



American
Petroleum
Institute

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The MSR™ - Monthly Statistical Report

API Statistics Department & Energy Economics Department

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December 2023

EXECUTIVE SUMMARY

Total U.S. domestic petroleum deliveries reached 20.3 million barrels per day (mb/d) in December. This was an increase of 1.4 percent from November and 4.9 percent from December 2022. The December increase helped to bring 2023 U.S. petroleum demand to 20.2 mb/d, the highest level since 2019.

An increase in driving and flying in December helped to boost gasoline and jet fuel demand this year compared to last year. Consumer gasoline demand, measured by motor gasoline deliveries, was 8.8 mb/d in December which was 2.0 and 2.2 percent higher than November and December 2022, respectively. K-Jet deliveries of 1.6 mb/d in December were up by 1.5 percent y/y.

Distillate deliveries of 3.7 mb/d in December was 6.9 percent lower than November and 3.0 percent lower than December 2022. Deliveries of residual fuel oil were 0.3 mb/d in December, which reflected a decrease of 16.4 percent m/m and a decrease of 1.1 percent compared with Dec. 2022.

December U.S. crude oil and natural gas liquids production reached 13.3 mb/d and 6.7 mb/d, respectively. The December domestic crude production number was up 0.2 percent m/m and up by 9.0 percent y/y. NGL production increased by 0.8 percent m/m and 19.6 percent y/y. Petroleum prices decreased at the end of 2023. West Texas Intermediate (WTI) crude oil prices decreased by 7.5 percent m/m (\$5.79 per barrel) and down by 5.9 percent (\$4.54 per barrel) and averaged at \$71.90 per barrel. Brent crude oil spot prices averaged \$77.63 per barrel, down by 6.4 percent (\$5.31 per barrel) and down by 4.1 percent (\$3.29 per barrel). This implied a Brent-WTI crude oil price differential of \$5.92 per barrel.

Refining activity also ramped up in December—throughput up 3.7 percent m/m and 5.7 percent y/y to 16.8 mb/d. Capacity utilization rates of 91.7 percent reflected increases of 3.3 percentage points compared to November and 3.7 percentage points compared with December 2022. U.S. total petroleum exports decreased by 2.2 percent m/m but increased by 7.6 percent y/y to their highest record level of 10.8 mb/d. U.S. total petroleum imports were 8.6 mb/d, up 5.6 percent m/m and 6.6 percent y/y. Consequently, the U.S. was a net exporter again in December and for the 27th straight month.

