

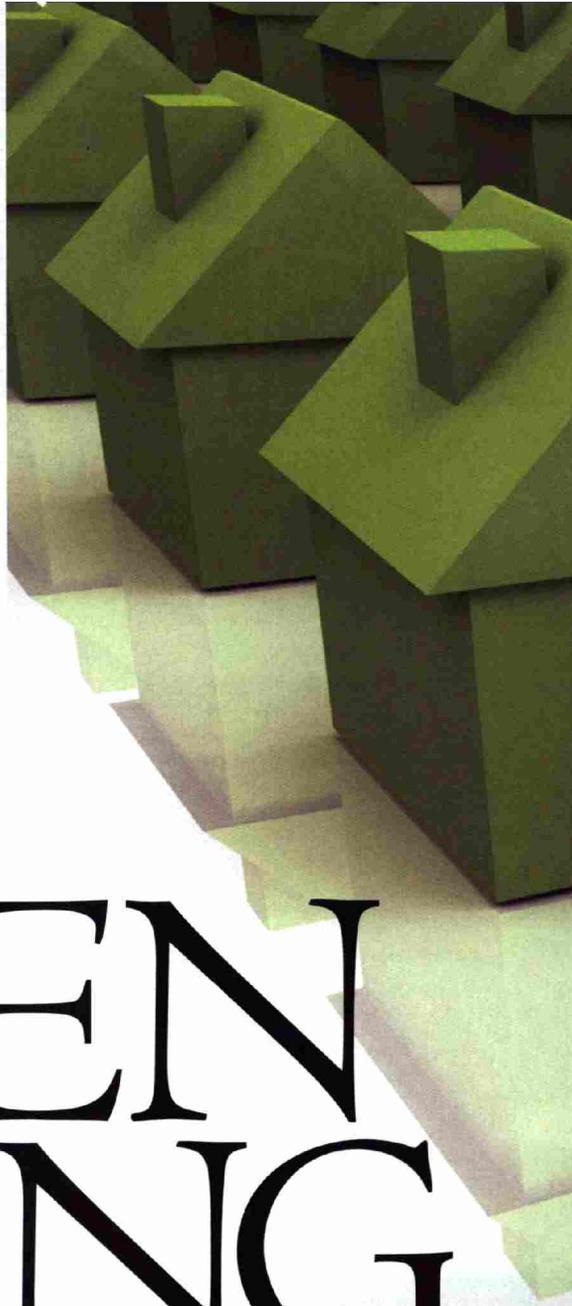
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Unless you have spent the last few years holed up on Robinson Crusoe's island, you know that the world has gone gaga for green. What was once a slightly risible offshoot of the hippie movement is now a worldwide moral imperative, not to

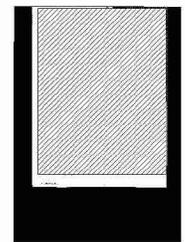
mention a red-hot marketing tool.

Politicians, corporations, schools, homeowners—everybody is scrambling to fly the green flag: Cities are banning plastic water bottles. Hybrid cars are objects of consumer lust. A new Planet Green cable network has just begun broadcasting. Even my local bank is handing out glossy brochures touting “green banking.” Sustainability is the window through which more and more of us are choosing to view the world. As green thinkers will tell you, it's not just the smart thing to do: It's the right thing. >>



GREEN LIVING

As green extends beyond fairways and putting surfaces, more and more golf communities are embracing green building as smart strategies for the future **BY MERRELL NODEN**





Sustainability is a priority at Suncadia.

By now, you probably have a pretty good idea of the right thing to do when it comes to gas-sucking machines like cars. We know it's greener to go 30 miles on a gallon of gas than 15. And for some time now, most of us have agreed that recycling paper, metal and plastic is environmentally responsible (if we must use plastic at all).

But it's only recently that environmentalists have focused on houses despite the fact that, according to experts, they could well be the place where we waste and pollute the most. According to the U.S. Green Building Council (USGBC), buildings account for 39 percent of both our energy use and greenhouse emissions.

