Longreach Energy Holdings LLC

Monthly Report

April 2022

FIRM INFORMATION

Investment Manager
Longreach Alternatives Ltd
ABN 25 082 852 364
AFSL 246747

Sub-Advisor
Longreach Energy Holdings LLC
Delaware registered #565928

KEY INVESTMENT PERSONNEL

Andrew Sinclair
Principal – Commercial Director

Thomas Wagenhofer
Principal – Technical Director

Market and Macro Industry Commentary

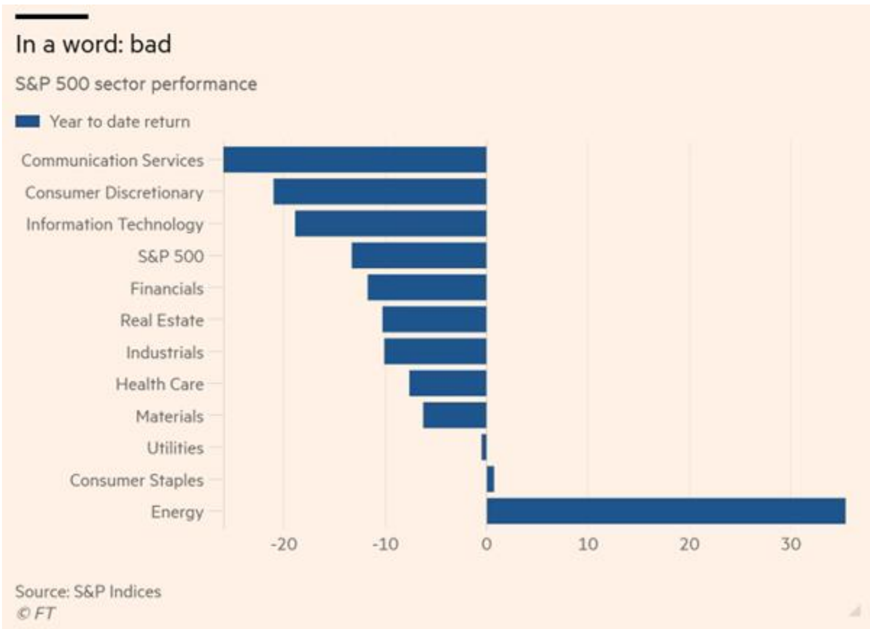
General Market Commentary

US Henry Hub gas prices rose very strongly in April, the prompt contract began the month at $5.12/mmbtu and calendar 2022 at $5.66/mmbtu. At close of business on 29 April the prompt had increased to $7.24/mmbtu and calendar 2022 at $7.389/mmbtu. Supply and demand fundamentals (discussed in Gas Market commentary below) suggest this rally has some way to run.

Oil prices also rose, with the prompt opening April at $93.44/bbl and closing at $104.69/bbl. The Calendar 2022 price was up from $93.46/bbl to $97.81/bbl.

The energy sector has delivered strong equity returns in the year to end 30 April as inflation fears take hold and equity investors become defensive, holding staples and utilities flat and selling sectors that have done best in recent years, e.g. tech (Figure 1).

Figure 1: S&P 500 Sector Performance 1 January to 29 April 2022 (Source: FT)



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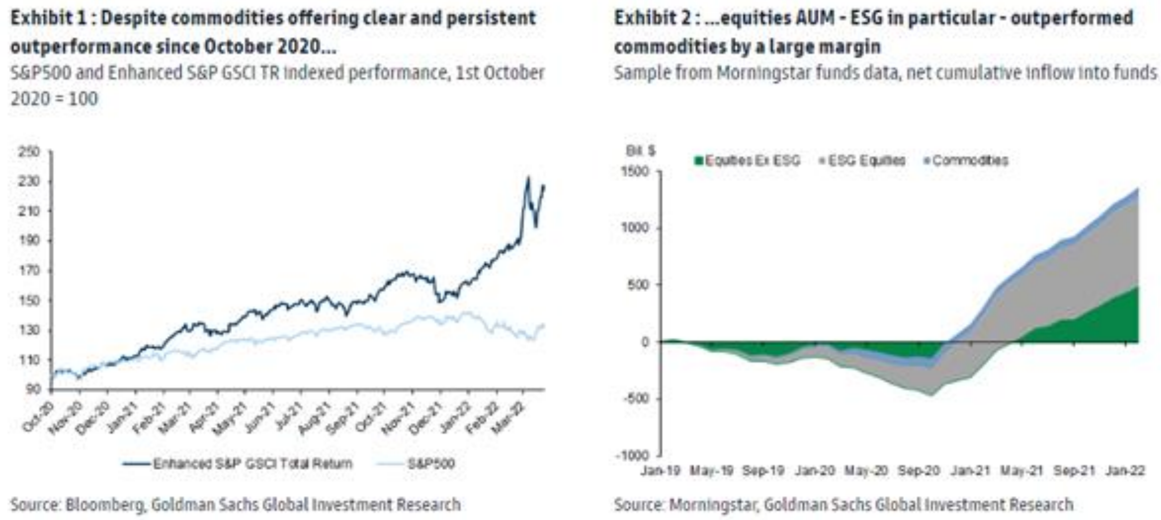
In October 2020 Goldman Sachs research launched a call for a new commodities super cycle. Since then, the enhanced S&P Goldman Sachs Commodity Index (S&P GSCI) is up 125% (vs 31% for S&P 500) (LHS Figure 2). Yet commodity investment in the Bloomberg Commodity Index (BCOMM) only rose 7% on a price-adjusted basis, while net equity inflows have been dwarfed by other sectors, particularly ESG (RHS Figure 2).

Figure 2: S&P Returns and Fund Inflows (Source: Bloomberg, Morningstar via GS)



Today, we are starting to feel the consequences of a capital starved commodity market, with no inventory buffer against large shocks of the Russia-Ukraine war, China's COVID wave and the largest Strategic Petroleum Reserve release in history. These consequences range from a growing volatility trap in many commodities' futures markets to a sharp rise in physical inflation and now even stagflation risk across Europe.

The financial constraints in physical markets today are no longer driven by low returns. Instead, they are cumulative effects of years of falling capacity to channel capital into the sector – from asset managers losing commodities as an investible asset class to banks losing entire physical trade finance divisions. These constraints have exposed a deep mismatch between financial and physical risk, Goldman notes "*while the market may be long on conviction, financial constraints make it short on position, and those who can maintain a long position likely facing outsized returns commensurate with the higher volatility.*"

A comparison with the 2000's illustrates the capital challenge. In the commodities bull market of the 2000's, there were circa $75b worth of inflows when commodities rose 110% from 2006 to 2008. Despite the outstanding recent returns, price-adjusted commodity exposure now sits circa $22b below its January 2020 level. Goldman again stated, "*in our view, the entire commodities complex remains a value buy, continuing to price in a world with easily available supply capacity and elastic demand*."

The latest Baker Hughes rig count data follows. In April US total rigs increased by 32 from 673 to 705. Oil rigs increased by 24 from 533 to 557 while gas rigs increased by 8 from 138 to 146.

