



Vol. 47 No. 11

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November 2023

### KEY POINTS

- **Subdued petroleum demand.** Petroleum demand (20.0 Mb/d) was the 2<sup>nd</sup> lowest for the month since 2016.
- **Strong oil production.** Oil production rose 13.2 million barrels per day, shy of September's record-breaking number.
- **Seasonally strong product inventories.** Total product inventories were at their highest since November 2020.
- **Robust total petroleum net exports.** Net exports of crude and petroleum products were at their 2<sup>nd</sup> highest for any month on record, expanding by 0.3 mb/d m/m.

### EXECUTIVE SUMMARY

In November, U.S. oil markets turned out to be unexpectedly bearish. The average price of WTI declined by almost \$10 per barrel in November from \$85.64 per barrel to \$77.69 per barrel. To explain this price drop, we can look towards continued record production in U.S. oil production, seasonally subdued petroleum demand, including lower demand from U.S. refineries and increased production rates in Nigeria and Angola and some relief on sanctions on Venezuelan crude oil. In November, OPEC+ called their final meeting of the year, which resulted in Russia, and Saudi Arabia voluntarily extending production cuts by another 1.5 million barrels per day and 500,000 barrels per day totaling to 2 million barrels per day till January 2024.

November throughput into refineries rose by nearly 0.3 mb/d to 16.2 mb/d - slightly below the five-year average for October. While the corresponding capacity utilization also rose to 88.4%, disrupting the four-month trend in declining capacity use. Capacity utilization fell below its 5-year November average for the first time since January by 1.2 percentage points.

Partly explaining the reduction in demand for crude oil was a decline in U.S. petroleum demand (261,000 b/d m/m) to 20.0 mb/d. This was the largest decline for the month since 2015, placing demand below the five-year average. The m/m decline was driven by decreases in other oils (238,000 b/d), distillate fuel (5,000 b/d) and motor gasoline (151,000 b/d), which fully offset increases in jet-fuel (94,000 b/d) and residual fuel (32,000 b/d).

Motor gasoline demand (8.6 mb/d) was at its fourth lowest for the month in 23 years. Although it is typical for demand to fall from October to November, demand for this period was below its 10-year average. This may be the result of a seasonal lull before people begin to travel again for year-end festivities. November gasoline stocks (220.9 mb) only rose 0.1% from October mainly due to a contraction in refinery production of motor gasoline.

Distillate consumption (3.9 mb/d) was flat month-over-month and below its seasonal average by 3.8%. However, the change exhibited in November was the weakest for the month in a decade, falling only 0.1% compared to the November 10-year average of -2.1%. This suggests that despite the weak November decline, consumption overall remained solid for this time of the year. Distillate inventories (112.4 mb) rose month-over-month by almost 0.5 million barrels but remained 15.1% below the five-year average.

