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EXECUTIVE SUMMARY

According to API's primary data for July 2021, summer driving and gasoline demand led to the highest U.S. petroleum demand since November 2019. Demand increased for the fifth consecutive month despite the crude oil and gasoline prices having risen to their highest levels since 2014.

U.S. crude oil and natural gas liquids production responded positively to the higher prices and together added more than 0.3 million barrels per day (mb/d) between June and July. Drilling activity, which is a leading indicator of production, also picked up for oil and natural gas, according to Baker Hughes.

However, crude oil inventories still fell in July to their lowest level since December 2019, which was a 15.8% y/y decrease to 6.8% above the minimum of 5-year range. Additionally, the U.S. remained a petroleum net importer with higher imports and lower exports in July.

Leading economic indicators remained positive but reinforced concerns for price inflation. API's Distillate Economic Indicator™ showed continued growth of U.S. industrial production and broader economic activity (please see the following [chart](#) for details). Other highlights:

- U.S. petroleum demand (20.6 mb/d) remained solid with summer driving.
 - Gasoline demand rose to 9.5 mb/d with summer driving.
 - Strongest jet fuel deliveries in 18 months.
 - Record July petrochemical demand for other oils.
- Highest sustained refinery capacity utilization (91.4%) since Dec. 2019.

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API's Distillate Economic Indicator™ - July 2021

The Distillate Economic Indicator™ value of +2.0 for July 2021 and three-month average of +2.3 signaled continued growth of U.S. industrial production and broader economic activity



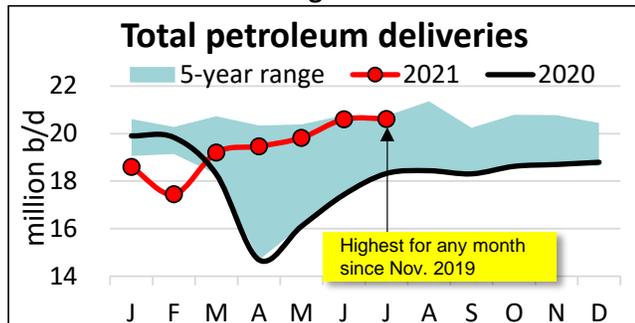
sources: API Monthly Statistical Report; EIA; CME Group; Moody's, Federal Reserve Board; API Team calculations



Details by section

Demand

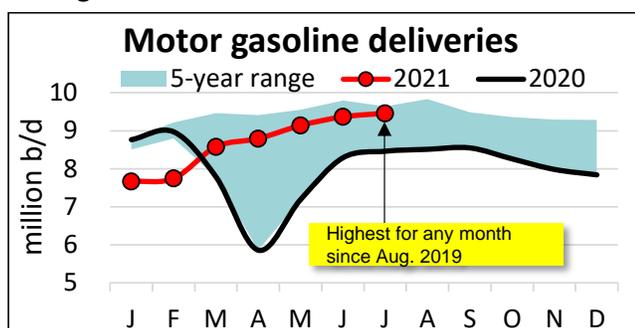
U.S. petroleum demand (20.6 mb/d) remained solid with summer driving



U.S. petroleum demand, as measured by total domestic petroleum deliveries, was 20.6 mb/d in July – its highest for any month since November 2019 and within 0.6% of its level in July 2019. This was an increase of 0.1% from June, reflecting steady demand through the summer driving season despite ongoing effects of the COVID-19 pandemic.

Gasoline

Gasoline demand rose to 9.5 mb/d with summer driving

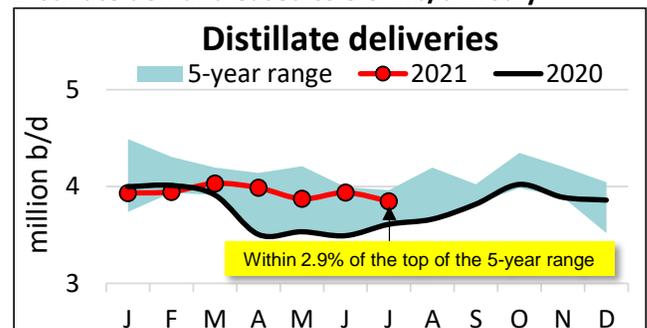


Consumer gasoline demand, measured by motor gasoline deliveries, of 9.5 mb/d in July increased by 1.0% (0.1 mb/d) from June and returned to within 0.8% of its July 2019 level.

