



The Coming (Of) Age Of Renewables

On June 24th we moderated a panel for the Energy Infrastructure Council (EIC) titled “The Coming Of Age Of Renewables”, where several companies spoke about how renewables had moved into the mainstream. After, we contemplated how removing the first “Of” transforms the title into something more forward looking: “The Coming Age Of Renewables”. This got us thinking about Stanley Kubrick’s “2001: A Space Odyssey” and how the black monolith scenes signified massive change. Perhaps we’re experiencing our own black monolith scene within the energy sector, a transition into the “Age Of Renewables”. The experts project this transition will take decades, allowing savvy energy investors to partake in what may end up being the greatest megatrend since the steam engine.

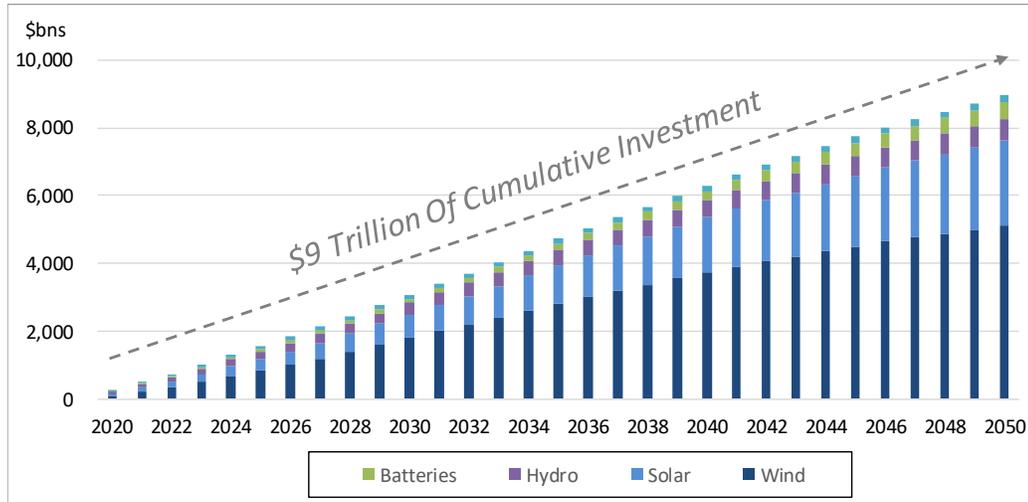


It's Not The Beginning, But We're Still On The Early Side

The megatrend represents the nexus of two powerful forces. The first is hyper growth as a result of declining costs as technology and knowledge progress. The second is Main Street support for global decarbonization efforts. The two ingredients feed each other in critical ways. R&D is financed by our leaders’ desire to give the market what it wants, which is a cleaner, healthier earth.