Baker Hughes rig count — Baker Hughes

Rotary Rig Count
5/6/22

Location	Week	+/-	Week Ago	+/-	Year Ago
Land	688	4	684	254	434
Inland Waters	0	0	0	-1	1
Offshore	17	3	14	4	13
United States Total	705	7	698	257	448
Gulf Of Mexico	16	3	13	3	13
Canada	91	-4	95	36	55
North America	796	3	793	293	503
U.S. Breakout Information	**This Week**	**+/-**	**Last Week**	**+/-**	**Year Ago**
Oil	557	5	552	213	344
Gas	146	2	144	43	103
Miscellaneous	2	0	2	1	1
Directional	34	4	30	11	23
Horizontal	646	3	643	238	408
Vertical	25	0	25	8	17

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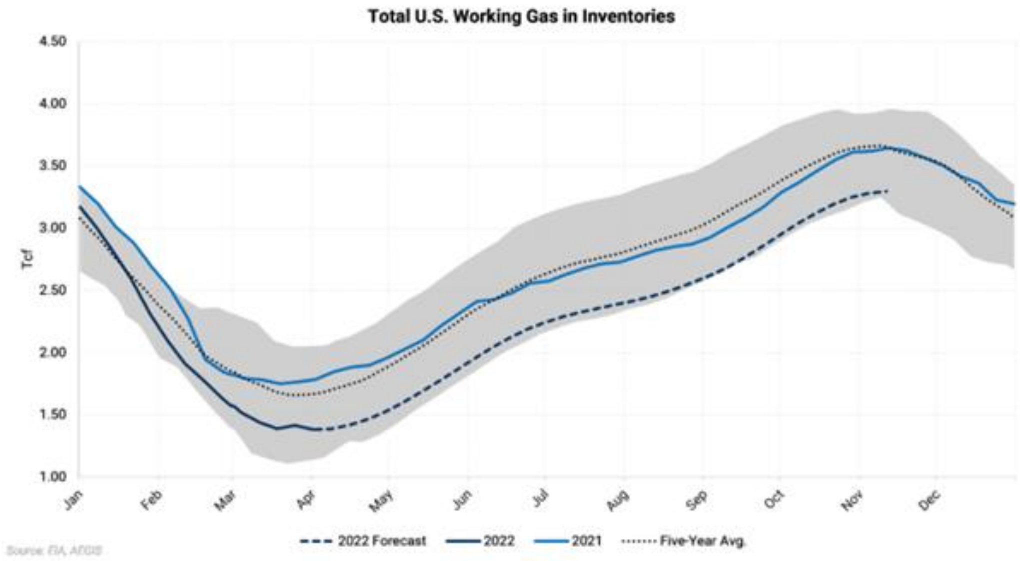
Monthly Report

Gas Market

The strong rise in US natural gas prices is primarily driven by tighter US domestic supply and demand fundamentals however the steady increase in US LNG export volumes, and likely increased hedging by the buyers of US LNG, has also contributed.

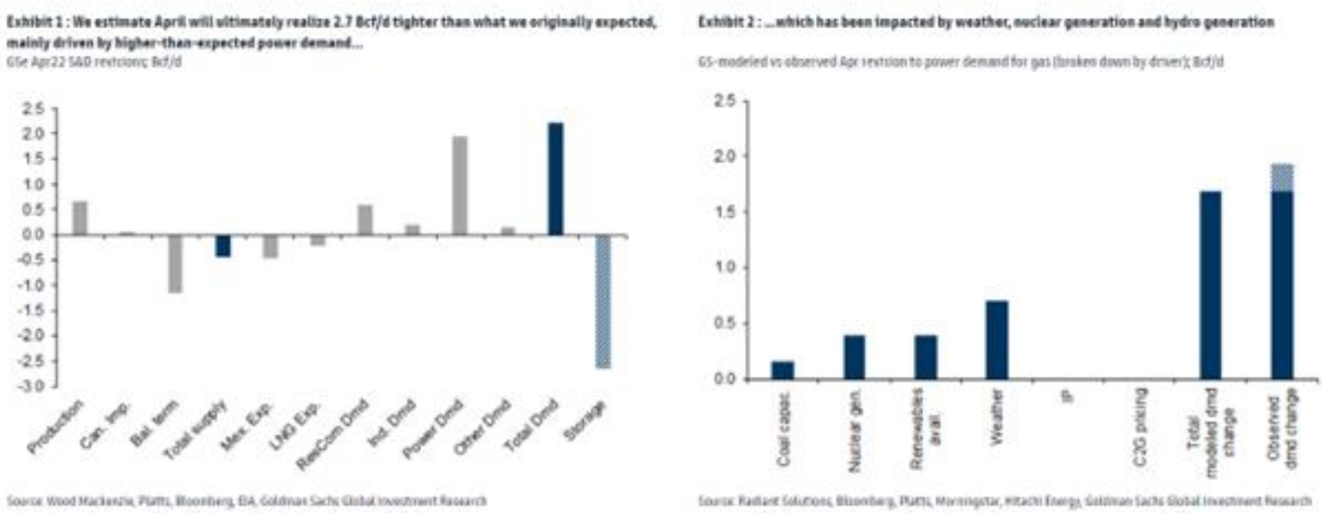
Weekly storage reports indicate that the US gas market is undersupplied and that gas inventories will likely struggle to build up to normal levels by the next northern winter. The deficit to the five-year average is expanding nearly every week (Figure 3).

Figure 3: Total US Working Gas Inventories (Source: EIA, Aegis)



Goldman estimates that April supply/demand balance will be 2.7bcf/d tighter than they had originally expected, this is driven by higher power demand (LHS Figure 4). The increased demand has been caused by colder weather and lower nuclear and hydro generation (RHS Figure 4).

Figure 4: April Gas Supply/Demand and Power Demand Detail (Source: various via GS)



Aegis notes that the result of the supply/demand imbalance "*has been that gas prices have had their hottest start in 2022 than any year on record. That run might not be done*".

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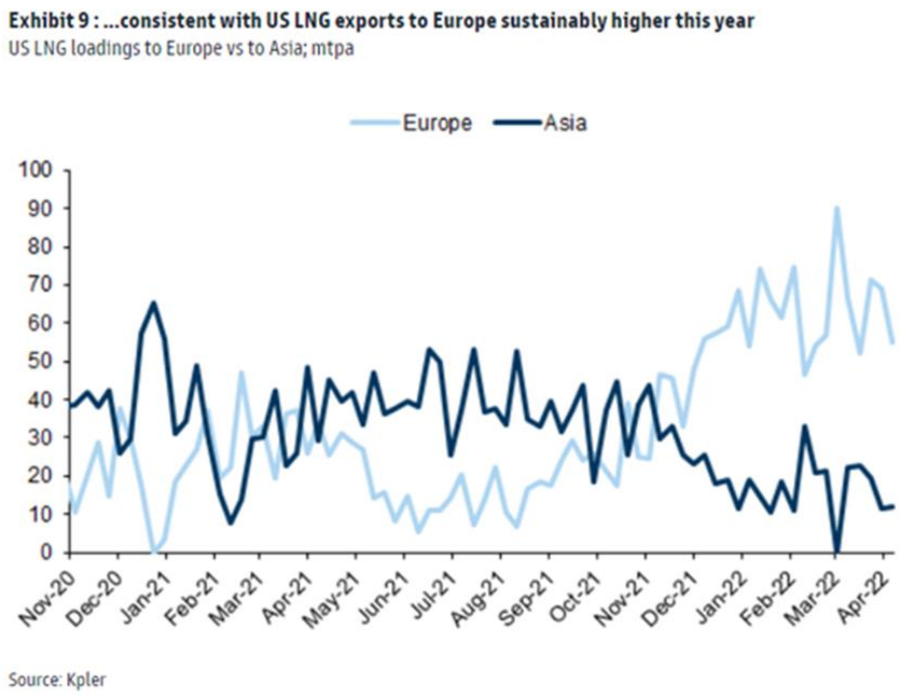
Goldman believes that an additional contributor to the strong price rises has been hedging demand from buyers of US LNG. This is in addition to the expected typical increase in speculative long positions (LHS Figure 5). Evidence of this hedging is found in the tightening of the forward spread between European TTF and US Henry Hub (RHS Figure 5)

Figure 5: Henry Hub Contracts and TTF/HH Forward Spread (Source: various via GS)

Hedging demand from European LNG buyers is consistent with increased US LNG exports to Europe (Figure 6).