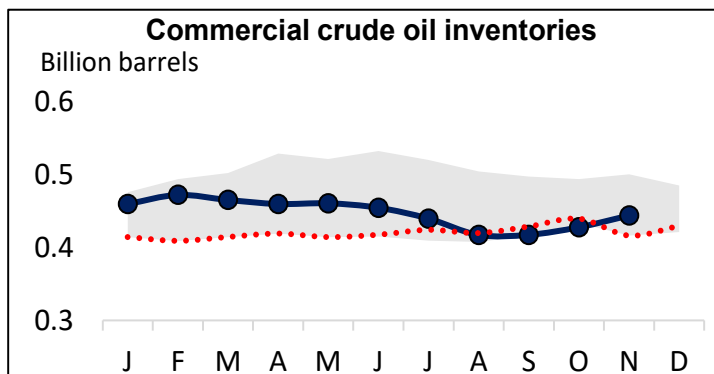
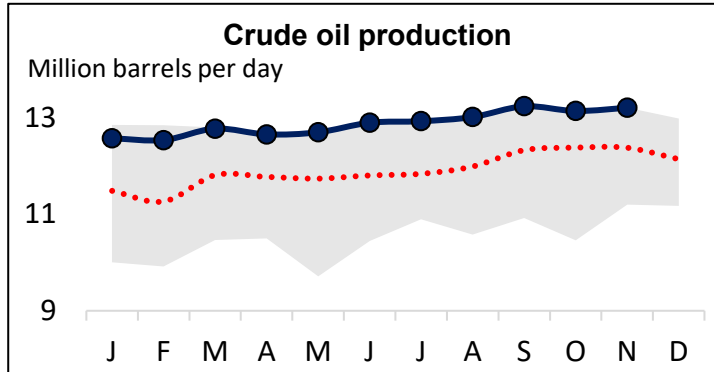
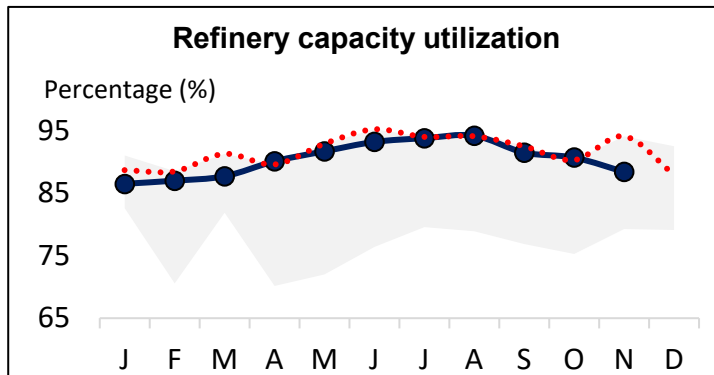
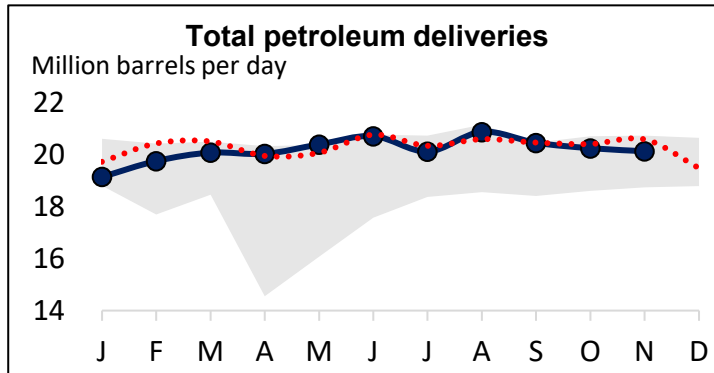
Other oils' consumption, which are used as feedstock in industrial/manufacturing processes, slipped by only 238,000 barrels month-over-month to 5.1 mb/d - significantly less than October's 0.5 million barrel a day decline. Despite this large drop, it was still the second highest for the month on record. The U.S. Purchasing Managers Index (PMI) from the Institute for Supply Management, remained in contraction territory with a reading of 46.7 in November. Within the index, there were decreases in the index's measures of new orders, production, employment, and inventories.

Meanwhile, U.S. net exports of petroleum increased by 326,000 b/d to 2.9 mb/d and exceeded last year's levels by 1.3 Mb/d. This was the second largest volume on record for any month. The growth is partly explained by an increase in total exports of crude oil and products of 330,000 b/d.

Compared to a year ago, headline inflation was 3.1%, and core CPI increased 4.0%, with monthly volatility restrained by falling gasoline prices and modest food inflation - gasoline prices fell by 6.0% in November after a 5.0% decline in October. And inflation moving back towards the Fed's 2% inflation target in turn supported the FOMC's decision to keep monetary policy in a holding pattern. As a result, preliminary data in December from the University of Michigan Index of Consumer Sentiment showed a significant improvement in consumer confidence. However, consumers continue to be beleaguered by concerns around unimproved economic conditions (e.g., high prices, high borrowing costs and labor market weakness).

