



PHOTO ILLUSTRATION BY LAUREN BURKE

The best things in life are **Green**

Earth-friendly options for living well.

HOPE SPRINGS ETERNAL AT SIERRA HQ, even after four years of dealing with George W. Bush's environmental mayhem. When we looked toward 2005, the editors imagined a new start—where instead of playing defense against yet another ill-placed gas-drilling proposal or stealth attack on EPA regulations, we could take a momentary breather, lighten up. We could focus on the personal rather than the political, on breakthroughs rather than breakdowns. Regardless of the outcome of the election, we decided it would be time to accentuate the positive when it comes to how we dwell, dress, even recreate.

If you think that sounds frivolous, consider this: Of the 330,000 tons of insecticide used in the developing world each year, half is applied to cotton. Cotton may be natural and comfy to wear, but it's also one of the world's most polluting products, giving "fashion casualty" a whole new meaning. British designer Katharine Hamnett has decided to stop being part of the poison-for-profit gang and is going organic with her new fall line (see "Profile," page 18). She hopes to revolutionize an industry that cares more about color coordination than environmental effects.

Architect Bill Dunster understands that in many ways climate change begins at home, since nearly half of the energy generated around the world is used to heat, light, and ventilate our buildings. (In the United States alone, power plants are the source of 40 percent of carbon dioxide emissions, a key contributor to the greenhouse effect that traps excess heat in the atmosphere.) Dunster has designed and built a zero-energy housing development in south London that has the capacity to produce more power—clean, of course—than it uses (see "Better Homes

and Garbage," page 28). Architects have accomplished similar feats for office and university buildings and even a commercial bakery ("Green From the Ground Up," page 31).

Across America, big bottoms are the rule (60 percent of us are obese), but people are beginning to make the connection between their health and the environment. They're getting off their duffs and into the outdoors (see "Fat Cities," page 38). The trend promises to slim waistlines, lower blood pressure, and curb trends toward diabetes while also expanding and strengthening our ties to the natural world.

From bicycles to blenders to photovoltaic power stations, inventors are tweaking what we take for granted and giving us delightful, earth-friendlier options ("Green Goods," page 34, and "Transported!," page 42). But in these gluttonous times, sometimes we need to just say no to more stuff. Our attitudinal advice columnist ("Hey Mr. Green," page 35) tells folks where to get off the consumer treadmill, while *ReadyMade* editor Shoshana Berger updates the "reduce, reuse, recycle" mantra for the do-it-yourself set (see "Interview," page 36). For those with a secret affection for "total transformation" in magazines and on TV, we've got an extreme environmental makeover replete with "Dos" and "Don'ts" ("Green Eye for the Conventional Guy," page 44).

We can make better choices about how we live and what kind of world we leave behind. If you want to call it "lifestyle," go ahead. But what we're really celebrating is a style of life that replaces ego with eco, self-indulgent with self-sustaining; a style that blends environment, ethics, and innovation to set a whole new trend.

—*Marilyn Berlin Snell*



Low impact, high style: A one-bedroom BedZED apartment is 603 square feet and costs around \$200,000, a steal in London. Above, rooftop devices heat, cool, and freshen air while plants around them absorb carbon dioxide and insulate.

Better Homes *and Garbage*

In Bill Dunster's London-area housing development, residents tread lightly without even trying.



Architect Bill Dunster

WHEN IT COMES TO DEVOURING OUR NATURAL RESOURCES, the places we live and work are monsters. More than half the materials consumed globally are used in construction, and 45 percent of the world's energy is used to heat, light, and ventilate our buildings. In the United States, three-quarters of all lumber goes toward new houses, remodels, and repairs. With the trend toward supersizing, lumber needs continue to

grow: Our homes were 38 percent bigger in 2002 than in 1975, despite having fewer people per household on average.

We dump millions of tons of "waste wood" from construction and demolition into our landfills each year, and toss 4.4 pounds of garbage per person, per day, on top of it—much of it either recyclable or compostable. And that's not all. Irresponsible housing development, combined with an addiction to the automobile, have led to colossal suburban

by Marilyn Berlin Snell

BELOW LEFT: DEBRA HURFORD BROWN



BedZED's bricks were made locally, reducing transport costs and pollution; its wood exterior is sustainably logged green oak, also from a local source.

sprawl. Each year, sprawl covers an amount of land nearly the size of Yellowstone National Park, while drive times between work and home and for necessities like groceries increasingly eat away at our lives: The average American driver spends the equivalent of 55 eight-hour workdays behind the wheel annually. If the rest of the world's people lived and consumed like that average American, we would need five planets to support them.

Across the Atlantic in the United Kingdom, the situation isn't much better. But there's a bright spot on the map, thanks to a cranky, visionary architect named Bill Dunster. In the suburb of Beddington, a half hour by train from central London, Dunster, 44, has designed and built a "Zero Energy Development" that has earned worldwide attention. Called BedZED by its creator and "the UK's most revolutionary housing" by the Manchester *Guardian*, the 82-unit development is built on the cleaned-up site of an old sewage plant and blends work and living space, rentals and private homes. Using renewable energy, it has the potential to satisfy all its energy needs. There is no net con-

tribution of carbon dioxide, a byproduct of burning fossil fuels and a greenhouse gas linked to climate change. When the fine-tuning of the site's innovative micro power plant is completed this year, there may even be a small net export of green electricity to the national power grid.