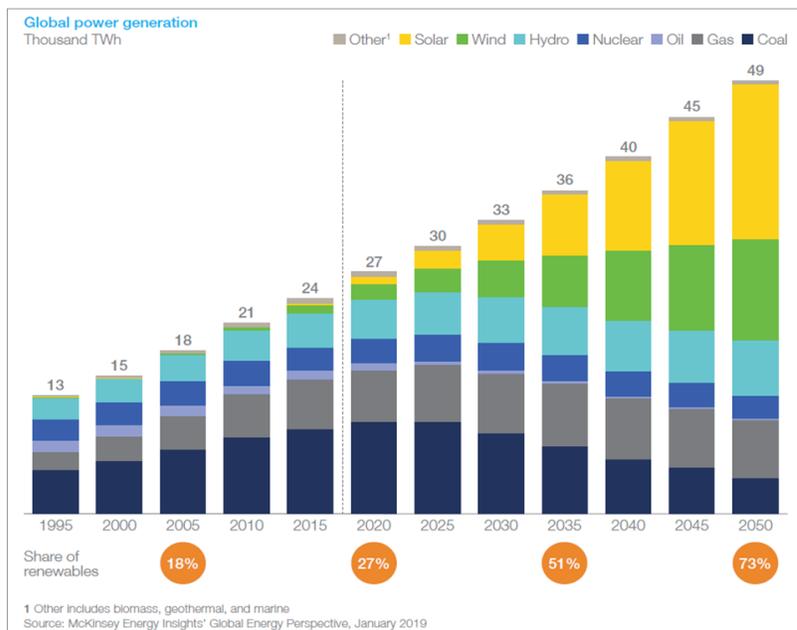


What this ultimately leads to is more than \$9 trillion in infrastructure development through 2050 as the world transitions away from a carbon economy. The interesting point to highlight though is these projections are based on current expectations for technological advancement of wind and solar. These expectations push some to believe wind will dominate and others to believe solar will. We believe each asset class has its own advantages and disadvantages, and this competition is ultimately going to help further push down the cost curve of renewables as a whole. However, it is critical to keep in tune with the economics and the technological advances in order to pick winners in this fast-evolving megatrend.



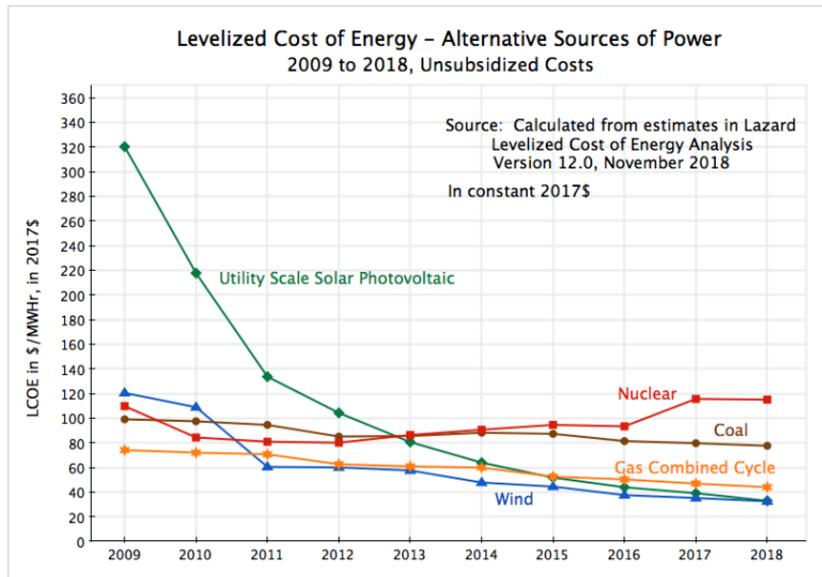
Source: Bloomberg New Energy Finance

The reality is there will be a collaborative solution utilizing all the forms of renewable energy in the market today, and even some that may not be commercial yet. To expand on this, the next chart shows another expert's view on where the growth from a capacity perspective will come from. In both the above and below charts the expectation is solar will gradually take more market share, though it's important to note the power generation capability of solar is far less than wind, which in turn is far less than natural gas. The reason we don't put much weight in any single expert forecast is because the biggest variable to renewables development is energy storage (batteries). Elon Musk to the rescue?

