

Energy Tidbits

Is Israel About to Attack Iran in the Coming Days or Did Biden Embellish He Knows When and How Israel will Retaliate?

Produced by: Dan Tsubouchi

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Dan Tsubouchi Chief Market Strategist dtsubouchi@safgroup.ca Ryan Dunfield CEO rdunfield@safgroup.ca Aaron Bunting COO, CFO abunting@safgroup.ca lan Charles Managing Director icharles@safgroup.ca

Winter forecast for the US in the 2024-25 season

How much snow will fall this winter? Will atmospheric rivers drench California? Will it be a good year for skiers? Find out the answers to these questions and more with AccuWeather's 2024-2025 U.S. winter forecast.

By Brian Lada, AccuWeather meteorologist and senior content editor Published Oct 14, 2024 7:05 AM CDT | Updated Oct 14, 2024 12:42 PM CDT

Will it be a cold and snowy winter? Lincoln Riddle spoke with AccuWeather's long-range experts to find out.

Meteorological winter is just around the corner, officially beginning in less than two months on Sunday, Dec. 1. The season will have some meteorological twists and turns that may end with a surge of snow and blasts of bitterly cold air.

As people prepare their skis and snowblowers with snow on their minds, <mark>AccuWeather forecasters predict that the season will be mild for most of the United States, similar to last winter, which was the warmest on record. However, that is only part of the story, as waves of frigid air will periodically send freezing air across the country, along with more chances for snow.</mark>

So dig out your winter coats from the closet and get ready for the colder days ahead with AccuWeather's 2024-2025 U.S. winter forecast.

3 key factors in the winter forecast

One of the major elements considered by AccuWeather's long-range meteorologists when crafting the winter forecast was La Niña. This phenomenon occurs when water temperatures near the equator in the eastern Pacific Ocean remain below the historical average for an extended period, which can significantly influence weather patterns across North America, including the trajectory of snowstorms.

"La Niña will be weak for most of the winter," AccuWeather Senior Meteorologist and Long-Range Expert Paul Pastelok explained. "A weaker La Niña can allow other signals to drive the pattern, more variability throughout the winter."



When the waters cool off to at least 0.9 of a degree Fahrenheit below historical average, La Niña is declared.

Another player in the winter forecast is the polar vortex.

Based on data from previous winters with a similar setup to the upcoming season, <mark>Pastelok said that February is</mark> the most probable time frame for the polar vortex to usher a blast of bitterly cold air across the eastern U.S., but added that it is not a certainty.

A third factor is the temperature of the water in the Gulf of Mexico and the northern and northeastern Pacific. Water temperatures in the Gulf are expected to be higher than historical averages, which can translate to mild air masses

for the central and eastern U.S. The warmer-than-average water temperatures in the northern Pacific could alter the storm track at times during the winter for the West Coast, impacting the entire U.S.

Bookend winter that could end with a bang in Northeast, Great Lakes

Snow shovels will be needed across the Northeast and Midwest this winter, although they could gather dust during part of the season as the weather patterns play tug-of-war between mild and rainy, and cold and snowy.

Most areas in the Northeast will receive more snow this season than last winter. An uptick in snow is also likely across parts of the Midwest, including Minnesota, Wisconsin and Michigan.

However, the snow will be broken up by pauses in the cold, wintry weather, especially in the middle part of the season, as milder air from the Pacific flows across the country.



December is the first month of meteorological winter and will bring brief blasts of cold air that will trigger lakeeffect snow. This is the opposite of last December when little lake effect was seen in the typical areas, including Buffalo, New York, Marquette, Michigan, Erie, Pennsylvania, and Cleveland. Snow is also possible this December in areas farther away from the lakes from typical early-season winter storms.

Big changes will unfold during the opening weeks of 2025 as a new weather pattern will promote milder air and less snow across the eastern half of the nation.

"The heart of the ski season can be rough in the East," Pastelok explained. Even at ski resorts where there is a healthy base of snow, slopes may turn icy as the snow melts during the daytime and then freezes overnight.

A backend surge to winter will bring the potential for multiple snowstorms from the Great Lakes, Ohio Valley and through the Northeast, according to Pastelok. The risk of snow may also be accompanied by the polar vortex. "The Northeast and mid-Atlantic ski season could be saved late if this occurs," he added.

EXCLUSIVE SNOWFAL	ACCUWEATHER FORECAST	024-2025 (I	NCHES)		
	LOCATION Boston, MA	snowfall (2023-2024) 9.8	AVERAGE SNOWFALL (1991-2020) 49.2	snowfall forecast 2024-2025 30-40	
W	New York, NY	7.5	29.8	20-25	A.
N.M.	Philadelphia, PA	11.2	23.1	15-20	
	Pittsburgh, PA	16.3	44.1	28-36	
	Buffalo, NY	71.3	95.4	75-100	-
3445	Chicago, IL	22.2	38.4	30-45	- 56

New York City, Boston, Philadelphia and Pittsburgh are a sampling of the cities predicted to have more snow than last winter, in part due to more snow opportunities in February. Places such as Chicago and Buffalo may not only

have more snow than last winter, but they also have a chance of snowfall totals for the season piling up more than the historical average this winter.

Warm winter to curb heating demand in southern, central US

Winter will get off to a warm start for millions across the Gulf Coast states and Plains, with it feeling more like an extension of autumn rather than the start of the coldest time of the year. And this will be the trend for most of the upcoming season.

"December through February, the warmest areas of the country, compared to the average, are going to be from the South, central southern Plains states through the Mississippi Valley, up through the Ohio and Tennessee valleys," Pastelok explained.



A combination of La Niña keeping the storm track over the northern part of the country most of the winter, aboveaverage water temperatures in the Gulf of Mexico, and mild Pacific air occasionally flowing into the Plains and East will limit the potential for cold air to have a sustained presence across the southern U.S.

Temperatures throughout the season could run more than 3 degrees above the historical average for most of the region, including Dallas, New Orleans, Atlanta and Nashville. This will result in a noticeable reduction in heating demand, which could translate to lower heating bills for families and businesses.

If a significant surge of cold air delivers subfreezing weather to the Gulf Coast and parts of Florida, it is most likely to occur in February, although the month as a whole is still projected to be milder than normal.



The widespread warmth will be paired with drier conditions along the Gulf coast states, which could cause drought conditions to grow and expand in Alabama, Mississippi, Louisiana and Texas.

When storms do roll through, they could bring a heightened risk of severe weather due to the overall mild conditions and the warm, humid air from the Gulf of Mexico.

"You need to be aware of severe weather in the winter. We've seen in the past damaging thunderstorms in December, January, and February," said Pastelok. "With mild air masses coming out of the west during the month of January, we could see the potential for severe weather farther north into places like Missouri, Arkansas, and Tennessee. As the jet stream dips farther south in February, we could start to see more severe weather in the Gulf coast states with warmer air and warmer waters from the Gulf of Mexico."

Atmospheric rivers to drench West Coast, spread snow over the Rockies

It felt more like summer across part of the West as October kicked off with record-breaking temperatures, but the heat will soon fade and the wet season will shift into gear before the official arrival of winter.

The frequency of rain will gradually trend upward in November and December, along with snow in the mountains. "I think skiing in the West is looking really good," Pastelok said. "I think it's going to get kick-started right for the holiday season," he added, saying Thanksgiving and Christmas look very good for skiers.



Atmospheric rivers and storms from the Pacific Ocean will focus on the Northwest and Northern California before traversing over the Rocky Mountains as winter gets underway in December. Forecasters are warning, though, that big changes will arrive around the time that 2025 begins.

"Look for a potential shift in the storm track midwinter," Pastelok said. This new pattern will open the door for storms to track farther south over Central and Southern California and push inland.

January could be the wettest month of the winter for Los Angeles and San Diego, as well as areas farther inland across the Southwest.

In February, the storms' focus will shift north, once again focusing on the Pacific Northwest and northern and central Rockies. As a result, the ski season could come to an early end at the ski resorts in the mountains of Southern California, northern Arizona and New Mexico.

La Niña winters typically do not result in frequent atmospheric rivers in California, but with a weaker La Niña predicted this winter, it could allow for other factors to dictate the West Coast weather pattern. This is what happened in the La Niña winter of 2022-23 when nearly 40 atmospheric rivers hit the western U.S., many of which impacted California.

Meteorological winter begins on Sunday, Dec. 1.

Snapshot of India's Oil & Gas data

Monthly Ready Reckoner September-24



Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

Highlights for the month

Indigenous crude oil and condensate production during September 2024 was 2.1 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.4 MMT whereas PSC/RSC registered production of 0.4 MMT during September 2024. There is a de-growth of 3.9 % in crude oil and condensate production during September 2024 as compared with the corresponding period of the previous year.

Total Crude oil processed during September 2024 was 21.2 MMT which is 4.4 % higher than September 2023, where PSU/JV refiners processed 13.9 MMT and private refiners processed 7.3 MMT of crude oil. Total indigenous crude oil processed was 1.8 MMT and total Imported crude oil processed was 19.4 by all Indian refineries (PSU+JV+PVT). There was a growth of 1.8 % in total crude oil processed in April-September FY 2024-25 as compared to same period of previous year.

Crude oil imports increased by 6.5% and 4.0% during September 2024 and April-September FY 2024-25 respectively as compared to the corresponding period of the previous year. As compared to net import bill for Oil & Gas for Sept 2023 of \$ 9.8 billion, the net import bill for Oil & Gas for Sept 2024 was \$ 9.9 billion. Out of which, crude oil imports constitutes \$ 10.6 billion, LNG imports \$1.2 billion and the exports were \$ 3.9 billion during Sept 2024.

The price of Brent Crude averaged \$74.33/bbl during Sept 2024 as against \$80.91/bbl during Aug 2024 and \$94.00/bbl during Sept 2023. The Indian basket crude price averaged \$73.69/bbl during Sept 2024 as against \$78.27/bbl during Aug 2024 and \$93.54 /bbl during Sept 2023.

Production of petroleum products was 22.7 MMT during September 2024 which is 5.8% higher than September 2023. Out of 22.7 MMT, 22.4 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 2.4 % in production of petroleum products in April-September FY 2024 – 25 as compared to same period of FY 2023 – 24. Out of total POL production, in September 2024, share of major products including HSD is 39.4 %, MS 17 %, Naphtha 6.4 %, ATF 6.7 %, Pet Coke 5 %, LPG 4.4 %, and rest is shared by Bitumen, FO/LSHS, LDO, Lubes & others.

POL products imports increased by 3.3% and 10.4% during September 2024 and April-September FY 2024-25 respectively as compared to the corresponding period of the previous year. Increase in POL products imports during April-September FY 2024-25 were mainly due to increase in imports of liquified petroleum gas (LPG), petcoke and lubes/LOBS etc.

- Exports of POL products increased by 21.0% and 1.2% during September 2024 and April-September FY 2024-25 respectively
 as compared to the corresponding period of the previous year. Increase in POL products exports during April-September FY
 2024-25 were mainly on account of increase in exports of petcoke/CBFS and fuel oil etc.
- The consumption of petroleum products during April-Sept 2024, with a volume of 117.7 MMT, reported a growth of 3.1 % compared to the volume of 114.2 MMT during the same period of the previous year. This growth was led by 16.7% growth in Lubes, 10.4% growth in Petcoke, 10.3% growth in ATF, 7.2% growth in MS, 6.0% in LPG,2.2% in Naphtha and 0.9% in HSD consumption besides growth in FO/LSHS during the period. The Consumption of petroleum products for the month of Sept-2024 recorded a de-growth of 1.6% with a volume of 17.9MMT compared to the same period of the previous year.
- Ethanol blending in Petrol was 15.9% during Sept'24 and cumulative ethanol blending during November 2023- September 2024 was 13.8%. As on 01.10.2024, 16,756 PSU outlets out of 83,190 total PSU Retail Outlets are dispensing E20 Ethanol Blended MS.
- Total Natural Gas Consumption (including internal consumption) for the month of September 2024 was 5840 MMSCM which was 5% higher than the corresponding month of the previous year. The cumulative consumption of 36850 MMSCM for the current financial year till September 2024 was higher by 11.9% compared with the corresponding period of the previous year.
- Gross production of natural gas for the month of September 2024 (P) was 2977 MMSCM which was lower by 1.6% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 18160 MMSCM for the current financial year till September 2024 was higher by 1.6% compared with the corresponding period of the previous year.
- Prorated LNG import for the month of September 2024 (P) was 2905 MMSCM which was 12.4% higher than the corresponding month of the previous year. The prorated cumulative import of 18975 (P) MMSCM for the current financial year till September 2024 is higher by 23.1% compared with the corresponding period of the previous year.

	1. Selected indicators of the Indian economy											
	Economic indicators	Unit/ Base	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24				
1	Population (basis RGI projections)	Billion	1.309	1.337	1.351	1.365	1.377	1.388				
2	GDP at constant (2011-12 Prices)	Growth %	6.5	4.0	-6.6	9.1	7.2	7.6				
			2nd RE	1st RE	1st RE	1st RE	PE	(E)				
		MMT	285.2	297.5	310.7	315.7	329.7	332.3				
3						4th AE	FE	FE				
	(Food grains)	Growth %	0.1	4.3	4.5	1.6	4.4	0.8				
л	Gross Fiscal Deficit	%	3.4	4.6	9.5	6.7	6.4	5.9				
4	(as percent of GDP)				RE	RE	RE	RE				
	Economic indicators	Unit/Base	2022-23	2023-24	September		April-Septeml					
								ptember				
					2023-24	2024-25(P)	2023-24	2024-25 (P)				
5	Index of Industrial Production (Base: 2011-12)	Growth %	5.2	5.9	2023-24 10.2	2024-25(P) -0.1*	2023-24 6.2#	2024-25 (P) 4.2#				
5	Index of Industrial Production (Base: 2011-12) Imports^	Growth % \$ Billion	5.2 714.2	5.9	2023-24 10.2 62.3	2024-25(P) -0.1* QE 64.4	2023-24 6.2# 275.8	2024-25 (P) 4.2# 295.3				
5 6 7	Index of Industrial Production (Base: 2011-12) Imports^ Exports^	Growth % \$ Billion \$ Billion	5.2 714.2 451.0	5.9 677.2 437.1	2023-24 10.2 62.3 38.3	2024-25(P) -0.1* QE 64.4 34.7	2023-24 6.2# 275.8 176.7	2024-25 (P) 4.2# 295.3 178.7				
5 6 7 8	Index of Industrial Production (Base: 2011-12) Imports^ Exports^ Trade Balance	Growth % \$ Billion \$ Billion \$ Billion	5.2 714.2 451.0 -263.2	5.9 677.2 437.1 -240.1	2023-24 10.2 62.3 38.3 -24.0	2024-25(P) -0.1* QE 64.4 34.7 -29.7	2023-24 6.2# 275.8 176.7 -99.2	2024-25 (P) 4.2# 295.3 178.7 -116.6				

Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Aug'24 and #April-Aug'23 and Apr-Aug'24; @ 2022-23 as on March 31, 2023,2023-24 as on March 29,2024, Sept 2023 as on Sept' 29, 2023 and Sept, 2024 as on Sept 27, 2024; ^Imports & Exports are for Merchandise for the month of Aug 2023 & Aug 2024 and Apr-Aug 2023 and Apr-Aug 2024.; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates; FE-Final Estimates. **Source:** Registrar General India, Ministry of Commerce & Industry, Ministry of Statistics and Programme Implementation, Ministry of Assimptions of Statistics and Programme Implementation, Ministry of

Agriculture & Farmer's Welfare, Ministry of Finance, Reserve Bank of India

	2. Crude o	il, LNG and	d petroleu	ım produo	cts at a gla	nce		
	Details	Unit/ Base	2022-23	2023-24	Septe	mber	April-Se	ptember
			(P)	(P)	2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)
1	Crude oil production in India [#]	MMT	29.2	29.4	2.4	2.3	14.7	14.4
2	Consumption of petroleum products*	MMT	223.0	234.3	18.2	17.9	114.2	117.7
3	Production of petroleum products	MMT	266.5	276.1	21.5	22.7	136.6	139.9
4	Gross natural gas production	MMSCM	34,450	36,438	3,027	2,977	17,879	18,160
5	Natural gas consumption	MMSCM	59,969	67,512	5,560	5,840	32,920	36,850
6	Imports & exports:							
	Crude oil imports	MMT	232.7	233.1	17.5	18.6	115.9	120.5
	erdde on mports	\$ Billion	157.5	132.8	10.9	10.6	63.7	71.3
	Petroleum products (POL)	MMT	44.6	48.7	4.1	4.2	23.4	25.8
	imports*	\$ Billion	26.9	23.0	2.1	2.0	10.7	12.1
	Gross petroleum imports	MMT	277.3	281.8	21.6	22.8	139.2	146.3
	(Crude + POL)	\$ Billion	184.4	155.9	12.9	12.6	74.4	83.4
	Petroleum products (POL)	MMT	61.0	62.4	4.8	5.8	30.7	31.0
	export	\$ Billion	57.3	47.7	4.3	3.9	23.6	22.0
	ING imports*	MMSCM	26,304	31,795	2,584	2,905	15,416	18,975
		\$ Billion	17.1	13.3	1.1	1.2	6.5	7.7
	Net oil & gas imports	\$ Billion	144.2	121.5	9.8	9.9	57.3	69.1
7	Petroleum imports as percentage of India's gross imports (in value terms)^^	%	25.8	23.0	20.8	19.6	22.5	23.5
8	Petroleum exports as percentage of India's gross exports (in value terms)^^	%	12.7	10.9	11.1	11.3	11.1	10.3
9	Import dependency of crude oil (on POL consumption basis)	%	87.4	87.8	86.2	88.7	87.6	88.2

#Includes condensate; *Private direct imports are prorated for the period Aug'24 to Sept'24 for POL. RIL data for Sept'24 is prorated.LNG Imports figure from DGCIS are prorated for Aug'24 to Sept'24.Total may not tally due to rounding off. ^^ Import and Exports for Sept'24 is prorated.

3. Indig	genous cr	ude oil p	roductior	(Million	Metric To	onnes)		
Details	2022-23	2023-24		September	•	A	oril-Septemb	er
	(P)	(P)	2023-24 (P)	2024-25 Target*	2024-25 (P)	2023-24 (P)	2024-25 Target*	2024-25 (P)
ONGC	18.4	18.1	1.5	1.6	1.4	9.1	9.8	8.8
Oil India Limited (OIL)	3.2	3.3	0.3	0.3	0.3	1.6	1.9	1.7
Private / Joint Ventures (JVs)	6.2	5.7	0.5	0.6	0.4	2.9	3.7	2.7
Total Crude Oil	27.8	27.2	2.2	2.6	2.1	13.7	15.3	13.3
ONGC condensate	1.0	1.1	0.1	0.0	0.1	0.5	0.0	0.5
PSC condensate	0.3	1.1	0.1	0.0	0.1	0.5	0.0	0.6
Total condensate	1.4	2.2	0.2	0.0	0.2	1.0	0.0	1.1
Total (Crude + Condensate) (MMT)	29.2	29.4	2.4	2.6	2.3	14.7	15.3	14.4
Total (Crude + Condensate) (Million Bbl/Day)	0.59	0.59	0.58	0.63	0.56	0.59	0.61	0.58

*Provisional targets inclusive of condensate.

4. Domestic and overseas oil & gas production (by Indian Companies)										
Details	2022-23	2023-24	September April-Septembe							
	(P)	(P)	2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)				
Total domestic production (MMTOE)	63.6	65.8	5.4	5.3	32.6	32.5				
Overseas production (MMTOE)	19.5	19.9	1.6	1.8	9.9	10.2				

Source: ONGC Videsh, GAIL, OIL , IOCL, HPCL & BPRL

	5. High Sulphur (HS) & Low Sulphur (LS) crude oil processing (MMT)												
	Details	2022-23	2023-24	Septe	ember	April-September							
		(P)	(P)	2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)						
1	High Sulphur crude	197.9	205.2	14.3	16.6	97.4	103.3						
2	Low Sulphur crude	57.4	56.3	6.0	4.6	32.4	28.8						
Total c	rude processed (MMT)	255.2	261.5	20.3	21.2	129.8	132.1						
Total c	rude processed (Million Bbl/Day)	5.13	5.25	4.96	5.17	5.20	5.29						
Percen	tage share of HS crude in total crude oil processing	77.5%	78.5%	70.4%	78.3%	75.0%	78.2%						

6. Quantity and value of crude oil imports										
Year Quantity (MMT) \$ Million Rs. Crore										
2021-22	212.4	120675	9,01,262							
2022-23	232.7	157531	12,60,372							
2023-24 (P)	233.1	132838	11,00,589							
April-September 2024-25(P)	120.5	71347	5,96,780							

	7. Self-sufficiency i	n petroleu	Im products	s (Million M	letric Tonn	es)	
	Particulars	2022-23	2023-24(P)	Septe	mber	April-Se	ptember
	Faiticulais	(P)		2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)
1	Indigenous crude oil processing	26.5	26.9	2.4	1.8	13.3	12.9
2	Products from indigenous crude (93.3% of crude oil processed)	24.7	25.1	2.2	1.7	12.4	12.0
3	Products from fractionators (Including LPG and Gas)	3.5	3.5	0.3	0.3	1.7	1.8
4	Total production from indigenous crude & condensate (2 + 3)	28.2	28.6	2.5	2.0	14.2	13.8
5	Total domestic consumption	223.0	234.3	18.2	17.9	114.2	117.7
% Self	-sufficiency (4 / 5)	12.6%	12.2%	13.8%	11.3%	12.4%	11.8%

	8. Re	fineries: Ins	stalled ca	pacity an	d crude c	oil proces	sing (MM	TPA / MI	MT)	
Sl. no.	Refinery	Installed			Crı	ide oil proc	essing (MN	/ГТ)		
		capacity	2022-23	2023-24		September		Ар	ril-Septeml	per
		(01.04.2024)	(P)	(P)	2023-24	2024-25	2024-25	2023-24	2024-25	2024-25
		ΜΜΤΡΑ			(P)	(Target)	(P)	(P)	(Target)	(P)
1	Barauni (1964)	6.0	6.8	6.6	0.5	0.5	0.5	3.3	3.2	3.3
2	Koyali (1965)	13.7	15.6	15.2	1.2	1.3	1.3	7.5	7.8	7.9
3	Haldia (1975)	8.0	8.5	8.1	0.3	0.7	0.0	3.8	3.4	3.0
4	Mathura (1982)	8.0	9.6	9.2	0.7	0.0	0.6	4.3	3.7	4.4
5	Panipat (1998)	15.0	13.8	14.3	1.2	1.3	1.2	7.4	8.1	7.5
6	Guwahati (1962)	1.2	1.1	1.0	0.1	0.1	0.1	0.6	0.7	0.6
7	Digboi (1901)	0.65	0.7	0.7	0.1	0.1	0.1	0.3	0.4	0.4
8	Bongaigaon(1979)	2.70	2.8	3.0	0.3	0.2	0.2	1.5	1.3	1.3
9	Paradip (2016)	15.0	13.6	15.2	1.2	1.4	1.2	7.8	7.7	6.5
	IOCL-TOTAL	70.3	72.4	73.3	5.5	5.6	5.3	36.5	36.2	34.9
10	Manali (1969)	10.5	11.3	11.6	1.0	1.0	0.5	5.7	5.1	4.9
11	CBR (1993)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CPCL-TOTAL	10.5	11.3	11.6	1.0	1.0	0.5	5.7	5.1	4.9
12	Mumbai (1955)	12.0	14.5	15.1	1.4	1.3	1.4	8.1	7.6	7.8
13	Kochi (1966)	15.5	16.0	17.3	1.3	1.2	1.3	8.4	8.3	8.6
14	Bina (2011)	7.8	7.8	7.1	0.7	0.7	0.5	3.0	3.5	3.7
	BPCL-TOTAL	35.3	38.4 39.5 3.3 3.1 3.1 19.5 19.4 20.2							
15	Numaligarh (1999)	3.0	3.1	2.5	0.28	0.2	0.2	0.8	1.5	1.4

Sl. no.	Refinery	Installed			Cruc	le oil proce	essing (MM	IT)		
		capacity	2022-23	2023-24		Septembe	r	Арі	ril-Septem	ber
		(01.04.2024)	(P)	(P)	2023-24	2024-25	2024-25	2023-24	2024-25	2024-25
		ΜΜΤΡΑ			(P)	(Target)	(P)	(P)	(Target)	(P)
16	Tatipaka (2001)	0.07	0.07	0.07	0.004	0.005	0.005	0.03	0.03	0.03
17	MRPL-Mangalore (1996)	15.0	17.1	16.5	0.8	1.4	1.5	7.6	8.6	8.8
	ONGC-TOTAL	15.1	17.2	16.6	0.8	1.4	1.5	7.6	8.6	8.9
18	Mumbai (1954)	9.5	9.8	9.6	0.8	0.8	0.9	5.0	4.6	4.7
19	Visakh (1957)	13.7	9.3	12.7	1.0	1.1	1.3	6.2	6.4	7.4
20	HMEL-Bathinda (2012)	11.3	12.7	12.6	1.1	1.0	1.1	6.5	6.0	6.5
	HPCL- TOTAL	34.5	31.8	35.0	2.9	2.8	3.2	17.7	17.0	18.6
21	RIL-Jamnagar (DTA) (1999)	33.0	34.4	34.4	2.8	2.8	2.9	17.2	17.2	17.5
22	RIL-Jamnagar (SEZ) (2008)	35.2	27.9	28.3	2.0	2.0	2.7	14.6	14.6	15.5
23	NEL-Vadinar (2006)	20.0	18.7	20.3	1.7	1.7	1.7	10.1	10.1	10.2
All India	(MMT)	256.8	255.2	261.5	20.3	20.7	21.2	129.8	129.8	132.1
All India	(Million Bbl/Day)	5.02	5.13	5.24	4.96	5.06	5.17	5.20	5.20	5.29

Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels. The Inputs to Refinery includes both Crude Oil and Other Inputs (OI), however Other Inputs (OI) do not form part of the above data.

9. Major crude oil and product pipeline network (as on 01.10.2024)												
Det	tails	ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total		
Crude Oil	Length (KM)	1,284	1,195	688	1,017	5,822	937			10,943		
	Cap (MMTPA)	60.6	9.0	10.7	11.3	53.8	7.8			153.1		
Products	Length (KM)		654			12,807	2,600	5,133	2,399	23,593		
	Cap (MMTPA)		1.7			70.6	22.6	35.2	10.2	140.3		

*Others include GAIL and Petronet India. HPCL and BPCL lubes pipeline included in products pipeline data

	11. Production and consumption of petroleum products (Million Metric Tonnes)													
Due du ete	2022-	·23 (P)	2023-	24 (P)	Sept-2	23 (P)	Sept-	24 (P)	Apr-Sep	ot'23 (P)	Apr-Sept'24 (P)			
Products	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons		
LPG	12.8	28.5	12.8	29.7	0.9	2.6	1.0	2.6	6.3	14.1	6.3	15.0		
MS	42.8	35.0	45.1	37.2	3.6	3.1	3.9	3.1	22.4	18.5	23.3	19.8		
NAPHTHA	17.0	12.2	18.3	13.8	1.4	1.0	1.5	1.0	9.0	6.6	9.3	6.7		
ATF	15.0	7.4	17.1	8.2	1.3	0.7	1.5	0.7	8.4	4.0	8.8	4.4		
ѕко	0.9	0.5	1.0	0.5	0.1	0.03	0.08	0.04	0.54	0.26	0.5	0.20		
HSD	113.8	85.9	115.9	89.6	8.9	6.5	9.0	6.4	57.2	44.0	57.5	44.4		
LDO	0.6	0.7	0.7	0.8	0.07	0.1	0.1	0.1	0.3	0.4	0.3	0.4		
LUBES	1.3	3.7	1.4	4.1	0.1	0.3	0.1	0.4	0.7	2.0	0.6	2.3		
FO/LSHS	10.4	7.0	10.3	6.5	0.7	0.5	1.0	0.6	4.1	3.3	5.8	3.3		
BITUMEN	4.9	8.0	5.2	8.8	0.3	0.5	0.2	0.5	2.3	4.0	2.3	3.8		
PET COKE	15.4	18.3	15.1	20.3	1.1	1.5	1.1	1.6	7.5	9.7	7.4	10.7		
OTHERS	31.5	15.8	33.3	14.7	3.0	1.5	3.4	0.9	17.7	7.4	17.7	6.6		
ALL INDIA	266.5	223.0	276.1	234.3	21.5	18.2	22.7	17.9	136.6	114.2	139.9	117.7		
Growth (%)	4.8%	10.6%	3.6%	5.0%	5.5%	7.9%	5.7%	-1.6%	4.0%	6.3%	2.4%	3.1%		

Note: Prod - Production; Cons - Consumption

			15. LP	G cons	umpti	on (The	ousanc	l Metri	c Tonne					
LPG category	202	2-23	2023	3-24		9	Septemb	ber			Apr	r <mark>il-Septe</mark>	mber	
					202	3-24	2024	-25(P)	Growth (%)	202	3-24	2024-	25 (P)	Growth (%)
1. PSU Sales :														
LPG-Packed Domestic	25,3	81.5	26,2	07.5	2,	222.3	2,	271.5	2.2%	12,	443.9	13,2	274.2	6.7%
LPG-Packed Non-Domestic	2,60	06.0	2,76	50.2		243.5		231.3	-5.0%	1,	359.6	1,2	296.2	-4.7%
LPG-Bulk	40	8.9	593	3.8		77.6		75.7	-2.5%		284.1		298.7	5.1%
Auto LPG	10	6.7	88	8.0		7.9		6.0	-24.0%		47.7		37.4	-21.5%
Sub-Total (PSU Sales)	28,5	03.1	29,6	49.4	2,	551.3	2,	584.6	1.3%	14,	135.3	14,9	906.6	5.5%
2. Direct Private Imports*	0.	.1	0.	.1		0.00		4.68	#DIV/0!	0.	04	-	72.84	189541.6%
Total (1+2)	28,5	03.2	29,6	49.5	2,	551.3	2,	589.2	1.5%	14,	135.3	14,9	979.4	6.0%
*Aug'24-Sept'24import data from DGCIS data is prorated.														
				16.	LPG ma	arketin	g at a	glance						
Particulars	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	01.10.24
(As on 1st of April)														(P)
LPG Active Domestic	(Lakh)			1486	1663	1988	2243	2654	2787	2895	3053	3140	3242	3280.1
Customers	Growth				11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.9%	3.2%	4.0%
LPG Coverage (Estimated)	(Percent)			56.2	61.9	72.8	80.9	94.3	97.5	99.8	-	-	-	-
LFO COVERage (Estimated)	Growth				10.1%	17.6%	11.1%	16.5%	3.4%	2.3%	-	-	-	-
DMUX Ropoficiarios	(Lakh)					200.3	356	719	802	800	899.0	958.6	1032.7	1033
PIVIOT BEHEIICIdHES	Growth						77.7%	101.9%	11.5%	-0.2%	12.2%	6.6%	7.7%	7.8%
LPC Distributors	(No.)	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25386	25481	25517
	Growth	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.5%	0.4%	0.4%
Auto LPG Dispensing	(No.)	667	678	681	676	675	672	661	657	651	601	526	468	446
Stations	Growth	2.3%	1.6%	0.4%	-0.7%	-0.1%	-0.4%	-1.6%	-0.6%	-0.9%	-8.5%	-12.5%	-11.0%	-10.1%
Pottling Plants	(No.)	185	187	187	188	189	190	192	196	200	202	208	210	211
	Growth	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	4.5%	1.0%	0.5%

Source: PSU OMCs (IOCL, BPCL and HPCL)

1.Growth rates as on 01.10.2024 are with respect to figs as on 01.10.2023. Growth rates as on 1 April of any year are with respect to figs as on 1 April of previous year.

2. The LPG coverage is calculated by PSU OMCs based upon the active LPG domestic connections and the estimated number of households. The number of households has been projected by PSU OMCs based on 2011 census data. Factors like increasing nuclearization of families, migration of individuals/ families due to urbanization and reduction in average size of households etc. impact the growth of number of households. Due to these factors, the estimated no. of households through projection of 2011 census data may slightly differ from the actual no. of households in a State/UT. Further, this methodology does not include PNG (domestic) connections.