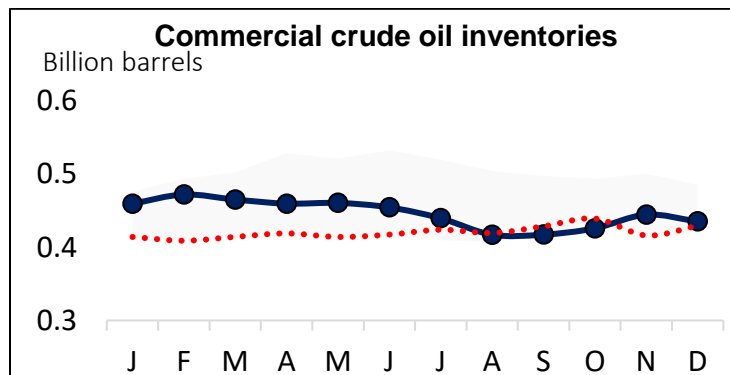
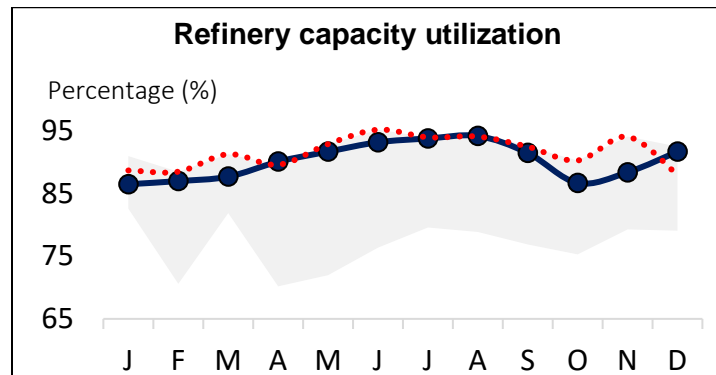
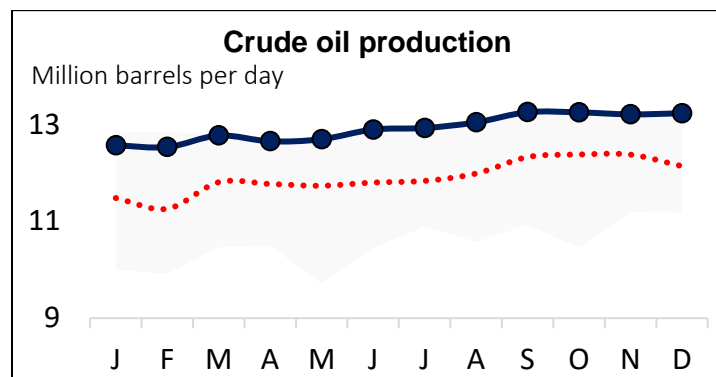
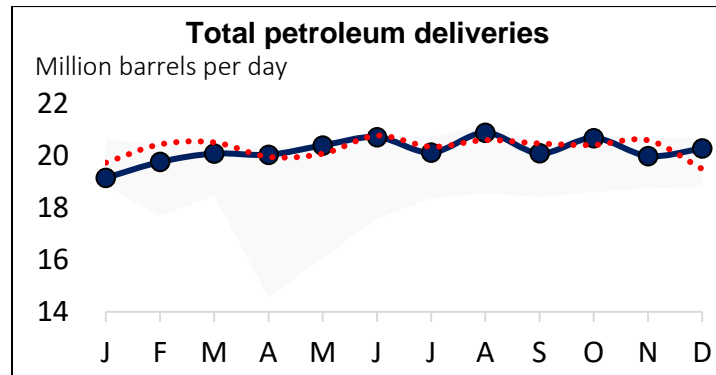
U.S. total petroleum inventories, including crude oil and refined products (but excluding the Strategic Petroleum Reserve) in December increased by 0.1 percent m/m and 3.7 percent y/y to 1.27 billion barrels. U.S. crude oil inventories in December were at their highest for the month since 2020 at 435.5 million barrels.

Other year to date 2023 highlights:

- Record high production of U.S. crude oil at 12.9 mb/d and U.S. natural gas liquids at 6.3 mb/d.
- U.S. petroleum exports of 10.2 mb/d was the highest ever recorded and surpassed 10 mb/d for the first time ever.
- The U.S. continued to be a petroleum net exporter for the fourth year in a row.
- Other oils – that is, intermediate products in refining and petrochemicals – which enable the manufacturing of medical plastics and sterile packaging rose in December, increased to their highest level on record since 1965 at 5.3 mb/d.

