and apprenticeships relevant to the specific green career pathway of their choice. Pathways will likely include green building, clean energy, ecological landscaping and restoration, materials recycling, and sustainable agriculture.

Several community partners, including the WNC Green Building Council, have already stepped forward to support the development and implementation of the program.

Other key partners include the City of Asheville, the Asheville Housing Authority, Asheville-Buncombe Technical Community College, the Asheville City School Foundation, Progress Energy, the Community Foundation of WNC, Just Economics, Habitat for Humanity, Wild South, and many more.

Asheville GO organizers and partners are implementing a demonstration project later this month in which they will train and lead teenagers in performing energy efficiency retrofits in low-income households in the Burton Street neighborhood of West Asheville. WNCGBC board members Carl Donovan (Conservation Pros) and Marcus Renner (Appropriate Building Solutions) are designing and leading the training. WBCGBC member and energy rater, Torin Kexel has been providing critical technical assistance and support.

For more information about the program, or to get involved, please contact Dan Leroy at 828-318-9916 or dan@airtrust.org.

### Mountain BizWorks Provides the Tools for Growth of “Green” Oriented Industries in WNC

By: Charles Leahey  
Board Member, Mountain BizWorks  
Member, WNC Green Building Council



Mountain BizWorks, a 501(c)3 non-profit organization (formerly *Mountain Microenterprise Fund*), has been helping small business

owners since 1989 through financing, business instruction and on-going support. Since its founding in western North Carolina, Mountain BizWorks has provided business training to nearly 3000 entrepreneurs, assisted in the establishment of over 1000 locally-owned businesses, and has loaned millions of dollars to local entrepreneurs who were unable to obtain capital from traditional lending institutions. With offices in Asheville, Sylva and Hendersonville, Mountain BizWorks is a model institution whose program is praised and respected on a national level.

*Continued on page 5*

## Asheville Opportunities cont'

In 2007 Mountain BizWorks assisted 744 entrepreneurs in western North Carolina. In turn,

- **135 new businesses were added to our WNC community**
- **230 local businesses were expanded**
- **520 NEW JOBS were established**
- **372 existing jobs were sustained**
- **67 loans were made to WNC businesses, totaling \$877,500 and leveraging over \$1.3million**
- **In late 2007 the Board of Directors of Mountain BizWorks voted to increase the maximum individual loan amount to \$50,000.00.**

In a time of a contracting economy the team at Mountain BizWorks recognizes the “green” industry is probably one of the fastest growing sectors of business in western North Carolina, if not the entire country. Through supplemental business training and financial lending, Mountain BizWorks can help turn your dreams of growing your business into reality. Visit their website at [www.mountainbizworks.org](http://www.mountainbizworks.org) for more information on how they can assist you in your efforts.

Mountain BizWorks has always believed that one of the strongest ways to “go green” is to support local small businesses. Let them help you make a difference - in our community, and in the world. And if you make contact with Mountain BizWorks please let them know that you heard about them through the Western North Carolina Green Building Council!

### Asheville Area Habitat for Humanity Announces New Deconstruction Program

By: Paul Reeves, Asheville Habitat for Humanity



The new deconstruction program at Asheville Area Habitat for Humanity will be working with builders, developers and homeowners to salvage reusable building materials from structures prior to demolition or remodeling.

Benefits of the new program to our community include:

- The diversion of usable building materials from our landfill
- Providing a source of affordable building materials for reuse in our community
- Creation of new living-wage jobs in Buncombe County
- Support for Habitat for Humanity’s mission to eliminate substandard housing
- Salvaged material is a tax deductible donation to Habitat for Humanity

WNCGBC members can play an important role in getting this program off the ground. If you have a building that is slated for demolition or are embarking on a remodeling project, large or small, please contact the deconstruction team at Asheville Area Habitat for Humanity to find out if your project can help build Habitat homes in Buncombe County through the salvage of reusable materials.

Please contact Paul Reeves at 828-777-0743.