18. Natural gas at a glance										
(MMSCM)										
Details	2022-23	2023-24		September		А	pril-Septem	ber		
			2023-24	2024-25	2024-25	2023-24	2024-25	2024-25 (P)		
			(P)	(Target)	(P)	(P)	(Target)			
(a) Gross production	34,450	36,438	3,027	3,243	2,977	17,879	19,497	18,160		
- ONGC	19,969	19,316	1,578	1,624	1,563	9,751	9,833	9,407		
- Oil India Limited (OIL)	3,041	3,090	256	326	255	1,517	1,932	1,577		
- Private / Joint Ventures (JVs)	11,440	14,032	1,192	1,293	1,159	6,611	7,731	7,176		
(b) Net production	33,664	35,717	2,976		2,936	17,503		17,875		
(c) LNG import [#]	26,304	31,795	2,584		2,905	15,416		18,975		
(d) Total consumption including internal consumption (b+c)	59,969	67,512	5,560		5,840	32,920		36,850		
(e) Total consumption (in BCM)	60.0	67.5	5.6		5.8	32.9		36.9		
(f) Import dependency based on consumption (%), {c/d*100}	43.9	47.1	46.5		49.7	46.8		51.5		

Aug'24-Sept'24 LNG data from DGCIS is prorated.



25

19. Coal Bed Methane (CBM) gas development in India								
Prognosticated CBM resources		91.8	TCF					
Established CBM resources		10.4	TCF					
CBM Resources (33 Blocks)	62.8	TCF						
Total available coal bearing areas (India)	32760	Sq. KM						
Total available coal bearing areas with MoPNG/DGH	12254*	Sq. KM						
Area awarded		21,177**	Sq. KM					
Blocks awarded*		39	Nos.					
Exploration initiated (Area considered if any boreholes were drilled	l in the awarded block)	11008	Sq. KM					
Production of CBM gas	April-September 2024 (P)	362 47	MMSCM					
Production of CBM gas	September 2024 (P)	62,29	MMSCM					

*ST CBM Block awarded & relinquished twice- in CBM Round II and Round IV -Area considered if any boreholes were drilled in the awarded block. **MoPNG awarded 04 new CBM Blocks (Area 3862 sq. km) under Special

CBM Bid Round 2021 in September 2022. ***Area considered if any boreholes were drilled in the awarded block.

19a. Status of Compressed Bio Gas (CBG) projects under SATAT (as on 01.10.2024) (Provisional)								
Particulars	Units	IOCL	HPCL	BPCL	GAIL#	IGL	Total	
No. of CBG plants commissioned and initiated sale of CBG	No. of plants	35*	12	8	18	6	77*	
Start of CBG sale from retail outlet(s)	Nos.	97	79	68	1	0	245	
Sale of CBG in 2022-23	Tons	5,822	77	6	5322		11,227	
Sale of CBG in 2023-24	Tons	6500	309	102	12813		19724	
Sale of CBG in 2024-25 (up to September 2024)	Tons	3855	949	178	12819		17801	
Sale of CBG in CGD network	GA Nos.				44		44	

Sale of CBG sourced under CBG-CGD synchronization scheme by GAIL through its own marketing channels as well as other CGDs/OMCs..*2 LOI holders of IndianOil are supplying CBG produced at their plants to two other OGMCs and hence they are counted only once in cumulative CBG plants commissioned on industry basis

20. Common Carrier Natural Gas pipeline network as on 30.06.2024														
Nature of pip	oeline	GAIL	GSPL	PIL	IOCL	AGCL	RGPL	GGL	DFPCL	ONGC	GIGL	GITL	Others*	Total
Operational	Length	10,986	2,722	1,483	143	107	304	73	42	24				15,884
Operational	Capacity	233.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				-
Partially	Length	4,933			1,080						1,302	364		7,679
commissioned [#]	Capacity	0.0												-
Total operational len	gth	15,919	2,722	1,483	1,223	107	304	73	42	24	1,302	364	0	23,563
Under construction	Length	2,605	100		65						0	220	2,640	5,630
onder construction	Capacity	26.3	3.0		1.0						0.0	36.0	42.0	-
Total lengt	:h	18,524	2,822	1,483	1,288	107	304	73	42	24	1,302	584	2,640	29,193

Source: PNGRB; Length in KMs ; Authorized Capacity in MMSCMD (Arithmetic sum taken for each entity -capacity may vary from pipeline to pipeline); *Others-APGDC, , IGGL, IMC, GTIL, HPPL Consortium of

H-Energy. Total authorized Natural Gas pipelines including Tie-in connectivity, dedicated & STPL is 33,347 Kms (P), however total operational and Under Construction Pipeline length is 35,217 Kms (P)

21. Existing LNG terminais								
Location	Promoters	Capacity as on 01.10.2024 (MMTPA)	% Capacity utilisation (April- August 2024)					
Dahej	Petronet LNG Ltd (PLL)	17.5	104.5					
Hazira	Shell Energy India Pvt. Ltd.	5.2	52.4					
Dabhol	Konkan LNG Limited*	5	34.0					
Kochi	Petronet LNG Ltd (PLL)	5	23.0					
Ennore	Indian Oil LNG Pvt Ltd	5	23.9					
Mundra	GSPC LNG Limited	5	28.8					
Dhamra	Adani Total Private Limited	5	48.2					
	Total Canacity	47.7						

* To increase to 5 MMTPA with breakwater. Only HP stream of capacity of 2.9 MMTPA is commissioned

22. Status of PNG connections and CNG stations across India (Nos.) as on 31.08.2024(P)								
State/UT	CNC Stations		PNG connections	;				
(State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	Domestic	Commercial	Industrial				
Andhra Pradesh	196	276,546	516	51				
Andhra Pradesh, Karnataka & Tamil Nadu	45	11,112	10	7				
Assam	23	63,829	1,400	468				
Bihar	146	181,610	150	17				
Bihar & Jharkhand	15	9,020	8	0				
Bihar & Uttar Pradesh	26	12,790	0	0				
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	30	28,081	183	53				
Chhattisgarh	22	3,671	0	0				
Dadra & Nagar Haveli (UT)	6	12,606	57	65				
Daman & Diu (UT)	5	5,312	90	57				
Daman and Diu & Gujarat	15	7,935	30	0				
Goa	12	15,492	39	47				
Gujarat	1,011	3,395,563	23,872	5,816				
Haryana	424	394,647	1,111	2,561				
Haryana	25	27,357	141	70				
Haryana & Himachal Pradesh	11	54	1	0				
Haryana & Punjab	27	1,826	0	0				
Himachal Pradesh	14	8,059	32	3				
Jharkand	32	100,895	23	3				
Jharkhand	71	38,267	20	5				
Karnataka	396	460,330	617	374				
Kerala	146	97,361	85	28				
Kerala & Puducherry	14	5,916	0	0				
Madhya Pradesh	311	248,042	513	550				
Madhya Pradesh and Chhattisgrah	9	0	0	0				
Madhya Pradesh and Rajasthan	36	1,105	0	0				
Madhya Pradesh and Uttar Pradesh	20	0	0	3				
Maharashtra	922	3,555,051	4,996	1,053				
Maharashtra & Gujarat	73	198,459	11	40				

State/UT	CNC Stations	PNG connections			
(State/UTs are clubbed based on the GA's authorised by PNGRB)	CING Stations	Domestic	Commercial	Industrial	
Maharashtra and Madhya Pradesh	16	0	0	0	
National Capital Territory of Delhi (UT)	493	1,604,819	4,256	1,909	
Odisha	118	127,698	19	2	
Puducherry	2	0	0	0	
Puducherry & Tamil Nadu	8	423	2	0	
Punjab	221	93,671	703	317	
Punjab & Rajasthan	19	5,364	0	0	
Rajasthan	332	342,889	300	1,749	
Tamil Nadu	323	38,418	21	24	
Telangana	195	216,645	131	131	
Telangana and Karnataka	11	126	0	2	
Tripura	19	63,283	508	62	
UT of Jammu and Kashmir	1	0	0	0	
Uttar Pradesh	1,005	1,676,830	2,905	3,568	
Uttar Pradesh	28	8,160	23	8	
Uttar Pradesh & Rajasthan	47	24,054	62	349	
Uttar Pradesh and Uttrakhand	30	16,249	0	0	
Uttarakhand	11	25,187	43	25	
Uttrakhand	26	49,356	61	95	
West Bengal	137	40,479	5	1	
Grand Total	7,125	13,494,587	42,944	19,513	

Note: 1. All the GAs where PNG connections/CNG Stations have been established are considered as Operational, 2. Under normal conditions. Operation of any particular GA commences within around one year of authorization. 3. State/UTs wherever clubbed are based on the GAs authorised by PNGRB.

2	3. Domest	ic Natural	Gas price a	nd Gas pr	ice ceiling (GCV basis			
Period		Domestic Natu	Iral Gas price in	US\$/MMBTU	Gas price ceiling	in US\$/MMBTU		
October 2019 - March 2020			3.23		8.4	43		
April 2020 - September 2020		2.39			5.61			
October 2020 - March 2021		1.79			4.06			
April 2021 - September 2021			1.79		3.0	62		
October 2021 - March 2022			2.90		6.13			
April 2022 - September 2022			6.10		9.0	92		
1 April 2023 - 7 April 2023			<u>8.57</u> 9.16		12.	12		
			5.10		12.			
Period	Domestic Gas ca	iculated price in	Domestic Gas ce	eiling price for	Period	HP-HT Gas price ceiling in		
i chou	US\$/M	MBTU	ONGC/OIL in U	IS\$/MMBTU	i chou	US\$/MMBTU		
8 April 2023- 30 April 2023	7.9	92	6.5	0				
1 May 2023 - 31May 2023	8.2	27	6.5	0				
1 June 2023 - 30 June 2023	7.5	58	6.5	0	April 2022-Soptombor 2022	12.12		
1 July 2023 - 31 July 2023	7.4	18	6.5	0	April 2023-September 2023			
1 Aug 2023 - 31 Aug 2023	7.8	35	6.5	0				
1 Sept 2023 - 30 Sept 2023	8.60		6.5	0				
1 Oct 2023 - 31 Oct 2023	9.20		6.5	0				
1 Nov 2023 - 30 Nov2023	9.2	9.12 8.47		0				
1 Dec 2023 - 31 Dec 2023	8.4			8.47		0	Octobor'2022 - March 2024	9.96
1 Jan 2024 - 31 Jan 2024	7.8	32 6.50		0		5.50		
1 Feb 2024- 29 Feb 2024	7.8	85 6.		0				
1 Mar 2024- 31 Mar 2024	8.2	17	6.5	0				
1 April 2024 - 30 April 2024	8.3	38	6.5	0				
1 May 2024 - 31 May 2024	8.9	90	6.5	0				
1 June 2024 - 30 June 2024	8.4	14	6.5	0	April 2024 Contomber 2024	0.97		
1 July 2024 - 31 July 2024	8.2	24	6.5	0	April 2024-September 2024	9.07		
1 Aug 2024 - 31 Aug 2024	8.5	51	6.5	0				
1 Sept 2024-30 Sept 2024	7.8	35	6.5	0				
1 Oct 2024 - 31 Oct 2024	7.4	18	6.5	0	October 2024 - March 2025	10.16		
Natural Gas prices are on GCV basis								
City			24. UNG/P	ng prices		Sourco		
Dolhi		75.09				IGL website (14, 10, 2024)		
Mumbai		75.00			48.00	MGL website (14.10.2024)		
	Ind	ian Natura	Gas Spot P	rice for Phy	vsical Delivery			
ICV Drice Index Month		Avg.	Price					
IGA Price index Wonth	INR/M	MBtu	\$/MN	1Btu		Source		
`September 2024	114	47	13.7	70	166.20	As per IGX website:		

*Prices are weighted average prices |\$1=INR 83.80| 1 MMBtu=25.2 SCM (Data Excluding Ceiling Price Gas)



North Dakota Department of Mineral Resources October 2024 **Director's Cut and Release August 2024 Production Numbers**

Oil Production Numbers

August	36,553,064 barrels	= 1,179,131 barrels/day RF +.8% RF +7%
July	36,254,457 barrels	= 1,169,499 barrels/day (final) RF+6%
	1,519,037	all-time high Nov 2019
	1,148,488 barrels/day	= 97% from Bakken and Three Forks
	30,643 barrels/day	= 3% from Legacy Pools

Revenue Forecast 1,100,000 barrels/day

Crude Price (\$barrel)	ND Light Sweet	WTI	ND Market
August	67.10	76.68	69.18 RF -1%
July	73.12	81.80	73.61 RF +5%
Today	70.50	70.68	70.59 RF8% est
All-time high (6/2008)	125.62	134.02	126.75
Revenue Forecast			70.00

Gas Production and Capture

August	109,341,748 MCF	=	3,527,153 MCF/Day + 1.8%
95% Capture	103,713,545 MCF	=	3,345,598 MCF/Day
July	107,348,670 MCF	=	3,462,860 MCF/Day (Final)
94% Capture	100,611,036 MCF	=	3,245,517 MCF/Day

3,582,821 MCF/day all-time high production Dec 2023

3,355,110 MCF/day all-time high capture Dec 2023

Wells Permitted

July	107	
August	100	
September	100	All-time high 370 in 10/2012
Rig Count		
July	39	
August	38	
September	38	
Today	40	All-time high 218 on 5/29/2012
Federal Surface	4	
Waiting on Comple	tions	
July	372	
August	376	
Inactive		
huly	1 771	
August	1,771	
August	1,000	
Completed		
July	79	
August	97	
September	58 (Preliminary)	
Producing		
July	19,049	
August	19,117 (Preliminary)	NEW All-time high 19,117 August/2024
	16,962 wells	89% are now unconventional
		Bakken/Three Forks Wells
	2,155 wells	11% produced from legacy conventional pools

IIJA Initial Grant	Wells PA	Sites Reclaimed
January 2023	1	0
February	4	0
March	1	0
April	8	0
May	17	0
June	12	1
July	15	5
August	15	13
September	0	14
October	0	10
November	0	0
December	0	1
January 2024	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	6
July	0	11
August	0	11
Total	73	72

Weekly updates are available at Initial Grant Information - Plugging and Reclamation | Department of Mineral Resources, North Dakota

Fort Berthold Reservation Activity

	Total	Fee Land	Trust Land
Oil Production (barrels/day)	196,207	72,481	123,726
Drilling Rigs	1	0	1
Active Wells	2,951	702	2,249
Waiting on Completion	7		
Approved Drilling Permits	120	3	117

Comments:

The drilling rig count remains steady due to mergers and acquisitions but is expected to increase to the mid-forties with a gradual increase expected over the next 2 years.

There are 18 frac crews currently active.

Drilling - activity is expected to increase slightly and operators continue to maintain a permit inventory of approximately 12 months.

Seismic - 2 active, 0 recording, 0 NDIC reclamation projects, 0 remediating, 4 permitted, 4 suspended surveys, and 3 pending.

The state-wide gas flared volume from July to August decreased 35.7 MMCFD to 181.6 MMCF per day, the statewide gas capture increased to 95% while Bakken gas capture also increased to 95%. The historical high flared percent was 36% in 09/2011

Gas capture details are as follows:

Statewide	95%
Statewide Bakken	95%
Non-FBIR Bakken	95%
FBIR Bakken	95%
Trust FBIR Bakken	97%
Fee FBIR	87%
Fertile Valley	50%
Burg	94%
Hanks	29%
Bar Butte	46%
Zahl	49%
Green Lake	95%
Little Muddy	84%
Round Prairie	98%
Painted Woods	92%
Ft. Buford	96%
Lake Trenton	91%
Sixmile	69%
Buford	79%
Briar Creek	44%
Assiniboine	100%
Lone Butte	79%
Ranch Creek	66%
Twin Buttes	43%
Charlson	83%

The Commission has established the following gas capture goals: 74% October 1, 2014 through December 31, 2014

For Immediate Release October 17, 2024 Mark Bohrer, Assistant Director ND Department of Mineral Resources Oil and Gas Division

77% January 1, 2015 through March 31, 2016
80% April 1, 2016 through October 31, 2016
85% November 1, 2016 through October 31, 2018
88% November 1, 2018 through October 31, 2020
91% beginning November 1, 2020

MONTHLY UPDATE

OCTOBER 2024 PRODUCTION &

TRANSPORTATION

North Dakota Oil Production

Month	Monthly Total, BBL	Average, BOPD
July 2024 - Final	36,254,457	1,169,499
Aug. 2024 - Prelim.	36,553,064	1,179,131

North Dakota Natural Gas Production

Month	Monthly Total, MCF	Average, MCFD
July 2024 - Final	107,348,670	3,462,860
Aug. 2024 - Prelim.	109,341,748	3,527,153

Estimated Williston Basin Oil Transportation, Aug. 2024

CURRENT DRILLING ACTIVITY:

NORTH DAKOTA¹

38 Rigs

EASTERN MONTANA²

1 Rigs

SOUTH DAKOTA²

0 Rigs

SOURCE (OCT 17, 2024):

- 1. ND Oil & Gas Division
- 2. Baker Hughes

PRICES:

Crude (WTI): \$70.26

Crude (Brent): \$74.05

NYMEX Gas: \$2.38

SOURCE: BLOOMBERG (OCT 17, 2024 9:30AM EST)

GAS STATS*

95% CAPTURED & SOLD

4% FLARED DUE TO CHALLENGES OR CONSTRAINTS ON EXISTING GATHERING SYSTEMS

1% FLARED FROM WELL WITH ZERO SALES

*AUG 2024 NON-CONF DATA





US Williston Basin Oil Production, BOPD

		2023		
MONTH	ND	EASTERN MT*	SD	TOTAL
January	1,062,924	62,114	2,610	1,127,648
February	1,158,988	63,559	2,475	1,225,021
March	1,124,917	64,596	2,652	1,192,165
April	1,135,872	61,956	2,557	1,200,385
Мау	1,140,253	61,310	2,560	1,204,123
June	1,174,603	59,744	2,275	1,236,621
July	1,187,084	56,994	2,311	1,246,388
August	1,219,832	62,412	2,540	1,284,784
September	1,290,356	62,829	2,504	1,355,689
October	1,255,517	62,674	2,452	1,320,642
November	1,279,103	63,120	2,448	1,344,671
December	1,275,004	63,288	2,496	1,340,788

2024

MONTH	ND	EASTERN MT*	SD	TOTAL
January	1,106,526	59,255	2,312	1,168,092
February	1,256,157	66,329	2,412	1,324,898
March	1,232,640	70,658	2,590	1,305,888
April	1,244,277	72,257	2,430	1,318,964
Мау	1,199,645	72,515	2,349	1,274,509
June	1,186,394	71,481	2,370	1,260,245
July	1,169,499	68,597	2,329	1,240,424
August	1,179,131			
September				
October				
November				
December				

* Eastern Montana production composed of the following Counties: Carter, Daniels, Dawson, Fallon, McCone, Powder River, Prairie, Richland, Roosevelt, Sheridan, Valley, Wibaux https://investor.phillips66.com/financial-information/news-releases/news-release-details/2024/Phillips-66-provides-notice-of-its-plan-to-cease-operations-at-Los-Angeles-area-refinery/default.aspx

Phillips 66 provides notice of its plan to cease operations at Los Angeles-area refinery

October 16, 2024

- Facility expects to cease operations in the fourth quarter of 2025
- Company will work with the state of California to supply fuel markets and meet ongoing consumer demand

HOUSTON--(BUSINESS WIRE)-- <mark>Phillips 66 (NYSE: PSX) announced plans to cease operations at its Los</mark> Angeles-area refinery in the fourth quarter of 2025 and will work with the state of California to supply fuel markets and meet ongoing consumer demand.

"We understand this decision has an impact on our employees, contractors and the broader community," said Mark Lashier, chairman and CEO of Phillips 66. "We will work to help and support them through this transition." Approximately 600 employees and 300 contractors currently operate the Los Angeles-area refinery.

"With the long-term sustainability of our Los Angeles Refinery uncertain and affected by market dynamics, we are working with leading land development firms to evaluate the future use of our unique and strategically located properties near the Port of Los Angeles," said Lashier. "Phillips 66 remains committed to serving California and will continue to take the necessary steps to meet our commercial and customer demands."

As the California Energy Commission's analysis has indicated, expanding supply capabilities will be critical. Phillips 66 supports these efforts and will work with California to maintain current levels and potentially increase supplies to meet consumer needs. The company will supply gasoline from sources inside and outside its refining network as well as renewable diesel and sustainable aviation fuels from its Rodeo Renewable Energy Complex in the San Francisco Bay area.

Phillips 66 has engaged <u>Catellus Development Corporation</u> and <u>Deca Companies</u>, two leading real estate development firms, to evaluate the future use of the 650-acre sites in Wilmington, California, and Carson, California. The firms bring strong track records of solving complex redevelopment challenges and will collaborate with Phillips 66 in an advisory role to advance potential commercial development options that support the regional economy and other key stakeholder objectives.

"These sites offer an opportunity to create a transformational project that can support the environment, generate economic development, create jobs and improve the region's critical infrastructure," Lashier said.

About Phillips 66

Phillips 66 (NYSE: PSX) is a leading integrated downstream energy provider that manufactures, transports and markets products that drive the global economy. The company's portfolio includes Midstream, Chemicals, Refining, Marketing and Specialties, and Renewable Fuels businesses. Headquartered in Houston, Phillips 66 has employees around the globe who are committed to safely and reliably providing energy and improving lives while pursuing a lower-carbon future. For more information, visit phillips66.com or follow @Phillips66Co on LinkedIn.

https://www.gov.ca.gov/2024/08/15/governor-newsom-announces-plan-to-prevent-big-oil-profit-spikes-save-californians-money-at-the-pump/

Aug 15, 2024

Governor Newsom announces plan to prevent Big Oil 'profit spikes' & save Californians money at the pump

What you need to know: Price spikes on consumers are profit spikes for oil companies, and they're overwhelmingly caused by refiners not backfilling supplies when they go down for maintenance. This first-in-the-nation proposal would require refiners to maintain minimum supply inventories, which would help prevent price spikes and save Californians hundreds of millions of dollars every year.

SACRAMENTO — The state has found that, when refiners limit gasoline supplies, prices spike at the pump and create massive profits for Big Oil. Today, Governor Gavin Newsom announced a new, first-in-the-nation proposal to further prevent price spikes and save Californians money.

The **proposal** would authorize the California Energy Commission (CEC) to require that petroleum refiners maintain a minimum fuel reserve to avoid supply shortages that create higher prices for consumers. If this proposal had been in effect in 2023, **Californians would've saved upwards of \$650 million in gas costs** due to refiners' price spikes.

The CEC also found that, in 2023, there were 63 days of California refiners maintaining less than 15 days of gas supply — driving up prices. This proposal would help ensure that the industry behaves responsibly and plans ahead to protect consumers from price spikes.

"Price spikes at the pump are profit spikes for Big Oil. Refiners should be required to plan ahead and backfill supplies to keep prices stable, instead of playing games to earn even more profits. By making refiners act responsibly and maintain a gas reserve, Californians would save money at the pump every year."Governor Gavin Newsom

The state's new oil & gas accountability tools have helped mitigate price spikes and held Big Oil accountable, with prices significantly lower than at this time last year and the year before. **This summer, Californians spent an estimated \$728 million less on gasoline than the same period last year.** Today's announced proposal would further protect consumers at the pump and help stabilize the market for the long-term.

"The data is clear: oil refiners have been racking up profits by planning maintenance that reduces supply during our busy driving seasons. The Governor's proposal gives us new tools to require refiners to plan responsibly and prevent price gouging during maintenance." — Tai Milder, Director of the Division of Petroleum Market Oversight for the CEC

What the proposal would do

1. Obligate California's petroleum refiners to demonstrate resupply plans and arrangements to the CEC that are adequate to address the loss in production from refinery maintenance.

https://www.argusmedia.com/en/news-and-insights/latest-market-news/2619144-pemex-to-cut-20pc-of-upstream-budget-in-4q

Pemex to cut 20pc of upstream budget in 4Q

- Market: Condensate, Crude oil, Natural gas
- 17/10/24

Mexico's state-owned Pemex plans to reduce its upstream budget by 20pc in the fourth quarter, impacting short-term crude production, according to industry sources and internal documents.

Pemex's new upstream head, Nestor Martinez, has instructed the company's units to implement budget cuts in activities such as major well repairs and seismic data contracts, according to documents seen by *Argus*.

The company aims to save Ps26.78bn (\$1.38bn) in 2024, according to an internal presentation of Pemex's upstream arm (PEP) dated 9 October. Pemex typically spends around Ps130bn quarterly, so the cut represents about 20pc of that, said an industry source.

Pemex did not respond a request for comment.

The reduction could lower Pemex's crude production by 5,804 b/d, according to the document. But the actual impact may be greater if wells go without essential repairs and stop production, sources added.

Pemex produced 1.73mn b/d of crude and condensates in August, according to hydrocarbon regulator CNH data.

This budget cut signals ongoing issues with delayed payments to Pemex vendors, which has worsened over the past six years, according to market sources. The cuts also suggest that President Claudia Sheinbaum's target of maintaining oil output below 1.8mn b/d could lead to further reductions in exploration and production spending.

As of 2 October, PEP owed around Ps99bn to suppliers, with Ps81bn for 2024 work, Ps10.5bn from 2023, and Ps1.9bn from 2022, according to an internal document sent by PEP to its units on 11 October.

In July, Pemex reported Ps126.4bn in overdue payments across all units.

Oil services companies GMS Bronco, Typhoon Offshore, Cotemar, Perforadora Integral de Orienta and Baker Hughes had the five highest outstanding balances as of 2 October, according to the internal document. Dowell Schlumberger and Halliburton de Mexico, subsidiaries of SLB and Halliburton, were among the10 companies owed the most by Pemex.

By Édgar Sígler

https://www.americanrhetoric.com/speeches/claudiasheinbauminauguraladdress.htm

Claudia Sheinbaum Pardo

Inauguration Address at the Presidential Swearing-In Ceremony

delivered 1 October 2024, Legislative Palace of San Lázaro, Mexico City, Mexico

CONGRESSWOMAN IFIGENIA MARTÍNEZ: In accordance with the provisions of Article 87 of the Constitution, Dr. Claudia Sheinbaum Pardo will be sworn in as President of the Republic before the Congress of the Union.

PRESIDENT CLAUDIA SHEINBAUM PARDO: Honorable Congress of the Union, people of Mexico:

I swear to keep and uphold the Political Constitution of the United Mexican States and the laws that emanate therefrom, and to perform loyally and patriotically the office of President of the Republic that the people have conferred upon me, looking in all things for the good and prosperity of the Union; and if I do not do so, may the Nation demand it of me.

PRESIDENT ANDRÉS MANUEL LÓPEZ OBRADOR: I pass it to you!

CONGRESSWOMAN IFIGENIA MARTÍNEZ: I pass it to you!

PRESIDENT CLAUDIA SHEINBAUM PARDO: Thank you!

CONGRESSWOMAN IFIGENIA MARTÍNEZ: The constitutional President of the United Mexican States, Dr. Claudia Sheinbaum Pardo will address a message to the Nation. I invite you to take your seats. Thank you very much!

PRESIDENT CLAUDIA SHEINBAUM PARDO: Good morning, everyone. Andrés Manuel López Obrador, Honorable Congress of the Union, Supreme Court of Justice of the Nation. Governors, heads of government, special guests, family and people of Mexico, I greet and thank you for the presence of 105 countries that are with us today.

It is a reflection of Mexico's commitment to the international community and the friendship that unites us with all the peoples of the world. I thank John Briceño, Prime Minister of Belize, Luis Ignacio Lula da Silva, President of the Federative Republic of Brazil, Gabriel Borich, President of the Republic of Chile, Gustavo Francisco Petro, President of the Republic of Colombia, Miguel Diaz Canel, President of the Republic of Cuba, Sylvanie Burton, President of the Dominica, Luis Rodolfo Abinader, President of the Dominican Republic, Cesar Bernardo Arevalo, President of the Republic of Guatemala, Regine Abraham, advisor to the President of the Presidential Transitional Council of the Republic of Haiti, Xiomara Castro, President of the Republic of the Republic of Paraguay, Bouchraya Hammoudi, Prime Minister of the Sahrawi Arab Democratic Republic, Philip Joseph Pierre, Prime Minister of Saint Lucia. I especially greet and thank Dr. Jill Biden who is attending on behalf of the President of the United States of America.

I thank Peter Boehm, representative of the Senate of Canada. Josep Borrel Fontelles, High Representative of the European Union for Foreign Affairs and Security Policy and Vice-President of the European Commission. I am grateful for the presence of former President Christian Wilhelm Walter of the Federal Republic of Germany, representing his country, and of Tie Ning, Vice-Chairwoman of the Standing Committee of the National People's Congress of the Republic of China, Kembo Mohadi, Vice-President of the Republic of Zimbabwe, Teodoro Nguema Obiang, Vice-President of the Republic of Equatorial Guinea, my gratitude to all the heads of delegations from Latin America and the Caribbean, Europe, Africa, Asia and the Middle East, and to the heads of the various branches of government, foreign ministers, ministers, ambassadors, I ask them to convey the warm greetings of the people and government of Mexico to their leaders. I am also grateful for the presence of 23 international organizations. Thanks to Jeremy Corbyn, Member of Parliament of the United Kingdom, leader of the Labour Party...and to the Spanish congressmen, Gerardo Pisarello and many others who are with us and to friendly representatives from different places in the world.

Exactly 19 years ago in this same venue, in an outrage to freedom, the then head of government Andres Manuel Lopez Obrador, in front of that legislature made a speech that forever shook the struggle for democracy, in front of the impeachment trial whose sole purpose was the attempt of an anticipated fraud, said: "You are going to judge me, but do not forget that history will still have to judge you and me."

Today we say it with certainty and without fear of being wrong, history and the people have judged Andrés Manuel López Obrador as one of the greats. The most important political leader and social fighter in modern history, the most beloved President, only comparable to Lázaro Cárdenas. The one who began and ended his term of office with the most love from his people and for millions, and although he does not like to be called, the best President of Mexico -- the one who started the peaceful revolution of the Fourth Transformation of Mexico's public life.

You have asked us on several occasions not to unveil busts, nor put your name on streets, avenues, neighborhoods or colonies, nor monuments or make great tributes. The truth is that there is no need, because you will always be there, where those who fight all their lives, those who do not give up, those who give back hope and joy. You will always be in the heart of the Mexican people.

He retires from public life, as a democrat and Maderista, to continue fighting from another trench, to write about what he has maintained since his early days, when he worked with the Mayan-Chontal people, that the origin of Mexico's cultural greatness lies in the great civilizations that lived in this land centuries before the Spanish invaded.

It is no coincidence, but a harmony of history, that yesterday the reform of the Political Constitution of the United Mexican States, which grants full rights to the indigenous and Afro-Mexican peoples of Mexico, was published in the Official Gazette of the Federation.

Your latest book is titled ¡Gracias!, and today we return the thanks, deep thanks, thanks, thanks, thanks forever. It has been an honor to fight with you. Goodbye, brother, friend, comrade, Andrés Manuel López Obrador.

On June 2 of this year, the people of Mexico, in a democratic and peaceful manner, said loud and clear, it is time for transformation, and it is time for women. Today, on October 1, 2024, the second stage begins,

the second floor of the Fourth Transformation of Mexico's public life, and also today, after 200 years of the Republic and 300 years of the Colony, because prior to that we have no clear records, that is, after at least 503 years, for the first time we women have arrived to lead the destinies of our beautiful nation.

And I say we arrived, because I did not arrive alone, we all arrived.

Mexico is a wonderful country, with an extraordinary people, we are a great nation. Here grew original cultures that gave the world corn, cocoa, tomatoes, who built monumental pyramids, who understood the stars, life and death as part of a constant change, who gave us and continue to give us living languages like no other, who wove and weave textiles with the hands of women artisans who intertwine with the soul and with life; with cultures such as the Maya, who created the zero as part of mathematics, or the Mexica who created the most sustainable method of cultivation known, the chinampa.

