American Petroleum Institute

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The MSR™ - Monthly Statistical Report

API Statistics Department & Office of the Chief Economist

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Executive Summary

With urban re-openings and the onset of the summer driving season, U.S. petroleum demand rose for a fourth consecutive month and eclipsed twenty million barrels per day (mb/d) in June, according to API's primary data. Domestic supply has not kept pace, and U.S. petroleum net imports grew despite stronger exports in June, which along with higher crude oil prices reinforced that the global economy and oil markets have remained solid.

Highlights:

- Total U.S. petroleum demand of 20.6 million barrels per day (mb/d) rose to its highest for any month since November 2019.
- A resumption in urban activity drove gasoline demand to 9.4 mb/d, within 3.5% of its June 2019 level.
- Refining and petrochemical demand for other oils – naphtha, gasoil, propane/propylene – of 5.7 mb/d set a record for the month of June and was over 17% above its June 2019 level.
- Increased refining throughput (16.5 mb/d) led the highest capacity utilization rate 91.4% since Dec. 2019.
- U.S. crude oil production (11.2 mb/d) edged up but remained 1.6 mb/d below its Nov. 2019 record level.
- With demand increases that outpaced those of supply, the U.S. remained a petroleum net importer in June.
- Leading economic indicators remained strong and positive in June, including API's Distillate Economic Indicator™ signaling continued industrial production gains (please see the following chart for details).

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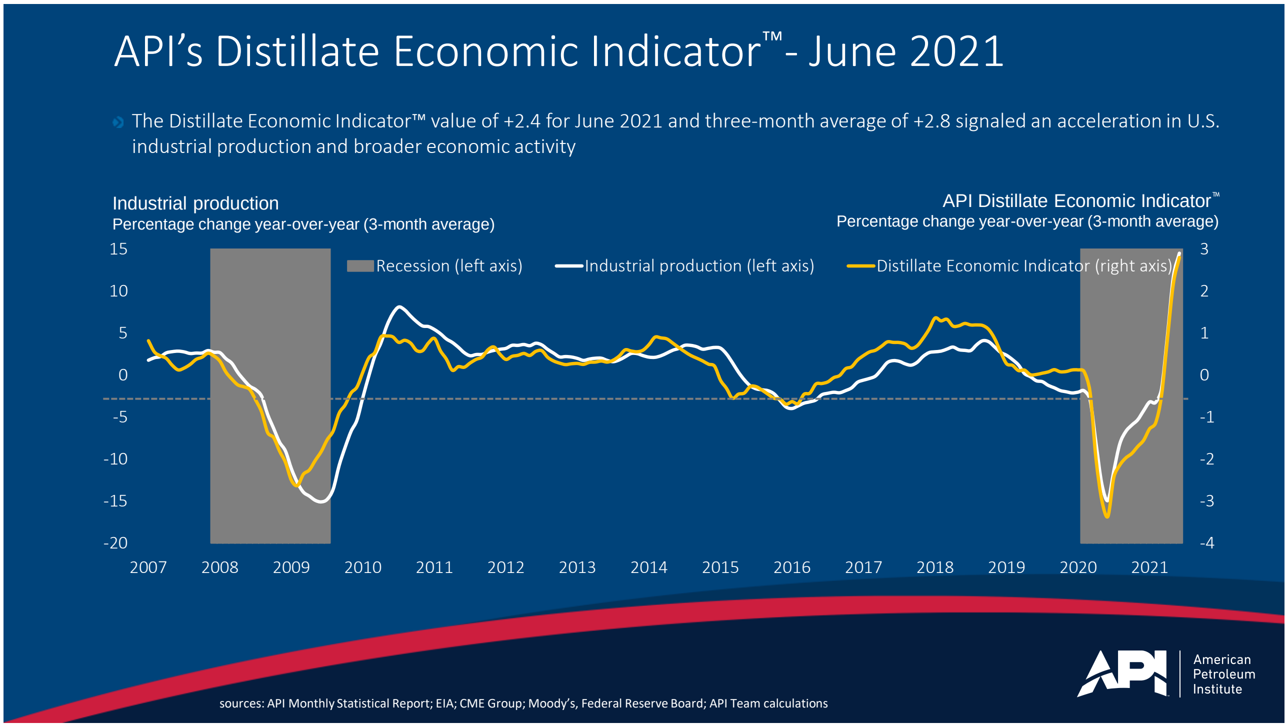
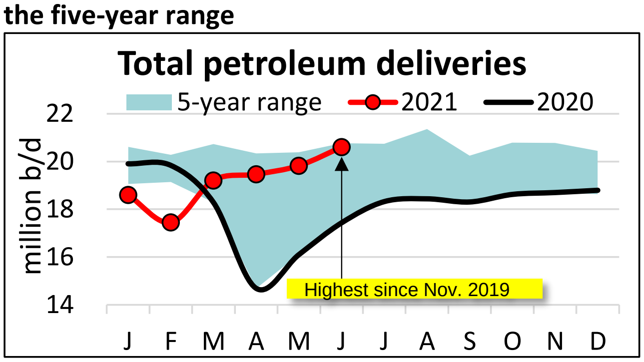


