

Don't Let the Green Grass Fool You



Lou Beach




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AS a suburban environmentalist, Mike Tidwell, 45, of Takoma Park, Md., always felt like a walking contradiction.

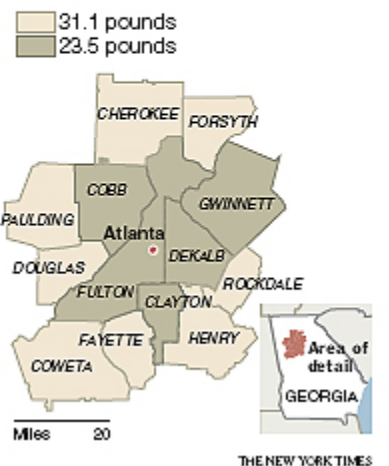
Greener Pastures? Studies have shown that suburbanites use more energy and produce more carbon dioxide than city-dwellers.

Energy use of the average household — based on family size, income and other factors — in three types of housing in the Atlanta metropolitan area.

	AVERAGE AREA (SQ. FT.)	ESTIMATED RESIDENTIAL ENERGY USE PER YEAR, IN MILLIONS OF B.T.U.'s			TOTAL
		HEATING	COOLING	OTHER	
 Single-family detached	2,368	45.7	8.0	44.0	97.7
 Single-family attached	1,121	36.6	6.1	36.7	79.4
 Multifamily	1,087	24.5	5.4	28.3	58.2

Sources: Prof. Reid Ewing, National Center for Smart Growth Research & Education, University of Maryland; Dr. Lawrence Frank and James Chapman, The Atlanta SMARTRAQ Study: Final Report, 2004.

Average weekday carbon dioxide emissions per person in the 13-county Atlanta metropolitan area.



Graphic



Darren Higgins for The New York Times

HOT KERNELS Mike Tidwell's silo holds 22 tons of organically fertilized corn used for heat.

Though he had quit his job as a journalist to work for environmental nonprofit organizations, Mr. Tidwell viewed suburbs (his own hometown is just outside of Washington) as places built "to defy nature," he said, giving everyone "their own little kingdom of grass and space" — not to mention 3,000-square-foot houses, heated swimming pools and hulking S.U.V.'s.

For years, Mr. Tidwell led an environmental campaign, one with few followers. In 2002, he started a neighborhood cooperative to buy and distribute organically fertilized corn kernels to burn in pellet stoves (a lower-emissions alternative to traditional fuel-oil boilers). At first, the cooperative consisted of just him and three other residents.

But lately, after the release of [Al Gore's](#) "Inconvenient Truth" and last summer's Live Earth concerts, his corn collective has ballooned to more than 70 members, some coming from more distant Maryland suburbs like Bethesda and Silver Spring. The group even built a 25-foot-tall cylindrical granary, holding 22 tons of corn, in a small lot belonging to Takoma Park.

Attitudes, Mr. Tidwell said, changed, too.

"In the American suburbs, people are suddenly literate in the language of carbon emissions and carbon footprints," he said. "I'm hearing it in most mainstream places."

Last summer, Mr. Tidwell attended a picnic where, he said, a guest had brought a plate of kiwi fruit imported from New Zealand. "This very nonhippie, not-environmental-cliché-type woman I heard asking another person, 'I wonder what the carbon budget of these kiwis are?'" he said. "I was just astonished."

If the United States is ever to reduce its carbon emissions, suburbanites — that is, roughly half of all Americans, said William H. Frey, a demographer at the [Brookings Institution](#) — are going to have to play a big role. And lately, they are trying.

Since 2005, the mayors of hundreds of suburban communities across America have pledged to meet or even beat the emissions goals set by the Kyoto Protocol, a treaty to reduce greenhouse emissions.

In November, Levittown, N.Y., the model postwar suburb, declared its intentions to cut carbon emissions by 10 percent this year. And a few suburban pioneers are choosing solar heating for their pools, clotheslines for their backyard, or hybrid cars for their commute.

But the problem with suburbs, many environmentalists say, is not an issue of light bulbs. In the end, the very things that make suburban life attractive — the lush lawns, spacious houses and three-car garages — also disproportionately contribute to [global warming](#). Suburban life, these environmentalists argue, is simply not sustainable.

“The very essence of the post-Second World War America suburb militates against ‘greening,’ ” said Thomas J. Sugrue, a professor of history and sociology at the [University of Pennsylvania](#). “Given the almost complete dependency of suburbanites on the car, it’s an uphill battle.”

Cities, for their part, have been trumpeting their green credentials. Mayor [Michael R. Bloomberg](#) of New York has made much of his plan to reduce carbon emissions 30 percent by 2030. (Already, the average denizen of New York City produces 7.1 metric tons of greenhouse gases each year, according to statistics compiled for the city government, compared with 24.5 metric tons for the average American.)

Longtime suburban residents might wonder how they suddenly became environmentally incorrect. People who moved to the suburbs in the ’50’s and ’60’s thought they were being green just by doing so, said Robert Beauregard, a professor of urban planning at [Columbia University](#).

Then, green “just meant open space and privacy,” Professor Beauregard said. “Those Levittowns were ‘green’ because they had lawns.”

The bar is considerably higher now.

