

# THE U.S. Energy DATABOOK

*A summary of national and global energy indicators*



AUGUST 7, 2024

FEDERAL RESERVE BANK of KANSAS CITY

## SUMMARY OF CURRENT ENERGY CONDITIONS

Since the last edition of the U.S. Energy Databook, activity in the energy sector decreased moderately. For the week ending July 26, West Texas Intermediate (WTI) crude oil averaged \$79.26 per barrel and North Sea Brent averaged \$82.52 per barrel, decreasing 6.2% and 6.8% respectively over the last quarter. The Henry Hub natural gas spot price averaged \$2.06 per million Btu for the week ending July 26, increasing 33.8% over the last three months. Over the last quarter, the total number of active drilling rigs in the United States fell slightly by 3.9% and is 11.3% below year-ago levels. U.S. crude oil production increased slightly by 0.6% compared to three months ago. U.S. crude oil and petroleum products exports decreased 0.8% in the last quarter and imports rose by 2.3%. Global demand for petroleum increased 0.9% and global petroleum production rose by roughly 0.6% over the last quarter.

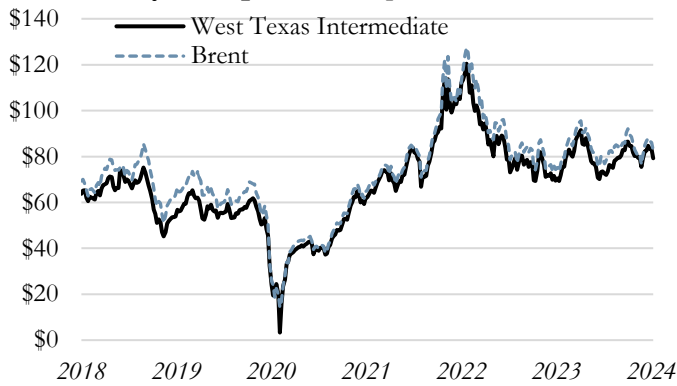
This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: oil and natural gas prices; global petroleum production and demand; U.S. oil production and petroleum demand; U.S. crude oil stocks; OECD petroleum stocks; U.S. oil imports; U.S. oil exports; oil and gas drilling rig counts; and U.S. natural gas production. These indicators can be found on the following pages.



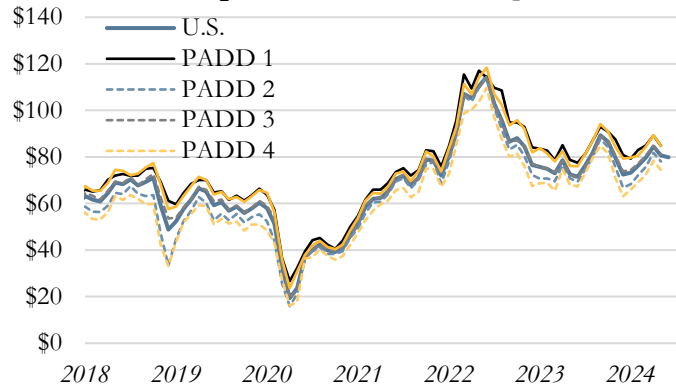
The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. There are three branches across the Tenth Federal Reserve District located in Denver, Oklahoma City, and Omaha.

Weekly data through July 26, 2024

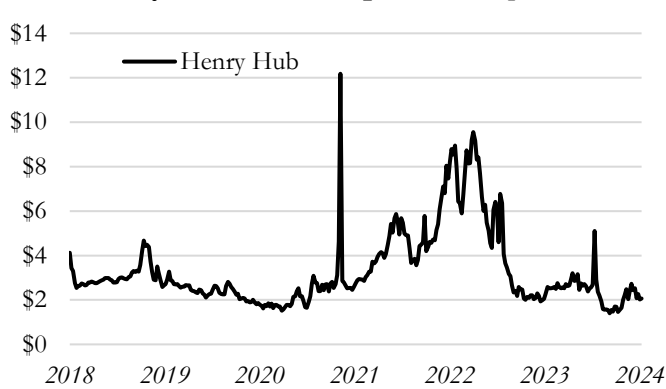
Weekly Oil Spot Prices, per barrel



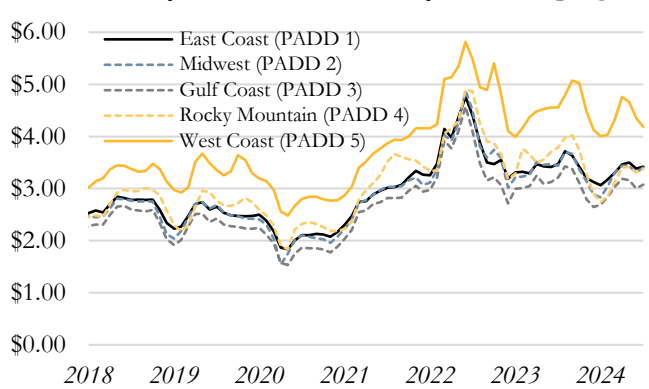
Refiner Acquisition Cost of Oil\*, per barrel



Weekly Natural Gas Spot Prices, per mmbtu



Monthly Gasoline Prices by PADD, per gallon



Weekly Spot Prices, Change from

Weekly Spot Prices	Current 7/26/24	1 Week Ago	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
West Texas Intermediate	\$79.26	-\$3.72	-\$3.27	-\$5.22	\$2.90	-\$0.42
Brent	\$82.52	-\$3.53	-\$4.20	-\$6.01	\$0.21	-\$1.03
Henry Hub	\$2.06	\$0.04	-\$0.46	\$0.52	-\$0.31	-\$0.53

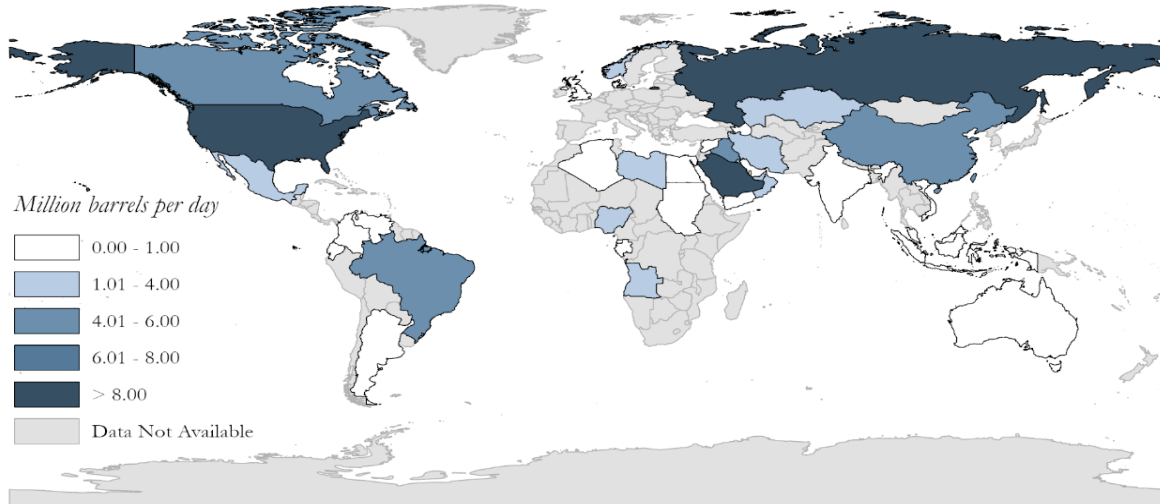
Monthly Gasoline Spot Prices, Change from

Geographic Area	Current Jul-24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
East Coast (PADD 1)	\$3.42	\$0.04	-\$0.04	\$0.36	-\$0.05
Midwest (PADD 2)	\$3.41	\$0.10	-\$0.03	\$0.58	-\$0.03
Gulf Coast (PADD 3)	\$3.08	\$0.07	-\$0.11	\$0.39	-\$0.14
Rocky Mountain (PADD 4)	\$3.38	\$0.06	-\$0.03	\$0.64	-\$0.41
West Coast (PADD 5)	\$4.18	-\$0.18	-\$0.58	\$0.17	-\$0.38

\*The cost of crude oil, including transportation and other fees paid by the refiner.