Mexico is the country that gave the world Hidalgo, who started with a few people the cry for Independence, and soon thereafter there were thousands who demanded justice, the one who abolished slavery, the one who knew how to lead his people with certainty on the path to freedom and became the Father of the Nation.

Mexico the country of Morelos, who knew how to identify the Sentiments of the Nation to write that sovereignty comes from the people, that torture is not admitted and the urgent need to moderate opulence and indigence; the country of Vicente Guerrero, who, in a difficult moment, when his father asked him to accept the viceroy's indulgence, knew how to say, the homeland comes first.1

Mexico is Guadalupe Victoria's, Mexico's first President, who, after the Independence, revolted against Emperor Iturbide to achieve the first Constitution of the Republic.

It is the country of Josefa Ortiz, who not only gave the famous heel strike to start the Independence, but also wisely stated: "those who serve the country should not be rewarded, but those who take advantage of it should be punished"; or of Leona Vicario, Mother of the Nation, journalist and fighter for Independence, who 200 years ago knew how to defend women through her thoughts; of Juárez and the Mexican Liberals, who, before anyone else in the world, and with great vision, separated Church and State and defended the nation against the invader; of the Flores Magón brothers, who demanded justice and freedom before anyone else in the 20th century; of the workers of Río Blanco and Cananea; and of Madero, who gave up everything to call the people to arms to fight for democracy; of Zapata, who knew how to demand Land and Freedom; of the brave Villa and also of Carranza, as the only governor who stood up against the Huerta coup d'état.

Mexico is that of the constitutionalists of 1917. Of Lázaro Cárdenas, who distributed the land and expropriated the oil; of Margarita Maza; of Adela Velarde, who commanded the Adelitas in the Revolution; of Dolores Jiménez Muro; of Elvia Carrillo Puerto and the Suffragettes, of Frida Kahlo, of Enriqueta González Baz, the first woman mathematician.

Mexico is a land of free women and men, who throughout the 20th century fought for democracy, freedoms, and justice; of the students of 1968, of the hundreds of men and women who are no longer with us today, but from whom we are proudly their heirs.
Mexico is a wonderful country, for our cultural mosaic, for our biodiversity. Mexico is wonderful thanks to our countrymen and countrywomen, heroes and heroines who live in the United States and who with love for their family and homeland send their support every month.

Mexico is a wonderful country, because of its generous, supportive, joyful, libertarian, resilient, rebellious, wise, and empowered people. Today, thanks to everyone, Mexico is the twelfth largest economy in the world and the sixth most popular tourist destination.

Mexico, it's great.

I call on everyone to reflect and evaluate with a cool head what happened during these six years. With solid data, recognized nationally and internationally, let us answer the following questions: How is it that 9.5 million Mexicans, according to the World Bank, were lifted out of poverty in only 6 years? How is it that inequalities were reduced without raising taxes? How is it that we are one of the least indebted countries in the Organization for Economic Cooperation and Development with a strong currency? How is it that we are one of the countries with the lowest unemployment rates? How is it that there is more welfare and at the same time the businessmen and banks earned more? How is it that we have record foreign direct investment and at the same time wages have increased? How is it that the minimum wage increased, and inflation did not rise?

The answer is that the country's development model changed, from the failed neoliberal model and the regime of corruption and privileges to one that emerged from Mexico's rich history, from the love for the people and honesty. We call it "Mexican Humanism."

That is why we talk about a profound transformation. And let's admit it: Everyone has fared better. With this thinking and its implementation, many myths and delusions of the past have been dispelled.

For example, during the neoliberal period, the one that cost the people of Mexico so much and marked our history for 36 long years, it was said that the State should be diluted or subordinated to market forces, that if the economy was watered down from above it would reach those below, that if the minimum wage was increased there would be inflation and there would be no foreign investment, that if the State participated in the economy there would be economic crisis and devaluation, that corruption was inherent to the government, that freedom did not only exist in the market, that freedom only existed in the market, that education, health, housing and fair wages were commodities and not rights. All of it turned out to be false.

Therefore, for the good of Mexico, for everyone, we will continue with Mexican Humanism, with the Fourth Transformation. I summarize some of what I consider to be its main principles:

• For there to be prosperity, it must be shared. Or in other words, for the good of all, the poor must come first.

• There can be no rich government with poor people. This is a phrase of Benito Juárez García, which the governments of the transformation make a reality, and which sustains that the ruler must live in the right moderation, without luxuries, paraphernalia or privileges, and that the government must not be a burden for the people. This is what we call "republican austerity."

• We, the leaders, must be honest. The use of government structures for personal or group benefit taints public service. Corruption must be fought out of ethics and principles but also, as we have seen, because that is where the resources necessary for the welfare of the people and the development of the nation lie. In short, honesty gives results. Moreover, moral authority is the most important thing, and that cannot be bought at the corner. It is built with a single mystique -- that of fighting with honesty every day for a Mexico with justice, democracy, and freedom.

• The maximum principle, that democracy is the government of the people, by the people and for the people. Or, to return to Juarez, "With the people everything, without the people nothing."

• Prohibited to prohibit. Freedom is the essence of democracy.

 The development and welfare of the people can only be strengthened by caring for the environment and natural resources.

• Women have the right to substantive equality.

• Mexico is a sovereign, independent, free and democratic country. We want peace and fraternity among nations, and we coordinate, but we do not subordinate ourselves.

• Politics is made with love, not hate. Happiness and hope are based on the love for one's neighbor, family, nature and homeland.

• We condemn classism, racism, sexism and any form of discrimination. It is not only a matter of tolerance, but also the recognition that the deepening of inequalities will always lead to injustice. Fraternity means seeing each other as equals.

With this in mind, I would like to state the following: In our government we will guarantee all freedoms: freedom of speech, freedom of the press, freedom of assembly, freedom of mobilization. Freedom is a democratic principle, and we are democrats. Human rights will be respected, and we will never use the force of the State to repress the people. We will respect and guarantee the religious, political, social, cultural and sexual diversity of our society. Anyone who says there will be authoritarianism is lying.

Our foreign policy will follow the constitutional principles of self-determination of peoples, nonintervention and the peaceful settlement of disputes.

In economic matters, the autonomy of the Bank of Mexico, a responsible fiscal policy and a reasonable debt-to-gross domestic product ratio will be maintained.

We will promote public and private investment. I say it clearly: Rest assured that the investments of shareholders, both national and foreign, will be safe in our country.

We will not increase the price of gasoline, diesel, domestic gas, or electricity in real terms. In the coming weeks we will be calling on businessmen to confirm the agreement that maintains the prices of the basic food basket without increases.

We will take advantage of the trade agreement with the United States and Canada to continue promoting the relocation of companies, while promoting regional development with well-being and care for the environment.

The United States, Canada, and Mexico know that economic cooperation strengthens all three nations. It is clear that we do not compete with each other. We complement each other and, in addition, we generate the conditions for a greater consolidation of the economy of the entire continent, in a vision of the present and future of the world economy.

We will continue to strengthen our economic and cultural relations with the countries of Latin America and the Caribbean. We are united by history and commitment, as well as with the different countries and regions of the world.

We will work hand in hand with the business sector and workers to continue increasing the minimum wage. Our goal is to reach 2.5 basic food baskets.

We will carry out the most ambitious digitalization program in history, to facilitate the payment of taxes and other procedures, as well as to encourage investment.

There will be rule of law. The recent constitutional reform of the judiciary, which provides for the election of judges, magistrates, and ministers by popular vote, means greater autonomy and independence for the judiciary.

Think about it just for a moment: If the objective had been for the President to control the Supreme Court, we would have made a Zedillo-style reform. No, that is authoritarianism, we are democrats.

We want to put an end to corruption in the Judiciary. It is a process in which there will be a single call, a selection committee for candidates to ensure that they meet the requirements. And who will decide? It will be the people. How can a decision that in essence is democratic and allows the people to decide be authoritarian?

I am sure that in a few years we will all be convinced that this reform is the best. I would like to take this opportunity to tell the workers of the Judicial Branch that their rights and salaries are fully safeguarded.

All welfare programs will be maintained, and we will ensure that their annual increase will never be below inflation. In addition, it is about to be approved in Congress that these rights become constitutional so that no one can reverse them.

Universal pension for the elderly, universal pension for people with disabilities, Benito Juárez scholarships for public high school students, scholarships for low-income students, Sembrando Vida [Sowing Life], Jóvenes Construyendo el Futuro [Youth Building the Future], production and fishing for well-being, free fertilizers, guaranteed prices, the Escuela es Nuestra [School is Ours] and the Clínica es Nuestra [Clinic is Ours] will all continue.

We will make three new welfare programs a reality. All women between the ages of 60 and 64 will receive bimonthly support in recognition of the work of Mexican women.

All children who go to public school or who go to public school for preschool, elementary and high school will have a scholarship. We will start next year with high school. Children should be happy; they are not only the future but the present of Mexico.

We will bring prevention and health care to the elderly in their homes. To this end, we will hire 20,000 doctors and nurses. The constitutional recognition of indigenous and Afro-Mexican peoples, once in the Constitution, we will make it a reality. We will consolidate IMSS/Bienestar as the best public, free, and quality health care system.

We will increase the number of high schools in public universities so that at least 300,000 more spaces will be available for higher education. Health and education are rights of the Mexican people, not privileges or commodities.

We will build at least one million homes, especially for young people, in schemes where they can first rent and then buy a home if they wish. In addition, there will be low-cost loans for home improvement and a massive deed program.

In terms of infrastructure, the Tren Maya will be extended to Puerto Progreso in Yucatán, and its more than 1,500 kilometers will also be a freight train. Line K of the Interoceanic Train from Ciudad Ixtepec to Ciudad Hidalgo en Chiapas, on the border with Guatemala, will be completed.

In addition, we want to build twice the number of kilometers of passenger trains that the President built. From Mexico City to Pachuca, from Mexico City to Nuevo Laredo and from Mexico City to Nogales, as well as the restoration of the passenger train to Veracruz. Before, they were privatized/ Now, we proudly recuperate the passenger trains because they mean regional development, jobs, tourism, and shared prosperity.

We will continue with artisanal roads to connect communities and with the construction of ports, airports and highways that generate development with wellbeing, and at the same time strengthen infrastructure and connectivity in our country and boost investment.

As we have stated since the campaign, the current ratio between public and private electricity generation of 54% and 46%, respectively, will be maintained. In a few days, we will present the National Energy Plan, which includes new investments in transmission, generation and an ambitious program of energy transition to renewable energy sources that contribute to reduce greenhouse gases that cause climate change.

Private investment to cover 46% of generation will be made with clear rules, within the framework of the law and guaranteeing stability in the electricity system. All of us need strong public energy companies that guarantee clean energy at low prices for current and future generations.

The fundamental objective of oil production with Pemex will continue to be national consumption and this will be limited to a production of 1.8 million barrels per day. We will promote energy efficiency and the transition to renewable energy sources to absorb the growth in energy demand through these sources. Remember that the energy reform proposed a production of three million barrels per day that is environmentally impossible. It is better to promote efficiency and renewable sources.

We will advance in food sovereignty and self-sufficiency, as the President says: "feed those who feed us." We will not allow the planting of transgenic corn, says Andrés Manuel López Obrador. We will not allow the planting of transgenic corn. We will be self-sufficient, not only in white corn, but also in beans and other crops, and Diconsa will be transformed into Alimentación para el Bienestar with the objective of promoting prices and fair trade for various agricultural products and continue serving 22 million families.

We will build the most ambitious circular economy project in the world in Tula, Hidalgo. This means that we will build an environmental complex to take advantage of waste, water treatment, energy generation and recycled products, which will allow us to reduce pollution and generate jobs. The most polluted city will become the cleanest city. That is what I committed to in my campaign.

We will initiate the regulation of concessions and the transfer of water rights. To this end, this month we will sign a national agreement for water security and sustainability, with all stakeholders, and we will make legal reforms to guarantee water as a national resource.

We will technify more than 200,000 hectares of irrigation and develop strategic projects for water supply and recycling. We will also clean and sanitize the country's most polluted rivers.

We will make Mexico a scientific and innovation power. To this end, we will support the basic natural and social sciences and the humanities and link them with priority areas and sectors for national development.

Mexican men and women have creativity, tenacity, and abundant capabilities. I am convinced that we cannot lag behind in technological development. Let's think about it: We have great thinkers and innovators, innovators since pre-Hispanic times. We have first-class universities and technology centers, and Mexicans are hard-working and creative.

In the area of security, we will guarantee the reduction of high-impact crimes. Calderon's irresponsible war on drugs, which continues to do so much damage to Mexico, will not return.

Our conviction is that security and peace are the fruit of justice, and our strategy consists of four axes: attention to the causes; always giving young Mexicans the possibility of having access to all rights; intelligence and investigation; strengthening of the National Guard. Whoever believes that the National Guard being in the Secretary of Defense is militarization is totally mistaken.

We will coordinate with municipalities, states, with the Public Prosecutor's Office, with the Attorney General's Office, which in its autonomy does not mean that it will stop coordinating. This will allow us to advance even more. Attention to the causes and zero impunity, with the four axes of security with justice. As head of government in Mexico City, we reduced the number of intentional homicides by more than 50% in just four years.

I would like to take this opportunity to say that tomorrow afternoon we will be in Acapulco, to continue the immediate attention given by the Mexican government, and we will support, as we have always done, as humanist governments, all the victims in Guerrero and other states.

I said that the people were very clear in saying, this June 2, it is time for transformation, and it is time for women. For a long time we women were annulled. Many of us were told a version of history since we were children, which wanted us to believe that the course of humanity was led only by men. But little by little this vision has been reversed.

Today, we know that women participated in the great feats of Mexico's history from different fronts. And we also know that women can be Presidents. With that, I respectfully invite everyone to say Presidenta with an "a" at the end, just like abogada [lawyer], científica [scientist], soldada [soldier], bombera [firefighter], doctora [doctor], maestra [teacher], ingeniera [engineer] with an "A," because as we have been taught, only what is named exists.

Today, I want to recognize not only the heroines of the homeland, whom we will continue to exalt, but also all the anonymous heroines, the invisible ones, whom we make visible with these lines, those that with our arrival to the Presidency and these words I make appear, those who fought for their dream and achieved it; those who fought and did not achieve it; those who were able to raise their voices and those who did not; those who had to remain silent and then shouted alone; the indigenous women [who] arrive; the domestic workers who leave their villages to support all the rest of us.

To the great-grandmothers who did not learn to read and write because school was not for girls. Our aunts arrive, who found in their loneliness the way to be strong. To the anonymous women, the anonymous heroines who, from their homes, the streets or their workplaces, fought to see this moment.

Our mothers arrive, who gave us life and then returned to give us everything. Our sisters, who from their history managed to move forward and emancipate themselves. Our friends and companions arrive. Our beautiful and brave daughters arrive, and our granddaughters arrive, they arrive, those who dreamed of the possibility that someday, no matter if we were born as women or men, we can realize our dreams and desires, without our sex determining our destiny. They arrive, all of them who thought us free and happy.

And with all of them here on our side, come our greatest dreams and longings, come with us the people of Mexico, empowered men and women; the transformation gave them back their dignity, freedom, and happiness, and no one else will ever be able to take that away from them.

I am a mother, a grandmother, a scientist, and a woman of faith. And, as of today, by the will of the people of Mexico, the constitutional President of the United Mexican States.

I will govern for all. And be certain that I will place my knowledge, my strength, my history, and my very life at the service of the people and the country. I am certain that together we will consolidate a Mexico that is more prosperous, free, democratic, sovereign, and just. And I will not let you down.

I call on you to continue making history.

Long live the Fourth Transformation!

Russia's Oil Exports at Three-Month High as Works Crimp Refining

Sanctioned tankers are being put back to work at an ever-faster rate

By Julian Lee

(Bloomberg) -- Russia's crude shipments edged up to the highest since early July as seasonal maintenance at refineries kept domestic oil processing depressed.

Four-week average cargoes crept up by 7,000 barrels a day in the week to Oct. 13. Refining fell to the lowest since mid-March in the first nine days of the month, averaging 5.07 million barrels a day. That left more crude available for export.

The small increase in shipments was accompanied by gains in average prices for Russia's crude, which were lifted by a broader increase in global benchmarks as markets continued to worry that the deepening conflict between Iran and Israel could disrupt Middle East supplies.

The gross value of Russia's crude exports rose to \$1.52 billion a week in the 28 days to Oct. 13, from \$1.48 billion in the four-week period to Oct. 6. That was the highest since the end of August.



Moscow's use of the tankers sanctioned for their involvement in the Russian oil trade is accelerating, with close to onethird of the blacklisted vessels back at work. At least 21 of the 72 tankers sanctioned by Western nations in the past year have loaded a total of 24 cargoes of Russian oil since they were designated in response to Moscow's 2022 invasion of Ukraine.

Crude Shipments

A total of 31 tankers loaded 23.14 million barrels of Russian crude in the week to Oct. 13, vessel-tracking data and port-agent reports show. The volume was little changed from 23.58 million barrels on the same number of ships the previous week.

Week ending	October 13	October 6	September 29
Primorsk (Baltic)	8	9	9
Ust-Luga (Baltic)	7	5	7
Novorossiysk (Black Sea)	3	4	4
Murmansk (Arctic)	1	3	n
Other Arctic	0	0	1
Kozmino (Pacific)	9	9	10
De Kastri (Pacific)	2	1	2
Prigorodnoye (Pacific)	1	0	1
Total	31	31	35

That left four-week average flows almost unchanged at 3.33 million, up slightly from 3.32 million the previous week.

Russia's more volatile daily crude flows in the week to Oct. 13 edged lower by about 60,000 barrels to 3.31 million, with volumes from the country's Black Sea and Arctic ports ebbing.

Crude shipments so far this year are about 50,000 barrels a day, or 1.4%, below the average for the whole of 2023.

One cargo of Kazakhstan's KEBCO crude was loaded at Novorossiysk on the Black Sea during the week.



Russia terminated its export targets at the end of May, opting instead to restrict production, in line with its partners in the OPEC+ oil producers' group. The country's output target is set at 8.978 million barrels a day until the end of November, after a planned easing of some output cuts was delayed by two months.

Moscow has also pledged to make deeper output cuts in October and November this year, then between March and September of 2025, to compensate for pumping above its OPEC+ quota earlier this year.

Russian data show the nation pumped <u>marginally below</u> its OPEC+ crude-output target in September, following a push from the group to improve adherence to its supply deal. At 8.97 million barrels a day, the official production number was 8,000 barrels a day below the country's target, after taking account of the deeper compensation cut it agreed to make last month.

But Moscow's assertion was contradicted by the secondary sources that OPEC uses to monitor compliance with output targets, who pegged Russia's September production at 9.001 million barrels a day, about 23,000 barrels above its allowance.

Export Value

The gross value of Russia's crude exports rose to \$1.6 billion in the seven days to Oct. 13, from \$1.54 billion in the period to Oct. 6. Income was boosted by an increase in weekly-average prices for Russia's major crude streams, which were buoyed up by a broader gain in oil prices amid continuing tensions in the Middle East, as Israel considers its response to an Iranian missile attack.

Export values at Baltic ports were up week-on-week by about \$3.10 a barrel, while shipments from the Black Sea rose by about \$3.25 a barrel. Prices for key Pacific grade ESPO gained by about \$3.60 compared with the previous week. Delivered prices in India were also up, rising by about \$3.30 a barrel, all according to numbers from Argus Media.

Four-week average income also advanced, increasing to about \$1.52 billion a week, from \$1.48 billion in the period to Oct. 6. That was the highest since the period ending Sept. 1. The four-week average peak of \$2.17 billion a week was reached in the period to June 19, 2022.

During the first four weeks after the Group of Seven nations' price cap on Russian crude exports came into effect in early December 2022, the value of seaborne flows fell to a low of \$930 million a week, but soon recovered.



Flows by Destination

Asia

Observed shipments to Russia's Asian customers, including those showing no final destination, slipped to 3.09 million barrels a day in the four weeks to Oct. 13. That's about 5% below the average level seen during the recent peak in April.



About 1.21 million barrels a day of crude was loaded onto tankers heading to China. The Asian nation's seaborne imports are boosted by about 800,000 barrels a day of crude delivered from Russia by pipeline, either directly, or via Kazakhstan.

Flows on ships signaling destinations in India averaged 1.7 million barrels a day, up from a revised 1.65 million for the period to Oct. 6.

Both the Chinese and Indian figures are likely to rise as the discharge ports become clear for vessels that are not currently showing final destinations.

The equivalent of about 150,000 barrels a day was on vessels signaling Port Said or Suez in Egypt. Those voyages typically end at ports in India or China and show up as "Unknown Asia" until a final destination becomes apparent.

The "Other Unknown" volumes, running at about 30,000 barrels a day in the four weeks to Oct. 13, are those on tankers showing no clear destination. Most originate from Russia's western ports and go on to transit the Suez Canal, but some could end up in Turkey. Others may be moved from one vessel to another.

Greece has extended naval exercises until November in an area that's become associated with the transfer of Russian crude. These naval drills haven't entirely halted ship-to-ship transfers of Russian crude in the area, though. The supertanker Alma recently received crude from two smaller tankers, Sagar Violet and Arlan, in a narrow channel located between two areas that have been closed to shipping.

Shipments of Russian crude to Asian buyers in million barrels a day										
4 weeks ending	China	India	Other	Unknown Asia	Other Unknown	Total				
September 8, 2024	1.27	1.67	0.00	0.00	0.00	2.94				
September 15, 2024	1 39	1.67	0.00	0,00	0.00	3.06				
September 22, 2024	1,27	1.65	0.00	0.03	0.00	2.94				
September 29, 2024	1.37	1,60	0.00	0,13	0.00	3,11				
October 6, 2024	1.31	1,65	0.00	0.15	0.03	3,13				
October 13, 2024	1.21	1.70	0.00	0,15	0.03	3 09				
Source: Vessel tracking da	ita compiled by	/ Bloomberg				Bloomberg				

Europe and Turkey

Russia's seaborne crude exports to European countries have ceased, with flows to Bulgaria halted at the end of last year. Moscow also lost about 500,000 barrels a day of pipeline exports to Poland and Germany at the start of 2023, when those countries stopped purchases.

Turkey is now the only short-haul market for shipments from Russia's western ports, with flows in the 28 days to Oct. 6 edging higher to about 180,000 barrels a day.



NOTES

This story forms part of a weekly series tracking shipments of crude from Russian export terminals and the gross value of those flows. The next update will be on **Tuesday, Oct. 22**.

Bloomberg News

All figures exclude cargoes identified as Kazakhstan's KEBCO grade. Those are shipments made by KazTransoil JSC that transit Russia for export through Novorossiysk and Ust-Luga and are not subject to European Union sanctions or a price cap. The Kazakh barrels are blended with crude of Russian origin to create a uniform export stream. Since Russia's invasion of Ukraine, Kazakhstan has rebranded its cargoes to distinguish them from those shipped by Russian companies.

Vessel-tracking data are cross-checked against port agent reports as well as flows and ship movements reported by other information providers including Kpler and Vortexa Ltd.

If you are reading this story on the Bloomberg terminal, click for a link to a PDF file of four-week average flows from Russia to key destinations.

--With assistance from Sherry Su.

To contact the author of this story: Julian Lee in London at jlee1627@bloomberg.net

To contact the editor responsible for this story: John Deane at jdeane3@bloomberg.net



OPEC Monthly Oil Market Report

14 October 2024

Feature article:

Winter oil market outlook

- Oil market highlights v
 - Feature article vii
- Crude oil price movements 1
 - Commodity markets 7
 - World economy 12
 - World oil demand 32
 - World oil supply 41
- Product markets and refinery operations 54
 - Tanker market 61
 - Crude and refined products trade 65
 - Commercial stock movements 71
 - Balance of supply and demand 76

Oil Market Highlights

Crude Oil Price Movements

In September, the OPEC Reference Basket (ORB) value declined by 4.82/b, or 6.1%, m-o-m, to average 73.59/b. The ICE Brent's front-month contract fell by 6.01, or 7.6%, m-o-m, to average 72.87/b. The NYMEX WTI front-month contract dropped by 6.06, or 8.0%, m-o-m, to average 69.37/b. GME Oman's front-month contract fell by 4.63, or 6.0%, m-o-m, to average 72.91/b. The front-month ICE Brent-NYMEX WTI spread rose by 5ϕ , m-o-m, to average 3.50/b. The oil futures forward curves flattened in September, but remained in backwardation. Money managers turned more negative on oil futures, shifting to a net short in the ICE Brent contract.

World Economy

The world economic growth forecast remains unchanged from last month's assessment at 3.0% for 2024 and 2.9% for 2025. The US economic growth forecast for 2024 is revised up slightly to 2.5%, reflecting upward revisions to official 1H24 growth numbers. For 2025, US growth remains unchanged at 1.9%. Japan's economic growth forecast for 2024 is revised down slightly to 0.1%, reflecting minor downward revisions to official 1H24 growth numbers, while the 2025 forecast remains at 0.9%. For the Eurozone, growth forecasts for 2024 and 2025 remain unchanged at 0.8% and 1.2%, respectively. China's economic growth forecasts remain unchanged at 4.9% for 2024 and 4.6% for 2025. India's economic growth forecasts remain unchanged at 6.8% for 2024 and 6.3% for 2025. The economic growth forecast for Brazil is revised up to 2.5% for 2024, on the back of ongoing robust dynamics, but remains at 1.9% for 2025. Russia's economic growth forecasts are unchanged at 3.2% for 2024 and 1.5% for 2025.

World Oil Demand

The global oil demand growth forecast for 2024 is revised down by 106 tb/d to 1.9 mb/d, y-o-y, still well above the historical average of 1.4 mb/d seen before the COVID-19 pandemic. The adjustment reflects actual data received, combined with slightly lower expectations for some regions. OECD oil demand is expected to grow by more than 0.1 mb/d, y-o-y, in 2024, with the OECD Americas driving growth. Non-OECD oil demand is forecast to grow by 1.8 mb/d, y-o-y, this year. The forecast for world oil demand growth in 2025 is also revised down by 102 tb/d to 1.6 mb/d, y-o-y. Non-OECD oil demand is set to drive next year's growth, increasing by about 1.5 mb/d, y-o-y, led by contributions from China, Other Asia, the Middle East, and India. The OECD demand is forecast to expand by about 0.1 mb/d, y-o-y, with OECD Americas providing most of the contribution.

World Oil Supply

Non-DoC liquids supply (i.e. liquids supply from countries not participating in the DoC) is expected to grow by 1.2 mb/d, y-o-y, in 2024, unchanged from last month's assessment. The main growth drivers are expected to be the US, Canada, Brazil and China. The non-DoC liquids supply growth forecast for 2025 is also unchanged at 1.1 mb/d, y-o-y. Growth is anticipated to be mainly driven by the US, Brazil, Canada, and Norway. Natural gas liquids (NGLs) and non-conventional liquids from countries participating in the DoC is forecast to grow by about 0.1 mb/d, y-o-y, to average 8.3 mb/d in 2024, followed by an increase of about 70 tb/d, y-o-y, to reach 8.4 mb/d in 2025. Crude oil production by the countries participating in the DoC decreased by 0.56 mb/d in September compared with the previous month, averaging about 40.10 mb/d, as reported by available secondary sources.

Product Markets and Refining Operations

Refinery margins in September declined across regions, as high product availability continued to weigh on product markets with most losses stemming from gasoline and middle distillates. In the USGC, the combination of the end of the summer season and the strong refinery runs witnessed in the previous month led to weakness across the barrel. Despite a decline in total US product inventories, product markets remained well supplied, and product margins moved lower, particularly for gasoline, which exhibited the strongest m-o-m drop across the barrel. In Northwest Europe, closed arbitrage for gasoline shipments, robust diesel imports and weak air travel suppressed refining economics despite notable naphtha and fuel oil strength as demand for both products increased during the month. In Singapore, all products showed a decline in crack spreads, m-o-m, except naphtha. The recent release of Chinese product export quotas contributed to pressure on the already oversupplied region, amid strong product flows from the Middle East, particularly for gasoli. A healthy naphtha petrochemical intake prevented steeper losses in the Southeast Asian refining margins.

Tanker Market

Dirty spot freight rates for VLCCs and Suezmax experienced an improved performance in September, while Aframax rates moved lower. On the Middle East-to-East route, VLCC spot freight rates rose by 6%, m-o-m, in September, while rates on the West Africa-to-East route gained 4% over the same period. In the Suezmax market, rates on the US Gulf Coast-to-Europe route edged up by 2%, m-o-m. Aframax rates on the Caribbean-to-US East Cost route dropped by 16%, m-o-m, while the rates on the cross-Med route declined by 12%, m-o-m. Despite the mixed m-o-m performance, rates for all classes in September were higher compared to the same month last year. In the clean market, spot freight rates declined, m-o-m, on all monitored routes, except for the Middle East-to-East, which rose by 10%, m-o-m.

Crude and Refined Product Trade

Preliminary weekly data shows US crude exports in September remaining just under 4 mb/d for the second month in a row. US crude imports picked up from a relatively weak performance in the previous month to average 6.6 mb/d. US product imports fell to the lowest level since 1997 amid declines in gasoline, jet fuel and other product categories. US product exports remain close to a record high at 6.9 mb/d. Preliminary estimates point to OECD Europe crude imports declining further in September, amid seasonal refinery maintenance in the region, while product imports were steady, m-o-m, supported by increased flows from the US. Japan's crude imports recovered in August to reach a four-month high of 2.3 mb/d. Japan's product imports increased for the second month in a row in August, averaging 911 tb/d, lifted by higher inflows of naphtha, jet fuel and gasoline. China's crude imports rebounded by 16% m-o-m in August to average 11.6 mb/d but were still down 7% compared to the same month last year. Product imports into China reached a three-month high of 2.3 mb/d, supported by higher inflows of other products and naphtha, which offset a sharp drop in LPG. India's crude imports began to pick up again in August, following seasonal declines, gaining 6%, y-o-y. India's product imports and exports were both about 2% lower, m-o-m.

Commercial Stock Movements

Preliminary August 2024 data shows total OECD commercial oil stocks down by 8.4 mb, m-o-m. At 2,828 mb, they were 157 mb below the 2015–2019 average. Within the components, crude and product stocks fell by 6.5 mb and 1.9 mb, m-o-m, respectively. OECD commercial crude stocks stood at 1,319 mb. This is 128 mb less than the 2015–2019 average. OECD total product stocks stood at 1,511 mb. This is 29 mb below the 2015–2019 average. In terms of days of forward cover, OECD commercial stocks fell in August by 0.1 days, m-o-m, to stand at 61.3 days. This is 1.8 days less than the 2015–2019 average.

Balance of Supply and Demand

Demand for DoC crude (i.e. crude from countries participating in the Declaration of Cooperation) is revised down by 0.1 mb/d from the previous month's assessment to stand at 42.8 mb/d in 2024, which is around 0.6 mb/d higher than the estimate for 2023. Demand for DoC crude in 2025 is revised down by 0.2 mb/d from the previous month's assessment to stand at 43.2 mb/d, around 0.5 mb/d higher than the estimate for 2024.

Feature Article

Winter oil market outlook

The global refinery intake has witnessed a gradual rising trend so far in 2024 and reached a year-to-date (y-t-d) high of 82 mb/d in August, albeit this was 600 tb/d lower, y-o-y. In September, however, this trend reversed, with the global refinery intake declining by 1.4 mb/d, m-o-m, (Graph 1) due to the start of the refinery maintenance in the Northern Hemisphere and an active hurricane season. Compared with a year earlier, the September global refinery intake was down by 1.0 mb/d. This decline aligns with historical trends and is expected to continue into October, with 1.7 mb/d of capacity scheduled for temporary shutdowns for heavy repair works. The higher refinery spare capacity and y-o-y output growth from recent capacity additions may soften the impact of the upcoming refinery maintenance season.

In addition to the planned maintenance, the ongoing Graph 1: Global refinery intake hurricane season in the US may present further risks mb/d regarding product availability. The extent will depend on the locations where hurricanes make landfall and the severity of their impact on refinery operations.

