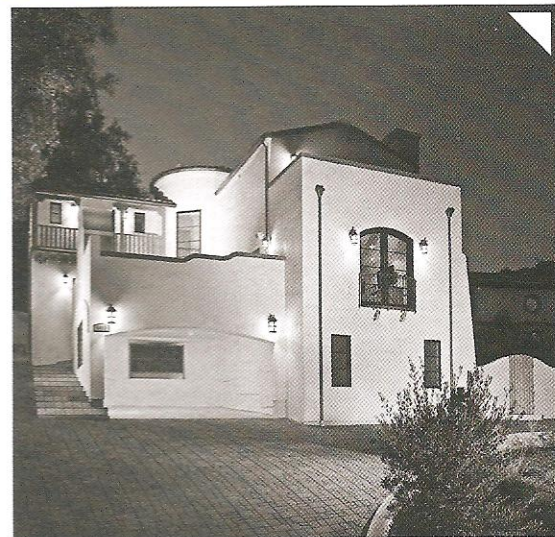


TAKING THE LEED!
Eco-conscious star Adrian Grenier wanted his *Alter Eco* show's home base to be as luxurious as it is green, with a modern and energy-efficient kitchen, recycled tiles in the master bath and exterior Eco Stucco made from natural lime plaster.



The High Roller

When *Entourage* star Adrian Grenier was tapped to host *Alter Eco*, a green-home makeover show on Discovery's Planet Green TV network, the actor put his friend and luxury-home developer Richard Byrd to the test. Byrd's challenge: Turn a decrepit Los Feliz home into a super-green version of a 1920s Spanish mansion—all in 14 weeks. "He asked me to build his dream home/*Alter Eco* headquarters, which was the home base for every episode. And what started as a friendly challenge between him and me culminated with the completion of a one-of-a-kind LEED Platinum house," Byrd says of the 3,900-sq.-ft., five-bedroom home's certification, the highest possible from the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) rating system.

The *Alter Eco* residence appears to have all the typical indicators of excess and waste—the splashy master bath, spacious kitchen, smart-home technology, wrought-iron staircase and fireplaces—and yet it's been built sustainably and in a way that takes absolutely nothing from the overall luxe effect. In the kitchen, sleek appliances from Fagor, Lennox and Liebherr provide 90 percent more energy efficiency than

CONTINUED...

The Bottom Line

Average power bill: **\$126**

Comparable bill for a home this size in this area: **\$290**

Total renovation cost: **\$1 million**

The Green House Effect

A trio of diverse redos pack an eco-ingenious punch! | By Amy Westervelt

You don't have to paint yourself into a prefab, bamboo-floored corner to give your home a green makeover. Consider these two case studies on green do-overs—from a luxurious Spanish mansion that proves that a low-carbon footprint can also come in super-size proportions to an environmentally friendly rebuild that boasts all-natural materials in a sleek, modern design. Or go über-techie like documentary filmmaker Chris Paine whose solar-energy-monitoring system tells him exactly how much power his house is using *and* putting back into the grid. The verdict? There's more than one way to re-green L.A.

...CONTINUED conventional ones. The showpiece oval tub in the master bath? Hand-carved from discarded terra-cotta. Even the home theater's Mohawk carpeting is made of post-consumer plastic water bottles and the tiles in the bathrooms and pool are from 87 percent recycled content (including beer bottles). Although the interior walls resemble Old World plaster, they're actually covered with natural clay and then mixed with pigment, eliminating the need for paint while providing a mold- and fade-resistant surface.

