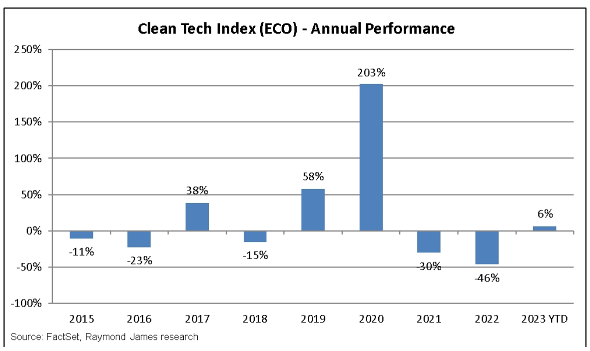
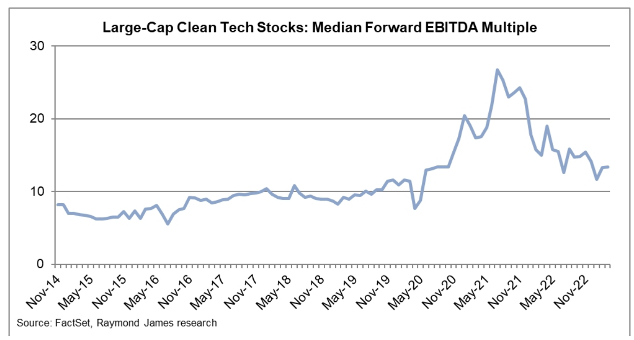
Excerpt from Raymond James, April 5, 2023

RENEWABLE ENERGY AND CLEAN TECHNOLOGY

A Decent Start to 2023, Nimbleness Still Pays; ….

After hefty losses in 2021 and 2022 erased nearly all the record-setting gains from 2020, clean tech stocks are off to a moderately good start in 2023. The WilderHill Clean Energy Index (ECO) was up 6% in 1Q23, narrowly behind the S&P 500's gain of 7%. While there is no investor euphoria, the uptick in appetite for high-beta growth names across the board has been helpful for clean tech as a matter of sentiment. Fundamentally, the picture is little changed from what we wrote three months ago: demand is generally robust, notwithstanding the complicated macro landscape; supply chain bottlenecks are easing, helped along (perhaps ironically) by the macro slowdown; and interest rate headwinds are manageable.





Here are several thematic highlights from the past three months.

Banking industry's troubles weigh on clean tech sentiment, but fundamental impact is slim. Much of the weakness in clean tech stocks during March was tied to the ubiquitous headlines about problems in the banking industry. The theoretical fear is that solar and other renewable power projects will have a shortfall of project financing, but that is a misconception. …. The more substantive issue for project developers in recent months had been the cost of capital: in other words, plenty of cash is available, just at higher rates. Ironically, the fact that the 10-year Treasury yield came down sharply amid the banking fears is actually helping ….

European energy crisis is in the rearview mirror, though prices remain lofty. While there is no end in sight to Russia's war in Ukraine, the Kremlin is emphatically on the losing side of its energy war with Europe. Moscow's strategy of curtailing natural gas exports as a means of political blackmail has failed, …. we will need to watch a potential reemergence of difficult conditions this coming summer, …. European energy security and diversification remain key demand drivers for a wide range of clean tech companies, bearing in mind that Europe still has the world's highest gas prices (even after a steep decline from the record levels of mid-2022) and above-average electricity prices.

Clean tech protectionism remains a potent trend. Economic nationalism vis-a-vis various clean tech verticals remains noticeable around the world. A notable case study, from February, is the EU's Green Deal Industrial Plan, which aims to replicate the U.S. Inflation Reduction Act in promoting domestic manufacturing of everything from PV modules to hydrogen electrolyzers. However, …. On a smaller scale, Indonesia's recently unveiled electric vehicle rebate policy includes a local content requirement, though ….

California approaches implementation of NEM 3.0. Net metering reform from state to state is *not* a new story, having taken place over the years in Hawaii, Massachusetts, Nevada, and elsewhere. The reason California's policy changes have received so much attention is simply because of the scale of this market: California accounted for approximately one-third of U.S. residential solar newbuilds in recent years. NEM 3.0, which is set to take effect …. Meanwhile, the fact that the national average of residential utility rates increased almost as much in 2022 as the previous 11 years *combined* represents a powerful stimulus for distributed ….

Lithium pricing is finally cooling off. In the global lithium market, the supply response is gathering pace, and pricing has noticeably cooled off, after an epic spike ….

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