

## Twitter Thread by Mark Sumner



**Mark Sumner**

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**Since everyone from @GovAbbott to @DanCrenshawTX are continuing to pass off massive lies about the energy situation in Texas, let's look at it again. Because it's not wind that's the problem. It's profit-protecting "deregulation" and a perverse idea of the "free market." ... 1/18**

On Wed., millions of Texans are still without power. Meanwhile, Austin is expected to reach freezing just in time for a massive ice storm expected to bring down trees and powerlines. Plus, broken water lines everywhere. So clearly, the people in charge need a scapegoat. ... 2/18

Fox News and GOP politicians—including Gov. Abbott — have been taking this “opportunity” to attack wind energy, call for the burning of more fossil fuels, and to make claims that green power is “deadly.” Surprise! They're lying. ... 3/18

In 2003, Australia installed a pair of wind turbines at it's Mawson Research Station in Antarctica. One of those turbines failed ... after 14 years of operating in sub zero temperatures and winds over100 mph. The other turbine is still operating today. ... 4/18

At the opposite end of the planet, wind turbines are operating at Svalbard, the most northerly town in the world. The fishing town of Havoysund, inside the Arctic Circle, runs on wind power. Greenland has been steadily moving to wind since 2008. ... 5/18

In the United States, anyone traveling along Interstate 94 through North Dakota can't help but notice over 1,500 wind turbines generating 3000Mw. Dallas might have reached 24 degrees on Tuesday, but it was -1 in Fargo. North Dakota's wind turbines kept right on cranking. ... 6/18

Wind turbines operate reliably, year in and year out, in conditions far worse than those currently being experienced in Texas. Yes, some Texas turbines are down for maintenance, but that number is completely in line with normal levels of outage. ... 7/18

While many sources show wind as accounting for 13% of the 35 gigawatts of power currently offline in Texas, that's only true if you use the max. rated power of every turbine offline and ignore how operating turbines are actually producing at over their projected rate. ... 8/18

If the wind turbines aren't frozen, then what is? Natural gas pipelines. Which is strange, because methane doesn't liquify until it hits -161C, much less freeze. So how can gas pipelines freeze? Well, it's an interesting question. ... 9/18

As it turns out, what's in a gas pipeline is far from pure methane. It includes fluids involved in drilling and fracking that freeze much more readily. So when those pipelines get cold, they can develop a kind of methane-saturated sludge that severely restricts the flow. ... 10/18

At the same time the pipelines are producing less, demand is going up. Not only is natural gas used at power plants, it's used directly in home and business heating. So everyone wants the gas, just as it's getting more difficult to move. ... 11/18

The result is shortages that have either taken plants offline or reduced their rate of production, while at the same time driving the spot price for natural gas through the roof. Gas that sold for \$4 / MMBTU last week, hit \$500 over the weekend and \$1000 on Tuesday. ... 12/18

Coal plants are also in trouble. Coal burned in Texas is sub-bituminous from the Powder River Basin in Wyoming, or in-state lignite. Both grades of coal are high moisture. Frozen coal can be hard to remove from train cars, halts conveyors, and clogs crushers. ... 13/18

In addition, both coal plants and gas plants are steam plants. That means that they require huge amounts of water. That water also moves around in pipes. When those pipes are exposed and uninsulated, they freeze. ... 14/18

Natural gas is BY FAR the largest contributor to the current power shortfall in Texas. If the system was more dependent on natural gas, the current situation would actually be MUCH WORSE than it is, both in cost and outages. ... 15/18

But the root cause of the failure is the system designed by ERCOT isn't gas. It's a system modeled on long-held ideals of deregulation. That has resulted in "wild west system" dominated by short-term profits that completely ignores safety and preparing for emergencies. ... 16/18

It's no wonder Fox News is screaming that the "Green New Deal" is killing Texas, and it's no secret why Abbott and others want to find a convenient scapegoat that lets them off the hook Texas' power grid is not only operating as designed, it's a showcase of GOP dreams. ... 17/18

Abbott, Fox, and the rest can't admit the truth, because what they want is more. Not more power. More fracking. More fossil fuels. More deregulation. More price gouging.

More of the same system that's keeping Texas in the dark.