## Misinformation - Solar Prices Are Falling.. IN FACT – Solar Prices Are Actually Increasing

I am not an expert in the energy market or industry, therefore I rely on those much smarter than myself to better understand it so as to best discern if what renewable energy developers are telling our communities is truthful, transparent and/or valid. Or, is what we are being told merely a sales pitch in order for the renewable energy industry and/or developer to gain public acceptance and/or approval for their proposed profit generating development?



To get a better understanding to the claim(s) made by those in the renewable energy industry, regarding renewables will bring down the cost of electricity, are valid, I believe it wise to look to see how the expansion of renewables has affected others, both far and near. Starting my desktop analysis by look "far", I found that Germany "for decades has been the global pioneer in applying renewable energy and environmental technologies." (International Trade Association) . So, how has this global pioneer been doing since nearly 45% of Germany's electricity mix came from wind, solar, biomass and hydroelectric sources?

According to statista.com, wholesale prices for electricity in January 2019 were 49.41 euros/MWh and in July of 2024 they were 67.71 euros/MWh (peaking in August 2022 at a record high of 469.35 euros/MWh). The record prices seemingly were "... the result of a myriad of factors, including increased heating demand due to cold winters, a drop in wind power generation due to low wind speeds, and water scarcity in the summer leading to reduced hydropower production. A rise in natural gas and coal prices ensued from the shortage of these fossil fuels during the economic recovery post-COVID-19 crisis and after Russia invaded Ukraine." Darn those pesky wind speeds and droughts!

So, a quick look at a global leading country's energy prices haven't readily proven the narrative of the renewable energy industry, how about locally here in the US? What data can be sought and used to help validate the industry's claims of renewables lowering energy costs? As California is seemingly dictating US policy these days, lets look at the state who once dared us to "Dream Big".

## Looking to California as an example...

- Since 2008, when Gov. Schwarzenegger mandated renewables, electric generation in CA has gone from 3% to >25% for wind & solar. -EIA (via Robert Bryce)
- Since 2008, residential electricity prices in CA have risen more than any other state. The rate for residential electricity has increased \$0.151/kWh while the US average reflects a rise of \$0.047/kWh. -EIA (via Robert Bryce)
- Between 2008 and 2023, CA residential electricity prices have risen more (as a percentage) than any other state...109.4% (US 41.9%). -EIA (via Robert Bryce)
- Demand apparently not the cause for price increase since 2008 electricity usage in CA has fallen more than any other state... down 29,925 GWh between 2008 and 2028. -EIA (via Robert Bryce)
- Residential electricity prices in CA cities are exceedingly higher than the rest of the US. The cost per kWh (May 2024) in Chicago (\$0.186), in Dallas (\$0.183), in New York (\$0.252), in Los Angeles (\$0.286), in San Francisco (\$0.413), and in San Diego (\$0.418)... with the US average being \$0.175. Bureau of Labor Statistics (via Robert Bryce)
- Renewable energy mandates in California reflect how they are adversely affecting, or punishing, low-income Californians. Per Rob Kikolewski, at the San Diego Union-Tribune, nearly 4.48 million California ratepayers had fallen behind on their monthly payments. SDG&E has 361,162 customers behind, or 26.7% of their customers, amounting to late payments of \$255.8M (or \$708 per customer on average). PG&E has 1,018,270 customers behind, or 18.5% of

their customers, amounting to late payments of \$648.73M (or \$637 per customer on average). SCE has 869,646 customers behind, or 16.4% of their customers, amounting to late payments of \$922.27M (or \$1,061 per customer on average). SoCalGas has 1,234,084 customers behind, or 20.0% of their customers, amounting to late payments of \$348.06M (or \$282 per customer on average).

