

## A sunny-side-up market

Solar solace. In this down economy, photovoltaic and energy-efficient upgrades can be golden parachutes for homeowners hoping to sell or build their equity.

By Elana Ashanti Jefferson *The Denver Post*

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WITH ALL EYES on the money crisis, homeowners and builders may find it hard to believe the words of Little Orphan Annie — the sun will come out tomorrow.

But one segment of the housing industry that continues to grow by banking on just that idea is the residential solar-energy business.

Even in these tough financial times, real estate experts say homes with solar technology and other efficiency upgrades continue to appraise higher and attract buyers, and those buyers may even come with special financing set aside for high-efficiency homes.

The residential solar business is especially strong in Colorado because of voter-approved legislation that mandates access to renewable energy, and because Xcel Energy's Solar Rewards rebate program is one of the strongest in the country — for now.

Rebates are expected to dry up in a year or two as solar energy installation becomes more mainstream. The writing is already on the wall as Xcel's commercial rebate program ends this year, along with the \$2,000 federal energy-tax rebate.

Earlier this year, Melissa Thornton was faced with unloading a 5,300-square-foot home in an upscale Boulder County neighborhood riddled with competitive properties, foreclosures, short sales and a reputation for foundation-cracking clay soil. So she took a leap of faith and sank \$15,000 into a solar system.

Within a month, her house was under contract.

"The only part of the economy that is growing right now is the green market," says Thornton, a real estate agent with special eco-broker certification that keeps her plugged into the latest green housing trends and technology, gives her the expertise to help other people retrofit their homes, and buy and sell green properties.

Before selling her own big "American dream" house, the maintenance of which left her little time to spend with her family, Thornton "greened" the property in other ways, like upgrading the insulation, caulking the electrical outlets, sealing the plumbing and buying Energy Star appliances. Along with the solar system, that made hers the first home in the area to receive an official Energy Star rating, Thornton says. And that immediately attracted buyers.

The mother of three launched her "quest for sustainability" out of the feeling that society has gotten sidetracked by a quest for quantity over quality.

"Our priorities are on having all this stuff," she says. "I was bothered when I would take a client into new construction and they would fall in love with it because it looked so good, but it actually compromised so much."

Thornton's business model now includes setting aside a portion of her fee after selling a house to green that property. For instance, Thornton recently sold a home priced at \$950,000, then gave

back \$6,000 of her commission to help the buyer fund green upgrades.

Her biggest piece of advice for anyone considering going solar is that they thoroughly research the system provider.

“There’s a big difference between a certified solar company and a mom-and-pop company,” Thornton says. If the system pays for itself in about a decade, “you want to make sure that the company is going to be around and they have the insurance” just in case something goes wrong before then.

According to Dave Dugdale, a Superior Web designer and blogger known as “Solar Dave,” a skilled do-it-yourselfer may be able to whittle the upfront cost of a solar system down to about \$7,000.

Dugdale launched [solar-dave.com](http://solar-dave.com) to collect and share information and interviews about going solar. His particular challenge is that his roof is covered with shake wood shingles, which cannot support solar panels. But after getting a new roof, Dugdale, whose background is in electrical engineering, plans to install the panels himself to keep costs down.

Like Dugdale, homeowners must do their homework before investing the average \$10,000 to \$30,000 in a solar energy system — an expense many cover by borrowing against their equity or liquidating assets. Sam Ley, chief designer with Standard Renewable Energy, says some of the key questions to ask are:

- Does your property have optimal, shade-free southern exposure? For solar enthusiasts, sacrificing an inconvenient tree is common.
- Is there enough space on your roof for solar panels?
- Do you want to generate just enough solar energy for your home or enough to sell excess power back to Xcel? The latter is rarely ideal because Xcel buys the extra power at a wholesale discounted rate? Anyone opting for this route should have a thorough understanding of how net metering works.
- Is your roofing material suitable for installing solar panels?
- Have you investigated the special riders required by your homeowners’ insurance to cover any damage to your solar system, which most often happens from high winds, torrential hail or, for anyone living near a golf course, the occasional wayward tee shot.
- And finally, how important is an actual physical return on your investment?

“Studies in the Netherlands have found that the systems pay themselves off environmentally in one-and-a-half to two years,” Ley says. “After that, (homeowners) are giving the world clean, carbon-free energy.”

Looking for a more concrete financial incentive? The Appraisal Institute, an appraiser’s trade group based in Chicago, has estimated that every dollar cut from a home’s annual energy bill can add \$20 to the sale price of the house.

But Solar Dave says not all of the appraisers he’s talked to buy into that idea. And it may take as many as 15 years for homeowners to recoup their solar investment in electricity savings.

Even so, Akeena Solar’s regional manager Eric Bowman says “demand is extremely high.” Solar power “absolutely differentiates the home” in a buyer’s real estate market, he adds.

Northern California-based Akeena Solar opened offices in Colorado in June and is now installing around 10 compact, design-friendly solar systems per month.

Standard Renewable Energy installed fewer than 100 systems in 2006. In 2007, Ley says the company installed about 1,300 systems. This year, the company is on track to surpass that number.

That increased popularity is one reason homebuilder Harvard Communities has continued to grow its business through a collection of ultra-efficient luxury homes in which solar energy is standard. Priced from the high \$600,000s, its Architect Collection at Stapleton is about 40 percent more efficient than traditionally built homes.

“We’re going to deal more houses this year than last year, and the energy story is a big” factor, says John Keith, CEO of Harvard. “When people see that the house we’re building for them aligns with their values, it just excites them.”

Social consciousness is a driving force behind the state’s residential solar boom. After reading up on the international, environmental, political and social downsides of fossil fuel production, Centennial mechanical engineer Gregory Damian felt strongly enough about installing solar panels on his house that he negotiated new rules with his community covenant. Against state law, the community had outlawed the installation of solar panels on his 2,800 square foot house.

Since his system became operational in February, Damian has been paying about \$25 a month for electricity.

“The only way this investment loses is if the price of energy goes down, which isn’t likely,” he says.

Around his neighborhood, Damian doesn’t see a lack of money to invest in energy efficiency home improvements. He sees a lack of will.

“For every Lexus that I see driving around,” he says, “I see a solar system.”

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“I get excited about my house being a power plant,” Damian says. “I keep a spreadsheet” to track the savings from the solar-energy system.



Gregory Damian was forced to challenge the dated rules of his community covenant in order to install a solar-power system from Standard Renewable Energy. Now his Xcel bill is about \$25 a month. His quest for efficiency also included replacing all of the windows in his Centennial home; using only compact fluorescent bulbs; upgrading his insulation; and installing Energy Star appliances. "When you're conscious of what you're consuming," he says, "you tend to consume a lot less." Photos by Cyrus McCrimmon, The Denver Post



Solar energy was the answer when Melissa Thornton needed to sell this house, located near several other sale properties. Melissa Thornton



Harvard Communities' Architect Collection homes start in the high \$600,000s and are selling. Roughly "\$20,000 worth of hardware goes into the houses to make them efficient," says CEO John Keith. Harvard Communities