Market Commentary: Why (and How) Are Gas Prices Down?

July 2022

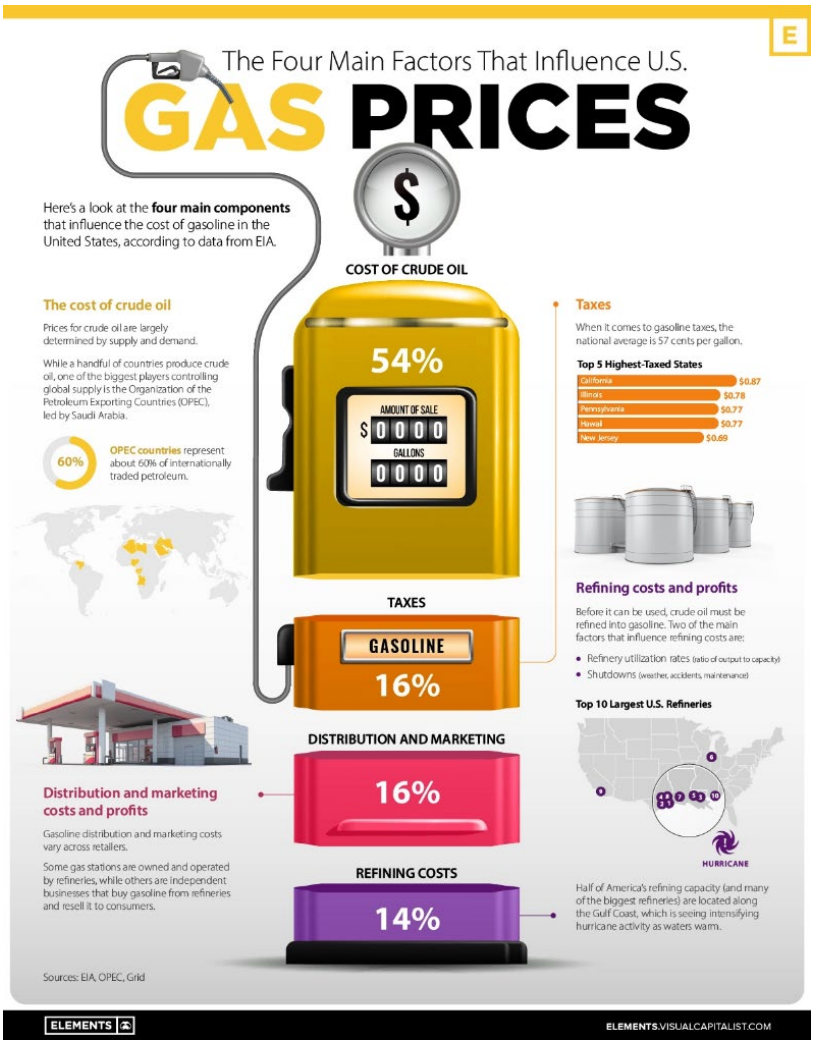
On June 14, the national average for regular unleaded gas was $5.016 per gallon. As of August 1, the average gas price is $4.212, down 16% from roughly a month earlier[1]. Crude oil is also near recent lows, at $94.4, down 27% from its high of $130.50. This year's storyline has been a lack of supply due to the Russian invasion, which has no sign of letting up. What gives? Where do we go from here?

The most recent drop in crude oil seems primarily to be the result of (1) consumers taking their foot off the pedal – spending less on gas in direct response to its simply being more expensive, exacerbated by financial stresses of other items also being more expensive ("inflation"); and (2) longer term buyers concerned that a global recession is looming. Lower crude levels should continue to translate into dropping gas prices over the next few weeks, though crude represents only slightly more than 50% of the pump price.[2]

However, the major story that led to a spike in crude and gas prices, the Russian invasion of Ukraine and the subsequent move away from Russian energy by EU, still remains. This major supply disruption, primarily to Europe, should continue to reverberate through the globe, resulting in prices remaining elevated and volatile. How is crude dropping in the face of this fact pattern? And more important, how is the longer-term supply / demand mismatch resolved?

Energy is complicated enough and there are a few moving parts to this story:

- **East vs West**: "Western" countries have decided that what Russia has done is wrong and are trying to punish Russia for its actions,[3] while trying at the same time to carve out exemptions for some shorter-term energy needs of an overly reliant Europe. There are still, though, a bunch of non-western countries, like India and China (~25% of the world population), more than willing to purchase from Russia at nice, steep discounts.
- **Portability**: Crude oil can be transported more easily than natural gas. It is one of the reasons that there is a global price for crude, but not one



[1] AAA Gas Prices

[2] https://www.visualcapitalist.com/what-drives-gasoline-prices-infographic/

[3] With the end goal of Ukraine remaining independent. So, it is not quite a "punishment" but incentive via a stick – though with no carrot on the other side since no one foresees a future of European reliance on Russian energy.

for natural gas. Yes, there are still complexities surrounding the type of crude and refining needs to match a country's energy infrastructure. Russia is set up to service Europe. While crude will be relatively easy to transition to Asia, natural gas, which necessitates pipelines and/or special, double-hulled ships and then further specialized equipment on the port side, will be much harder. So, while crude can slosh around the world, natural gas transport is a much harder problem to solve. It is temporarily being solved by the US materially increasing its natural gas exports to Europe. As long as we can produce more natural gas, it seems like this can be part of a longer-term shift. In fact, Germany had already committed to one longer term natural gas contract[4]. Though developing infrastructure and capabilities are measured in years not months, resulting in a continued stressed environment for the short to medium term.