Figure 6: US LNG Loading to Europe vs Asia (Source: Kpler via GS)



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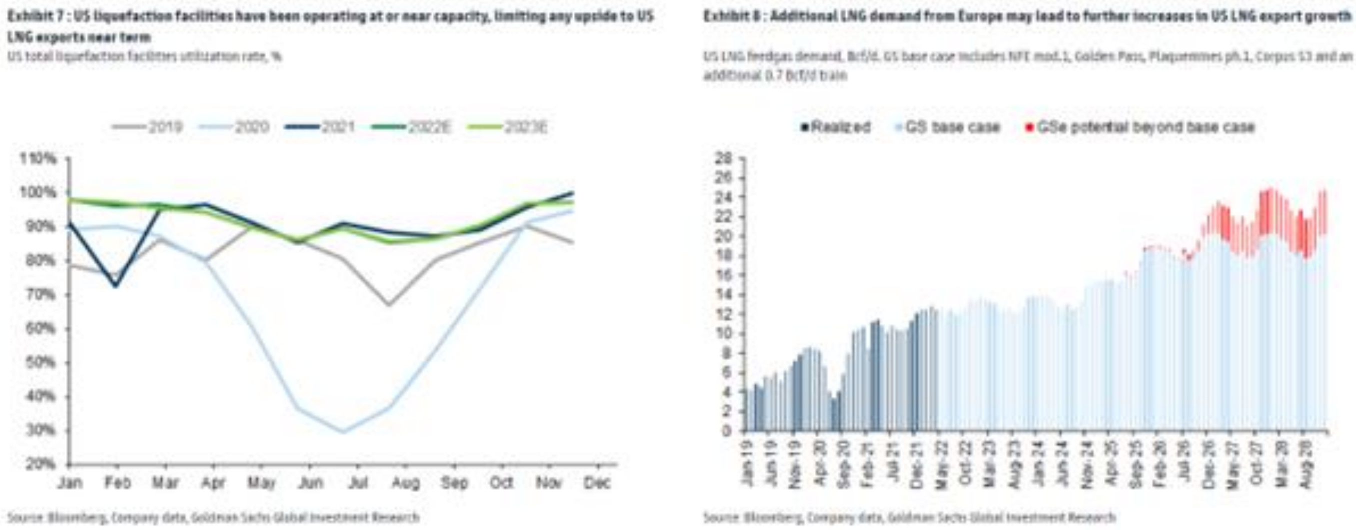
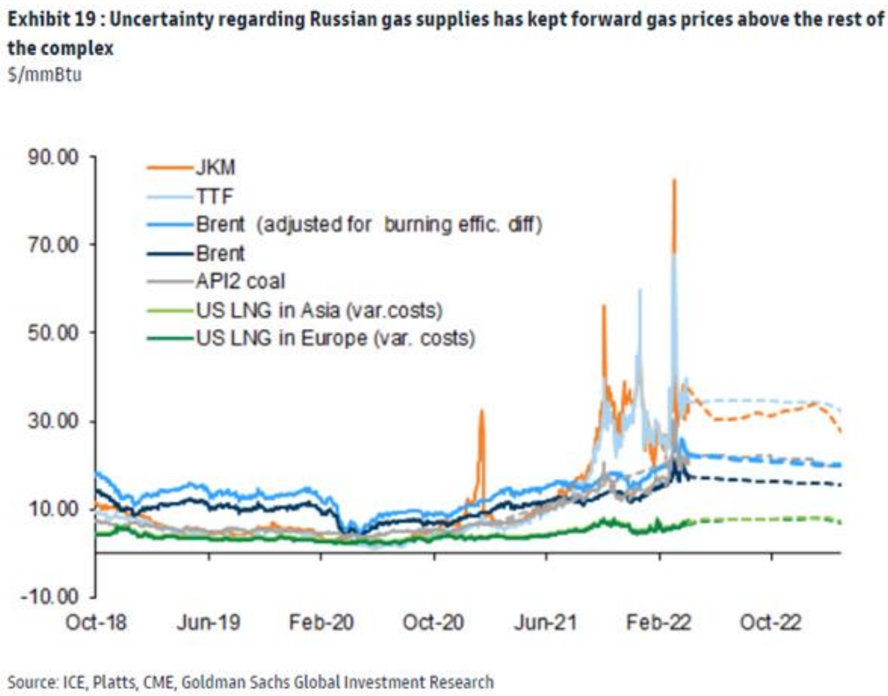
US LNG facilities have been operating at or near capacity (LHS Figure 7). This limits upside to US LNG exports in the near term but may lead to US LNG export growth from new facilities (RHS Figure 7).

Figure 7: US LNG Utilisation Rate and Projected Feed-gas Demand vs Asia (Source: various via GS)



Forward gas prices in Europe and Asia remain significantly above the rest of the energy complex (Figure 8).

Figure 8: Comparative Energy Prices $/mmbtu (Source: various vis GS)