Deliveries of reformulated-type gasoline (consumed primarily in urban areas) were virtually unchanged at 3.1 mb/d, while those of conventional gasoline (mainly in rural areas) rose by 107 kb/d (1.7% m/m) to 6.4 mb/d. These relative changes suggested that summer driving and tourism, rather than urban commuting, were responsible for the monthly increase.

Distillate Fuel Oil

Distillate demand eased to 3.9 mb/d in July

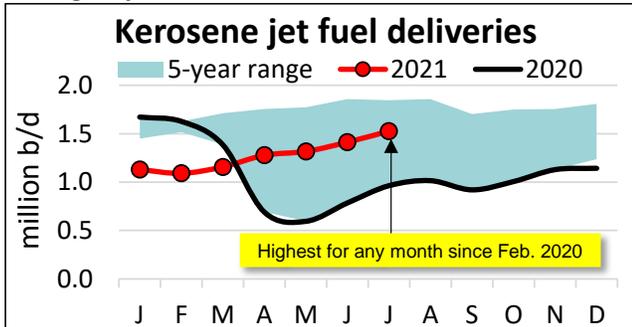


Distillate deliveries of 3.9 mb/d decreased by 2.3% from June but were within 2.9% of the top of the 5-

year range. [DAT iQ industry trendlines](#) showed weaker truck freight activity in July, with spot truck loads down by 6.6% from June.

Kerosene Jet Fuel

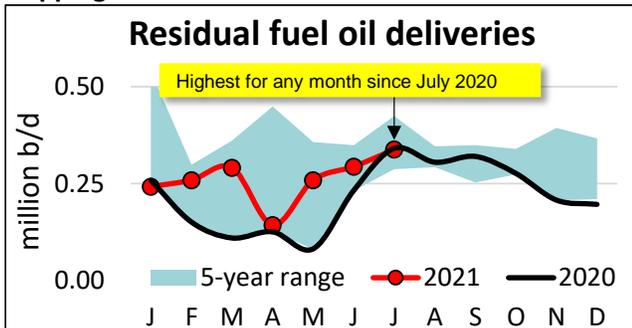
Strongest jet fuel deliveries in 18 months



'K-jet' deliveries rose by 8.1% (114 kb/d) m/m to 1.5 mb/d in July, the strongest demand in 18 months but 17.3% below their level in July 2019. Consistent with the jet fuel increase, [Flightradar24](#) high-frequency data showed that tracked flights increased by 4.7% m/m in July.

Residual Fuel Oil

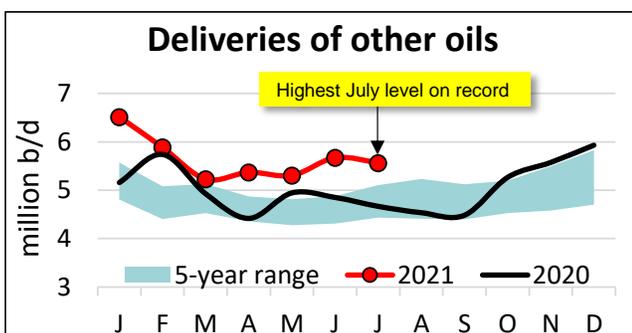
Residual fuel oil demand picked up with marine shipping



Deliveries of residual fuel oil, which is used in electric power production, space heating, industrial applications and as a marine bunker fuel, were 338 kb/d in July. This was an increase of 15.0% from June to its highest level in a year, consistent with indications that global supply chains are striving to catch up from the pandemic and thereby raised marine freight demand and [rates](#).