Alex Wilson, one of the leaders of the green building movement (see "Where to Start," page 32), says there are many ways to make a house more green, ranging from the simple—installing fluorescent light bulbs or lowering your thermostat—to the esoteric, in the form of building materials designed specifically to be green. In thinking about all this, it may help to think of your house as another machine; your goal is to make it a more efficient machine, one that runs on as little energy as possible.

And that's especially true when talking about second homes. "Nobody needs a second home," allows Chris Kelsey, senior vice president for development at Wash-

ington State's Suncadia, a resort community in the mountains east of Seattle. "So being part of a community that has an environmentally friendly status is increasingly important. Feeling better about consuming resources allows people to make that decision."

As does economics, which may be what makes environmentalists of us all. The building industry estimates that while it costs an extra three to five percent to build a green home, it does not take long to make up that cost in energy savings. USGBC, which began rating homes only recently (but has been gathering data for years), estimates that, for commercial buildings, it takes between one and two years for green technologies to pay for themselves. If, as expected, energy costs continue to rise, homes that are not green will surely lose resale value.

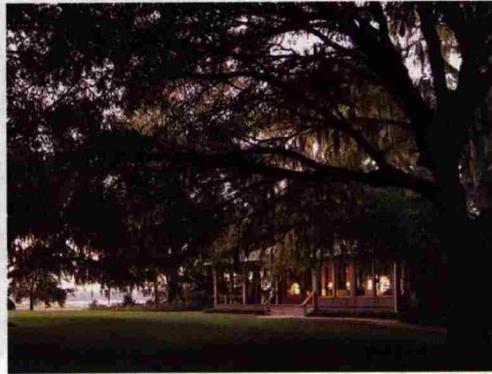
"Right now green is an option," says Lucas Anthony, vice president for development at the Cliffs Communities in the western Carolinas. "In four or five years, it will be a requirement."

FIRST STEPS

If you are approaching the world of green building for the first time, it can all seem quite daunting. Not only are there a variety of green technologies to choose from, you'll



There are thousands of acres of preserved land at Spring Island.



also be confronted with multiple rating systems and a whole new alphabet of acronyms, such as LEED (Leadership in Energy and Environmental Design), FSC (Forest Stewardship Council) and VOC (Volatile Organic Compounds).

Green building has had to confront the same regulatory dilemma the organic food movement faced in its

early days. "It wasn't until the FDA wrote a set of guidelines [defining the word organic] that it really began to mean something," says Dan Paquette, vice president for development at DPS Sporting Club Development, which operates the Greenbrier Sporting Club in West Virginia and the Snake River Sporting Club in Jackson Hole, Wyoming. "[The building trade has] been going through



'When people think of green, they think of weird-angled buildings,' says Greenbrier's Dan Paquette. 'We're the opposite of that.'

a similar process: Now we have a definition and a rating system for what a green home is.”

In fact, we have multiple rating systems. The best known is probably the U.S. Green Building Council's LEED system, which awards points for a builder's use of approved green materials, technologies and practices. Based on total points, buildings receive one of four possible rating

levels: certified, silver, gold or platinum.

Some prefer the National Home Builders Association's Model Green Home Building Guidelines, claiming that they are more user-friendly. (See “Green Resources,” below.) A Department of Energy software program called REZCheck allows a builder to input all the variables of a particular design—space, materials, mechanical systems—

to obtain a reading of its energy efficiency. The houses at Greenbrier's Summit Village are designed to be 30 percent more efficient than current industry standards; Paquette would ultimately like them to reach 40 percent.

Green building has evolved from its early days of evoking frontier-spirit innovation to what it is now: a movement everyone wants a piece of. "It's not like I have to go out, the way I did in the '70s, and find these materials or actually create them," says Paquette. "I can get Energy Star windows and appliances. I can get FSC-rated woods. And I can get zero-VOC paints from Sherwin Williams or Benjamin Moore."

Paquette and his colleagues actually took a spreadsheet and broke down the 600 separate components of one of their Summit Village homes. About each one, they asked: "Is there a way to make this greener in its manufacture, transportation or use?"