KEY CHARTS

5-year range 2023 2022



ESTIMATED UNITED STATES PETROLEUM BALANCE¹
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	December			Year-to-Date		
	2023 ²	2022	% Change	2023 ³	2022	% Change
Disposition:						
Total motor gasoline.....	8,787	8,596	2.2	8,920	8,810	1.2
Finished reformulated.....	2,710	2,558	5.9	2,770	2,761	0.3
Finished conventional.....	6,077	6,038	0.6	6,150	6,049	1.7
Kerosene-jet.....	1,617	1,593	1.5	1,653	1,560	6.0
Distillate fuel oil.....	3,678	3,793	(3.0)	3,934	4,026	(2.3)
≤ 500 ppm sulfur.....	3,658	3,763	(2.8)	3,906	4,006	(2.5)
≤ 15 ppm sulfur.....	3,649	3,755	(2.8)	3,893	3,997	(2.6)
> 500 ppm sulfur.....	20	30	(33.3)	28	20	40.0
Residual fuel oil.....	270	273	(1.1)	268	329	(18.5)
All other oils (including crude losses)	5,628	4,886	15.2	5,143	5,117	0.5
Reclassified ⁴	296	186	na	268	169	na
Total domestic product supplied.....	20,276	19,327	4.9	20,185	20,010	0.9
Exports.....	10,796	10,035	7.6	10,153	9,520	6.7
Total disposition.....	31,072	29,362	5.8	30,338	29,530	2.7
Supply:						
Domestic liquids production						
Crude oil (including condensate).....	13,229	12,138	9.0	12,920	11,911	8.5
Natural gas liquids.....	6,698	5,600	19.6	6,432	5,933	20.0
Other supply ⁵	1,194	1,208	(1.1)	1,280	1,219	5.0
Total domestic supply.....	21,121	18,946	11.5	20,632	19,063	8.2
Imports:						
Crude oil (excluding SPR imports).....	6,572	5,999	9.5	6,441	6,281	2.5
From Canada.....	3,685	3,542	4.0	3,805	3,798	0.2
All other.....	2,887	2,457	17.5	2,636	2,483	6.1
Products.....	1,985	2,027	(2.1)	2,035	2,048	(0.6)
Total motor gasoline (incl. blend.comp)....	657	641	2.5	727	639	13.8
All other.....	1,328	1,386	(4.2)	1,308	1,409	(7.1)
Total imports.....	8,557	8,026	6.6	8,476	8,329	1.8
Total supply.....	29,678	26,972	10.0	29,108	27,391	6.3
Stock change, all oils.....	(1,394)	(2,390)	na	(1,230)	(2,139)	na
Refinery Operations:						
Input to crude distillation units.....	16,753	15,843	5.7	16,453	16,485	(0.2)
Gasoline production.....	9,643	9,415	2.4	9,639	9,569	0.7
Kerosene-jet production.....	1,784	1,562	14.2	1,706	1,615	5.6
Distillate fuel production.....	5,046	4,873	3.6	4,881	5,011	(2.6)
Residual fuel production.....	272	272	0.0	269	251	7.0
Operable capacity.....	18,272	18,004	1.5	18,235	17,963	1.5
Refinery utilization ⁶	91.7%	88.0%	na	90.2%	91.8%	na
Crude oil runs.....	16,363	15,377	6.4	15,939	15,977	(0.2)

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 BALANCE¹

(Daily average in thousands of 42 gallon barrels)