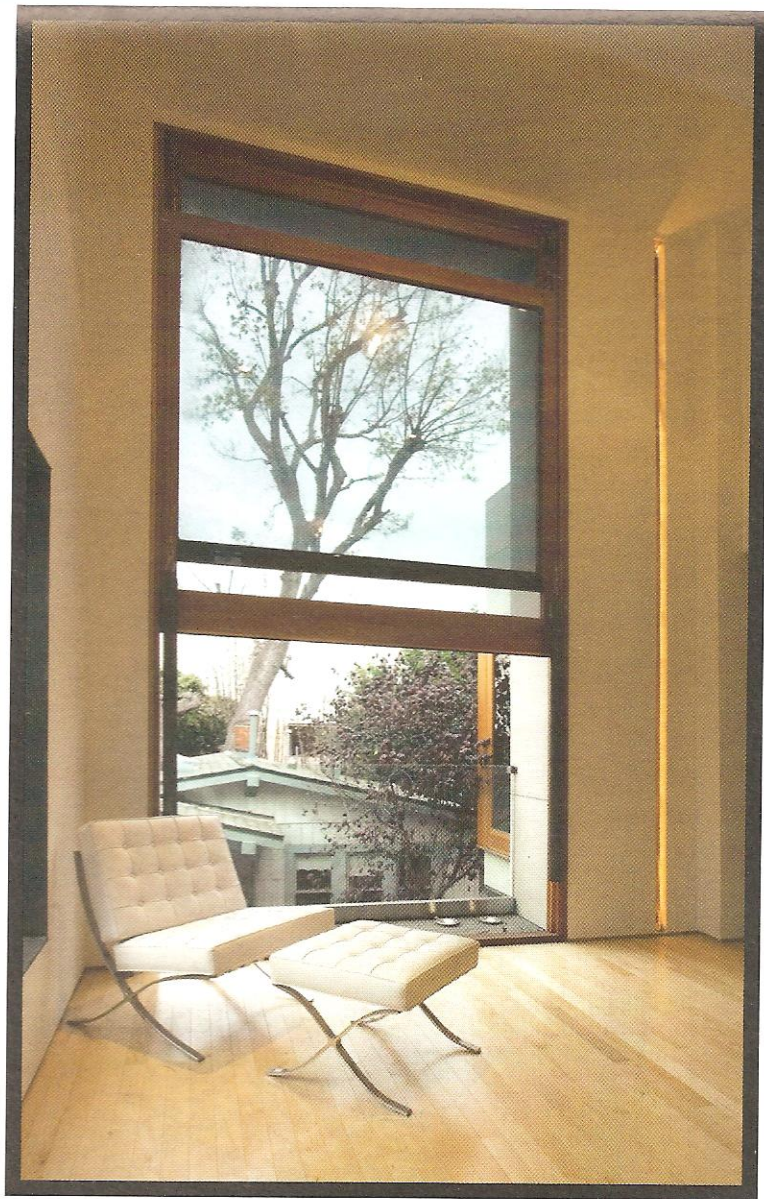
Outside, solar panels provide 7.5 kilowatt-hours of the home's energy needs and rainwater is recycled for irrigation. Even the deconstruction waste was reused either in the new home or in Byrd's other projects, leaving just 4 percent sent to the landfill—a record for a house of this size, according to Waste Management, Inc.

Byrd's currently working on a Cape Cod-style LEED home in San Diego and a property in the Hollywood Hills that's going for LEED Platinum. Now, when he meets with clients, the *Alter Eco* home helps Byrd demonstrate that eco-luxury is not an oxymoron. "That's one of the biggest misconceptions that we face," he says. "But it's really all about designing and building smarter homes no matter what size."

Ultimate Tech Toys

When documentarian Chris Paine (*Who Killed the Electric Car?*) teamed with project manager Shellie Collier to turn his 4,300-sq.-ft. Marrakesh House in Culver City into a veritable powerhouse, the \$1 million renovation plan (completed last year) included adding 36 rooftop solar panels that produce 6,000 kilowatt-hours of clean electricity—about 70 percent of the home's annual power needs. Inside the house, a Fatspanel educational kiosk, set up by Mitsubishi Electric and REC Solar, provides real-time data on exactly how much energy Marrakesh House uses and puts back into the grid. Sensors attached to every power-hungry source—from lights and appliances to car chargers—wirelessly transmit data to a software program that analyzes usage patterns. And when Paine plugs in his sporty Tesla Roadster, his house delivers on the true promise of electric cars. His ride runs solely off the rays of the sun.

WITH THE SUN
A computer keeps tabs
on Marrakesh House's
power give and take.



The Natural

If the *Alter Eco* home blends luxury with gadget-happy eco-features, this loftlike minimalist goes green with a low-tech makeover that celebrates nature. Family law attorney Lawrence Leone had gotten a dozen quotes for tearing down the earthquake-damaged Craftsman bungalows on his Santa Monica lot before he found Erla Dögg Ingjaldsdóttir and Tryggvi Thorsteinsson, the Icelandic co-founders of Minarc. They had a different plan: Preserve and strengthen the frames and foundations of the original historic structures and use as many recycled and natural materials as possible in the redesign.

Leone's newly modernized 1,800-sq.-ft. three-bedroom home is Zen at its greenest. For instance, the home's windows and doors were reoriented to take advantage of shade, natural sunlight and wind streams that help cut energy costs. Added skylights invite sunny days and moonlit nights. A 16-foot picture window on the second floor opens (with one finger) via a simple weight-and-pulley system, allowing ocean breezes to cool the home—no air conditioning needed.

Hewing to its all-natural pledge, Minarc used no chemicals, carpets, tiles or paint in the new space. Even the kitchen cabinets and stairs are covered in "elephant bark" (rubber from recycled tires). And picture windows now face a small courtyard where Leone's beloved cottonwood tree reminds him of Santa Monica's past, when nearby Ocean Park Boulevard was a creek lined with cottonwoods. "I'm in this very urban setting and yet I feel like I am in the country," he says. "It's wonderful." Up next: remodeling the back structure and installing a rooftop solar system that will take him completely off the grid. "The journey of a thousand miles begins with a step and I feel that we have, collaboratively, gone the extra mile on this project," Leone says. "There is farther to go, but that is another story." **A**



OPEN SEASON Garden-facing windows and earth-friendly materials transform this former Craftsman into a Zen haven.

The Bottom Line

Keeping original structures and footprint of the buildings minimized construction debris by 50 percent

Exterior panels are made with 30 percent recycled materials; driveway and walkways are constructed with on-site schist from Leone's garden

Total renovation cost
\$300,000