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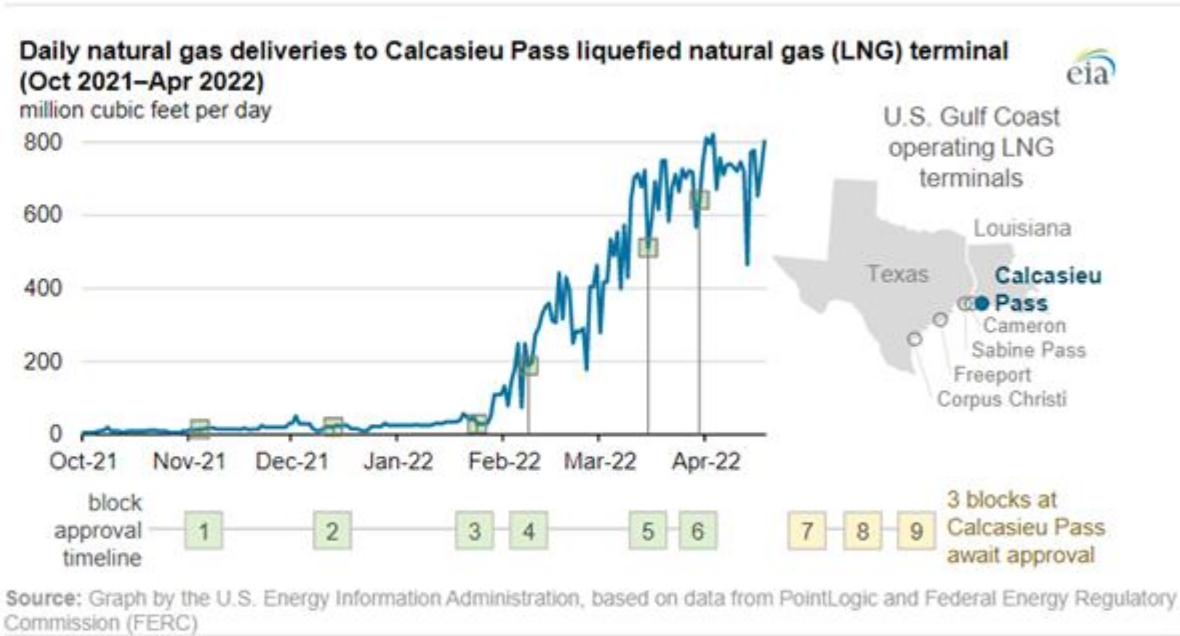
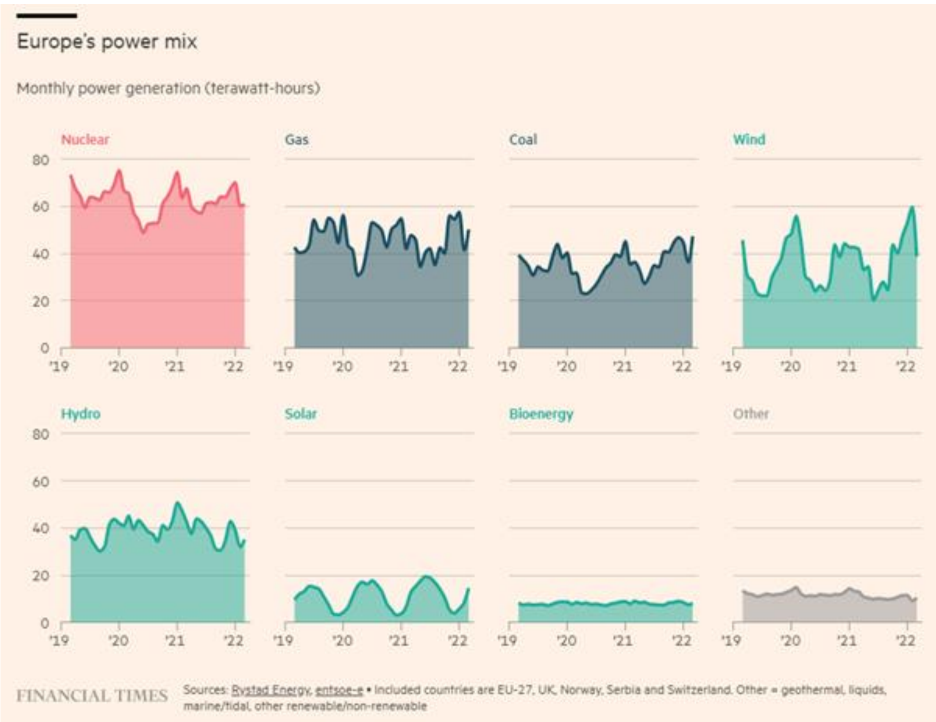
Compelling economics were no doubt a factor in the rapid completion of the new Calcasieu Pass LNG export terminal in Louisiana (Figure 9). Calcasieu Pass loaded its first LNG cargo on 1 March, 30 months after its final investment decision. This was the shortest amount of time to completion of all the LNG export projects in the United States.

Figure 9: Daily Gas Deliveries to Calcasieu Pass LNG (Source: FERC, EIA)



With the Russian supply dislocation and accelerating integration of global natural gas markets, a trend long anticipated by Giant Capital, it is worth reviewing European gas markets. Over the last four years gas has been second only to nuclear in European monthly power generation (Figure 10).

Figure 10: Monthly European Power Generation (Source: various via FT)



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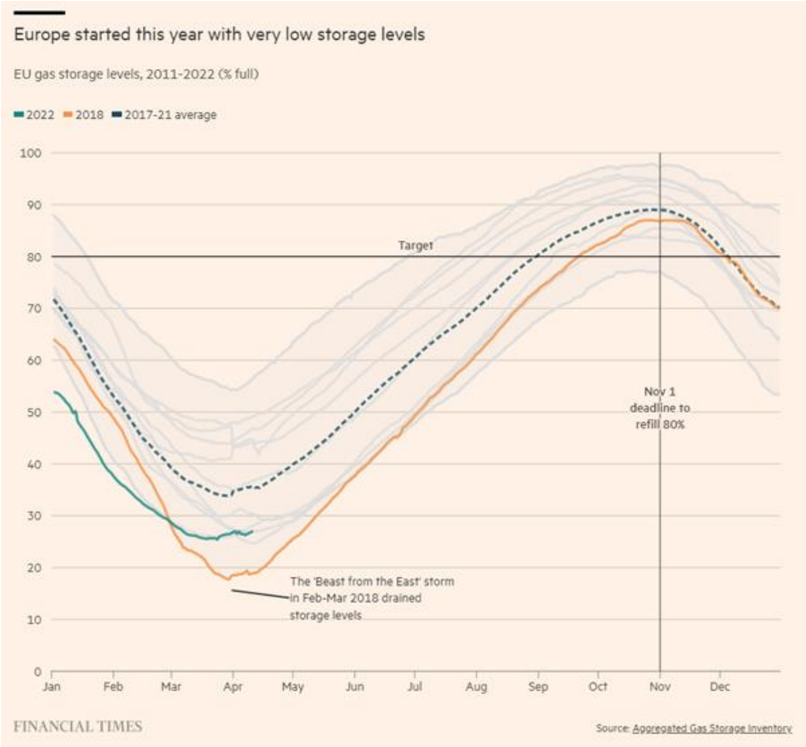
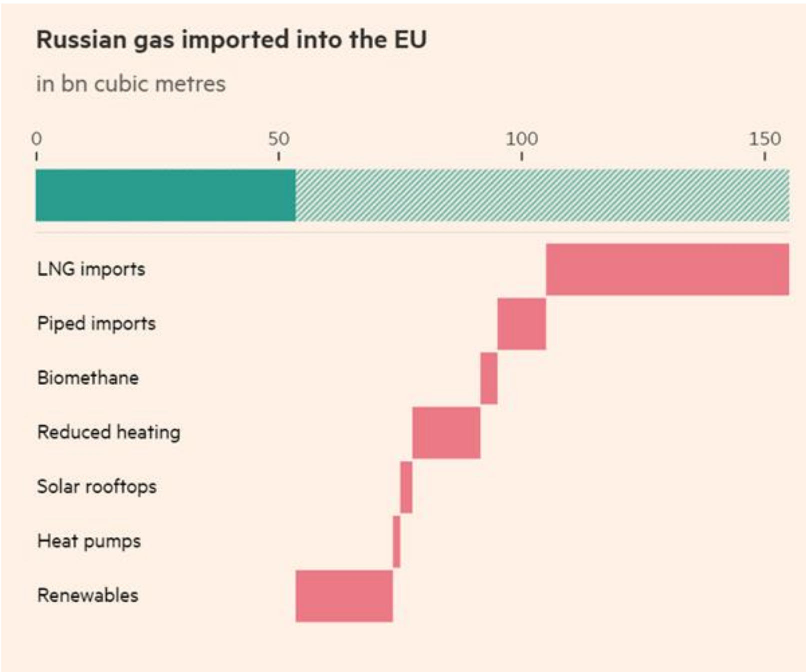
High demand and reduced supply, specifically from Russia and pre-dating the Ukraine invasion, meant that Europe started 2022 with very low gas storage levels (Figure 11).

