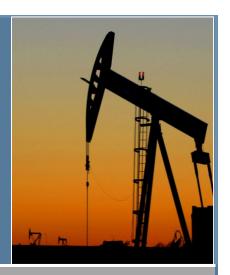
U.S. Energy DATABOOK

A summary of national and global energy indicators



FEBRUARY 28, 2025

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 January 31, West Texas Intermediate (WTI) crude oil averaged \$73.31 per barrel and North Sea Brent averaged \$77.37 per barrel, rising 6.7% and 6.6% respectively over the last quarter. The Henry Hub natural gas spot price averaged \$3.29 per million Btu for the week ending January 31, increasing 80.8% over the last three months. Over the last quarter, the total number of active drilling rigs in the United States fell slightly by 0.2% and is 3.4% below year-ago levels. U.S. crude oil production fell slightly by 0.4% compared to three months ago. U.S. crude oil and petroleum products exports rose by 0.2% in the last quarter and imports fell by 0.5%. Global demand for petroleum increased 0.4% and global petroleum production grew by roughly 1.0% 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.



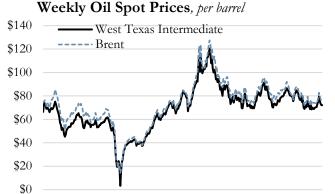
The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

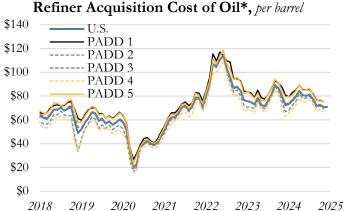
2018

2019

2020

Weekly data through December 27, 2024





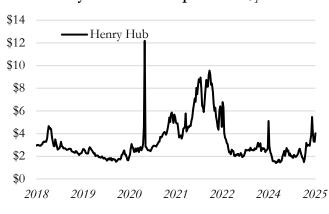
Weekly Natural Gas Spot Prices, per mmbtu

2021

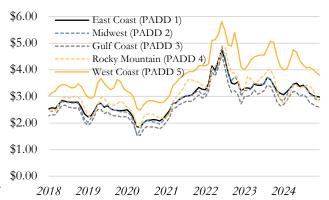
2022

2023

2024



Monthly Gasoline Prices by PADD, per gallon



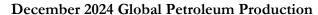
Weekly Spot Prices, Change from

	Current	1 Week	1 Month	3 Months	6 Months	1 Year
Weekly Spot Prices	12/27/24	Ago	Ago	Ago	Ago	Ago
West Texas Intermediate	\$70.51	\$0.12	\$1.57	\$0.29	-\$12.02	-\$3.01
Brent	\$73.13	-\$0.66	-\$1.03	-\$0.94	-\$13.59	-\$6.10
Henry Hub	\$4.03	\$0.75	-\$1.44	\$2.24	\$1.90	\$2.44

Monthly Gasoline Spot Prices, Change from

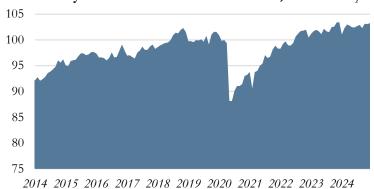
, , , , , , , , , , , , , , , , , , ,	. 03				
	Current	1 Month	3 Months	6 Months	1 Year
Geographic Area	Dec-24	Ago	Ago	Ago	Ago
East Coast (PADD 1)	\$2.98	-\$0.03	-\$0.14	-\$0.41	-\$0.15
Midwest (PADD 2)	\$2.88	-\$0.01	-\$0.21	-\$0.43	-\$0.01
Gulf Coast (PADD 3)	\$2.60	-\$0.03	-\$0.16	-\$0.40	-\$0.05
Rocky Mountain (PADD 4)	\$2.84	-\$0.14	-\$0.57	-\$0.48	-\$0.06
West Coast (PADD 5)	\$3.80	-\$0.10	-\$0.29	-\$0.55	-\$0.32

