



Bright (green) ideas

> With the future of the environment—and the economy—so dim, more midlife women are finding financial prosperity as eco-entrepreneurs. Here's how to make money and stop climate change, all at the same time >> *by* REBECCA ADLER WARREN

➔ IF YOU NEED some cheering up about the economy (and who doesn't?), take a look at what's going on with green business: The sector has been growing by 30 to 60 percent a year, on par with the success of the personal computer in the 1990s. And while venture capitalists have been fleeing pretty much every other kind of investment, they're still

pouring money into eco-companies—to the tune of \$8.4 billion in 2008, up 38 percent from 2007. With President Obama's support for green initiatives, experts predict the growth will only continue. Here, meet eight midlife innovators who are pioneering the trend.

LINDSAY SMITH | 63

Fountain Valley, California

RUBBER SIDEWALKS
Her paving tiles (made from recycled tires) last longer than concrete. Plus, they're easy on the knees—and the trees.



When Lindsay Smith drives down Redondo Beach Boulevard in Los Angeles County, she can still see faded red X's on the 13 ficus trees she saved from destruction eight years ago. Smith, then a film producer and screenwriter, was out one morning when she saw two dozen men in orange vests taking buzz saws to 26 full-grown trees. Enraged, Smith begged the foreman to stop. He explained that the County Public Works Department had hired him to remove the trees, whose roots were breaking up the concrete sidewalk. Smith was surprised by what the foreman said next: He admitted he didn't believe in cutting down the trees.

Smith, a lifelong environmentalist, ran home and called the local newspaper to report the cutting, which had not been publicized. The county

put the project on hold and met with Smith two days later. By that time, she had contacted other cities to learn how they handled their broken concrete. “There was a lot of heartache over this terrible problem,” Smith says, “but no one had any solutions.” Then she called the City of Santa Monica. The urban forester there told her about Richard Valeriano, who, after the 1997 Northridge earthquake devastated much of the city, had invented rubber pavers so flexible that a glass bottle will bounce off them. The pavers, or sidewalk tiles, are completely made from recycled tires and last up to 16 years. (Concrete lasts only three to 10 years when trees are in the area.)

With a sample paver in tow, Smith met with city officials and nearly 30 other neighborhood activists. To her amazement, the city agreed to spare 13 of the trees and was open to learning about the rubber pavers. Excited by the idea of helping other communities, Smith invited 30 city officials from the greater Los Angeles area to see Valeriano’s invention. By the end of the meeting two weeks later, she had sold \$55,000 worth of product—and put her movie career on hold.

On a tip from a sports flooring maker, Smith contacted the California Integrated Waste Management Board, which awarded her a \$250,000 grant. In 2001, she opened Rubbersidewalks (rubbersidewalks.com). It took three years—and multiple manufacturers—to grow the business. “I got a lot of ridicule,” Smith says. “People thought I was a crazy tree-hugger.”

As the green movement took off, so did Smith’s company; in 2004 she got funding from an angel investor and hired a salesperson. Today her products are used in 95 cities in 28 states. Rubbersidewalks, which are easy on the knees, are also found in senior facilities and parks, and on college campuses. Because there are so many uses for her products, Smith’s sales have increased by 300 percent since the company launched. “I can’t imagine anybody not being an environmentalist,” Smith says. “You have to respect the world we live in.”

MELANIE HAGA | 48

Ogdensburg, New Jersey

BACKTHRU THE FUTURE She wondered what would happen to old computers—now she runs a company that recycles them.



In the early 1980s, personal computers cost anywhere from \$1,500 to \$10,000. As the marketing representative for a computer leasing company, Melanie Haga was responsible for promoting a program that allowed customers to lease pricey computers and later exchange them for newer models. “Back then, borrowing one computer for an entire office was a big deal,” she says. When she was laid off by the leasing company, Haga decided to start her own business.

