

# THE U.S. Energy DATABOOK

*A summary of national and global energy indicators*



MAY 8, 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 slightly. For the week ending April 26, West Texas Intermediate (WTI) crude oil averaged \$84.48 per barrel and North Sea Brent averaged \$88.53 per barrel, increasing 10.6% and 7.6% respectively over the last quarter. The Henry Hub natural gas spot price averaged \$1.54 per million Btu for the week ending April 26, decreasing 35% over the last three months. Over the last quarter, the total number of active drilling rigs in the United States decreased slightly by 1.3% and remain 18.8% below year-ago levels. U.S. crude oil production increased 4.6% from a month ago but is down 1.1% from three months ago. U.S. crude oil and petroleum products exports increased 3.6% in the last quarter and imports increased 8.2%. Global demand for petroleum decreased 0.41% and global petroleum production increased slightly by 0.53% over the last quarter.

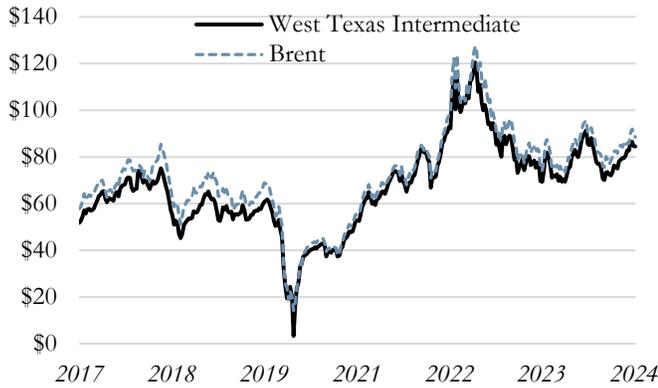
This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: oil and natural gas prices; global petroleum production and demand; U.S. oil production and petroleum demand; U.S. crude oil stocks; OECD petroleum stocks; U.S. 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 April 26, 2024

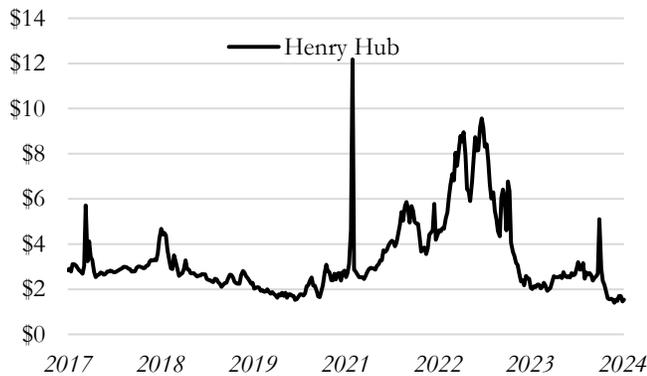
Weekly Oil Spot Prices, per barrel



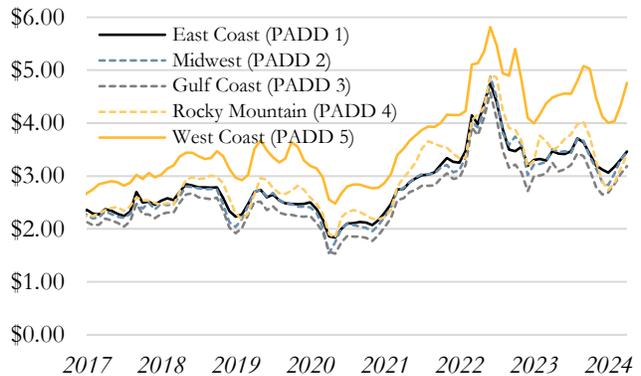
Refiner Acquisition Cost of Oil\*, per barrel



Weekly Natural Gas Spot Prices, per mmbtu



Monthly Gasoline Prices by PADD, per gallon



Weekly Spot Prices, Change from

	Current	1 Week	1 Month	3 Months	6 Months	1 Year
Weekly Spot Prices	4/26/24	Ago	Ago	Ago	Ago	Ago
West Texas Intermediate	\$84.48	-\$0.17	\$1.75	\$8.12	-\$0.72	\$8.17
Brent	\$88.53	-\$1.06	\$2.73	\$6.22	-\$1.31	\$7.13
Henry Hub	\$1.54	\$0.08	\$0.06	-\$0.83	-\$1.35	-\$0.67

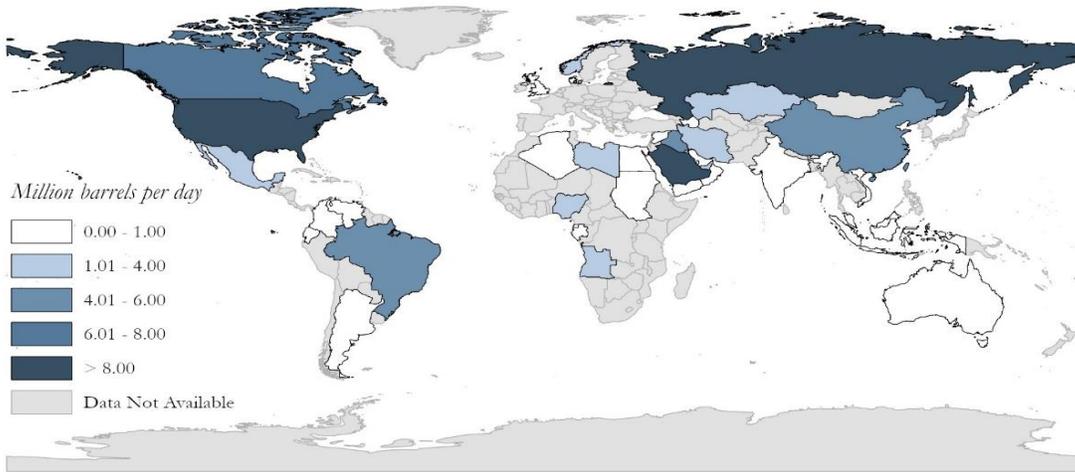
Monthly Gasoline Spot Prices, Change from

	Current	1 Month	3 Months	6 Months	1 Year
Geographic Area	Apr-24	Ago	Ago	Ago	Ago
East Coast (PADD 1)	\$3.46	\$0.15	\$0.40	\$0.04	-\$0.01
Midwest (PADD 2)	\$3.44	\$0.12	\$0.61	\$0.07	-\$0.07
Gulf Coast (PADD 3)	\$3.19	\$0.14	\$0.50	\$0.08	-\$0.06
Rocky Mountain (PADD 4)	\$3.41	\$0.27	\$0.67	-\$0.33	-\$0.09
West Coast (PADD 5)	\$4.76	\$0.42	\$0.75	-\$0.27	\$0.28

\*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

April 2024 Global Petroleum Production



Million barrels per day

- 0.00 - 1.00
- 1.01 - 4.00
- 4.01 - 6.00
- 6.01 - 8.00
- > 8.00
- Data Not Available

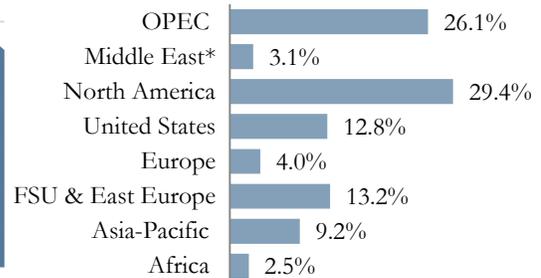
Source: Energy Information Administration/Haver Analytics