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

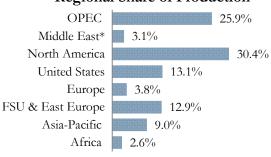




Monthly Global Petroleum Production, million barrels per day

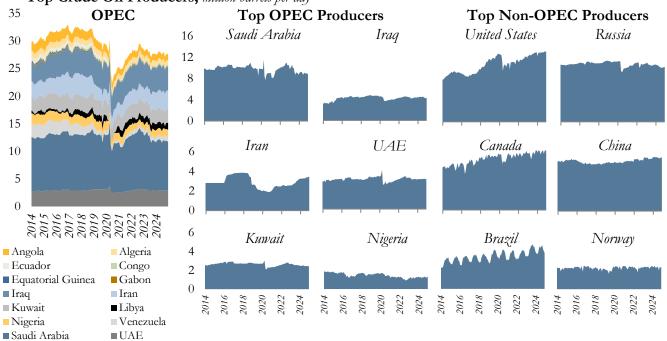


Regional Share of Production

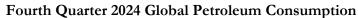


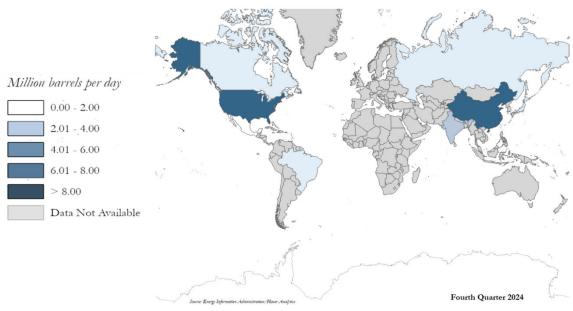
*Excludes OPEC

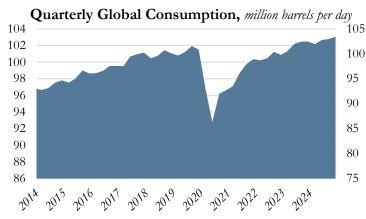
Top Crude Oil Producers, million barrels per day

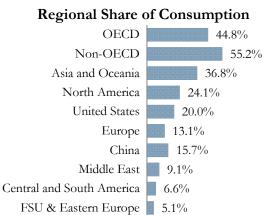


Note: OPEC country production values are for crude oil and non-OPEC country data is for petroleum production.

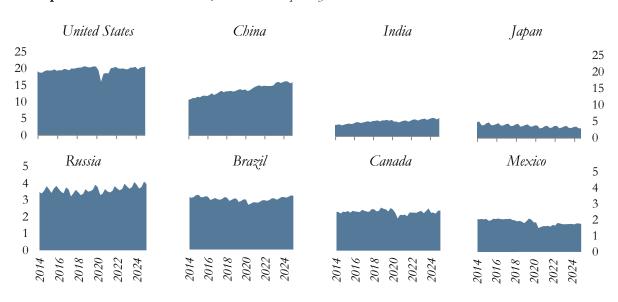






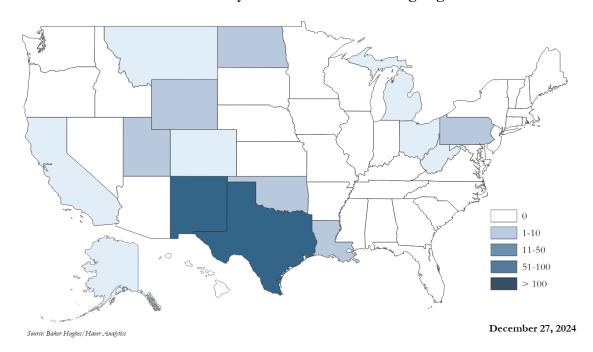


Top Petroleum Consumers, million barrels per day

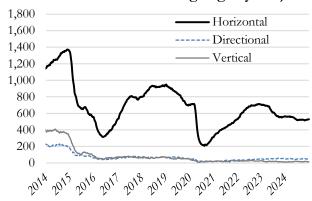


Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

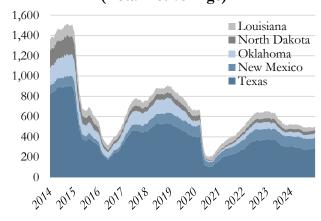
December 2024 Weekly Active Oil & Gas Drilling Rig Counts