Details by section

Demand

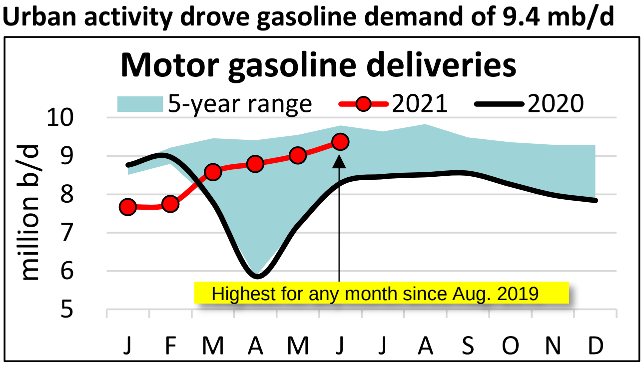
U.S. petroleum demand (20.6 mb/d) neared top of the five-year range



In June, U.S. petroleum demand, as measured by total domestic petroleum deliveries, was 20.6 mb/d – its highest for any month since November 2019. This reflected an increase of 3.9% from May and was 0.3% below the level of June 2019, which topped the five-year range.

Gasoline

Urban activity drove gasoline demand of 9.4 mb/d

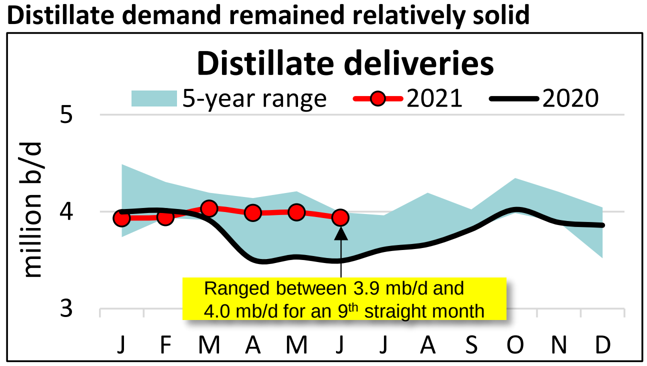


Consumer gasoline demand, measured by motor gasoline deliveries, of 9.4 mb/d in June, increased by 3.9% (0.4 mb/d) from May and returned to within 3.5% of its June 2019 level.

Deliveries of reformulated-type gasoline (consumed primarily in urban areas) rose by 373 thousand barrels per day (kb/d) or 13.8% from May, while those of conventional gasoline (mainly in rural areas) decreased by 22 kb/d (0.3% m/m). These relative changes suggested urban commuting and tourism have been recovering from the effects of the pandemic.

Distillate Fuel Oil

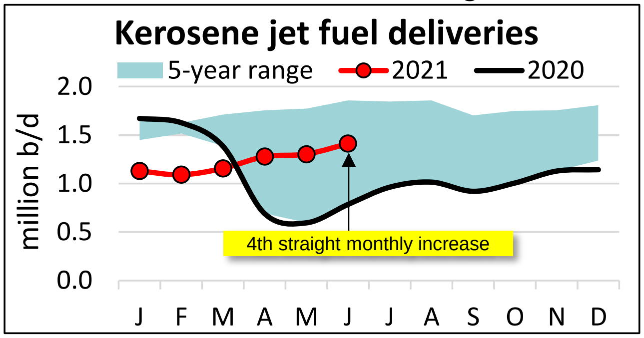
Distillate demand remained relatively solid



Distillate deliveries of 3.9 mb/d in June have been relatively steady for nine consecutive months and were 1.4% below their level in June 2019 that had been its strongest in 11 years. [DAT iQ industry] trendlines showed weaker truck freight activity in June, with spot truck loads down by 6.0% from May.