April 2024

Monthly Global Petroleum Production, million barrels per day

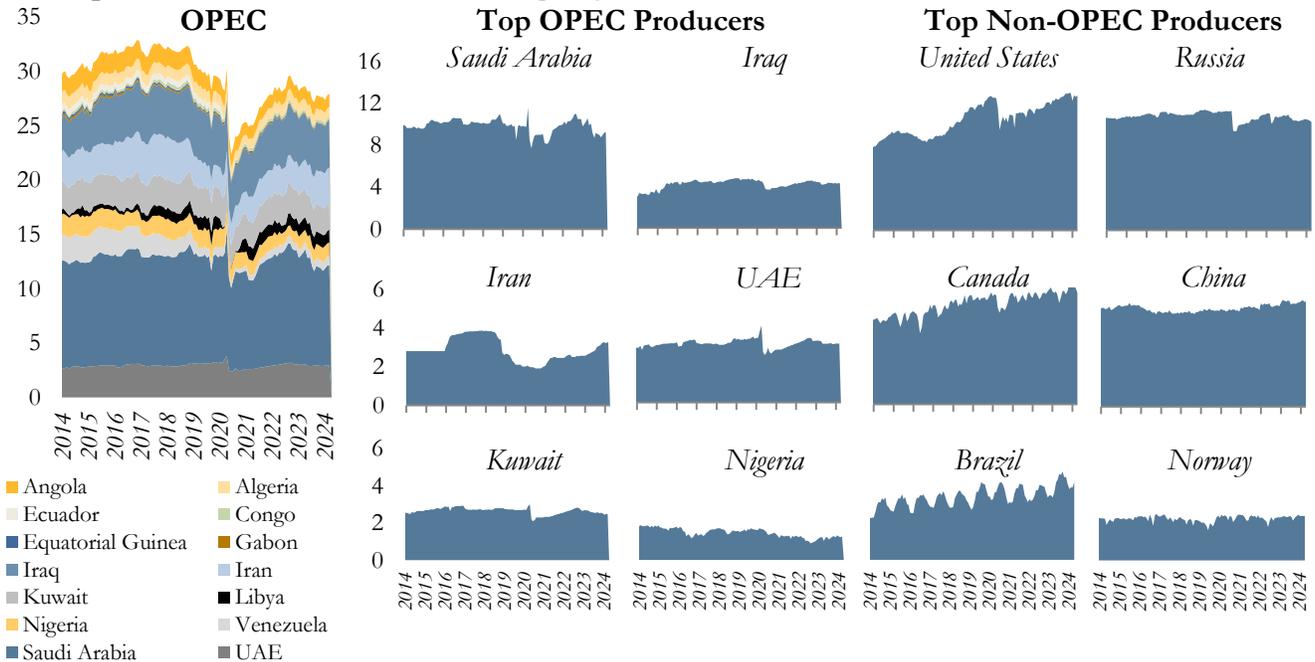


Regional Share of Production



\*Excludes OPEC

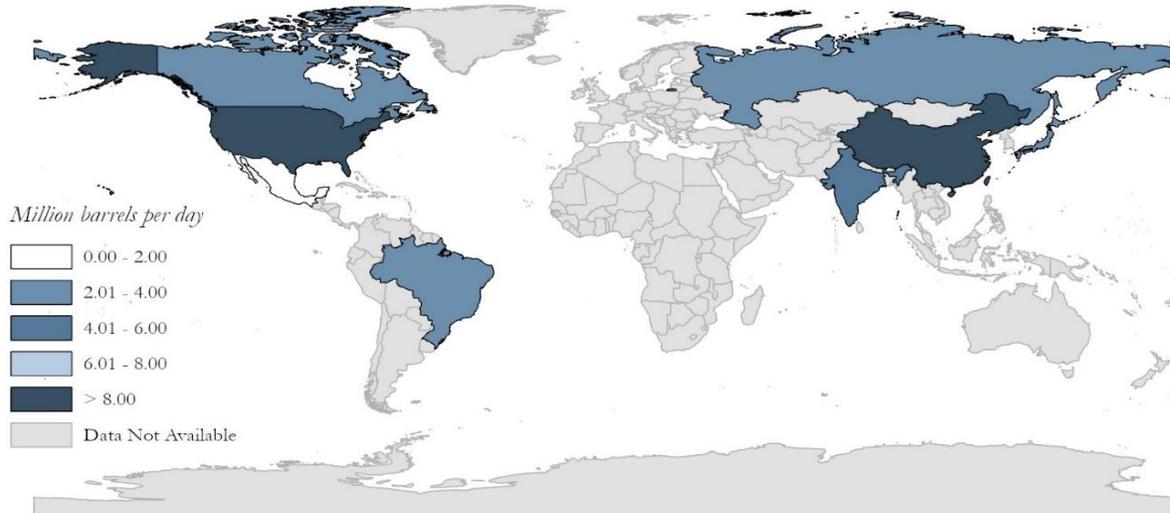
Top Crude Oil Producers, million barrels per day



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

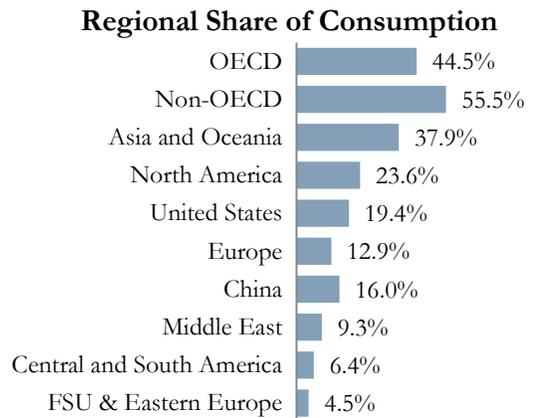
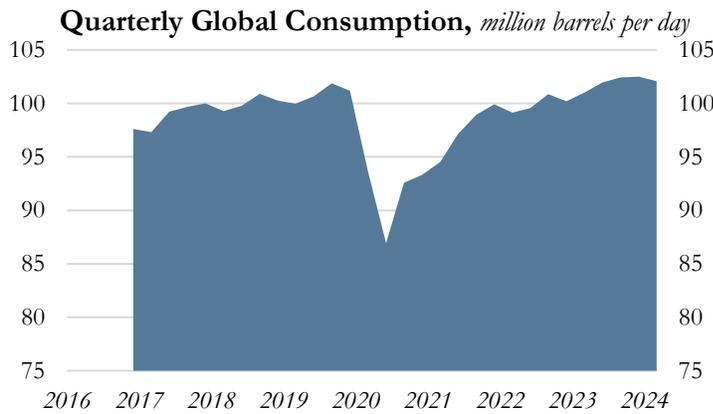
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