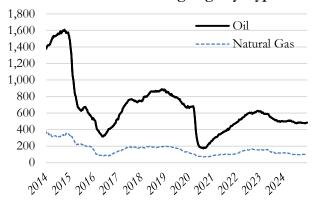
U.S. Active Drilling Rigs by Trajectory



Top Five States for Drilling Activity (Total Active Rigs)



U.S. Active Drilling Rigs by Type



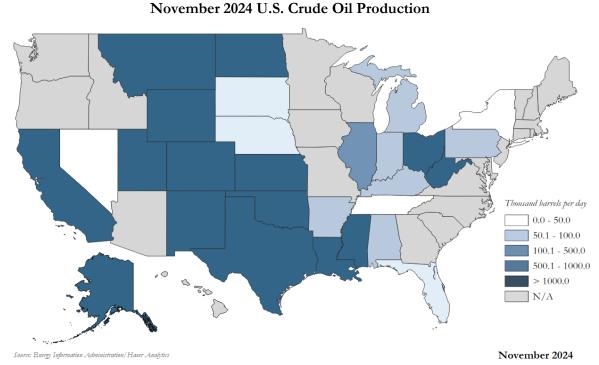
Rig Count By Type

Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	483	477	484	500
Gas	102	100	99	120
Misc	4	5	4	2
Total	589	582	587	622

Rig Count By Type, Change from

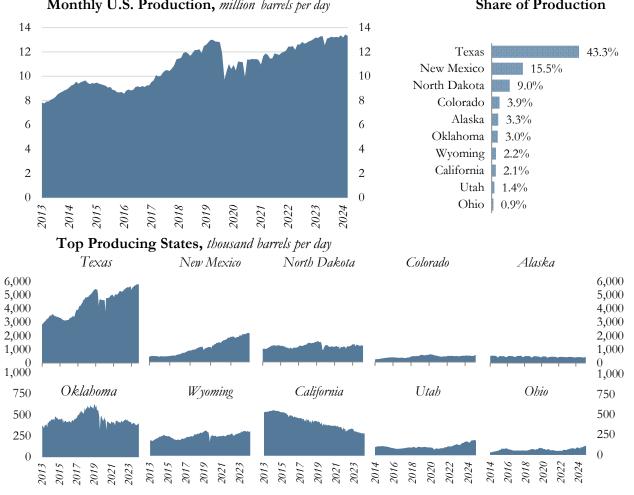
Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	-	1.3%	-0.2%	-3.4%
Gas	-	2.0%	3.0%	-15.0%
Misc	-	-20.0%	0.0%	100.0%
Total	-	1.2%	0.3%	-5.3%

Source: Baker Hughes/Haver Analytics

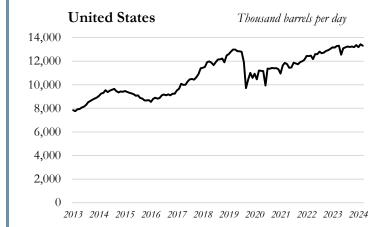


Monthly U.S. Production, million barrels per day

Share of Production



Data through November 2024



Unite Thousand barr	Change from	
Nov-24	13,314	J
Month Ago	13,436	-0.9%
3 Months Ago	13,364	-0.4%
6 Months Ago	13,201	0.9%
1 Year Ago	13,281	0.2%

