There’s nothing wrong with expanding renewable energy sources. The more choices available in this (or any) marketplace the better consumers will be served – both from a price and a quality standpoint. However serious problems are caused when government starts using taxpayer resources to subsidize or incentivize these expansions.

Things get even worse when centralized planners start manipulating market choices or trying to manage the marketplace itself by controlling the generation of power.

This is precisely what is happening in Germany – where command economists have failed spectacularly in their bid to force a national transition to renewable energy.

In 2000 Germany passed a major green initiative which forced providers to purchase renewable energy at exorbitant fixed prices and feed that power through their grids for a period of twenty years. Promulgated by a Socialist-Green coalition government – this initiative has since been embraced by Germany’s Conservative-Liberal majority, led by Chancellor Angela Merkel. In fact Merkel has doubled down on Germany’s renewable energy push in the wake of the 2011 Fukushima nuclear disaster in Japan – ramping up government’s plan to phase in renewables while taking the country’s nuclear power industry offline.

Merkel’s government shut down eight reactors in the immediate aftermath of the Fukushima disaster (which was caused by a tsunami – a threat Germany isn’t exposed to) and has vowed to shut down all remaining nuclear facilities by 2022. The problem? Despite heavy government subsidization, renewable energies simply aren’t filling the void.

“After deciding to exit nuclear energy, it seems as if Ms. Merkel’s coalition stopped its work,” a former German environmental minister told The New York Times last year. “There is great danger that this project will fail, with devastating economic and social consequences.”

A year later the project is failing – resulting in what one German industry expert termed a “chaotic standstill.”

Merkel’s energy plan called for the addition of 25,000 megawatts of sea-based wind turbine power by 2030. However through the first six months of 2012 only 45 megawatts had been added to Germany’s existing 200-megawatt supply, according to an industry analyst quoted by Reuters.
And despite massive subsidies funded by a household energy surcharge (which currently comprises 14 percent of German power bills), major wind projects in the North Sea are being delayed or canceled due to skittish investors.

The basic problem? Wind farms are notoriously unreliable as a power source. Not only that, they take up vast amounts of space and kill tens of thousands of birds annually.

“Generating energy with wind involves extreme fluctuations because it depends on the weather and includes periods without any recognizable capacity for days, or suddenly occurring supply peaks that push the grid to its limits,” a 2012 report from Germany energy expert Dr. Guenter Keil notes. “There is a threat of power outages over large areas, mainly in wintertime when the demand is high and less (power) gets delivered from abroad.”

A typical 20-turbine wind farm occupies an area of 250 acres. So in order for Merkel to achieve her objective, she would have to cover an area six times the size of New York City with turbines. Not surprisingly the erection of all those turbines – along with the infrastructure needed to route their inconsistent power supply back to the German heartland – would be astronomical.

“The costs of our energy reform and restructuring of energy provision could amount to around one trillion euros by the end of the 2030s,” Germany’s environmental minister announced last month.

That sum could rise even higher, as last month a Harvard University study revealed the extent to which the power generating potential of wind farms has been “overestimated.”

“The generating capacity of very large wind power installations may peak at between 0.5 and 1 watts per square meter,” the study concluded. “Previous estimates, which ignored the turbines’ slowing effect on the wind, had put that figure at between 2 and 7 watts per square meter.”

Such are the shifting sands upon which Merkel has staked her country’s energy future.

Because renewable power sources have been so unreliable, Germany has been forced to construct numerous new coal plants in an effort to replace the nuclear energy it has taken offline. In fact the country will build more coal-fired facilities this year than at any time in the past two decades – bringing an estimated 5,300 megawatts of new capacity online. Most of these facilities will burn lignite, too, which is strip-mined and emits nearly 30 percent more carbon dioxide than hard coal.

In other words Germany is dirtying the planet in the name of clean energy – and sticking its citizens with an ever-escalating tab so it can subsidize an energy source which will never generate sufficient power.

This is the cautionary tale of command energy economics – one other nations would be wise to heed.

The author is chairman of Americans for Limited Government.