In Europe, total product inventories have remained 78 well-supplied, reflecting an 11 mb, y-o-y, increase as of 26 September. Gasoil represented 85% of this monthly rise, as Europe has been stockpiling gasoil in anticipation of the winter season, resulting in a surge of gasoil imports into the region. Going forward, however, product stocks are anticipated to face downward pressure due to the expected heavy maintenance season. Anticipated colder weather in months the comina in Europe could



create upside potential for heating fuel markets, thereby exerting additional pressure on diesel stock levels in the near term.

In Asia, refinery runs are expected to remain healthy, supported by robust near-term regional requirements and the recent release of product export quotas in China. Although offline capacities in the region are projected to increase by 230 tb/d, m-o-m, reaching 1.7 mb/d in October, this can easily be compensated for, given the large scale of the Asian refining system. Despite the region's weak refining margin environment, reduced product output in the Northern Hemisphere is anticipated to support refinery runs in Asia during October before experiencing a decline in the following months.

In anticipation of the upcoming winter, a typical Graph 2: Heating fuel demand in OECD, y-o-y change seasonal increase in heating oil demand is expected, mb/d driven by rising requirements in the Northern 0.14 Hemisphere. Overall, OECD Europe, OECD Americas, and OECD Asia Pacific are projected to experience demand growth for fuel oil and diesel in 4Q24 (Graph 2). Accordingly, the OECD's total heating fuel demand in 4Q24 is forecast to increase by 80 tb/d, y-o-y. In OECD Europe and the US, heating oil is forecast to drive demand, while in OECD Asia Pacific, 'other fuels,' primarily LPG, are forecast to support 4Q24 demand. Among these regions, OECD Americas is expected to see the largest y-o-y demand increase of 65 tb/d, followed by OECD Europe with approximately 10 tb/d, while oil demand





Note: 4Q24-1Q25 = Forecast. Source: OPEC.

in OECD Asia Pacific remains broadly unchanged. In 1Q25, heating fuel demand in the OECD region is projected to grow by 117 tb/d, y-o-y, primarily driven by increases in the Americas and Europe, with a marginal rise expected in the Asia Pacific. Looking ahead, the World Meteorological Organization forecasts about a 60% chance of the La Niña weather phenomenon impacting the Northern Hemisphere from 4Q24 to 1Q25. This could lead to a relatively colder winter, thereby increasing the upside potential for heating fuel demand.

World Oil Demand

For 2024, world oil demand growth is revised down by 106 tb/d from last month's assessment, largely due to actual data received combined with slightly lower expectations for the oil demand performance in some regions. World oil demand is forecast to grow by about 1.9 mb/d, y-o-y. Some minor adjustments were made to the OECD forecast in 2Q24 based on actual data received. In 3Q24, the forecast for the OECD Americas was slightly revised upwards to account for an expected improvement, largely in US oil demand. In the non-OECD, some adjustments were implemented, reflecting actual data as well as slightly lower expectations for the performance of some regions.

In terms of regions, OECD oil demand is expected to grow by more than 0.1 mb/d in 2024, with OECD Americas accounting for the bulk of oil demand growth, supported by marginal growth from OECD Asia Pacific. However, OECD Europe is projected to see a slight contraction, y-o-y. In the non-OECD, oil demand is expected to increase by 1.8 mb/d, y-o-y, driven mostly by China, with additional support from Other Asia, India, the Middle East, and Latin America. Total world oil demand is anticipated to reach 105.6 mb/d in 4Q24, to average 104.1 mb/d in 2024, bolstered by strong air travel demand and road mobility, including trucking, as well as healthy industrial, construction and agricultural activities, primarily in non-OECD countries. Similarly, refinery capacity additions in non-OECD countries – mostly in China and the Middle East – are also expected to contribute to oil demand growth. The global growth forecast is subject to uncertainties, including global economic developments.

For 2025, global oil demand growth is revised down by 102 tb/d in some sub-regions of the non-OECD. Accordingly, oil demand is forecast to grow by about 1.6 mb/d, y-o-y, to average 105.8 mb/d. Within the regions, the OECD is forecast to grow by 0.1 mb/d, y-o-y, while the non-OECD region is projected to drive growth by 1.5 mb/d, y-o-y.

							Change 2	2024/23
World oil demand	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Americas	24.96	24.42	24.98	25.58	25.37	25.09	0.13	0.54
of which US	20.36	19.92	20.47	20.71	20.85	20.49	0.13	0.62
Europe	13.45	12.85	13.72	13.73	13.41	13.43	-0.02	-0.13
Asia Pacific	7.24	7.53	7.04	7.03	7.43	7.26	0.01	0.17
Total OECD	45.65	44.80	45.74	46.34	46.21	45.78	0.13	0.28
China	16.36	16.66	16.75	17.09	17.25	16.94	0.58	3.56
India	5.34	5.66	5.66	5.48	5.65	5.61	0.27	5.02
Other Asia	9.28	9.72	9.79	9.51	9.51	9.63	0.35	3.82
Latin America	6.69	6.67	6.77	6.92	6.88	6.81	0.12	1.77
Middle East	8.63	8.68	8.44	9.19	9.02	8.83	0.20	2.32
Africa	4.46	4.56	4.32	4.39	4.85	4.53	0.07	1.61
Russia	3.84	3.96	3.88	3.96	4.11	3.98	0.14	3.57
Other Eurasia	1.17	1.33	1.24	1.08	1.28	1.23	0.06	5.06
Other Europe	0.78	0.78	0.78	0.77	0.84	0.79	0.01	0.81
Total Non-OECD	56.56	58.02	57.62	58.38	59.40	58.36	1.80	3.18
Total World	102.21	102.81	103.36	104.73	105.61	104.14	1.93	1.89
Previous Estimate	102.21	102.90	103.61	104.81	105.61	104.24	2.03	1.99
Revision	0.00	-0.09	-0.25	-0.08	0.00	-0.11	-0.11	-0.10

Table 4 - 1: World oil demand in 2024*, mb/d

Note: * 2024 = Forecast. Totals may not add up due to independent rounding.

Source: OPEC.

Table 4 - 2: World oil demand in 2025*, mb/d

							Change 2	2025/24
World oil demand	2024	1Q25	2Q25	3Q25	4Q25	2025	Growth	%
Americas	25.09	24.48	25.04	25.70	25.45	25.17	0.08	0.31
of which US	20.49	19.95	20.50	20.76	20.89	20.53	0.04	0.21
Europe	13.43	12.87	13.73	13.75	13.43	13.45	0.02	0.12
Asia Pacific	7.26	7.54	7.04	7.04	7.44	7.27	0.01	0.15
Total OECD	45.78	44.89	45.81	46.50	46.32	45.88	0.11	0.23
China	16.94	17.09	17.14	17.53	17.64	17.36	0.41	2.44
India	5.61	5.88	5.90	5.73	5.88	5.85	0.24	4.27
Other Asia	9.63	9.99	10.11	9.84	9.81	9.93	0.30	3.15
Latin America	6.81	6.81	6.91	7.07	7.02	6.95	0.14	2.09
Middle East	8.83	8.93	8.65	9.52	9.23	9.08	0.25	2.82
Africa	4.53	4.64	4.41	4.50	4.94	4.62	0.09	2.03
Russia	3.98	4.02	3.93	4.02	4.15	4.03	0.05	1.35
Other Eurasia	1.23	1.36	1.27	1.13	1.31	1.26	0.03	2.56
Other Europe	0.79	0.79	0.79	0.78	0.85	0.80	0.01	1.42
Total Non-OECD	58.36	59.52	59.10	60.11	60.83	59.90	1.54	2.63
Total World	104.14	104.41	104.91	106.61	107.15	105.78	1.64	1.58
Previous Estimate	104.24	104.60	105.26	106.79	107.26	105.99	1.74	1.67
Revision	-0.11	-0.19	-0.35	-0.19	-0.10	-0.21	-0.10	-0.10

Note: * 2025 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

OECD

OECD Americas

Update on the latest developments

In July, oil demand in OECD Americas increased by 338 tb/d, y-o-y, up from the 688 tb/d y-o-y decline seen the previous month. This increase in monthly demand can largely be attributed to transportation fuel and diesel requirements in the US, which offset y-o-y declines seen in Canada and flat growth in Mexico.









US

US oil demand in July expanded by 439 tb/d, y-o-y, up from a contraction of 506 tb/d, y-o-y, registered the previous month. The largest increase was recorded in transportation fuels amid the summer driving season.

In terms of products, gasoline led oil demand growth in July by 318 tb/d, y-o-y, up from 246 tb/d, y-o-y, a decline from the previous month. On the back of a surge in mobility during summer travel in the US, data from the US Department of Transportation showed that seasonally adjusted vehicle miles travelled for July 2024 increased by 0.6%, y-o-y. This also represents a 0.04% increase m-o-m. Diesel expanded by 110 tb/d, y-o-y, up from a decline of 384 tb/d, y-o-y, seen the previous month. The rise in diesel demand was partly supported by an increase in trucking activity in the US, as the American Trucking Association's (ATA) seasonally adjusted

World Oil Demand

Truck Tonnage Index increased by 0.4%, y-o-y, in July. The 'other products' category, notably petroleum coke, which is widely used in aluminium and steel manufacturing, expanded by 266 tb/d, y-o-y, up from lesser growth of 76 tb/d, y-o-y, seen in June. Jet/kerosene demand expanded by 68 tb/d, y-o-y, up from the 41 tb/d y-o-y decline registered the previous month. The increase in jet/kerosene demand aligned with developments in the air travel industry. According to a report from the International Air Travel Association (IATA), US domestic passenger traffic and international revenue passenger-kilometres (RPKs) increased by 5.0% and 6.4%, y-o-y, respectively in July. Residual fuels expanded by 43 tb/d, y-o-y, up from a minor growth of 14 tb/d, y-o-y, seen in the previous month.

US oil demand			Change	Jul 24/Jul 23
By product	Jul 23	Jul 24	Growth	%
LPG	3.45	3.10	-0.35	-10.1
Naphtha	0.14	0.12	-0.02	-11.8
Gasoline	8.98	9.30	0.32	3.5
Jet/kerosene	1.77	1.83	0.07	3.9
Diesel	3.58	3.69	0.11	3.1
Fuel oil	0.25	0.29	0.04	17.1
Other products	2.17	2.44	0.27	12.3
Total	20.33	20.77	0.44	2.2

Table 4 - 3: US oil demand, mb/d

Note: Totals may not add up due to independent rounding.

Sources: EIA and OPEC.

In terms of petrochemical feedstock, LPG contracted by 350 tb/d, y-o-y, down from 78 tb/d y-o-y growth seen the previous month. Naphtha inched down by 16 tb/d, y-o-y.

Near-term expectations

In the near term, economic activity in the US is anticipated to remain healthy and the US economy is expected to experience ongoing support from private household consumption. Similarly, manufacturing activity is also expected to see a gradual improvement in 4Q24, albeit lower than in 3Q24. Furthermore, air travel activity is anticipated to remain healthy and support oil demand. However, driving activity is expected to slow during the winter season. In 4Q24, oil demand is anticipated to grow by 170 tb/d, y-o-y, to average 20.85 mb/d. On the back of continued robust air travel activity, jet kerosene is anticipated to continue to drive oil demand. In 2024, the US is forecast to grow by 126 tb/d to average 20.5 mb/d.

In 1Q25, economic activity is expected to remain healthy and support the petrochemical sector and mobility, which will help oil demand grow marginally by 35 tb/d. Jet/kerosene and LPG are expected to be the main drivers of product demand growth. However, demand for diesel and naphtha is expected to remain subdued, as manufacturing activity has not yet shown a rebound. In 2025, US oil demand is projected to increase by 42 tb/d, y-o-y, to average 20.5 mb/d.

OECD Europe

Update on the latest developments

Oil demand in the OECD Europe rebounded by 272 tb/d, y-o-y, in July, up from a decline of 102 tb/d, y-o-y, the previous month. The demand increase stemmed from France, Spain, and the UK, which more than offset the observed oil demand decline in Germany and Italy. Petrochemical feedstock and transportation fuels were the products that accounted for the growth in oil demand.

Regarding products, naphtha surged by 173 tb/d, y-o-y, up from 165 tb/d, y-o-y, growth seen in the previous month. LPG increased by 113 tb/d, y-o-y, up from 17 tb/d, y-o-y, growth observed the previous month. In terms of transportation fuels, gasoline expanded by 113, y-o-y, up from no growth the previous month. Jet/kerosene saw growth of 59 tb/d, y-o-y, slightly below the 79 tb/d, y-o-y, growth of the previous month. The monthly relative decline in jet/kerosene aligns closely with a report from IATA's Air Passenger Market Analysis showing that Europe's international RPKs grew by 8.3%, y-o-y, in July compared with 9.6%, y-o-y, growth witnessed in June. Diesel continued to see a contraction of 158 tb/d, y-o-y, in July.

Graph 4 - 3: OECD Europe's oil demand by main petroleum product category, y-o-y change



Graph 4 - 4: OECD Europe's oil demand, y-o-y change



Near-term expectations

In the near term, GDP for the region is expected to remain on a positive trajectory, albeit at a low rate in 2H24. Stronger-than-expected economic performance in both 1Q24 and 2Q24, primarily driven by the services sector, is anticipated to continue into 2H24. However, ongoing headwinds in manufacturing and petrochemical activity are expected to weigh on regional oil demand. Accordingly, the region is expected to see a moderate increase of 28 tb/d, y-o-y, in 2H24. Overall, Europe is projected to see a decline of 17 tb/d, y-o-y, in 2024 to average 13.4 mb/d.

Expected improvements towards the end of 2024 are foreseen to continue into 2025, with anticipated positive GDP growth in the region slightly above the 2024 rate. Furthermore, air travel and driving activity are expected to remain steady and continue to drive oil demand. Accordingly, OECD Europe oil demand growth in 2025 is forecast at 17 tb/d, y-o-y, to average 13.5 mb/d.

OECD Asia Pacific

Update on the latest developments

Oil demand in OECD Asia Pacific declined by 29 tb/d, y-o-y, down from 154 tb/d, y-o-y, growth seen in June. The relatively strong decline in Japan's oil demand offsets y-o-y growth from South Korea, while oil demand in Australia was flat, y-o-y.









Sources: IEA, JODI, OPEC and national sources.

In terms of petroleum products, the largest contraction stemmed from diesel requirements, which fell by 142 tb/d, y-o-y, down from a 29 tb/d, y-o-y, decline seen the previous month. Gasoline demand contracted by 56 tb/d, y-o-y, down from 14 tb/d, y-o-y, the previous month. Jet/kerosene inched down by 7 tb/d, y-o-y, from minor y-o-y growth of 4 tb/d observed the previous month.

In terms of petrochemical feedstock, LPG expanded by 70 tb/d, y-o-y, from y-o-y growth of 120 tb/d in June. Naphtha increased by 41 tb/d, y-o-y, down from 131 tb/d, y-o-y, growth the previous month. In the meantime, while residual fuels grew by 14 tb/d, y-o-y, the 'other fuels' category expanded by 51 tb/d, y-o-y, up from 14 tb/d y-o-y growth observed the previous month.

Near-term expectations

In the near term, economic activity in the region is anticipated to remain positive, albeit with variations among the region's countries. Economic activity in South Korea has been very steady, with all growth indicators being largely supportive. The Japanese economy is expected to gradually rebound in the near term. Accordingly, a steady air traffic recovery amid healthy driving activity and petrochemical industry operations is anticipated to support oil demand growth of 35 tb/d, y-o-y, in 4Q24. In 2024, oil demand in the Asia Pacific is forecast to increase moderately by 12 tb/d to average 7.3 mb/d.

In 2025, the region's GDP is projected to surpass the 2024 growth rate, and improvements in regional economic activity are anticipated to support the services sector. In addition, healthy air travel dynamics and requirements of the petrochemical sector in the region are projected to support slight oil demand growth of 11 tb/d, y-o-y. Overall, oil demand in the region is anticipated to average 7.3 mb/d in 2025.

Non-OECD

China

Update on the latest developments

China's oil demand in August inched up by 83 tb/d, y-o-y, down from 121 tb/d, y-o-y, growth seen the previous month. Demand was driven by strong petrochemical feedstock requirements.

These rising requirements resulted in LPG expanding by 195 tb/d, y-o-y, though this is below the annual increase of 301 tb/d seen the previous month. Similarly, naphtha grew by 64 tb/d, y-o-y, slightly below y-o-y growth of 74 tb/d seen the previous month. China's LPG demand, including PDH demand for propane, was supported by capacity expansion.









Jet/kerosene expanded by 50 tb/d, y-o-y, supported by both domestic and international flights. A report from China's Civil Aviation Administration shows that domestic and international air travel turnover increased by 10.7% and 49.4%, y-o-y, in August. Gasoline demand was flat in August, down from y-o-y growth of 36 tb/d seen the previous month. The 'other fuels' category inched up by 10 tb/d, y-o-y, showing an improvement from the 27 tb/d, y-o-y, decline seen the previous month.

Diesel demand contracted by 176 tb/d, y-o-y, in August, albeit an improvement from the annual decline of 246 tb/d seen the previous month. Diesel consumption continued to be subdued by slowing economic activity, mostly a slowdown in building and housing construction, and the substitution of liquefied natural gas (LNG) for petroleum diesel fuel in heavy-duty trucks. Residual fuels fell by 61 tb/d, y-o-y, although showing an improvement from the 117 tb/d, y-o-y, decline in July.

Table 4 - 4: Chi	na's oil demand*, mb/d	

China's oil demand			Change	Aug 24/Aug 23
By product	Aug 23	Aug 24	Growth	%
LPG	2.46	2.66	0.19	7.9
Naphtha	1.86	1.92	0.06	3.4
Gasoline	3.53	3.53	0.00	0.0
Jet/kerosene	0.95	1.00	0.05	5.3
Diesel	3.92	3.75	-0.18	-4.5
Fuel oil	0.84	0.78	-0.06	-7.2
Other products	2.77	2.78	0.01	0.4
Total	16.33	16.42	0.08	0.5

Note: * Apparent oil demand. Totals may not add up due to independent rounding.

Sources: Argus Media, Chinese Customs, Chinese National Bureau of Statistics, JODI and OPEC.

Near-term expectations

Looking ahead, the government has implemented some fiscal and monetary stimulus measures in response to ongoing headwinds in the Chinese economy, particularly in the housing sector, intending to boost economic activity, in turn, lead to an overall positive impact on consumer purchasing power. These measures are expected to support the construction sector and oil demand, particularly in 4Q24. The travel sector is expected to remain healthy, with jet/kerosene and gasoline expected to lead oil demand growth amid an ongoing air travel recovery and healthy road mobility. The industrial sector and manufacturing activity are expected to gain support from the government's policy to support manufacturing and high-tech industries. Moreover, robust global demand for finished goods for export is expected at the end of the year, feeding into demand for petrochemical products in 4Q24. Petrochemical feedstock demand is also expected to remain strong on the back of the new capacity additions that will require extra LPG, ethane, and naphtha for use as feedstock. Accordingly, China's oil product demand is expected to expand by around 484 tb/d, y-o-y, in 2H24. Overall, oil demand in 2024 is forecast to grow by 583 tb/d, y-o-y, to average 16.9 mb/d.

In 2025, the positive impact of government fiscal stimulus introduced in September 2024 is expected to take hold. Similarly, ongoing healthy petrochemical feedstock requirements and stable demand for transportation fuels are expected to support oil demand in 1H25, with China remaining the global leader in oil demand growth, which is expected to increase by 413 tb/d, y-o-y, to average 17.4 mb/d in 2025.

India

Update on the latest developments

India's oil demand in August contracted by 77 tb/d, y-o-y, down from the 378 tb/d, y-o-y, growth seen in July. Oil demand was subdued by extreme rainfall in some parts of India in August, which affected economic activity.

Specifically, the 'other products' category, which includes bitumen, saw the largest contraction by 181 tb/d, y-o-y, down from 85 tb/d, y-o-y, growth observed the previous month. Bitumen consumption during August contracted by 17.2%, y-o-y, due to heavy rainfall in some parts of the country, which affected road construction. Road building normally accounts for 98% of bitumen consumption in India. Diesel, the most widely used oil product in India, fell by 40 tb/d, y-o-y. Diesel was also affected by heavy flooding, which contributed to restricted mobility and reduced agricultural activity. According to data from the Federation of Automobile Dealers Association Research, domestic sales of commercial vehicles and tractors fell by 6.0%, y-o-y, and 11.4%, y-o-y, respectively, in August. Naphtha declined by 14 tb/d, y-o-y, after growth of 33 tb/d, y-o-y, was seen in July.

Graph 4 – 9: India's oil demand by main petroleum product category, y-o-y change



Graph 4 – 10: India's oil demand, y-o-y change



On a positive note, gasoline demand led growth in August with a y-o-y increase of 76 tb/d, albeit showing a slight decline from the 90 tb/d, y-o-y, growth observed the previous month. LPG grew by 68 tb/d, y-o-y, down from growth of 88 tb/d, y-o-y, witnessed the previous month. Household requirements accounted for approximately 89% of LPG consumption during the month. Growth in LPG was supported by a price reduction. Jet/kerosene increased by 10 tb/d, y-o-y, marginally below the 14 tb/d y-o-y growth seen the previous month. Residual fuel requirements inched up by 3 tb/d, y-o-y, from a 7 tb/d, y-o-y, contraction in July.

Table 4 - 5:	India's oil	demand, mb/d	

India's oil demand			Change	Aug 24/Aug 23
By product	Aug 23	Aug 24	Growth	%
LPG	0.92	0.99	0.07	7.4
Naphtha	0.35	0.33	-0.01	-3.9
Gasoline	0.85	0.92	0.08	9.0
Jet/kerosene	0.19	0.20	0.01	5.3
Diesel	1.62	1.58	-0.04	-2.5
Fuel oil	0.11	0.11	0.00	3.2
Other products	1.20	1.02	-0.18	-15.1
Total	5.24	5.16	-0.08	-1.5

Note: Totals may not add up due to independent rounding.

Sources: JODI, Petroleum Planning and Analysis Cell of India and OPEC.

Near-term expectations

In the near term, current healthy economic activity, combined with steady mobility in India, is expected to be sustained. In addition, the government's proposed increase in capital spending is forecast to boost economic activity. In 4Q24, oil demand is forecast to see an increase of 246 tb/d, y-o-y, with transportation fuels expected to be the main driver. In 2024, India's oil demand is forecast to grow by 268 tb/d to average 5.6 mb/d.

Specifically, demand for transportation fuels, gasoline and jet/kerosene is expected to remain steady on the back of healthy driving mobility and ongoing air travel recovery. The country's traditional annual festivities are set to support transportation activity and boost gasoline demand. Moreover, jet fuel demand may also surge, due to Indian carrier fleets being supplemented by an additional 84 aircraft this year. Overall, these factors are expected to bolster India's oil demand.

India's robust economic momentum is expected to be sustained in 2025. Manufacturing and business activities in the country are expected to remain steady, supporting a 239 tb/d y-o-y oil demand increase forecast for next year, to average 5.8 mb/d. Diesel is expected to continue acting as the main driver of demand growth, followed by the 'other products' category, bitumen in particular. Additionally, robust growth in transport fuels and growth in LPG and naphtha demand are expected to support overall oil demand during the year.

Latin America

Update on the latest developments

Oil demand in Latin America in July surged by 278 tb/d, y-o-y, amid strong demand for diesel and 'other products' in Brazil and Venezuela, which offset weakness from Argentina.

Graph 4 - 12: Latin America's oil demand, y-o-y





In terms of product demand, diesel saw the largest growth by 118 tb/d, y-o-y, up from 40 tb/d, y-o-y, growth observed the previous month. Diesel consumption was supported by increased agricultural activity due to the beginning of the harvest season. The 'other products' category, including ethanol primarily from Brazil, expanded by 103 tb/d, y-o-y, surging further from 85 tb/d, y-o-y, growth seen the previous month.

In terms of petrochemical feedstock, while LPG increased by 26 tb/d, y-o-y, up from an annual decline of 21 tb/d, y-o-y, seen the previous month, naphtha was flat, down, from the slight 6 tb/d, y-o-y, growth recorded the previous month. In terms of transportation fuel demand, while gasoline inched up by 18 tb/d, y-o-y. jet/kerosene demand was broadly flat. Residual fuels increased by 17 tb/d, y-o-y, an improvement from a 14 tb/d, y-o-y, decline seen the previous month.

Near-term expectations

Looking ahead, oil demand in the region is expected to remain relatively strong in 2H24, amid projected healthy economic growth and steady air travel recovery. Improving service PMIs in the region's big consuming countries, combined with rising consumer and business confidence, are anticipated to support regional oil demand. Oil demand in Latin America is projected to grow by 165 tb/d, y-o-y, in 4Q24, to average 6.9 mb/d. For 2024, the region's oil demand is forecast to grow by 118 tb/d, to average 6.8 mb/d.

Healthy GDP growth combined with expected improvements in air travel is expected to support oil demand growth, which is forecast at 136 tb/d, y-o-y, in 1Q25. This will be driven the most by transportation fuel demand, followed by diesel and petrochemical feedstock. Overall, in 2025, oil demand in the region is expected to grow by 142 tb/d, y-o-y, to average 7.0 mb/d.

Middle East

Update on the latest developments

Oil demand in the Middle East surged further in July, by 304 tb/d, up from a growth of 196 tb/d, y-o-y, in June. The increase in oil demand was largely supported by the 'other products' category and residual fuel demand for electricity generation in the hot summer season, mostly from Saudi Arabia.

Looking at demand for specific products, the 'other products' category led regional demand growth by 168 tb/d, y-o-y, up from a 19 tb/d, y-o-y, increase observed the previous month. Residual fuels expanded by 81 tb/d, y-o-y, albeit still below the 127 tb/d, y-o-y, growth of the previous month. In terms of transportation fuels, while gasoline expanded by 38 tb/d, y-o-y, up from a minor decline of 2 tb/d, y-o-y, seen the previous month, jet/kerosene inched down by 9 tb/d, y-o-y, a drop from y-o-y growth of 19 tb/d seen a month earlier. Diesel demand grew by 34 tb/d, y-o-y, down from 45 tb/d, y-o-y, growth in June. In terms of petrochemical feedstock, LPG fell by 11 tb/d, y-o-y, similar to the 10 tb/d, y-o-y, decline observed in the previous month. Naphtha saw an uptick of 2 tb/d, y-o-y, an improvement from zero y-o-y growth reported in the previous month.

Graph 4 - 13: Middle East's oil demand by main petroleum product category, y-o-y change



Graph 4 - 14: Middle East's oil demand, y-o-y change



Near-term expectations

Steady economic activity in the region is expected to be sustained in the near term. In addition, ongoing strength in international air traffic and driving mobility due to the reopening of schools and expatriate workers returning from holidays should boost gasoline and jet/kerosene demand and support oil demand growth in the region. Accordingly, oil demand in the area is expected to expand by an average of 265 tb/d, y-o-y, in 4Q24. For 2024, the Middle East oil demand is forecast to grow by 200 tb/d to average 8.8 mb/d.

Regional economic activity is expected to remain healthy in 1Q25, as 2025 GDP growth rates are forecast to surpass those of 2024. In addition, air travel is expected to fully recover and surpass pre-pandemic levels. Gasoline, transportation diesel and jet/kerosene are expected to lead oil demand growth, which is expected to stand at 249 tb/d, y-o-y, in 1Q25. Overall, in 2025, the Middle East is expected to see y-o-y growth of 249 tb/d, averaging 9.1 mb/d. The bulk of demand growth is expected to come from Iraq, Saudi Arabia, and the UAE.

Non-DoC liquids supply (i.e. liquids supply from countries not participating in the DoC) is expected to grow by 1.2 mb/d in 2024 to average 53.1 mb/d, unchanged from last month's assessment.

US crude and condensate production dropped marginally in July. While natural gas liquids (NGLs) production fell m-o-m, output remained strong at about 6.9 mb/d, higher by 0.4 mb/d, y-o-y. Accordingly, US liquids supply growth for 2024 is expected at 0.6 mb/d. The other main drivers for expected non-DoC growth in 2024 are Canada, Brazil and China.

In 2025, non-DoC liquids supply growth is expected at 1.1 mb/d, for an average of 54.2 mb/d, which is also unchanged from last month's assessment. Growth is expected to be driven mainly by the US, Brazil, Canada and Norway, while the main decline is expected in Angola.

DoC NGLs and non-conventional liquids are forecast to grow by around 0.1 mb/d to average 8.3 mb/d in 2024, followed by an increase of around 70 tb/d to average 8.4 mb/d in 2025. OPEC NGLs and non-conventional liquids production are expected to increase by around 60 tb/d to average 5.5 mb/d in 2024, while additional growth of 110 tb/d is forecast in 2025 for an average of 5.6 mb/d.

DoC crude oil production in September decreased by 0.56 mb/d, m-o-m, averaging 40.10 mb/d, as reported by available secondary sources.

Key drivers of growth and decline

Non-DoC liquids supply is expected to grow by 1.2 mb/d in 2024, unchanged from the previous month's assessment. Upward revisions in OECD Americas and Africa were offset by downward shifts in Latin America and OECD Europe. The main drivers for non-DoC liquids supply growth in 2024 are expected to be the US, Canada, Brazil, and China.



In 2025, non-DoC liquids supply growth is expected at 1.1 mb/d, unchanged from last month's assessment. Annual growth is set to be driven mainly by the US, Brazil, Canada, and Norway.

Non-DoC liquids production in 2024 and 2025

Table 5 - 1: Non-DoC liquids production in 2024*, mb/d

							Change 20)24/23
Non-DoC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Americas	26.67	26.91	27.58	27.57	27.70	27.44	0.77	2.90
of which US	20.97	21.02	21.81	21.64	21.62	21.52	0.55	2.63
Europe	3.65	3.66	3.59	3.58	3.73	3.64	-0.01	-0.39
Asia Pacific	0.45	0.46	0.43	0.47	0.45	0.45	0.01	1.43
Total OECD	30.77	31.03	31.59	31.62	31.89	31.54	0.77	2.49
China	4.52	4.62	4.63	4.53	4.50	4.57	0.05	1.17
India	0.79	0.80	0.79	0.79	0.79	0.79	0.01	0.97
Other Asia	1.61	1.62	1.62	1.60	1.59	1.61	-0.01	-0.46
Latin America	6.96	7.28	7.19	7.18	7.46	7.28	0.32	4.57
Middle East	2.02	2.00	2.00	2.01	2.02	2.01	-0.02	-0.76
Africa	2.22	2.24	2.26	2.34	2.29	2.28	0.06	2.86
Other Eurasia	0.37	0.37	0.37	0.37	0.37	0.37	0.00	-1.32
Other Europe	0.10	0.10	0.10	0.10	0.10	0.10	0.00	-1.63
Total Non-OECD	18.60	19.03	18.96	18.91	19.13	19.01	0.41	2.22
Total Non-DoC production	49.37	50.06	50.56	50.53	51.02	50.55	1.18	2.39
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52	0.05	2.02
Total Non-DoC liquids production	51.84	52.58	53.08	53.05	53.54	53.07	1.23	2.37
Previous estimate	51.84	52.58	53.08	53.12	53.47	53.07	1.23	2.37
Revision	0.00	0.00	0.00	-0.07	0.07	0.00	0.00	0.00

*Note: * 2024 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.*

Table 5 - 2: Non-DoC liquids production in 2025*, mb/d

							Change 20	025/24
Non-DoC liquids production	2024	1Q25	2Q25	3Q25	4Q25	2025	Growth	%
Americas	27.44	27.77	27.94	28.24	28.47	28.11	0.66	2.42
of which US	21.52	21.66	22.05	22.16	22.22	22.02	0.50	2.33
Europe	3.64	3.82	3.69	3.67	3.78	3.74	0.10	2.77
Asia Pacific	0.45	0.45	0.44	0.45	0.45	0.45	-0.01	-1.74
Total OECD	31.54	32.04	32.07	32.36	32.70	32.29	0.76	2.40
China	4.57	4.63	4.61	4.53	4.53	4.57	0.01	0.12
India	0.79	0.79	0.80	0.81	0.81	0.80	0.01	0.99
Other Asia	1.61	1.60	1.58	1.56	1.56	1.58	-0.03	-1.81
Latin America	7.28	7.44	7.48	7.56	7.69	7.54	0.27	3.64
Middle East	2.01	2.01	2.04	2.04	2.03	2.03	0.02	1.01
Africa	2.28	2.31	2.30	2.30	2.30	2.30	0.02	0.74
Other Eurasia	0.37	0.37	0.37	0.37	0.37	0.37	0.00	0.07
Other Europe	0.10	0.10	0.10	0.10	0.10	0.10	0.00	2.02
Total Non-OECD	19.01	19.25	19.28	19.27	19.39	19.30	0.29	1.52
Total Non-DoC production	50.55	51.28	51.34	51.63	52.10	51.59	1.05	2.07
Processing gains	2.52	2.58	2.58	2.58	2.58	2.58	0.06	2.38
Total Non-DoC liquids production	53.07	53.86	53.92	54.21	54.68	54.17	1.11	2.08
Previous estimate	53.07	53.96	53.90	54.13	54.68	54.17	1.10	2.08
Revision	0.00	-0.10	0.02	0.08	0.00	0.00	0.00	0.00

Note: * 2025 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

OECD

For 2024, OECD liquids production (excluding DoC Graph 5 - 3: OECD quarterly liquids supply, participating country Mexico) is anticipated to expand y-o-y changes by about 0.8 mb/d to average 31.5 mb/d. Growth is set to be led by OECD Americas, with an expected increase of 0.8 mb/d to average 27.4 mb/d. This is revised up by about 40 tb/d compared with the previous month's assessment. Yearly liauids production in OECD Europe is set to drop by about 15 tb/d to average 3.6 mb/d, which is a downward revision of 28 tb/d compared with the September MOMR. OECD Asia Pacific is expected to remain largely unchanged, y-o-y, to average 0.5 mb/d.