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3,000		~								
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0	 013	5 2016	2017	2018	2019	2020	2021	2022	2023	2024

Thousand barre	Texas ls per day	Change from
Nov-24	5,761	
Month Ago	5,831	-1.2%
3 Months Ago	5,805	-0.8%
6 Months Ago	5,688	1.3%
1 Year Ago	5,658	1.8%
Share of U.S. Pro	oduction	43.3%

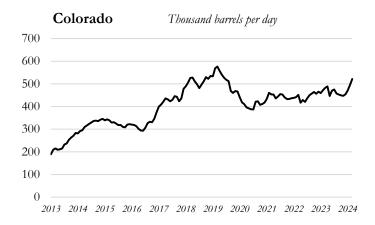
	New Mexico	
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2014	4 2015 2016 2017 2018 2019 2020 202	21 2022 2023 2024

New	Change			
Thousand barr	els per day	from		
Nov-24	2,064			
Month Ago	2,102	-1.8%		
3 Months Ago	2,089	-1.2%		
6 Months Ago	2,019	2.2%		
1 Year Ago	1,894	9.0%		
Share of U.S. Pr	Share of U.S. Production			

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North	Change	
Thousand barrel	ls per day	from
Nov-24	1,197	
Month Ago	1,156	3.5%
3 Months Ago	1,176	1.8%
6 Months Ago	1,184	1.1%
1 Year Ago	1,278	-6.4%
Share of U.S. Pro	9.0%	

Data through November 2024



	Colorado	Change
Thousand ba	irrels per day	from
Nov-24	522	
Month Ago	495	5.4%
3 Months Ago	454	14.8%
6 Months Ago	453	15.2%
1 Year Ago	483	8.1%
Share of U.S.	Production	3.9%

700				
600				
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400	V V V	ν γ γ	$\Lambda \sim$	\sim
300			•	
300				
200				

Thousand barre	Alaska ls per day	Change from
Nov-24	439	
Month Ago	427	2.6%
3 Months Ago	396	10.7%
6 Months Ago	417	5.2%
1 Year Ago	428	2.5%
	1	2.20/
Share of U.S. Pro	oduction	3.3%

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•	Oklahoma	Change
Thousand ba	rrels per day	from
Nov-24	404	
Month Ago	392	2.9%
3 Months Ago	379	6.4%
6 Months Ago	396	1.8%
1 Year Ago	418	-3.4%
Share of U.S.	Production	3.0%

	Wyoming	
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Wy	Change	
Thousand barrel	s per day	from
Nov-24	294	
Month Ago	288	2.1%
3 Months Ago	296	-0.8%
6 Months Ago	290	1.2%
1 Year Ago	288	2.1%
Share of U.S. Pro	duction	2.2%

Data through November 2024



C Thousand barr	California els per day	Change from
Nov-24	279	
Month Ago	280	-0.3%
3 Months Ago	281	-0.7%
6 Months Ago	289	-3.6%
1 Year Ago	305	-8.4%
Share of U.S. Pr	roduction	2.1%

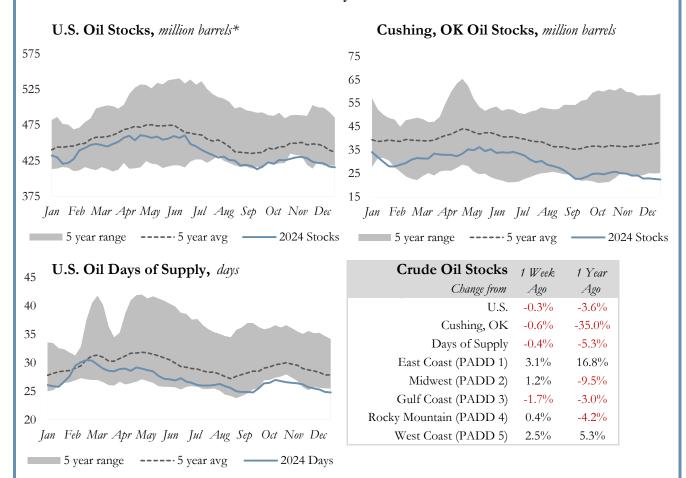
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Thousand barrels	Utah per day	Change from
Nov-24	184	
Month Ago	189	-2.9%
3 Months Ago	187	-2.0%
6 Months Ago	187	-1.7%
1 Year Ago	174	5.6%
Share of U.S. Pro	duction	1.4%