Figure 11: EU Gas Storage Levels (Source: FT)



In 2021, the EU imported 155 bn cubic meters (5.4 trillion cubic feet) of Russian gas. The European Commission wants to cut this amount by two-thirds by the end of this year through boosting supply from other sources and reducing the demand for gas. The planned targets include increasing LNG imports by 50 bn cubic metres (1.7 tcf) (Figure 12).

Figure 12: Reducing EU Imports of Russian Gas (Source: FT)



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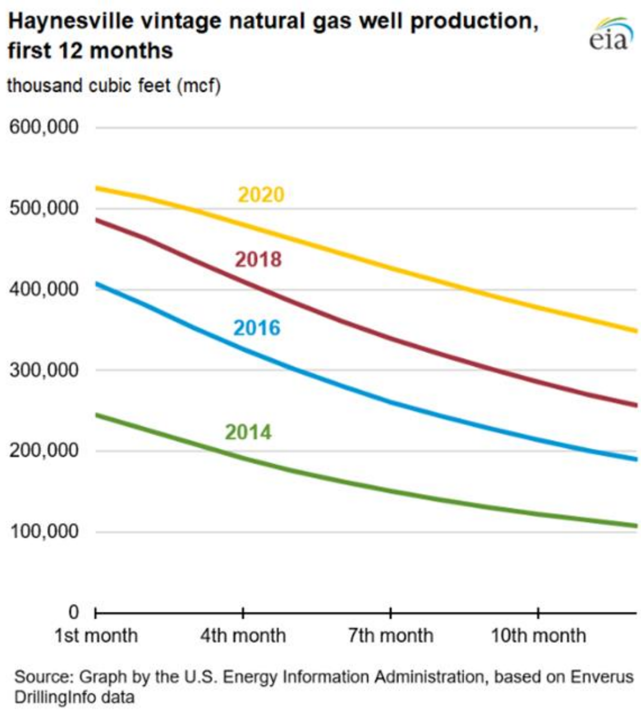
In the week to 4 May, Bloomberg reports that swap prices for LNG cargoes in East Asia averaged $23.93/mmbtu. At the Title Transfer Facility (TTF) in the Netherlands, the day-ahead prices averaged $30.84/mmbtu. This is the third week in a row that TTF has averaged above East Asia.

Historically, the natural gas prices in East Asia averaged above those in Europe. In the same week last year (week ending 5 May 2021), the prices in East Asia and at the TTF were $8.83/mmbtu and $8.35/mmbtu, respectively.

In the field, operators continue to deliver higher production from new wells. Illustrated by production from new wells in the Haynesville formation of north Louisiana and eastern Texas (Figure 13), wells drilled today have almost twice the gas recovery of wells in 2014.

Figure 13: Haynesville Vintage Nat Gas Well Production (Source: EIA)



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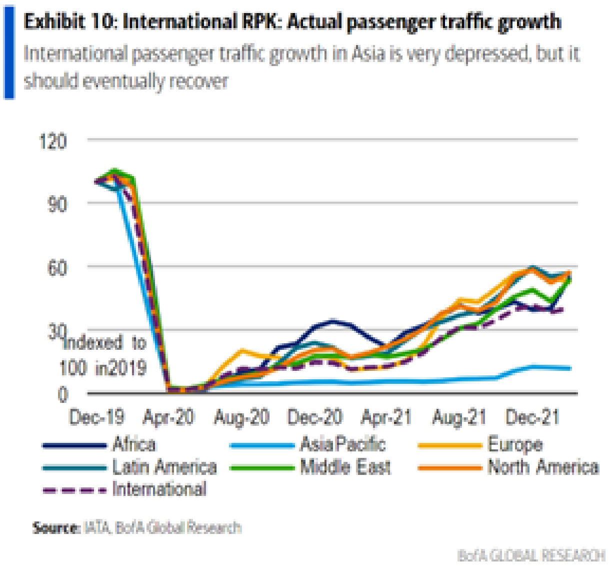
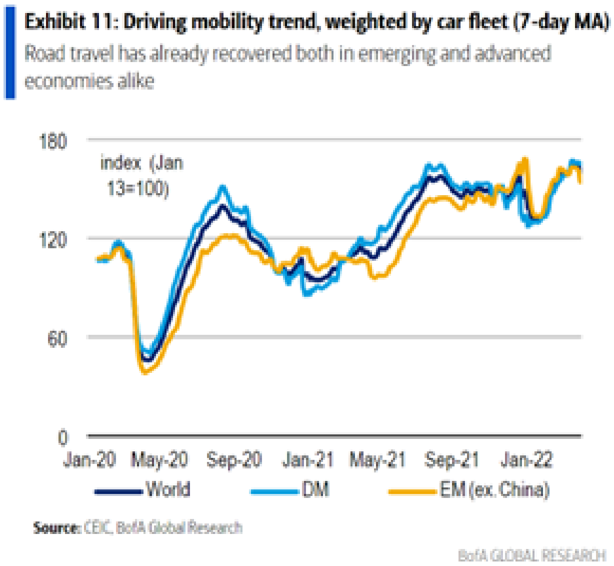
Oil Market

International air travel continues to recover although Asia is very depressed as China maintains tight restrictions in pursuit of zero Covid (LHS Figure 14). Road travel has already recovered in both emerging and advanced economies (RHS Figure 14).

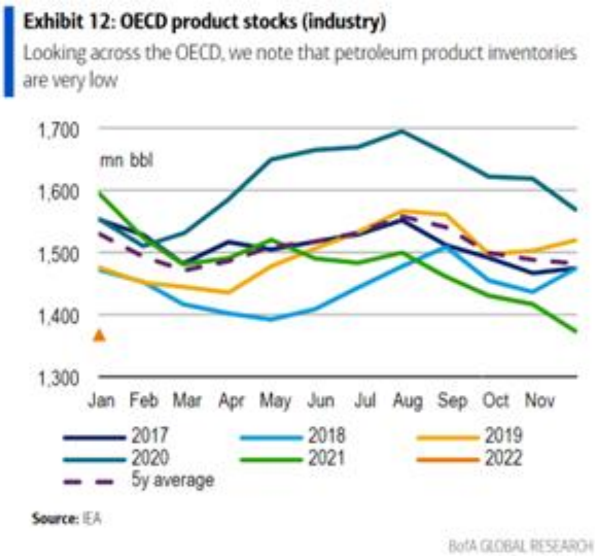
Figure 14: International Passenger Traffic and Driving Mobility (Source: various via BofA)

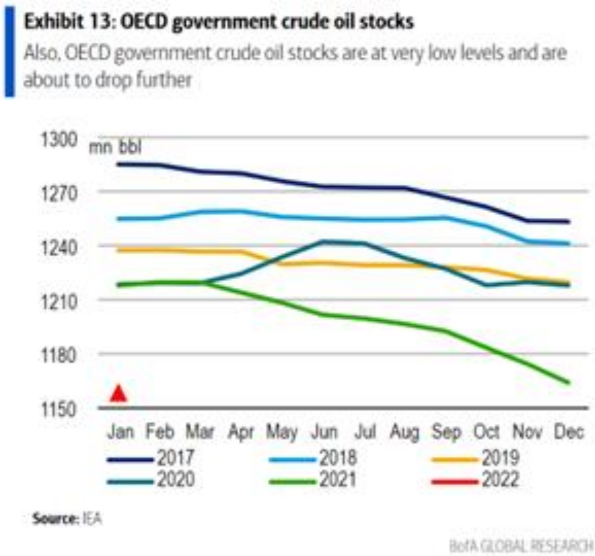




Similar to the situation with natural gas, across the OECD petroleum product inventories are very low (LHS Figure 15). This is also true of crude oil stocks, and they are about to drop further as Russian supply is reduced (RHS Figure 15).