OECD liquids production is forecast to grow by 0.8 mb/d to average 32.3 mb/d in 2025. OECD Americas is expected to be the main growth driver, with an anticipated increase of 0.7 mb/d for an



average of 28.1 mb/d. Yearly liquids production in OECD Europe is expected to grow by 0.1 mb/d to average 3.7 mb/d, while OECD Asia Pacific is expected to decline by a minor 8 tb/d, y-o-y, to average 0.4 mb/d.

US

US liquids production in July fell by 0.1 mb/d, m-o-m, to average 21.8 mb/d. This was 0.8 mb/d higher than in July 2023.

Crude oil and condensate production dropped by Graph 5 - 4: US monthly liquids output by key 25 tb/d, m-o-m, to average 13.2 mb/d in July, up by component 0.3 mb/d, y-o-y.

In terms of the crude and condensate production breakdown by region (PADDs), production decreased on the US Gulf Coast (USGC) by just 7 tb/d to average 9.7 mb/d. Production in the East Coast (PADD 1) and Rocky Mountain (PADD 4) remained broadly unchanged. Output in the Midwest (PADD 2) dropped by 22 tb/d, while the West Coast (PADD 5) region increased by 7 tb/d, m-o-m.

A m-o-m decrease in production in the main producing regions can primarily be attributed to lower output in Texas and North Dakota. Those losses were partially offset by gains in New Mexico and Alaska.



NGLs production dropped by 118 tb/d, m-o-m, to average 6.9 mb/d in July. This was 0.4 mb/d higher, y-o-y. According to the US Department of Energy (DoE), the production of non-conventional liquids (mainly ethanol) increased by 40 tb/d, m-o-m, to average 1.7 mb/d. Preliminary estimates show non-conventional liquids averaging about 1.6 mb/d in August, lower by about 80 tb/d, m-o-m.

Gulf of Mexico (GoM) production remained largely unchanged, m-o-m, for an average of 1.8 mb/d in July. Production at federal offshore fields was hit by hurricanes Francine and Helene in September; however, damage to oil and gas infrastructure was negligible, and output is expected to be recovered shortly and supported by new projects in the coming months. In the onshore Lower 48, crude and condensate production fell by 36 tb/d, m-o-m, to average 11.0 mb/d in July.

Table 5 - 3: US	crude oil	production b	y selected	state	and region,	tb/d
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				Chai	Change		
State	Jul 23	Jun 24	Jul 24	m-o-m	у-о-у		
Texas	5,560	5,740	5,706	-34	146		
New Mexico	1,748	2,010	2,035	25	287		
Gulf of Mexico (GOM)	1,925	1,803	1,805	2	-120		
North Dakota	1,173	1,181	1,161	-20	-12		
Colorado	457	450	446	-4	-11		
Alaska	397	399	408	9	11		
Oklahoma	439	387	378	-9	-61		
Total	12,935	13,230	13,205	-25	270		

Sources: EIA and OPEC.

In terms of individual US states, New Mexico's oil production rose by 25 tb/d to average 2.0 mb/d, which is 287 tb/d higher than a year ago. Production from Texas was down by 34 tb/d to average 5.7 mb/d, which is 146 tb/d higher than a year ago. In the Midwest, North Dakota's production dropped by 20 tb/d, m-o-m, to average 1.2 mb/d, down by 12 tb/d, y-o-y. Meanwhile, Oklahoma's production fell by 9 tb/d, m-o-m, to average 0.4 mb/d. Production in Colorado dropped by a minor 4 tb/d, m-o-m, while output in Alaska rose by 9 tb/d, m-o-m.



US total liquids production US crude oil production Sources: EIA and OPEC.

US tight crude output in July is estimated to have Graph 5 - 7: US tight crude output breakdown remained largely unchanged, m-o-m, at an average of 8.6 mb/d, according to the latest estimates from the US Energy Information Administration (EIA). This was 0.2 mb/d higher than in the same month last year.

The m-o-m production increases from shale and tight formations using horizontal wells came mainly from the Permian shale in Texas, where output rose by 10 tb/d to average 5.5 mb/d. This was an increase of 0.3 mb/d, y-o-y.

In North Dakota, Bakken shale oil output remained unchanged, m-o-m. It averaged 1.2 mb/d, or about 20 tb/d higher, y-o-y. Tight crude output at Eagle Ford in Texas declined marginally to average 1.0 mb/d. This was down by about 60 tb/d, y-o-y. Production at Niobrara-Codell in Colorado and Wyoming was largely unchanged, m-o-m, at an average of 480 tb/d.

Graph 5 - 6: US monthly crude oil and total liquids supply, m-o-m changes



US total liquids production US crude oil production Sources: EIA and OPEC.





Sources: EIA and OPEC.

platforms.

US liquids production in 2024, excluding processing Graph 5 - 8: US liquids supply developments by gains, is expected to grow by 0.6 mb/d, y-o-y, to component average 21.5 mb/d. The growth is higher by about 45 tb/d from the previous assessment. The forecast assumes a modest level of drilling and completion activities and fewer logistical issues this year at prolific major shale sites. To date, the hurricane season has affected crude oil production in the GoM during September: however, a rapid recovery is expected in October due to a lack of critical disruptions at offshore

Crude oil and condensate output in 2024 are expected to increase by about 250 tb/d, y-o-y, to average 13.2 mb/d. At the same time, NGLs production and that of non-conventional liquids, particularly ethanol, are projected to increase by 0.3 mb/d and 40 tb/d, y-o-y, to average 6.8 mb/d and 1.6 mb/d, respectively.



Average tight crude output in 2024 is expected to reach 8.7 mb/d, up by 0.3 mb/d, y-o-y. The 2024 forecast assumes ongoing capital discipline and less inflationary pressure, as well as moderating supply chain issues and oil field service constraints. At the same time, well productivity and operational efficiency improvements are expected to support crude production, despite a decline in drilling rig counts.

US liquids production, excluding processing gains, is expected to grow by 0.5 mb/d, y-o-y, to average 22.0 mb/d in 2025. This assumes a mild increase in drilling activity, lower service cost inflation and continued well productivity improvements in the key shale basins. Crude oil and condensate output are expected to rise by 0.3 mb/d, v-o-v, to average 13.5 mb/d. At the same time, NGLs production and that of non-conventional liquids, particularly ethanol, are projected to increase by 0.2 mb/d and 20 tb/d, y-o-y, to average 7.0 mb/d and 1.6 mb/d, respectively. Average tight crude output in 2025 is expected to reach 9.0 mb/d, up by 0.3 mb/d, y-o-y. The 2025 forecast also assumes ongoing capital discipline in the US upstream sector.

		Change		Change			
US liquids	2023	2023/22	2024*	2024/23	2025*	2025/24	
Tight crude	8.40	0.64	8.71	0.30	9.01	0.31	
Gulf of Mexico crude	1.87	0.13	1.81	-0.06	1.89	0.09	
Conventional crude oil	2.66	0.17	2.67	0.01	2.56	-0.11	
Total crude	12.93	0.94	13.18	0.25	13.47	0.29	
Unconventional NGLs	5.36	0.58	5.63	0.27	5.84	0.21	
Conventional NGLs	1.14	-0.02	1.13	-0.01	1.11	-0.02	
Total NGLs	6.50	0.57	6.76	0.26	6.95	0.19	
Biofuels + Other liquids	1.54	0.10	1.58	0.04	1.60	0.02	
US total supply	20.97	1.61	21.52	0.55	22.02	0.50	

Table 5 - 4: US liquids production breakdown, mb/d

Note: * 2024-2025 = Forecast.

Sources: EIA, OPEC and Rystad Energy.

US tight crude production in the Permian Basin during 2024 is expected to increase by 0.3 mb/d, y-o-y, to average 5.5 mb/d. In 2025, it is forecast to grow by 0.3 mb/d, y-o-y, to average 5.7 mb/d.

In North Dakota, Bakken shale production is expected to remain below the pre-pandemic average of 1.4 mb/d. Growth of just 30 tb/d and 20 tb/d is expected for 2024 and 2025, respectively, to average around 1.2 mb/d in both years. This trend could indicate a maturing basin.

to have averaged 1.0 mb/d in 2023. In 2024, a decline y-o-y changes of 25 tb/d is expected for the basin, while growth of 15 tb/d is forecast for 2025.

Niobrara's production is expected to rise by around 25 tb/d. v-o-v. in 2024. to average 0.5 mb/d. With expected growth of 20 tb/d in 2025, output is forecast to remain at 0.5 mb/d.

In the other tight plays, which are experiencing a modest pace of drilling and completion activities, production is expected to drop by about 55 tb/d this year, before stabilizing in 2025.

Output in the Eagle Ford basin in Texas is estimated Graph 5 - 9: US tight crude output by shale play.



Table 5 - 5: US tight oil production growth, mb/d

		Change		Change	Change		
US tight oil	2023	2023/22	2024*	2024/23	2025*	2025/24	
Permian tight	5.15	0.48	5.48	0.33	5.73	0.25	
Bakken shale	1.16	0.13	1.19	0.03	1.21	0.02	
Eagle Ford shale	0.99	0.02	0.96	-0.02	0.98	0.02	
Niobrara shale	0.45	0.02	0.48	0.02	0.50	0.02	
Other tight plays	0.66	-0.01	0.60	-0.06	0.60	0.00	
Total	8.40	0.64	8.70	0.30	9.01	0.31	

Note: * 2024-2025 = Forecast.

Source: OPEC.

US rig count, spudded, completed, DUC wells and fracking activity

in the week ending 4 October 2024 dropped by two to output and WTI price 585, according to Baker Hughes. This is 34 fewer rigs US\$/b Rigs than a year ago. The number of active offshore rigs dropped by one, w-o-w, to 18. This is two less than in the same month a year earlier. The number of onshore oil and gas rigs dropped by one, w-o-w, to stand at 566, with one rig in inland waters. This is down by 30 rigs, y-o-y.

The US horizontal rig count dropped by one, w-o-w, to 522, compared with 553 horizontal rigs a year ago. The number of drilling rigs for oil fell by five, w-o-w, to 479, while the number of gas drilling rigs rose by three, w-o-w, to 102.

The Permian's rig count fell by two, w-o-w, to 304, while the DJ-Niobrara basin saw a gain of one,

w-o-w, to eight. Rig counts remained unchanged in the Williston, Eagle Ford, and Cana Woodford basins at 34, 48, and 18, respectively.

The total number of active US oil and gas drilling rigs Graph 5 - 10: US weekly rig count vs. US crude oil



wells in all US shale plays include 819 horizontal wells in US shale plays spudded in August, as per preliminary data. This is up Wells by 19, m-o-m, and about 3% lower than August last 1,000 year.

Preliminary data for August indicates a lower number of completed wells, m-o-m, at 750, and the number is down by about 8%, y-o-y. The number of started wells is estimated at 700, which is 21% lower than a year earlier.

Preliminary data for September saw 798 spudded, 525 completed and 850 started wells, based on Rystad Energy data.

In terms of identifying US oil and gas fracking operations by region, Rystad Energy reported that 1,083 wells started fracking in July. In August and September, it stated that 965 and 712 wells began fracking, respectively, according to preliminary numbers based on an analysis of high-frequency satellite data.

In regional terms, preliminary data for August shows that 282 and 263 wells started fracking in the Permian Midland and Permian Delaware regions, respectively. There was a gain of 25 wells in the Midland region and a loss of 34 in Delaware compared with July. Data also indicates that 58 wells began fracking in the DJ Basin, 59 in Eagle Ford and 88 in Bakken during August.

Canada

have risen by about 80 tb/d, m-o-m, to average development by type 6.0 mb/d, indicating a full recovery from disruptions in May and June.

Conventional crude production remained unchanged in August, m-o-m, at an average of 1.2 mb/d. NGLs output was also largely unchanged, m-o-m, at an average of 1.3 mb/d.

Crude bitumen production output rose in August by 120 tb/d, m-o-m, while synthetic crude production decreased by 45 tb/d, m-o-m. Taken together, crude bitumen and synthetic crude production rose by 75 tb/d to average 3.5 mb/d.

Liquids production in 3Q24 is expected to rise by 0.2 mb/d, g-o-g, as wildfire disruptions and major scheduled maintenance are already passed.







Sources: Rystad Energy and OPEC.



Sources: Rystad Energy Shale Well Cube and OPEC.

Canada's liquids production in August is estimated to Graph 5 - 13; Canada's monthly liquids production



Sources: Statistics Canada, Alberta Energy Regulator and OPEC.

In 2024. Canada's liquids production is forecast to Graph 5 - 14: Canada's guarterly liquids production increase at a much faster pace compared with 2023, and forecast rising by 0.2 mb/d to average 5.9 mb/d. Incremental production is expected to come from oil sands project ramp-ups, optimization and the expansion of existing facilities in areas like Montney, Kearl, Duvernay and Fort Hills, in addition to some conventional field growth. At the same time, new export opportunities following the commissioning of the Trans Mountain Expansion (TMX) pipeline is expected to stimulate production in the coming months.

Canada's liquids production is forecast to grow by 0.2 mb/d to average 6.1 mb/d in 2025. Additional production is expected to come from expanding oil sands projects and additional well pads coming online at a number of facilities. Sources of production

mb/d



Note: * 3Q24-4Q25 = Forecast. Source: OPEC.

are primarily expected from the Athabasca, Kearl, Horizon, Christina Lake, Suncor and Foster Creek oil sands projects. The main start-ups in 2025 are expected to be Syncrude Mildred Lake/Aurora, Narrows Lake, Cold Lake Oil Sands and the Montney Play.

Norway

0.1 mb/d, m-o-m, to average 2.0 mb/d. Norway's development crude production decreased by about 60 tb/d, m-o-m, in August to average 1.8 mb/d. This was down by 25 tb/d, y-o-y. Nevertheless, monthly oil production was 7.5% higher than the Norwegian Offshore Directorate's (NOD) forecast.

Production of NGLs and condensate decreased by 40 tb/d, m-o-m, to average 0.2 mb/d in August, according to NOD data.

For 2024, Norwegian liquids production is forecast to remain unchanged at an average of 2.0 mb/d. This was revised down by 27 tb/d from the previous month's assessment, mainly due to expected higher and longer maintenance at several offshore platforms and deferrals of some new projects. Several projects

Norwegian liquids production in August dropped by Graph 5 - 15: Norway's monthly liquids production



have been scheduled to ramp up this year. In addition to a few new projects at Hanz, Eldfisk, Kristin and Snorre that started production this year, further start-ups are expected at the Kvitebjorn, Tyrving and Aasgard floating, production, storage and offloading (FPSO) projects. Johan Castberg is projected to be the main source of output growth, with first oil planned later this year. Hookup operations have started at the Johan Castberg's FPSO in September, following the offshore anchoring of the unit, according to Equinor.

In 2025, Norwegian liquids production is forecast to grow by 0.1 mb/d to average 2.1 mb/d. Several small-tolarge-scale projects are scheduled to ramp up, including Johan Castberg, Kristin, Eldfisk and Balder/Ringhorne. At the same time, start-ups are expected at the Ormen Lange, Balder/Ringhome, Snohvit, Halten East, Eirin, Norne FPSO, Maria and Alve projects. Norway's Var Energi recently postponed the startup of its Balder X oil project in the North Sea to the 2Q25.

UK

In August, UK liquids production dropped by 0.2 mb/d, m-o-m, to average 0.6 mb/d. Crude oil output decreased by 0.2 mb/d, m-o-m, to average 0.5 mb/d. However, this was lower by 60 tb/d, y-o-y, according to official data. NGLs output fell by 14 tb/d, m-o-m, to an average 59 tb/d.

For 2024, UK liquids production is forecast to drop by Graph 5 - 16: UK monthly liquids production 25 tb/d to average 0.7 mb/d. Production ramp-ups will development be seen at the ETAP and Clair sites, as well as the Captain enhanced oil recovery (EOR) and a start-up is forecast at the Josephine project. Furthermore, the Penguins FPSO unit is expected to be towed out to the UK's North Sea fields in 4Q24.

UK liquids production is forecast to stay steady at an average of 0.7 mb/d in 2025. Production ramp-ups will be seen at the Clair sites and at Schiehallion. Elsewhere, project start-ups are expected at the Victory, Janice and Murlach (Skua redevelopment) assets. However, decline rates from the ageing basins are expected to be largely offset by any additional volumes.

Non-OECD





mb/d



Sources: UK Department for Business, Energy and Industrial Strategy and OPEC.





China

China's liquids production dropped by 15 tb/d, m-o-m, to average 4.5 mb/d in August. This is up by 81 tb/d, y-o-y, according to official data. Crude oil output in August averaged 4.2 mb/d, down by 15 tb/d compared with the previous month. This was also higher by 86 tb/d, y-o-y.

NGLs production remained unchanged, m-o-m, averaging 41 tb/d. This was lower by 7 tb/d compared with the same month a vear earlier.





Graph 5 - 20: China's quarterly liquids production and forecast





For 2024, China's liquids production is expected to rise by about 50 tb/d, y-o-y, to average 4.6 mb/d. This is largely unchanged from the previous assessment. Additional growth through more infill wells and EOR projects is anticipated to be largely offset by decline rates at mature fields. Chinese operators are poised to maintain high upstream CAPEX in 2024 in line with the seven-year exploration and development plan (2019-2025) to scale up exploration activities and to help boost domestic production. Several projects have already started production like Liuhua 11-1, Suizhong 36-1, Huizhou 26-6, Lufeng 8-1/9-2/14-8 and Enping 21-4 since January. At the same time, projects like Wushi 17-2, Lingshui 17-2 Gas Complex (Phase 2), Bozhong 19-2 and Suizhong 36-2 – operated by CNOOC and PetroChina – are still expected to start operation in 2024. Furthermore, key ramp-ups are planned for Changqing, Kenli 10-2, Wushi 17-2 and Kenli 6-4.

In 2025, Chinese liquids production is expected to remain broadly steady, y-o-y, at an average of 4.6 mb/d. Supply growth is primarily expected to come from the offshore sector following considerable recent exploration investments in Bohai Bay off northern China and in the South China Sea. For next year, oil and gas condensate projects like Songliaho, Peng Lai 19-9, Kenli 10-2, Shengli, Liaodong Bay West, Xijiang 30-2, Wenchang 9-7 – operated by CNOOC, PetroChina and Sinopec – are expected to come on stream. Meanwhile, key rampups are planned for Changqing, Tarim, Xibei, Peng Lai 19-9 and Xi'nan.

Brazil

Brazil's crude output in August rose by 110 tb/d, m-o-m, to average 3.3 mb/d. The output partially recovered from low July figures; however, it has still been affected by extensive maintenance, operational issues, and slow ramp-ups. NGLs production remained largely unchanged at an average of around 80 tb/d and is expected to remain flat in September 2024. Biofuel output (mainly ethanol) is estimated to remain unchanged, m-o-m, at average 0.7 mb/d, with preliminary data showing a stable trend in September. The country's total liquids production increased by 114 tb/d in August to average 4.1 mb/d, albeit lower by about 0.1 mb/d, y-o-y.

Graph 5 - 21: Brazil's monthly liquids production development by type









Note: * 3Q24-4Q25 = Forecast. Sources: ANP and OPEC.

For 2024, Brazil's liquids supply, including biofuels, is forecast to grow by about 60 tb/d, y-o-y, to average 4.2 mb/d. This was revised down by 50 tb/d due to lower-than-expected production in recent months. Crude oil output is expected to increase through production ramp-ups at the Buzios (Franco), Mero (Libra NW), Tupi (Lula) and Itapu (Florim) fields. Oil project start-ups are expected mainly through the Mero 3, Atlanta and Maria Quiteria FPSOs. However, technical and operational issues could potentially delay the start-up of scheduled production platforms.

Brazil's liquids supply, including biofuels, is forecast to increase by 0.2 mb/d, y-o-y, to average 4.4 mb/d in 2025. Crude oil output is expected to rise through production ramp-ups at the Buzios (Franco), Mero (Libra NW), Tupi (Lula), Marlim and Atlanta fields. Oil project start-ups are expected at the Buzios, Bacalhau (x-Carcara), Wahoo, Parque das Baleias and Lapa (Carioca) fields. However, growing offshore development costs and inflationary pressure may continue to delay projects and moderate short-term growth.

DoC NGLs and non-conventional liquids

DoC NGLs and non-conventional liquids are expected Graph 5 - 23: DoC NGLs and non-conventional to expand by about 0.1 mb/d in 2024 to average liquids quarterly production and forecast 8.3 mb/d.

Preliminary data shows that NGLs and nonconventional liquids output in 3Q24 averaged 8.2 mb/d. According to preliminary August data, OPEC Member Countries and non-OPEC DoC countries are estimated to have produced 5.5 mb/d and 2.8 mb/d, respectively, of NGLs and non-conventional liquids.

The 2025 forecast points toward a combined increase of about 70 tb/d for an average of 8.4 mb/d. NGLs and non-conventional liquids production are projected to grow by 0.1 mb/d to average 5.6 mb/d for OPEC Member Countries. However, a drop of about 40 tb/d is forecast for non-OPEC DoC countries.



Note: * 3Q24-4Q25 = Forecast. Source: OPEC.

Table 5 - 6: DoC NGLs + non-conventional liquids, mb/d

DoC NGLs and		Change		Change						Change
non-coventional liquids	2023	23/22	2024	24/23	1Q25	2Q25	3Q25	4Q25	2025	25/24
OPEC	5.46	0.06	5.53	0.06	5.60	5.67	5.64	5.64	5.64	0.11
Non-OPEC DoC	2.77	0.20	2.79	0.02	2.79	2.77	2.68	2.76	2.75	-0.04
Total	8.23	0.26	8.32	0.08	8.40	8.43	8.31	8.40	8.39	0.07

Note: 2024-2025 = Forecast. Source: OPEC.
DoC crude oil production

According to secondary sources, **total OPEC-12 crude oil production** averaged 26.04 mb/d in September 2024, which is 604 tb/d lower, m-o-m. Crude oil output increased mainly in IR Iran and Kuwait, while production in Libya, Iraq, Nigeria, and Saudi Arabia decreased.

At the same time, **total non-OPEC DoC crude oil production** averaged 14.06 mb/d in September 2024, which is 47 tb/d higher, m-o-m. Crude oil output increased mainly in Kazakhstan, while production in Russia decreased.

Secondary									Change
sources	2022	2023	1Q24	2Q24	3Q24	Jul 24	Aug 24	Sep 24	Sep/Aug
Algeria	1,013	973	907	904	909	908	910	909	0
Congo	261	261	246	262	257	252	264	254	-11
Equatorial Guinea	84	56	54	56	58	57	57	60	3
Gabon	195	204	215	210	213	210	217	211	-6
IR Iran	2,554	2,859	3,179	3,238	3,300	3,289	3,295	3,316	21
Iraq	4,439	4,289	4,265	4,234	4,235	4,324	4,267	4,112	-155
Kuwait	2,704	2,595	2,430	2,429	2,421	2,415	2,418	2,430	13
Libya	981	1,162	1,119	1,189	894	1,180	950	540	-410
Nigeria	1,210	1,315	1,413	1,366	1,415	1,401	1,438	1,405	-33
Saudi Arabia	10,531	9,609	9,000	8,965	8,984	8,987	8,994	8,971	-23
UAE	3,066	2,950	2,926	2,934	2,959	2,953	2,964	2,958	-6
Venezuela	684	749	816	838	871	863	875	877	3
Total OPEC	27,722	27,021	26,570	26,624	26,515	26,838	26,648	26.044	-604
		-	,			-			
Azerbaijan	560	503	477	475	486	487	482	488	6
Azerbaijan Bahrain	560 193	503 183	477 174	475 182	486 162	487 171	482 160	488 156	6 -4
Azerbaijan Bahrain Brunei	560 193 76	503 183 73	477 174 82	475 182 67	486 162 86	487 171 89	482 160 84	488 156 85	6 -4 2
Azerbaijan Bahrain Brunei Kazakhstan	560 193 76 1,489	503 183 73 1,597	477 174 82 1,614	475 182 67 1,555	486 162 86 1,528	487 171 89 1,569	482 160 84 1,471	488 156 85 1,545	6 -4 2 75
Azerbaijan Bahrain Brunei Kazakhstan Malaysia	560 193 76 1,489 396	503 183 73 1,597 374	477 174 82 1,614 359	475 182 67 1,555 359	486 162 86 1,528 348	487 171 89 1,569 351	482 160 84 1,471 346	488 156 85 1,545 348	6 -4 2 75 2
Azerbaijan Bahrain Brunei Kazakhstan Malaysia Mexico	560 193 76 1,489 396 1,652	503 183 73 1,597 374 1,655	477 174 82 1,614 359 1,615	475 182 67 1,555 359 1,599	486 162 86 1,528 348 1,593	487 171 89 1,569 351 1,592	482 160 84 1,471 346 1,595	488 156 85 1,545 348 1,593	6 -4 2 75 2 -3
Azerbaijan Bahrain Brunei Kazakhstan Malaysia Mexico Oman	560 193 76 1,489 396 1,652 850	503 183 73 1,597 374 1,655 819	477 174 82 1,614 359 1,615 772	475 182 67 1,555 359 1,599 765	486 162 86 1,528 348 1,593 766	487 171 89 1,569 351 1,592 765	482 160 84 1,471 346 1,595 766	488 156 85 1,545 348 1,593 765	6 -4 2 75 2 -3 -1
Azerbaijan Bahrain Brunei Kazakhstan Malaysia Mexico Oman Russia	560 193 76 1,489 396 1,652 850 9,771	503 183 73 1,597 374 1,655 819 9,574	477 174 82 1,614 359 1,615 772 9,426	475 182 67 1,555 359 1,599 765 9,216	486 162 86 1,528 348 1,593 766 9,037	487 171 89 1,569 351 1,592 765 9,079	482 160 84 1,471 346 1,595 766 9,029	488 156 85 1,545 348 1,593 765 9,001	6 -4 2 75 2 -3 -1 -28
Azerbaijan Bahrain Brunei Kazakhstan Malaysia Mexico Oman Russia Sudan	560 193 76 1,489 396 1,652 850 9,771 62	503 183 73 1,597 374 1,655 819 9,574 54	477 174 82 1,614 359 1,615 772 9,426 34	475 182 67 1,555 359 1,599 765 9,216 25	486 162 86 1,528 348 1,593 766 9,037 26	487 171 89 1,569 351 1,592 765 9,079 26	482 160 84 1,471 346 1,595 766 9,029 27	488 156 85 1,545 348 1,593 765 9,001 27	6 -4 2 75 2 -3 -1 -28 0
Azerbaijan Bahrain Brunei Kazakhstan Malaysia Mexico Oman Russia Sudan South Sudan	560 193 76 1,489 396 1,652 850 9,771 62 144	503 183 73 1,597 374 1,655 819 9,574 54 145	477 174 82 1,614 359 1,615 772 9,426 34 113	475 182 67 1,555 359 1,599 765 9,216 25 65	486 162 86 1,528 348 1,593 766 9,037 26 53	487 171 89 1,569 351 1,592 765 9,079 26 52	482 160 84 1,471 346 1,595 766 9,029 27 54	488 156 85 1,545 348 1,593 765 9,001 27 52	6 -4 2 75 2 -3 -1 -28 0 -2
Azerbaijan Bahrain Brunei Kazakhstan Malaysia Mexico Oman Russia Sudan South Sudan Total Non-OPEC DoC	560 193 76 1,489 396 1,652 850 9,771 62 144 15,193	503 183 73 1,597 374 1,655 819 9,574 54 145 14,978	477 174 82 1,614 359 1,615 772 9,426 34 113 14,666	475 182 67 1,555 359 1,599 765 9,216 25 65 14,310	486 162 86 1,528 348 1,593 766 9,037 26 53 14,085	487 171 89 1,569 351 1,592 765 9,079 26 52 14,182	482 160 84 1,471 346 1,595 766 9,029 27 54 14,013	488 156 85 1,545 348 1,593 765 9,001 27 52 14,060	6 -4 2 75 2 -3 -1 -28 0 -2 47

Table 5 - 7: DoC crude oil production based on secondary sources, tb/d

Notes: Totals may not add up due to independent rounding, given available secondary sources to date. Source: OPEC.

OPEC crude oil production

OPEC crude oil production for September, as reported by OPEC Member Countries, is shown in *Table 5 - 8* below.

Table 5 - 8: OPEC crude oil production based on direct communication, tb/d

									Change
Direct communication	2022	2023	1Q24	2Q24	3Q24	Jul 24	Aug 24	Sep 24	Sep/Aug
Algeria	1,020	973	907	905	909	909	910	908	-2
Congo	262	271	252	260	264	257	270	265	-6
Equatorial Guinea	81	55	53	60		57		52	
Gabon	191	223							
IR Iran									
Iraq	4,453	4,118	3,957	3,862	3,897	3,993	3,904	3,792	-112
Kuwait	2,707	2,590	2,413	2,413	2,413	2,413	2,413	2,413	0
Libya		1,189	1,149						
Nigeria	1,138	1,187	1,327	1,270	1,328	1,307	1,352	1,324	-27
Saudi Arabia	10,591	9,606	8,979	8,937	8,970	8,941	8,992	8,975	-17
UAE	3,064	2,944	2,919	2,928	2,933	2,933	2,935	2,931	-4
Venezuela	716	783	864	904	933	928	927	943	16
Total OPEC									

Notes: .. Not available. Totals may not add up due to independent rounding.

Source: OPEC.

Commercial Stock Movements

Preliminary August 2024 data shows total OECD commercial oil stocks down by 8.4 mb, m-o-m. At 2,828 mb, they were 4.8 mb higher than the same time a year ago, but 86.0 mb less than the latest fiveyear average, and 157.4 mb below the 2015–2019 average. Within the components, crude and product stocks fell by 6.5 mb and 1.9 mb, respectively.

OECD commercial crude stocks stood at 1,319 mb. This was 18.5 mb lower than the same time a year ago, 64.1 mb below the latest five-year average, and 128.1 mb less than the 2015–2019 average.

OECD total product stocks stood at 1,509 mb. This is 23.2 mb higher than the same time a year ago, but 21.8 mb lower than the latest five-year average, and 29.2 mb below the 2015–2019 average.

In terms of days of forward cover, OECD commercial stocks fell in August by 0.1 days, m-o-m, to stand at 61.3 days. This is 0.1 days lower than the level registered in August 2023, 2.9 days lower than the latest five-year average, and 1.8 days less than the 2015–2019 average.