Kerosene Jet Fuel

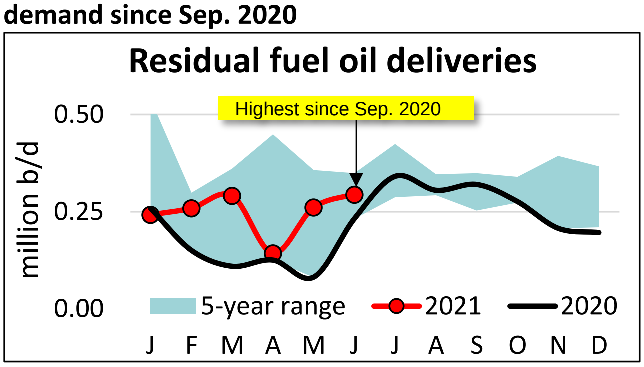
Jet fuel deliveries rose for the 4th straight month



'K-Jet' deliveries rose by 0.1 mb/d to 1.4 mb/d in June. This was an increase of 8.4% from May but 21.5% below its June 2019 level – but relatively stronger than the 26.4% gap between May 2021 and 2019. Consistent with the jet fuel increase, Flightradar24 high-frequency data showed that tracked flights increased by 11.3% m/m in June.

Residual Fuel Oil

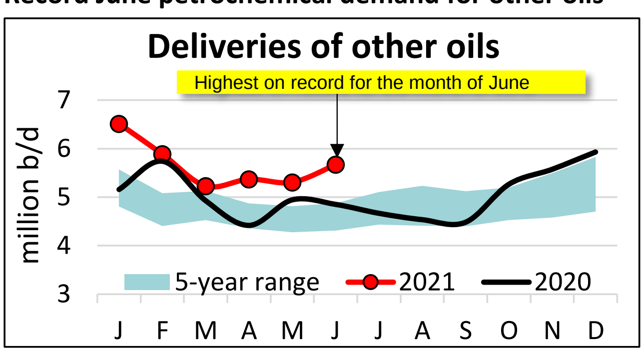
Marine shipping drove highest residual fuel oil demand since Sep. 2020



Deliveries of residual fuel oil, which is used in electric power production, space heating, industrial applications and as a marine bunker fuel, were 294 kb/d in June. This was an increase of 12.6% from May and its highest level since September 2020, consistent with indications of increased marine transportation demand.

Naphtha, Gasoil, Propane, Propylene "Other Oils"

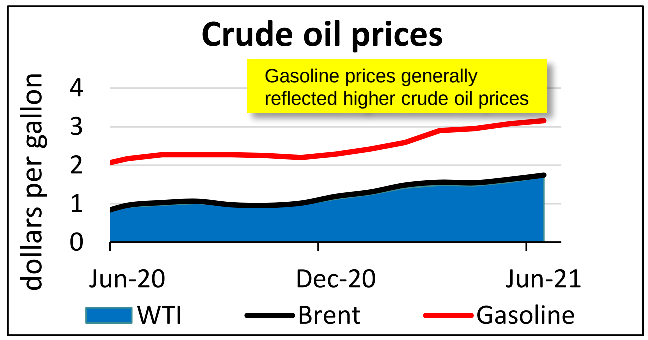
Record June petrochemical demand for other oils



Deliveries of liquid feedstocks, such as naphtha, gasoil, and propane/propylene ("other oils") used primarily in refining and petrochemical manufacturing, were 5.7 mb/d in June – its highest on record for June and more than 17% over its June 2019 level. This likely reflected continued strong demand for films/packaging, medical plastics as well as increased refining activity.

Prices

Gasoline prices responded to higher crude oil prices – highest for June since 2014



In June, West Texas Intermediate (WTI) crude oil prices increased to $71.38 per barrel ($1.70 per gallon), a 9.5% increase m/m and 68.4% year-to-date. By comparison, Brent crude oil spot prices averaged $73.16 per barrel ($1.74 per gallon), and the Brent-WTI price differential narrowed by 47% m/m to $1.78 per barrel.

