

# sol man

THE FOUNDER OF MATCH.COM IS MAKING THE CASE FOR SOLAR ENERGY, ONE ROOF AT A TIME.

BY **JON MOOALLEM**

PHOTOGRAPH BY **ERIC MILLETTE**

**g**ary Kremen sat in his San Francisco office on a winter afternoon, shouting on his cell phone and taking frequent, inexplicable swigs from a bottle of lemon juice. Kremen is 44 and stout, with a raspy voice and an inability to sit still. He founded Match.com in 1993 and ran the porn-marketing site Sex.com before selling it off for a reported \$14 million in 2006. Lately, he has been sinking a chunk of his wealth and most of his energy into a new, slightly more altruistic startup called Clean Power Finance.

The new company, says Kremen, “is all about bringing solar to mass market”—making the case for going solar to average Americans, rather than just selling its virtues to what he calls “green liberals,” “national-security types,” and “utility haters.” He wants to make installing solar panels on your roof as mundane as buying a car or any other big-ticket item. “If we’re really going to get solar working, it can’t be a green sell. It’s got to be an economic sell,” he says. “I’m all about ‘green is cool.’ But that’s not big enough.”

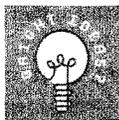
His plan has two parts. First, he offers user-friendly sales software and marketing support to solar-panel installers. “Installers are guys with trucks. They’re guys with

ladders,” Kremen explains. “They’re not sophisticated marketers.” The software helps installers calculate their customers’ tax credits and energy-bill savings and boil the data down for a slick sales pitch. Then, once the installer gets close to making the sale, Clean Power Finance steps in to broker a market-rate loan for the buyer, making the \$20,000 to \$50,000 cost of a solar setup manageable.

With the U.S. market for solar power expected to be worth \$69 billion by 2016, the potential payoff is huge. The field is being populated by former dot-com barons like Kremen, and many have lured their stable of venture capitalists in with them. “These are serial entrepreneurs,” says Adam Browning of the Vote Solar Initiative, a California nonprofit, “and they see energy as the next field to conquer.” PayPal cofounder Elon Musk is

now chairman of a solar-installation firm. Google, which powers its headquarters partly with a titanic solar installation, recently invested \$10 million in a solar-thermal startup (see next page). Browning says dot-commers’ enthusiasm for solar “appeals to their desire to do good. They want to be part of something bigger.”

Several of Clean Power Finance’s 10 employees, working for significantly less pay than they’d command at a tech company, fit this profile. Kremen, for his part, doesn’t fit any profile exactly. Four years ago he was living alone in a mansion outside San Diego—a palace awarded to him in a lengthy lawsuit against a con man who’d stolen his Sex.com domain name. (Kremen also won \$65 million.) It was a lonely time, with Kremen forgoing the online dating scene he’d helped create and offering \$25,000 to anyone who successfully set him up with a Jewish bride.



**SOLAR-POWERED MALLS** Energywise, shopping malls are the Hummers of the retail world. So why not cover those acres of empty roofs and parking spaces with PV panels? Enter Destiny USA, a 1.3-million-square-foot renewable-energy-powered addition to a mall in Syracuse, New York. A solar

array covering the parking lot will provide about 12 percent of the power, and the builders say on-site wind, fuel cells, biofuel, and hydroelectric will provide the rest. The project is not purely altruistic: The developer’s solar shopping spree is backed by local and state tax breaks and federal green-building bonds. —*Joyce Tang*

The *San Diego Jewish Journal* likened him to George Costanza: "loveable...like an irritable teddy bear."

Thanks to the bounty, Kremen got married earlier this year. He concedes that launching Clean Power Finance "feels better" than "doing some other horrible dot-com or another porn company." But he still seems to be in it primarily for the money. "We're hitting this tipping point of getting off of fossil fuels and onto sustainable energy sources," he told me, "and money's made at tipping points." Just as the Web changed how people communicate—the tipping point Kremen exploited with Match.com—he anticipates that solar will break down our system of centralized energy production and create a distributed network of tiny power-producing homesteads. I mentioned that Al Gore had recently forecast something similar, a so-called "Electranet." "Whatever, Al Gore," Kremen answered impatiently.