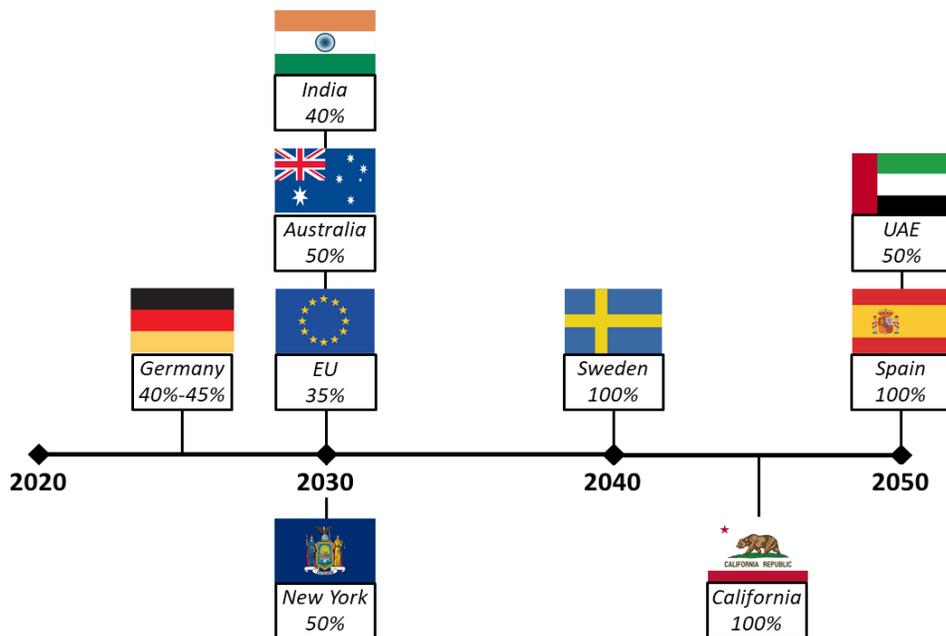


¹ Other includes biomass, geothermal, and marine
Source: McKinsey Energy Insights' Global Energy Perspective, January 2019

The key takeaway here is the fundamentals are starting to support what the public wants. Undeniably the cost of generating electricity for renewables has declined significantly over the last ten years. The chart below shows the remarkable advances wind and solar have made as they now cost less to generate electricity than coal and natural gas. We continue to expect these costs to come down, though perhaps not at the rate they fell initially.



However, without Main Street buy-in renewables would go nowhere. In many instances federal and state governments are helping push renewables forward as shown below, though there is a ground roots drive to push renewables as well. Whether it be younger activists pushing for financial institutions to divest from traditional energy stocks or older investors directing their dollars into renewables. A traditional energy company said recently that younger investors view oil and natural gas as a 20th century fuel, a concept no doubt shared by a growing proportion of the world population.



Source: Eagle Global Advisors

And so, it's no surprise that our renewables infrastructure index (RENEW) has put up some compelling year-to-date performance. Its defensive attributes helped it rank at the top of our slate of comparable indices for the first quarter, while its growth attributes helped it rank in the middle of the pack for the furious second quarter rally. We believe RENEW offers investors a "sleep at night" investment opportunity for conservative investors who want to participate in the renewables megatrend without the roller coaster ride that defines many of today's renewables investments.

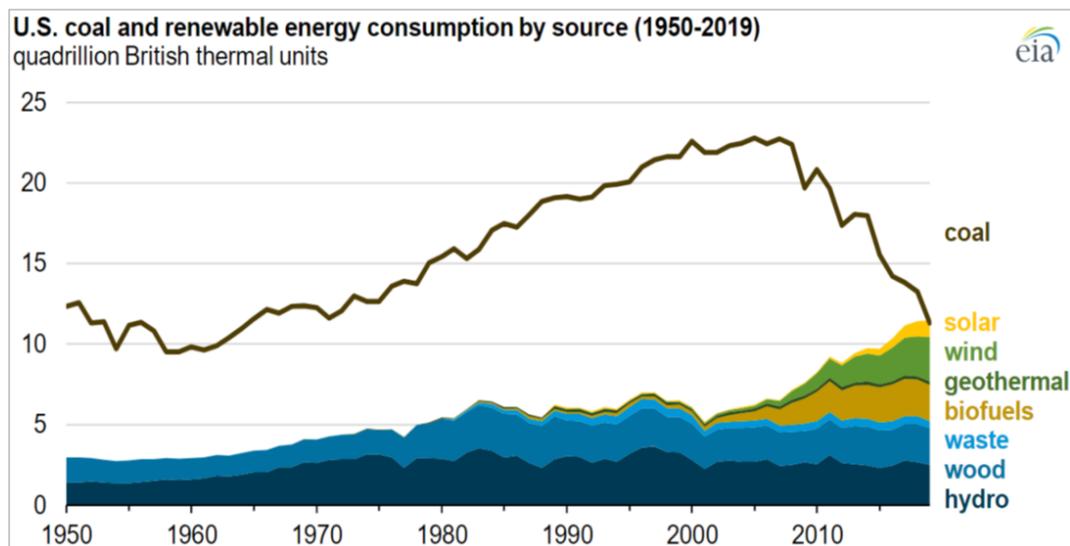
	Average Trailing Total Return (Trailing 12 Months)		Average Trailing Total Return (Trailing CAGR)			
	Q1 2020	Q2 2020	YTD	TTM	3 Years	5 Years
Eagle Global Renewables Infra Index (RENEW)	(10.23%)	15.84%	3.99%	17.34%	14.36%	11.17%
S&P Global Clean Energy Index *	(17.88%)	30.26%	6.97%	19.30%	16.18%	4.51%
S&P 500 Index	(19.60%)	20.54%	(3.08%)	6.69%	10.73%	10.58%
MSCI World Index	(21.05%)	19.36%	(5.77%)	2.19%	6.70%	6.75%
PHLX Utility Index	(12.31%)	2.55%	(10.07%)	(0.98%)	7.19%	10.08%
DJ All REIT Equity Index	(23.28%)	13.21%	(13.15%)	(6.11%)	3.56%	6.33%
Barclays US Corp High Yield Bond Index	(12.68%)	10.18%	(3.80%)	(0.16%)	3.33%	4.74%
S&P 500 Energy Sector	(51.06%)	28.68%	(37.02%)	(39.06%)	(15.59%)	(12.05%)

