## Solar Powered Walking

The battle between fossil fuels and solar energy takes place on many fronts. Some are in the news, others are forgotten or have never been recognized as parts of the energy competition. It is a sad fact that people don't recognize that they are solar powered, fueled by sun grown crops. We pay close attention when photovoltaic panels are installed, little attention where much more cost effective skylights are put in and no attention when people walk rather than drive. Somehow, machinery, particularly electricity has cast a spell over us that is playing havoc with the economy and our health, including our children's health. We are going backwards, giving up economical uses of the sun such as children walking to school, while large companies distract us advertising their subsidized solar divisions.

Governments subsidize photovoltaic panels aggressively, in some cases paying as much as half the cost. They are creating a boom of uneconomic solar installations. On another front, the sun is being badly defeated. Fossil fuels are replacing solar energy with devastating consequences to our children's health, yet it isn't recognized as part of the competition between the sun and fossil fuels.

Fewer and fewer children walk or bike to school. They aren't too weak from hunger; they continue to consume solar grown food, they are driven by cars for other reasons. Diane Scena, an Albuquerque, landscape architect gives some statistics in an editorial in the December 1, 2004 Albuquerque Journal.

Fewer than 17% of children make their own way, powered by solar grown food, on bicycles or on foot to school. A generation ago 80% walked or biked to school.

Today the resulting car traffic makes up 20% of the morning rush hour. Talking to Diane, she mentioned that the few children who still walk encounter dangerous traffic from the many cars delivering the majority of children who have stopped walking.

Poor placement of schools, bad sidewalks, parents too busy to walk with or partway with their children are other reasons contributing to this defeat for solar energy and advance of fossil fuels.

There are some 230,000 school children in New Mexico. Walking or riding bikes, they make up a potential at 100 Watts per child (my estimate) of some 23 megawatts of solar power. The habits of a generation ago would have used 80% of these 23 megawatts, but now we use only 17%. Getting kids to school is the perfect job for their solar powered legs and it is terribly inefficient when done by Mom or Dad in the car. To see this, imagine how many children it would take to push the family car to school and back even just creeping along. Fifty or one hundred per car?

Taking a guess, I calculate that four extra miles of driving each day is required delivering and fetching each child. In just one small state, the 63% of children we have lost to the car in the last generation is 145,000 bodies hauled by gasoline. This is 580,000 miles per day, 19,000 hours per day of needless driving, 29,000 gallons of gasoline per day just. If we hired cars at 31 cents per mile and ten dollars per hour for the drivers, we have \$370,000 per day at 150 days per year. That is 55 million dollars per year as one of the expenses to society replacing solar power with gasoline engines and driving.

The \$55 million per year is not the worst part of the change in habits over the last generation. The worst part is the unburned solar food the children eat that is making them fat and unhealthy and probably unhappy.

The topic of solar energy should include these vital matters, not just the generation of electricity. By being narrow minded we are neglecting our economy and our children to feed money to automobile manufacturers and oil companies.

Solar energy is school children walking and biking to school, not just a new solar division entering heavily subsidized markets.

Steve Baer 2004