- **Supply/Demand**: Between a dearth of local energy and geographic proximity, Russia is a natural energy partner for Europe, and especially for Germany. It is optimal for Russia, Germany, and the rest of Europe to trade with each other. Russia can command higher prices with lower transportation costs – neither of which is possible when facing Asia.

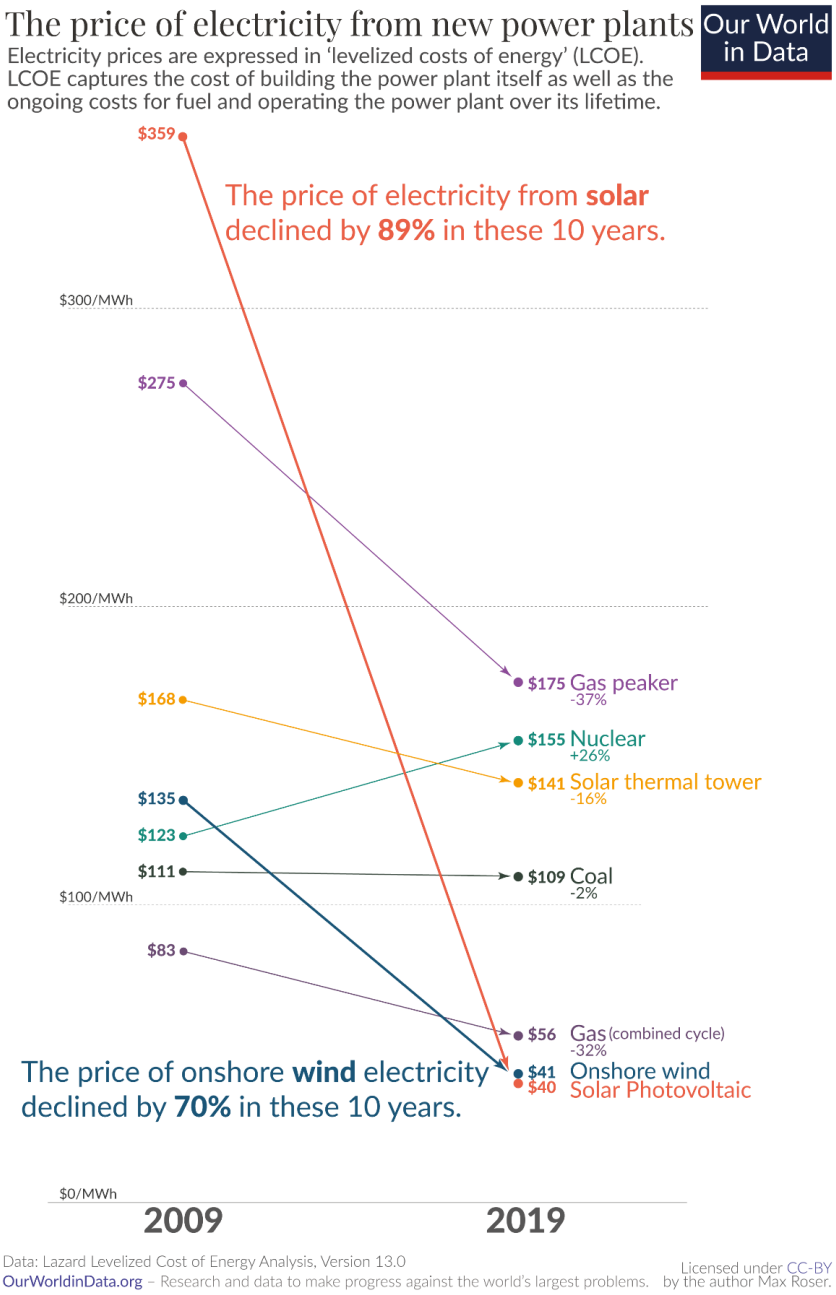
The lack of portability of natural gas, coupled with the twin realities of (1) Europe forcing itself off of Russian oil and (2) Asia's lower dependence, translates into both steep discounts on energy sold and less energy making it into the system. This latter effect will result in continued global pricing pressure. This reality is further exacerbated by:

- A reluctance of traditional energy companies to spend capital on large energy infrastructure initiatives given the massive upfront costs and inconsistent future demands in light of alternative energies and general supply / demand dynamics; and
- The reality that a lot of energy infrastructure resides in geographically sensitive locations. The US is lucky enough to have huge natural gas reserves and the technology to extract it, allowing us to have materially lower costs as compared to Europe (whose natural gas prices are currently 8x ours!) Nonetheless, most of our refineries are located off the gulf which is more prone to hurricanes. We are one natural disaster away from both a local and global spike in prices.

There is a positive side, though, for those who can afford to wait! When there is a supply / demand imbalance, innovation generally comes to the rescue due to increased economic incentives. For example, past expensive energy conditions spurred on fracking technologies and clean energy alternatives.

[4] Germany Commits to American Gas with First U.S. LNG Offtake Deal (maritime-executive.com)

Over the very long term, harnessing energy has become more plentiful and cheaper[6]. Can we efficiently harness the sun? The wind? The ocean? There have been many "impossibles" in the energy space – including the shale revolution – sideways drilling – something that was deemed impossible in the past. Battery power, long term storage, and transportation for alternative energy sources will get solved – it is only a matter of time. In the interim, we will have ups and downs in the markets, though we expect a longer-term trend down in cost and up in capacity.



[5] https://ourworldindata.org/cheap-renewables-growth

[6] Natural fire – wood – whale blubber – etc.… / legs – wheel – domesticated animal – etc.…