## KEY CHARTS

5-year range 2023 2022



**ESTIMATED UNITED STATES PETROLEUM BALANCE<sup>1</sup>**  
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	November			Year-to-Date		
	2023 <sup>2</sup>	2022	% Change	2023 <sup>3</sup>	2022	% Change
<b>Disposition:</b>						
Total motor gasoline.....	8,617	8,827	(2.4)	8,903	8,830	0.8
Finished reformulated.....	2,775	2,680	3.5	2,788	2,780	0.3
Finished conventional.....	5,842	6,147	(5.0)	6,115	6,050	1.1
Kerosene-jet.....	1,690	1,585	6.6	1,648	1,557	5.8
Distillate fuel oil.....	3,951	4,060	(2.7)	3,947	4,047	(2.5)
≤ 500 ppm sulfur.....	3,887	4,054	(4.1)	3,916	4,028	(2.8)
≤ 15 ppm sulfur.....	3,878	4,052	(4.3)	3,903	4,020	(2.9)
> 500 ppm sulfur.....	64	5	1,180.0	31	19	63.2
Residual fuel oil.....	323	359	(10.0)	270	335	(19.4)
All other oils (including crude losses) .....	5,125	5,194	(1.3)	5,105	5,138	(0.6)
Reclassified <sup>4</sup> .....	285	190	na	265	167	na
Total domestic product supplied.....	19,991	20,214	(1.1)	20,137	20,074	0.3
Exports.....	11,034	9,979	10.6	10,154	9,472	7.2
Total disposition.....	31,025	30,193	2.8	30,291	29,546	2.5
<b>Supply:</b>						
Domestic liquids production						
Crude oil (including condensate).....	13,207	12,376	6.7	12,877	11,890	8.3
Natural gas liquids.....	6,648	6,139	8.3	6,383	5,964	20.0
Other supply <sup>5</sup> .....	1,132	1,298	(12.8)	1,266	1,220	3.8
Total domestic supply.....	20,987	19,813	5.9	20,526	19,073	7.6
Imports:						
Crude oil (excluding SPR imports).....	6,321	6,253	1.1	6,452	6,307	2.3
From Canada.....	3,690	3,765	(2.0)	3,806	3,822	(0.4)
All other.....	2,631	2,488	5.8	2,646	2,485	6.5
Products.....	1,779	2,089	(14.8)	2,036	2,049	(0.7)
Total motor gasoline (incl. blend.comp).....	597	569	4.9	729	639	14.1
All other.....	1,182	1,520	(22.3)	1,306	1,411	(7.4)
Total imports.....	8,100	8,342	(2.9)	8,487	8,357	1.6
Total supply.....	29,087	28,155	3.3	29,013	27,430	5.8
Stock change, all oils.....	(1,938)	(2,038)	na	(1,277)	(2,115)	na
<b>Refinery Operations:</b>						
Input to crude distillation units.....	16,156	16,940	(4.6)	16,411	16,544	(0.8)
Gasoline production.....	9,512	9,682	(1.8)	9,634	9,583	0.5
Kerosene-jet production.....	1,669	1,659	0.6	1,699	1,620	4.8
Distillate fuel production.....	5,008	5,338	(6.2)	4,859	5,023	(3.3)
Residual fuel production.....	279	219	27.4	269	249	7.8
Operable capacity.....	18,272	18,004	1.5	18,231	17,959	1.5
Refinery utilization <sup>6</sup> .....	88.4%	94.1%	na	90.0%	92.1%	na
Crude oil runs.....	15,788	16,450	(4.0)	15,895	16,033	(0.9)

1. Total supply, i.e., production plus imports adjusted for net stock change is equal to total disposition from primary storage. Total disposition from primary storage less exports equals total domestic products supplied. Information contained in this report is derived from information published in the API *Weekly Statistical Bulletin* and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2. Based on API estimated data converted to a monthly basis.

3. Data for most current two months are API estimates. Other data come from U.S. Energy Information Administration (including any adjustments).

4. An adjustment to avoid double counting resulting from differences in product classifications among different refineries and blenders.

5. Includes unaccounted-for crude oil, withdrawals from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol, and downstream blending of ethanol.

6. Represents "input to crude oil distillation units" as a percent of "Operable capacity".

R: Revised. na: Not available.

