

HOME^{energy}

advancing home performance

March/April 2007 \$12



BETTER

Multifamily Buildings

THROUGH BENCHMARKING

Comfort Comes to New Jersey

Green Realtor Leads Texas

CO Detective

AS TEXAS GOES, SO GOES THE PLANET

Green building is the core of one Texas realtor's practice.

by BETH JOHNSON

“Unknowingly, the architecture and building community is responsible for almost half of all U.S. greenhouse gas emissions annually,” says renowned solar architect Edward Mazria, whose speech draws the largest crowd in our U.S. Green Building Council (USGBC) North Texas Chapter's two-year history. This November 2006 evening culminates a year of green building events. For 29 years I worked professionally for environmental advocacy organizations at all levels, and I haven't seen this many varied groups this motivated since the late 1970s.

Mazria explains how energy-efficient building design can counter the wrenching threat that global warming poses to people and planet. Starting now, his plan says, all new buildings will use half the “normal” amount of energy for their type, and by 2030 all new buildings will require no fossil fuel energy to operate. We'll also renovate (to 50% less fossil fuel usage) as much as we build new each year.

“Can we do it? Absolutely,” says Mazria. “It's already happening in California.” The American Institute of Architects, the U.S. Conference of Mayors, and the USGBC have adopted Mazria's sensible 2030 Challenge.

In North Texas, homes that use 50%–75% less energy than standard construction have been built only by a handful of longtime green architects and custom builders. After the challenges of shopping for land, architect, and builder for my own green home, I became a licensed real estate agent to help green buyers and green builders flourish. My mission is “connecting and respecting the buyer, seller, builder, community, Earth.” Millions of Baby Boomers like me are poised to transform the market by swapping 20th-



DENTON AFFORDABLE HOUSING CORPORATION

A thousand visitors flocked to the educational grand opening that Denton Affordable Housing and Dan Fette Builders organized to unveil the Green Built North Texas program.

century fuel-guzzling homes for modern, energy-efficient homes.

One of 45 agents at Dallas-based Advocates Realty, I'm the first North Texas real estate agent specializing in green building who's not affiliated with a builder. I completed three additional courses to become the first Texas realtor to earn the nationally recognized EcoBroker Certification, which provides additional training on energy and environmental issues that relate to real estate transactions. I passed a stringent exam to become the first Texas realtor and one of the few anywhere to earn Leadership in Energy and Environmental Design, Accredited Professional (LEED AP), the credential associated with USGBC's nationally accepted benchmark for high-performance buildings. I help buyers find their land, architect, and builder. My new-construction clients include green buyers, owner-builders, custom builders, develop-

ers, and “legacy landowners” who seek conservation development and green building if they must sell the family farm. My work includes helping buyers and sellers of existing homes that have energy efficiency or other green features, as well as selling homes that new-construction clients are leaving. I network extensively to keep current on which green homes are available, where they are, and who's building them.

Facing 18 proposed new coal-fired power plants and already-unhealthy air, “Texas is on the front line,” says Mazria. “If Texas chooses a new energy future, we win. If Texas leads, it sends a message; the whole world follows.” But I fear the planet's in real trouble if it's counting on Texans to use resources efficiently. (As a native Texan, I can get away with saying this.) Our sprawling Dallas-Ft. Worth Metroplex constructs 48,000 ever-larger and mostly standard-built homes

each year. “Live large, think big,” is Dallas’s official motto. Texans supersize consumption—car, house, mall. We’re 15 years behind Austin, whose city-owned utility created the world’s first voluntary residential green building program and inspired many other programs.

Yet even in North Texas, the past year’s green building milestones show that market transformation is well under way. When it happens here, it’ll happen everywhere.

Diary of a Transforming Market

September 2005

A hundred Home Energy Rating System (HERS) raters, builders, and government officials attend the first-ever University of North Texas green building conference for inspiration and advice on saving the world, one house at a time. Terms like “building science,” “high-performance home,” “whole-house approach,” and “systems engineering” abound. My husband, Arthur Kuehne, and I have our lot and think we’re ready to build our green house. But the conference confirms that a green house is not a regular house with some green thrown on it. Speakers show proof that not every builder gets durability right, that oversized HVAC units are uncomfortable and unhealthy, that we’ve got to ensure tight-house and climate-responsive basics before we consider solar hot water, ground source heat pump, rainwater catchment, or site-generated power. For better or worse, our house will perform long after we’re gone, and it’ll be trickier than we thought to get it right.

