

Midstream: We're often asked (by clients, as well as our spouses) why we don't significantly invest in renewables – aren't they another form of infrastructure? We addressed some of the challenges associated with the renewable/battery transition in our 2017 white paper. But financially, pipelines and renewables couldn't be more different. We see *traditional* midstream delivering market-leading free cash flow (FCF) and paying off debt, as the current renewable boom repeats – and amplifies – many of the midstream sector's past mistakes.

Natural Resources: OPEC's July announcement to increase production added an unprecedented twist – a clear and explicit plan to continue increasing monthly production through 2022. While many viewed increased OPEC production as negative for oil markets, measured increases provide long sought-after certainty while maintaining market deficits for multiple quarters into the future.

Check out Recurrent's video series, "Research in 99 Seconds," as well as our research white papers, here.

MLP & Infrastructure

Performance review

During the month of July 2021, the Recurrent MLP & Infrastructure Strategy generated net returns of -6.19%, outperforming the -6.31% return of the Alerian MLP Index (AMZ) by +0.12%. Since the strategy's July 2017 inception, Recurrent's MLP & Infrastructure Strategy has outperformed the AMZ by +3.15% (annualized, net of fees). Please see the performance section at bottom for more detail.

With strong YTD results, midstream's debt leverage approaches 15-year lows; renewable leverage is heading the other way

We've spent many of our monthly letters discussing the midstream sector's ongoing recovery from the debt-fueled growth boom of 2005-15, when midstream companies used debt to pursue seemingly endless shale-driven growth opportunities.

As we now know, a decade of midstream asset growth – despite being largely backstopped by contracted cash flows from largely investment grade counterparties – eventually put equityholders at risk as overly indebted balance sheets could only be repaired via dividend cuts and reduced capex. The good news for midstream: balance sheet repair is largely over, and lower growth leaves excess free cash flow (FCF) available for debt reduction, higher dividends and buybacks.



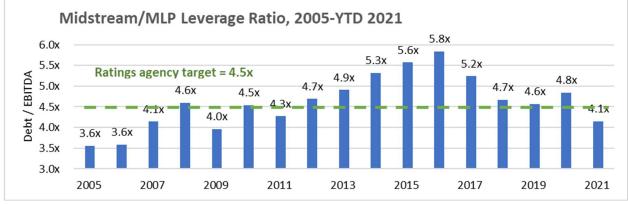


Exhibit 1 – Midstream debt leverage is below agency targets, approaching 15-year lows

Source: Bloomberg, SEC company filings, Recurrent research.

As midstream capital discipline takes hold and frees up cash flow for shareholders, the reverse is happening in the renewables sector. Cheap capital, forgiving equity/debt markets are weakening capital discipline, driving renewable companies into FCF-negative funding plans, and driving debt leverage much higher, as shown below:

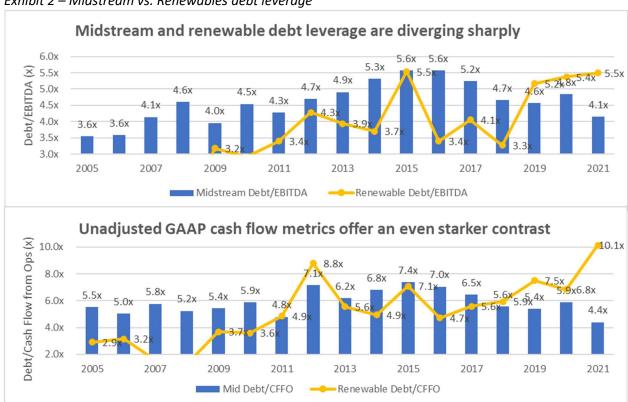


Exhibit 2 – Midstream vs. Renewables debt leverage

Source: Bloomberg, SEC company filings, Recurrent research.

Note: Solar/Wind includes NEP, BEP, TERP, VESTAS, ORSTED, AY. Cleantech includes PLUG, BDLP, FCEL, ENPH, CLNE, SEDG, RUN, NOVA, FSLR.



Renewables today are reminiscent of the "bad old days" of midstream debt, circa 2015

What is driving the rapid increase in renewable leverage?

First, it is the availability of capital – as we saw with midstream a decade ago, if companies are offered cheap debt with forgiving terms, they will generally avail themselves of that capital. Second, in another trend reminiscent of midstream 10 years ago, intense competition for growth is driving down returns on incremental capital deployed.

Below, we can see evidence that capital efficiency of renewables is headed the wrong way, as capital efficiency of midstream increases. Prior to 2018, both sectors experienced comparable debt efficiency:

- From 2010 to 2018, midstream companies were still generally in "growth mode", with aggressive debt deployment (\$126bn deployed vs. \$29bn of EBITDA growth generated, making for a leverage ratio of >4x ratio on debt deployed (126/29 = 4.4x).
- Renewables were not so different in this 2010-18 time period the sector deployed \$21bn of debt generating almost \$6bn of EBITDA growth. The result was <4x leverage (21/6=3.5x).

Since 2018, the debt deployment of the two sectors has diverged significantly:

- Midstream has done more with less capital: \$14bn of incremental debt since 2018 has driven \$8bn of annualized EBITDA growth, including \$10bn of debt <u>reduction</u> in YTD 2021.
- Since 2018, renewable debt and equity raises have accelerated given 2020's outperformance. Cheap capital has massively reduced capital efficiency, with renewable companies taking on \$25bn since 2018 with EBITDA hardly budging.