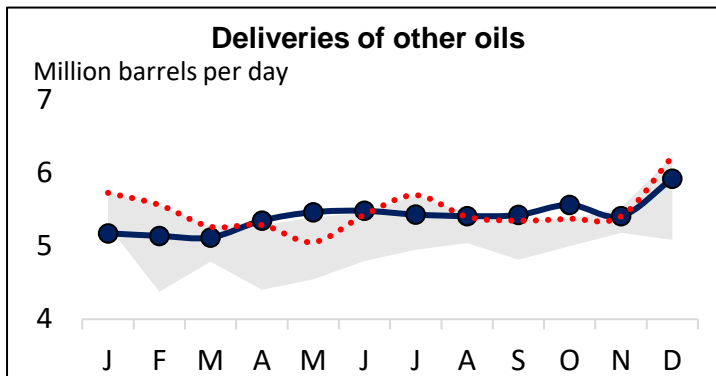
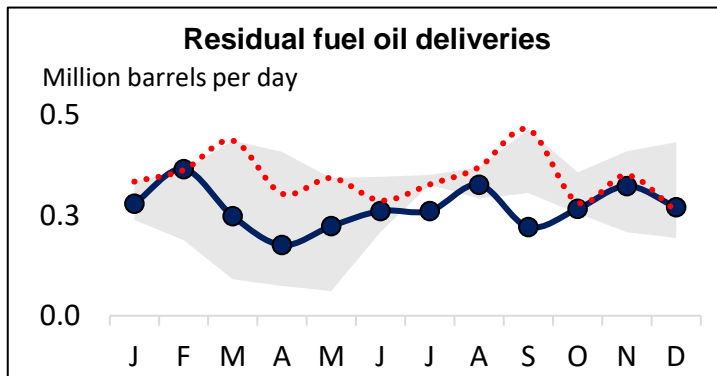
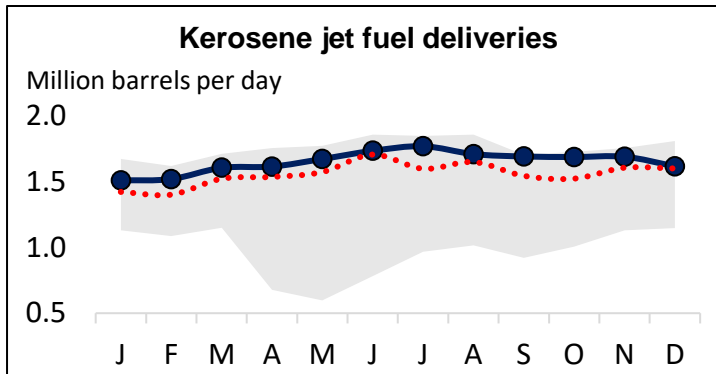
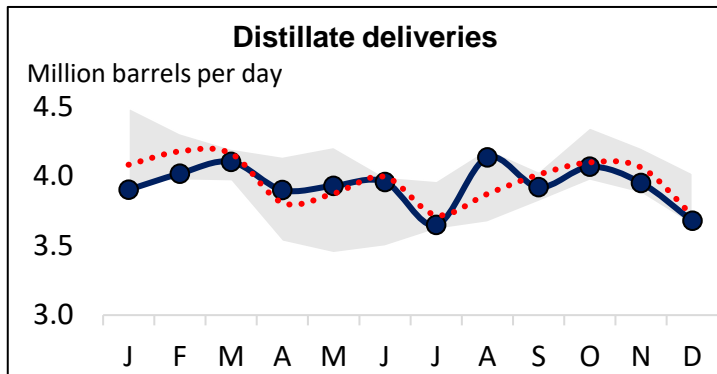
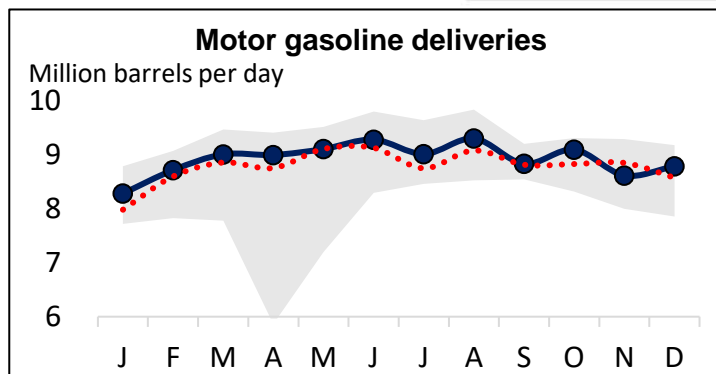
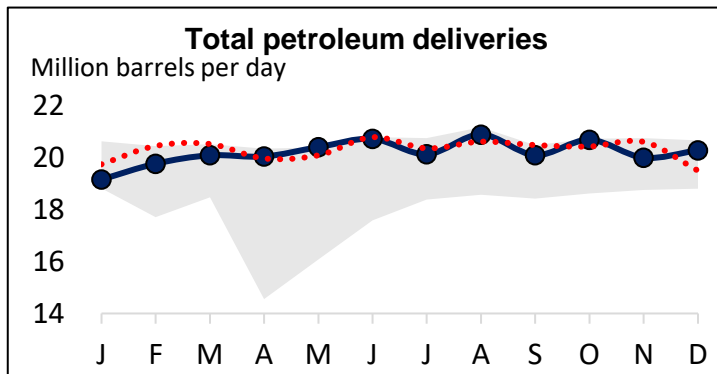
(Daily average in thousands of 42 gallon barrels)