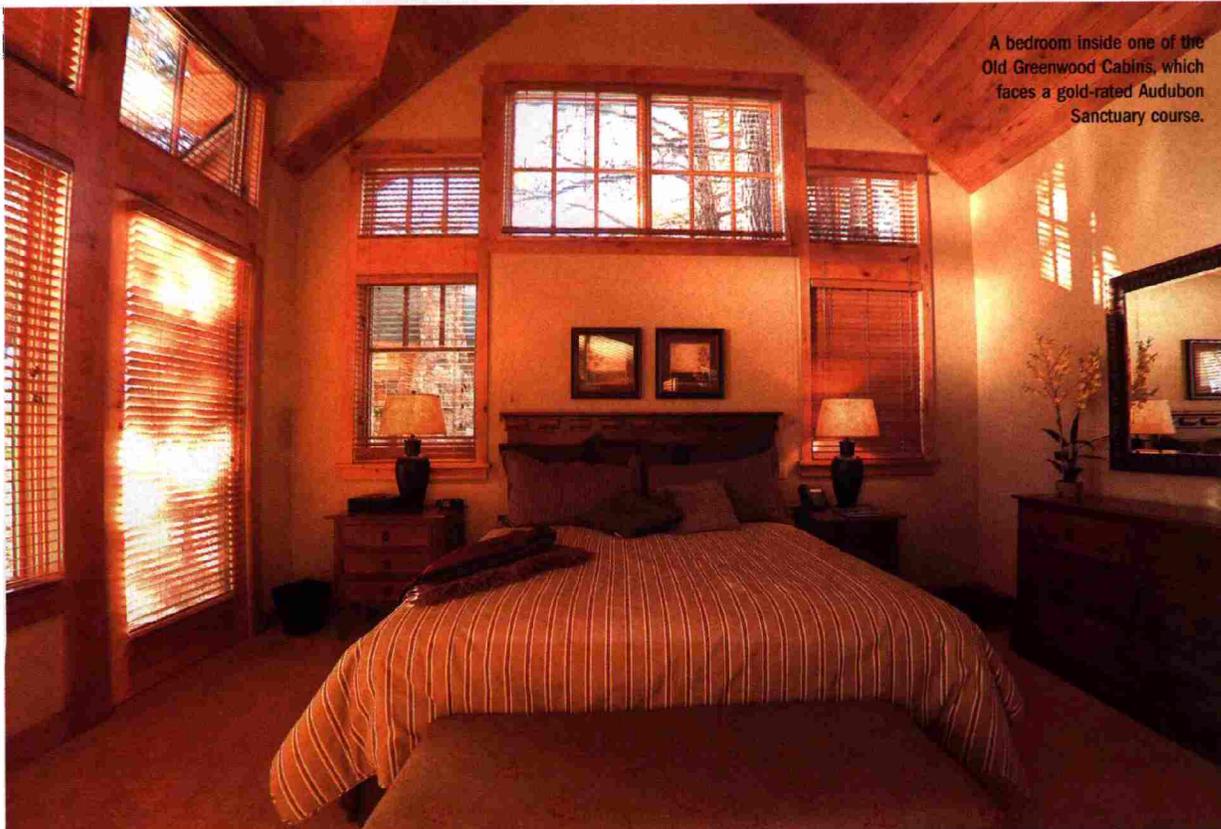
And while some green strategies show great imagination—the walls of the Wild Goose restaurant at Old Greenwood, near Lake Tahoe, are insulated with discarded blue jeans—many are just updates of strategies smart builders have been using for centuries. At the Greenbrier, for

instance, where rainwater runoff can be a problem as it is in all mountain communities, barrels catch the water from gutters, which can then be used for irrigation. It's a simple idea as well as an old one.