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

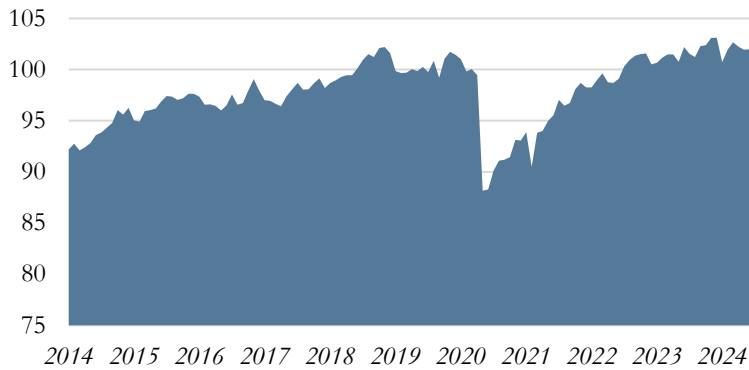
June 2024 Global Petroleum Production



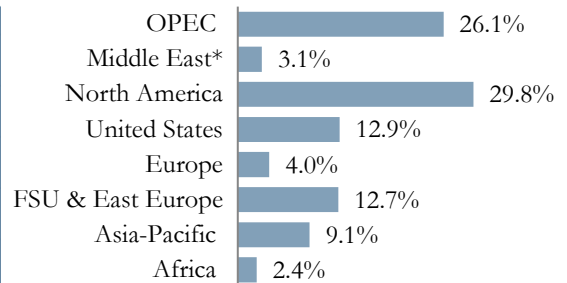
Source: Energy Information Administration/Haver Analytics

June 2024

Monthly Global Petroleum Production, million barrels per day

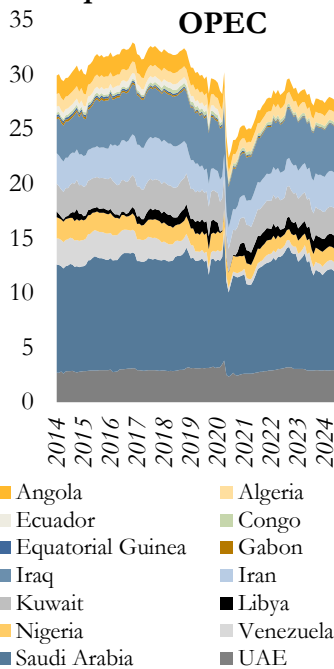


Regional Share of Production

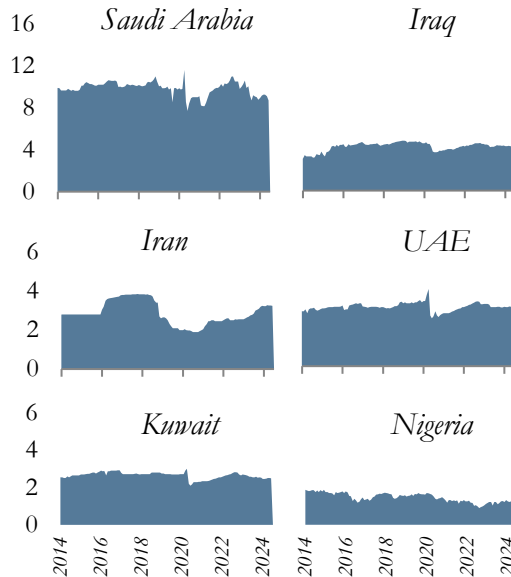


\*Excludes OPEC

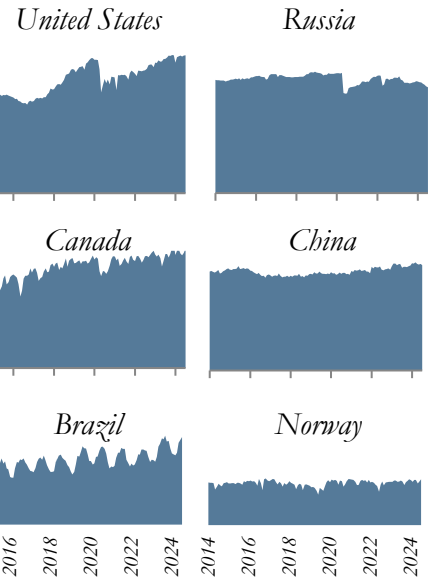
Top Crude Oil Producers, million barrels per day



Top OPEC Producers



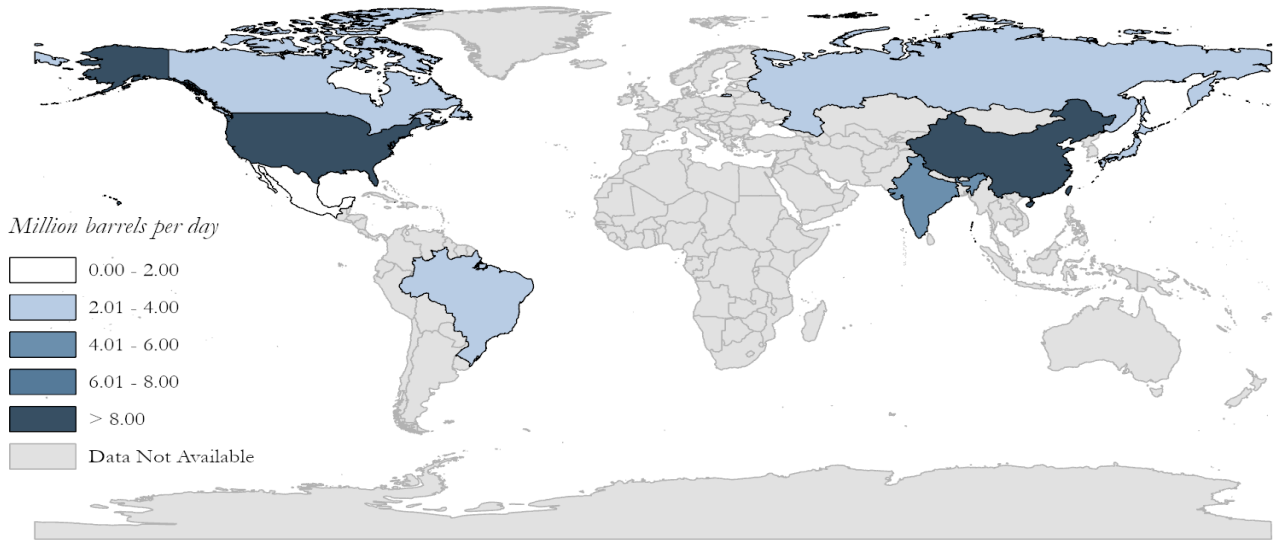
Top Non-OPEC Producers



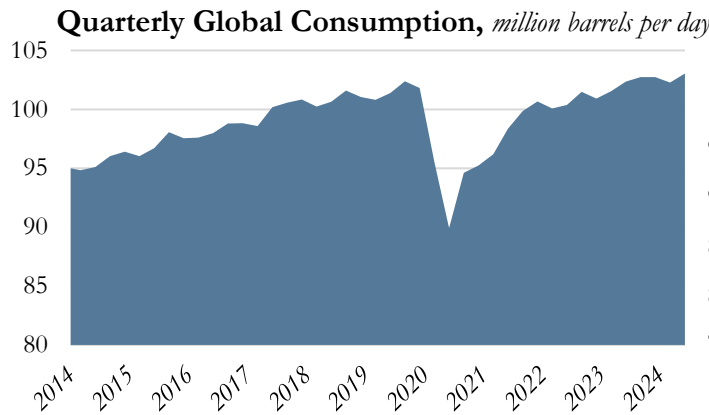
Note: OPEC country production values are for crude oil and non-OPEC country data is for petroleum production.