	Ohio
250	
200	
150	
100	
50	
0	014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

	Ohio	Change
Thousand barrels	per day	from
Nov-24	120	
Month Ago	107	12.1%
3 Months Ago	107	12.0%
6 Months Ago	95	26.3%
1 Year Ago	91	32.6%
Share of U.S. Pro	duction	0.9%

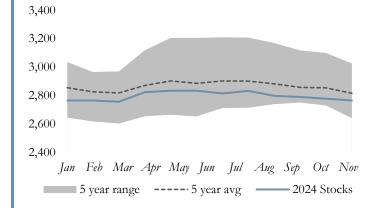
December 2024 Weekly U.S. Crude Oil Stocks



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

December 2024 OECD Commercial Petroleum Inventory

OECD Commercial Petroleum Inventory, million barrels

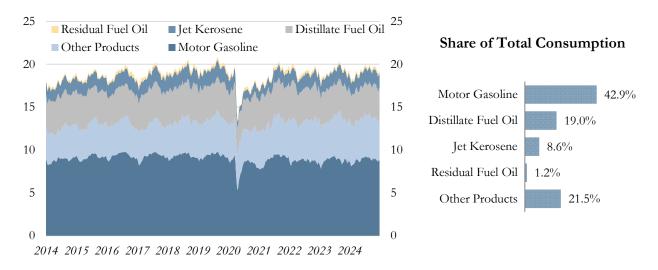


Petrole	Change				
	Million Barrels				
Current Mor	nth	2,782			
1 Month A	ıgo	2,766	0.6%		
3 Months A	ıgo	2,790	-0.3%		
6 Months A	ıgo	2,815	-1.2%		
1 Year A	ıgo	2,766	0.6%		

December 2024 Weekly U.S. Demand for Petroleum Products

4-Week Averages

All Petroleum Products, million barrels per day



U.S. Consumption by Product & Percent Change

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

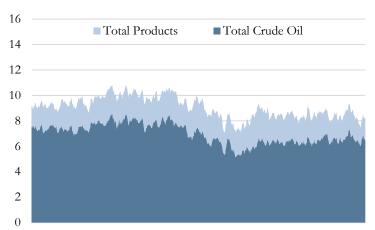
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	Current 12/27/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
All Products	20,338	20,448	20,102	20,518	20,586
Motor Gasoline	8,728	8,761	8,745	9,205	8,678
Distillate Fuel Oil	3,858	3,747	3,754	3,719	3,560
Jet Kerosene	1,742	1,712	1,710	1,730	1,642
Residual Fuel Oil	248	311	294	228	298
Other Products	4,381	4,775	4,690	4,822	4,921

U.S. Consumption by Product, Change from

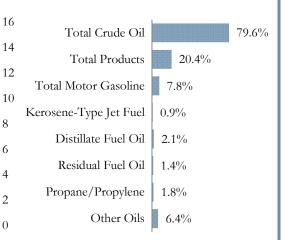
	Current 12/27/24	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
All Products	-	-0.5%	1.2%	-0.9%	-1.2%
Motor Gasoline	-	-0.4%	-0.2%	-5.2%	0.6%
Distillate Fuel Oil	-	3.0%	2.8%	3.7%	8.4%
Jet Kerosene	-	1.8%	1.9%	0.7%	6.1%
Residual Fuel Oil	-	-20.3%	-15.6%	8.8%	-16.8%
Other Products	-	-8.3%	-6.6%	-9.1%	-11.0%