She called her company Back Thru the Future (backthruthefuture.com) and focused on buying and selling used computers. After running the business out of her home for a year, Haga noticed that she always had leftover computer cords, power strips, external disk drives and other accessories. She was also troubled by the cost of shipping whole computers. Then she had an epiphany: She could break down the old computers into their component parts and sell the motherboard, power supplies and drivers one by one, just as scrap dealers do with used car parts. Haga changed the company’s focus from brokering to parts resale. Soon her house was so overrun with electronic debris that, in 1991, she moved the business into a 10,000-square-foot warehouse.

Over the next five years, Haga opened similar locations in Atlanta, Chicago and San Jose. (Now the warehouses are consolidated in New Jersey.) But even after selling off the parts, she was still left with the computers’ nonreusable metal and plastic casings. Getting rid of the metal was easy—Haga drove it in her truck to scrap centers—though with no state guidelines in place, she couldn’t ensure that it met an eco-friendly end. Dealing with the plastic

was more difficult. Haga petitioned the major computer manufacturers to take responsibility for recycling the waste—to no avail. “The computer companies put me on hold and sent me through the phone systems with no answers,” she says. “They wouldn’t recycle or take anything back.” Out of options, Haga reluctantly discarded the leftover plastic at local dumps.

Finally, the industry began to catch up with Haga’s vision; 1998 saw the start of the International Association of Electronic Recyclers, among other groups. Then, in 2000, as part of a pilot program for recycling electronics, the State of New Jersey classified Back Thru the Future as an intelligent segregator. Now the company has the authority to send computer parts to reliable recycling facilities. “I had been trying for so long to be heard,” she says. “At last the government got the word out that computers must be handled properly.”

Today Haga brings in more than \$1 million each year and shares ownership of the company with her husband of 14 years. “I started this business because I needed an income,” says Haga, who, on most days, is decked out in steel-tipped boots and perched behind the wheel of the warehouse forklift. “I had no idea I would become a pioneer in the recycling effort.”

JONELLE RAFFINO | 43
JONETTE BECK | 64

Tempe, Arizona

SOUTHWEST TRADING COMPANY They didn’t plan to save the world, but now they sell yarn made from sustainable fiber.



Jonelle Raffino, her husband and her parents all used to work as telecommunication contractors, acquiring sites for cell phone towers and building the infrastructure. “Then, after 9/11, there was no money to fund our projects, and development ground to a stop,” Raffino says. “My husband didn’t work for a year, and my parents, who owned an independent consulting business—their careers just ended.” With a toddler and a newborn at home, Raffino knew she

had to figure out some way to make money. Inspired by generations of knitters in her family, she decided to write a book about the different fibers used in spinning, a process in which animal fleece is twisted, à la *Rumpelstiltskin*, into yarn on a wheel.

While she was researching the book, Raffino came across a fiber made from soybeans. She was instantly taken with the material, which was silky soft and warm. Up until that point, the yarns most widely available were either wool, or acrylic made from petrochemicals. “I realized that there was a whole class of sustainable materials evolving,” she says, “and I knew women would embrace them.” Her family agreed to commit to a new venture, which they named Southwest Trading Company (soysilk.com).

In the early days, Raffino and her mother, Jonette Beck, who co-owns the business, hand-dyed the fibers in Jonette’s backyard. “We spent Mother’s Day of 2002 baking in the Arizona sun,” Beck says. “We were doing back-breaking work in 110-degree heat, dipping 100 pounds of fiber in the dyes and then hanging them over the fence to dry.” They called the material Soy-Silk and sold it on eBay, packing orders in Raffino’s garage. After eight months, the women outgrew the garage and moved their stock into a warehouse.

Entering an established industry was tough. They found a market niche with their soy fibers, which they imported from China (most wool and acrylic yarns sold in the U.S. come from Europe). The process is still improving, but the women ensure quality by employing several people in China and communicating with a factory agent there almost daily. Raffino and Beck also navigate the dangers of doing business with family 24/7: “We don’t communicate as well with one another as we do with complete strangers in a corporation,” Raffino says. “But it’s been amazing to blossom together as a company, to learn to stand back-to-back and use our individual skills.”