### Asheville Habitat Builds Green



The Asheville Area Habitat has pledged to build all of their new homes

HealthyBuilt certified. Their first HealthyBuilt certified home should be completed any day now. They currently have nine homes registered in the program.

WNCGBC is excited to work with Habitat and see affordable green housing become a reality.

Eleven WNCGBC members will be volunteering with Habitat on June 28th on one of the houses currently under construction in Enka Hills.

## Upcoming Summer Classes: Register online at <http://www.wncgbc.org>

### Green Building 101: Zero Energy Homes

**WHERE:** NC Arboretum: 100 Frederick Law Olmstead Way Asheville, NC 28806  
**WHEN:** Wednesday, June 25th 9:00 am to 5:00 pm  
**COST:** \$80 members, \$100 for non-members. Pre-registration required. Price includes lunch.  
**CEU CREDITS:** 8 AIA HSW, 8 Engineers, 4 ECO Agent credits

#### AGENDA:

We will go through the qualitative as well as the technical components of achieving a Net Zero Energy Home. The course will go through each technique and technology beginning with home orientation and ending with generating electricity. The course will have a heavy focus on passive solar design including overhang design, window sizing and thermal mass. More advanced technologies such as LED's and building integrated solar will be discussed in reference to the future of the zero energy home.

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### Green Building 101: HealthyBuilt Home Orientation Training

**WHERE:** NC Arboretum: 100 Frederick Law Olmstead Way Asheville, NC 28806  
**WHEN:** Wednesday, July 23rd from 1:00 pm to 5:00 pm  
**COST:** \$49 per person. Pre-registration required.  
**CEU CREDITS:** 4 AIA HSW, 4 ECO Agent credits

#### AGENDA:

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.

### Green Building 101: Alternative Energy: Harness the Power of Solar

**WHERE:** NC Arboretum: 100 Frederick Law Olmstead Way Asheville, NC 28806  
**WHEN:** Tuesday, August 12th from 9:00 am to 5:00 pm  
**COST:** \$80 for members, \$100 for non-members. Pre-registration required. Price includes lunch.  
**CEU CREDITS:** 8 AIA HSW, 8 Engineers, 4 ECO Agent credits

#### AGENDA:

Now is the Time for Solar Energy  
 Learn how to harness clean, renewable energy from the sun. Plants do it everyday and you can too. Participants will learn how to assess their solar resource; heat their homes and domestic water with solar thermal energy; create electricity for on-grid and off-grid applications using solar electric systems; review case studies of local installations; understand the many state and federal incentives available; and get answers on questions like How much will it cost? and Who can design and install these systems?

Brent Summerville is a Renewable Energy Engineer at the Appalachian State University Energy Center where he manages the Western North Carolina Renewable Energy Initiative. He has experience with the design and installation of solar, wind and microhydro systems and stays busy with Renewable Energy consultations, presentations and workshops.

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### Green Building 101: Alternative Energy: Harness Power from Wind and Water in Western North Carolina

**WHERE:** NC Arboretum: 100 Frederick Law Olmstead Way Asheville, NC 28806  
**WHEN:** Wednesday, August 13th 9:00 am to 5:00 pm  
**COST:** \$80 for members, \$100 for non-members. Pre-registration required. Price includes lunch.  
**CEU CREDITS:** 8 AIA HSW, 4 ECO Agent credits

#### AGENDA:

The mountains of western North Carolina contain abundant wind resources and countless falling streams. Learn how to harness the power for these clean, renewable energy sources. Topics will include assessing your resource, designing and building systems, costs, incentives, case studies and local installers.

## Down from the Mountain: News from beyond WNC

**US DOE** finds that wind could supply up to 20% of electricity by 2030 for only 50¢ per month for the average household



The report explores one scenario for reaching 20% wind electricity by 2030 and contrasts it to a scenario in which no new U.S. wind power capacity is installed. It examines costs, major impacts and challenges associated with the 20% Wind Scenario. It investigates requirements and outcomes in the areas of technology, manufacturing, transmission and integration, markets, environment and siting. The report finds that the Nation possesses affordable wind energy resources far in excess of those needed to enable a 20% scenario.