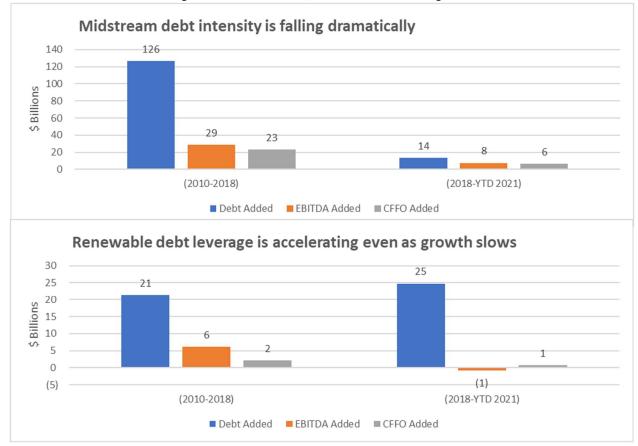


Exhibit 3 – Midstream is doing more with less debt, renewables are doing less with more debt

Source: Bloomberg, SEC company filings, Recurrent research.

Note: Solar/Wind includes NEP, BEP, TERP, VESTAS, ORSTED, AY. Cleantech includes PLUG, BDLP, FCEL, ENPH, CLNE, SEDG, RUN, NOVA, FSLR.

In conclusion – the midstream sector has just emerged from a brutal 5-year, debt-driven downturn – with excess debt incurred thanks to a mistaken belief that growth goes on forever and capital markets never close. Today, we see midstream learning from its mistakes, while the renewables sector chases its own mirage of endless growth, financed with more debt than before.

Natural Resources

Performance Review

During the month of July 2021, the Recurrent Natural Resources strategy fell by -4.69%, outperforming the S&P North American Natural Resources Index's -5.27% by +0.58%. Portfolio overweights in the Steel, aluminum and copper sectors benefitted relative performance, while portfolio underweights in the gold sector detracted from relative performance.

OPEC's recent agreement to steadily increase production, if maintained through YE2022, provides the most constructive oil supply environment in years

- Despite the impact of COVID, global oil markets are currently undersupplied by 2-3 million barrels/day
- COVID has reduced global oil demand by roughly 2-4 million barrels/day



- Between now and YE 2022, OPEC outlined a plan to increase production by 0.4 million barrels per day on a monthly basis. As a result:
 - The market will remain undersupplied through YE 2021, even if COVID continues to reduce oil demand
 - OPEC is providing an 18-month "glidepath" through YE 2022 back to full production as the demand impacts of COVID diminish
 - After 2022, the expectation is that OPEC will be produce near 100% of capacity, removing the "OPEC overhang" from the oil market

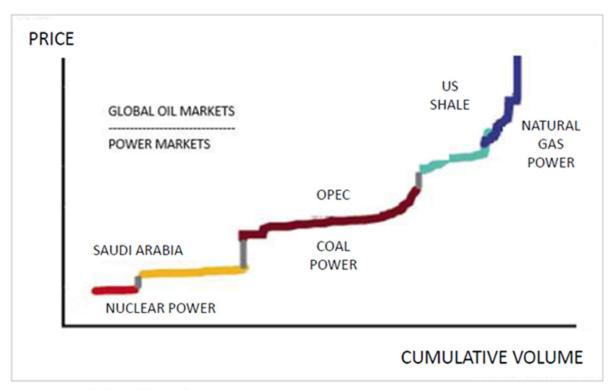
The plan has two main purposes

- Maintain near-term supply deficits, while accommodating potential flare-ups in COVID cases and supporting oil prices, and
- Provide clear, intermediate term signals of production increases. With low cost "baseload" barrels returning to the market over the coming months, higher-cost producers (primarily US shale) are dissuaded from growing production to compete with low-cost capacity. Instead, high-cost producers will maintain flattish production and focus on optimizing returns/cash flow. OPEC generally has not provided this level of intermediate term planning and transparency which should bolster equity valuations

Importantly, OPEC is also able to use the disruption of COVID to put global oil markets on a more sustainable footing over the longer term. Prior to COVID, OPEC had fallen into a cycle of frequent production cuts, artificially supporting price and allowing high-cost US shale barrels to fill the "gap" created by low-cost OPEC barrels removed from the market. These cuts were beneficial for oil prices in the short term, but this strategy ultimately created an untenable market structure. Shale production, with a cost structure of ~\$40-70/bbl, grew by 5 million barrels per day while low-cost OPEC production was withdrawn from the markets.

As a result of the "dispatch curve" framework, we have long viewed normalized oil prices ranging between \$45-65, as defined by the cost structure for US shale producers to maintain production. With the market currently undersupplied and financial markets eliciting capital discipline from US producers, the high end of the range (if not above) is likely for the duration of this OPEC agreement. Lastly, as outlined in the "dispatch curve" framework from Recurrent's 2017 white paper, low-cost barrels should provide "baseload" supply before higher-cost barrels are allowed to produce. This weekend's OPEC agreement charts a course to return to the dispatch curve framework. "Baseload" producers, which produce barrels at relatively low marginal cost and with low inherent production declines, like the Canadian oil sands, should be a noteworthy beneficiary of this OPEC agreement.





Source: Prof Liza Moyer, University of Chicago, Recurrent research

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