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

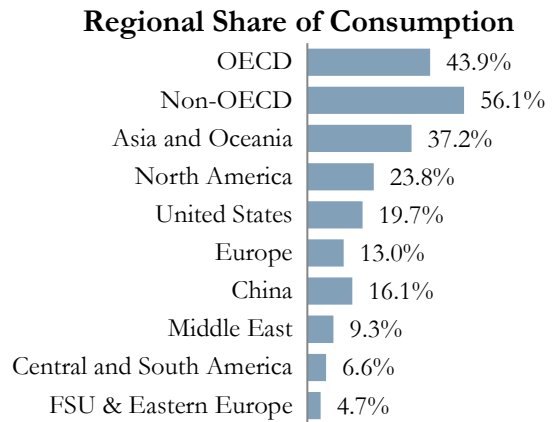
Second Quarter 2024 Global Petroleum Consumption



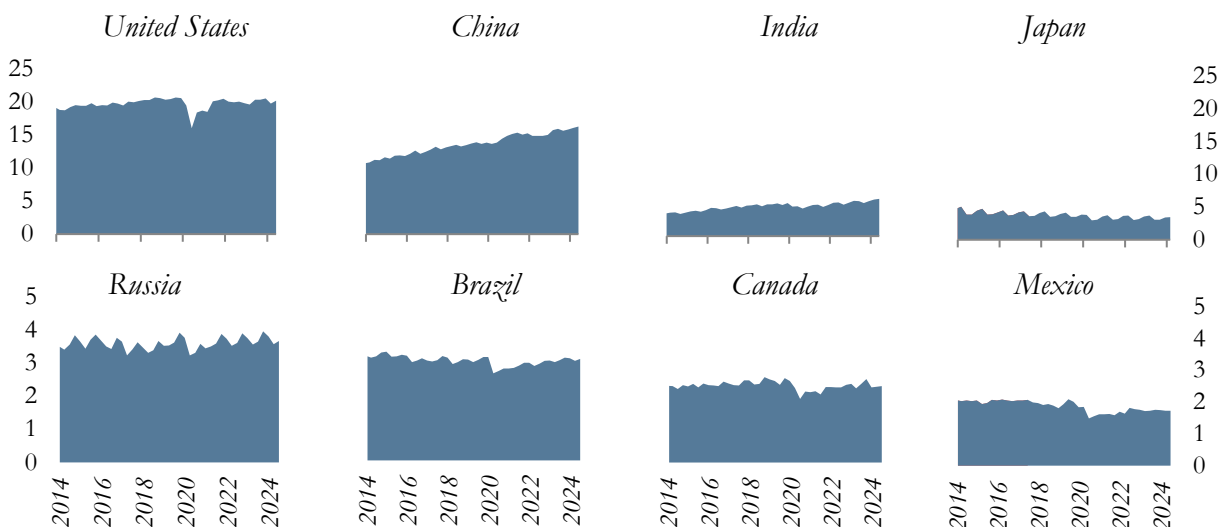
Source: Energy Information Administration/Haver Analytics



Second Quarter 2024

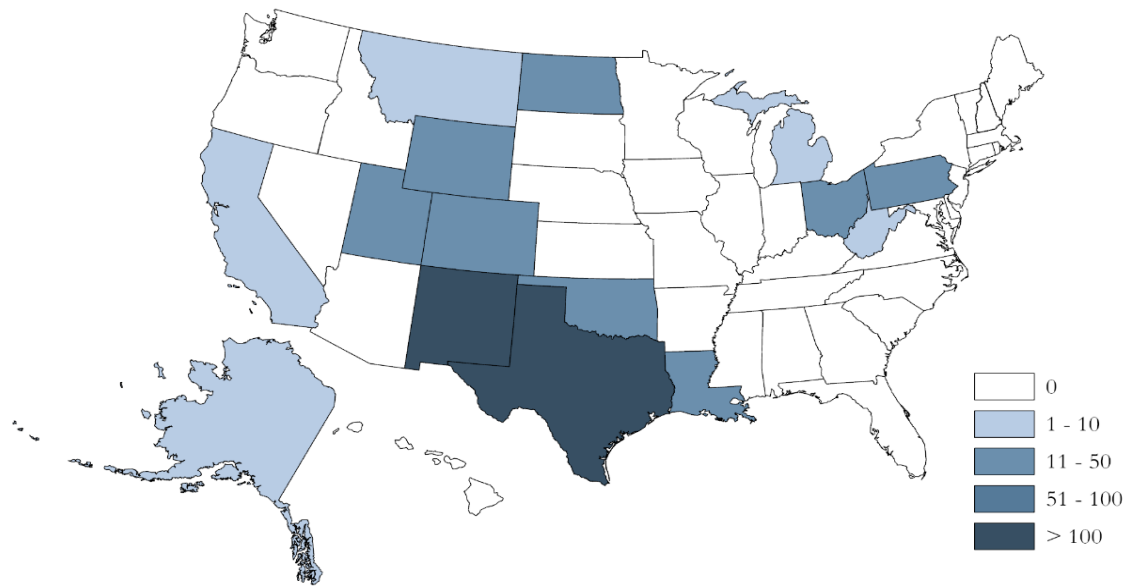


Top Petroleum Consumers, million barrels per day



Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

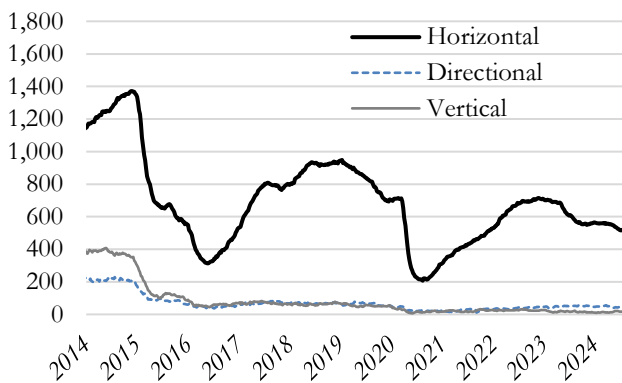
July 2024 Weekly Active Oil & Gas Drilling Rig Counts



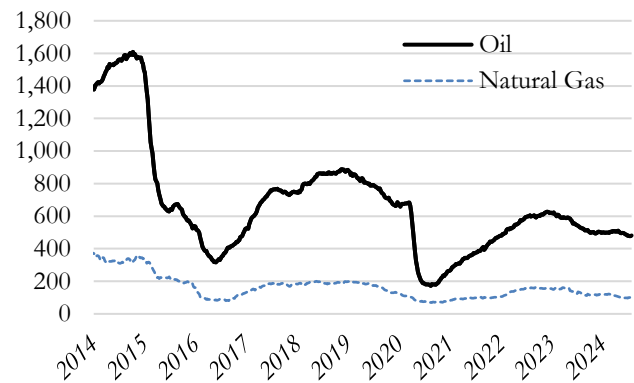
Source: Baker Hughes/Haver Analytics

July 26, 2024

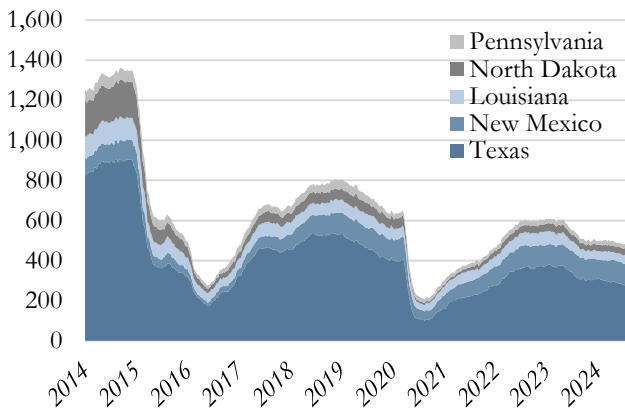
U.S. Active Drilling Rigs by Trajectory



U.S. Active Drilling Rigs by Type



Top Five States for Drilling Activity (Total Active Rigs)