Naphtha, Gasoil, Propane, Propylene "Other Oils"

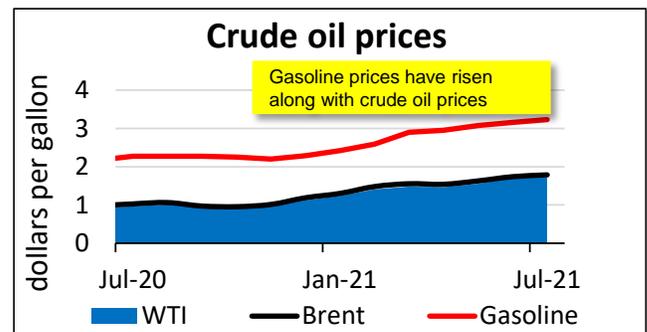
Record July petrochemical demand for other oils



Deliveries of liquid feedstocks, such as naphtha, gasoil, and propane/propylene ("other oils") used primarily in refining and petrochemical manufacturing, were 5.6 mb/d in July – the highest on record for July and 9.0% over their July 2019 level. This reflected solid refining activity and petrochemical demand for films/packaging and medical plastics.

Prices

Highest gasoline prices for any month since Oct. 2014



In July, West Texas Intermediate (WTI) crude oil prices increased to \$72.49 per barrel (\$1.73 per gallon), a 1.6% increase m/m to its highest level since November 2014. Brent crude oil spot prices averaged \$75.17 per barrel (\$1.79 per gallon), and the Brent-WTI price differential broadened to \$2.68 per barrel, generally reflecting transportation costs.

As crude oil remained the top input cost in making gasoline per [EIA](#), relatively strong crude oil prices corresponded with increased gasoline prices in July and for an eighth consecutive month. The U.S. average conventional gasoline price was \$3.23 per gallon in July, up by 2.3% (\$0.07 per gallon) from June and 41.5% year-to-date (\$0.95 per gallon), according to [AAA](#). This was the highest gasoline price for any month since October 2014.

Macroeconomy

Leading indicators point towards growth, but reinforced price inflation concerns

API's Distillate Economic Indicator™, which is based primarily on diesel/distillate supply, demand, and inventories, had a reading of +2.0 in July and a three-month average of +2.3, showing that U.S. industrial production and broader economic activity have continued to grow.

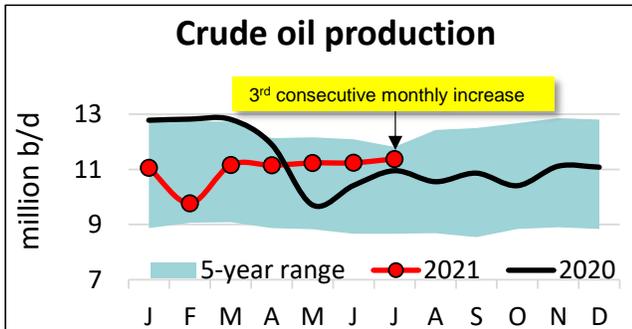
The Institute for Supply Management’s manufacturing Purchasing Managers Index (PMI) had a reading of 59.5 in July, a 1.1 percentage point decrease from June. Index values above 50.0 suggest an expansion, and the manufacturing PMI exceeded that threshold for a 14th consecutive month. Within the index, the backlog of orders and employment increased from June, while inventories, supplier deliveries, new export orders, and the imports index each slowed. Seventeen of the 18 manufacturing industries surveyed reported growth in July.

The [University of Michigan’s consumer sentiment index](#) indicated 5.0% m/m weaker consumer sentiment in July (81.2) compared with June (85.5). The survey attributed July’s decrease to complaints about high prices for homes, vehicles and household durable goods, noting that “there is growing evidence that an inflation storm is likely to develop on the not too distant horizon.”

According to the [Bureau of Labor Statistics \(BLS\)](#), the unemployment rate fell by 0.5% to 5.4% in July as non-farm payrolls increased by a preliminary estimate of 943,000, their strongest gain since August 2020.