	December 2023	November 2023	December 2022	% Change From	
				Month Ago	Year Ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding lease & SPR stocks).....	435.5	444.8 R	430.1	(2.1)	1.3
Unfinished oils.....	84.5	87.1	86.4	(3.0)	(2.2)
Total motor gasoline.....	236.0	221.0	224.4	6.8	5.2
Finished reformulated.....	0.0	0.0	0.0	0.0	(19.2)
Finished conventional.....	16.4	16.5	17.2	(0.6)	(4.8)
Blending components.....	219.6	204.5	207.2	7.4	6.0
Kerosene-jet.....	38.9	37.5	35.0	3.7	11.0
Distillate fuel oil.....	125.3	112.4	118.9	11.5	5.4
≤ 500 ppm sulfur.....	119.0	105.6	111.2	12.7	7.0
≤ 15 ppm sulfur.....	116.7	103.0	108.7	13.3	7.3
> 500 ppm sulfur.....	6.3	6.8	7.7	(7.4)	(17.7)
Residual fuel oil.....	25.2	26.1	30.7	(3.4)	(18.0)
All other oils.....	321.9	337.0 R	297.0	(4.5)	8.4
Total all oils.....	1,267.3	1,265.9 R	1,222.6	0.1	3.7



MSR Energy Charts

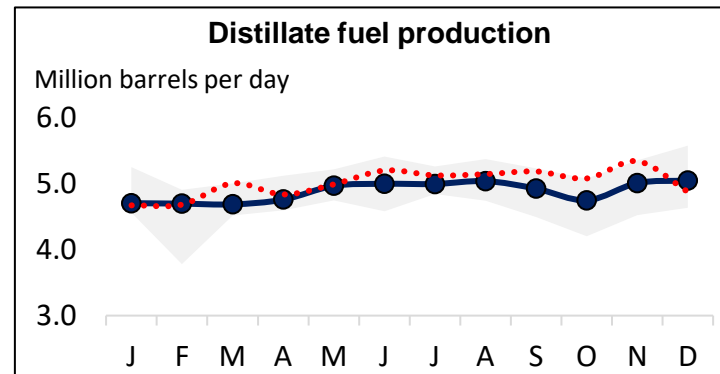
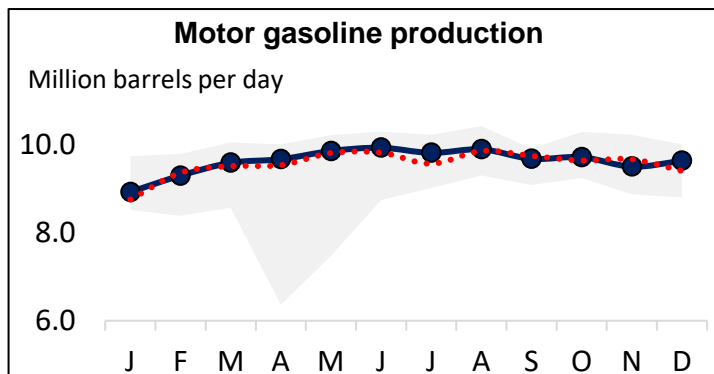
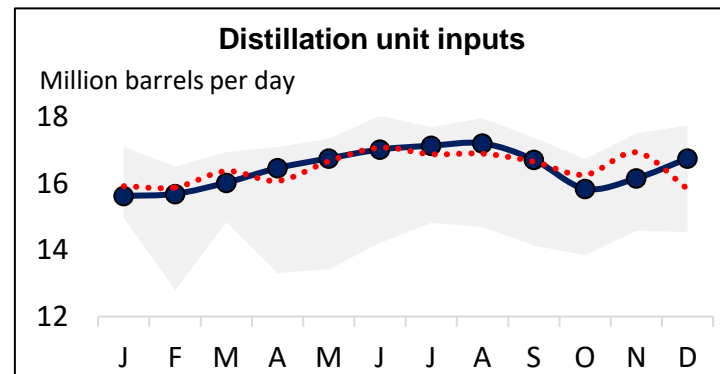
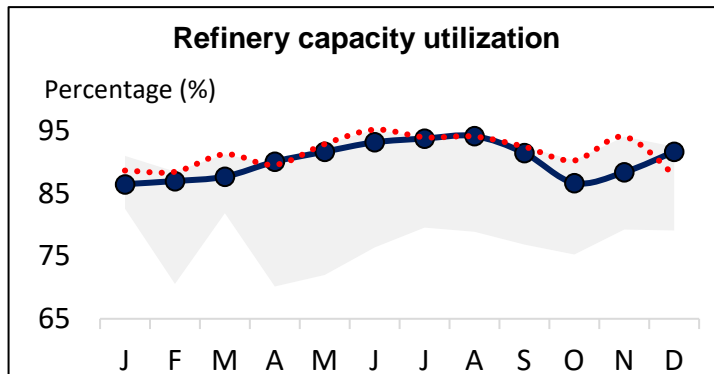
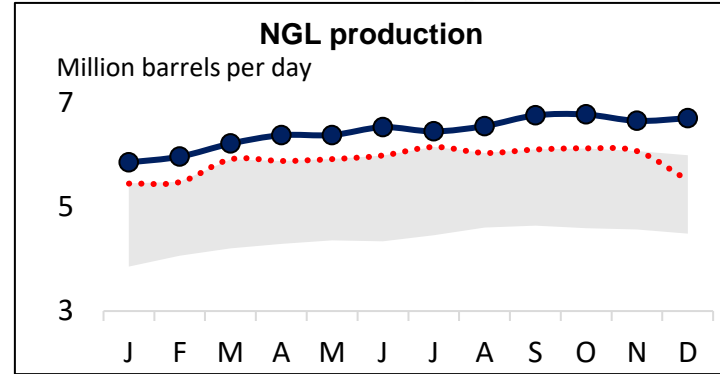
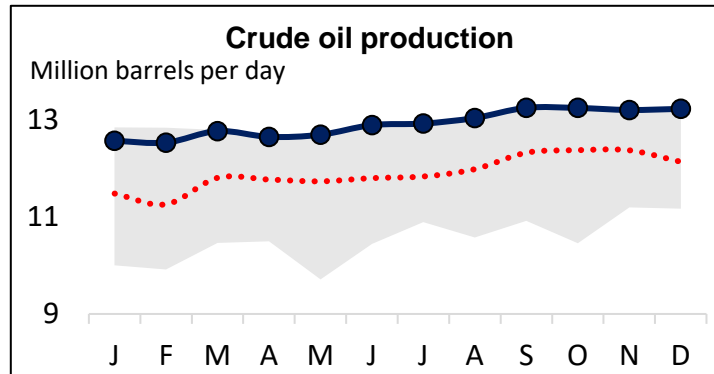
5-year range 2023 2022