Since starting out with soy fiber, Raffino and Beck have explored other renewable resources, including corn, milk, chitin (a fiber made from shrimp

and crab shells), jadeite (a mineral) and bamboo, which has become increasingly popular. The knitting community has responded to the alternative fabrics in a big way: SWTC has made about \$20 million in sales since 2002.

And while the mother-daughter duo has only recently put saving the environment on their to do list, they’ve embraced the eco-movement wholeheartedly. “It really does change your life,” Raffino says. “Jonette just got a blue recycle bin to keep under her sink, and I sold my SUV and bought a Prius. Every small adjustment is a step in the right direction.”

VALERIE REED | 42

San Marcos, California

VALANA MINERALS
An allergic reaction gave her the idea to start an all-natural, vegan cosmetics line for women of color.



Sociology professor Valerie Reed was in her early thirties when she came down with a mysterious illness—horrible joint pain, night sweats, a lingering rash and hair loss. Doctors thought it might be leukemia, kidney disease, HIV—but every test came back negative. Unable to continue working, Reed lost her apartment, moved in with her parents and turned to alternative medicine to ease the pain. When her acupuncturist, and eventually her doctor, diagnosed her with selenium toxicity, Reed was shocked. “Selenium is a mineral that your body needs to make antioxidants,” she says. “I was getting it in my food and from multivitamins, but I didn’t know it was also in some of my toiletries.” Certain shampoos contain selenium, which can be toxic in high doses (sensitivity varies from person to person). Each time Reed lathered up, the selenium in her shampoo seeped into her skin and from there into her bloodstream.

While she detoxed—Reed was out of work for three months—she researched the science of skin care. Alarmed by what she read, Reed tossed out her old products, stopped wearing

most makeup and started using olive and jojoba oils to moisturize her skin and hair. A rash from her illness had discolored her skin, however, and Reed needed to use cover-up. But even expensive department store foundations gave her breakouts—and they never matched her complexion.

Reed decided to experiment with natural cosmetics. She spent close to \$1,000 on foundation samples, but the shade she was after proved elusive. That’s when she hunkered down in her kitchen, grabbed a mixing bowl and began making her own cosmetics. She whipped up lotions, scrubs and moisturizers with ingredients such as paraffin wax, vitamin E and aloe, which she found at the grocery store. She studied formulation guides online and began blending her own colors with iron oxides, mica, zinc and titanium dioxide. “People at work would say, ‘Your skin looks so nice. Are you in love? Are you dating someone special?’” she says. “And I would say, ‘No, it’s my makeup. Do you want a card?’” With so much positive feedback, Reed realized she could turn her homemade cosmetics into a business. She refined her products and designed labels on weekends and after work. With \$15,000 from refinancing her condo, she launched an all-natural, vegan cosmetics line with foundation colors formulated for women of color.

Her Web site, valanaminerals.com, went up in 2007. Before the site was officially open for business, her Web manager took it live to test links. In that 30-minute window, Reed got her first order, a foreshadowing of her future success. Right now the makeup business pays Reed a salary equivalent to her teaching income. She expects to bring in \$1.4 million in sales in the next five years, and so far, her revenue has been increasing by 15 percent each month. “There are toxins in our water, in our soil, in the air,” Reed says. “Those things are nearly impossible to avoid. But we can change the lotion, lipstick and foundation we use. To create a business from scratch, watch it evolve and see how it influences people—that feels great.” »

KATHARINE KENT | 50*Tucson, Arizona*

THE SOLAR STORE
Her products power homes using renewable energy from the sun and wind—and save a bundle on electric bills.



“One thing Arizonans have is sunshine,” Katharine Kent says. In 1998, Kent was working as an engineering consultant when her father, a home builder, insisted that she attend a meeting he’d planned about opening a solar contracting store. She was skeptical about the idea, but when she realized she was the only person in the group who knew how to write a business plan, she agreed to help her father. She spent two weeks researching the market—and came away convinced there was plenty of demand for solar power. Kent met with investors, explained her vision for a contracting company that sold and installed renewable energy components, and became its president.