As crude oil remained the top input cost in making gasoline per EIA, relatively strong crude oil prices corresponded with increased gasoline prices in June and for a seventh consecutive month. The U.S. average conventional gasoline price was $3.16 per gallon in June, up by 2.6% ($0.08 per gallon) from May and 25.9% year-to-date ($0.59 per gallon), according to AAA. This was the highest gasoline price for the month of July since 2014.

Macroeconomy

Leading indicators suggest broad industrial gains

API's Distillate Economic Indicator™, which is based primarily on diesel/distillate supply, demand, and inventories, had a reading of +2.4 in June and a three-month average of +2.8 – its strongest readings on record since 2007 – indicating U.S. industrial production and broader economic activity continued to accelerate.

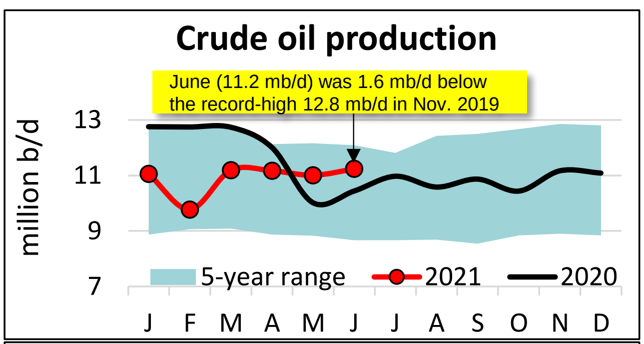
The Institute for Supply Management's manufacturing Purchasing Managers Index (PMI) had a reading of 60.6 in June, a 0.6 percentage point decrease from May. Index values above 50.0 suggest an expansion, and the manufacturing PMI has exceeded that threshold for 13 consecutive months. Within the index, slowing growth was registered for the backlog of orders, employment, and supplier deliveries. These are offset by increases in inventories and new export orders. Seventeen of the 18 manufacturing industries surveyed reported growth in June.

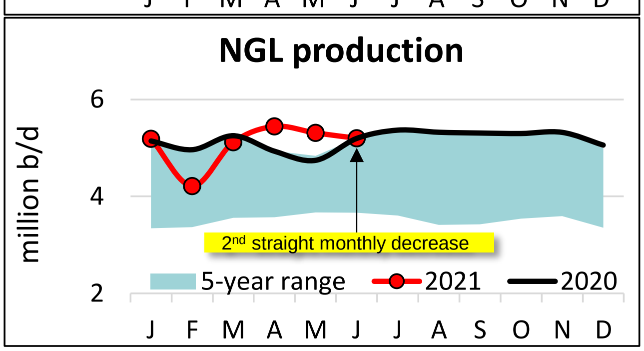
The University of Michigan's consumer sentiment index indicated 3.1% m/m stronger consumer sentiment in June (85.5) compared with May (82.9). The survey attributed June's decrease exclusively to improved sentiment among households with annual incomes above $100,000.

According to the Bureau of Labor Statistics (BLS), the unemployment rate rose by 0.1% to 5.9% in June despite non-farm payrolls that increased by 850,000.

Supply

U.S. crude oil production edged up, while natural gas and NGL production fell





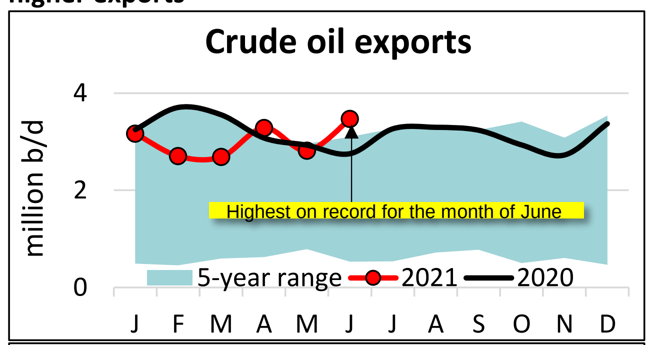
In June, U.S. crude oil production rose to 11.2 mb/d, a 2.1% m/m increase along with solid rig productivity and increased drilling activity.