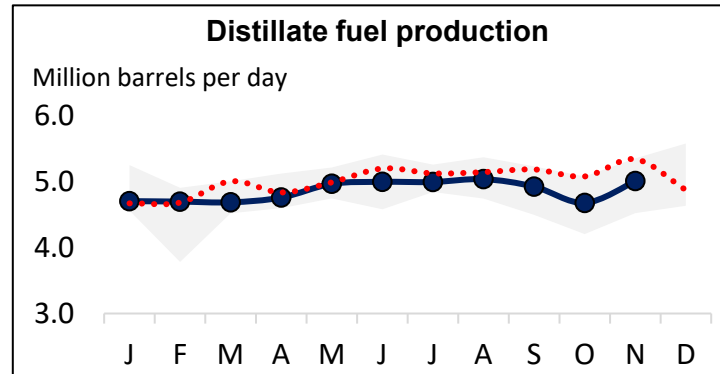
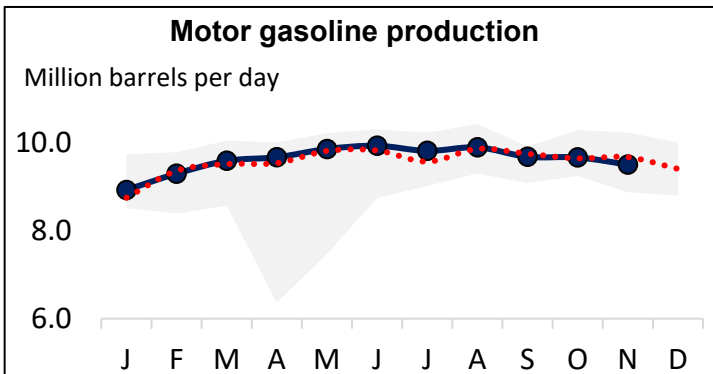
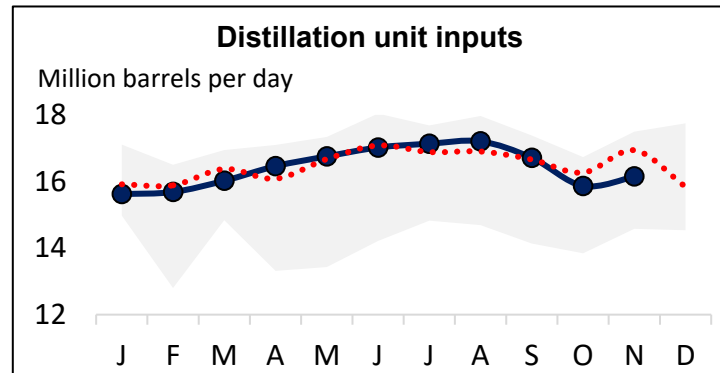
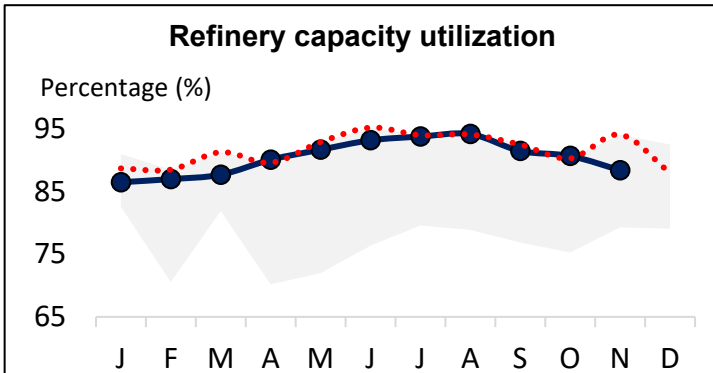
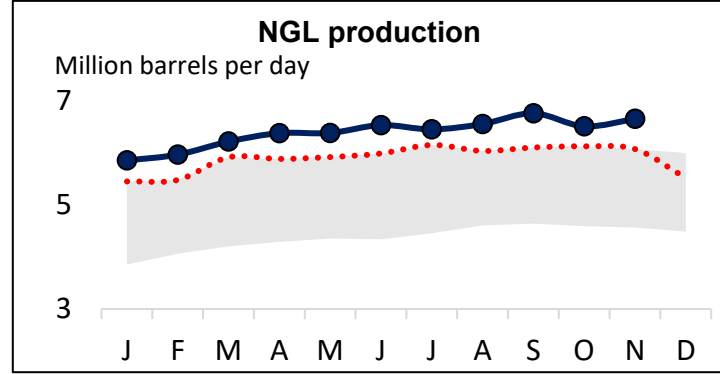
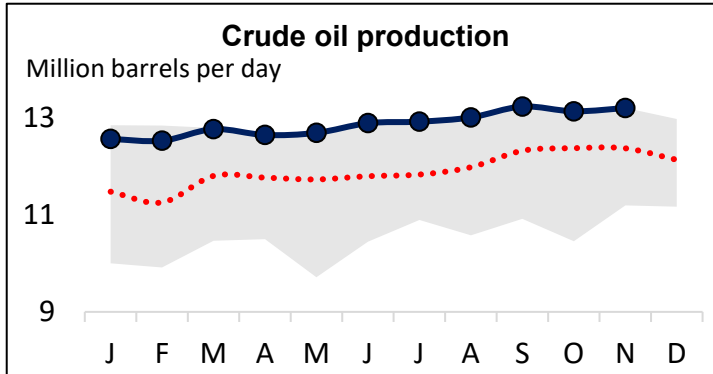
**ESTIMATED UNITED STATES PETROLEUM BALANCE<sup>1</sup>**  
(Daily average in thousands of 42 gallon barrels)