Kent, her father and another partner each put in \$5,000 to open the Solar Store (solarstore.com) in 1998. At the time, solar technology had grassroots appeal, which wasn’t necessarily a good thing. “The solar companies in town worked out of garages,” Kent says. “People thought they were hippies. They weren’t very professional.”

Kent managed the office, taking inventory, cleaning the bathrooms and creating the accounting system. She had the foresight to stock the store with every conceivable type of renewable energy product, including solar plumbing and pool heaters, wind turbines and tankless water heaters. With her father’s connection to the building community and her partner’s experience as a solar salesman, the store began installing systems within two weeks of opening. Kent worked alongside the contractors she hired, shimmying up roofs to put in solar panels or climbing hills to put up 35-foot-high wind turbines.

Kent is now the sole owner of the company; she bought out her partner in 2000 and her father in 2004.

“People are still so surprised to see a woman as a contractor and engineer, it floors me,” Kent says. “Although in the past five years, perhaps because I have gray in my hair, things have gotten better.” In 2008, Kent brought in \$3.8 million in sales, up 41 percent from the year before. And while the struggling real estate market has hurt many home builders, Kent reports that southern Arizona, which attracts retirees, is doing fine. “I love to help people save money, save energy and understand the simple things they can do to help the environment,” she says. And yes, she practices what she preaches: The energy bill for her store is never more than \$9 a month.

VIRGINIA YOUNG | 44
JANIE LOWE | 45*Portland, Oregon*

YOLO COLORHOUSE
Standard paint gave them headaches, so they developed a nontoxic alternative in 92 colors.



Life partners—and self-proclaimed color nerds—Virginia Young and Janie Lowe moved to Portland from New York in 1993 to live in a greener city. Two years later, they opened their own custom painting company. They were happily immersed in their art, working on specialty finishes, murals and furniture, but at the five-year mark, both women were feeling sick. Intuition and a little research confirmed that paint fumes were the culprit. “We had headaches and respiratory problems, and we were nauseous and irritable,” Lowe says. “So we started looking for healthier paint options.”

In the late 1990s, there were almost no paints made without volatile organic compounds (VOCs) and other toxins like ammonia, formaldehyde or crystalline silica. So Young and Lowe set about making their own. They learned to formulate natural clay and milk paints at a workshop in Arizona. Then they canvassed Oregon’s Painted Hills, scooping earth in shades of ocher and terra-cotta into buckets. “We’d take the rough cuts of clay and

then cook them with water and rice paste, which acts as the binder that lets the paint stick to the wall,” Young says. After five years of making their own paint for their artistic commissions, it became clear they couldn’t continue to do both. So Young and Lowe decided to put most of their energy into the earth-friendly paints.

They got a Small Business Association loan of \$85,000, and friends and family contributed seed money to help them transition to their new company, YOLO Colorhouse (yolocolorhouse.com), in 2005. They created a limited color palette, offering 92 colors (as opposed to the 2,000 color selection typical of major wholesalers), and pitched it to a manufacturer who signed on to help develop the product. Over six months, they worked with environmental scientists and chemists to create a line of zero-VOC paints, which they now sell to Kelly-Moore Paints, eco-specialty stores and select Home Depot stores.

“From the start, we tried to look at everything through a green lens,” Lowe says. The company’s paint cans are 100 percent recycled; their in-store displays are made from sustainable materials; marketing materials are printed on recycled paper with soy-based inks; bike racks line the walls of their office to encourage their nine employees to ride to work; and YOLO products are shipped around the country on railroads or trucks fueled with biodiesel. “One of our biggest problems is shipping,” Young says. “Paint is mostly water, and it’s heavy. That cost alone is a problem. And in the winter it’s difficult to ship paint that has no antifreeze.”

The business has been a hit with consumers: YOLO Colorhouse netted just under \$1 million in sales its first year in business. And the company’s sales increased 69 percent from 2007 to 2008, despite the declining housing market. “We were in the right place at the right time,” Lowe says. “We wanted to make beautiful products without compromising how they were made. It’s exciting to be in a place where you can make change.” 🍃