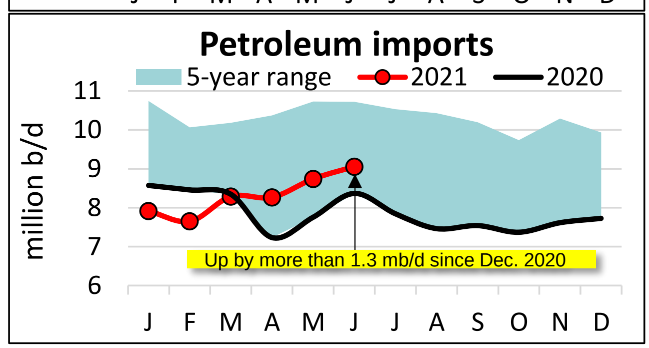
Baker Hughes reported 370 active oil-directed rigs in June, a 4.6% m/m increase but less than half of the 790 rigs in June 2019.

By comparison, natural gas-directed drilling decreased by 2.4% in June despite spot prices of $3.26 per million Btu that were at their highest for the month since 2014. U.S. natural gas marketed production averaged approximately 105 billion cubic feet per day in June per EIA, which corresponded with the extraction of 5.2 mb/d of natural gas liquids (NGLs) by API estimates, which was a decrease of 0.1 mb/d from May.

International trade

U.S. petroleum net imports persisted despite higher exports

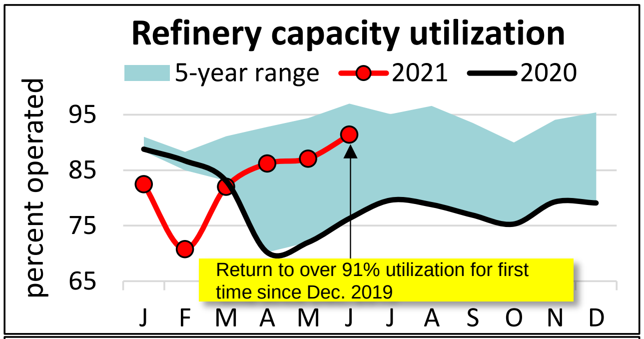


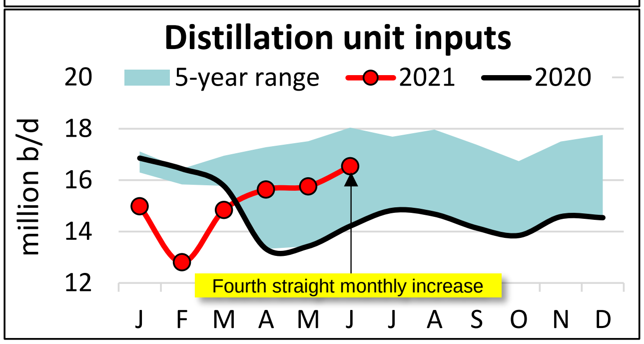


The U.S. remained a petroleum net importer in June and has seen total petroleum imports rise by more than 1.3 mb/d since December 2020. Meanwhile, the recovery in global demand generated a pull for U.S. crude oil exports, which rose to 3.5 mb/d in June – their highest level on record for the month since 1920. U.S. refined product exports also increased by 0.4 mb/d to 5.4 mb/d in June, which was the highest for the month since 2019.