OECD

Preliminary August 2024 data shows total OECD Graph 9 - 1: OECD commercial oil stocks commercial oil stocks down by 8.4 mb, m-o-m. At 2,828 mb, they were 4.8 mb higher than the same time a year ago, but 86.0 mb less than the latest five-year average, and 157.4 mb below the 2015–2019 average. 3,000 Historical range 2019-23

Within the components, crude and product stocks fell by 6.5 mb and 1.9 mb respectively.

Within the OECD regions, in August, total commercial oil stocks fell in OECD America, while they rose in OECD Asia Pacific and OECD Europe.

OECD commercial crude stocks fell by 6.5 mb, m-o-m, ending August at 1,319 mb. This was 18.5 mb lower than the same time a year ago, 64.1 mb below the latest five-year average, and 128.1 mb less than the 2015–2019 average.



Sources: EIA, IEA, METI, OilX and OPEC.

Within the OECD regions, OECD Americas saw crude stock draws of 8.9 mb, m-o-m, while crude stocks in OECD Asia Pacific and OECD Europe rose by 1.5 mb and 0.9 mb, m-o-m, respectively.

OECD total product stocks fell by 1.9 mb, m-o-m, in August to stand at 1,509 mb. This is 23.2 mb higher than the same time a year ago, but 21.8 mb lower than the latest five-year average, and 29.2 mb below the 2015–2019 average.

Within the OECD regions, product stocks in OECD Asia Pacific and OECD Europe witnessed a build of 2.8 mb and 6.8 mb, m-o-m, respectively. OECD Americas product stocks declined by 11.5 mb, m-o-m.

Table 9 - 1: OECD commercial stocks, mb

					Change
OECD stocks	Aug 23	Jun 24	Jul 24	Aug 24	Aug 24/Jul 24
Crude oil	1,337	1,362	1,325	1,319	-6.5
Products	1,486	1,487	1,511	1,509	-1.9
Total	2,823	2,848	2,836	2,828	-8.4
Days of forward cover	61.4	61.5	61.4	61.3	-0.1

Note: Totals may not add up due to independent rounding. Sources: EIA, IEA, METI, OilX and OPEC.

In terms of days of forward cover, OECD commercial stocks fell in August by 0.1 days, m-o-m, to stand at 61.3 days. This is 0.1 days lower than the level registered in August 2023, 2.9 days less than the latest five-year average, and 1.8 days less than the 2015–2019 average.

Within the OECD regions, OECD Americas stood at 3.4 days and OECD Asia Pacific at 3.9 days below the latest five-year average, standing at 60.3 days and 49.0 days, respectively. OECD Europe was 1.5 days less than the latest five-year average, standing at 69.6 days.

OECD Americas

OECD Americas' total commercial stocks fell in August by 20.4 mb, m-o-m, to settle at 1,532 mb. This is 18.3 mb higher than the same month in 2023, but 23.3 mb below the latest five-year average.

Commercial crude oil stocks in OECD Americas fell in August by 8.9 mb, m-o-m, to stand at 740 mb, which is 5.8 mb higher than in August 2023, but 20.5 mb less than the latest five-year average.

Total product stocks in OECD Americas decreased by 11.5 mb, m-o-m, in August to stand at 792 mb. This is 12.5 mb higher than the same month in 2023, but 2.8 mb below the latest five-year average. Higher consumption in the region was behind the product stock draw.

OECD Europe

OECD Europe's total commercial stocks rose in August by 7.7 mb, m-o-m, to settle at 946 mb. This is 4.9 mb higher than the same month in 2023, but 28.3 mb below the latest five-year average.

OECD Europe's commercial crude stocks rose by 0.9 mb, m-o-m, to end August at 404 mb. This is 12.5 mb less than one year ago and 17.7 mb lower than the latest five-year average.

Total product stocks also increased by 6.8 mb. m-o-m. to end August at 541 mb. This is 17.4 mb higher than the same time a year ago, but 10.6 mb below the latest five-year average.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose in August by 4.3 mb, m-o-m, to stand at 349 mb. This is 18.5 mb lower than the same time a year ago and 34.4 mb below the latest five-year average.

OECD Asia Pacific's crude stocks rose by 1.5 mb, m-o-m, to end August at 174 mb. This is 11.8 mb lower than one year ago, and 25.9 mb below the latest five-year average.

OECD Asia Pacific's total product stocks also went up by 2.8 mb, m-o-m, to end August at 175 mb. This is 6.7 mb less than one year ago, and 8.5 mb below the latest five-year average.

US

Preliminary data for September 2024 shows that total Graph 9 - 2: US weekly commercial crude oil US commercial oil stocks fell by 3.1 mb, m-o-m, to inventories stand at 1,267 mb. This is 15.4 mb, or 1.2%, lower than the same month in 2023, and 27.0 mb, or 2.1%, below the latest five-year average. Crude and product stocks fell by 1.4 mb and 1.8 mb, m-o-m, respectively.

US commercial crude stocks in September stood at 416.9 mb. This is 0.9 mb, or 0.2%, lower than the same month in 2023, and 21.2 mb, or 4.8%, below the latest five-year average. The monthly draw in crude oil stocks came despite lower crude runs, which decreased by 920 tb/d, m-o-m, to average 16.03 mb/d in September.

Total product stocks also fell in September to stand at 850.1 mb. This is 14.4 mb, or 1.7%, less than in September 2023, and 5.8 mb or 0.7%, lower than the latest five-year average. The product stock draw can be attributed to higher product consumption.





Commercial Stock Movements

Distillate stocks in September decreased by 1.1 mb, Graph 9 - 3: US weekly gasoline inventories m-o-m, to stand at 121.6 mb. This is 2.8 mb, or 2.4%, higher than the same month in 2023, but 11.5 mb, or 8.7%, below the latest five-year average.

Residual fuel oil stocks in September went down by 1.1 mb. m-o-m. At 24.5 mb. they were 3.2 mb. or 11.7%, less than a year earlier and 4.5 mb, or 15.5%, below the latest five-year average.

Jet fuel stocks fell by 1.1 mb, m-o-m, ending September at 45.6 mb. This is 2.2 mb, or 5.0%, higher than the same month in 2023, and 4.4 mb, or 10.6%, above the latest five-year average.

By contrast, gasoline stocks rose in September by 2.0 mb, m-o-m, to settle at 221.2 mb. This is 6.7 mb or 2.9% lower than the same month in 2023, and 3.6 mb. or 1.6%, below the latest five-year average.



Sources: EIA and OPEC.

Table 9 - 2: US commercial petroleum stocks, mb

					Change
US stocks	Sep 23	Jul 24	Aug 24	Sep 24	Sep 24/Aug 24
Crude oil	417.9	427.2	418.3	416.9	-1.4
Gasoline	227.9	224.0	219.2	221.2	2.0
Distillate fuel	118.8	129.6	122.7	121.6	-1.1
Residual fuel oil	27.8	26.1	25.7	24.5	-1.1
Jet fuel	43.5	45.4	46.8	45.6	-1.1
Total products	864.6	858.5	851.9	850.1	-1.8
Total	1,282.4	1,285.7	1,270.2	1,267.1	-3.1
SPR	351.3	375.4	379.7	382.6	2.9

Sources: EIA and OPEC.

Japan

In Japan, total commercial oil stocks in August 2024 rose by 4.3 mb, m-o-m, to settle at 126.5 mb. This is 6.4 mb, or 4.8%, lower than the same month in 2023 and 8.9 mb, or 6.6%, below the latest five-year average. Crude and product stocks rose by 1.5 mb and 2.8 mb, m-o-m, respectively.

Japanese commercial crude oil stocks rose in August Graph 9 - 4: Japan's commercial oil stocks by 1.5 mb, m-o-m, to stand at 68.1 mb. This is 1.7 mb, or 2.4 %, lower than the same month in 2023 and 5.1 mb, or 7.0%, below the latest five-year average.

Gasoline stocks remained unchanged, m-o-m, to stand at 9.5 mb in August. This is 0.2 mb, or 1.7%, lower than a year earlier, and 0.8 mb, or 7.7%, below the latest five-year average.

Total residual fuel oil stocks also decreased, m-o-m, by 0.3 mb to end August at 12.3 mb. This is 1.8 mb, or 12.7%, less than the same month in 2023 and 0.2 mb, or 1.8%, lower than the latest five-year average. Within the components, fuel oil A stocks rose by 0.8%, m-o-m, while fuel oil BC stocks fell by 5.7%, m-o-m





By contrast, middle distillate stocks rose by 3.1 mb, m-o-m, to end August at 28.1 mb. This is 0.5 mb, or 1.9%, lower than the same month in 2023, and 1.6 mb, or 5.5%, lower than the latest five-year average. Within the distillate components, jet fuel stocks fell by 1.6%, while gasoil and kerosene stocks rose by 17.6% and 14.1%. m-o-m, respectively.

					Change
Japan's stocks	Aug 23	Jun 24	Jul 24	Aug 24	Aug 24/Jul 24
Crude oil	69.7	63.3	66.5	68.1	1.5
Gasoline	9.7	10.8	9.5	9.5	0.0
Naphtha	10.8	8.5	8.6	8.5	-0.1
Middle distillates	28.7	25.8	25.0	28.1	3.1
Residual fuel oil	14.1	12.7	12.5	12.3	-0.3
Total products	63.2	57.8	55.6	58.4	2.8
Total**	132.9	121.1	122.2	126.5	4.3

Table 9 - 3: Japan's commercial oil stocks*, mb

Note: * At the end of the month. ** Includes crude oil and main products only. Sources: METI and OPEC.

EU-14 plus UK and Norway

Preliminary data for August 2024 showed that total Graph 9 - 5: EU-14 plus UK and Norway total oil European oil stocks rose by 7.7 mb, m-o-m, to stand stocks at 999.8 mb. At this level, they were 6.0 mb, or 0.6%, higher than the same month in 2023, but 44.5 mb, or 4.3%, beneath the latest five-year average. Crude and product stocks rose by 0.9 mb and 6.8 mb, m-o-m, respectively.

European crude stocks stood at 399.8 mb in August. This is 5.7 mb, or 1.4%, lower than the same month in 2023 and 20.0 mb, or 4.8% less than the latest five-year average. The build in crude oil stocks came despite higher refinery throughput in the EU-14, plus the UK and Norway, which increased by 570 tb/d. m-o-m. to stand at 10.25 mb/d.



Total European product stocks also rose by 6.8 mb, m-o-m, to end August at 600.0 mb. This is 11.7 mb, or 2.0%, higher than the same month in 2023, but 24.5 mb, or 3.9%, below the latest five-year average. The stock build can be attributed to lower demand in the region.

Gasoline stocks fell in August by 0.1 mb, m-o-m, to stand at 104.8 mb, which is 1.8 mb, or 1.7%, higher than the same time in 2023, but 3.7 mb, or 3.4%, lower than the latest five-year average.

Residual fuel stocks in August were down by 0.6 mb, m-o-m, to stand at 62.7 mb. This is 4.2 mb, or 7.1%, higher than the same month in 2023, and 0.7 mb, or 1.1%, above the latest five-year average.

By contrast, middle distillate stocks rose in August by 6.7 mb, m-o-m, to stand at 397.8 mb, This is 3.4 mb, or 0.9%, higher than the same month in 2023, but 27.0 mb, or 6.4%, lower than the latest five-year average.

Naphtha stocks also increased in August by 0.8 mb, m-o-m, ending the month at 34.6 mb. This is 2.4 mb, or 7.4%, higher than the same month in 2023, and 5.5 mb, or 18.7%, above the latest five-year average.

Table 9 - 4: EU-14 plus UK and Norway's total oil stocks, mb

					Change
EU stocks	Aug 23	Jun 24	Jul 24	Aug 24	Aug 24/Jul 24
Crude oil	405.5	408.8	399.0	399.8	0.9
Gasoline	103.1	105.0	104.9	104.8	-0.1
Naphtha	32.2	34.0	33.8	34.6	0.8
Middle distillates	394.4	397.1	391.1	397.8	6.7
Fuel oils	58.6	63.6	63.3	62.7	-0.6
Total products	588.2	599.7	593.2	600.0	6.8
Total	993.7	1,008.5	992.1	999.8	7.7

Sources: OilX and OPEC.

Singapore, Amsterdam-Rotterdam-Antwerp (ARA) and Fujairah

Singapore

In August, total product stocks in Singapore fell by 0.1 mb, m-o-m, to stand at 45.2 mb. This is 4.2 mb, or 10.1%, higher than the same month in 2023, but 0.6 mb, or 1.2%, less than the latest five-year average.

Middle distillate stocks fell in August by 0.3 mb, m-o-m, to stand at 11.0 mb. This is 2.9 mb, or 36.0%, higher than in August 2023 and 0.2 mb, or 2.3%, above the latest five-year average.

Residual fuel oil stocks went down by 1.1 mb, m-o-m, ending August at 18.4 mb. This is 1.4 mb, or 7.2%, lower than in August 2023, and 3.0 mb, or 14.0%, below the latest five-year average.

By contrast, light distillate stocks rose in August by 1.3 mb, m-o-m, to stand at 15.7 mb. This is 2.7 mb or 20.5% higher than the same month in 2023, and 2.2 mb, or 16.1%, above the latest five-year average.

ARA

Total product stocks in ARA in August rose by 2.7 mb, m-o-m. At 46.8 mb, they were 7.0 mb, or 17.7%, above the same month in 2023, and 3.9 mb, or 9.2%, higher than the latest five-year average.

Gasoline stocks fell by 0.5 mb, m-o-m, ending August at 8.5 mb. This is 2.9 mb, or 25.6%, lower than in August 2023 and 1.3 mb, or 13.6%, below the latest five-year average.

Fuel oil stocks decreased in August by 0.5 mb, m-o-m, to stand at 8.5 mb. This is 1.6 mb, or 23.4%, higher than in August 2023 and 1.2 mb, or 15.7%, above the latest five-year average.

By contrast, gasoil stocks in August rose by 3.0 mb, m-o-m, to stand at 18.1 mb. This is 4.2 mb, or 30.4%, higher than the same month in 2023 and 1.7 mb, or 10.2%, above the latest five-year average.

Jet oil stocks also increased by 0.1 mb, m-o-m, to stand at 7.5 mb in August. This is 2.4 mb, or 46.8%, higher than the level seen in August 2023 and 1.2 mb, or 18.1%, above the latest five-year average.

Fujairah

During the week ending 30 September 2024, total oil product stocks in Fujairah rose by 0.37 mb, w-o-w, to stand at 15.0 mb, according to data from FEDCom and S&P Global Commodity Insights. At this level, total oil stocks were 3.57 mb lower than at the same time a year ago.

Light distillate stocks rose by 0.51 mb, w-o-w, to stand at 5.19 mb, which is 0.6 mb higher than a year ago.

Middle distillate stocks also increased by 0.81 mb, w-o-w, to stand at 2.31 mb, which is 0.02 mb below the same time last year.

By contrast, heavy distillate stocks dropped by 0.96 mb, w-o-w, to stand at 7.5 mb, which is 4.15 mb less than the same time a year ago.

Balance of Supply and Demand

Demand for DoC crude (i.e. crude from countries participating in the Declaration of Cooperation) is revised down by 0.1 mb/d from the previous assessment to stand at 42.8 mb/d in 2024. This is around 0.6 mb/d higher than the estimate for 2023.

Demand for DoC crude in 2025 is revised down by 0.2 mb/d from the previous assessment to stand at 43.2 mb/d. This is around 0.5 mb/d higher than the estimate for 2024.

Balance of supply and demand in 2024

Demand for DoC crude

Demand for DoC crude (i.e. crude from countries participating in the Declaration of Cooperation) in 2024 is revised down by 0.1 mb/d from the previous assessment to stand at 42.8 mb/d. This is around 0.6 mb/d higher than the estimate for 2023.

Table 10 - 1: DoC supply/demand balance for 2024*, mb/d

							Change
	2023	1Q24	2Q24	3Q24	4Q24	2024	2024/23
(a) World oil demand	102.2	102.8	103.4	104.7	105.6	104.1	1.9
Non-DoC liquids production	51.8	52.6	53.1	53.1	53.5	53.1	1.2
DoC NGL and non-conventionals	8.2	8.4	8.3	8.2	8.3	8.3	0.1
(b) Total non-DoC liquids production and DoC NGLs	60.1	61.0	61.4	61.3	61.9	61.4	1.3
Difference (a-b)	42.1	41.8	42.0	43.4	43.7	42.8	0.6
DoC crude oil production	42.0	41.2	40.9	40.6			
Balance	-0.2	-0.6	-1.1	-2.8			

*Note: * 2024 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.*

Balance of supply and demand in 2025

Demand for DoC crude

Demand for DoC crude (i.e. crude from countries participating in the Declaration of Cooperation) in 2025 is revised down by 0.2 mb/d from the previous assessment to stand at 43.2 mb/d. This is around 0.5 mb/d higher than the estimate for 2024.

Table 10 - 2: DoC supply/demand balance for 2025*, mb/d

							Change
	2024	1Q25	2Q25	3Q25	4Q25	2025	2025/24
(a) World oil demand	104.1	104.4	104.9	106.6	107.2	105.8	1.6
Non-DoC liquids production	53.1	53.9	53.9	54.2	54.7	54.2	1.1
DoC NGL and non-conventionals	8.3	8.4	8.4	8.3	8.4	8.4	0.1
(b) Total non-DoC liquids production and DoC NGLs	61.4	62.3	62.4	62.5	63.1	62.6	1.2
Difference (a-b)	42.8	42.1	42.6	44.1	44.1	43.2	0.5

Note: * 2025 = Forecast. Totals may not add up due to independent rounding. Source: OPEC.

Appendix

Table 11 - 1: World oil demand and supply balance, mb/d

World oil demand and supply													
balance	2021	2022	2023	1Q24	2Q24	3Q24	4Q24	2024	1Q25	2Q25	3Q25	4Q25	2025
World demand													
Americas	24.0	24.7	25.0	24.4	25.0	25.6	25.4	25.1	24.5	25.0	25.7	25.4	25.2
of which US	19.8	20.2	20.4	19.9	20.5	20.7	20.8	20.5	20.0	20.5	20.8	20.9	20.5
Europe	13.1	13.6	13.4	12.8	13.7	13.7	13.4	13.4	12.9	13.7	13.8	13.4	13.4
Asia Pacific	7.3	7.3	7.2	7.5	7.0	7.0	7.4	7.3	7.5	7.0	7.0	7.4	7.3
Total OECD	44.4	45.6	45.6	44.8	45.7	46.3	46.2	45.8	44.9	45.8	46.5	46.3	45.9
China	15.5	15.0	16.4	16.7	16.7	17.1	17.3	16.9	17.1	17.1	17.5	17.6	17.4
India	4.8	5.1	5.3	5.7	5.7	5.5	5.7	5.6	5.9	5.9	5.7	5.9	5.8
Other Asia	8.7	9.1	9.3	9.7	9.8	9.5	9.5	9.6	10.0	10.1	9.8	9.8	9.9
Latin America	6.2	6.4	6.7	6.7	6.8	6.9	6.9	6.8	6.8	6.9	7.1	7.0	7.0
Middle East	7.8	8.3	8.6	8.7	8.4	9.2	9.0	8.8	8.9	8.6	9.5	9.2	9.1
Africa	4.2	4.4	4.5	4.6	4.3	4.4	4.9	4.5	4.6	4.4	4.5	4.9	4.6
Russia	3.6	3.8	3.8	4.0	3.9	4.0	4 1	4.0	4.0	3.9	4.0	4.2	4.0
Other Furasia	12	12	12	1.3	12	11	1.3	12	14	1.3	1 1	1.3	1.3
Other Europe	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	52.8	54 1	56.6	58.0	57.6	58.4	59.4	58.4	59.5	59 1	60.1	60.8	59.9
(a) Total world demand	97.2	99.7	102.2	102.8	103.4	104.7	105.6	104 1	104 4	104.9	106.6	107.2	105.8
V-o-v change	5.0	2.5	2.6	1.6	1.6	2 1	2 1	1 0	1.6	1 5	1 0	15	1 6
	5.5	2.0	2.0	1.0	1.0	2.4	2.1	1.5	1.0	1.5	1.3	1.5	1.0
Non-DoC liquids production													
Americas	23.5	25.0	26.7	26.9	27.6	27.6	27.7	27.4	27.8	27.9	28.2	28.5	28.1
of which US	18.1	19.4	21.0	21.0	21.8	21.6	21.6	21.5	21.7	22.0	22.2	22.2	22.0
Europe	3.8	3.6	3.7	3.7	3.6	3.6	3.7	3.6	3.8	3.7	3.7	3.8	3.7
Asia Pacific	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Total OECD	27.9	29.1	30.8	31.0	31.6	31.6	31.9	31.5	32.0	32.1	32.4	32.7	32.3
China	4.3	4.4	4.5	4.6	4.6	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.6
India	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Other Asia	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Latin America	6.0	6.3	7.0	7.3	7.2	7.2	7.5	7.3	7.4	7.5	7.6	7.7	7.5
Middle East	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Africa	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Other Eurasia	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Non-OECD	17.6	18.0	18.6	19.0	19.0	18.9	19.1	19.0	19.2	19.3	19.3	19.4	19.3
Total Non-DoC production	45.4	47.0	49.4	50.1	50.6	50.5	51.0	50.5	51.3	51.3	51.6	52.1	51.6
Processing gains	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6
Total Non-DoC liquids production	47.7	49.4	51.8	52.6	53.1	53.1	53.5	53.1	53.9	53.9	54.2	54.7	54.2
DoC NGLs	7.6	8.0	8.2	8.4	8.3	8.2	8.3	8.3	8.4	8.4	8.3	8.4	8.4
(b) Total Non-DoC liquids		0.0	0.2	0	0.0	0.2	0.0	0.0	0.1	0	0.0	0.1	0.1
production and DoC NGLs	55.3	57 4	60 1	61.0	61 4	61.3	61 9	61 4	62.3	62.4	62 5	63.1	62.6
V-o-v change	0.0	2.0	2 7	17	2.0	11	01.5	1 2	1 3	1.0	1 2	1 2	1 2
OPEC crude oil production	0.0	2.0	2.1	1.1	2.0		0.0	1.5	1.5	1.0	1.2	1.2	1.2
(secondary sources)	25.2	27.7	27.0	26.6	26.6	26.5							
Non OPEC DoC orudo production	15.0	15 1	15.0	20.0	20.0	20.5							
Non-OPEC Doc crude production	15.0	10.1	15.0	14.7	14.5	14.1							
Doc crude on production	40.3	42.8	42.0	41.2	40.9	40.6							
I otal liquids production	95.6	100.2	102.0	102.2	102.2	101.9							
Balance (stock change and													
miscellaneous)	-1.6	0.6	-0.2	-0.6	-1.1	-2.8							
OECD closing stock levels, <i>mb</i>													
Commercial	2,652	2,781	2,778	2,768	2,848								
SPR	1,484	1,214	1,207	1,219	1,226								
Total	4,136	3,995	3,984	3,987	4,074								
Oil-on-water	1,348	1,546	1,438	1,460	1,396								
Days of forward consumption in													
OECD, days													
Commercial onland stocks	58	61	61	61	61								
SPR	33	27	26	27	26								
Total	91	88	87	87	88								
Memo items													
(a) - (b)	41.8	4 <u>2.3</u>	42.1	41.8	4 <u>2.0</u>	43.4	4 <u>3.7</u>	42.8	42.1	4 <u>2.6</u>	44.1	44.1	43.2
Neter Tetele men net edd yn dy'r te indenen	dent very d	1											

Note: Totals may not add up due to independent rounding.

Source: OPEC.

https://www.nytimes.com/2024/10/20/world/middleeast/israel-saudi-arabia-iran-gulf.html

A Mideast Shift Is Underway, Without Israel

2024-10-20 09:01:57.302 GMT

By Maria Abi-Habib and Ismaeel Naar

(New York Times) -- Before Hamas's Oct. 7 attacks, Saudi Arabia was open to forging stronger ties with the Israelis. Now, a year into the war in Gaza, it is warming up to its traditional enemy, Iran.

A year ago, Saudi Arabia was preparing to recognize Israel in a normalization deal that would have fundamentally reshaped the Middle East and further isolated Iran and its allies while barely lifting a finger to advance Palestinian statehood.

Now, that deal is further away than ever, even after the killing of the Hamas leader, Yahya Sinwar, which has been widely seized upon as a potential opening for a peace deal. Instead, Saudi Arabia is warming relations with its traditional archenemy, Iran, while insisting that any diplomatic pact now hinges on Israel's acceptance of a Palestinian state, a remarkable turnaround for the kingdom.

A diplomatic détente is underway in the Mideast, but not the one envisioned by the Israeli prime minister, Benjamin Netanyahu, who continues to say that his administration can clinch a deal with Riyadh. This month, the foreign ministers of the Persian Gulf states met for the first time as a group with their Iranian counterpart. It is a shaky, early-stage rapprochement that will only chip away at centuries of sectarian antagonisms, but it represents a sharp shift in a region where the rivalry between Riyadh and Tehran has drenched the region in bloodshed for decades.

Tehran's outreach continued after that, with the Iranian foreign minister, Abbas Araghchi, visiting Saudi Arabia before heading to other countries in the region, including Iraq and Oman, in an effort to ease tensions. He also visited Jordan before traveling to Egypt and Turkey. The visit to Egypt was the first by an Iranian foreign minister in 12 years, according to the Iranian news media.

"In the region, we now have a common grievance about the threat of the war spreading, and the wars in Gaza and Lebanon and the displaced people," Mr. Araghchi said on Friday, when he landed in Istanbul. While Mr. Netanyahu continues to reject the creation of a Palestinian state, Saudi officials have taken to newspapers and public speeches to put a two-state solution on the negotiating table. That, the kingdom has said, is the only way at this point for Israel to win favor with Saudi Arabia, largely seen as the leader of the Arab world.

What changed? Images started streaming out of Gaza of children buried alive under rubble, mothers grieving over their dead babies and Palestinians starving because Israel had blocked aid from entering the territory — all of which made it impossible for the Saudi leadership to ignore the issue of Palestinian statehood.

"What Gaza has done is set back any Israeli integration into the region," said Ali Shihabi, a Saudi businessman who is close to the monarchy and sits on the advisory board of Neom, a futuristic city that is the pet project of Crown Prince Mohammed bin Salman, the kingdom's future ruler. "Saudi Arabia sees that any association with Israel has become more toxic since Gaza, unless the Israelis change their spots and show a real commitment to a Palestinian state, which they have refused to do."

For now, Saudi Arabia and its Gulf partners remain skeptical about the sincerity of Iran's diplomatic overtures. While two of Iran's proxies, Hamas and Hezbollah, have been hammered by Israel, Iran still arms and supports its third ally, the Houthis in Yemen, which have attacked Saudi Arabia.

But "as long as the Iranians are reaching a hand out to Riyadh, the Saudi leadership will take it," said Mr. Shihabi, adding that, if Iran is serious, "that would be a true realignment of the Mideast."

Saudi Arabia and Iran have long jockeyed for regional dominance, a rivalry shaped by the competing branches of Islam each country embraces.

The war in Gaza has been raging for over a year, started after Hamas launched a bloody attack on Oct. 7, 2023, that killed some 1,200 Israelis and kidnapped over 200 more. That prompted Israel to launch an invasion of Gaza that has been criticized for its indiscriminate bombing and catastrophic death toll: over 40,000 dead, many of them civilians.

And while palace insiders like Mr. Shihabi admit that Saudi Arabia is no democracy, <mark>Prince Mohammed is sensitive to public opinion, which has hardened</mark> toward Israel over the past year. The Gulf region has one of the world's youngest populations; the average age of Saudis was 29 in 2022. Many of its citizens are transfixed by the endless stream of horrific images coming out of Gaza on their social media feeds, changing many of their once positive, or at least ambivalent, attitudes toward a deal with Israel.

In the months before Oct. 7, Saudi Arabia was planning an agreement with Israel that would have given Riyadh an expanded defense pact with the United States and support for a civilian nuclear program in exchange for normalizing ties. While some other Gulf countries opened diplomatic relations with Israel in 2020 in a deal known as the Abraham Accords, they did not use their leverage to push Israel to create and recognize a Palestinian state.

While Riyadh has long been a vociferous supporter of a two-state solution, that goal became less of a foreign policy priority in recent years, as the crown prince solidified his power and shaped the nation's regional and domestic policies. In last year's talks to normalize ties with Israel, a Palestinian state was never raised as a condition. Instead, Riyadh demanded that Israel allow for the Palestinian Authority — which governs the West Bank — to expand its territorial control and power, according to Mr. Shihabi and Arab diplomats with knowledge of the talks.

But the situation in Gaza has upended that ambivalence.

In his first public comments advocating for a Palestinian state, Crown Prince Mohammed was unequivocal about Riyadh's new demands.

"The kingdom will not cease its tireless efforts to establish an independent Palestinian state with East Jerusalem as its capital, and we affirm that the kingdom will not establish diplomatic relations with Israel without one," the crown prince said on Sept. 18 to his senior advisory council, in a speech akin to the akin to the U.S. State of the Union address.

The Abraham Accords have been criticized for not delivering the peace to the region promised by former President Donald J. Trump, whose administration brokered the deal. None of the Arab states that signed on have fought a war with Israel in decades, and the deal did not include Iran and Syria, which are in active conflict with Israel.

The historic meeting between Iran and the Gulf countries this month came a day after Tehran launched 180 ballistic missiles at Israel. The attack was revenge

for last month's killing of Hassan Nasrallah, the leader of Hezbollah, and the assassination of Hamas's political chief, Ismail Haniyeh, earlier this year, key Iranian allies.

Observers wonder if Iran is now more eager to thaw relations with the Gulf because of Israeli operations that have killed most of Hezbollah's top leadership in recent weeks. The Lebanese militia has long been Iran's most powerful Arab ally and proxy, long feared by Israel and the linchpin in Tehran's efforts to project its power across the Mideast. It also provided a bulwark against Israel for Iran. Without Hezbollah, Tehran is severely weakened.

The war in Gaza has also forced countries that have signed on to the Abraham Accords to start advocating for Palestinian statehood, possibly because they worry about public opinion at home.

While the United Arab Emirates, the Gulf's second-most powerful player, has maintained links to Israel over the last year, the relationship has come under increasing stress.

"The United Arab Emirates is not ready to support the day after the war in Gaza without the establishment of a Palestinian state," the Emirati foreign minister, Sheikh Abdullah bin Zayed, said last month, referring to Israel's demands that the U.A.E. shoulder the burden of rebuilding Gaza after the war ends.

While Mr. Netanyahu continues to claim that a monumental deal is in the works with Riyadh, Saudi officials have pushed back, highlighting the widening divide between their nations.

"The Abraham Accords were cosmetic; there was nothing substantive about them when it comes to a real, enduring regional peace agreement. Many of the states that signed on did so because they see Israel as a path to influence in Washington," Mr. Shihabi said.

"But now we see that the U.S. has no power or influence over Israel — to a humiliating degree," he added, "and that the Israelis have no intention to create a Palestinian state."

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Crown Prince: No ties with Israel without establishing Palestine State

Shoura Council speaker and members take oath of office September 18, 2024

Crown Prince and Prime Minister Mohammed bin Salman addressing the Shoura Council in Riyadh on Wednesday.

Saudi Gazette report

RIYADH — Crown Prince and Prime Minister Mohammed bin Salman reaffirmed that Saudi Arabia will not establish diplomatic relations with Israel without the establishment of an independent Palestinian state with East Jerusalem as its capital.

He announced this while inaugurating, on behalf of Custodian of the Two Holy Mosques King Salman, the activities of the first year of the ninth session of the Shoura Council in Riyadh on Wednesday. Shoura Council Speaker Sheikh Abdullah Al-Sheikh and members of the Council, who were appointed to the ninth session of the Council recently by a royal order, took the oath of office before the Crown Prince.

