



*Inside the 2,000 Watt Society, February 2009*

Just outside the center of Basel, Switzerland, in the suburb of Gundeldinger, Matthias Scheurer is explaining to me what it's like to eat in the dark. "You should never try to pour your own wine, but the restaurant will pay for your dry cleaning when you spill," he says, grabbing my hand and leading me through a series of heavy drapes to the dining room. It's pitch black, but I'm told I'm in the middle of Blindekuh Restaurant, a seasonal cafe operated by 30 blind waiters designed to show its patrons what it's like to lose your sense of sight. That is one point of all this blackness. The other is to save energy.

Blindekuh Restaurant—which translates as "Blind Cow," the German equivalent of "blind man's bluff"—sits inside Gundeldinger Feld, a 100-year-old factory that has been converted into a cultural gathering place with one very specific mission: show the neighborhood (and by extension the world) that you don't need a lot of fossil fuels for a library, law offices, a youth hostel, playrooms, a kindergarten, welder's shops, a community center—or, for that matter, a community—to run perfectly well.

"We have sixty-five tenants, all focused on going green," says Scheurer, one of the founders of Gundeldinger Feld. To retrofit the factory, though, and to turn it into an environmentally friendly community space, the five scientists had their work cut out for them. They would have to insulate everything, install double glass panes, forgo heating wherever possible (like at the rock climbing wall and the disco, where people's bodies are enough to warm the room comfortably), not to mention figure out a way to run a restaurant with no lights. "When we designed this place, our philosophy was leave as much of the original factory, which was beautiful, to not destroy anything, and insulate,"

explains Scheurer. “We put an ad in the newspaper asking people to donate plants and we got a lot—even that birch tree.”

“Climate change is only hurting the people who did not contribute to the problem—the floods, rising sea levels, droughts.” —Roland Stultz

While Gundeldinger may be peculiar, it’s not entirely unique. It’s part of the 2,000 Watt Society, a growing movement of scientists and entrepreneurs who are trying to live comfortable, urban lives using as little energy as possible. Their experiment started in the late 1990s when five Swiss science professors were taking a train from Lausanne to Zurich. They started talking, as scientists are apt to do, about a research project. It was an undertaking that analyzed energy consumption worldwide and concluded the worldwide average to be 2,000 watts per person. Put another way, at any given moment, the world is producing 2,000 watts for every living man, woman, and child. The professors sought to cap the amount of electricity being generated at exactly that level, to halt the growth of the use of energy even as the population continued to boom. This, they reasoned, might actually save the planet. As they saw it, alternative energy isn’t the solution because we already have all the technology we need. Now we to learn how to conserve and reduce, which, they tell us, can be done. They’re already doing it, after all.

It’s not a coincidence that Switzerland is the breeding ground for this kind of thinking. According to a study published in 2008 by the Yale Center for Environmental Law and Policy and Columbia University’s Center for International Earth Science Information Network, Switzerland comes in first on the list of the most environmentally conscious nations, followed by Sweden, Norway, and Finland. The United States ranks 39th.

A particularly distressing factor in the ranking is the data about energy use by country. Bangladeshis, for example, use about about 380 watts per person; Africans are a blip above that; the Chinese: 1,500; Western Europeans: 6,000. Americans, meanwhile, use more than twice what even Europeans use: 12,000

watts per person. The biggest obstacle in curbing energy use, says Roland Stultz, the director of the 2,000 Watt Society since 2001, is human behavior. “It’s what we call *trägheit*—being stuck in the old way of thinking. The majority of people don’t want to change their way of life, even if the new way is no less comfortable. Until it starts hurting, like gasoline getting expensive, people don’t like change.”

“These are ethical questions: How much is one human being allowed to use? How do we distribute the benefits and the risks? How do we deal with nature?” —Hans Ruh

**A word about the comfort thing:** According to the numbers, the people of Basel use less than half the amount of energy I—and other over-air-conditioned Americans—do. So it follows that they should be about half as comfortable. But walking around Basel, riding their trams, visiting their warm homes, drinking mocha lattes in their cafes, it was hard to imagine these people were suffering. For Stultz, this is the point: “No one is suggesting we go back to the Stone Age,” he says. “It’s about responsibility and fairness.” Stultz, who was trained as an architect, has spent most of career tracking sustainability in developing countries. “Climate change is only hurting the people who did not contribute to the problem—the floods, rising sea levels, droughts,” he says.

Stultz’s job, then, has been to create practical applications for the philosophies of the Society. “For instance, putting shutters on your windows can prevent 50 percent of the energy from leaking out,” he says. “I had a friend who opened a shutter company in America but no one would buy them because Americans like blinds and curtains.” The differences between Americans and Europeans don’t stop there. As Stultz sees it, Europeans prefer natural light and fresh air; Americans favor artificial light and air conditioning. Europeans like their trains, trams, and buses; Americans want their cars. “Europe is closer,” he says, “but it is not the model yet.”

“We’ve become megalomaniacs,” says Hans Ruh, an environmental ethicist

who works with the Society. “We’ve overstepped our borders, produced a disaster, and refuse to face the music. These are ethical questions: How much is one human being allowed to use? How do we distribute the benefits and the risks? How do we deal with nature?” Humans are the only species to ever produce garbage, and, says Ruh, it is our moral duty to work with the natural world. “We invested so much money in the sixties in nuclear power— unfortunately, I hasten to add. Imagine if we’d used that money for renewable energy.”

In the coming decades, when developing nations want in on all those Hummers, private jets, and air-conditioned shopping malls, worldwide energy consumption will explode. That’s where the Society comes in. Right now, they’re working to rein in the developed world. (For starters, they want to see American consumption reduced by 80 percent.) Next, the Society intends to help developing nations boost their economies and their standard of living by ushering in renewable energy technology. Because, of the 2,000 watts the Society says we’re all entitled to, only 500 can come from fossil fuels. The other 1,500 has to be from clean sources, like wind, solar, and geothermal. In other words, take one flight to Europe, and you’re done for the year.

If all goes according to the Society’s plan, Basel is the future. It’s already a model: The city has passed ordinances banning outdoor heaters; less than half its population owns a car; and one third of all houses employ sustainable energy. Basel has also invested about \$5 million in the energy sector. One recent project gives its citizens access to a personal “energy coach” who will check your lamps, insulation, windows, and takes a thermostatic picture so you can see where you’re leaking heat. If you take your coach’s suggestions, the city will pay for most of the work.

Still, the scientists and architects with whom I met stressed that this is a drop in the global-warming bucket. How do can they get the rest of the world on the 2,000-watt plan? “Start from the top down,” says Keller. “In Basel, the programs started and eventually the laws followed. But in Zurich, they watched what we were doing and did it in reverse: It started with the

**government and change happened much faster.”**

**Switzerland may be the most environmentally conscious nation in the world, but it’s hardly the most influential. Once back in New York, after two transatlantic flights that ate up my share of energy for a few lifetimes, I spoke to Roland Stultz by phone. I asked him what happens next. “I am an optimist,” he said. “I believe people do the right thing. In Switzerland we are watchmakers. We are good with the details, but we don’t think big. We need big thinkers. This movement needs to be led by North America.”**

***To check how many watts you’re lugging around, go to the 2,000 Watt Calculator:***

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