Rig Count By Type

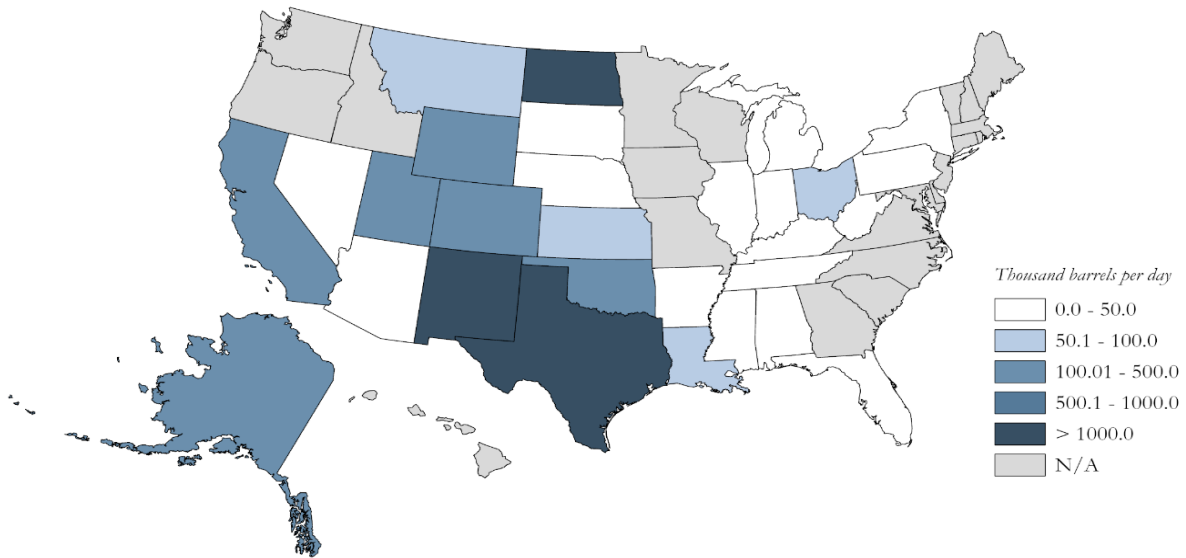
Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	482	479	506	529
Gas	101	97	105	128
Misc	6	5	2	7
<b>Total</b>	<b>589</b>	<b>581</b>	<b>613</b>	<b>664</b>

Rig Count By Type, Change from

Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	-	0.6%	-4.7%	-8.9%
Gas	-	4.1%	-3.8%	-21.1%
Misc	-	20.0%	200.0%	-14.3%
<b>Total</b>	-	<b>1.4%</b>	<b>-3.9%</b>	<b>-11.3%</b>

Source: Baker Hughes/Haver Analytics

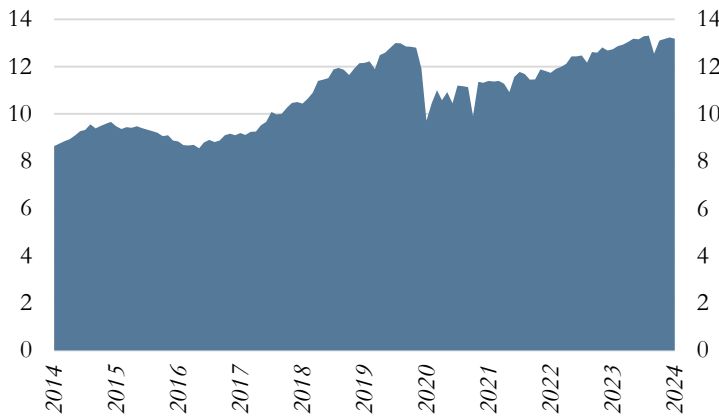
May 2024 U.S. Crude Oil Production



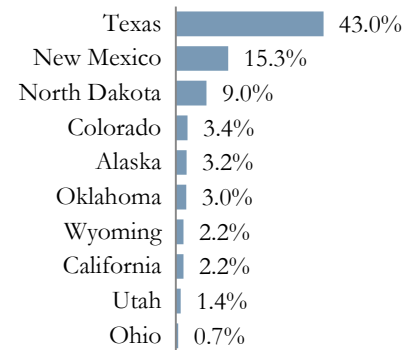
Source: Energy Information Administration/Haver Analytics

May 2024

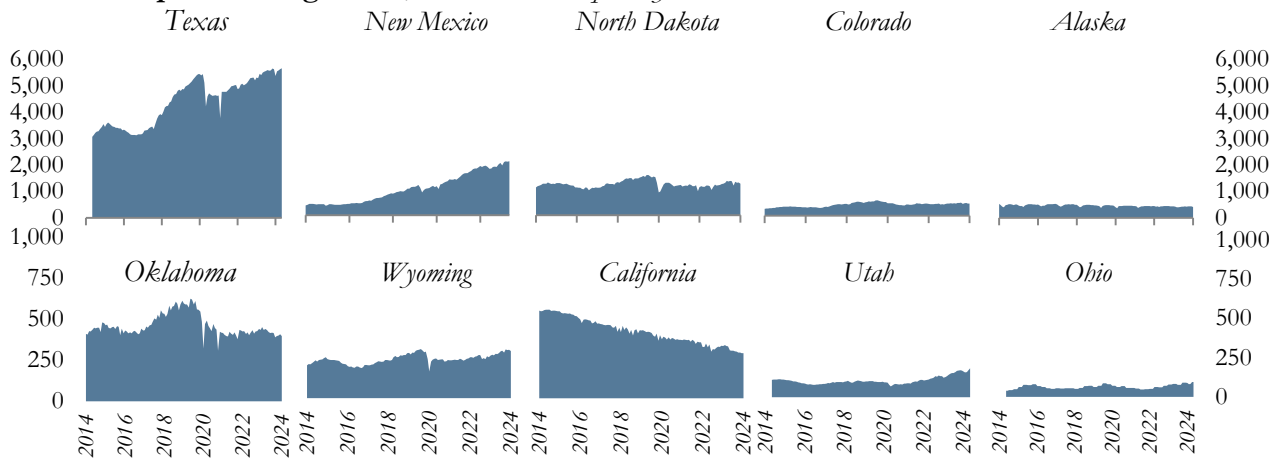
Monthly U.S. Production, million barrels per day



Share of Production



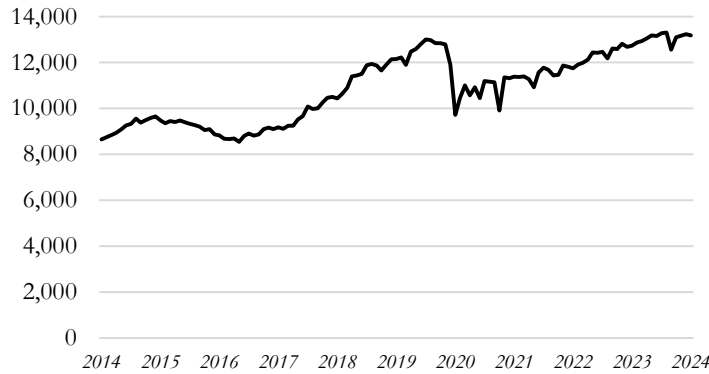
Top Producing States, thousand barrels per day



Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

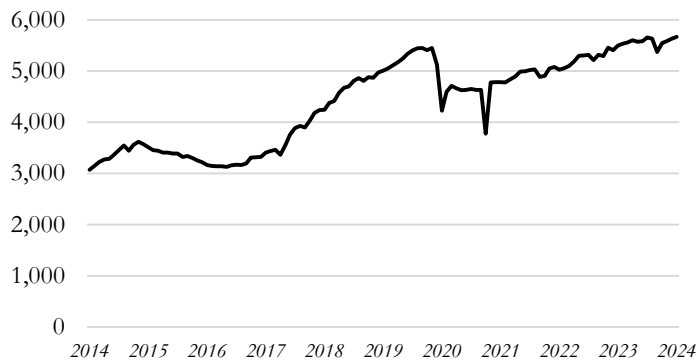
Data through May 2024

**United States** *Thousand barrels per day*



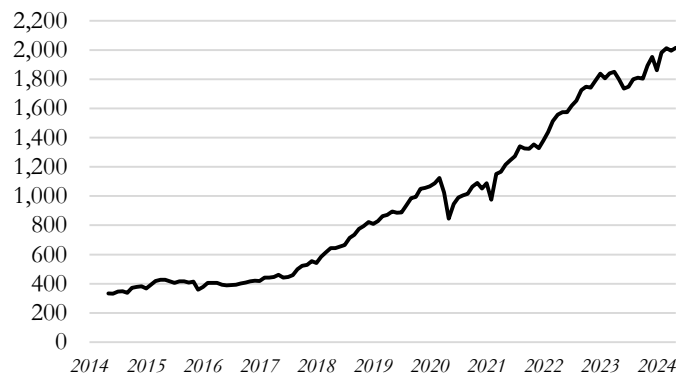
<b>United States</b>		<i>Change</i>
<i>Thousand barrels per day</i>		<i>from</i>
May-24	13,178	
Month Ago	13,239	-0.5%
3 Months Ago	13,102	0.6%
6 Months Ago	13,281	-0.8%
1 Year Ago	12,730	3.5%