The report finds that, during the decade preceding 2030, the U.S. wind industry could:

- support roughly 500,000 jobs in the U.S., with an annual average of more than 150,000 workers directly employed by the wind industry;
- support more than 100,000 jobs in associated industries (e.g., accountants, lawyers, steel workers, and electrical manufacturing);
- support more than 200,000 jobs through economic expansion based on local spending;
- increase annual property tax revenues to more than \$1.5 billion by 2030; and
- increase annual payments to rural landowners to more than \$600 million in 2030.

Since substantial amounts of coal and natural gas fuels would be displaced, the 20% Wind Scenario could reduce CO<sub>2</sub> emissions in 2030 by 825 million metric tons – 25% of the CO<sub>2</sub> emissions from the nation's electric sector in the no-new-wind scenario.

Costs incurred by the 20% Wind Scenario exceed those of the no-new-wind scenario by about 2%. Although the 20% wind scenario would incur higher initial capital costs, a large portion of those costs would be offset by \$155 billion in lower fuel expenditures. The estimated incremental investment would be \$43 billion (net-present-value basis; 2006

\$). This corresponds to about 0.06¢/kWh of total generation, or about 50¢ per month for the average household. These monetary costs do not reflect other potential offsetting positive impacts.

For more information and the full report:<http://www.20percentwind.org/>

### Stimulating Hope for the Future: One check at a time

By: Matt Siegel



Now that we all have our \$600 it is our responsibility to use it. What economy do we want to stimulate? I will be stimulating one that helps improve the future of this world. My family will be donating all of ours to a project in Central America that provides efficient wood burning stoves to some of the world's poorest people. What will you stimulate?

There are many things to do with your economic stimulus check. We thought we'd give you a few ideas in case you don't have any of your own:

1. Increase your insulation. It's like getting your stimulus check over and over again for years to come.
2. Seal your ductwork. If you don't, you might as well send your check to the local utility right after you get it.
3. Offset your carbon footprint with Appalachian Offsets. [www.appalachianoffsets.org](http://www.appalachianoffsets.org)
4. Change out all your light bulbs, and your neighbor's light bulbs, and your neighbor's neighbor's light bulbs, and on and on.
5. Install a rainwater catchment system so that we all have water in 20 years.
6. Replace old appliances with new efficient Energy Star rated ones.
7. Donate all or part of your check to organizations that support sustainable projects in developing countries that are feeling the worst effects of climate change.

## Down from the Mountain: News from beyond WNC cont...

### Nation's largest solar concentrating power plant up and running

Nevada Solar One, developed by the Spanish company Acciona, now has an incredible new website full with photo galleries, videos and extensive information on solar technology.



Nevada Solar One is the third largest concentrated solar power plant in the world and generates electricity reliably and affordably for thousands of people in Nevada.

The groundbreaking Nevada Solar One plant based in Boulder City, NV, has been in operation since June 2007. At a cost of more than US\$260 million dollars, it is the largest concentrating solar power plant to be built in the last 17 years, and is the third largest plant of its kind in the world. Constructed on a lifetime of research and development, the plant demonstrates that concentrating solar power production is economically feasible on a commercial scale.

The plant has a nominal production capacity of 64 MW with a maximum capacity of 75 MW, produces enough energy to power more than 14,000 households annually and the project encompasses over 300 acres, the size of approximately 200 football fields.

Producing electricity with near zero-CO2 emissions, ACCIONA's Nevada Solar One plant has made Nevada the largest per-capita generator of solar energy in the United States. Nevada Power Company and Sierra Pacific Power Company have purchased the plant's entire electricity production under long-term power purchase agreements (PPAs). The PPAs ensure fixed costs for the electricity, making solar power an economically feasible alternative energy.

For more information, go to:  
[www.nevadasolarone.net](http://www.nevadasolarone.net)

### Solar Hot Water Required in Hawaii



A bill was recently passed by the Legislature in Hawaii that will require all homes constructed in 2010 to install solar hot water heaters. The bill will now go before Gov. Linda Lingle. Hawaii is the first state to pass this law. The law was passed in an effort to achieve the goal of using at least 70% renewable energy by 2030. Solar hot water heaters are estimated to save between 30% to 35% on resident's electricity use.