Delivering the annual address of the King at the Shoura Council, the Crown Prince outlined salient features of the domestic and foreign policies of Saudi Arabia. He reiterated that the Palestinian issue is at the forefront of Saudi Arabia's concerns. "We renew the Kingdom's rejection and strong condemnation of the crimes of the Israeli occupation authority against the Palestinian people, ignoring international and humanitarian law in a new and bitter chapter of suffering. The Kingdom will not stop its tireless work towards the establishment of an independent Palestinian state with East Jerusalem as its capital, and we affirm that the Kingdom will not establish diplomatic relations with Israel without that," he said while extending thanks to the countries that recognized the Palestinian state, saying that this is an embodiment of international legitimacy. He urged the rest of the countries to recognize Palestine.

During the speech, the Crown Prince highlighted the remarkable progress and achievements made by Saudi Arabia on the domestic front. "As we are on the threshold of a new session of the Shoura Council, we emphasize the importance of the Council's role in improving the performance of state institutions, and its effective role in developing and modernizing systems, in addition to its oversight tasks and continuous follow-up of the implementation of approved strategies and plans. Since the launch of the Kingdom's Vision 2030, the citizen has been our focus, as he is its pillar and goal, and any achievement made through its comprehensive umbrella of various paths is an elevation for the homeland, a benefit for the citizen, and immunity for future generations from fluctuations and changes," he said.

"We meet you today after we have completed parts of this journey with steady steps and continuous work, in which we are proud of achieving many targets at the national and international levels, and the Kingdom has advanced degrees in international indicators and classifications. We are moving forward with optimism and confidence in continuing the journey to achieve our targets, according to a comprehensive and integrated approach based on careful review and prioritization," he said.

The Crown Prince said that Saudi Arabia has achieved many remarkable accomplishments during this

great journey, and among the examples of these non-oil activities in the Kingdom, saying that it recorded its highest contribution to the real GDP at 50 percent last year, which enhanced the sustainability and comprehensiveness of growth and achieved high quality in economic diversification. The Public Investment Fund continues its role in achieving its goals to be a driving force for investment, and unemployment among citizens, both male and female, recorded its lowest historical level in the first quarter of 2024, reaching 7.6 percent after its rate was 12.8 percent in 2017.

The Crown Prince noted that the percentage of home ownership for citizens increased from 47 percent in 2016 to more than 63 percent. In the field of tourism, achievements preceded the target date, as the National Tourism Strategy, launched in 2019, set a target of 100 million tourists in 2030, and this target was exceeded and reached 109 million tourists in 2023, and the Kingdom achieved the 16th rank among the most competitive countries. "With the exploration of natural resources, the Kingdom has become one of the largest natural resource stores in the world, and your country has also achieved an advanced position in the field of renewable energy, and has become one of the most active in it regionally and internationally," he said.

"Today, as a result of its achievements and vision, the Kingdom enjoys global confidence that has made it one of the first destinations for global centers and major companies, most not ably the opening of the regional center of the International Monetary Fund, and centers for various international activities in sports, investment, and culture, and a gateway for cultural communication, which contributed to its selection to host Expo 2030, and today it is preparing to organize the World Cup in 2034."

"We are proud of the achievements of our citizens in the fields of innovation and science, and we pay great attention to education to be of a quality that enhances knowledge and innovation, and we work to build generations that enjoy scientific excellence and high skills, and have every opportunity to obtain a high-quality education." The Crown Prince reiterated that Saudi Arabia is keen on protecting its distinct identities and sublime values. "We affirm that while we proceed on the paths of modernization and diversity, we are keen to protect our identity and values, which are an extension of the journey of our grandfathers and fathers, and are our insightful image in the entire world.

Outlining the Kingdom's foreign policy, the Crown Prince said that Saudi Arabia is keen to cooperate with all active countries in the international community. "We are convinced that what protects humanity and preserves its civilizational values is the joint pursuit of a better future based on fruitful cooperation between countries and peoples, respecting the independence and values of countries, adopting the principle of good neighborliness, non-interference in their internal affairs, and avoiding resorting to force in resolving disputes. The Kingdom also seeks to enhance regional and international security and peace by making efforts to reach political solutions to crises in Yemen, Sudan, Libya and other countries as well as supporting solutions to international crises such as the Russian-Ukrainian crisis," he added.

In his speech Shoura Council Speaker Al-Sheikh briefed on the major achievements made by the Council during its eighth session. He also highlighted the remarkable growth and progress Saudi Arabia is witnessing in all spheres of life.

uncertainties that could cause our results to differ materially from those projected in these statements.

For more information, please refer to our latest 10-K filing and other SEC filings which can be found which can be found on our website. Our comments today also include non-GAAP financial measures. Additional details and reconciliations to the most directly comparable GAAP financial measures can be found in our third quarter press release, which is on our website. And finally, in conjunction with our proposed acquisition, SLB and ChampionX have filed materials with the SEC, including a registration statement with a proxy statement and prospectus.

These materials can be found on the SEC's website or from the parties' websites. With that, I will turn the call over to Olivier.

Olivier Le Peuch {BIO 16885975 <GO>}

Thank you, James. Ladies and gentlemen, thank you for joining us this morning.

During the call, I will cover a few topics. I will start by reviewing our third quarter results. Then I will discuss how we are leveraging our differentiated market positioning, digital leadership, and operating efficiency to navigate the evolving macro environment. And finally, I will provide an update on our full year financial ambitions and our early outlook for 2025.

So far, we then provide additional details on our financial results, and we'll open the line to your questions. Let's begin. SLB delivered strong third quarter results with continued margin expansion. Sequentially, although revenue was flat, we expanded our adjusted EBITDA margin by more than 50 basis points to 20.5%, 20.6% by driving efficiencies throughout the business, and we generated very strong free cash flow of \$1.81 billion.

In international markets, revenue remains steady sequentially despite lower reactivity as commodity prices resulted in a more cautious approach to discretionary short cycle spending. Demand for SLBs, digital products, and services continued to accelerate, and we saw continued growth in the Middle East and Asia fueled by all capacity expansions and strong gas activity as well as offshore products. Meanwhile, revenue in Europe and Africa was largely unchanged. A strong production and recovery activity in North Africa was offset by a decline in Latin America following a strong second quarter.

Turning to North America, revenue increased 3% sequentially as higher offshore activity in the Gulf of Mexico was partially offset by lower drilling activity in US Land as the market remained constrained by gas prices and ongoing capital discipline by operators. Next, let me touch on the performance of the divisions. In digital and integration, we delivered strong sequential growth led by our digital business, which reached a new quarterly revenue high. We also continued to increase profitability, expanding our pre-tax segment operating margins to 36% driven by our digital revenue and cost optimization.

Overall, our digital business remained on pace to achieve full year to achieve full year revenue growth in the high teens. And we announced a number of exciting new products and partnership during the quarter that I will discuss a little later in today's call. Turning to the core

divisions, production system continues to grow, benefiting from long cycle development activity, particularly in the Middle East and Asia and in the Gulf of Mexico. I was proud to see that most production system business lines contributed to this performance as we continue to secure sizable bookings while also increasing our backlog for the future.

As our performance remains steady, supported by stable production and recovery spending, and while construction declined slightly due to weaker land activity in North America and international markets. Overall, these results demonstrate SLB's unique ability to navigate the evolving market by leveraging our differential international and offshore positioning, our broad technology portfolio, and our continued focus on capital discipline and operating efficiency. I want to thank the SLB team for continuing to deliver for our customers and shareholders in this dynamic environment. I'm extremely proud of their contribution and dedication to our performance strategy.

Next, I wanted to share some updates on our progress in digital. We delivered another quarter of strong digital growth as operators continue to increase their investment in digital technology to reduce cycle times and risk, enhance productivity, lower cost and carbon, and accelerate returns. This is presenting opportunities for high margin growth. And we have taken a leading role in this space, partnering with our customers to accelerate their transition to the cloud, scaling new technology for drilling and production operations, and creating new markets by delivering disruptive solutions for data and AI As part of this journey, we hosted a digital forum in September where we brought more than 1,000 customers and partners to innovate solutions and shape our shared digital future.

During this event, we launched the Lumi data and AI platform, which will accelerate advanced data and generative AI capabilities at scale for SLB customers across the energy value chain. Today, we offer approximately 150 AI and machine learning capabilities across our product and solutions. And we continue to work for customers and partners to innovate and deploy new ones. We also unveiled a number of cross-industry announcements during the forum.

This includes a collaboration with NVIDIA to develop generative AI solutions for energy, as well as a partnership with Amazon Web Services to expand access to applications from the Delphi platform and to evaluate decarbonization solutions for Amazon digital infrastructure. Each of these agreements helps to expand our capability set and positions SLB as a key partner in digital and sustainability across the industry. Next, let me discuss the macro environment. environment.

Over the past few months, community prices have been under pressure. This is largely due to concern of an oversupplied market, driven by higher output from non-OPEC plus producers, uncertainty around OPEC plus supply releases, weaker demand from China, and softer economic growth rates in the US And Europe. This has resulted in a cautionary approach to activity and discussion is spent by many customers as highlighted in our third quarter results. Despite these evolving market conditions, we believe the long-term fundamental for oil and gas remains in place.

Demand for energy is increasing, and energy security remains a global priority, as witnessed by recent community prices fluctuations tied to geopolitical tensions in the Middle East. In this

environment, gas will continue to play an increasing role in the energy transition, while oil remains a large part of the energy mix for decades to come. Internationally, gas investment remains strong, particularly in Asia, the Middle East, and the North Sea, and is expected to grow regardless of OPEC plus decisions on oil production. Meanwhile, whereas short-cycle oil investment has been more challenged, long-cycle deepwater projects globally, and most capacity expansion projects in the Middle East remain economically and strategically favorable.

Specific to North America, we do not see US Activity rebounding in the near term, and any potential increases in gas rigs could be quickly offset by a further decline in oil rigs due to increased operating efficiency. Overall, we expect this to result in a sustained level of global upstream investment in the years to come, with the secular trends of digital and industry decarbonization extending the investment horizon. SLB is well positioned to navigate in this evolving macro environment to our differential portfolio and multi-pronged strategic approach across core, digital, and new energy. With that background, let me conclude my opening remarks by sharing our outlook for the full year 2024 and our early thoughts regarding 2025.

Specific to the fourth quarter, we expect muted revenue growth with a favorable mix of yearend digital and product sales, partially offset by E&P budget exhaustion in US Land, and cautious discussion expanding from certain international customers. And with continued cost optimization, we anticipate we will deliver EBITDA margin expansion in the fourth quarter. For the full year 2024, ongoing margin expansion will enable us to deliver full-year adjusted EBITDA margins at or above 25%. Additionally, our strong cash flows, coupled with the announced sale of our Palliser asset in Canada, will support increased returns to our shareholders.

In 2025, we see the potential for upstream spending in the international market to grow in the low to mid-single digits, while North while North America's spending will be flat to slide it down. This directional outlook will depend on the geopolitical environment and community prices and will be shared and updated during January after we receive more feedback on customer budget. In conclusion, SLB remains well positioned to deliver strong financial results as an optimized cost structure, portfolio rationalization, differential exposure to key international and offshore markets, and digital leadership which support further margin expansion, higher cash generation, and increased returns to shareholders. I will now turn the call over to Stephane.

Stephane Biguet {BIO 18640415 <GO>}

Thank you, Olivier, and good morning, ladies and gentlemen. Third quarter earnings per share, excluding charges and credits, was \$0.89. This represents an increase of \$0.04 sequentially and \$0.11, or 14%, when compared to the third quarter of last year. During the quarter, we recorded \$0.02 of merger and integration charges relating to the Aker, Subsea, and ChampionX transactions and \$0.04 of charges in connection with the program we started last quarter to realign and optimize the support and service delivery structure in certain parts of our organization.

Overall, our third quarter revenue of \$9.2 billion was essentially flat sequentially. However, the third quarter represented another quarter of both sequential and year-on-year margin expansion, despite revenue growth rates moderating. These improvements were driven by very strong digital and integration margins combined with the effect of the cost optimization

A - Olivier Le Peuch {BIO 16885975 <GO>}

Thank you, James.

Operator

Our next question we have is from David Anderson with Barclays. Please go ahead.

Q - J David Anderson {BIO 16441072 <GO>}

Hi. Good morning, Olivier.

A - Olivier Le Peuch {BIO 16885975 <GO>}

Good morning.

Q - J David Anderson {BIO 16441072 <GO>}

So your customers are being more cautious, though you're saying larger projects are still moving ahead.

It seems pretty clear the cycle is kind of plateauing here. International spending you're saying now is low, mid to single digits next year. But if we look at the prior cycle, the second half of that was really driven by sustained deep water development. So my question is, do you think deep water can once again be a driver of growth, say beyond '25? We have something like \$300 billion in FIDs the last few years.

You just announced a slew of Petrobras awards today, and now you have Namibia and Suriname on the horizon. So my question is, is that enough to drive growth's overall spending higher, or is it just really a function of the oil prices need to structurally improve in order to kind of get this cycle kind of re-accelerated?

A - Olivier Le Peuch {BIO 16885975 <GO>}

Yeah, I think you have seen the realization that when community price is under pressure, there is some pressure on short cycle that is suppressed, and that may come back and will come back as soon because it impacts in-field drilling, it impacts intervention activity, it impacts short cycle and commercial in some regions. But it will most likely come back as soon as the community price regains traction. But the long cycle, apart from some decision on timing and project execution, have been untouched, and we have had a year of strong exploration activity that has unlocked new reserves that a new reserve that has appraised a new future pipeline of deepwater, as you have heard and seen across the Americas, across South Africa, across the East Mediterranean and across Asia where gas is critical.

And the combination of these, as you know, is representing every year. This year, I think the total offshore FID will approach \$100 billion, and we expect that this rate of \$100 billion FID for

Stephane, how would the financials be impacted by the Palliser sale? How much EBITDA comes out and how much CapEx comes out?

A - Stephane Biguet {BIO 18640415 <GO>}

Yeah, so we, on Palliser, we generate approximately \$500 million of revenue per year on the asset, and this comes with pre-tax margins in the high 30s. Now you mentioned something very important, it also removes quite a bit of investment that we need to inject every year to maintain this number, so the CapEx is about \$150 million per year. And as I mentioned as well in my prepared remark, something not to underestimate is removing future abandonment liabilities, which discounted are about \$280 million, but undiscounted are close to \$1 billion, so that's, it's a good thing this is going away from our balance sheet and NTL P&L, and it will reduce both earnings volatility and capital intensity.

Q - Scott Gruber {BIO 6761975 <GO>}

Appreciate the colar, thank you.

A - Olivier Le Peuch {BIO 16885975 <GO>}

Thank you.

A - Stephane Biguet {BIO 18640415 <GO>}

Thank you.

Operator

Next we go to Arun Jayaram with JP Morgan, please go ahead.

Q - Arun Jayaram {BIO 5817622 <GO>}

Yeah, good morning, Olivier, you framed that you're seeing a little bit of cautiousness in some of the short cycle markets, North America, international oil, with some resiliency and long cycle gas and deep water opportunities.

I was wondering how, if you could, how would you characterize the price, the current pricing dynamics internationally, just relative to your expectations of margin expansion from here?

A - Olivier Le Peuch {BIO 16885975 <GO>}

I think we believe that the pricing environment is still positive, constructive, I would say. I think first realizing that the industry is capital discipline, and the industry has no spare capacity to move and to place, and as a consequence, performance, technology, and integration capabilities still give us opportunity to support our pricing. And I don't see it in the current environment changing very much.

Q - Arun Jayaram {BIO 5817622 <GO>}

Fair enough.

I had a follow-up on new energy. You guys press release an update on your lithium DLE pilot in the quarter Nevada, which highlighted a very high kind of recovery rate. I was wondering if you could talk about, Olivier, the next steps to commercialize this technology. How competitive are the extraction costs today versus existing technologies? I was wondering if you could just maybe frame the growth opportunity from lithium.

A - Olivier Le Peuch {BIO 16885975 <GO>}

Well, as you pointed out, I think first we are very pleased to have achieved these milestones. Again, the milestone has been to produce lithium carbonate from our demonstration plant in Nevada using a direct lithium using a direct lithium extraction from brine and using a concentration and purification process that we have integrated with our own IP and using some external technology and putting this together and working for months to tune it, to digitally optimize it, and to realize this. So our plan forward is to work with prospective partners and customers to see how this technology can be used and scaled to respond to big demands that exist and some plans that some of our customers and partners have announced to use DLE as a method to extract lithium and produce it in large quantity in the coming years. So we are looking forward to use this technology to scale it for application as a licensed technology or as a partner where we will develop and run going forward this technology with our customers and partners.

That's the way we look into it. And again, very good first and benchmark performance for such a DLE plant and exciting prospect, long-term prospect for us in this new space.

Q - Arun Jayaram {BIO 5817622 <GO>}

Great. Thanks a lot.

A - Olivier Le Peuch {BIO 16885975 <GO>}

Thank you.

Operator

And our next question comes from Neil Mehta with Goldman Sachs. Please go ahead.

Q - Neil Mehta {BIO 16213187 <GO>}

Yeah, good morning, team.

A couple of financial questions. Maybe as we think about 2025 over the summer, you had talked about that \$10 billion EBITDA target for 2025 on the 20% CAGR Just in light of some of

made in the past already, now it's just enriching the platform and supporting the enriched offering for the customer.

Q - Analyst

Great, appreciate it, thanks.

A - Olivier Le Peuch {BIO 16885975 <GO>}

Thank you.

Operator

And our last question will come from Stephen Gengaro with Stifel. Please go ahead.

Q - Stephen Gengaro {BIO 1506867 <GO>}

Thanks. Good morning, everybody.

A - Olivier Le Peuch {BIO 16885975 <GO>}

Good morning, Stephen.

Q - Stephen Gengaro {BIO 1506867 <GO>}

Two for me.

The first, just sort of thinking about the short-term in the fourth quarter, can you talk a little bit about sort of the puts and takes as we look at the fourth quarter and maybe even versus sort of normal seasonality that we get every year? And I'm just also curious on the Gulf of Mexico if there's been any big impact from the storm activity.

A - Olivier Le Peuch {BIO 16885975 <GO>}

I'm not sure we got your second question you're concerned about, the second part of your question.

Q - Stephen Gengaro {BIO 1506867 <GO>}

Whether there's been much impact from the Gulf of Mexico storms.

A - Olivier Le Peuch {BIO 16885975 <GO>}

So I'll start with this to say that we have seen muted impact on the Gulf of Mexico storm operation and the Gulf of Mexico has been the driver for growth in the third quarter sequentially.

10/16/2024 05:27:40 [BN] Bloomberg News

OIL DEMAND MONITOR: Market Watchers Reduce Their Growth Outlooks

OPEC makes big cut to 2024 forecast, but focuses on first half Producer group still sees much bigger demand growth than peers

By Julian Lee and John Deane

(Bloomberg) -- The leading oil agencies have updated their outlooks - and all three have cut their forecasts for demand growth for this year. Big differences remain between the views of producers and consumers.

The most substantial cut was made by the Organization of Petroleum Exporting Countries, which reduced its assessment of incremental demand in 2024 by about 100,000 barrels a day. The International Energy Agency and the US Energy Information Administration made smaller reductions of 40,000 barrels and 30,000 barrels respectively.

It's notable that the cuts made by OPEC – which had been slower than its peers to trim forecasts – are heavily weighted to the first half of the year, where actual data for an increasing number of countries is becoming available.

The producer group cut its assessment of first-quarter 2024 demand growth by another 90,000 barrels a day, following even bigger reductions in each of the previous two months.



The group now sees first-quarter demand growth at 1.41 million barrels a day, almost 700,000 barrels a day lower than it thought in July. It cut its second-quarter growth figure by 430,000 barrels a day over the same period.

In stark contrast, the figure for the just-ended third quarter has been reduced by only 170,000 barrels a day since the July forecast, while growth in the current quarter is virtually unchanged.



OPEC's annual average demand growth estimate of 1.93 million barrels a day for this year is still more than twice that seen by either the EIA, at a little over 900,000 barrels a day, or the IEA, at 860,000 barrels a day.

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The producer group remains more optimistic for next year as well. It sees oil use worldwide rising by 1.63 million barrels a day, compared with about 1,3 million forecast by the EIA and growth of 1 million seen by the IEA.

DEMAND BY COUNTRY:

Demand Measure	Location	S ys. 2023	16 ye 2022	16.vii 2021	% vi 2020	38 vs 2019	.m/m.ekg	Freq	Larest Date	Latest Value	Šource:
Gasoline product supplied	US	12.5	16.7	2.4	8.5	2.1	13.9	w	Oct. 4	9.65m b/d	EIA
Distillates product supplied	US	9.8	-7.8	-7.7	4.2	-0.1	13.3	w	Oct. 4	4.03m b/d	EIA
Jet fuel product supplied	US	14.4	11.9	0.8	88.2	-3.6	14.0	w	Oct. 4	1.71m b/d	ÉIA
Total oil product supplied	US	7.7	9.9	-1.6	15.5	-1.1	9.3	w	Oct, 4	21.19m b/d	EIA
Total products consumption	India	-1.6	6.2	14.8	18.4	10.7	-2.7	m	September	17.92m tons	PPAC
Diesel sales	India	-1.8	1.9	15.6	16.3	9.2	-2.0	m	September	6.37m tons	PPAC
Gasoline sales	India	3.0	11.4	21.2	28.5	32.7	-6.3	m	September	3.15m tons	PPAC
Jet fuel sales	India	10.4	22.6	77.4	131.8	8 11.1	-0.8	m	September	726k tons	PPAC
LPG sales	India	1.6	6.1	10.0) 14.0	5 19.7	-2,3	m	September	2.59m tons	PPAC
Car use index	υĸ	0.0	2.1	5.5	5 11.0	6 -4	-2.0	m	Oct. 7	96	DfT
Heavy goods vehicle use index	UK	0.9	2.9	9 -0.9	9 1.	9 +{	3 0.0) m	Oct. 7	108	DfT
All motor vehicle use index	UK	1.0	9 4.	1 6.3	3 12.	1 +:	2 -1.0) m	Oct. 7	102	DfT
Gasoline (petrol) avg sales per filling station	UK	4.8	87.	7 -24.	5 12.	4 1.	1, 3.:	3 q	Week to Sept. 29	7,265 liters/day	BEIS
Diesel avg sales per station	UK	-1.	7 -5.	8 -33.	1 -10.	2 -17.	4 9.1	2 9	Week to Sept. 29	8,597 liters/day	BEIS
Total road fuels sales per station	UK	1.	2 -0.	0 -29.	4 -1.	1 -9.	9 6.	4 q	Week to Sept. 29	15,862 liters/day	BEIS
Road fuel sales	France	-2.	6					m	Septembe	3.89m m3	UFIP
Gasoline sales	France	3.	1					m	Septembe	r n/a	UFIP
Road diesel sales	France	-4.	9					m	Septembe	r n/a	
Jet fuel sales	France	+4.	8					m	Septembe	729k m3	UFIP
All petroleum products	France	+2.	9					m	Septembe	4.71m tons	UFIP
Gasoline deliveries	Spain	+12.	9					m	Septembe	607k m3	Exolum

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Diesel (and heating oil) deliveries	Spain	+11.7			m	September	2,381k m3	Exolum
Jet fuel deliveries	Spain	+13.2			m	September	748k m3	Exolum
Total oil products deliveries	Spain	+12.7			m	September	3,735k m3	Exolum
% change y/y in toll roads kms traveled	France	-3.0			m	September	n/a	Mundys
% change y/y in toll roads kms traveled	Italy	-2.1			m	September	n/a	Mundys
% change y/y in toll roads kms traveled	Spain	5.1			m	September	n/a	Mundys
% change y/y in toll roads kms traveled	Brazil	3.2			m	September	n/a	Mundys
% change y/y in toll roads kms traveled	Chile	0.6			m	September	n/a	Mundys
% change y/y in toll roads kms traveled	Mexico	4.9			m	September	n/a	Mundys

Click here for data on Portuguese fuels consumption

Click here for Anas data on Italy traffic levels
Click here for BNEF story on China road traffic indicators

READ: India's September Oil Products Consumption Lowest in 24 Months
 READ: Italy's Jet Fuel Sales Hit Two-Decade Seasonal High in August

• Click here for data



China's Monthly Crude Imports (Millions of Tons), from CGA

• READ: China Oil Imports Slowed in September on Weak Margins, Repairs

NOTE: Click here for more on sources

AIR TRAVEL:

Measure	Location	vs 2023	vs 2022	vs <u>202</u> 1	es 2020	vs 2019	m/m	w/w	Freq	Latest Date	Lates Value	Source
All flights	Worldwide	5.5	13.4	22.0	57.2	18.0	-1.5	-2.0	d	Oct. 14	231,211	Flightradar 24

Commercial flights	Worldwide	4.9	23.3	39,2	91.2	11.2	-1.2	-1.7	d	Oct. 14	131,480	Flightradar 24
Airport passenger throughput (7 – day avg)	US	-2.3	8.3	30.4	187.6	0.8	6.1	1.5	d	Oct. 14	2.47m	TSA
Seat capacity	Worldwide						-0.8	-0.7	w	Oct. 14 week	115.7 million	OAG
Air traffic (flights)	Europe	3.9	11.8	35.5	126.7	-1,7	-6.3	-1.1	d	Octa 14	31,508	Eurocontrol
Heathrow monthly passengers	UK	3.0	26.1	183.4	479.9	7.5	-8.6		m	September	7.29 million	Heathrow

READ: Global Jet-Fuel Demand to Grow 45% by 2040, Goldman Sachs Says









• READ: Aviation Indicators Weekly: Jet Consumption Largely Stable

REFINERIES:

Measure	Location	vs 2023	vs 2022	vs 2021	vs 2019	m/m chg	Latest as of Date	Latest Value	Source
Crude intake	US	2.5	-0.6	-1.0	-0.4	-7.0	Oct. 4	15,590	EIA
Utilization	US	1.0	-3.2	-2.9	1.0	-6.1	Oct, 4	86.7	EIA
Utilization	US Gulf	2.3	-3.4	0.0	1.1	-4.6	Oct. 4	88.5	EIA
Utilization	US East	13.2	-7.2	-4.8	23.6	-1.9	Oct. 4	84.3	EIA
Utilization	US Midwest	-1.9	-8.0	-10.0	-3.4	-11.4	Oct. 4	84	EIA



• NOTE: US refinery data is weekly. Changes are shown in percentages for the row on crude intake (millions of barrels a day), while changes in refinery utilization percentages are shown in percentage points.

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--With assistance from Prejula Prem and Bill Lehane.

To contact the reporters on this story: Julian Lee in London at jlee1627@bloomberg.net; John Deane in London at jdeane3@bloomberg.net

To contact the editors responsible for this story: John Deane at jdeane3@bloomberg.net Brian Wingfield

Geopolitical tensions and fragmentation are major risks for energy security and for coordinated action on reducing emissions

Escalating conflict in the Middle East and Russia's ongoing war in Ukraine underscore the continued energy security risks that the world faces. Some of the immediate effects of the global energy crisis had started to recede in 2023, but the risk of further disruptions is now very high. The experience of the last few years shows how quickly dependencies can turn into vulnerabilities; a lesson that applies also to clean energy supply chains that have high levels of market concentration. Markets for traditional fuels and for clean technologies are becoming more fragmented: since 2020, almost 200 trade measures affecting clean energy technologies – most of them restrictive – have been introduced around the world, compared with 40 in the preceding five-year period.

Fragility in today's energy markets is a reminder of the abiding importance of energy security – the foundational and central mission of the International Energy Agency (IEA) – and the ways that more efficient, cleaner energy systems can reduce energy security risks. The increasingly visible impacts of climate change, the momentum behind clean energy transitions, and the characteristics of clean energy technologies are all changing what it means to have secure energy systems. A comprehensive approach to energy security therefore needs to extend beyond traditional fuels to cover the secure transformation of the electricity sector and the resilience of clean energy supply chains. Energy security and climate action are inextricably linked: extreme weather events, intensified by decades of high emissions, are already posing profound energy security risks.

Clean energy transitions have accelerated sharply in recent years, shaped by government policies and industrial strategies, but there is more near-term uncertainty than usual over how these policies and strategies will evolve. Countries representing half of global energy demand are holding elections in 2024, and energy and climate issues have been prominent themes for voters that have been buffeted by high fuel and electricity prices, and by floods and heatwaves. Yet energy policies and climate targets, influential though they are, are not the only forces behind the continued rise of clean energy. There are strong cost drivers, as well as intense competition for leadership in clean energy sectors that are major sources of innovation, economic growth and employment. More than ever, the energy outlook is complex, multifaceted and defies a single view on how the future might unfold.

Robust, independent analysis and data-driven insights are vital to navigate today's energy uncertainties

Reflecting today's uncertainties, our three main scenarios are complemented by sensitivity cases for renewables, electric mobility, liquefied natural gas (LNG) and how heatwaves, efficiency policies and the rise of artificial intelligence (AI) might affect electricity demand. The scenarios and sensitivity cases illustrate different pathways that the energy sector could follow, the levers that decision-makers can use to reach them, and their implications for energy markets, security and emissions, and for people's lives and livelihoods. The Stated Policies Scenario (STEPS) provides a sense of the energy sector's direction of travel today, based on the latest market data, technology costs and in-depth analysis of the prevailing

policy settings in countries around the world. The STEPS also provides the backdrop for the upside and downside sensitivity cases. The Announced Pledges Scenario (APS) examines what would happen if all national energy and climate targets made by governments, including net zero goals, are met in full and on time. The Net Zero Emissions by 2050 (NZE) Scenario maps out an increasingly narrow path to reach net zero emissions by mid-century in a way that limits global warming to 1.5 °C.

Geopolitical risks abound but underlying market balances are easing, setting the stage for intense competition between different fuels and technologies

The next phase in the journey to a safer and more sustainable energy system is set to take place in a new energy market context, marked by continued geopolitical hazards but also by relatively abundant supply of multiple fuels and technologies. Our detailed analysis of market balances and supply chains brings an overhang of oil and LNG supply into view during the second half of the 2020s, alongside a large surfeit of manufacturing capacity for some key clean energy technologies, notably for solar PV and batteries. These provide something of a buffer against further market disruptions, but also imply downward pressure on prices and a period of increased competition among suppliers. The rapid rise in clean energy deployment in recent years came during a period of price volatility for fossil fuels. Clean technology costs are coming down, but maintaining and accelerating momentum behind their deployment in a lower fuel-price world is a different proposition. How consumer choices and government policies play out will have huge consequences for the future of the energy sector, and for tackling climate change.

How fast will clean energy transitions unfold?

Clean energy is entering the energy system at an unprecedented rate, including more than 560 gigawatts (GW) of new renewables capacity added in 2023, but deployment is far from uniform across technologies and countries. Investment flows to clean energy projects are approaching USD 2 trillion each year, almost double the combined amount spent on new oil, gas and coal supply – and costs for most clean technologies are resuming a downward trend after rising in the aftermath of the Covid-19 pandemic. This helps renewable power generation capacity rise from 4 250 GW today to nearly 10 000 GW in 2030 in the STEPS, short of the tripling target set at COP28 but more than enough, in aggregate, to cover the growth in global electricity demand, and to push coal-fired generation into decline. Together with nuclear power, which is the subject of renewed interest in many countries, low-emissions sources are set to generate more than half of the world's electricity before 2030.

China stands out: it accounted for 60% of the new renewable capacity added worldwide in 2023 – and China's solar PV generation alone is on course to exceed, by the early 2030s, the total electricity demand of the United States today. There are open questions, in China and elsewhere, about how quickly and efficiently new renewable capacity can be integrated into power systems, and whether grid expansions and permitting times keep pace. Policy uncertainty and a high cost of capital are holding back clean energy projects in many developing economies. Recent clean energy trends in advanced economies present a mixed picture, with accelerations in some areas accompanied by slowdowns in others, including a

large fall in heat pump sales in Europe in the first half of 2024. Progress on the other headline commitments from COP28 is lagging: the goal of doubling the global rate of energy efficiency improvements could provide larger emissions reductions by 2030 than anything else, but looks far out of reach under today's policy settings. Tried and tested policies and technologies are likewise available to deliver a major reduction in methane emissions from fossil fuel operations, but abatement efforts have been patchy and uneven.