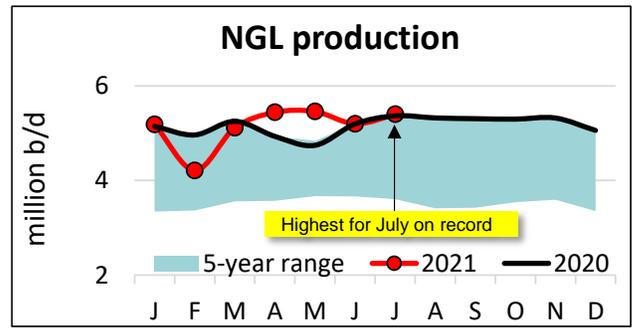
Supply

U.S. crude oil production (11.4 mb/d) and NGL production (5.4 mb/d) stepped up in July



In July, U.S. crude oil production rose to 11.4 mb/d, a 1.2% m/m (0.14 mb/d) increase along with higher [drilling activity](#).

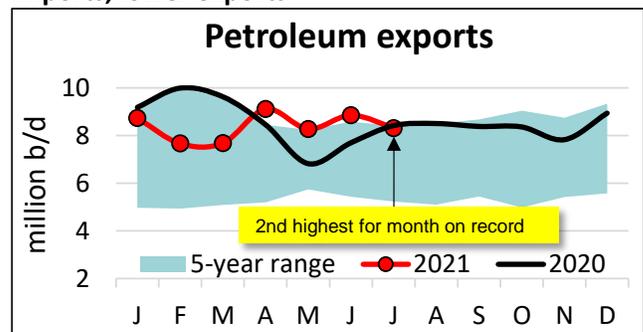
[Baker Hughes](#) reported 381 active oil-directed rigs in July, a 3.8% m/m increase but to a level that remained less than half of the 782 rigs in July 2019.



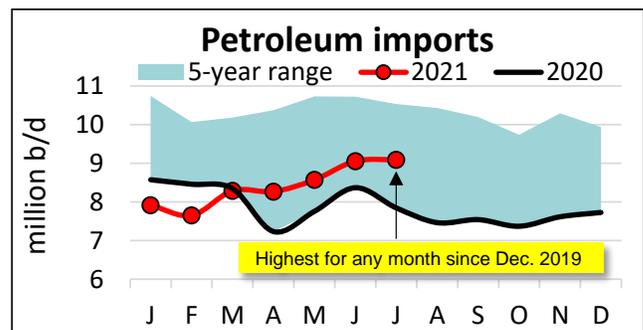
Meanwhile, natural gas-directed drilling increased by 5.4% in July as spot prices averaged \$3.84 per million Btu, their highest for the month since 2014. U.S. natural gas marketed production averaged approximately 104.6 billion cubic feet per day in July per [EIA](#), which corresponded with the extraction of 5.4 mb/d of natural gas liquids (NGLs) by API estimates, which was an increase of 0.2 mb/d from June.

International trade

U.S. a petroleum net importer in July with higher imports, lower exports



U.S. total petroleum exports – crude oil and refined products – of 8.3 mb/d in July fell by 0.5 mb/d from June. The change resulted from 0.7 mb/d m/m lower crude oil exports of 2.8 mb/d, partially offset by 0.2 mb/d m/m higher refined product exports of 5.5 mb/d.