Figure 15: OECD Product and Crude Oil Stocks (Source: EIA via BofA)





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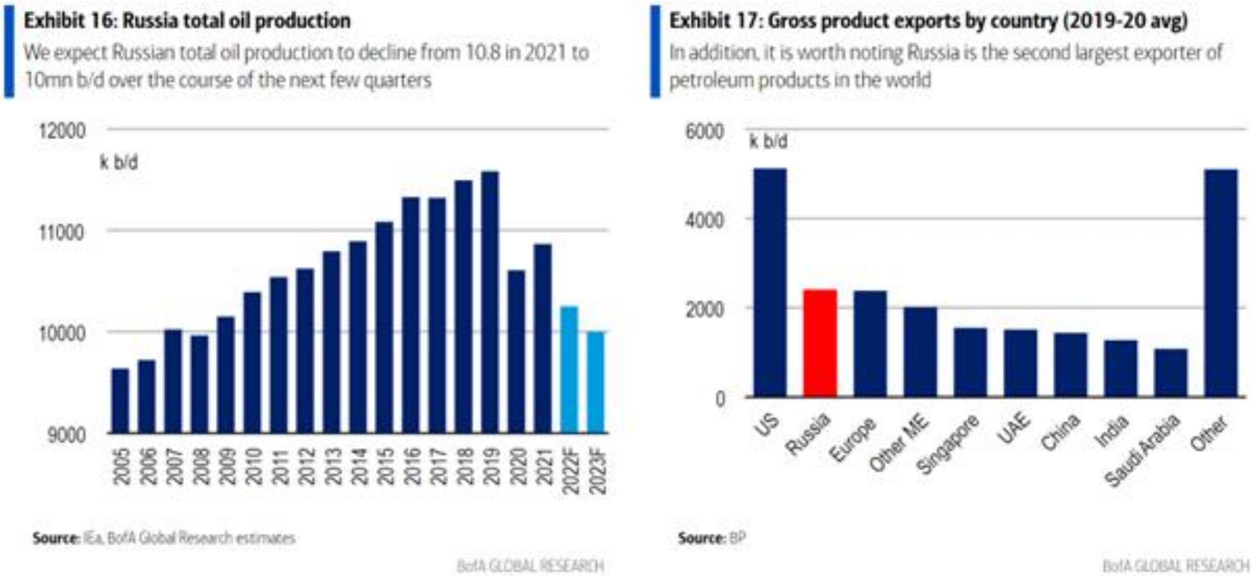
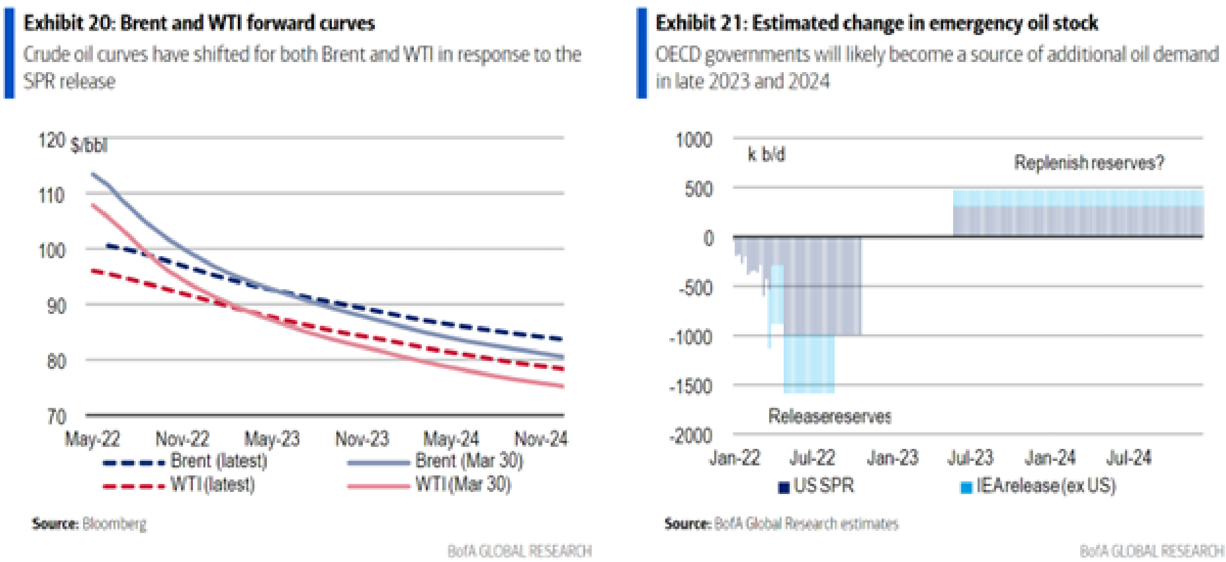
BofA expects Russian total oil production to decline from 10.8 mmbbld in 2021 to 10 mmbbld over the next few quarters (LHS Figure 16). It is worth noting that Russia is the second largest exporter of petroleum products in the world (RHS Figure 16).

Figure 16: Russian Oil Production and Gross Product Exports by Country (Source: IEA, BP via BofA)



Crude oil forward curves have moved in response to the largest ever release from the Strategic Petroleum Reserve (SPR), and the need for governments to buy back released volumes in future periods to replenish those reserves (Figure 17).

Figure 17: Brent and WTI Forward Curves and Estimated Changes in SPR (Source: Bloomberg, BofA)



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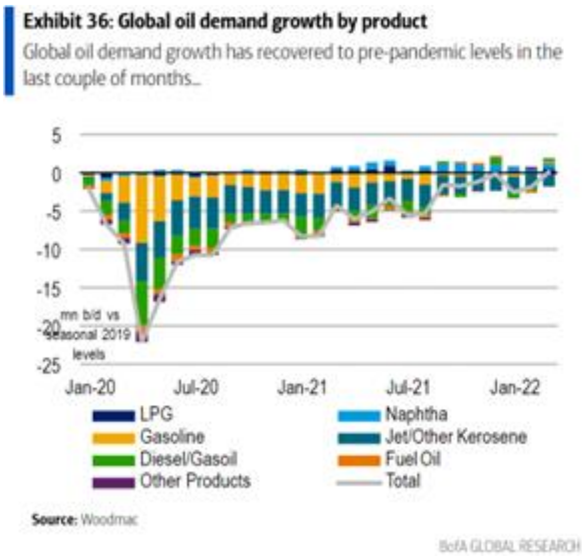
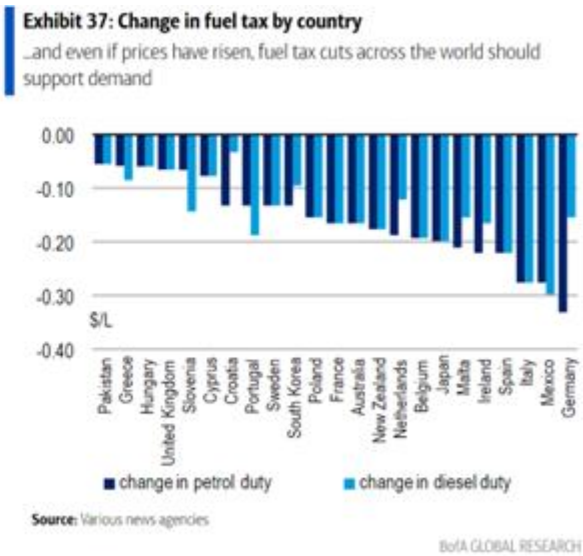
In the last couple of months global oil demand growth has recovered to pre-pandemic levels (LHS Figure 18). While commodity prices have risen, petroleum tax cuts around the world will support demand (RHS Figure 18).