First Quarter 2024 Global Petroleum Consumption

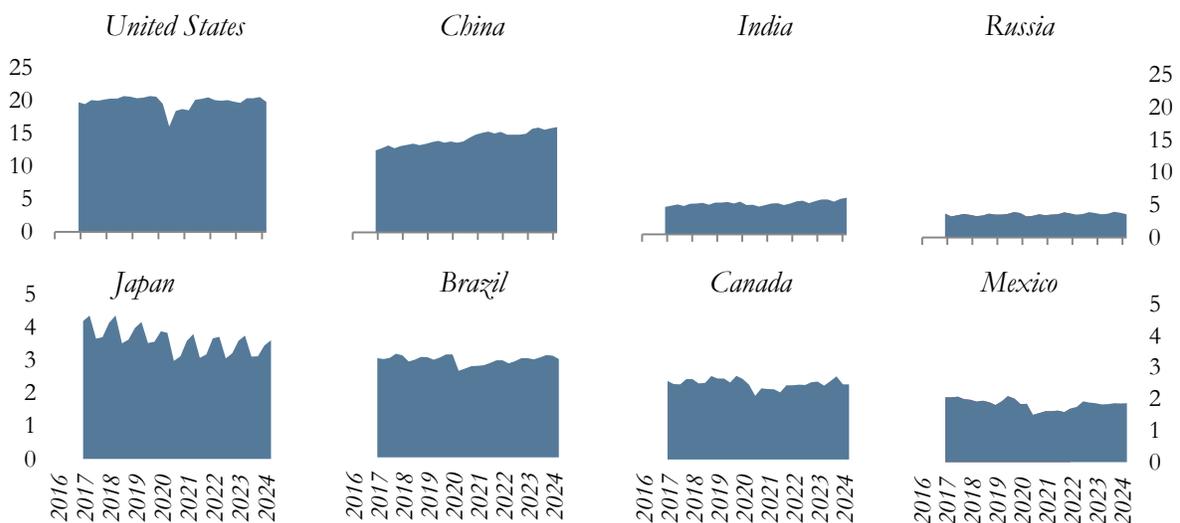


Source: Energy Information Administration/Haver Analytics

First Quarter 2024

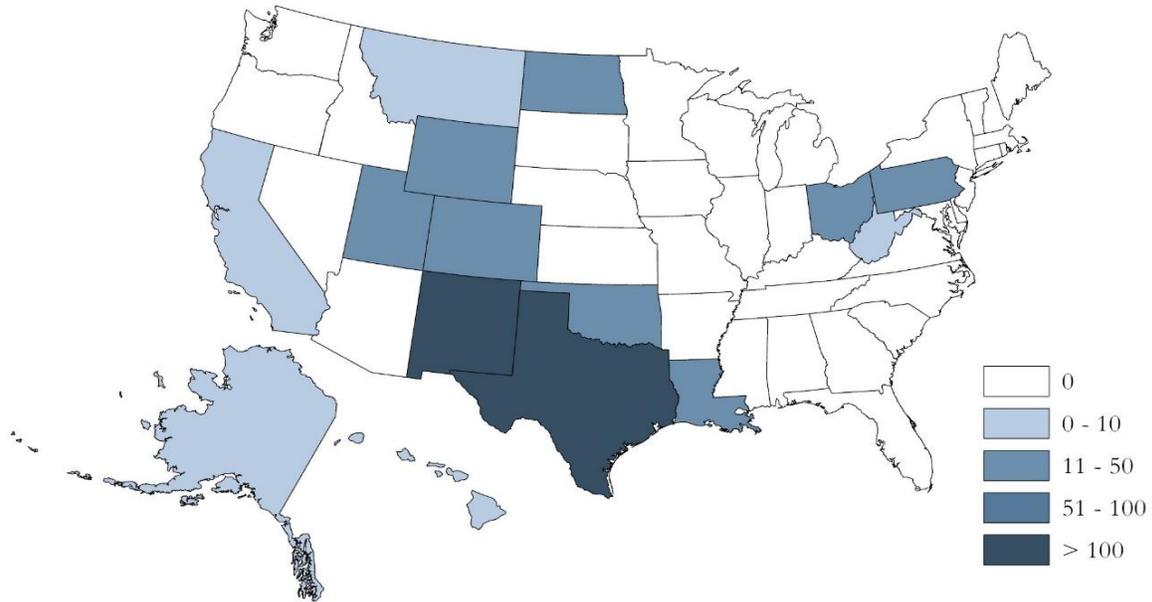


Top Petroleum Consumers, million barrels per day



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

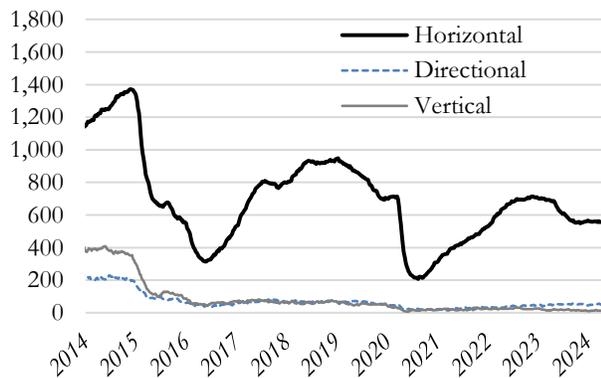
April 2024 Weekly Active Oil & Gas Drilling Rig Counts



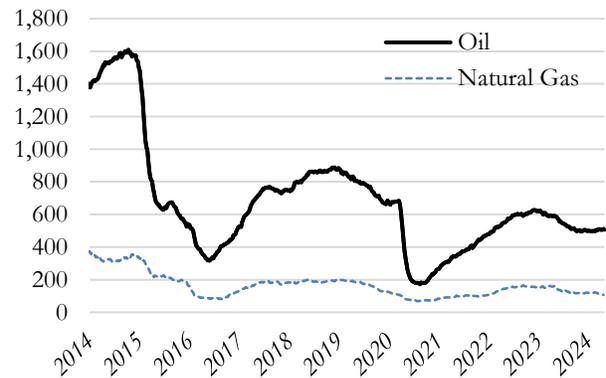
Source: Baker Hughes/Haver Analytics

April 26, 2024

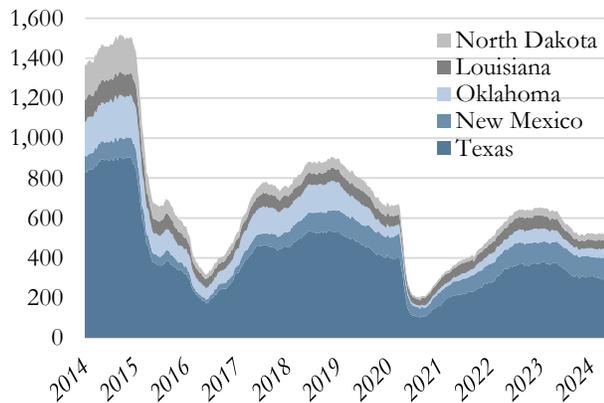
U.S. Active Drilling Rigs by Trajectory



U.S. Active Drilling Rigs by Type



Top Five States for Drilling Activity (Total Active Rigs)



Rig Count By Type

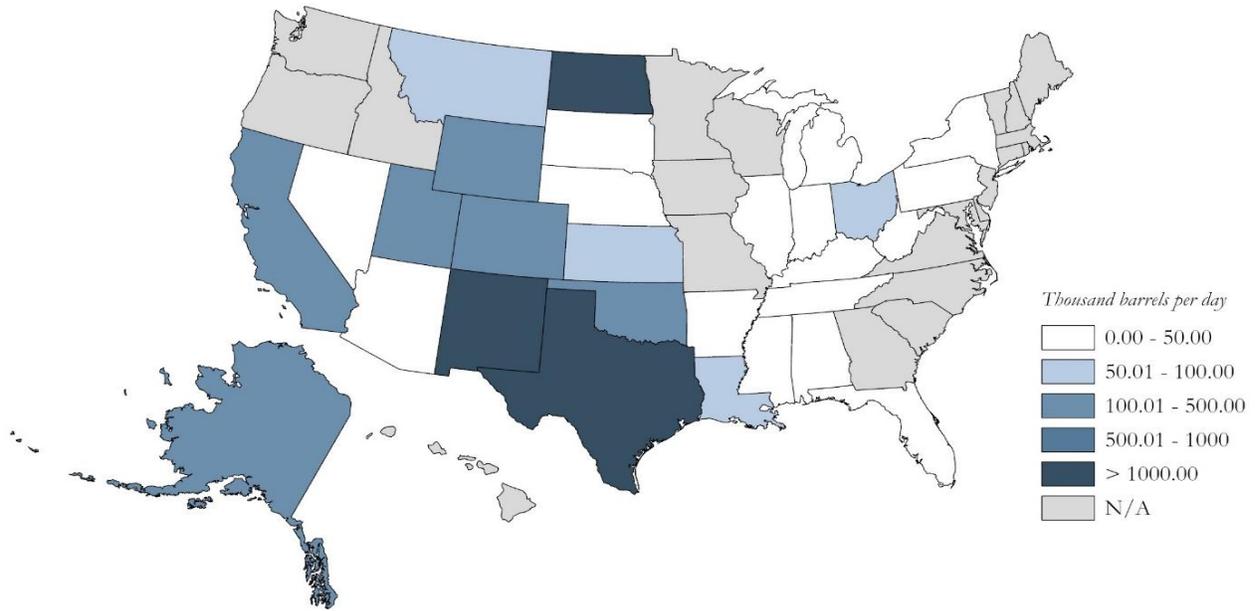
Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	506	506	499	591
Gas	105	112	119	161
Misc	2	3	3	3
<b>Total</b>	<b>613</b>	<b>621</b>	<b>621</b>	<b>755</b>