“Some worried whether our green building ordinance would stop growth in Frisco,” says Jeff Witt, environmental administrator of the hyper-growing Dallas suburb. Four years after Frisco became the nation’s first city to mandate that every home be built using Energy Star and other green building measures, continued explosive growth and emulation by others validates the city council’s vision.

January 2006

“What we call green building today will just be called building five to eight years from now,” says Greater Dallas Home Builders Association (HBA) President T.W. Bailey. I’m serving on a com-

mittee that develops a regional voluntary HBA-administered green building program requiring Energy Star certification plus 37 additional elements. At its April launch, dozens of builders, raters, and others immediately join the council associated with this Green Built North Texas program. It’s now well on its way to including builders of every price point and size; membership will double in 2007; its green building classes are packed; and homes are being built to its standards. “Builders are going to have to learn green building,” says HBA Director of Government Relations Paul Cauduro. “They’ll either be on the front edge of the wave with a competitive advantage, or be on the tail end and play catch-up.”

Advocates Realty becomes a founding member and I’m selected as the only realtor to serve as a director of the council. I chair the marketing subcommittee, which recruits and educates builders, consumers, and elected officials. As I work with builder clients, I explain the competitive advantages, attraction to consumers, and educational opportunities of programs like this. With buyer clients, I explain how certified green homes are built better for people, pocketbook, and planet. Now green-leaning buyers can drive the market like never before, armed with checklists like Green Built North Texas and LEED for Homes (USGBC’s green building rating system, with over 3,000 homes slated for certification nationwide under the pilot program that’s due to be finalized in 2007).

February 2006

Advocates Realty becomes the nation’s first real estate agency to join Residential Energy Services Network (RESNET), the national organization that sets standards for quality of energy-rating services and annually hosts the premier national forum on home energy performance and financing. At the annual conference in Texas, EPA’s David Lee tells us that half a million Energy Star-qualified homes are on the ground. Texas dominates the national Energy Star market, building one-third of all Energy Star homes last year. One out of three new Texas homes is Energy Star qualified. Yet even here, a home’s Energy Star certification is all but invisible to the consumer. Even builders who have committed to make every home

Energy Star inexplicably downplay what I consider a tremendous selling point.

Whether I’m representing the seller of a green-built property, or a buyer looking for one, or providing consulting services to help a builder green up or market a home, the resources of RESNET, EcoBroker, USGBC, the Austin Green Building program, Greater Dallas HBA, Realtors Land Institute, and others help me to articulate and market the value, benefits, and features of green-built homes and conservation communities.

I educate my buyer and seller clients about HERS raters’ services. And when I consult with owners considering an energy efficiency retrofit for homes they intend to keep, I explain the value of a RESNET-certified rater’s audit and refer them to raters like TexEnergy Solutions. A leading provider of Energy Star Home services in the nation’s leading Energy Star market, TexEnergy has certified over 16,000 new homes, wins the Energy Star Outstanding Achievement Award every year, and in 2006 won the Energy Star Partner of the Year Award.

June 2006

Eight hundred people come to see energy efficiency first-hand at prominent green architect Gary Olp’s (GGO Architects) own high-performance Dallas home. Built by Ferrier Custom Homes, it earned Silver recognition at the 2006 national Energy Value Housing Awards. “Phenomenally successful” is how organizer Lisa Silguero describes today’s first-ever Sierra Club green home fund-raising tour that Advocates is sponsoring. I take buyers to Olp and Ferrier, I help their clients find land, and I provide real estate services for some of Olp’s projects. Like many of my clients, most of the clients in Ferrier and Olp’s exclusively green practices are committed to green as the smart choice, they want their home to last into the next century, and many are Boomers building their final home.

