TortoiseEcofin QuickTake Podcast

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

Hello I am Matt Sallee, Energy Portfolio Manager at Tortoise.

Midstream had another good run last week supported by more positive macro data. First, the IEA reported the global crude oil surplus has drained over recent quarters from the combination of a demand recovery and restrained supply. Storage has dropped from nearly 300 million excess barrels all the way back to the average inventory level from the last 5 years. Speaking of demand, the TSA screenings hit another 1 year high at 1.7M passengers on May 9th. That compares to the low right about a year ago of 163,000 and an average of 800,000 over the last year.

Just to take it up to a higher level, simply put the economy seems to be booming. The massive stimulus, high savings rate, and pent up demand are driving red hot inflation as shown in April's CPI/PPI readings led by things like used car prices +10%, hotels +9%. It's even showing up in wages; McDonald's announced a 10% wage hike and Amazon is hiring 75,000 workers and offering a $1,000 signing bonus in some cases. To understand why companies are taking these measures, just look at the JOLTS report last week reporting over 8M job openings, the highest level on record by far. It's so extreme that several states are even opting out of federal unemployment benefits programs in June and July.

Moving on, I spent some time last week participating in the Citi energy conference and the company refrain was best described by Chevron's mantra, "higher returns – lower carbon". Despite greatly improved commodity prices, public companies are keeping capital plans flat and instead generating higher returns and more free cash flow which is used to fortify balance sheets and increase the return of capital to equity holders. But I thought the most interesting presentation was that of Ernest Moniz the 13th Secretary of Energy and current CEO of Energy Futures Initiative. He is very focused on delivering energy stability in the face of increasing extreme weather events. Also along these lines he believes the US is "woefully" unprepared regarding cybersecurity for energy infrastructure but more on that in a minute. Regarding the energy evolution, he broke out the future into 3 periods, the first of which is now to 2030. During this period the drive will be rolling out existing technologies to reduce carbon output from electric generation. Here the recipe is simple: replace coal with renewables and gas but also adding carbon capture & sequestration, to thermal generation. In the next phase from 2030 to 2050 he sees the need to create long term power storage to balance renewable supply that's necessary in meeting the Presidents goals for wind and solar penetration. As he sees it, the best line of sight today is blue hydrogen from natural gas + CCUS where America is uniquely positioned due natural gas prices at a fraction of other parts of the World. Further there is a need for reduced cost for green hydrogen and "supercharged" innovation related to nuclear power and direct air carbon capture advancement. Beyond 2050 his concepts start to get a little more difficult for me to follow including genetically modified plants to generate biofuels which combined with CCUS during the process is carbon negative. On the jobs front, he argues for an acceleration of energy transition to stimulate jobs growth but doing so in a way that doesn't dislocate jobs in specific communities in the energy sector now. Figuring this part out will remove a key headwind to energy transition. Specifically we need to localize the supply chain not just to create jobs but to deal with the logistical challenges of the massive renewable roll-out. Current oil and gas workers have the skill set to fill these labor needs so it seems we can meet this challenge.

Speaking of carbon capture, on May 11th Netherlands pledged $2.6B to back a CCUS project at the Port of Rotterdam with several companies including Shell and Exxon. This project can capture an estimated 2.5 million metric tons of C02 which is over 10% of the emissions from the port or 1.5% of the country's total emissions. The project will build a network to capture emissions from refineries and industrial plants at the port and compress and store it in depleted North Sea oil fields. This project is estimated to cost about 80 euros per ton so the subsidy will make up the 25 euro/ton difference between the cost and the current market price of C02 in the EU. This seems pretty reasonable to make a big dent in emissions and with additional investment, the cost will likely come down to make the technology even more competitive.

Now back to cyber security. In Brian Kessens' podcast from the prior week he talked about the Colonial Pipeline ransomware attack. Late Wednesday afternoon, and after paying a $5M ransom (in cryptocurrency no less), the company announced they were bringing the pipeline back in to operation and supply will ramp over the next few days. The pipeline being out of service was a big deal for those on the East Coast where fuel shortages were starting to occur in several markets including some military bases. It was such a big deal that the White House is getting daily briefings on the situation and launched an "All of Government' effort to ensure access to "critical energy supply chains". I applaud the focus but at the same time I can't help to notice the ironic juxtaposition with the situation of Enbridge Line 5 where Michigan Governor, Gretchen Whitmer, has ordered the pipeline, which delivers 55% of the state's total fuel supply, to shut down.

I'll leave it there for now, thanks for listening.

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.

Carbon capture, utilization and storage (CCUS), also referred to as carbon capture, utilization and sequestration, is a process that captures carbon dioxide emissions from sources like coal-fired power plants and either reuses or stores it so it will not enter the atmosphere. Carbon dioxide storage in geologic formations includes oil and gas reservoirs, unmineable coal seams and deep saline reservoirs -- structures that have stored crude oil, natural gas, brine and carbon dioxide over millions of years.

The S&P 500® Index is a market-value weighted index of equity securities.

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The **PCE inflation rate** is the Personal Consumption Expenditures Price Index. It measures price changes for household goods and services. Increases in the PCEPI warn of inflation while decreases indicate deflation.

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Producers = Tortoise North American Oil & Gas Producers Index℠
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