**Texas**



<b>Texas</b>		<i>Change</i>
<i>Thousand barrels per day</i>		<i>from</i>
May-24	5,667	
Month Ago	5,632	0.6%
3 Months Ago	5,548	2.2%
6 Months Ago	5,658	0.2%
1 Year Ago	5,500	3.1%
Share of U.S. Production		43.0%

**New Mexico**



<b>New Mexico</b>		<i>Change</i>
<i>Thousand barrels per day</i>		<i>from</i>
May-24	2,015	
Month Ago	1,995	1.0%
3 Months Ago	1,983	1.6%
6 Months Ago	1,894	6.4%
1 Year Ago	1,799	12.0%
Share of U.S. Production		15.3%

**North Dakota**

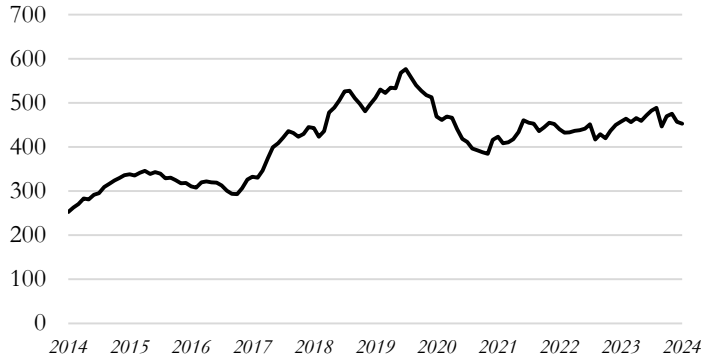


<b>North Dakota</b>		<i>Change</i>
<i>Thousand barrels per day</i>		<i>from</i>
May-24	1,182	
Month Ago	1,225	-3.5%
3 Months Ago	1,248	-5.3%
6 Months Ago	1,278	-7.5%
1 Year Ago	1,127	4.9%
Share of U.S. Production		9.0%

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

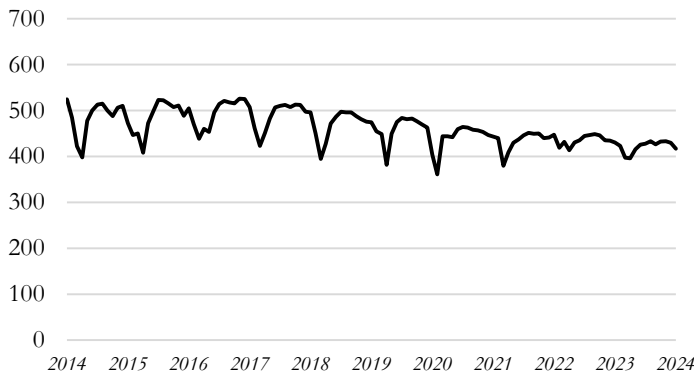
Data through May 2024

**Colorado** *Thousand barrels per day*



<b>Colorado</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	453	
Month Ago	457	-0.9%
3 Months Ago	470	-3.6%
6 Months Ago	483	-6.2%
1 Year Ago	457	-0.9%
Share of U.S. Production	3.4%	

**Alaska**



<b>Alaska</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	417	
Month Ago	430	-3.0%
3 Months Ago	432	-3.6%
6 Months Ago	428	-2.6%
1 Year Ago	430	-3.1%
Share of U.S. Production	3.2%	

**Oklahoma**



<b>Oklahoma</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	396	
Month Ago	409	-3.1%
3 Months Ago	397	-0.3%
6 Months Ago	418	-5.2%
1 Year Ago	452	-12.3%
Share of U.S. Production	3.0%	

**Wyoming**



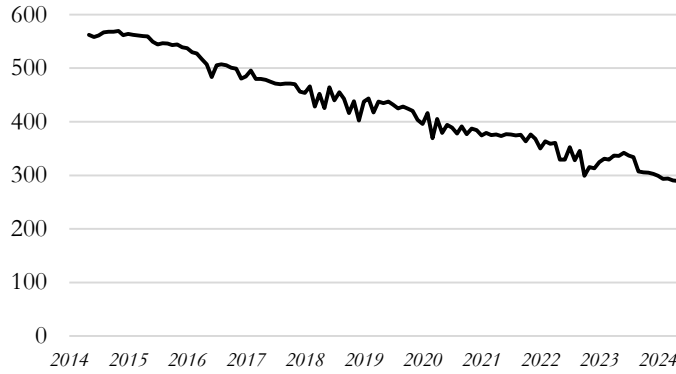
<b>Wyoming</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	291	
Month Ago	297	-2.2%
3 Months Ago	298	-2.6%
6 Months Ago	288	1.0%
1 Year Ago	261	11.6%
Share of U.S. Production	2.2%	

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics



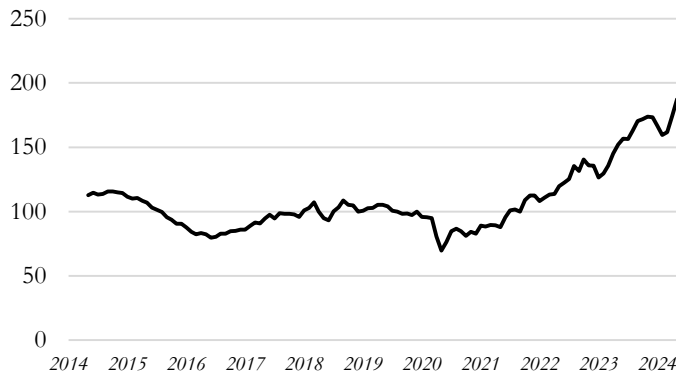
Data through May 2024

**California** *Thousand barrels per day*



<b>California</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	289	
Month Ago	291	-0.5%
3 Months Ago	293	-1.3%
6 Months Ago	305	-5.0%
1 Year Ago	336	-13.9%
Share of U.S. Production		2.2%

**Utah**



<b>Utah</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	187	
Month Ago	174	7.5%
3 Months Ago	160	17.4%
6 Months Ago	174	7.8%
1 Year Ago	152	23.2%
Share of U.S. Production		1.4%

**Ohio**

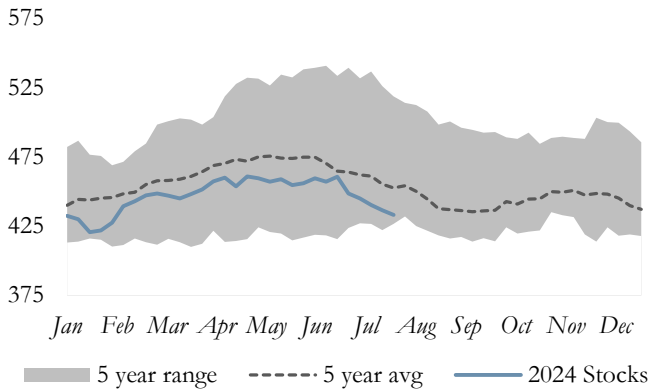


<b>Ohio</b>		<i>Change from</i>
<i>Thousand barrels per day</i>		
May-24	95	
Month Ago	95	0.1%
3 Months Ago	81	16.9%
6 Months Ago	91	4.6%
1 Year Ago	82	15.7%
Share of U.S. Production		0.7%

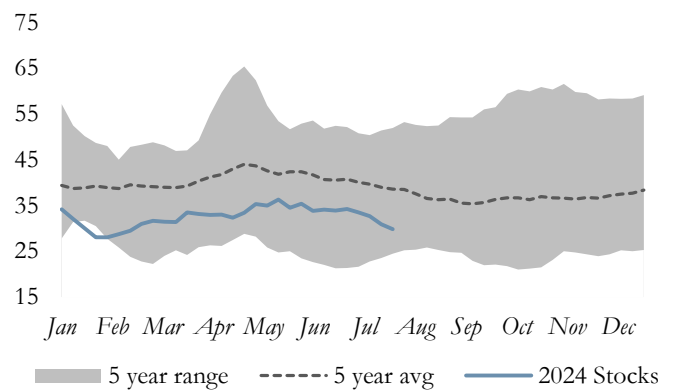
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