August 2006

“Katrina nailed it. We would build green,” says Jane Provo, executive director of Denton Affordable Housing Corporation (DAHC), of her organization’s decision to build the Metroplex’s first “attainable” all-green subdivision, Nevada Court. Amid post-Katrina natural gas price and supply shocks, DAHC commit-

ted to green as the most sensible construction strategy for clients whose utility costs were overtaking their rents.

A thousand visitors flock to the educational grand opening that DAHC and Dan Fette Builders have organized. Fette is in the unique position of having managed construction of the \$600,000, 3,800 ft² luxury net zero-energy home in nearby Frisco, and of Nevada Court's \$130,000, 1,200–1,500 ft² homes. Not only are the Nevada Court homes the flagship example of the base level of the Green Built North Texas program that Fette chairs, but they also heat and cool 50% more efficiently than standard homes to achieve the \$2,000 per home federal energy tax credit. The market will change fast once consumers learn that high-performance production homes can be built for folks earning below median area income.

At today's opening, Nelrod Company Energy Star Director and RESNET board member C.T. Loyd illustrates Energy Star's Thermal Bypass Checklist to a young couple while their kids explore the on-demand hot water circulation buttons. An elderly widower learns of the average \$60 per month energy use guarantee for heating and cooling a Nevada Court home. Willow Bend Mortgage prequalifies folks for energy-efficient mortgages while green builder Chris Miles broadcasts his radio show live in the model home. Sierra Club volunteer Arthur Kuehne helps Fette explain wet-blown cellulose insulation and ductwork in conditioned space. And exhibitors include everything from green builders to Wilbow Corporation's award-winning New Urbanism community Tribute at Mills Branch, which is seeking green builders for its lots. A young couple gaze at the shaded windows and rainwater catchment tank and beam, "It just makes sense!"

October 2006

"You could sum up The Woodson Place in three words: craftsmanship, community, conservation," project manager and Woodson family member Chris Allen tells the large crowd of USGBC members who've come to tour the first conservation and green-built development in North Texas. I serve on the local USGBC chapter's Education and Events Committee, and Advocates is among the handful of Texas real estate firms that are national members of USGBC.



Passive solar design ICFs, SIPs, and energy-efficient equipment earned this Dallas home a high HERS rating.

Nestled in the quiet post oak savannah in the exurban fringe east of Dallas, The Woodson Place is a 66-acre part of a 108-year-old family farm developed so others can share the natural legacy enjoyed by seven generations of the Woodson family. The community is professionally managed as a home for people and wildlife; 60% of the landscape is preserved as scenic woodland, meadow, ponds, and trails. The year-old model home is one of the few to achieve the highest, 5-star rating, among 5,000 homes rated by Austin's 15-year-old Green Building program. The Texas Farmhouse style and the wrap-around porch illustrate the neighborhood's relaxed, friendly porch living. And there is no minimum required home size—a huge plus for those seeking a not-so-big house.

Advocates Realty is the listing agency for this premier, catalytic development, which combines land preservation with high-performance structures, and today Allen graciously welcomes us to the team as a unique component "who can now help us take The Woodson Place to the next level—an agency who gets what we're trying to do, represented by the only realtor to achieve both LEED and EcoBroker accreditation and the first Texas realtor to earn either!"

Conservation developments can add long-term value, Allen says, especially if

they are built to last 100 years with timeless aesthetics that include historic architecture, and with overall green building principles. Woodson's team is now tackling building some spec homes to 3-star or higher under Austin's rating program. "The challenge is to figure out how to offer the right price point, combining green building and correct aesthetics, in a rural area not traditionally exposed to cutting-edge innovation," he says.

"It's just the right thing to do," longtime Dallas architect Bill Larson says of his Woodson Place homes, which couple climate-responsive design with environmentally sensitive siting. "Clients come to me because they've heard that I design a really nice living place. We design that, and by the way, it's green. My clients are not after woo woo green; they're after common sense green. After doing The Woodson Place model home, I can now point to one of my projects that's not only certified, but 5-star, and rated under Austin's well-regarded program. Green that we can assure the customer is certified by a third party carries a lot of weight."