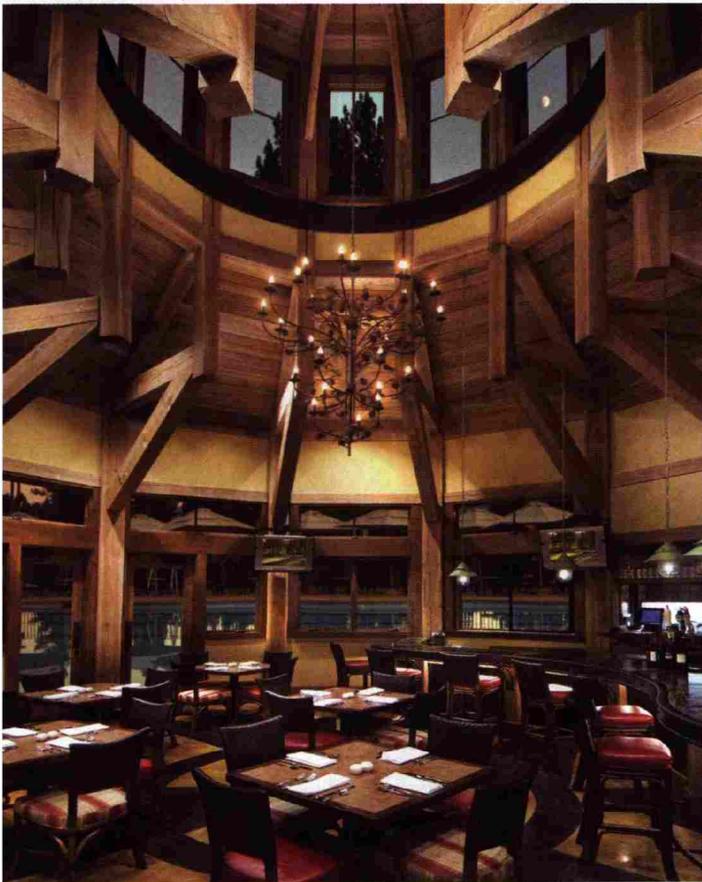
REDEFINING GREEN

Although green can be simple, the mention of a green home still conjures up the wrong image for some. "When people think of green, they think of funky, weird-angled buildings and glass boxes," says Paquette. "We're at the absolute opposite approach to that. We can build beautiful vernacular homes that are extraordinarily well insulated, with very little air infiltration, phenomenal windows, and mechanical systems that work at very high levels of efficiency. And we don't sacrifice any architectural beauty."

Of course it's not just individual homes that determine a community's overall sustainability. A great deal of thought goes into how those homes occupy the landscape—not just on their own, but how they fit together. Low-impact development is the prevailing philosophy



A bedroom inside one of the Old Greenwood Cabins, which faces a gold-rated Audubon Sanctuary course.



Old Greenwood's Pavilion uses recycled wood from old railroad trestles and wine barrels.

now. By clustering homes, you leave larger natural spaces and limit the amount of roads and infrastructure you need to build. Paquette reckons that DPS has left some 85 percent of its land untouched, while out at Suncadia the developers have paid particular attention to the wildlife corridors connecting the Cle Elum and Yakima rivers.

Spring Island, a 3,000-acre former quail-hunting plantation near Hilton Head Island, South Carolina, originally was permitted for 5,500 condos and two golf courses. But when Chaffin & Light Associates, a development company known for its commitment to green issues, took over, it decided to preserve as much as possible.

"The concept was that the whole island was to remain a nature preserve," says Dr. Chris Marsh, one of four full-time naturalists on site. "It was to be a community in a nature preserve rather than a community with a nature preserve." As a result, Spring Island has just one course, Old Tabby Links, and fewer than 400 homes, which are situated unobtrusively on the land through the use of