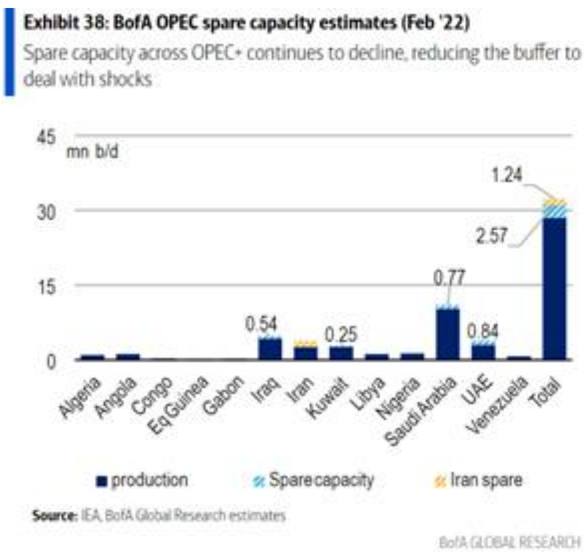
Figure 18: Global Oil Demand Growth and Change in Fuel Tax by Country (Source: various via BofA)

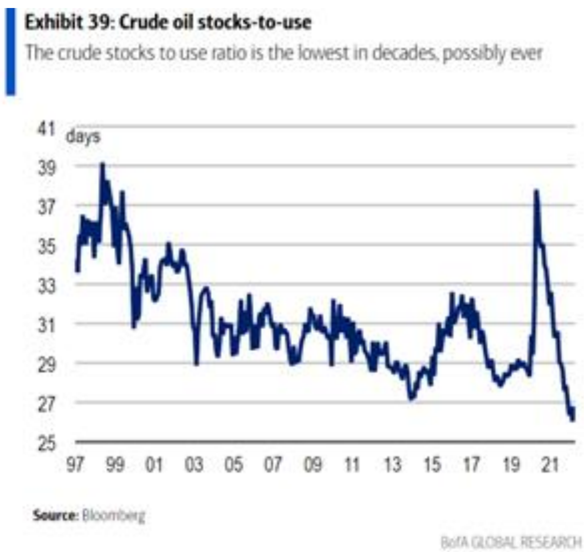




Spare production capacity across OPEC+ continues to decline, reducing the buffer to deal with shocks (LHS Figure 19). The ratio of crude stocks to average daily use is the lowest in decades, possibly ever (RHS Figure 19).

Figure 19: Global Oil Inventory Changes (Source: IEA, Bloomberg via BofA)





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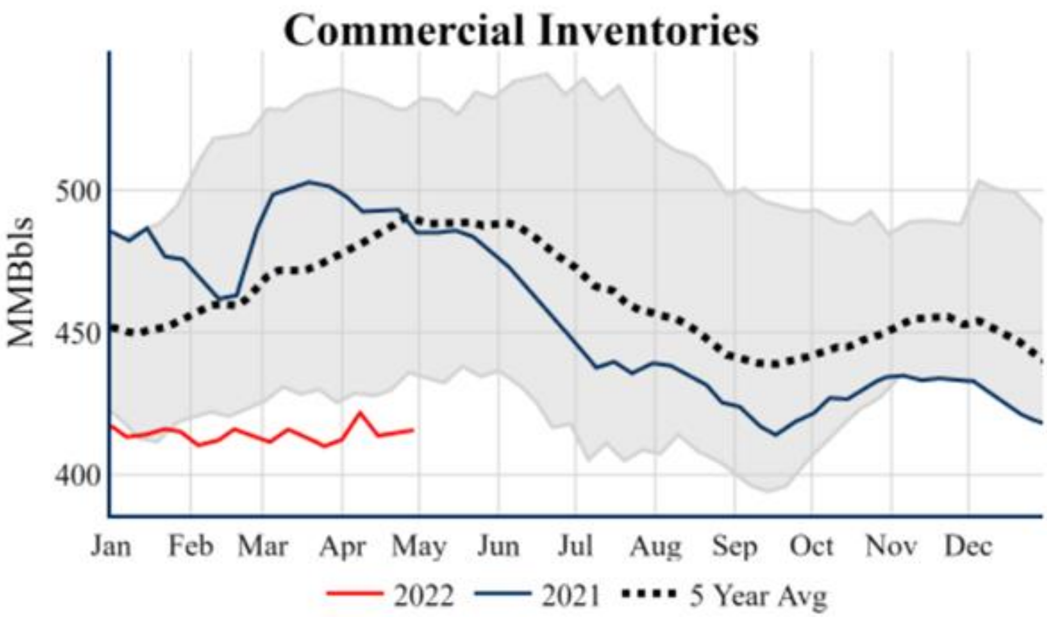
In the US, inventories are now at a deficit of 70.5 MMbbls (-14.5%) to last year, and a deficit of 73.8 MMbbls (-15.1%) to the five-year average (Figure 20).

Figure 20: Commercial Crude Inventories (Source: EIA via Aegis)



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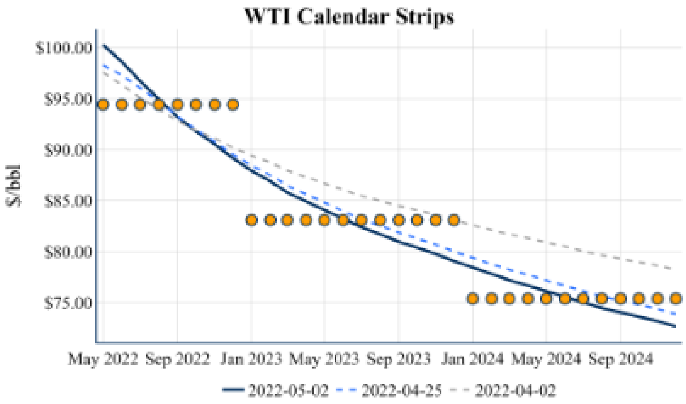
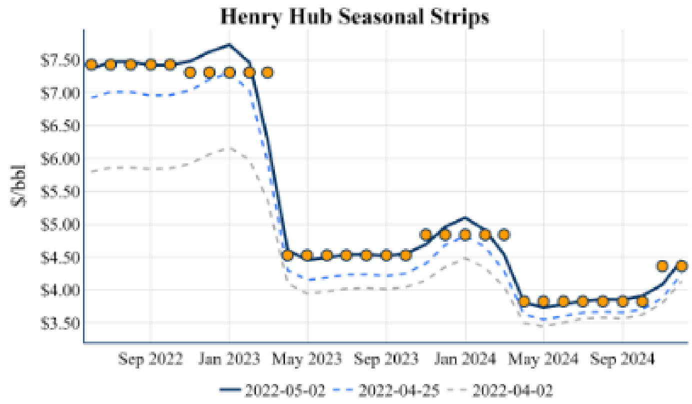
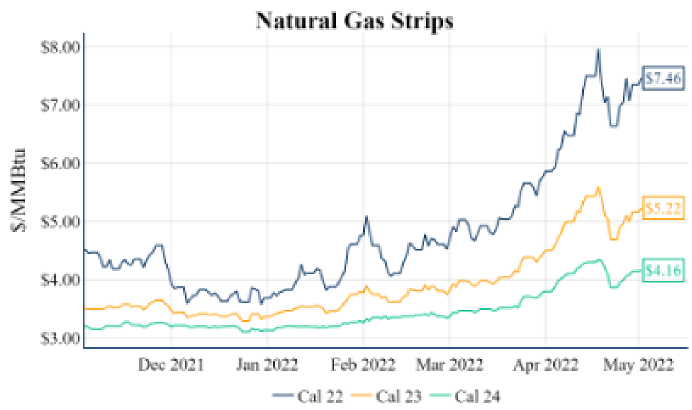
Gas and Oil Prices 2 May 2022