July 2024 Weekly U.S. Crude Oil Stocks

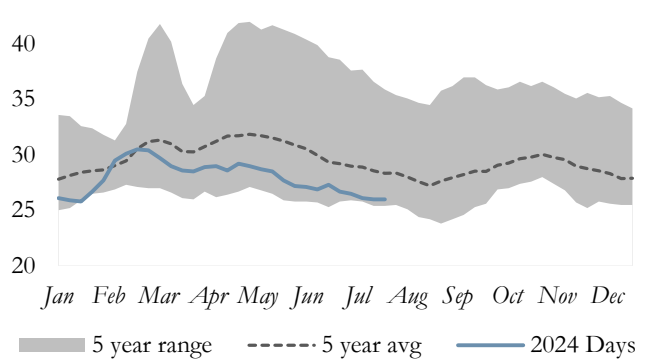
U.S. Oil Stocks, million barrels\*



Cushing, OK Oil Stocks, million barrels



U.S. Oil Days of Supply, days



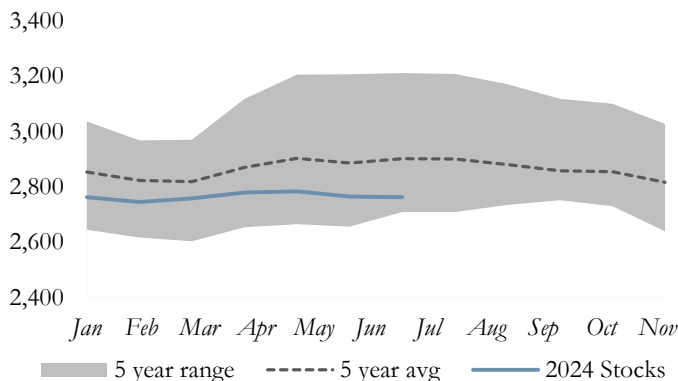
Crude Oil Stocks

	1 Week Change from Ago	1 Year Ago
U.S.	-0.8%	-1.5%
Cushing, OK	-3.6%	-13.4%
Days of Supply	0.0%	-2.3%
East Coast (PADD 1)	-5.2%	-6.5%
Midwest (PADD 2)	-0.9%	-7.0%
Gulf Coast (PADD 3)	-1.6%	-0.2%
Rocky Mountain (PADD 4)	1.7%	-5.3%
West Coast (PADD 5)	3.5%	8.9%

\*Stocks include those domestic and Customs-cleared foreign stocks held at, or in transit to, refineries and bulk terminals, and stocks in pipelines.

July 2024 OECD Commercial Petroleum Inventory

OECD Commercial Petroleum Inventory, million barrels



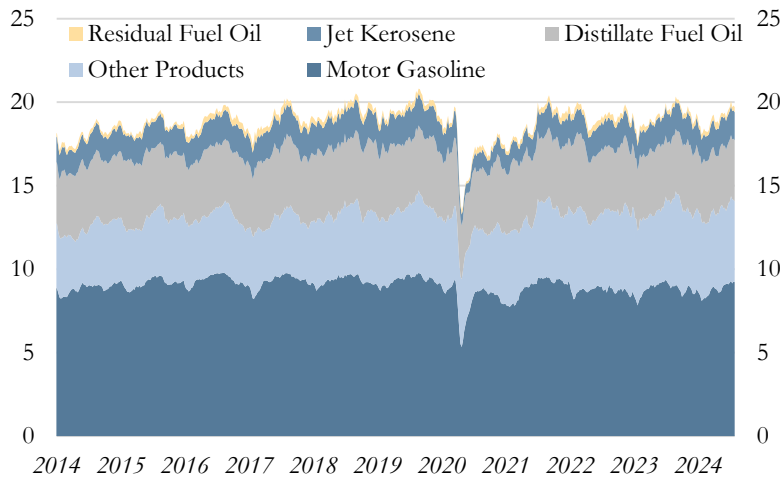
Petroleum Stocks

	Million Barrels	Change from
Current Month	2,764	
1 Month Ago	2,765	-0.1%
3 Months Ago	2,780	-0.6%
6 Months Ago	2,763	0.0%
1 Year Ago	2,810	-1.6%

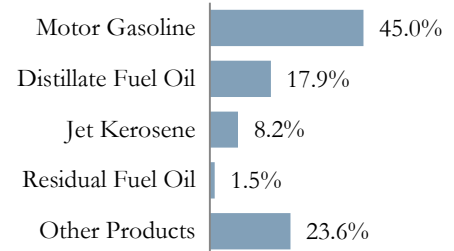
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

### July 2024 Weekly U.S. Demand for Petroleum Products 4-Week Averages

All Petroleum Products, million barrels per day



Share of Total Consumption



### U.S. Consumption by Product & Percent Change

U.S. Consumption by Product, thousand barrels per day

	Current 7/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
All Products	20,484	20,518	19,602	19,787	20,192
Motor Gasoline	9,221	9,205	8,579	8,155	8,847
Distillate Fuel Oil	3,659	3,719	3,470	3,655	3,546
Jet Kerosene	1,683	1,730	1,625	1,500	1,663
Residual Fuel Oil	299	228	326	264	277
Other Products	4,836	4,822	4,709	4,604	5,044

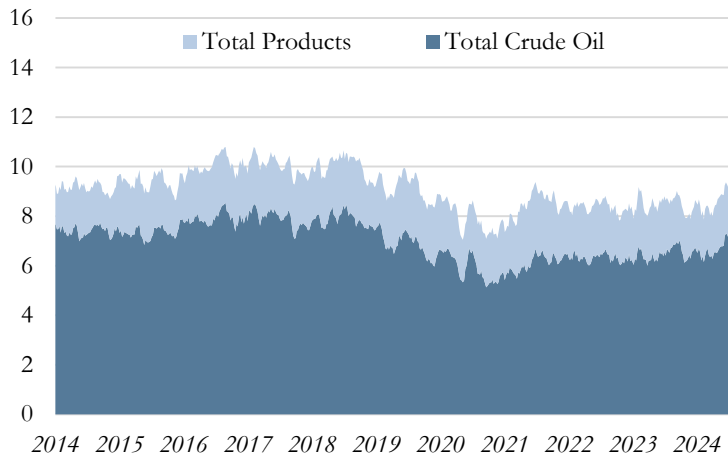
U.S. Consumption by Product, Change from

	Current 7/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
All Products	-	-0.2%	4.5%	3.5%	1.4%
Motor Gasoline	-	0.2%	7.5%	13.1%	4.2%
Distillate Fuel Oil	-	-1.6%	5.4%	0.1%	3.2%
Jet Kerosene	-	-2.7%	3.6%	12.2%	1.2%
Residual Fuel Oil	-	31.1%	-8.3%	13.3%	7.9%
Other Products	-	0.3%	2.7%	5.0%	-4.1%

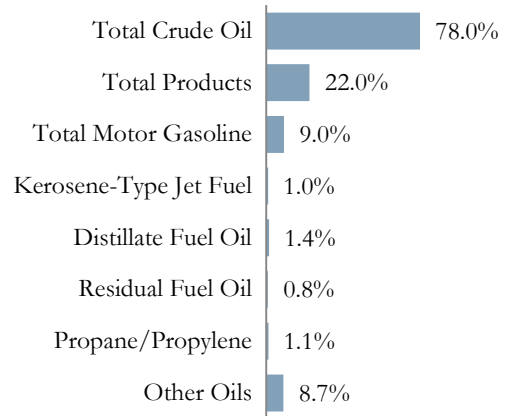
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