Rig Count By Type, Change from

Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	-	0.0%	1.4%	-14.4%
Gas	-	-6.3%	-11.8%	-34.8%
Misc	-	-33.3%	-33.3%	-33.3%
<b>Total</b>	-	<b>-1.3%</b>	<b>-1.3%</b>	<b>-18.8%</b>

Source: Baker Hughes/Haver Analytics

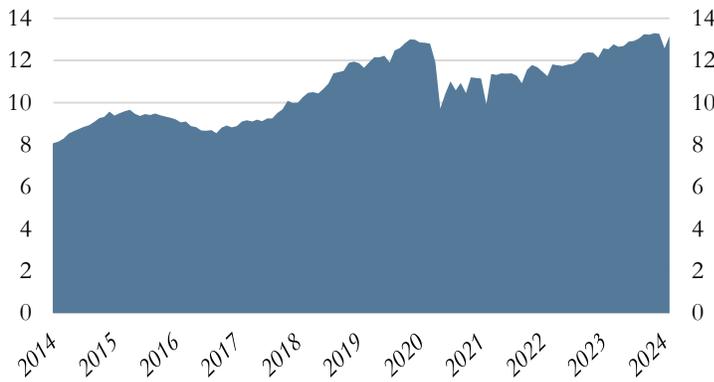
February 2024 U.S. Crude Oil Production



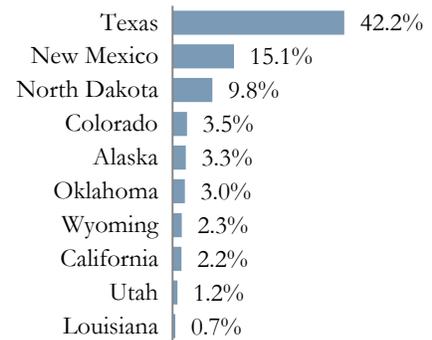
Source: Energy Information Administration/Haver Analytics

February 2024

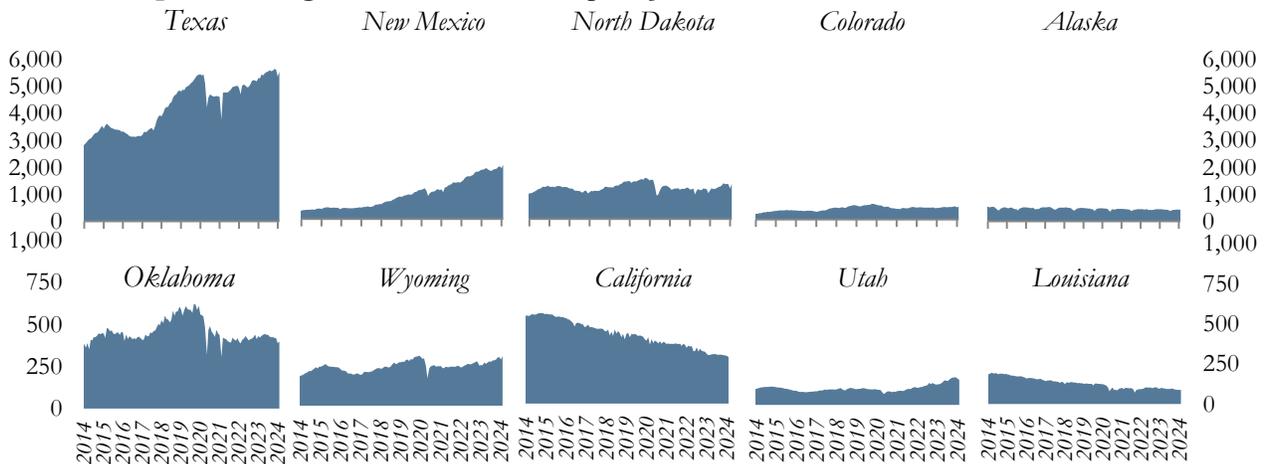
Monthly U.S. Production, million barrels per day



Share of Production

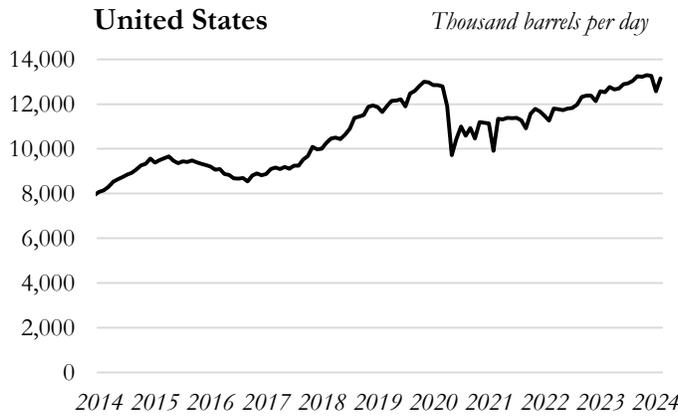


Top Producing States, thousand barrels per day

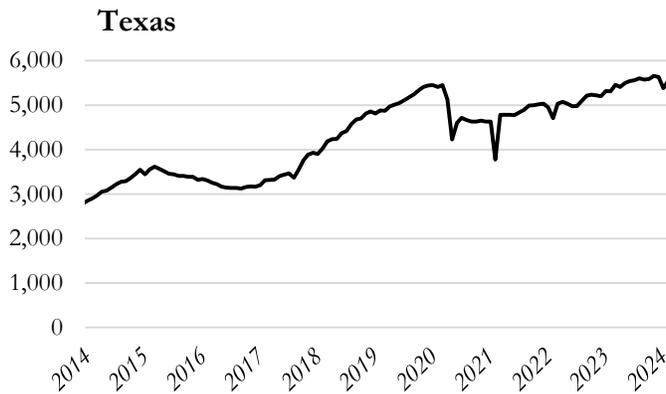


Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

Data through February 2024



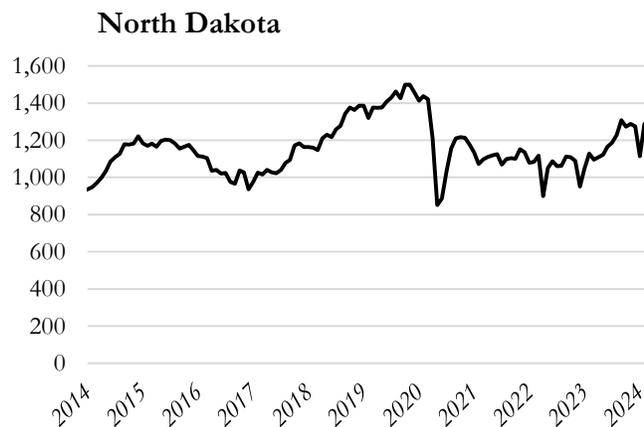
United States		Change from
Thousand barrels per day		
Feb-24	13,154	
Month Ago	12,576	4.6%
3 Months Ago	13,295	-1.1%
6 Months Ago	13,041	0.9%
1 Year Ago	12,532	5.0%