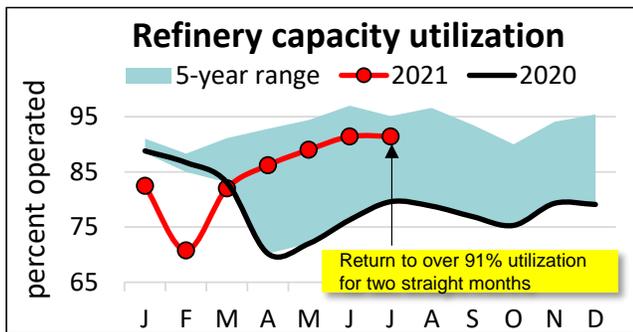
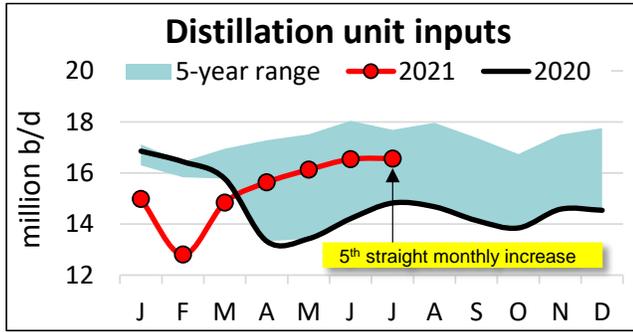


By comparison, U.S. total petroleum imports rose by 0.3% m/m to 9.1 mb/d and their highest level for any month since December 2019.

Consequently, the U.S. remained a petroleum net importer of 0.8 mb/d in July and has been a net importer for four of the past five months.

Industry operations

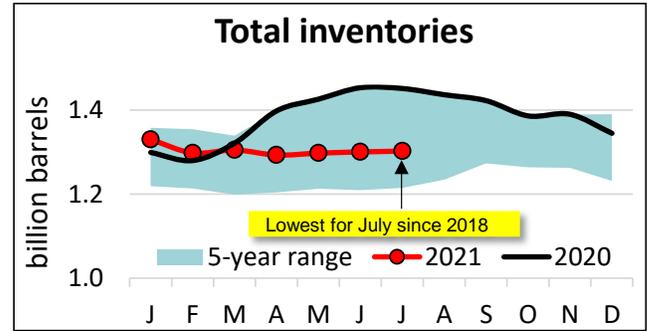
Highest sustained refinery capacity utilization (91.4%) since Dec. 2019



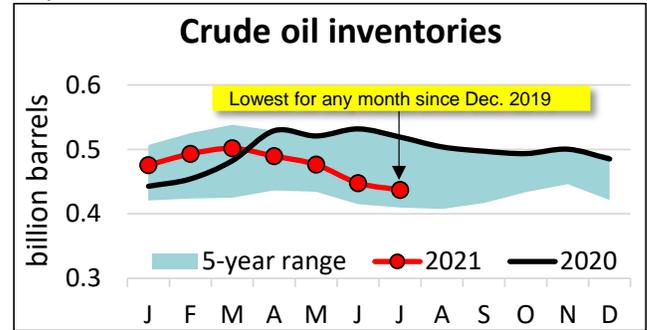
U.S. refinery throughput was 16.6 mb/d in July, which was an increase of 0.2% from June. The implied capacity utilization rate of 91.4% for July was unchanged from June and sustained the highest level since December 2019.

Inventories

Lowest crude oil inventories since Dec. 2019



U.S. total petroleum inventories, including crude oil and refined products (but excluding the Strategic Petroleum Reserve) increased by 0.1% m/m to 1.302 billion barrels in July. Despite increasing, the July level was the lowest for the month since 2018.



Within the total, crude oil inventories fell by 2.3% m/m to 437.4 million barrels, their lowest level since December 2019. This represented a 15.8% y/y decrease from July 2020 and stood 6.8% above the bottom of the 5-year range.