**July 2024 Weekly U.S. Imports of Crude Oil & Petroleum Products**  
4-Week Averages

**Imports, million barrels per day**



**Share of Total Imports**



**U.S. Imports by Product\***

Thousand barrels per day

	Current 7/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	<b>6,906</b>	<b>7,129</b>	<b>6,541</b>	<b>6,211</b>	<b>6,523</b>
<b>Total Products</b>	<b>1,948</b>	<b>2,010</b>	<b>2,118</b>	<b>1,795</b>	<b>1,968</b>
Total Motor Gasoline	798	881	799	519	799
Kerosene-Type Jet Fuel	85	94	82	80	73
Distillate Fuel Oil	125	117	138	182	101
Residual Fuel Oil	74	80	109	111	76
Propane/Propylene	95	82	92	126	82
Other Oils	771	757	897	776	837
<b>Total Imports</b>	<b>8,854</b>	<b>9,139</b>	<b>8,659</b>	<b>8,006</b>	<b>8,491</b>

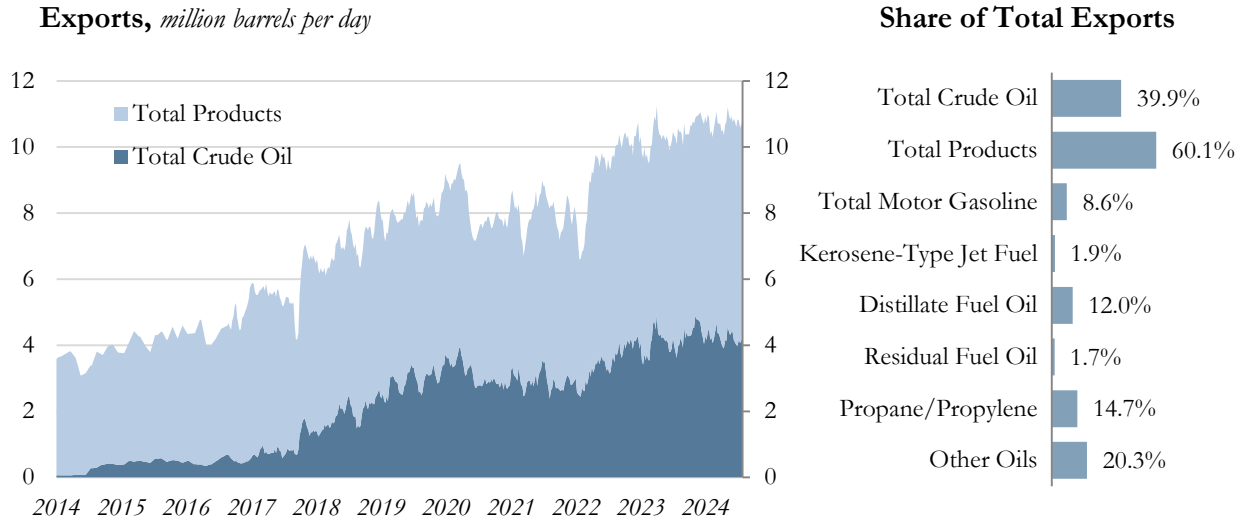
**U.S. Imports by Product, Change from**

	Current 7/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	-	<b>-3.1%</b>	<b>5.6%</b>	<b>11.2%</b>	5.9%
<b>Total Products</b>	-	<b>-3.1%</b>	<b>-8.0%</b>	<b>8.5%</b>	<b>-1.0%</b>
Total Motor Gasoline	-	-9.4%	-0.1%	53.8%	-0.1%
Kerosene-Type Jet Fuel	-	-9.6%	3.7%	6.3%	16.4%
Distillate Fuel Oil	-	6.8%	-9.4%	-31.3%	23.8%
Residual Fuel Oil	-	-7.5%	-32.1%	-33.3%	-2.6%
Propane/Propylene	-	15.9%	3.3%	-24.6%	15.9%
Other Oils	-	1.8%	-14.0%	-0.6%	-7.9%
<b>Total Imports</b>	-	<b>-3.1%</b>	<b>2.3%</b>	<b>10.6%</b>	<b>4.3%</b>

\*Totals may not sum due to component rounding

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

**July 2024 Weekly U.S. Exports of Crude Oil & Petroleum Products**  
4-Week Averages



**U.S. Exports by Product\***

Thousand barrels per day

	Current 7/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	<b>4,267</b>	<b>3,979</b>	<b>4,133</b>	<b>4,170</b>	<b>3,958</b>
<b>Total Products</b>	<b>6,417</b>	<b>6,865</b>	<b>6,636</b>	<b>6,219</b>	<b>6,608</b>
Total Motor Gasoline	923	929	876	918	1,001
Kerosene-Type Jet Fuel	203	240	206	220	187
Distillate Fuel Oil	1,280	1,447	1,308	1,090	1,361
Residual Fuel Oil	183	153	165	100	164
Propane/Propylene	1,568	1,733	1,773	1,708	1,523
Other Oils	2,169	2,269	2,173	2,057	2,282
<b>Total Exports</b>	<b>10,684</b>	<b>10,844</b>	<b>10,768</b>	<b>10,389</b>	<b>10,566</b>

**U.S. Exports by Product, Change from**

	Current 7/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	-	<b>7.2%</b>	<b>3.2%</b>	<b>2.3%</b>	<b>7.8%</b>
<b>Total Products</b>	-	<b>-6.5%</b>	<b>-3.3%</b>	<b>3.2%</b>	<b>-2.9%</b>
Total Motor Gasoline	-	-0.6%	5.4%	0.5%	-7.8%
Kerosene-Type Jet Fuel	-	-15.4%	-1.5%	-7.7%	8.6%
Distillate Fuel Oil	-	-11.5%	-2.1%	17.4%	-6.0%
Residual Fuel Oil	-	19.6%	10.9%	83.0%	11.6%
Propane/Propylene	-	-9.5%	-11.6%	-8.2%	3.0%
Other Oils	-	-4.4%	-0.2%	5.4%	-5.0%
<b>Total Exports</b>	-	<b>-1.5%</b>	<b>-0.8%</b>	<b>2.8%</b>	<b>1.1%</b>

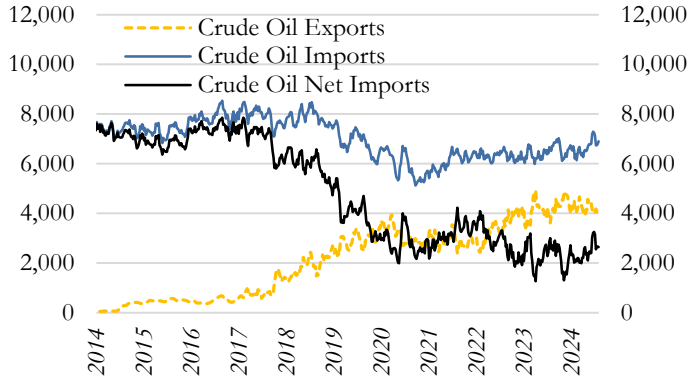
\*Totals may not sum due to rounding

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

### July 2024 Weekly U.S. Net Imports of Crude Oil & Petroleum Products

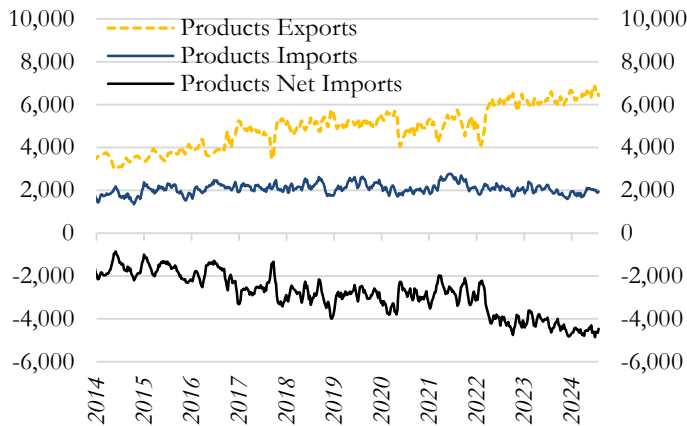
4-Week Averages, Thousand barrels per day