MSR Energy Charts

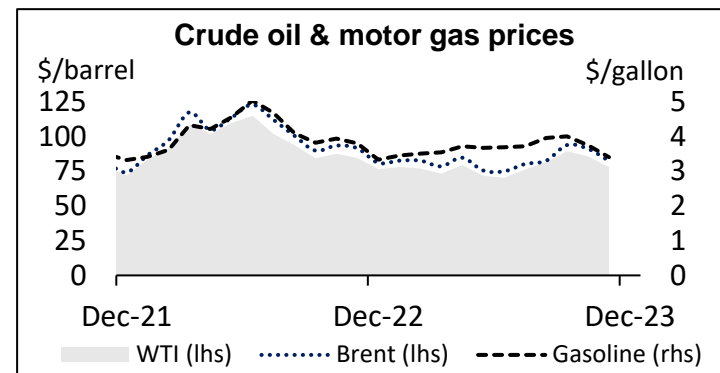
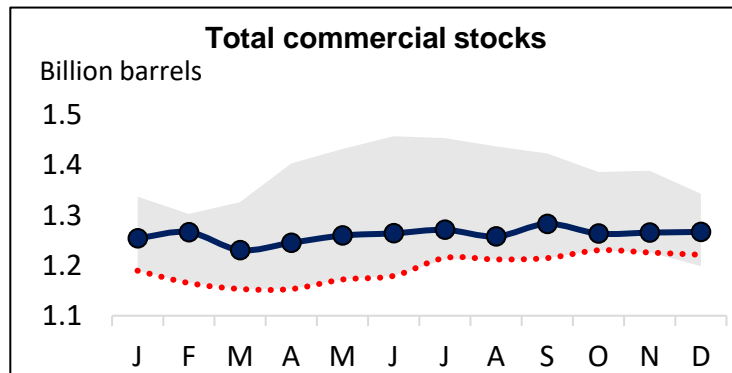
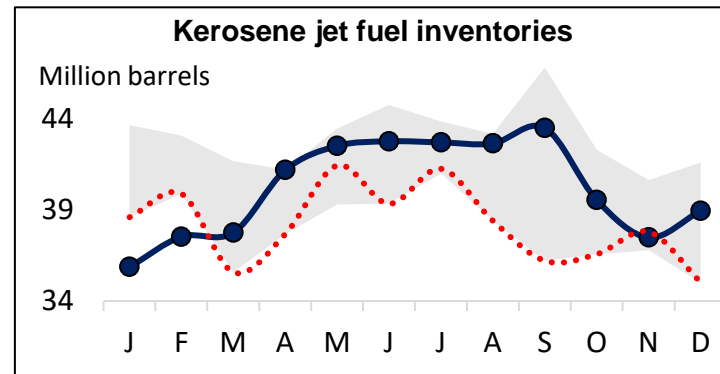
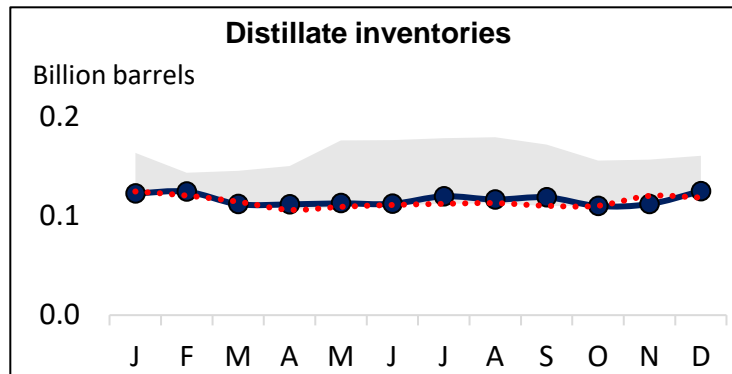
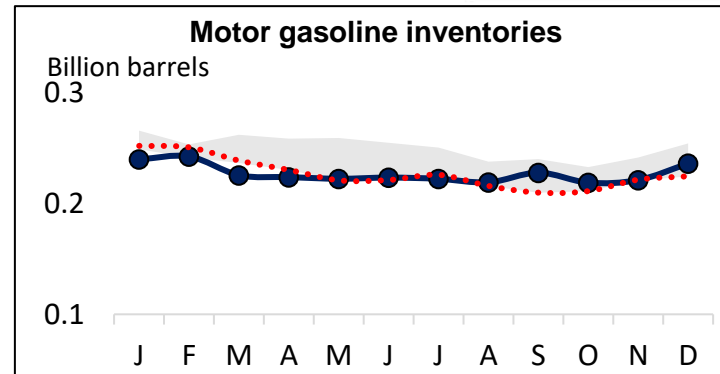
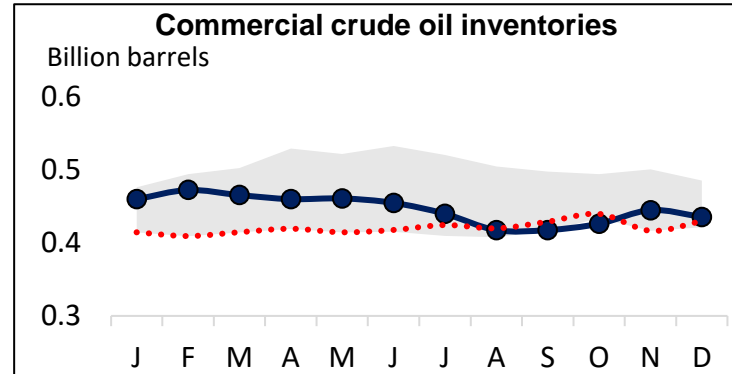
5-year range 2023 2022





MSR Energy Charts

5-year range 2023 2022





MSR Energy Charts

5-year range 2023 2022