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

Imports, million barrels per day



Share of Total Imports



2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

U.S. Imports by Product*

Thousand barrels per day

					1 2
	Current	1 Month	3 Months	6 Months	1 Year
	12/27/24	Ago	Ago	Ago	Ago
Total Crude Oil	6,507	6,891	6,568	7,129	6,595
Total Products	1,670	1,618	1,653	2,010	1,954
Total Motor Gasoline	635	537	599	881	608
Kerosene-Type Jet Fuel	76	118	61	94	131
Distillate Fuel Oil	174	123	159	117	216
Residual Fuel Oil	115	107	107	80	102
Propane/Propylene	144	127	95	82	128
Other Oils	527	606	632	757	771
Total Imports	8,177	8,509	8,221	9,139	8,549

U.S. Imports by Product, Change from

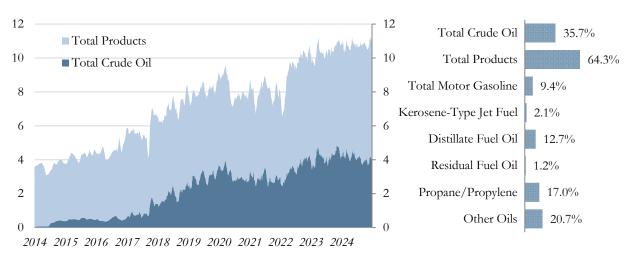
C.S. Imports by Froduct, Cha	nge from				
	Current	1 Month	3 Months	6 Months	1 Year
	12/27/24	Ago	Ago	Ago	Ago
Total Crude Oil	-	-5.6%	-0.9%	-8.7%	-1.3%
Total Products	-	3.2%	1.0%	-16.9%	-14.5%
Total Motor Gasoline	-	18.2%	6.0%	-27.9%	4.4%
Kerosene-Type Jet Fuel	-	-35.6%	24.6%	-19.1%	-42.0%
Distillate Fuel Oil	-	41.5%	9.4%	48.7%	-19.4%
Residual Fuel Oil	-	7.5%	7.5%	43.8%	12.7%
Propane/Propylene	-	13.4%	51.6%	75.6%	12.5%
Other Oils	-	-13.0%	-16.6%	-30.4%	-31.6%
Total Imports	-	-3.9%	-0.5%	-10.5%	-4.4%

^{*}Totals may not sum due to component rounding

December 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	1 Month	3 Months	6 Months	1 Year
1	12/27/24	Ago	Ago	Ago	Ago
Total Crude Oil	3,893	4,179	3,917	3,979	4,275
Total Products	7,006	6,934	6,957	6,865	6,654
Total Motor Gasoline	1,021	1,013	871	929	1,084
Kerosene-Type Jet Fuel	224	238	215	240	231
Distillate Fuel Oil	1,387	1,348	1,433	1,447	1,214
Residual Fuel Oil	131	132	133	153	116
Propane/Propylene	1,850	1,881	1,801	1,733	1,781
Other Oils	2,257	2,180	2,376	2,269	2,099
Total Exports	10,899	11,113	10,875	10,844	10,929

U.S. Exports by Product, Change from

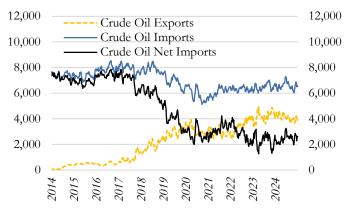
	Current	1 Month	3 Months	6 Months	1 Year
	12/27/24	Ago	Ago	Ago	Ago
Total Crude Oil	-	-6.8%	-0.6%	-2.2%	-8.9%
Total Products	-	1.0%	0.7%	2.1%	5.3%
Total Motor Gasoline	-	0.8%	17.2%	9.9%	-5.8%
Kerosene-Type Jet Fuel	-	-5.9%	4.2%	-6.7%	-3.0%
Distillate Fuel Oil	-	2.9%	-3.2%	-4.1%	14.3%
Residual Fuel Oil	-	-0.8%	-1.5%	-14.4%	12.9%
Propane/Propylene	-	-1.6%	2.7%	6.8%	3.9%
Other Oils	-	3.5%	-5.0%	-0.5%	7.5%
Total Exports	-	-1.9%	0.2%	0.5%	-0.3%