#### Crude Oil Net Imports



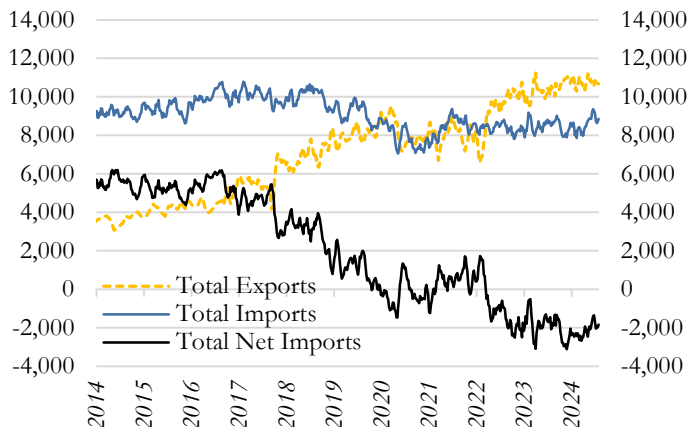
Crude Oil Net Imports		Change
Thousand barrels per day		from
7/26/24	2,639	
Month Ago	3,150	-16.2%
3 Months Ago	2,408	9.6%
6 Months Ago	2,042	29.2%
1 Year Ago	2,565	2.9%

#### Products Net Imports



Products Net Imports		Change
Thousand barrels per day		from
7/26/24	-4,469	
Month Ago	-4,855	-
3 Months Ago	-4,517	-
6 Months Ago	-4,424	-
1 Year Ago	-4,639	-

#### Total Net Imports

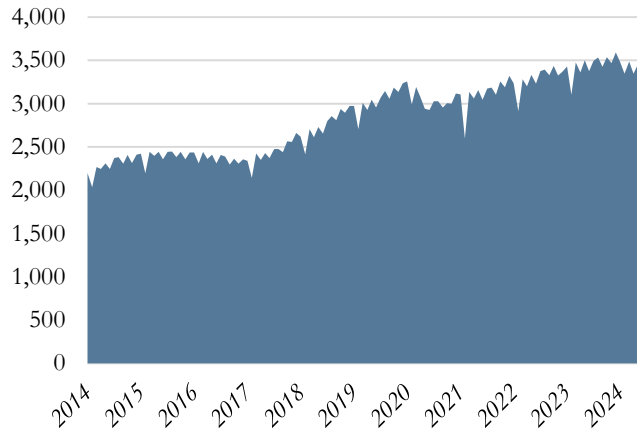


Total Net Imports		Change
Thousand barrels per day		from
7/26/24	-1,830	
Month Ago	-1,705	-
3 Months Ago	-2,109	-
6 Months Ago	-2,382	-
1 Year Ago	-2,075	-

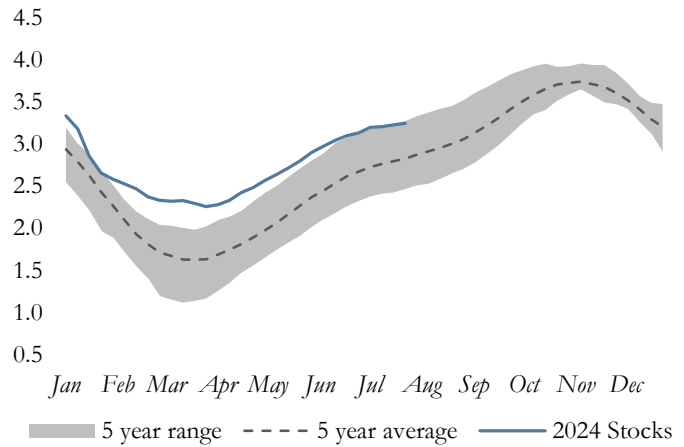
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

U.S. Natural Gas Production & Stocks

**May 2024 Production**  
Total U.S. Production, Billion cubic feet (Bcf)



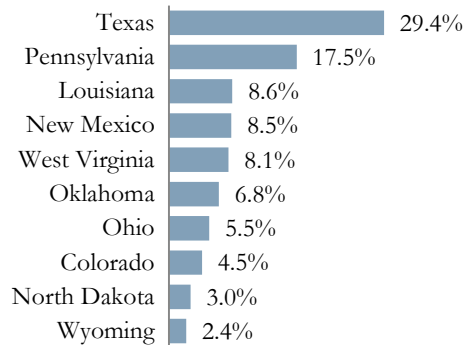
**July 2024 Weekly Stocks**  
U.S. Natural Gas Stocks, Billion cubic feet (Bcf)



U.S. Natural Gas, Billion cubic feet (Bcf)

	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
U.S. Production	3,455	3,347	3,349	3,469	3,500
U.S. Stocks	3,249	3,134	2,484	2,659	3,001

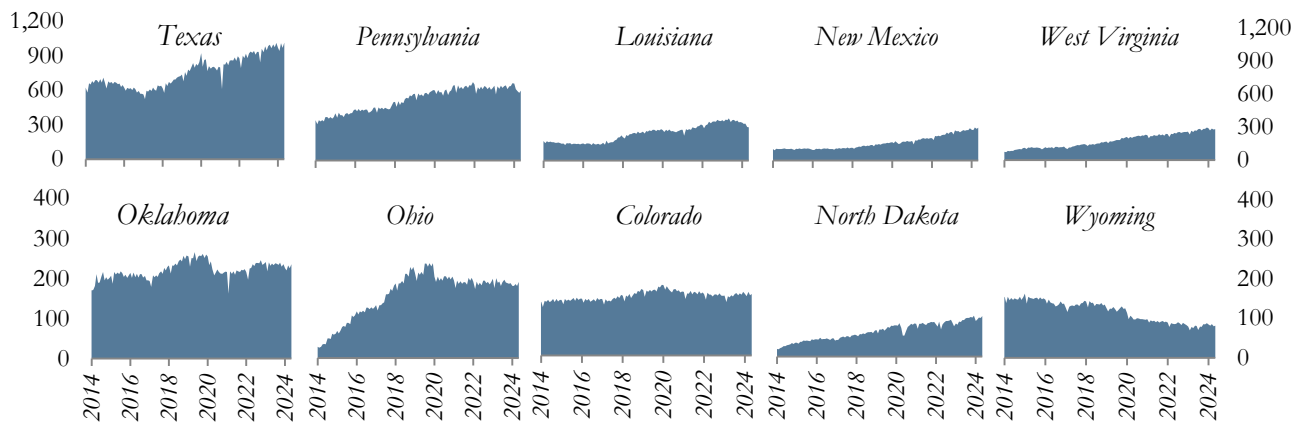
Share of Production



U.S. Natural Gas, Change from

	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
U.S. Production	-	3.2%	3.2%	-0.4%	-1.3%
U.S. Stocks	-	3.7%	30.8%	22.2%	8.3%

Top Producing States, Billion cubic feet (Bcf)



\*U.S. production is monthly data & stocks are weekly data

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

**Definitions:**

**West Texas Intermediate:** A crude oil produced in Texas and southern Oklahoma which serves as a reference or "marker" for pricing a number of other crude streams and is traded in the domestic spot market at Cushing, Oklahoma.

**Brent:** A blended crude oil produced in the North Sea region which serves as a reference or "marker" for pricing a number of other international crude streams.

Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Refined petroleum products include but are not limited to gasolines, kerosene, distillates (including No. 2 fuel oil), liquefied petroleum gas, asphalt, lubricating oils, diesel fuels, and residual fuels.

**Notes:**

**Page 2:** Petroleum Administration for Defense Districts (PADD) are geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation. For more information, visit: <http://www.eia.gov/petroleum/supply/monthly/pdf/append.pdf>

**Page 3:** For OPEC countries & the U.S., only crude oil production data is used. For non-OPEC countries (excluding the U.S.) total petroleum production data is used. Total petroleum production includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

**Page 5:** The active rig count is the number of rigs actively exploring for or developing oil or natural gas. Rig counts provide an indicator of new drilling activity and potential for expanded crude oil or natural gas production.

**Pages 10:** Crude oil stocks are stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

Crude oil stocks for Cushing include domestic and foreign crude oil stocks held in tank farms in Lincoln, Payne, and Creek counties in Oklahoma. Cushing, Oklahoma, is the designated delivery point for NYMEX crude oil futures contracts.

Days of supply are calculated by taking the current stock level and dividing by product supplied (used as an estimate of demand) averaged over the most recent four-week period. For crude oil, refinery inputs of crude oil are used as a proxy for demand.

**Notes:**

**Page 11:** Petroleum Consumption approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals.

**Data Revisions**

Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

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