Industry operations

Refinery capacity utilization (91.4%) highest since Dec. 2019

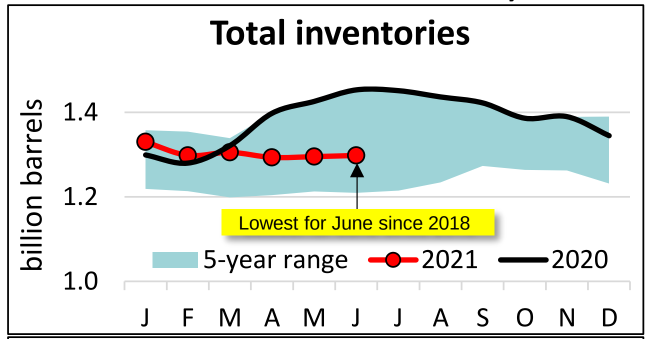


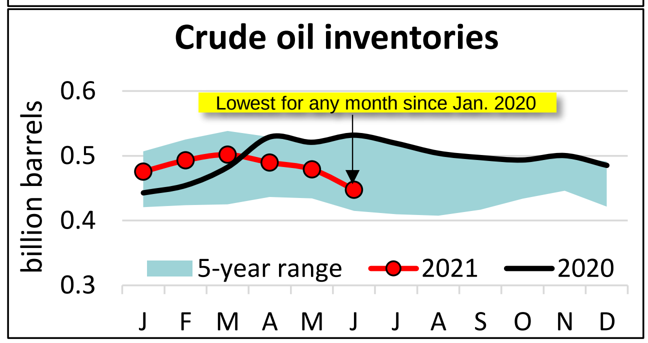


U.S. refinery throughput was 16.5 mb/d in June, which was an increase of 5.0% from May but 6.6% below its June 2019 level – a narrower difference than the 7.6% one in May, reflecting a relatively stronger throughput level. The implied capacity utilization rate of 91.4% for June increased by 4.3 percentage points from May to its highest level since December 2019.

Inventories

Lowest crude oil inventories since January 2020





U.S. total petroleum inventories, including crude oil and refined products (but excluding the Strategic Petroleum Reserve) increased by 0.2% m/m to 1.298 billion barrels in June from revised May estimates. Total inventories increased despite lower crude oil inventories, which fell by 6.6% m/m to 447.6 million barrels, their lowest level since January 2020.

ESTIMATED UNITED STATES PETROLEUM BALANCE[1]
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	June			Year-to-Date		
	2021[2]	2020	% Change	2021[3]	2020	% Change
Disposition:						
Total motor gasoline	9,363	8,286	13.0	8,532	7,801	9.4
Finished reformulated	3,084	2,570	20.0	2,649	2,380	11.3
Finished conventional	6,279	5,716	9.8	5,883	5,421	8.5
Kerosene-jet	1,414	786	79.9	1,231	1,126	9.3
Distillate fuel oil	3,938	3,492	12.8	3,973	3,742	6.2
≤ 500 ppm sulfur	3,915	3,443	13.7	3,945	3,704	6.5
≤ 15 ppm sulfur	3,856	3,439	12.1	3,893	3,684	5.7
> 500 ppm sulfur	23	49	(53.1)	28	38	(26.3)
Residual fuel oil	294	232	26.7	248	159	56.0
All other oils (including crude losses)	5,671	4,613	22.9	5,114	4,753	7.6
Reclassified[4]	(81)	28	na	108	124	na
Total domestic product supplied	20,599	17,435	18.1	19,207	17,704	8.5
Exports	8,848	7,692	15.0	8,371	8,615	(2.8)
Total disposition	29,447	25,127	17.2	27,578	26,319	4.8
Supply:						
Domestic liquids production						
Crude oil (including condensate)	11,240	10,442	7.6	10,921	11,780	(7.3)
Natural gas liquids	5,200	5,197	0.1	5,090	5,041	1.0
Other supply[5]	1,078	985	9.5	1,055	976	8.1
Total domestic supply	17,518	16,624	5.4	17,066	17,797	(4.1)
Imports:						
Crude oil (excluding SPR imports)	6,170	6,397	(3.6)	5,848	6,204	(5.7)
From Canada	3,496	3,332	4.9	3,597	3,634	(1.0)
All other	2,674	3,065	(12.8)	2,251	2,570	(12.4)
Products	2,885	1,970	46.5	2,479	1,918	29.2
Total motor gasoline (incl. blend.comp)	1,036	716	44.7	860	548	56.9
All other	1,849	1,254	47.5	1,619	1,370	18.2
Total imports	9,055	8,367	8.2	8,326	8,122	2.5
Total supply	26,573	24,992	6.3	25,393	25,919	(2.0)
Stock change, all oils	(2,874)	(136)	na	(2,185)	(400)	na
Refinery Operations:						
Input to crude distillation units	16,540	14,212	16.4	15,117	15,003	0.8
Gasoline production	10,009	8,745	14.5	9,284	8,415	10.3
Kerosene-jet production	1,365	731	86.7	1,202	1,121	7.2
Distillate fuel production	5,001	4,580	9.2	4,527	4,893	(7.5)
Residual fuel production	211	239	(11.7)	197	207	(4.6)
Operable capacity	18,099	18,622	(2.8)	18,107	18,860	(4.0)
Refinery utilization[6]	91.4%	76.3%	na	83.5%	79.5%	na
Crude oil runs	16,103	13,732	17.3	14,664	14,465	1.4