2007 and Beyond

Green building is gaining in popularity, but challenges remain. Few green-built homes have resold, so there's a shortage of similar homes, or "comps," for appraisers to compare to "standard"

homes to accurately value green-built homes for loan and resale appraisals. Common reliance on price/ft² valuation may make purchase prices of better-designed and higher-performing homes look somewhat high, so lenders may require a bigger down payment for a green-built home. More widespread use of green building programs' registries of certified homes will help cure this shortage of comps. Updating the Multiple Listing Service to include homes' green building attributes like predicted energy use and certification under Energy Star and other rating systems will help, too.

"There's more awareness of green building, driven by energy prices," says Jane Ahrens, USGBC North Texas board member and assistant professor of Architecture at the University of Texas at Arlington. And she adds, "The concept of 'rate of return' is starting to be understood." Texans' deregulated electric rates are among the nation's highest, and recent mammoth price increases are foremost in homeowners' minds. A study in the *Appraisal Journal* found that the market value of a home increases by \$10-\$25 for every \$1 decrease in annual fuel bills. Those findings should soon prove true here.

North Texas desperately needs EPA's Home Performance with Energy Star green remodeling program, which is already available in Austin. This program connects homeowners with trusted raters and contractors who take a whole-house approach to retrofits. I foresee a time—perhaps very soon—when utility bill disclosures will be common for resale transactions, and a new home's HERS rating or energy use guarantee will be listed alongside its floor area, maybe even expressed as annual utility cost/ft². I don't have a crystal ball or give financial advice, but if green building becomes the norm in five to eight years, as Greater Dallas HBA predicts, today's home buyers may run a greater financial risk, not only in operating cost but also in resale value, by not building—rather than by building—green.

For consumer demand here to escalate dramatically, the consumer must see more examples, in more places, of affordable and midpriced production home communities that heat and cool 50%-better than standard. Recently extended federal tax credit will help. "What would kick-start widespread residential green building

most in this market is a well-known quality developer who will champion green," says architect and USGBC board member David Rodriguez.

The 2007 horizon on the North Texas green building frontier is dotted with more market-transforming happenings. An auspicious milestone is the certification that North Texas' "Heather's Home" (GGO Architects, Ferrier Custom Homes) received as the first LEED-H home in Texas, one of only three anywhere to achieve LEED Platinum, and rated to use only 55% of the whole-house energy of an average new home. Condos and small-lot homes with sustainable features are going up; new communities of all-LEED single-family detached homes are envisioned; a green-built cohousing community is in the works; and another net zero-energy educational catalyst home will break ground. Greater Dallas HBA's Parade of Homes this year will include Green Built North Texas homes, and \$400,000 in advertising will promote the benefits of Energy Star homes to the public.

The HBA will offer a full slate of green building courses, and our local Energy Efficient Green Building Institute will offer a full slate of raters courses. The LEED for Homes rating system and higher rating levels for Green Built North Texas will be finalized, and local USGBC and the HBA are discussing ways to cooperate in promoting green building. Our continued drought is changing ordinances to water-efficient landscaping and opening minds to more efficient use of all resources. Fanned by favorable mentions in *Newsweek* and other magazines, EcoBroker's national ranks have quadrupled in the last year and will probably double again in 2007.

My husband and I will build our green home in the post oak woods on the eastern edge of the Metroplex. And we will use it as an educational catalyst to illustrate attainable green building in a 2,000 ft² home.

"Texas is on the front line," Mazria said in his speech. Texas has a critical opportunity to change the world's energy path. Texas has been oil, sprawl, the illusion of endless resources. Yet we also invented the world's first voluntary green building program, were the first to require that a whole city be green built, are among the leaders in LEED commercial construction. We're bold, can-do, high-tech, and innovative. We'll Live Large—

harnessing our abundant wind and solar resources. We'll Think Big—in terms of energy savings. I'm proud to play my part in this historic frontier. A new century is dawning—and not a moment too soon.

Beth Johnson, of Dallas-based Advocates Realty, is the world's first realtor to earn both LEED AP and EcoBroker accreditation and the first Texas realtor to earn either. For decades she served as professional staff and consultant to the Sierra Club and other environmental advocacy organizations.

For more information:

For a comprehensive North Texas green building events calendar, and links to green building organizations and programs throughout the country, go to www.BethJohnson.com.