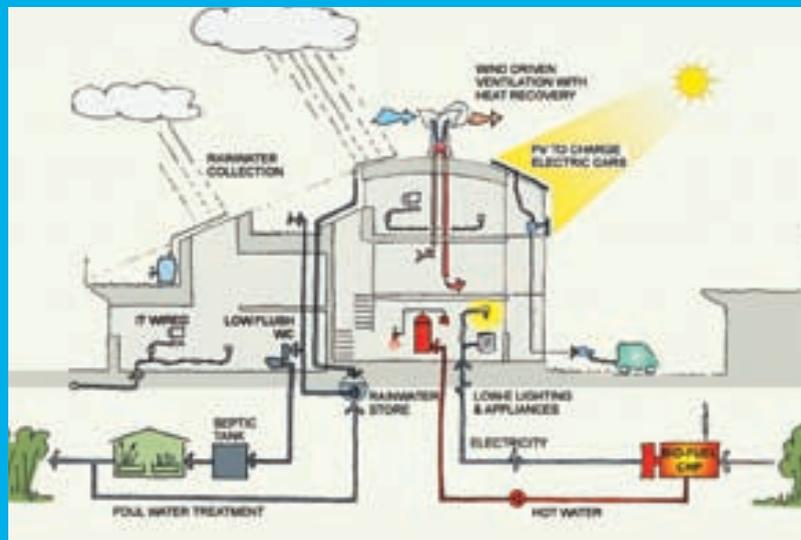
From the train, a visitor can easily spot Dunster's development. Its multicolored rooftop ventilation systems look more like rooster heads than wind cowls. In fits of whimsy and utility, the two-way cowls spin in the breeze to deliver fresh air. Outgoing stale air heats incoming air, ensuring comfortable temperatures in

each room of the superinsulated homes. No energy-guzzling heating systems or circulation fans are required. High-tech tricks like this, along with solar panels, double- and triple-glazed windows, energy-efficient lights and appliances, and the power plant, which burns urban tree waste, help residents enjoy a hypergreen lifestyle. (Since the power plant burns trimmings from trees, which absorb atmospheric carbon dioxide as they grow, the process is considered “carbon neutral”; additionally, the plant is nearly twice as efficient as conventional off-site facilities that burn fossil fuels, and so clean-burning that its particulate levels are negligible.)

But it’s not just the environment that benefits. Quality of life has been considered as well. Homes are terraced so that almost everyone can have a private garden without decreasing the development’s density. In fact, according to Dunster, if BedZED’s density were replicated, the UK could restore and reuse the nation’s brownfields, or contaminated properties, and build the 3 million homes the government says are needed by 2016 with no loss of open space. The development has a childcare center and is a five-minute walk to the train station, and for those who drive an electric car—Dunster does—the building’s solar panels provide free power. On-site businesses include engineers, psychotherapists, environmental groups, property developers, and recycling companies. Insulated lockboxes outside residents’ front doors provide temporary storage for groceries, delivered en masse by store vans, saving individual car trips. Built-in bins in the kitchen simplify the recycling process, and large windows and a conservatory, or sunroom, let the light stream in. Recycled timber adds aesthetic warmth to rooms, while sedums planted on the buildings’ roofs attract birds and butterflies.

Though there’s nothing quite like it in the United States, ironically Bed-

“What we are trying to prove is that you can use less of everything and improve the quality of your life.”



From collecting rainwater to providing power by burning tree trimmings, Dunster’s designs mean eco-savings. Even the toilets are interesting. The on-site water-treatment facility recycles 100 percent of BedZED’s wastewater, which is then fed back into the system as “green water” for use in toilets and gardens. The low-flush loos use either green or rainwater—collected on the roof and stored underground—and save about 2,500 gallons per person each year.

ZED was made possible by an American. In 1862, banker and pioneering philanthropist George Peabody gave the city of London \$2.5 million to build affordable, clean, comfortable housing for workers. The Peabody Trust now owns or manages over 19,000 mixed-income properties across greater London; BedZED is its most innovative investment to date.

When the units became available in 2001, they were either rented or sold within a matter of months. On Dunster’s Web site, www.zedfactory.com/home.html, he invites those interested in buying future ZED homes to sign up. So far, more than a thousand have. Yet “Britain’s greenest architect,” as *Building* magazine called him in 2003, has hit a wall finding funding for those projects—even with a stellar track record and obvious demand. Part of the blockage is due to conventional builders who don’t like change, and who worry that innovation will cut into their profit margin. Dunster says problems also arise from environmentalists. A 15-story condominium development proposal for the London borough of Harrow, for instance, was opposed by some members of the local chapter of Friends of the Earth. “I had concerns about the high-rise nature [of the project],” says Bernard Burns, coordinator for the chapter. “I felt it was overdevelopment.”

Last summer, Dunster drove his electric car the half hour from his ZED-style home to meet with Sierra at his BedZED offices.

Sierra: Why did the Harrow Friends of the Earth oppose your green design?

Dunster: Because [they] are emotive and they’re not actually looking at environmental and policy problems from a dispassionate point of view.

Sierra: If they were dispassionate, what would they see?

Dunster: The project we called HarrowZED was going to be built on a brownfield site, in a suburban area next to a [subway] station. We live on a very crowded little island, and there is a massive shortage of land. Government, volume house-builders, all the big construction compa-

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