Texas		Change from
Thousand barrels per day		
Feb-24	5,548	
Month Ago	5,376	3.2%
3 Months Ago	5,658	-2.0%
6 Months Ago	5,603	-1.0%
1 Year Ago	5,306	4.5%
Share of U.S. Production		42.2%



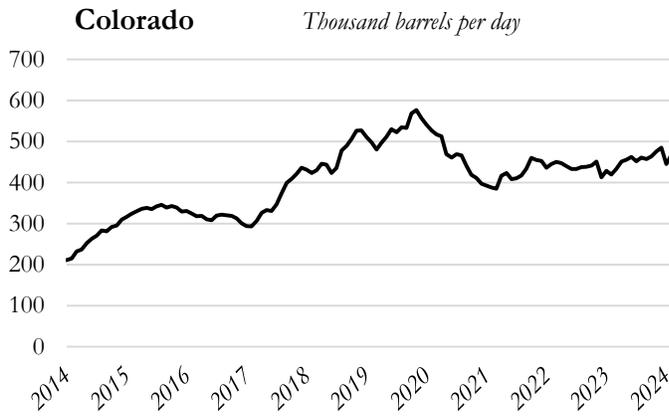
New Mexico		Change from
Thousand barrels per day		
Feb-24	1,982	
Month Ago	1,862	6.4%
3 Months Ago	1,905	4.0%
6 Months Ago	1,802	10.0%
1 Year Ago	1,799	10.1%
Share of U.S. Production		15.1%



North Dakota		Change from
Thousand barrels per day		
Feb-24	1,287	
Month Ago	1,114	15.6%
3 Months Ago	1,288	-0.1%
6 Months Ago	1,229	4.8%
1 Year Ago	1,128	14.1%
Share of U.S. Production		9.8%

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

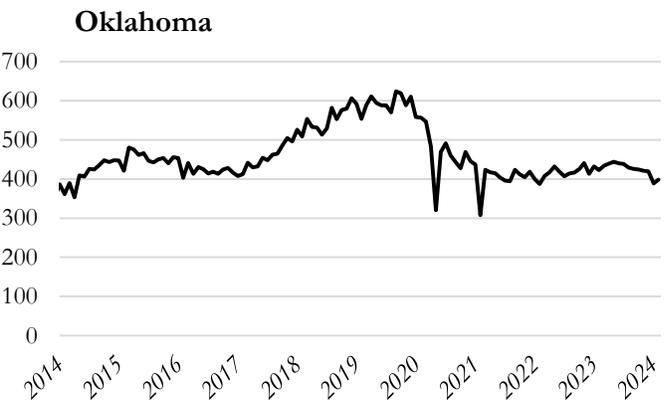
Data through February 2024



Colorado		Change from
Thousand barrels per day		
Feb-24	467	
Month Ago	445	5.0%
3 Months Ago	476	-1.9%
6 Months Ago	461	1.3%
1 Year Ago	420	11.3%
Share of U.S. Production	3.5%	



Alaska		Change from
Thousand barrels per day		
Feb-24	432	
Month Ago	427	1.4%
3 Months Ago	428	1.0%
6 Months Ago	396	9.2%
1 Year Ago	446	-3.1%
Share of U.S. Production	3.3%	



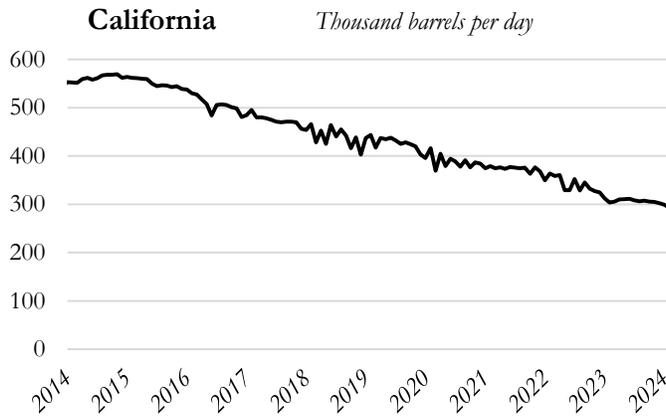
Oklahoma		Change from
Thousand barrels per day		
Feb-24	399	
Month Ago	389	2.4%
3 Months Ago	421	-5.3%
6 Months Ago	429	-7.0%
1 Year Ago	422	-5.7%
Share of U.S. Production	3.0%	



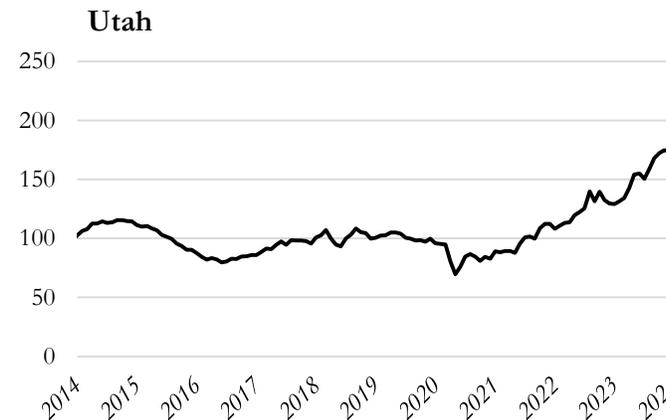
Wyoming		Change from
Thousand barrels per day		
Feb-24	298	
Month Ago	279	6.9%
3 Months Ago	289	3.3%
6 Months Ago	273	9.3%
1 Year Ago	243	22.9%
Share of U.S. Production	2.3%	

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

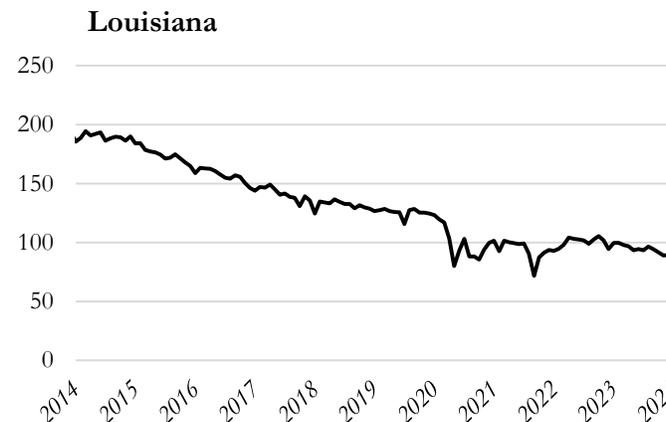
Data through February 2024



California		Change from
Thousand barrels per day		
Feb-24	293	
Month Ago	299	-2.1%
3 Months Ago	305	-3.8%
6 Months Ago	306	-4.3%
1 Year Ago	303	-3.4%
Share of U.S. Production		2.2%



Utah		Change from
Thousand barrels per day		
Feb-24	160	
Month Ago	167	-4.4%
3 Months Ago	175	-8.6%
6 Months Ago	159	0.5%
1 Year Ago	132	21.4%
Share of U.S. Production		1.2%

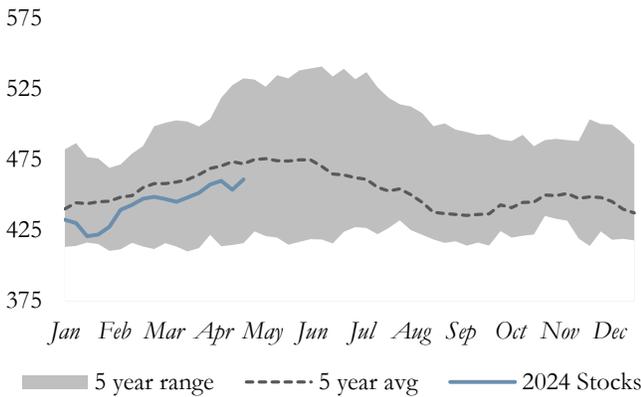


Louisiana		Change from
Thousand barrels per day		
Feb-24	89	
Month Ago	87	1.9%
3 Months Ago	89	-0.3%
6 Months Ago	96	-8.2%
1 Year Ago	100	-11.2%
Share of U.S. Production		0.7%