Swap Pricing	Bal 22	Cal 23	Cal 24	Cal 25
NYMEX WTI	$94.40	$83.10	$75.39	$69.94
ICE Brent	$98.00	$87.63	$80.03	$75.00
LLS	$95.18	$85.08	$76.61	$70.87
Mars	$93.13	$82.00	$74.30	$68.85
Western Canadian Crude (WCC)	$81.17	$69.92	$59.67	$53.84
West TX Sour (WTS)	$93.66	$82.40	$74.69	$69.24

Swap Pricing	Month 1	Summer 22	Winter 22/23	Summer 23	Winter 23/24
Henry Hub Fixed	$7.360	$7.427	$7.312	$4.530	$4.838
Eastern Gas South	-$1.100	-$1.279	-$0.917	-$1.353	-$0.986
Waha	-$0.763	-$1.022	-$1.215	-$2.020	-$0.922
TETCO M3	-$0.710	-$0.867	$3.398	-$0.950	$2.675
Houston Ship Channel	-$0.156	-$0.141	$0.068	-$0.170	-$0.041
Columbia Gulf Mainline	-$0.431	-$0.507	-$0.262	-$0.375	-$0.241
Panhandle East	-$0.535	-$0.533	$0.016	-$0.604	-$0.096
NGPL MidCon	-$0.468	-$0.490	-$0.058	-$0.562	-$0.204
SoCal	-$0.056	$0.489	$0.891	-$0.043	$0.645
AECO	-$1.980	-$2.133	-$1.470	-$1.130	-$1.109
Chicago City-Gates	-$0.258	-$0.269	$0.423	-$0.274	$0.300

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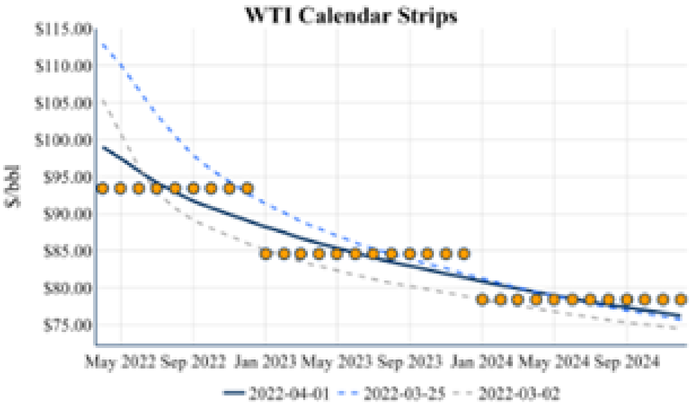
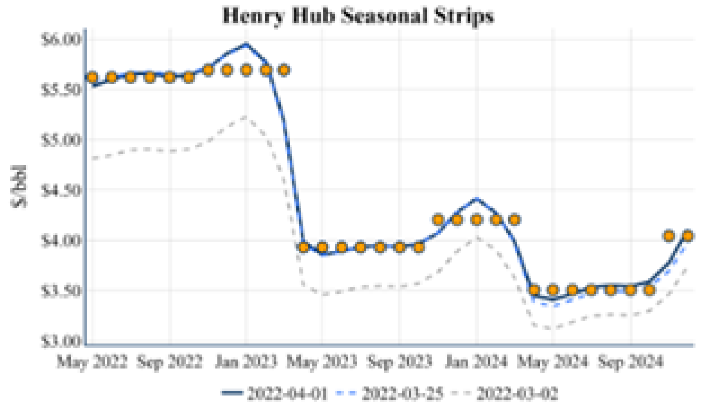
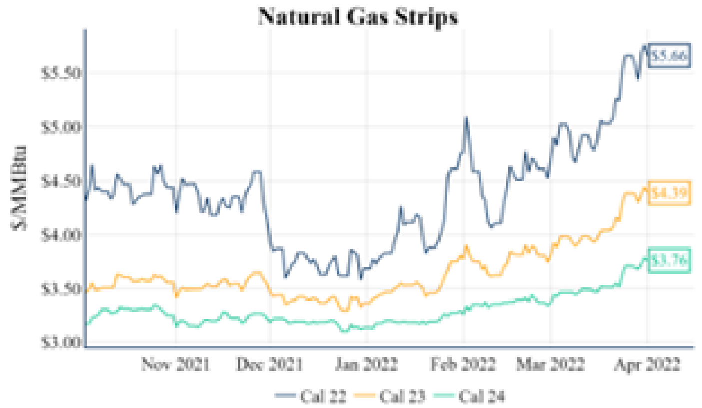
LONGREACH ENERGY

Gas and Oil Prices 1 April 2022







Swap Pricing	Bal 22	Cal 23	Cal 24	Cal 25
NYMEX WTI	$93.44	$84.56	$78.42	$74.02
ICE Brent	$98.29	$89.53	$83.49	$79.60
LLS	$94.15	$85.28	$78.47	$74.10
Mars	$91.26	$82.93	$76.71	$72.31
Western Canadian Crude (WCC)	$81.36	$71.55	$62.71	$57.94
West TX Sour (WTS)	$92.78	$84.04	$77.93	$73.54

Swap Pricing	Month 1	Summer 22	Winter 22/23	Summer 23	Winter 23/24
Henry Hub Fixed	$5.532	$5.619	$5.688	$3.931	$4.203
Eastern Gas South	-$0.820	-$0.994	-$0.832	-$1.119	-$0.865
Waha	-$1.012	-$1.012	-$1.077	-$1.748	-$1.117
TETCO M3	-$0.671	-$0.813	$2.498	-$0.771	$1.829
Houston Ship Channel	-$0.252	-$0.203	-$0.093	-$0.266	-$0.105
Columbia Gulf Mainline	-$0.484	-$0.501	-$0.270	-$0.370	-$0.244
Panhandle East	-$0.610	-$0.577	-$0.049	-$0.632	-$0.118
NGPL MidCon	-$0.515	-$0.520	-$0.105	-$0.585	-$0.167
SoCal	-$0.557	$0.168	$0.765	-$0.108	$0.606
AECO	-$1.480	-$1.433	-$1.085	-$1.007	-$0.883
Chicago City-Gates	-$0.336	-$0.326	$0.250	-$0.274	$0.226

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