Browning commends Kremen's car-salesmanlike approach. He notes that no cars would ever get sold if dealers had to tell every customer, "Nice that you want to buy this car, but since you didn't bring \$30,000 with you, why don't you go away, talk to somebody about getting that money, and come back when you've got it." Instead, there's GMAC financing right there on the lot. That kind of full-service sales package, Browning says, is central to "growing the market for solar from an infant to a teenager."

However, at the time of my visit to Kremen's office in January, not quite six months after he'd started offering loans, Clean Power Finance had closed only one. "It would be better if this mortgage and credit crisis didn't suck," he griped. He doesn't expect to turn a profit for at least another year. Part of the problem is that most solar customers already have the means to pay up front; as one of Kremen's colleagues put it, many installers are still operating profitably as "order takers" and don't yet feel pressure to become salespeople. And even if they do, right now the economic case for home solar can really only be made in the handful of states such as California, New York, and New Jersey that are offering significant tax rebates or other incentives. Kremen said it's better to be ahead of the curve than behind it. But, he admitted, "I'm hoping it's too early, as opposed to it's never." ■

INTERVIEW

## search for the solar grail

BILL WEIHL, GOOGLE'S GREEN-ENERGY CZAR

**Mother Jones:** What kind of clean-energy technology is Google developing in-house?

**Bill Wehl:** The major focus right now is on solar-thermal technology to generate electricity. We think more attention could drive the cost of that down substantially to the point where it really could be competitive with coal.

**MJ:** Google's investment in energy is pretty small given its market cap. Does that mean you don't see the same moneymaking potential there as in Internet search?

**BW:** Right now, our major revenue source is our core business. But the revenue potential in the energy sector probably dwarfs the sector we are in today.

**MJ:** What would it take for renewable energy to go mainstream?

**BW:** This is where I get worried. If you look at the amount of energy that's needed in 2050 and the amount of infrastructure that needs to be installed between now and then, it's staggering. I don't see the current capital markets being in a position to generate the investment needed to make that kind of infrastructure happen. We need investment in the technology to drive down the cost, and we need a lot more investment.

**MJ:** What's your favorite personal energy-saving tip?

**BW:** Make sure your computer puts itself to sleep if it's idle for more than 15 or 30 minutes.

## the roof is on fire

WHY HOME SOLAR MAY SOON GET A LOT MORE AFFORDABLE

Installing solar panels on your roof is like paying for 20 years of juice up front. There's no guarantee you'll recoup that money when you sell, and American families move every seven years on average. While it may be exhilarating to watch the utility meter spin backward, these basic facts make solar impractical for the masses. "People are willing to pay a premium to not be tied down," notes Cisco DeVries of Berkeley, California, who until recently served as the mayor's chief of staff.

But last year, DeVries hit upon a brilliantly simple idea. What if, he asked, the city financed residents' solar rooftops, then levied a 20-year tax assessment on their properties to pay for it? The debt would follow the home, not the owner, and in one fell swoop, the two greatest impediments to home solar would be history.

His bosses ate it up, and Berkeley plans to roll out its new program this summer. City officials will float low-interest municipal bonds to cover the initial costs, and DeVries figures a solar setup factoring in rebates and tax deductions (which can be looked up at [dsireusa.org](http://dsireusa.org)) will cost a single-family household at least \$65 a month. Once the system is paid for, the homeowner enjoys free electricity.

DeVries' phone has lately been ringing off the hook as dozens of municipalities look to follow Berkeley's lead. In Santa Fe, installation costs would show up on monthly utility bills, and Milwaukee, whose private utility already buys customers' excess solar electricity at above-market rates, is mulling over its own financing program. Ditto San Francisco, which is aiming for 10,000 new solar roofs by 2012. "We've got very ambitious targets," says Johanna Partin, the city's renewable-energy guru.

There's even a ray of hope for less-ambitious locales. A dearth of materials, namely silicon wafers, photovoltaic cells, and the modules that hold PV cells, has kept prices up, but a manufacturing spree by China promises to remedy that. "China is in a ramp-up phase that is very, very aggressive," says Travis Bradford, president and founder of the Prometheus Institute for Sustainable Development. He notes that China and Taiwan have already tripled production in each of the last two years. By 2010, the institute predicts, PV modules will be about half what they cost in 2007. That, by Bradford's math, should knock at least 25 percent off the installation price. Bright forecast, indeed. —J.T.