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

Disposition and Supply	July			Year-to-Date		
	2021 ²	2020	% Change	2021 ³	2020	% Change
Disposition:						
Total motor gasoline.....	9,457	8,458	11.8	8,686	7,897	10.0
Finished reformulated.....	3,071	2,630	16.8	2,735	2,416	13.2
Finished conventional.....	6,386	5,828	9.6	5,951	5,480	8.6
Kerosene-jet.....	1,528	964	58.5	1,276	1,102	15.8
Distillate fuel oil.....	3,848	3,610	6.6	3,937	3,723	5.8
≤ 500 ppm sulfur.....	3,789	3,580	5.8	3,910	3,686	6.1
≤ 15 ppm sulfur.....	3,727	3,575	4.3	3,857	3,668	5.1
> 500 ppm sulfur.....	59	30	96.7	27	37	(27.0)
Residual fuel oil.....	338	341	(0.9)	261	185	41.1
All other oils (including crude losses).....	5,562	4,928	12.9	5,193	4,778	8.7
Reclassified ⁴	(123)	21	na	98	109	na
Total domestic product supplied.....	20,610	18,323	12.5	19,452	17,794	9.3
Exports.....	8,307	8,412	(1.2)	8,376	8,585	(2.4)
Total disposition.....	28,917	26,734	8.2	27,828	26,380	5.5
Supply:						
Domestic liquids production.....						
Crude oil (including condensate).....	11,380	10,956	3.9	11,014	11,625	(5.3)
Natural gas liquids.....	5,401	5,369	0.6	5,158	5,088	1.4
Other supply ⁵	1,121	1,050	6.8	1,087	987	10.2
Total domestic supply.....	17,902	17,376	3.0	17,259	17,700	(2.5)
Imports:						
Crude oil (excluding SPR imports).....	6,441	5,906	9.1	5,921	6,161	(3.9)
From Canada.....	3,497	3,522	(0.7)	3,614	3,618	(0.1)
All other.....	2,944	2,384	23.5	2,306	2,543	(9.3)
Products.....	2,645	1,940	36.4	2,492	1,921	29.7
Total motor gasoline (incl. blend.comp).....	1,021	633	61.3	895	561	59.5
All other.....	1,624	1,307	24.3	1,597	1,361	17.4
Total imports.....	9,086	7,846	15.8	8,412	8,082	4.1
Total supply.....	26,988	25,221	7.0	25,672	25,782	(0.4)
Stock change, all oils.....	(1,929)	(1,513)	na	(2,156)	(597)	na
Refinery Operations:						
Input to crude distillation units.....	16,566	14,824	11.8	15,384	14,977	2.7
Gasoline production.....	9,905	9,026	9.7	9,383	8,504	10.3
Kerosene-jet production.....	1,427	836	70.7	1,237	1,080	14.6
Distillate fuel production.....	4,910	4,842	1.4	4,594	4,886	(6.0)
Residual fuel production.....	239	225	6.2	203	209	(2.9)
Operable capacity.....	18,128	18,622	(2.7)	18,116	18,826	(3.8)
Refinery utilization ⁶	91.4%	79.6%	na	84.9%	79.6%	na
Crude oil runs.....	16,030	14,338	11.8	14,910	14,446	3.2

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)

	July 2021	June 2021	July 2020	% Change From	
				Month Ago	Year Ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding lease & SPR stocks).....	437.4	447.6	519.3	(2.3)	(15.8)
Unfinished oils.....	90.5	91.2	89.0	(0.8)	1.7
Total motor gasoline.....	229.9	240.8	249.3	(4.5)	(7.8)
Finished reformulated.....	0.0	0.0	0.0	(0.1)	(60.9)
Finished conventional.....	17.5	20.6	24.3	(15.0)	(27.8)
Blending components.....	212.4	220.2	225.0	(3.5)	(5.6)
Kerosene-jet.....	44.1	45.2	41.0	(2.4)	7.6
Distillate fuel oil.....	139.3	139.1	177.6	0.1	(21.5)
≤ 500 ppm sulfur.....	130.9	129.8	168.6	0.8	(22.4)
≤ 15 ppm sulfur.....	127.4	126.5	164.0	0.7	(22.3)
> 500 ppm sulfur.....	8.4	9.3	9.0	(9.7)	(6.3)
Residual fuel oil.....	29.3	32.1	36.3	(8.7)	(19.4)
All other oils.....	331.9	304.5	338.6	9.0	(2.0)
Total all oils.....	1,302.4	1,300.5	1,451.0	0.1	(10.2)