Heather Ferrier wanted her first home to be as kind to the environment as it would be to her bottom line. As Jaime Gross found, Heather ended up with that and more—a light-bathed house that has something to teach all of us about clean living.

Designed to be as eco-friendly and affordable as possible, the house embodies a pretty mighty idea: namely, that being environmentally conscious doesn’t require deep pockets. “If I can do it—being single, in my 20s, and without a lot of money,” Heather says, “then anyone can.”

Four years ago, Heather was a recent college graduate working full-time at Ferrier Custom Homes, her father’s company, and daydreaming about buying her own house. Around that time, her father, Don Ferrier, got hooked on the idea of building a home that would have minimal impact on the environment.

INSET, LEFT: Donald Ferrier, Heather’s father and the home’s builder, made the most of the dead space under the staircase when he installed white-ash bookshelves and a closet for storing luggage. The purple vases are from Target.

LEFT: Sculptural glass blocks (see inset, opposite page, and right) allow ample sunlight into Heather Ferrier’s living room, which reduces the need for lamps and fixtures. When she must have artificial light, Heather uses energy-saving compact fluorescent bulbs.

NOT EVERYTHING IS BIGGER IN TEXAS. TAKE, for example, Heather Ferrier’s home near Fort Worth—a compact, 2,028-square-foot house with tiny energy bills and minimal impact on the environment.

Green House
be not only entirely “green” but also affordable for the average American family. And he envisioned the project as an educational tool for people interested in learning more about sustainability and, of course, building a new home. Heather was game to be his guinea pig: As a child, she’d struggled with asthma and allergies and understood how a home could affect one’s well-being; now a vegetarian and a “conscious consumer,” she says she’s always “looking for ways to tread more lightly on the planet.” So the Ferriers hired Dallas-based architect Gary Gene Olp to design a home that would be, according to Olp, “contemporary, easy-to-build, highly energy-efficient, and lovely.” The biggest challenge was to accommodate Heather’s construction budget of $115 per square foot, a pea-size figure compared to other green homes.

Every design decision was made with both budget and earth-friendliness in mind. The floors are bamboo (a rapidly renewable resource, as anyone who’s tried to get rid of the plant in her yard can attest) and...
So how did the Ferriers’ collaboration go? Swimmingly, by every measure. The house came in just under budget and Heather loves the place. It’s won a bevy of honors, including one from the American Lung Association’s Health House program and the platinum LEED certification, the highest rating for building-sustainability. (Heather’s is the first residence in Texas, and the third in the country, to receive the LEED honor.) To support her father’s vision, Heather opens her home frequently for tours, and more than 4,700 people have traipsed through to date. “The first weekend we had the finished house open for tours, a woman marched up to me with a checkbook and said, ‘I want to buy it now,’” Heather says. Wisely, she demurred. Good citizen of the planet and daughter that she is, Heather handed over one of her father’s business cards instead.

LEFT: “The contractor discouraged me from doing so, but I wish I’d used more red tiles,” Heather says of the mosaic of one-inch square tiles in her upstairs bathroom. “The room is feminine but fun, and it’s my absolute favorite part of the house.” She conserves water by using low-flow faucets in the sink and shower.

LEFT: Like many of the home’s appliances, the Hampton Bay ceiling fan (see inset, above) is approved by Energy Star, a government-backed program dedicated to energy conservation. Heather furnished her bedroom with a chair from ikea, a bed from Sears, and a table, lamp, and linens from Target.

polished concrete (an inexpensive material that retains heat during the winter and stays cool in the summer). The kitchen and bathroom cabinets are made of locally harvested white ash. The paint is VOC-free, meaning there were no toxic fumes.

The house was designed around passive solar principles, to take advantage of one of the state’s most abundant resources: sunlight. Solar panels on the roof soak up the sun’s energy to generate hot water, while strategically placed windows and awnings minimize sunlight in the summer and maximize it in the winter, when the sun is lower in the sky. As a result, the entire space is so bright that Heather hardly ever needs to turn on a lamp during the day (in fact, much of the O at Home photo shoot was conducted without supplemental lighting). Outside, a 3,000-gallon tank catches rainwater, which is used to flush the toilets and water the lawn.