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[1]
(Daily average in thousands of 42 gallon barrels)

	June 2021	May 2021	June 2020	% Change From Month Ago	% Change From Year Ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding lease & SPR stocks)........	447.6	479.3	531.9	(6.6)	(15.9)
Unfinished oils........	91.2	92.1	91.9	(1.0)	(0.7)
Total motor gasoline........	240.8	235.9	253.3	2.1	(4.9)
Finished reformulated........	0.0	0.0	0.0	(0.1)	(53.7)
Finished conventional........	20.6	19.5	23.5	5.6	(12.2)
Blending components........	220.2	216.4	229.8	1.8	(4.2)
Kerosene-jet........	45.2	43.1	41.5	4.9	8.9
Distillate fuel oil........	139.1	133.2	175.4	4.4	(20.7)
≤ 500 ppm sulfur........	129.8	124.0	166.5	4.7	(22.1)
≤ 15 ppm sulfur........	126.5	120.5	163.0	5.0	(22.4)
> 500 ppm sulfur........	9.3	9.2	8.9	1.1	4.5
Residual fuel oil........	32.1	32.4	39.6	(0.9)	(19.0)
All other oils........	301.8	278.9 R	319.2	8.2	(5.5)
Total all oils........	1,297.8	1,294.9 R	1,452.8	0.2	(10.7)

QUARTERLY ESTIMATED UNITED STATES PETROLEUM BALANCE[1]
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	Second Quarter 2021[2]	2020	% Change
Disposition			
Total motor gasoline	9,055	7,110	27.4
Finished reformulated	2,863	2,139	33.9
Finished conventional	6,192	4,971	24.6
Kerosine-jet	1,332	690	93.1
Distillate fuel oil	3,973	3,510	13.2
≤ 0.05 percent sulfur	3,939	3,481	13.2
≤ 15 ppm sulfur	3,915	3,458	13.2
> 0.05 percent sulfur	34	30	13.3
Residual fuel oil	233	145	60.7
All other oils (including crude losses)	5,300	4,517	17.3
Reclassified[5]	64	105	na
Total domestic product supplied	19,958	16,077	24.1
Exports	8,704	7,645	13.9
Total disposition	28,662	23,721	20.8
Supply:			
Domestic liquids production			
Crude oil (including condensate)	11,137	10,815	3.0
Natural gas liquids	5,317	4,956	7.3
Other supply[4]	1,063	819	29.9
Total domestic supply	17,518	16,590	5.6
Imports:			
Crude oil (excluding SPR imports)	5,969	6,002	(0.5)
From Canada	3,429	3,384	1.3
All other	2,540	2,618	(3.0)
Products	2,719	1,784	52.4
Total motor gasoline (incl. blend.comp)	1,035	526	96.8
All other	1,684	1,258	33.9
Total imports	8,688	7,786	11.6
Total supply	26,206	24,376	7.5
Stock change, all oils	(2,456)	655	na
Refinery Operations:			
Input to crude distillation units	15,973	13,651	17.0
Operable capacity	18,106	18,745	(3.4)
Gasoline production	9,818	7,524	30.5
Distillate fuel production	4,759	4,834	(1.5)
Kerosine-jet production	1,307	617	111.7
Residual fuel production	199	183	8.7
Refinery utilization[5]	88.2%	72.8%	na
Crude oil runs	15,512	13,157	17.9

	Second Quarter 2021[2]	2020	% Change
Stocks (at end of quarter, in millions of barrels):			
Crude oil (excluding lease & SPR stocks)	447.6	531.9	(15.9)
Unfinished oils	91.2	91.9	(0.7)
Total motor gasoline	240.8	253.3	(4.9)
Finished reformulated	0.0	0.0	(53.7)
Finished conventional	20.6	23.5	(12.2)
Blending components	220.2	229.8	(4.2)
Kerosine-jet	45.2	41.5	8.9
Distillate fuel oil	139.1	175.4	(20.7)
≤ 0.05 percent sulfur	129.8	166.5	(22.1)
≤ 15 ppm sulfur	126.5	163.0	(22.4)
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Residual fuel oil	32.1	39.6	(19.0)
All other oils	301.8	319.2	(5.5)
Total all oils	1,297.8	1,452.8	(10.7)

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