

Germany, the country of my origin, is a place of contradictions. In Bavaria, home of the Oktoberfest, beer is considered a food. But Germans also love their bread: over three hundred varieties exist, all of them vastly more robust and nutritious than the pap that masquerades as bread hereabouts. (I bake my own.) In a country roughly the size of Montana, where 31 percent of landmass is covered by forest, the living space of its 82 million inhabitants is densely populated and severely regulated. Neighbors will call the police on you, should you plant a tree in your backyard on a holy day or, perish the thought, resurface your driveway on a Sunday afternoon. The populace grumbles but accommodates itself.

In the wake of the Fukushima disaster, the German government swiftly decided, in future the country should go without nuclear power. It immediately retired eight of its older nuclear power plants, with the remaining nine scheduled to close by 2022.

At this, many Germans feared a return to electricity via coal-burning power plants, which would leave an ominous greenhouse-gasses footprint quite unacceptable to a nation that hopes to reduce its 1990 emission levels by 40 percent, come 2020. Some Germans, my relatives among them, now heat their homes with pellet stoves or geothermal heat. More and more solar panels appear on steepled, ceramic-tiled roofs.

The result? On Saturday, May 26, 2012, at 2:02 PM EDT, Reuters reported that German solar power plants produced a world-record 22 gigawatts of electricity, equal to 20 nuclear power stations at full capacity, through the midday hours of Friday and Saturday. According to Norbert Allnoch, director of the Institute of the Renewable Energy Industry (IWR) in Muenster, the electricity fed into the national grid to meet one-third of Friday's workaday needs and nearly 50 percent of the Saturday following, when offices and businesses were closed.

"Never before anywhere has a country produced as much photovoltaic electricity," Mr. Allnoch told Reuters. "Germany came close to the 20 gigawatt mark a few times in recent weeks. But this was the first time we made it over." He added that Germany "is capable of meeting a large share of its electricity needs with solar power." He observed that today the country gets by with "fewer coal-burning power plants, gas-burning plants, nuclear plants." Allnoch said the data is based on information from the European Energy Exchange in Leipzig.

Government-mandated support has helped the country become a world leader in renewable energy. Modest-sized Germany has nearly as much installed solar-power generating capacity as the rest of the world combined. As Chancellor Angela Merkel's regime demonstrates, it's indeed possible for an industrialized nation to function well on renewable energy.

Not surprisingly, the incentives through the state-mandated "feed-in-tariff" (FIT) generate a certain amount of resistance. Utilities and consumer groups complain that the FIT for solar power adds about two cents per kilowatt hour on top of electricity prices that, next to Australia's, are among the highest in the world. (Germans pay about 23 cents per kw/h.) Merkel's government is trying to accelerate cuts in the FIT, which has fallen by between 15 and 30 percent in recent years.

In the United States, photovoltaic cells have had their ups and downs. Jimmy Carter installed them on the White House roof; Ronald Reagan took them down again. Jerry Brown as Governor of California promoted the industry via tax breaks and subsidies, but as soon as the Middle East oil crisis diminished, his successor allowed the industry to go bankrupt, no thanks to the Reagan administration, which sliced the solar budget by two thirds. Our dream of a direct conversion of sunlight into electricity faded with falling oil prices.

Apart from the greenhouse gasses generated by the burning of fossil fuels that, we now know, accelerates global warming, trading in coal, oil, and natural gas is subject to international exigencies that can bring sudden spikes or dips. Inasmuch as American governments have little or no control over the international market, it's an unreliable and unstable base on which to plan for the future.

Americans typically object that renewable energy is not reliable enough, or there isn't enough capacity to power major industrial nations. They claim jobs would be lost, were we to wean ourselves of our fossil-fuel addiction and focus on renewables. Where does this leave Wyoming, with its blinders about fossil-fuels wealth and riches? Just now, as our state government gets ready to cut well over a hundred state jobs due to projected, reduced state income on account of falling gas- and oil prices, Wyomingites are on edge.

This year's legislative session dropped House Bill 79, which would have extended the sales tax exemption for residents and businesses that install small, renewable energy systems, while House Bill 121, which allocates moneys from the Abandoned Mine Land Funds, managed to include \$10 million for construction of a minerals-to-liquids plant. The Joint Appropriations Committee, seeking to set aside a little something for alternative energy, reduced the amount to \$9 million but Governor Mead, in true Reagan-think, signed the bill with all appropriations going exclusively to the fossil-fuel industry. No conservation measures in this state, by Job, no Germany-type expensive solutions! Are we any better off, putting all eggs in one basket? With the kind of job cuts on the horizon, I don't think so.

Ronald Reagan, it was disclosed after his death, suffered from Alzheimer's during his years in the White House. More's the pity.