Many times have I found myself watching the hyperactive chaos of schoolyards during recess and thought, *If we could harness that energy, we wouldn't need fossil fuels.* I recently learned that this very idea is being tested—appropriately, if hard to believe, by second-graders. They attend the Academy for Global Citizenship (AGC), a public charter school in Chicago. After a recent unit on renewable energy, the class came up with the idea of an energy-generating playground, with swings and see-saws converted into generators.

The energy-generating playground will be built on the school's large parking lot, and projects like it are why the Academy is running out of parking spaces. The lot is being converted, project by project, into a classroom-sized greenhouse, a green-roofed chicken coop, a wind turbine demonstration project, and a garden, the produce from which is used in the three organic meals cooked each day from scratch in the school's kitchen. "We keep eliminating parking spaces to the point where people are going to have to carpool, or ride bikes," says Sarah Elizabeth Ippel, the school's 29-year-old founder and executive director. Already, her students are bugging their parents to arrange more efficient means of transport to school, thanks to an ongoing classroom focus on energy and the environment. Many AGC students are making their parents save compostable kitchen waste, too, so they can bring it to school to make more dirt.

I met Ippel last month at Terra Madre, an international gathering of food activists, producers, educators, and students. Her two-year-old school currently offers just kindergarten through third grade, but Ippel plans to grow the school by a grade every year, so that eventually today's kids will have blazed a trail all the way to the eighth.

AGC spent its first year in a former dental tool factory before relocating to its present home in an old barrel factory sandwiched between a truck parts shop and a pallet factory in an industrial neighborhood on Chicago's South Side. The school's next move will be permanent, Ippel says.

"We've identified an abandoned trucking depot down the street. Our plan is to turn it into a 10-acre urban farm with a net-positive-energy school building that sells power to the grid." She says the new school will have a solar-powered plug-in carport, yurts for "WWOOF-ers" (World Wide Opportunities on Organic Farms), two experimental gardens for the community, and the energy-generating playground.

AGC may sound like the perfect school for, say, children of wealthy ex-hippies. But many of the students aren't there for the eco-organic touchy-feeliness so much as because it's the closest school to their home. Or because AGC's eight-and-a-half-hour school day is an advantage for parents working multiple jobs.
"Eighty percent of our students live below the poverty line," Ippel says. Until recently, 10 percent qualified as homeless, partly because of the recession. And 40 percent, she adds, come from non-English speaking households.

It may come as a surprise that the children of this demographic are exasperating their parents by refusing to throw things away or refusing car rides to school. Or by asking for Swiss chard and tempeh at dinner. One of the most exciting things about her school, Ippel says, is the effect it's having on the community.

Despite their unfamiliarity with the lifestyle espoused at AGC, many families are warming to it along with their children, Ippel says. Several families want to start a community garden next summer. Another group is building a local baking collective to supply the neighborhood with whole grain bread.

Students learn in two languages, English and Spanish. Soon a third, Mandarin, will be introduced.

The school’s curriculum is based on the International Baccalaureate (IB) program, which is inquiry-based. "For six weeks at a time they work on a question, like 'where does our food come from?', or 'what happens to our waste?', or 'why do all living things need water?'," Ippel says. "They could be doing math in the garden, or at a field trip to the landfill. We spend more money on field trips than textbooks."

In addition to learning through inquiry, there are five other core tenets by which the AGC day is organized: serving the whole child, fostering international-mindedness, facilitating collaboration with the community, modeling academic excellence, and environmental stewardship. These goals are expressed by, for instance: beginning each school day with yoga, the employment of a wellness instructor, and those daily organic meals, which Ippel says no other school in the nation can boast of.

You would expect that the school's kitchen, which is assigned the daily tasking of feeding city kids rutabaga, would have a few secrets for making famously unappealing healthy foods attractive and tasty. Here's one such recipe from the school's kitchen, for kale crisps.

**Recipe: Kale Crisps**

Adapted from the cafeteria of Chicago’s Academy for Global Citizenship.

Serves 4

- 2 bunches kale
- 2 tablespoons olive oil
- 2 to 3 large cloves garlic, minced
- sea salt and freshly ground black pepper
- 1 tablespoon toasted sesame seeds

Preheat oven to 375 F. Rinse kale and pat dry thoroughly. Remove and discard thick ribs and roughly chop leaves. Pat leaves dry again. Toss the chopped leaves with olive oil, garlic, salt, and pepper in a large bowl. Spread the seasoned leaves on a baking sheet. Bake for 15 to 20 minutes, stirring every five minutes or so, until leaves are tender, crisp on edges, and slightly browned. Sprinkle with sesame seeds and serve.