• Isaac Orr & Mitch Rolling authored an article for Energy Bad Boys in which they stated, "We aren't building a new electric grid from scratch, so we should be comparing the cost of new wind and solar with the cost of existing power plants that these intermittent generators would hope to replace. The truth is that we already have reliable, depreciated assets that produce electricity at low cost, and they could've kept doing so for decades. This means that building new wind and solar adds to the cost of providing electricity to the grid. If wind and solar were truly lower cost than other forms of energy, we would expect states like California and Minnesota, which have high penetrations of wind and solar, to see falling electricity costs. Instead, electricity prices in these states have increased much faster than the national average." Based on data from the US Energy Information Administration (EIA), they provided a chart reflecting the average annual retail price of electricity (in all sectors) rising by 93.2% in California, 63.58% in Minnesota, and 39.32% across the US.

Isaac Orr & Mitch Rolling went on to conclude, "*The intermittency of wind and* solar imposes unique expenses on the electric grid that require an evaluation of the entire electric system in order to derive meaningful cost estimates from these generators. This is difficult to do, which is why most people don't do it."

• California, having more installed solar capacity than any other state (approx. 49.4GW), ha seemingly created a regressive tax on poor and middle-income class residents. Per The Public Advocates Office, at the California Public Utility Commission, "California's main rooftop solar incentive program (Net Energy Metering) will cost customers without solar an estimated \$8.5 billion by the end of 2024, a figure that has more than doubled since 2021."

Putting my desktop analysis of domestic leader (California) in renewables implementation into perspective...

- 1. No! Renewable energy seeming has not contributed to the decline in energy prices since mandated in 2008,
- 2. Despite lower demand, energy prices have seeming skyrocketed when compared to the US average, &

3. Renewable energy mandates and subsides have seemingly resulted in skyrocketing prices that have unjustly hurt low- and middle-class residents the hardest.

Despite use of the carrot and stick metaphor used by the renewable energy industry and based on data of a domestic leader in renewable technologies, the "*If you build it, they will come*" narrative is merely that of this industry wishing us to "*Dream Big*". This big renewable dream has resulted in, per the Santa Clara Business Law Chronicle, since 2018 more than 265 business headquarters are leaving California, and average of 6.3 departing per month. Of the reasons stated in this article, "*California's tax laws and prohibitive regulations are the leading causes of the massive corporate exodus.*"

Although I still hold the opinion that renewable technologies can help supplement energy generation, it cannot and will not benefit the public as a whole as it is currently being pursued and implemented. Communities, where such renewable energy developments are being proposed, are already seeing at least one major, and at times devastating, negative effects that accompany developers even before their development is built...divisiveness. These developments are, without question, dividing communities in such unfortunate ways which devastate, if not destroy, relationships between friends, neighbors, and worst of all families. Are the results of higher energy costs, which will include higher costs to goods and/or services across the spectrum, loss of farmland, increased threats to the environment and wildlife, and destruction of long held relationship worth the pursuit of a "green energy" based economy that is seeming unattainable (and exceeding unattainable without massive US government intervention and subsidies)?

I will leave it to you to perform your own due diligence. However, my research seeming supports that;

- 1. Energy costs will not decline as a result of massive increases in renewable implementation,
- 2. Utility-scale renewable energy developments will continue to negatively affect established local agricultural economies,
- 3. Utility-scale renewable energy developments will adversely affect and lower the value of our largest capital investments, our homes/property,
- 4. Utility-scale renewable energy developments do present enough probable cause to contaminate soils and/or potable subsurface drinking aquifers that residents/communities should have concern,
- 5. Implementation of utility-scale renewable energy facilities seemingly hurt lowto middle-class families the hardest &
- 6. The devastation of long held and cherished relationship within a community.

I believe that neither the risk(s) nor the cost(s) seem to outweigh the theoretical benefit(s) of utility-scale renewable energy development implementation. Further, although not a shill for either the nuclear or natural gas industry, I believe we as a country should be investing in both advanced research and construction of energy generating facilities specifically in these two industries. Industries such as Healthcare and Manufacturing not only depend on such reliable/base-load energy generation means, but require it (as it can, at times, mean the difference between life or death).