	November 2023	October 2023	November 2022	% Change From	
				Month Ago	Year Ago
<b>Stocks (at month-end, in millions of barrels):</b>					
Crude oil (excluding lease & SPR stocks).....	444.0	427.9	416.6	3.8	6.6
Unfinished oils.....	87.1	87.2	84.2	(0.1)	3.5
Total motor gasoline.....	221.0	220.8	221.4	0.1	(0.2)
Finished reformulated.....	0.0	0.0	0.0	0.1	(4.5)
Finished conventional.....	16.5	18.0	16.5	(8.3)	(0.1)
Blending components.....	204.5	202.8	204.8	0.8	(0.2)
Kerosene-jet.....	37.5	40.3	37.8	(6.9)	(0.8)
Distillate fuel oil.....	112.4	111.9	120.6	0.4	(6.8)
≤ 500 ppm sulfur.....	105.6	104.1	112.3	1.4	(5.9)
≤ 15 ppm sulfur.....	103.0	101.5	109.5	1.5	(5.9)
> 500 ppm sulfur.....	6.8	7.8	8.3	(12.8)	(18.3)
Residual fuel oil.....	26.1	27.3	29.4	(4.4)	(11.1)
All other oils.....	359.4	370.1 R	316.9	(2.9)	13.4
Total all oils.....	1,287.5	1,285.5 R	1,226.8	0.2	4.9