* the S&P Global Clean Energy Index is a diversified mix of clean energy production and clean energy equipment & technology companies

Source: Bloomberg

Renewables Surpasses Coal Generation

In a continuation of the megatrend theme, renewable energy consumption surpassed coal consumption in 2019 on a combination of 14%/10% increases in solar/wind and a 15% drop in coal. Coal's contribution to total energy consumption was 11% in 2019, representing a substantial drop from the 21% contribution coal made ten years ago. We highlight that a major offset to the decline in coal consumption was the increase in natural gas consumption, a far cleaner fuel than coal but still dirty compared to renewables. Notwithstanding this, coal ranks among the dirtiest energy sources in the market and certainly the dirtiest on the power curve, and therefore we consider coal's decline a positive sign of the market's commitment to a lower carbon future. We also believe the increase in renewables consumption bodes well for a further transition away from fossil fuels.



Source: Energy Information Administration (EIA)

Another Renewables Infrastructure Stock Makes It Through The Rain

In late 2018, California experienced devastating wildfires that set the electric utility company Pacific Gas and Electric Company (PCG) on the path towards bankruptcy. As a result, several renewables infrastructure companies with exposure to PCG came under pressure, such as Clearway (CWEN), Atlantica (AY), and to a lesser extent Nextera (NEP). As part of the bankruptcy process, affected assets were required to keep cash flow at the project level until the bankruptcy process concluded, leaving the parent companies (i.e., CWEN) with a diminished cash flow stream with which to support their dividend. To protect its own balance sheet CWEN cut its dividend 40% in February 2019. It was always our view that California regulators would not cancel or renegotiate contracts between PCG and renewable generators for a variety of reasons, top of which was California's market leadership in the transition to renewables where contract cancellation would have thrown ice water on renewables investment in the state. Fast forward to 2020 and the bankruptcy process is expected to reach its conclusion in the second half of this year, which opens the door for assets to release restricted cash up to its sponsors (i.e., CWEN).

We highlight this event as renewables contracts were reaffirmed. There was substantial support across the political spectrum to keep these contracts intact, so it was really only a matter of time before renewables companies were able to see their cash flows right sized to their previous levels.

Renewables Infrastructure Team Update

There were no significant team related news items to highlight this quarter. We continue to focus on the research and portfolio execution effort as well as our indexing initiative and are in constant dialogue with industry experts and management teams. The absence of in-person conferences has been made up by the large multitude and great variety of virtual events that have been hosted by the broker community since the pandemic started. While these virtual events are helping us keep up to speed on renewables, we look forward to a time when we can resume in-person dialogues with management teams and the investor community.

We look forward to communicating the results of your investment next quarter and thank you for your continued patronage and confidence in Eagle Global Advisors.

- The Eagle Renewables Infrastructure Team