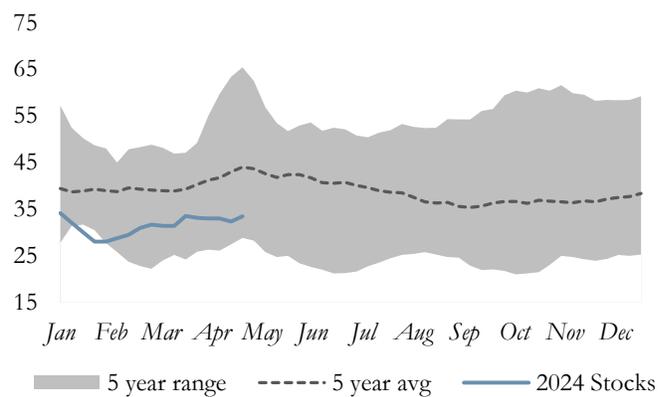
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

April 2024 Weekly U.S. Crude Oil Stocks

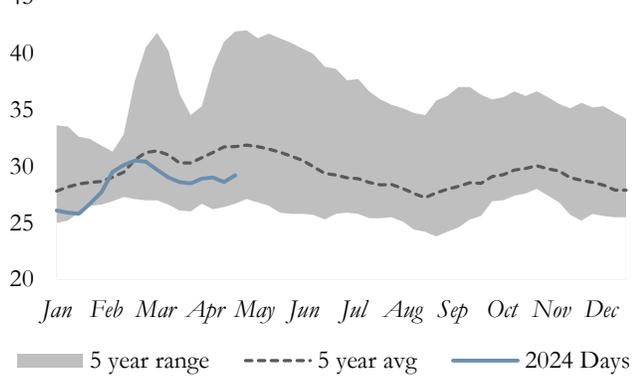
U.S. Oil Stocks, million barrels\*



Cushing, OK Oil Stocks, million barrels



U.S. Oil Days of Supply, days



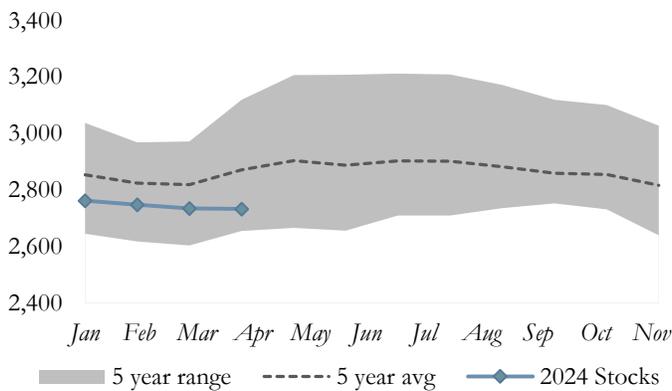
Crude Oil Stocks

	1 Week Ago	1 Year Ago
U.S.	1.6%	0.3%
Cushing, OK	3.4%	-0.5%
Days of Supply	2.1%	0.0%
East Coast (PADD 1)	-0.6%	11.0%
Midwest (PADD 2)	0.7%	0.6%
Gulf Coast (PADD 3)	2.7%	2.6%
Rocky Mountain (PADD 4)	-1.0%	-2.6%
West Coast (PADD 5)	0.0%	-12.1%

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

April 2024 OECD Commercial Petroleum Inventory

OECD Commercial Petroleum Inventory, million barrels



Petroleum Stocks

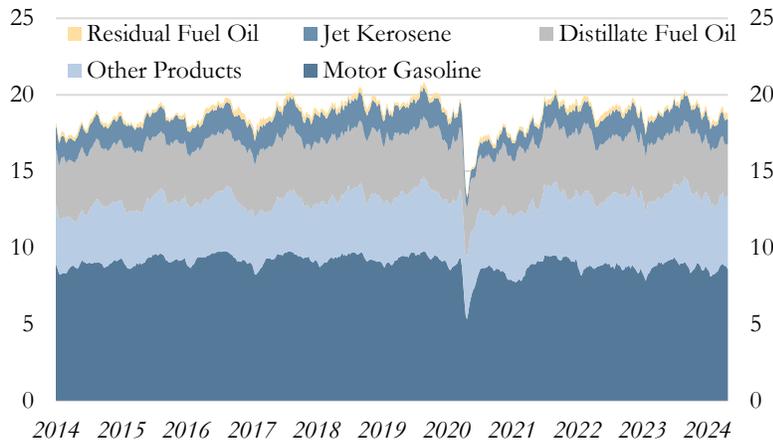
	Million Barrels	Change from
Current Month	2,733	
1 Month Ago	2,735	-0.1%
3 Months Ago	2,762	-1.1%
6 Months Ago	2,778	-1.6%
1 Year Ago	2,808	-2.7%

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

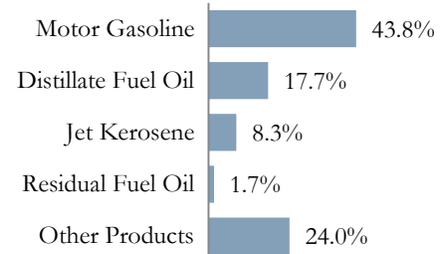
**April 2024 Weekly U.S. Demand for Petroleum Products**

*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**

	<i>Current</i> 4/26/24	<i>1 Month</i> <i>Ago</i>	<i>3 Months</i> <i>Ago</i>	<i>6 Months</i> <i>Ago</i>	<i>1 Year</i> <i>Ago</i>
All Products	19,602	20,342	19,787	20,384	19,596
Motor Gasoline	8,579	8,951	8,155	8,771	8,896
Distillate Fuel Oil	3,470	3,671	3,655	3,959	3,782
Jet Kerosene	1,625	1,615	1,500	1,600	1,555
Residual Fuel Oil	326	336	264	272	168
Other Products	4,709	4,688	4,604	4,821	4,289

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

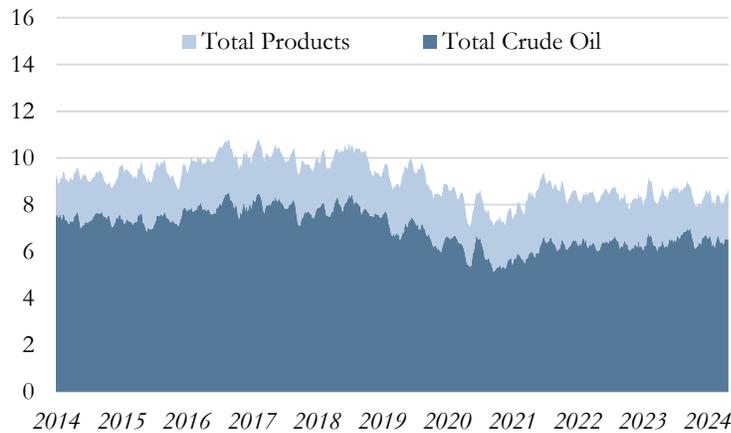
	<i>Current</i> 4/26/24	<i>1 Month</i> <i>Ago</i>	<i>3 Months</i> <i>Ago</i>	<i>6 Months</i> <i>Ago</i>	<i>1 Year</i> <i>Ago</i>
All Products	-	-3.6%	-0.9%	-3.8%	0.0%
Motor Gasoline	-	-4.2%	5.2%	-2.2%	-3.6%
Distillate Fuel Oil	-	-5.5%	-5.1%	-12.4%	-8.2%
Jet Kerosene	-	0.6%	8.3%	1.6%	4.5%
Residual Fuel Oil	-	-3.0%	23.5%	19.9%	94.0%
Other Products	-	0.4%	2.3%	-2.3%	9.8%