# MSR Energy Charts

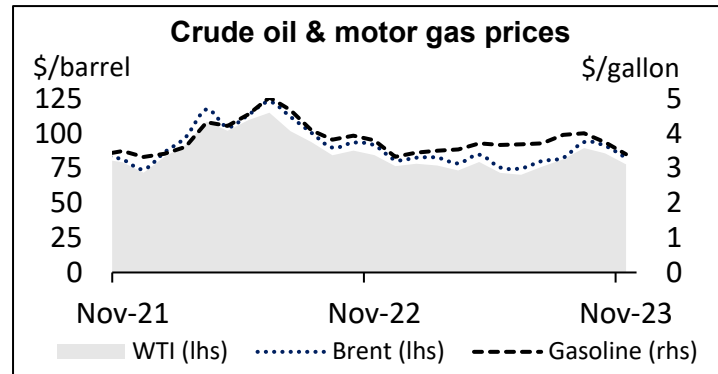
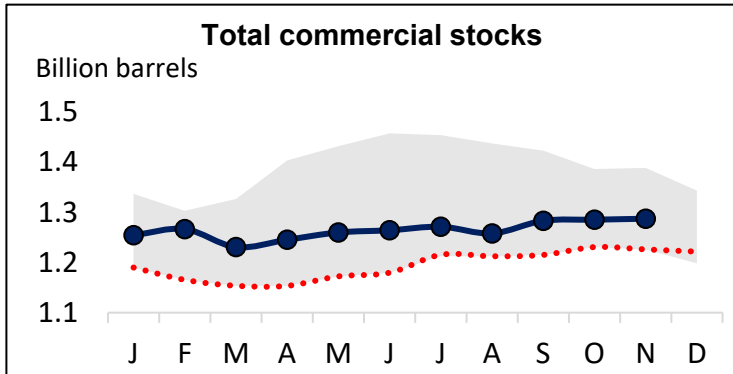
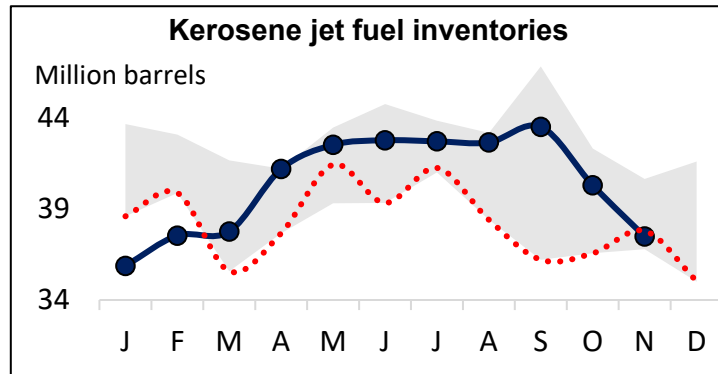
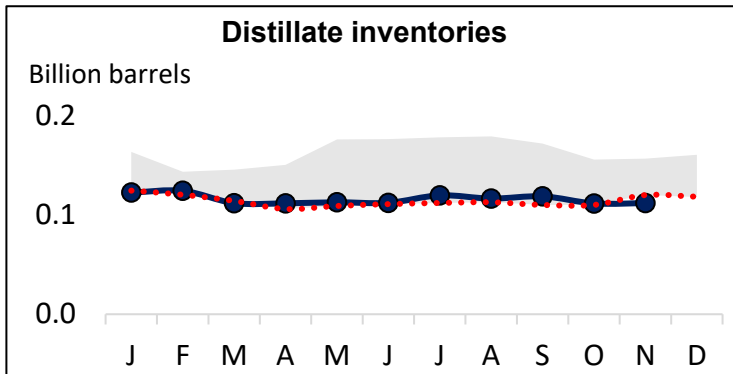
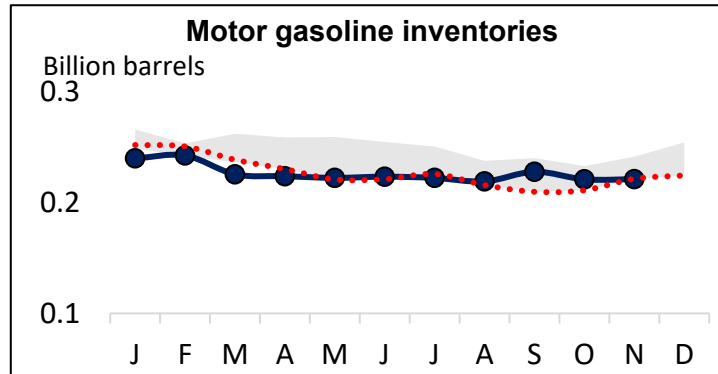
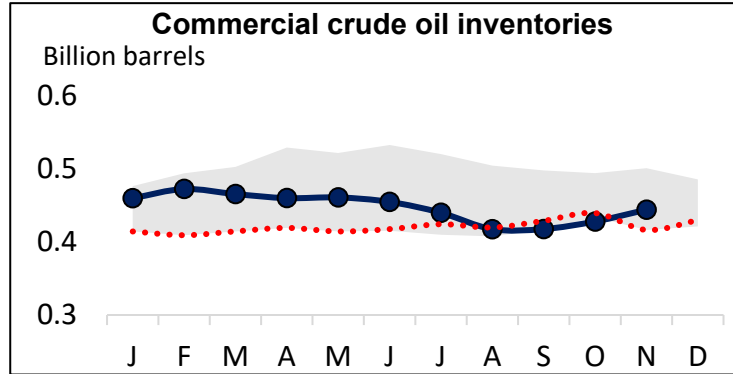
5-year range 2023 2022