^{*}Totals may not sum due to rounding

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

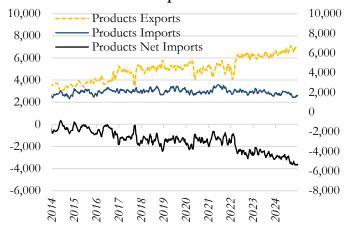
4-Week Averages, Thousand barrels per day

Crude Oil Net Imports



Crude Oil Net Thousand harre	Change from	
12/27/24	2,615	
Month Ago	2,712	-3.6%
3 Months Ago	2,651	-1.4%
6 Months Ago	3,150	-17.0%
1 Year Ago	2,320	12.7%

Products Net Imports



Products Net Imports						
Thousand barrels per day						
-5,336						
-5,316	-					
-5,304	-					
-4,855	-					
-4, 700	-					
	-5,336 -5,316 -5,304 -4,855					

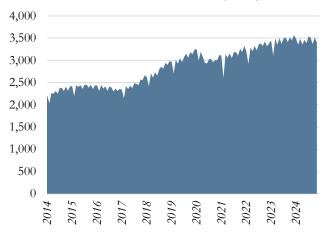
Total Net Imports

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,000,		– Total	Expor Impor Net In	ts \	$\mathcal{N}_{\mathcal{N}}$	₩\	₩	*_~^	2,00 0 -2,0
,000	2014	2016	2017	2019	2021	2022	2023	2024	-4,0

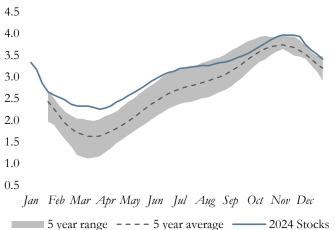
Total Net Imports						
els per day	from					
-2,721						
-2,603	-					
-2,653	-					
-1,705	-					
-2,380	-					
	-2,721 -2,603 -2,653 -1,705					

U.S. Natural Gas Production & Stocks

December 2024 Production
Total U.S. Production, Billion cubic feet (Bef)



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



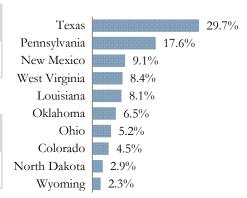
U.S. Natural Gas, Billion cubic feet (Bcf)

3 1 3/								
	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago			
U.S. Production	3,401	3,509	3,508	3,461	3,450			
U.S. Stocks	2,571	3.413	3.864	3.249	2.659			

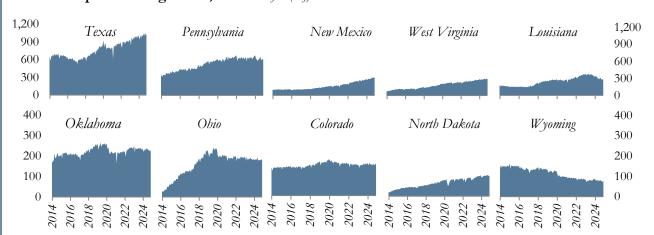
U.S. Natural Gas, Change from

	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
U.S. Production	-	-3.1%	-3.0%	-1.7%	-1.4%
U.S. Stocks	-	-24.7%	-33.5%	-20.9%	-3.3%

Share of Production



Top Producing States, Billion cubic feet (Bcf)



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

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 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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