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

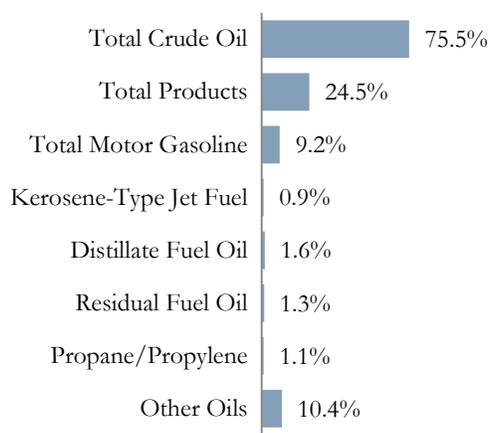
April 2024 Weekly U.S. Imports of Crude Oil & Petroleum Products

4-Week Averages

Imports, million barrels per day



Share of Total Imports



U.S. Imports by Product\*

Thousand barrels per day

	Current 4/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	<b>6,541</b>	<b>6,272</b>	<b>6,211</b>	<b>6,177</b>	<b>6,315</b>
<b>Total Products</b>	<b>2,118</b>	<b>1,709</b>	<b>1,795</b>	<b>1,753</b>	<b>2,232</b>
Total Motor Gasoline	799	535	519	626	833
Kerosene-Type Jet Fuel	82	140	80	105	153
Distillate Fuel Oil	138	152	182	96	146
Residual Fuel Oil	109	105	111	114	89
Propane/Propylene	92	121	126	103	95
Other Oils	897	655	776	709	917
<b>Total Imports</b>	<b>8,659</b>	<b>7,981</b>	<b>8,006</b>	<b>7,930</b>	<b>8,547</b>

U.S. Imports by Product, Change from

	Current 4/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	-	<b>4.3%</b>	<b>5.3%</b>	<b>5.9%</b>	3.6%
<b>Total Products</b>	-	<b>23.9%</b>	<b>18.0%</b>	<b>20.8%</b>	<b>-5.1%</b>
Total Motor Gasoline	-	49.3%	53.9%	27.6%	-4.1%
Kerosene-Type Jet Fuel	-	-41.4%	2.5%	-21.9%	-46.4%
Distillate Fuel Oil	-	-9.2%	-24.2%	43.8%	-5.5%
Residual Fuel Oil	-	3.8%	-1.8%	-4.4%	22.5%
Propane/Propylene	-	-24.0%	-27.0%	-10.7%	-3.2%
Other Oils	-	36.9%	15.6%	26.5%	-2.2%
<b>Total Imports</b>	-	<b>8.5%</b>	<b>8.2%</b>	<b>9.2%</b>	<b>1.3%</b>

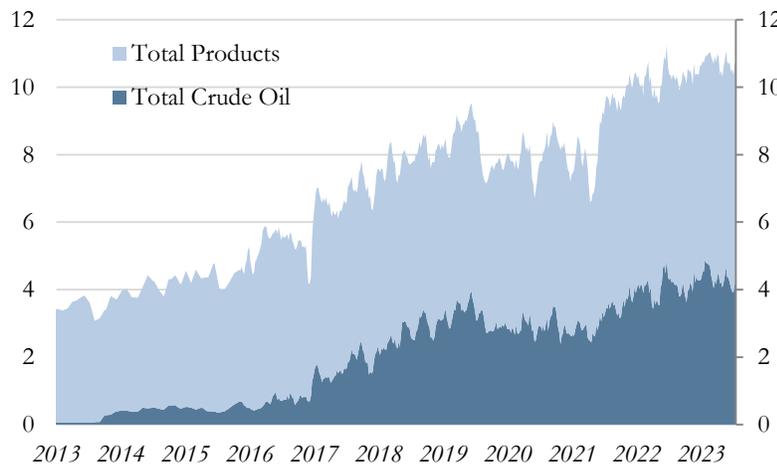
\*Totals may not sum due to component rounding

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

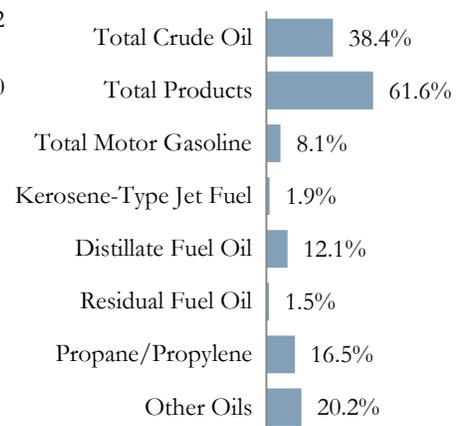
April 2024 Weekly U.S. Exports of Crude Oil & Petroleum Products

4-Week Averages

Exports, million barrels per day



Share of Total Exports



U.S. Exports by Product\*

Thousand barrels per day

	Current 4/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	<b>4,133</b>	<b>4,058</b>	<b>4,170</b>	<b>4,525</b>	<b>4,214</b>
<b>Total Products</b>	<b>6,636</b>	<b>6,402</b>	<b>6,219</b>	<b>6,196</b>	<b>6,019</b>
Total Motor Gasoline	876	920	918	982	826
Kerosene-Type Jet Fuel	206	192	220	165	124
Distillate Fuel Oil	1,308	1,183	1,090	1,088	1,106
Residual Fuel Oil	165	181	100	99	121
Propane/Propylene	1,773	1,651	1,708	1,753	1,559
Other Oils	2,173	2,172	2,057	2,018	2,284
<b>Total Exports</b>	<b>10,768</b>	<b>10,460</b>	<b>10,389</b>	<b>10,720</b>	<b>10,232</b>

U.S. Exports by Product, Change from

	Current 4/26/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
<b>Total Crude Oil</b>	-	<b>1.8%</b>	<b>-0.9%</b>	<b>-8.7%</b>	<b>-1.9%</b>
<b>Total Products</b>	-	<b>3.7%</b>	<b>6.7%</b>	<b>7.1%</b>	<b>10.3%</b>
Total Motor Gasoline	-	-4.8%	-4.6%	-10.8%	6.1%
Kerosene-Type Jet Fuel	-	7.3%	-6.4%	24.8%	66.1%
Distillate Fuel Oil	-	10.6%	20.0%	20.2%	18.3%
Residual Fuel Oil	-	-8.8%	65.0%	66.7%	36.4%
Propane/Propylene	-	7.4%	3.8%	1.1%	13.7%
Other Oils	-	0.0%	5.6%	7.7%	-4.9%
<b>Total Exports</b>	-	<b>2.9%</b>	<b>3.6%</b>	<b>0.4%</b>	<b>5.2%</b>