### San Francisco's Solar Energy Initiative Program

The country's largest municipal solar program is well on its way to being implemented in San Francisco. The program has been greenlighted for the next ten years with a budget of \$3 million a year. The money will be issued as rebates in the form of tax incentives to private solar installations. San Francisco's Mayor Newson anticipates the program will begin as soon as July 1st. The rebates range from \$3000 to \$6000 for residents and up to \$10,000 for businesses who install solar. The goal of the program is to increase San Francisco's solar installations from the present number of around 700 to 10,000 within the next ten years.

### REGREEN Launches

The U.S. Green Building Council, along with the American Society of Interior Designers, has recently launched green residential remodeling guidelines. The program, named REGREEN, includes all aspects of green renovations from one-room renovations to whole-house renovation projects. The guidelines can be downloaded for free at:  
[www.regreenprogram.org](http://www.regreenprogram.org)

## Special Thanks to Platinum Members of the WNCGBC!



**A2Z Plumbing & Gas Inc.**  
 Georg & Miranda Wildman  
 Efird111 Forest Street  
 Asheville, NC 28803  
 828.274.4858

[www.eatsleepplumb.com](http://www.eatsleepplumb.com)

A2Z Plumbing & Gas Piping, Inc. Is working with contractors, homeowners, and business owners to promote more environmentally sustainable ways of operating. Incorporating green building practices into the plumbing trade will improve quality of air, water and living. using low V.O.C. (Volatile Organic Compound) products and fueling our company vehicles with BioDiesel are a just a few ways in which we are successfully reducing our environmental footprint.



**EcoSteward Realty**  
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 Asheville, NC 28806  
 828.255.1082

[www.ECOstewardRealty.com](http://www.ECOstewardRealty.com)

THE REAL ESTATE CONSULTING FIRM where your “Green Real Estate Team” is ECO-friendly, into sustainable innovation, highly focused on quality of property and life, and has YOU in mind.



**Alliance Metal Corporation**  
 John Burry  
 420 New Stock Rd  
 Asheville, NC 28804  
 828.484-9481



**High Country Timberframe & Gallery Woodworking**

**High Country Timberframe & Gallery Woodworking Co.**  
 Tom Owens  
 PO Box 1858  
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 828.264.8971

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**Air Craftsman Heating and Cooling**  
 George Willis  
 264 Charlotte Hwy  
 Asheville, NC 28803  
 828.299.1809

[www.aircraftsmanheating.com](http://www.aircraftsmanheating.com)

Air Craftsman Heating and Cooling, Inc. is a full service HVAC contractor and American Standard Customer Care Dealer who specializes in creating comfortable and safe indoor environments, lasting relationships with customers, and minimal impact on the environment through the thoughtful design and installation of efficient equipment and uncompromising customer service, making craftsmanship and integrity paramount.

High Country Timberframe & Gallery Woodworking Co. has been a leader in traditional and contemporary timber frame and SIPS panel design and construction for over 12 years with projects completed throughout the Eastern United States. With many high profile projects in their resume, High Country Timberframe & Gallery Woodworking Co. strives to ensure that “the second life of the tree be as dignified as the first”.



**Timeless Mountain Homes, LLC**  
 Bill & Cathy Fagan  
 2 E. Market St  
 Black Mountain, NC 28711  
 877.669.5557

[www.timelessmountainhomes.com](http://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.



**BILTMORE FARMS HOMES**

**Biltmore Farms Homes LLC**  
 Bill de Bruin  
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 828.209.2000

[www.mybiltmorehome.com](http://www.mybiltmorehome.com)

Driven by a legacy founded on quality, innovation and trust, Biltmore Farms approaches home building with a simple goal: To build homes, not houses. This is a company looking ahead even while it is sensitively aware of its immediate surroundings and environmental impact. It currently offers HealthyBuilt Homes and communities both good for the homeowner and the planet.