

April 19, 2021

Welcome to the TortoiseEcofin QuickTake podcast. Thank you for joining us as we provide timely updates on the market.

Hello. I am Tortoise Senior Portfolio Manager Rob Thummel with this week's TortoiseEcofin QuickTake podcast.

Over 200 million vaccines administered, one-quarter of the entire U.S. population fully vaccinated and improving mobility data are all signs the recovery moves forward despite the CDC recommendation to pause the use of Johnson & Johnson's vaccine last week.

Bloomberg reported that weekly vehicle miles driven on interstate highways were up 1% relative to the same period in 2019. For the first time since the beginning of the pandemic, people in the U.S. are driving more.

Last week, OPEC increased its 2021 world oil demand growth to almost 6 million barrels per day or 6.6% higher than 2020. Similarly, the International Energy Agency or IEA increased its 2021 oil demand growth estimate to 5.7 million barrels per day. Even more encouraging data from the IEA report was the 56 million barrel decline in global oil-related inventories in February. This is the seventh consecutive month of inventory declines. Total global oil inventories are only slightly 28 million barrels to be exact higher than the 5-year average. Lastly, U.S. oil inventories fell for third consecutive week. So, OPEC optimism and IEA inventory data propelled energy stocks higher with the Alerian Midstream Energy Index rising by almost 1% last week.

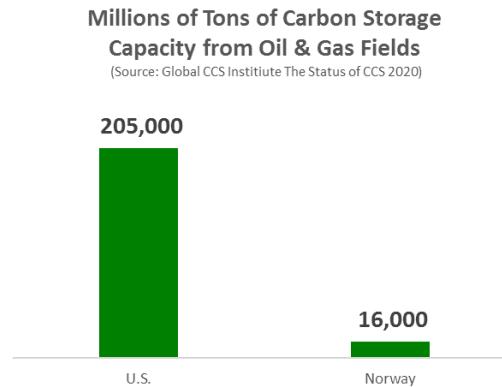
There were two significant announcements last week neither of which had to do with the JLo and ARod split which was really disappointing news in my book. As you know by now, global energy companies are embracing the energy transition. Several energy companies are taking the next step and participating in the energy transition. First, EQT Corporation, the largest natural gas producer in the U.S., not only announced its support of a federal standard on methane but EQT also raised the bar for itself and its peers by committing to independent certification of responsibly sourced natural gas. What does that mean? Responsible sourced natural gas is produced under the highest standards including a priority to reduce GHG emissions, confirmation of water stewardship, mitigation of operational risk, and maintaining understanding and keeping best interests of community as a priority. In my opinion, third-party audits and verification of these type of activities enhance the ESG profile of EQT and the energy companies that choose similar paths. A second announcement advancing energy transition came from Royal Dutch Shell. Shell released its Energy Transition Strategy. But it went further. Shell also announced that its Energy Transition Strategy will be subject to a shareholder advisory vote at its Annual Meeting on May 18. This will be the first time an energy company asks shareholders to approve an energy transition strategy. Another clear indication that energy companies are engaging with shareholders, and progressing the energy transition.

There was some good information in Shell's transition strategy as well. Shell's goal is to become a net-zero emissions energy business by 2050. This means reducing 1.7 gigatons of carbon dioxide to zero. There are interim goals including reducing net carbon by 20% by 2030, 45% by 2035, and 100% by 2050. Shell's energy transition plan to reach its goal includes eliminating flaring, shifting hydrocarbon production toward natural gas away from oil, increasing investment in renewables specifically wind and solar, expanding its electric vehicle charging infrastructure network, producing low-carbon fuels such as biofuels and hydrogen and targeting carbon capture and storage of more than 25 million tons per year by 2035.

Shell's last method of de-carbonizing is interesting to me. IEA Chief Dr. Fatih Birol recently stated "Almost half of emissions reductions needed to reach net zero by 2050 will need to come from technologies that have not reached the market today". Carbon capture is one those technologies that has the potential to accelerate the pace of de-carbonization. The U.S. has an opportunity to be a global leader in carbon capture. Carbon Capture and Storage or CCS involves capturing carbon dioxide, transporting it to a storage site, and ultimately depositing carbon dioxide where it will not enter the atmosphere. To achieve cost-effective net-zero emissions, CCS investment is needed. BofA estimates cumulative investment in carbon capture could be greater than \$1 trillion by 2050. CCS can be used to capture carbon dioxide from industrial facilities that use a lot of energy to produce iron, steel and cement as well as from power generation. Currently, approximately 40 million tons of carbon are captured today. The Global CCS Institute forecasts around 5,600 million tons of carbon will be captured per year by 2050 that is a 140x increase over current levels. One of the keys to CCS is

transportation and storage of captured carbon. This is where the U.S. has a distinct advantage. Typically, carbon dioxide is stored in oil and gas fields or saline formations. As illustrated in Figure 1 below, the U.S. has the largest potential carbon storage capacity based on estimates provided by the Global CCS Institute of any country in the world. Another important component for carbon capture is transportation. The extensive pipeline network in the U.S. is also a competitive advantage that decreases the costs of carbon storage. We expect adoption of carbon capture technology to accelerate and several energy companies including midstream will play a pivotal role as this technology advances.

Figure 1



Those are the highlights from last week. Thanks for listening. We will talk to you next week.

Thank you for joining us. And stay tuned for our next episode. Have topics you want covered or other feedback to share? Write us at info@tortoiseecofin.com.

The **Alerian Midstream Energy Index**[®] is a broad-based composite of North American energy infrastructure. The capped, float-adjusted, capitalization-weighted index, whose constituents earn the majority of their cash flow from midstream activities involving energy commodities, is disseminated real-time on a price-return basis (AMNA) and on a total-return basis (AMNAX).

Disclaimer: *Nothing contained in this communication constitutes tax, legal, or investment advice. Investors must consult their tax advisor or legal counsel for advice and information concerning their particular situation. This podcast contains certain statements that may include "forward-looking statements." All statements, other than statements of historical fact, included herein are "forward-looking statements." Although we believe that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect. Actual events could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors. You should not place undue reliance on these forward-looking statements. This podcast reflects our views and opinions as of the date herein, which are subject to change at any time based on market and other conditions. We disclaim any responsibility to update these views. These views should not be relied on as investment advice or an indication of trading intention. Discussion or analysis of any specific company-related news or investment sectors are meant primarily as a result of recent newsworthy events surrounding those companies or by way of providing updates on certain sectors of the market. Through our family of registered investment advisers, we provide investment advice to related funds and others that includes investment into those sectors or companies discussed in these podcasts. As a result, we stand to beneficially profit from any rise in value from many of the companies mentioned herein including companies within the investment sectors broadly discussed.*