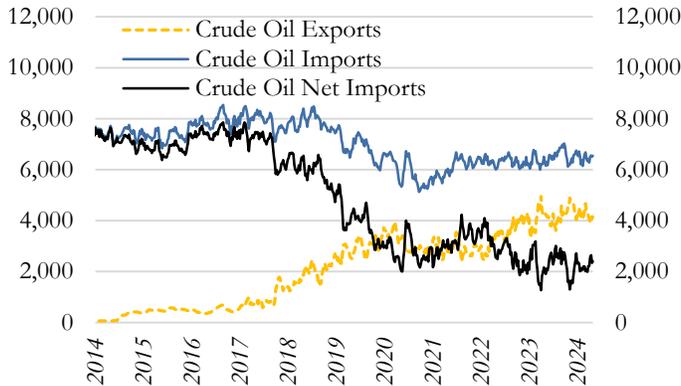
\*Totals may not sum due to rounding

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

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

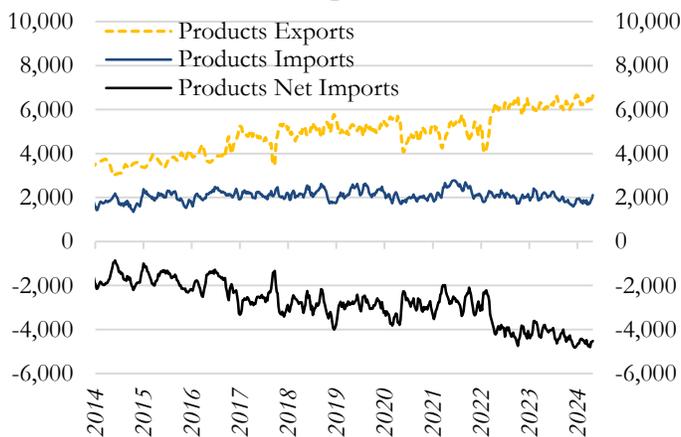
4-Week Averages, Thousand barrels per day

Crude Oil Net Imports



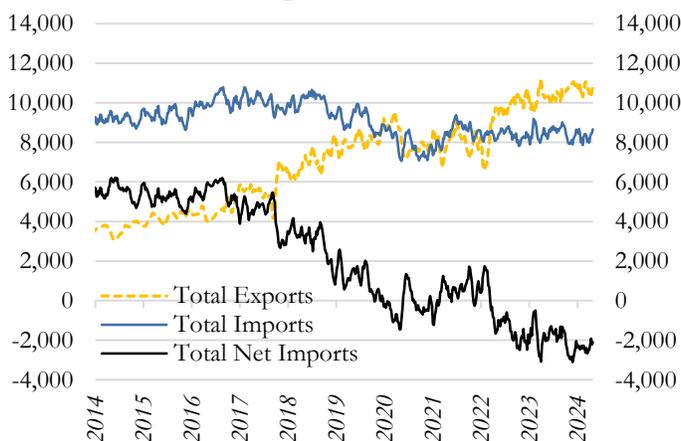
Crude Oil Net Imports		Change
Thousand barrels per day		from
4/26/24	2,408	
Month Ago	2,215	8.7%
3 Months Ago	2,042	17.9%
6 Months Ago	1,653	45.7%
1 Year Ago	2,101	14.6%

Products Net Imports



Products Net Imports		Change
Thousand barrels per day		from
4/26/24	-4,517	
Month Ago	-4,694	-
3 Months Ago	-4,424	-
6 Months Ago	-4,442	-
1 Year Ago	-3,786	-

Total Net Imports

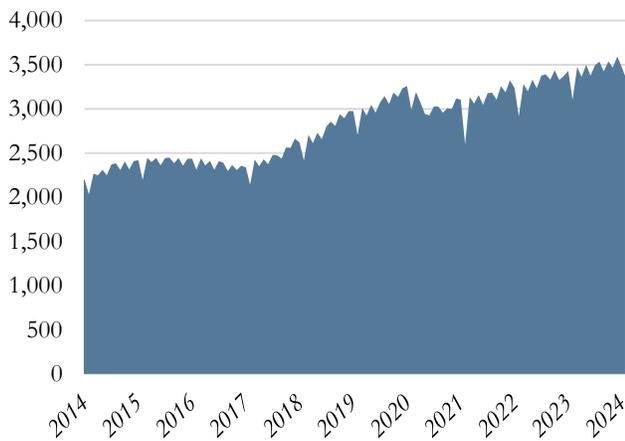


Total Net Imports		Change
Thousand barrels per day		from
4/26/24	-2,109	
Month Ago	-2,479	-
3 Months Ago	-2,382	-
6 Months Ago	-2,790	-
1 Year Ago	-1,685	-

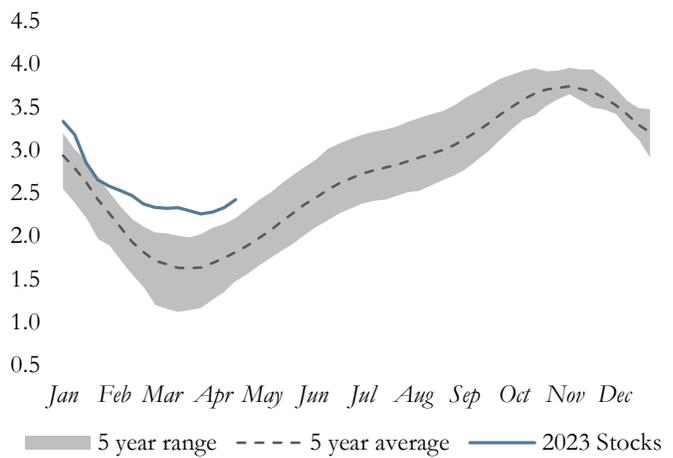
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

### U.S. Natural Gas Production & Stocks

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



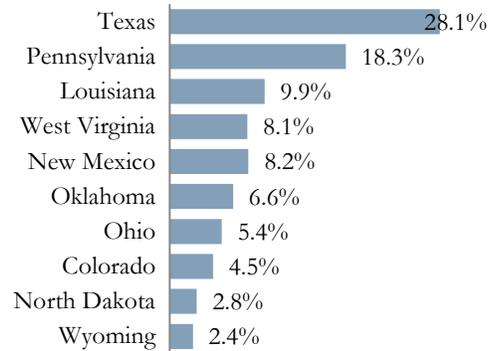
**April 2024 Weekly Stocks**  
U.S. Natural Gas Stocks, Billion cubic feet (Bcf)



**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	3,340	3,474	3,469	3,534	3,103
U.S. Stocks	2,425	2,296	2,856	3,700	2,009

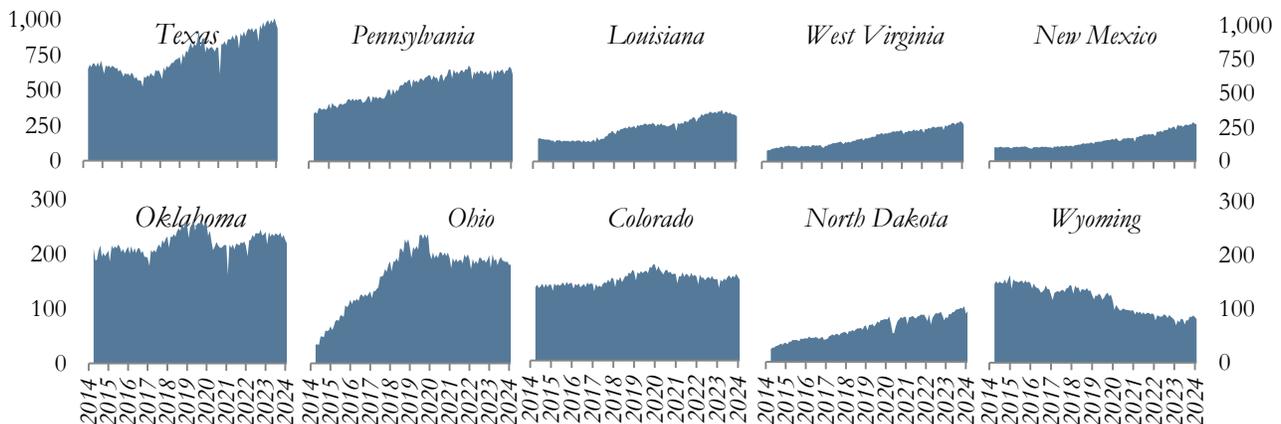
**Share of Production**



**U.S. Natural Gas, Change from**

	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
U.S. Production	-	-3.9%	-3.7%	-5.5%	7.6%
U.S. Stocks	-	5.6%	-15.1%	-34.5%	20.7%

**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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