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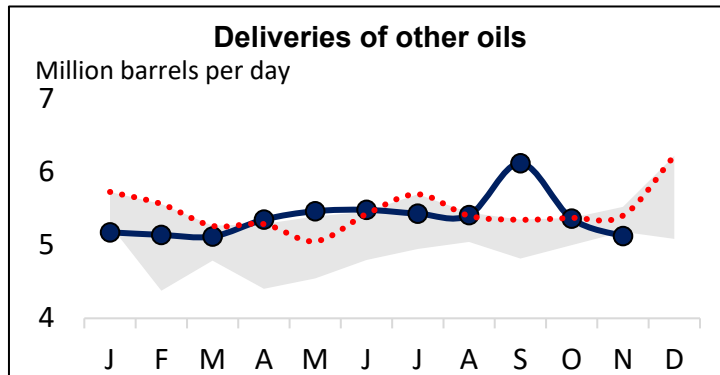
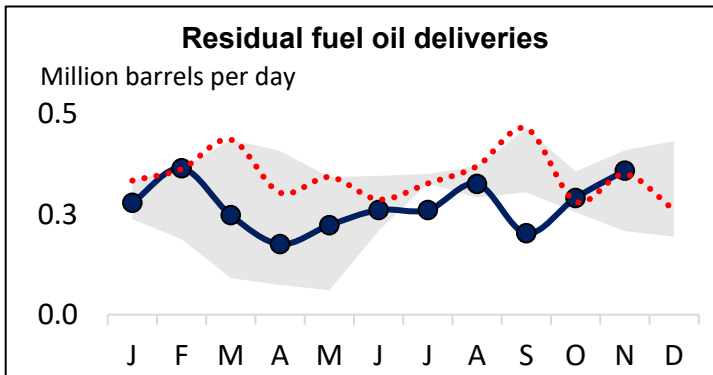
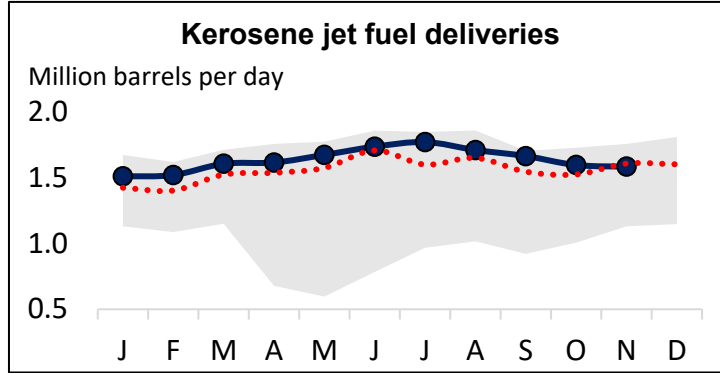
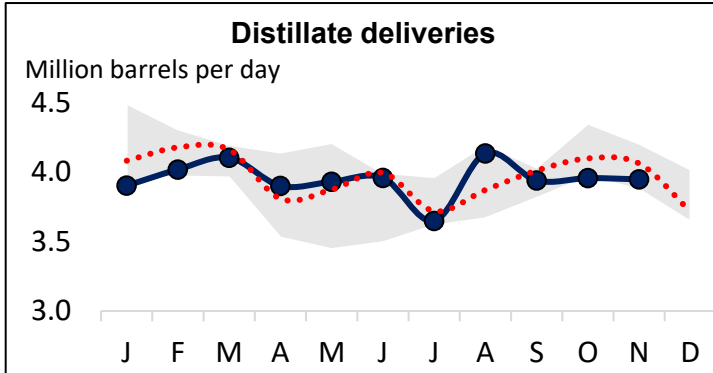
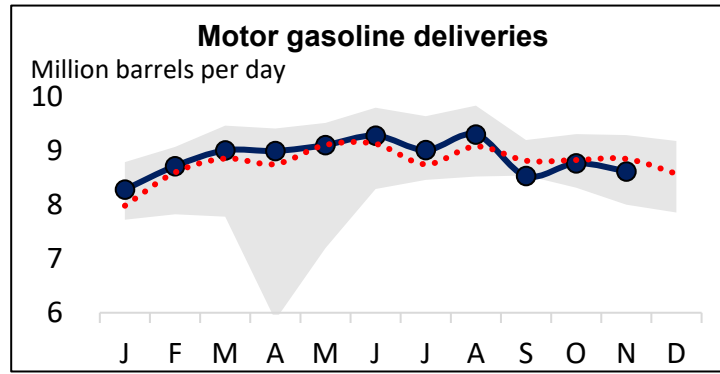
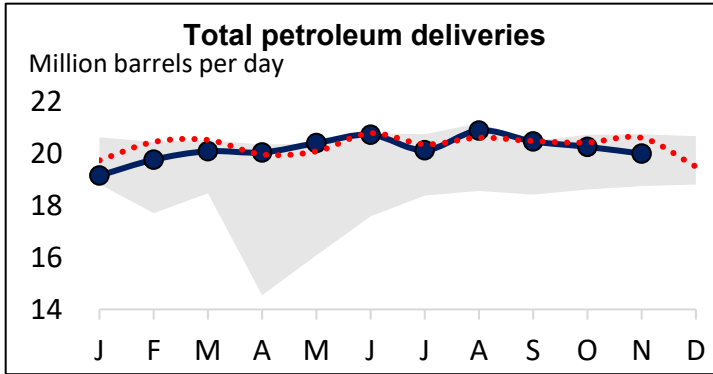
5-year range 2023 2022





# MSR Energy Charts

5-year range 2023 2022





# MSR Energy Charts

5-year range 2023 2022