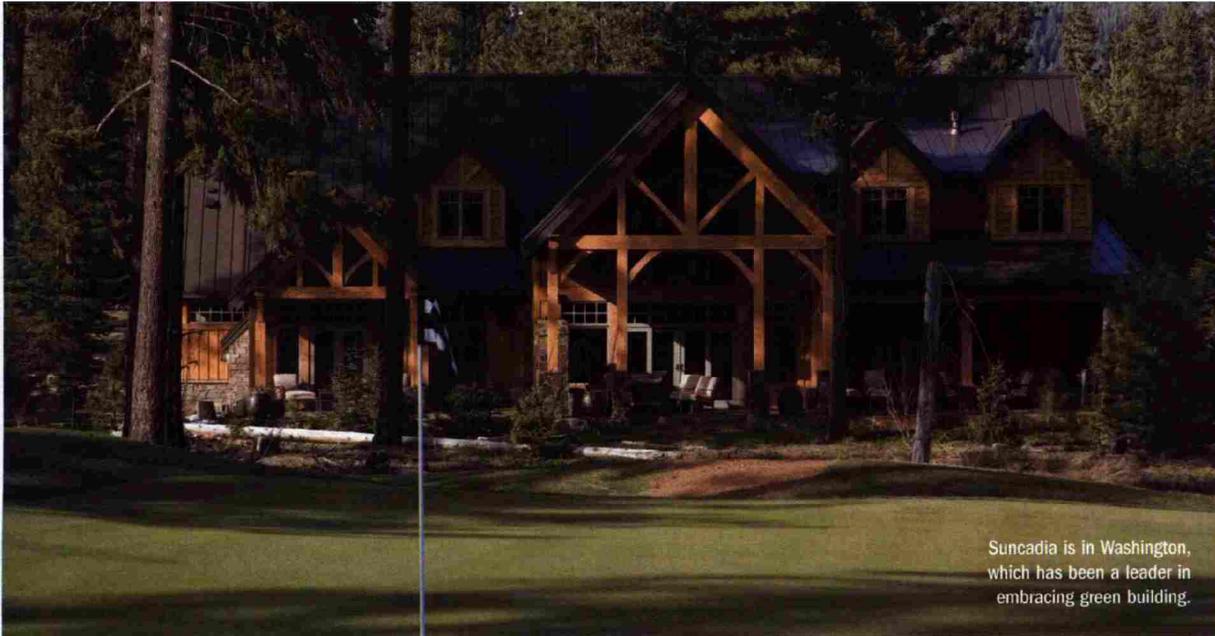
extensive buffers. There's also a nature center and a rookery with several hundreds nests of herons and egrets.

But Spring Island's commitment to nature doesn't stop at its borders: Through its Lowcountry Institute, the community offers a Master Naturalist program that teaches college-level material in a 12-day program. The classes are open to not just Spring Island residents but people from all over South Carolina who come to learn about the state's unique ecology.

That's one more thing about green strategies: They are site specific, depending not only on the local climate but also on your building site. What passes for green in Florida may not make sense in Vermont, and the cool new technology in one part of the country may be old school in another.

For example, Brenda Nunes opened her model green home at Suncadia to the public two years ago. Although she received 4,000 visitors in the first two months, she was amused to discover how blasé visitors from the eastern part of her own state were about features like ground loop heating (see "From the Ground up," page 42). In places like Pullman, this hardly qualified as a brave-new-world technology.

It's worth noting that to earn a five-star Built Green rating, the highest possible, Nunes' 3,000-square foot house included no fewer than 65 distinct green features. Among them were bamboo floors (bamboo replenishes itself much faster than other woods), fluorescent lighting, low-VOC paints, tankless water heater, and a foundation built from insulated concrete forms that fit



together like hollow Lego blocks. The tiles and countertops were made from recycled glass. And wherever possible, the materials were recycled from the lot to save transportation costs, and the landscaping was as natural as possible. ("Native plantings" is a phrase you hear over and over when talking to greenies.)

Most green strategies focus on conservation, on preserving the land and resources as much as possible. But coming into focus is the tougher question of reducing a house or community's "carbon footprint." To that end, there's a new school of thought that goes by many names,

including "cradle to cradle." In this more farsighted way of measuring sustainability, the consumer considers the lifespan of every material: What does it take to harvest or manufacture? To transport it? To install it? How long will it last? And, at the end of its useful life, to dispose of it?

Of course, this means there are even more opportunities for the conscientious consumer to feel guilt. But with so many areas open to improvement, that's hardly the way to look at things:

"It's really not what you are doing wrong," says Paquette. "It's what you can do better." 