Aileen Eilert, an accountant who lives in Lisle, Ill., about 30 miles west of Chicago, recently bought a 70-foot wind turbine to install in her family’s backyard. The turbine, which cost \$12,000, will generate all the household power and more; the family will trade the excess back to the local power company for credits. It should pay for itself in about 10 years, she said.

Yes, the neighbors may talk. One neighbor, she said, was skeptical, asking, “So what is this going to look like?” But most, added Ms. Eilert, 47, simply said, “If it doesn’t bother me and make noise, I don’t care.” (They may not be so easily mollified by her next campaign, to persuade neighbors to replace their lawns with vegetable and fruit gardens, in an effort to reduce the emissions involved in buying, say, strawberries from Chile.)

Alexander Lee, the 33-year-old founder of Project Laundry List, which tries to revive the use of clotheslines to save energy, has run into plenty of resistance from suburban community associations, many of which have regulations restricting them, he said.

“There are three complaints,” Mr. Lee said. “It will lower my property values. That’s what poor people do. Also, I don’t want anyone to see my underwear — what I call the ‘prudery’ objection.”

After national newspapers reported his program last spring, the number of participants jumped from 400 nationally to more than 2,000. But, Mr. Lee said, “we’re still looking at 300,000 mini-battles to change way we do things.”

Some local suburban governments are trying to make their towns greener. Many mayors from the 780 towns that have signed the United States Conference of Mayors Climate Protection Agreement — pledging to meet the Kyoto standards for carbon emissions by 2012 — hail from suburbs like Aliso Viejo, Calif., and Fair Lawn, N.J., said Glen Brand, the national director of the [Sierra Club](#) Cool Cities program.

Some participating suburbs were already pursuing aggressive emissions-control measures, even before signing the agreement. Northbrook, Ill., near Chicago, now buys credits for 4,500 megawatts of electricity from wind farms, enough to offset all the power consumed by its water utility, saving an estimated 4.9 million pounds of carbon dioxide emissions a year, said John Novinson, the Northbrook village manager. Like many other suburbs, it has also changed its traffic signals to energy-efficient L.E.D. models, and has enforced no-idling rules for motorists — including police officers.

SO far, Mr. Novinson said, residents have found the efforts to be relatively painless.

“The wind energy is costing people five cents per thousand gallons of water,” Mr. Novinson said. “It’s a nominal increase in water bills, for which we received nothing but positive comments.”

More symbolically, Nassau County officials started the Green Levittown program in the landmark suburb that was carved out of a potato field on Long Island in 1947. The initiatives are intended to persuade residents to conduct a home energy audit (at a cost of \$150). The county then offers discounts rebates, and low-interest loans to anyone who switches to energy-efficient light bulbs, [solar power](#), bio-fuels and upgraded home insulation.

Children in many schools are also being encouraged to walk or bike to school through the federal program Safe Routes to School, which has helped build bike paths, train crossing guards, and improve roadway safety in towns and suburbs around the country. (The percentage of children who walk or ride bikes has plummeted from 50 percent in 1969 to 15 percent in 2001, according to federal studies.)

A pilot program started in Marin County, north of San Francisco, in 2000, where at the time, surveys showed that 21 percent of children at nine schools surveyed either walked or rode their bikes to school. Two years later, that number was 38 percent, said Deb Hubsmit, the national director of the program.

Despite the efforts of individuals and whole communities to reduce the carbon cost of suburban life, the broad trends in American life have been moving in the opposite direction for decades. The average single-family home nearly doubled in size from 1970 to 2005, to 2,434 square feet. Americans commuting to work by car travel farther as suburbs sprawl (an average 12.1 miles in 2001, up from 8.9 miles in 1983), in vehicles whose average fuel efficiency has improved little.

It is not clear, though, that suburbs need to ratchet back to 1970. Even moderate increases in density can help significantly in curbing carbon emissions, said Lawrence D. Frank, a professor of sustainable transportation at the University of British Columbia.

In a 2004 study of the environmental impact on transportation in the Atlanta metropolitan region, Mr. Frank found that the average carbon emissions per person per workday were about 10 percent lower in neighborhoods with six to eight dwellings per acre — a typical suburban layout — than in a more spacious one with only two to four dwellings per acre, simply because people drive shorter distances in denser suburbs.

“You don’t have to live in a skyscraper,” Dr. Frank said. “You can have relatively low density and still maintain a more environmentally responsible lifestyle. You just can’t have your own Ponderosa.”

Gladwyn D’Souza, 53, a former electrical engineer who lives in suburban Belmont, Calif., moved out of a two-story 2,300-square-foot house to build a more environmentally friendly model in the same town. He relied on sustainable materials for construction: recycled concrete and glass for the kitchen countertops, doors scavenged from old houses, reclaimed timber for beams.

Because he insisted on living close to the local mass transit hub, he could find only a tiny lot, about one-tenth of an acre, within his price range. Without the ability to build out, he built up. His house is five narrow stories, and he rarely needs his car (a Prius, naturally).

“It’s about two blocks from everything — pizza, Safeway, the greenmarket,” Mr. D’Souza said.

By one view, Mr. D’Souza is a pioneer — inhabiting a microscale model of the eco-friendly, futuristic, post-automobile suburb.

By another, his home turf seems more familiar.

It’s called a city.