Clean energy momentum remains strong enough to bring a peak in demand for each of the fossil fuels by 2030

Demand for energy services is rising rapidly, led by emerging and developing economies, but the continued progress of transitions means that, by the end of the decade, the global economy can continue to grow without using additional amounts of oil, natural gas or coal. This has not been the case in recent years: despite record clean energy deployment, twothirds of the increase in global energy demand in 2023 was met by fossil fuels, pushing energy-related CO₂ emissions to another record high. In the STEPS, the largest sources of rising demand for energy are, in descending order, India, Southeast Asia, the Middle East and Africa. But growth in clean energy and structural changes in the global economy, particularly in China, are starting to temper overall energy demand growth, not least because a more electrified, renewables-rich system is inherently more efficient than one dominated by fossil fuel combustion (in which a lot of the energy generated is lost as waste heat). Outcomes in individual years can vary in practice depending on broader economic or weather conditions, or in hydropower output, but the direction of travel under today's policy settings is clear. Continued growth in global energy demand post-2030 can be met solely with clean energy.

The world has the need and the capacity to go much faster

Ample clean energy manufacturing capacity creates scope for faster transitions that move towards alignment with national and global net zero goals, but this means addressing imbalances in today's investment flows and clean energy supply chains. Over the past five years, annual solar capacity additions quadrupled to 425 GW, but annual manufacturing capacity is set for a sixfold increase to more than 1 100 GW, a level that – if deployed in full – would be very close to the amounts needed in the NZE Scenario. There is a similar story of plentiful manufacturing capacity for lithium-ion batteries. Bringing these technologies at scale to developing economies would be transformative for the global outlook, helping rising demand to be met in a sustainable way and allowing global emissions not only to peak in the coming years, as they do in the STEPS, but also to enter a meaningful decline, which they do not do in the STEPS. This requires concerted efforts to facilitate investment in developing economies by addressing risks that push up the cost of capital. Periods of ample supply make life difficult for new entrants, but improving the resilience and diversity of the supply chains for clean energy technologies and for critical minerals remains an essential task. For the moment, these supply chains are heavily concentrated in China.

Demand for electricity is taking off, but how high will it go?

The contours of a new, more electrified energy system are coming into focus as global electricity demand soars. Electricity use has grown at twice the pace of overall energy

demand over the last decade, with two-thirds of the global increase in electricity demand over the last ten years coming from China. Electricity demand growth is set to accelerate further in the years ahead, adding the equivalent of Japanese demand to global electricity use each year in the STEPS, and rising even more quickly in scenarios that meet national and global net zero goals. The projections for global electricity demand in STEPS are 6%, or 2 200 terawatt-hours (TWh), higher in 2035 than in last year's *Outlook*, driven by light industrial consumption, electric mobility, cooling, and data centres and AI.

Rising data centre electricity use, linked in part to growing use of AI, is already having some strong local impacts, but the potential implications of AI for energy are broader and include improved systems coordination in the power sector and shorter innovation cycles. There are more than 11 000 data centres registered worldwide and they are often spatially concentrated, so local effects on electricity markets can be substantial. However, at a global level, data centres account for a relatively small share of overall electricity demand growth to 2030. More frequent and intense heatwaves than we assume in the STEPS, or higher performance standards applied to new appliances – notably air conditioners – both produce significantly greater variations in projected electricity demand than an upside case for data centres. The combination of rising incomes and increasing global temperatures generate more than 1 200 TWh of extra global demand for cooling by 2035 in the STEPS, an amount greater than the entire Middle East's electricity use today.

The rise of electric mobility, led by China, is wrong-footing oil producers

The slowdown in oil demand growth in the STEPS puts major resource owners in a bind as they face a significant overhang of supply. China has been the engine of oil market growth in recent decades, but that engine is now switching over to electricity: the country's oil use for road transport is projected to decline in the STEPS, although offset by a large increase in oil use as a petrochemical feedstock. India becomes the main source of oil demand growth, adding almost 2 million barrels per day (mb/d) to 2035. Cost-competitive EVs - many of them from Chinese manufacturers – are making inroads in a range of markets, although there is uncertainty over how fast their share will grow. EVs currently have a share of around 20% in new car sales worldwide, and this rises towards 50% by 2030 in the STEPS (a level already being achieved in China this year), by which time EVs displace around 6 mb/d of oil demand. If the market share of electric cars were to rise more slowly, remaining below 40% by the end of the decade, this would add 1.2 mb/d to projected oil demand in 2030, but there would still be a visible flattening in the global trajectory. Additional near-term oil supply is coming mainly from the Americas – the United States, Brazil, Guyana and Canada – and this is putting pressure on the market management strategies of the OPEC+ grouping. The STEPS sees prices around USD 75-80 per barrel, but this implies further production restraint and an increase in spare capacity, which is already at record levels of around 6 mb/d.

Who will ride the wave of new LNG?

An increase of nearly 50% in global LNG export capacity is on the horizon, led by the United States and Qatar, but the prices that many suppliers need to recover their investments may not entice developing economies to switch to natural gas at scale: something has to give.

Around 270 billion cubic metres (bcm) of annualised new LNG capacity has been approved and, if delivered according to announced schedules, is set to enter into operation over the period to 2030, a huge addition to global supply. In the STEPS, LNG demand grows by more than 2.5% per year to 2035, an upward revision from last year's outlook and faster than the rise in overall gas demand. Europe and China have the import infrastructure to absorb significantly more gas, but their scope to clear the market is constrained by their investments in clean energy. Gas-importing emerging and developing economies would generally need prices at around USD 3-5/MBtu to make gas attractive as a large-scale alternative to renewables and coal, but delivered costs for most new export projects need to average around USD 8/MBtu to cover their investments and operation. If gas markets are to absorb all the prospective new LNG supply and to continue to grow past 2030, this would require some combination of even lower clearing prices, higher electricity demand and slower energy transitions – with less wind and solar, lower rates of building efficiency improvements, and fewer heat pumps – than projected in the STEPS. However, any acceleration of global energy transitions towards the outcomes projected in the APS or NZE Scenario, or a wild card for supply like a large new Russia-China gas supply deal (which we do not include in the STEPS), would exacerbate the LNG glut.

Lower fuel prices ease concerns about affordability and industrial competitiveness in fuel-importing economies

The new market context may provide some breathing space for fuel-importing countries and regions – such as Europe, and South and Southeast Asia – that have been hit hard by higher prices for fossil fuels and electricity in recent years. Consumers around the world spent nearly USD 10 trillion on energy in 2022 during the global energy crisis, around half of which ended up as record revenues for oil and gas producers. An easing of price levels promises some welcome relief, particularly in fuel-importing countries. Lower natural gas prices should lift some of Europe's gloom about its industrial competitiveness, although Europe still faces a sizeable structural energy price disadvantage compared with the United States and China. The breathing space from fuel price pressures can provide policymakers with room to focus on stepping up investment in renewables, grids, storage and efficiency; facilitating the removal of inefficient fossil fuel subsidies; and allowing developing economies to regain the momentum that was lost in recent years behind the provision of access to electricity and clean cooking fuels. However, cheaper natural gas can also slow structural changes by diminishing the economic case for consumers to switch to cleaner technologies, and by making it more difficult to close the cost gap with alternatives like biomethane and low-emissions hydrogen.

A sustainable energy system needs to be people-centred and resilient

A new energy system needs to be built to last: this means prioritising security, resilience and flexibility, and ensuring that the benefits of the new energy economy are shared. The STEPS does not see traditional energy security concerns diminishing, particularly for importers in Asia that face a long-term rise in their dependence on oil and gas imports to nearly 90% for oil and around 60% for gas by 2050. At the same time, faster clean energy transitions put the spotlight on electricity security, as growing electricity demand and more variable generation increase the operational need for flexibility in power systems, both for short-term and seasonal needs. This also requires a rebalancing of power sector investment towards grids and battery storage, as proposed by the IEA in advance of the COP29¹ climate conference in Baku, Azerbaijan. At the moment, for every dollar spent on renewable power, 60 cents are spent on grids and storage. By the 2040s, this reaches parity in all scenarios. Many power systems are vulnerable to an increase in extreme weather events and cyberattacks, putting a premium on adequate investments in resilience and digital security.

Dividing lines are emerging on energy and climate, which can only be bridged if there is more help provided to poorer countries, communities and households to manage the upfront costs of change, including much greater international support. High financing costs and project risks are limiting the spread of cost-competitive clean energy technologies to where they are needed most, especially in developing economies where they can deliver the biggest returns for sustainable development and affordability. Lack of access to modern energy is the most fundamental inequity in today's energy system, with 750 million people – predominantly in sub-Saharan Africa – remaining without access to electricity and more than 2 billion without clean cooking fuels. The outlook for access projects is improving thanks to cheaper technologies, new policies, the growing availability of digital payment options and pay-as-you-go business models, but more is needed, including a stronger focus on electrifying productive uses, which can improve project bankability. The climate finance discussions at COP29 and at the G20 will be a barometer of the prospects for scaling up clean energy investment in developing economies, which will also require strengthened national policy visions, policies and institutions, and a willingness to engage with the private sector.

Choices and consequences

Despite gathering momentum behind transitions, the world is still a long way from a trajectory aligned with its climate goals. Decisions by governments, investors and consumers too often entrench the flaws in today's energy system, rather than pushing it towards a cleaner and safer path. There are some positive developments in the STEPS, but today's policy settings still put the world on course for a rise of 2.4 °C in global average temperatures by 2100, entailing ever more severe risks from a changing climate. Our scenario analysis highlights the prospect of buyers and consumers having the edge in energy markets for a time, with suppliers competing for their attention as they make fuel and technology choices that have widely different implications for the energy sector and for its emissions. All parties need to recognise that locking in fossil fuel use has consequences. There may be downward pressure on fuel prices for a while, but energy history tells us that one day the cycle will be reversed, and prices will rise. And the costs of climate inaction, meanwhile, grow higher by the day as emissions accumulate in the atmosphere and extreme weather imposes its own unpredictable price. By contrast, clean technologies that are increasingly cost-effective today are set to remain so, with greatly reduced exposure to the vagaries of commodity markets and lasting benefits for people and planet.

¹

¹ See IEA (2024) From Taking Stock to Taking Action: How to implement the COP28 energy goals.

Overview and key findings

Where do we go from here?

S U M M A R Y

- There are three overarching and inter-related themes for this year's Outlook. The first is energy security, corresponding to the longstanding core of the IEA's mandate as well as the imperatives of the present given escalating risks in the Middle East. The second relates to the prospects for clean energy transitions, which have accelerated rapidly in recent years, but which need to move much faster to meet climate goals. A third theme is uncertainty, an ever-present factor in any forward-looking analysis but particularly visible this year: our Outlook includes several sensitivity cases on key factors affecting oil, gas and electricity demand in the Stated Policies Scenario (STEPS).
- The potential for near-term disruption to oil and gas supply is high due to conflict in the Middle East. Around 20% of today's global oil and liquefied natural gas (LNG) supplies flow through the Strait of Hormuz, a maritime chokepoint in the region. However, while geopolitical risks remain elevated, an easing in underlying market balances and prices is on the horizon as slowing oil demand growth in the STEPS sees spare crude oil production capacity rise to 8 million barrels per day by 2030. A wave of new LNG projects is set to add almost 50% to available export capacity by 2030.
- In all our scenarios, growth in global energy demand slows thanks to efficiency gains, electrification and a rapid buildout of renewables. In the STEPS by 2030, nearly every other car sold in the world is electric, although delays in the roll-out of charging infrastructure or in policy implementation could lead to slower growth.
- Clean energy meets virtually all growth in energy demand in aggregate in the STEPS between 2023 and 2035, leading to an overall peak in demand for all three fossil fuels before 2030, although trends vary widely across countries at different stages of economic and energy development.
- Electricity demand grows much faster than overall energy demand, thanks to existing
 uses, notably cooling, and new ones such as electric mobility and data centres.
 Renewables lead the expansion in electricity generation, with sufficient speed to meet
 in aggregate all the increases in demand. There is scope to go even faster: today's
 solar manufacturing capacity hovers around 1 100 GW per year, potentially allowing
 for deployment almost three-times higher than in 2023.
- The share of clean energy investment in emerging market and developing economies outside of China remains stuck at 15% of the total, even though these economies account for two-thirds of the global population and one-third of global GDP. A range of new business models and a policy push in some countries ensure that an additional 550 million people gain access to clean cooking and nearly 200 million to electricity in the STEPS between 2023 and 2030. This still falls well short of universal access goals.


Pathways for the energy mix

Peaks coming into view?

S U M M A R Y

- Global energy markets found a tentative new balance in 2023, with natural gas prices coming down after skyrocketing in 2022 in Europe and other parts of the world, and with an increase of 2.1% in global energy demand, in line with the average rate in the two decades before 2020.
- While a growing global population and higher incomes increase the need for energy services, energy demand growth slows to 0.7% per year from 2023 to 2030 in the Stated Policies Scenario (STEPS), half the rate of the past decade. Most growth occurs in emerging market and developing economies. Efficiency gains and electrification lead to a slight decline in global energy demand in the Announced Pledges Scenario (APS), and to a more significant fall in the Net Zero Emissions by 2050 (NZE) Scenario.
- Strong electricity demand growth is a feature of all three scenarios, driven not just by
 economic growth but also by increasing electrification of end-uses, notably electric
 vehicles, and by rising demand for data centres. The share of electricity in final
 consumption increases from 20% today to 26% in 2035 in the STEPS, 29% in the APS
 and 36% in the NZE Scenario. Electricity demand in China rises particularly fast and is
 set to surpass the level of demand in all advanced economies combined by 2030.
- Low-emissions sources, led by renewables, increase faster than electricity demand in all scenarios, thereby pushing down the share of fossil fuels in electricity generation. In 2023, renewables provided 30% of global electricity supply, while fossil fuels edged down to 60%, their lowest share in 50 years. By 2035, the share of solar PV and wind in electricity generation exceeds 40% globally in the STEPS, and by 2050 increases to nearly 60%. The share of nuclear power remains close to 10% in all scenarios.
- Fossil fuels met 80% of global energy demand in 2023. As in the WEO-2023, our scenarios indicate that demand for oil, natural gas and coal is set to peak by 2030, though oil use for aviation and petrochemicals increases to 2050 in the STEPS, natural gas demand remains robust in emerging market and developing economies, and the decline in coal use is relatively gradual. Higher clean energy investment and a faster descent from these peaks is needed to fulfil announced pledges and move the world towards a net zero emissions pathway.
- Seven clean energy technologies solar PV, wind, nuclear, electric vehicles, heat pumps, hydrogen and carbon capture are key to affordable and secure transitions. Together they account for three-quarters of the CO₂ emissions reductions to 2050 in the APS and the NZE Scenario, complemented by other renewables such as bioenergy and geothermal, and energy efficiency. Overcoming barriers to their deployment, including network and storage infrastructure, should be a priority worldwide.



Clean technologies are re-shaping the global energy mix

Despite growing needs for energy services, more efficiency and electrification are slowing the rate of global energy demand growth while the uptake of clean technologies like renewables and electric vehicles lead to a peak in demand for oil, natural gas and coal by 2030, though more clean energy investment is needed to accelerate CO_2 emissions reductions.



3.5.1 Oil

Table 3.1 Þ	Global liquids demand and supply by scenario (mb/c	(k
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	STEPS		APS			NZE				
	2023	2030	2035	2050	2030	2035	2050	2030	2035	2050
Road transport	42.7	43.3	40.2	34.8	40.5	34.1	16.8	31.9	20.1	2.3
Aviation and shipping	11.6	13.0	13.5	14.5	11.0	10.1	7.5	9.3	7.0	1.8
Industry and petrochemicals	20.0	23.3	24.6	25.3	21.4	20.9	17.5	19.7	18.2	13.1
Buildings and power	11.4	9.0	7.7	6.1	8.1	6.1	3.6	6.6	3.6	0.4
Other sectors	13.3	13.1	13.1	12.5	11.8	10.9	8.4	10.8	8.9	5.3
World oil demand	99.1	101.7	99.1	93.1	92.8	82.0	53.7	78.3	57.8	23.0
Liquid biofuels	2.3	2.9	3.2	4.1	4.9	6.3	7.0	6.0	6.8	5.9
Low-emissions hydrogen- based fuels	0.0	0.0	0.1	0.6	0.3	1.4	4.6	0.7	2.0	5.6
World liquids demand	101.4	104.7	102.4	97.9	98.0	89.7	65.4	85.0	66.6	34.5
Conventional	62.7	59.4	57.0	54.3	54.9	46.6	28.9	48.6	35.7	15.3
Tight oil	9.1	11.2	11.8	10.7	10.8	10.4	7.2	8.4	6.4	1.6
NGLs	20.2	23.1	22.1	19.2	19.8	18.4	13.1	15.4	11.0	4.1
EHOB	3.9	4.6	4.6	5.1	3.9	3.6	2.7	3.2	2.5	1.3
Other	1.0	1.0	1.0	1.0	0.9	0.9	0.3	0.4	0.3	0.1
World oil production	96.9	99.2	96.5	90.3	90.4	79.9	52.1	76.0	55.9	22.4
OPEC share	34%	33%	34%	40%	34%	36%	41%	35%	39%	51%
Processing gains	2.4	2.5	2.6	2.8	2.4	2.2	1.6	2.3	1.9	0.7
World oil supply	99.2	101.7	99.1	93.1	92.8	82.0	53.7	78.3	57.8	23.0
Price (USD [2023]/barrel)	82	79	78	75	72	67	58	42	33	25

Notes: mb/d = million barrels per day; NGLs = natural gas liquids; EHOB = extra-heavy oil and bitumen; OPEC = Organization of the Petroleum Exporting Countries. Other production includes coal-to-liquids, gas-toliquids, additives and kerogen oil. Historical supply and demand volumes differ due to changes in stocks. Liquid biofuels and low-emissions hydrogen-based liquid fuels are expressed in energy equivalent volumes of gasoline and diesel, reported in million barrels of oil equivalent per day. Methodological differences explain the deviations with the IEA Oil Market Report 2024. See Annex C for definitions. See Annex E for inputs to the IEA Global Energy and Climate Model.

Global oil markets continue to evolve and rebalance amid shifts in geographical and sectoral supply and demand. Demand in 2023 surpassed the previous peak set in 2019, increasing by nearly 2 mb/d from 2022 levels to reach 99 mb/d, of which China contributed 1.5 mb/d. Transport accounted for a large share of the global increase: demand for road passenger cars increased by nearly 600 thousand barrels per day (kb/d), while fuel use for aviation increased by 1 000 kb/d after flight activity eclipsed pre-pandemic levels. Demand for oil from petrochemicals increased by 500 kb/d in 2023, almost double the average growth over the last 5 years. All of the growth on the supply side was met by non-OPEC sources, primarily from the United States where over 40% of production comes from tight oil plays.

Demand growth is slowing noticeably in 2024 and is expected to be less than 1 mb/d for the year as a whole. This pattern of slowing growth continues in the STEPS: the trajectory for oil

4.0

Chapter 3 | Pathways for the energy mix

demand between 2023 and 2035 in the STEPS remains broadly unchanged from the *WEO-2023*, and, as before, demand peaks before 2030. By 2050, oil demand is around 6 mb/d lower than in 2023, driven primarily by lower levels of demand in transport.

Demand

In the STEPS, global oil demand peaks before 2030 at just less than 102 mb/d, and then falls back to 2023 levels of 99 mb/d by 2035 (Figure 3.30). Overall oil consumption is pulled down by reduced demand for oil in road transport. Surging EV sales since 2015 have already displaced around 1.0 mb/d of gasoline and diesel demand, and EVs avoid a further 12 mb/d of oil demand growth for road transport between 2023 and 2035 in the STEPS: the net result is a 2.5 mb/d contraction in oil use for road transport over this period. Fuel switching and efficiency gains reduce oil use in the buildings sector, which contracts by 1.4 mb/d. These declines are offset by a 6.2 mb/d increase in the use of oil in aviation and petrochemical production between 2023 and 2035.



Figure 3.30 Oil demand by region, sector and scenario, 2000-2050

Oil demand falls as EV ownership expands in advanced economies in all scenarios; oil demand is more resilient in aviation, shipping and petrochemicals in the STEPS and APS

Notes: mb/d = million barrels per day; AE = advanced economies; EMDE = emerging market and developing economies; road = road transport. Oil demand does not include biofuels demand.

In the APS, oil demand falls by 17% in 2035 relative to 2023 levels. An additional 135 million EVs are on the road by 2035 compared to the STEPS. A doubling in the plastics recycling rate and material efficiency gains in chemicals between 2023 and 2035 arrest some of the growth in petrochemical demand. In the NZE Scenario, oil demand drops to 58 mb/d by 2035, with 1 350 million EVs on the road while the plastic recycling rates increase slightly compared to the APS.

In emerging market and developing economies, oil demand growth in the STEPS slows from 1.8% a year in the 2015-2023 period to 1% a year in the 2023-2035 period. India sees the largest increase in oil demand over this period with a rise of 1.9 mb/d. Oil demand in China rises by just under 1 mb/d, with declines in road transport offset by growth of 1.5 mb/d in the petrochemicals sector (Box 3.7). China is on track to overtake the United States as the world's largest oil consuming country by 2030. In Central and South America, Africa, Middle East and Eurasia, demand continues to grow to 2050, and it accounts for around one-third of total global demand by 2050, compared with 22% today.

In advanced economies, the STEPS sees an acceleration in the decline in oil demand that has been evident since 2005 (Figure 3.31). In Europe, the share of internal combustion engine (ICE) vehicles in total car sales falls sharply: over 20% of cars sold today are battery electric or plug-in hybrids, and this increases in the STEPS to 90% by 2035. In North America, the share of EVs in total car sales grows from around 10% today to about 70% by 2035, mostly as a result of the Environmental Protection Agency (EPA) rules recently introduced in the United States and the Electric Vehicle Availability Standards in Canada. These trends accelerate in the APS and NZE Scenario: by 2035, the overall share of EVs in car sales in advanced economies grows to almost 90% in the APS and to almost 100% in the NZE Scenario.





Oil demand for road transport falls in advanced economies and China in the decade ahead; oil use for petrochemical production increases in most regions

Chapter 3 | Pathways for the energy mix

Notes: mb/d = million barrels per day. Other includes transport excluding road, aviation and shipping; industry excluding petrochemicals; buildings; agriculture; and non-energy use.

capacity sees net growth of around 2 mb/d between 2023 and 2030 before starting to decline as rising EV sales and fuel efficiency gains put pressure on refining margins. In the APS, refinery runs drop by 15 mb/d by 2035, and some 30% of today's refining capacity faces the risk of lower utilisation or closure. In the NZE Scenario, this share rises to 50% by 2035.

The Middle East remains the largest crude oil exporter in all scenarios, and the share of its exports flowing to emerging market and developing economies in Asia rises from 25% of total seaborne crude trade today to 40% by 2050 in the STEPS. As a result, the Malacca Strait between Malaysia and Indonesia becomes the world's largest chokepoint for oil and gas trade, with a higher volume of oil passing through it than the Strait of Hormuz, the chokepoint in the Persian Gulf. China remains the world's largest oil importer through to 2050 in the STEPS, and India and Southeast Asia see imports increase by around 35% by that date. By 2050, crude oil import dependency in Asia rises from about 80% today to 90% in all scenarios.

3.5.2 Natural gas

More than two years after Russia's invasion of Ukraine, global gas markets have regained a fragile equilibrium. Natural gas exports from Russia have fallen from a pre-war record of 250 bcm in 2021 to 130 bcm in 2023. Natural gas demand in the European Union in 2023 was 20% below its level in 2021, and the United States was its second-largest supplier after Norway, having delivered 60 bcm of LNG in 2023, or around half of its total LNG imports. Global natural gas demand increased by 0.5% in 2023, with a 40 bcm contraction in advanced economies, led by Europe, offset by 60 bcm of growth in emerging market and developing economies, led by China and the Middle East. A wave of new supply is also on the horizon: 270 bcm of new LNG export terminals are under construction, and will add another 50% to global LNG capacity, alongside an additional 200 bcm of annual production from upstream projects sanctioned since early 2022 that target local markets.

Natural gas demand has been revised upward in all scenarios compared with the WEO-2023, reflecting stronger anticipated demand for gas to meet growth in electricity demand in China as well as additional demand in the Middle East, where policies to shift away from oil in electricity generation have been reaffirmed. In the STEPS, the level of demand in 2030 has been revised up by 130 bcm compared to the Outlook in 2023, reaching just over 4 400 bcm before demand peaks.

Low-emissions gases - biogas, biomethane and hydrogen - are poised to see strong growth in all scenarios. By 2050, they reach nearly 400 billion cubic metre equivalent (bcme) in the STEPS, a ten-fold increase. In the NZE Scenario they reach 1.4 trillion cubic metres, meeting 60% of total gas demand in 2050.

CC BY 4.0.

			STEPS			APS			NZE	
	2023	2030	2035	2050	2030	2035	2050	2030	2035	2050
Natural gas demand (bcm)	4 186	4 430	4 422	4 377	4 003	3 493	2 466	3 617	2 257	882
Power	1 642	1 657	1 602	1 513	1 519	1 258	786	1 537	773	136
Industry	936	1 037	1 080	1 136	941	888	674	852	711	338
Buildings	809	877	868	855	780	649	418	570	307	1
Transport	151	183	191	191	143	116	56	113	67	7
Inputs to low-emissions hydrogen	-	5	13	31	25	66	219	64	120	246
Other	647	671	668	651	593	510	302	482	279	156
of which: equipped with CCUS	14	29	43	74	69	134	356	144	247	463
Natural gas production (bcm)	4 218	4 430	4 422	4 377	4 003	3 493	2 466	3 617	2 257	882
Conventional gas	2 908	2 982	2 996	3 076	2 818	2 560	1 969	2 526	1 800	635
Unconventional gas	1 310	1 449	1 425	1 301	1 185	932	497	1 091	457	247
Natural gas trade (bcm)	1 039	1 189	1 214	1 234	1 044	863	466	826	517	195
LNG	546	690	719	830	653	597	290	539	339	145
Pipeline	493	499	495	403	391	266	176	287	179	50
Natural gas prices (USD/MBtu)										
United States	2.7	3.9	4.0	4.2	3.2	3.1	2.9	2.1	2.1	2.0
European Union	12.1	6.5	6.5	7.7	6.0	5.5	5.2	4.4	4.2	4.0
China	11.5	7.2	7.1	8.3	6.9	6.4	6.2	5.0	4.9	4.8
Japan	13.0	8.3	7.8	8.7	6.8	6.2	6.2	5.0	4.9	4.8
Low-emissions gases demand (bcm equivalent)	36	78	125	362	175	375	1 023	349	643	1 397
Hydrogen	0	18	37	128	65	210	688	172	397	1 052
Biogas	26	36	48	80	43	59	107	51	74	125
Biomethane	10	24	40	154	67	106	228	126	172	221

Table 3.2 Global gas demand, production and trade by scenario

Notes: bcm = billion cubic metres; CCUS = carbon capture, utilisation and storage; LNG = liquefied natural gas; MBtu = million British thermal units; 1 bcm equivalent of hydrogen = 0.3 million tonnes. Low-emissions hydrogen is in gaseous form, prior to any further conversion to hydrogen-based fuels, and is produced primarily from electrolysis and steam methane reformation with CCUS. Inputs to low-emissions hydrogen includes natural gas for "merchant" hydrogen sold to end-users and not natural gas converted to hydrogen onsite by end-users for self-consumption. Other includes other non-energy use, agriculture and other energy sector. Trade reflects gross volumes traded between regions modelled in the IEA Global Energy and Climate Model. The difference between production and demand is due to stock changes.

Demand

In the STEPS, natural gas demand growth averages 0.5% per year in the 2023-2035 period, compared with a 2% average annual rate in the 2010-2023 period. Demand reaches a maximum level around 2030 and then declines very slightly through to 2050 (Figure 3.35). This trajectory is largely a consequence of accelerating deployment of renewables, efficiency gains and the electrification of end-uses. In the APS, demand begins to decline in the second-half of the 2020s and is 17% lower by 2035 than it was in 2023. In the NZE Scenario, demand falls by roughly 5% per year from 2023 to 2035, and by 6% per year on average between 2035 and 2050.

International Energy Agency | World Energy Outlook 2024



Figure 3.35 Natural gas demand by sector and scenario, 2000-2050

current policy settings; demand falls 40% in the APS by 2050 and 80% in the NZE Scenario Notes: bcm = billion cubic metres. Other includes LNG own use, transformation and distribution processes, and other own uses.

Coal-to-gas switching in the power sector in the United States in recent years is largely a consequence of cheap gas following the shale revolution, and has been responsible for over 120 bcm of natural gas demand growth between 2013 and 2022 (offset in part by 20 bcm of switching from gas to renewables over the same period). Rapid advances in renewables and efficiency gains in all scenarios leave little space for further coal-to-gas switching. However, the increase that has already taken place, together with increases in the use of natural gas in industry and own use in the LNG sector, means that the United States has been responsible for 30% of global natural gas demand growth during this period, an amount similar to China.

Growth in electricity demand opens some space for natural gas use in the power sector in emerging market and developing economies, where it increases by 190 bcm between 2023 and 2035 in the STEPS. However, this is more than offset by a reduction of 230 bcm in natural gas use in the power sector in advanced economies over the same period. Industry is the second-largest source of demand growth in emerging market and developing economies, recording a 150 bcm gain over the same period: this is only slightly offset by a 5 bcm contraction in natural gas use in industry in advanced economies. In the APS, natural gas demand growth in emerging market and developing reduced by faster deployment of renewables and more rapid efficiency gains across the board, together with scaling up the use of low-emissions fuels in industry (Figure 3.36). (Sensitivity analysis of the outlook for natural gas in the STEPS is included in Chapter 4 and the conditions under which gas demand could continue to grow post-2030 are discussed in Chapter 1.)

Chapter 3 | Pathways for the energy mix

Stellantis boss warns long EV transition poses cost 'trap' for carmakers

Carlos Tavares says industry will suffer from prolonged period of investing in both traditional engines and battery-powered cars



Stellantis chief Carlos Tavares: 'When you make a longer transition, in fact, you don't replace the old world by the new one. You add up the new world to the old' © Nathan Laine/Bloomberg

Sarah White and Kana Inagaki in Paris 6 HOURS AGO

The chief executive of Stellantis has warned that delays to the electric vehicle transition pose a "trap" that will bring higher costs, cautioning against industry calls to water down regulations to cut carbon emissions.

Carlos Tavares, head of the European group behind the Peugeot, Fiat and Jeep brands, told the Financial Times that the industry would ultimately suffer from lower profitability if companies were burdened with investing in both the existing internal combustion technology and the switch to battery-powered vehicles.

"Making a transition for [EVs] longer is a big trap," Tavares said on the sidelines of the Paris Motor Show, which kicked off on Monday. "When you make a longer transition, in fact, you don't replace the old world by the new one. You add up the new world to the old."

European car executives have urged regulators to consider adjusting the region's new emissions standards that will come into force next year in light of the slowing growth of EV sales. That is heaping doubts on a 2035 European deadline for the industry to shift to all electric sales.

Martin Sander, who leads sales, marketing and after-sales at Volkswagen's passenger car business, also called on governments to speed up the transition after demand for EVs fell sharply in Germany and other markets where state subsidies were removed or reduced.

"The most important thing is that customer demand and political regulations are in sync," said Sander. The German carmaker is the most behind in meeting EU emission targets, according to analysts.

"I hope that we're going to see clear commitments and signals from politicians that the future is electric. And then I'm convinced we also see customer demand picking up," he added.

The regulatory pressures come as Stellantis also faces investor criticism for rising inventories in the US, which has led to a recent downgrade in its profit guidance and a management shake-up across the entire group.

Long seen as one of the car industry's heroes after he turned around the PSA group behind Peugeot a decade ago and merged it with Fiat Chrysler in 2021, Tavares has recently been blamed for the aggressive pricing of vehicles that have turned off consumers in North America.

Tavares rejected suggestions that his decisions were the origin of the company's current problems in the US, saying he had trusted the local US team with independently leading its pricing and inventory strategy.

"This plan was built, proposed, decided by the local team," Tavares said, acknowledging that he had seen risks with its strategy from the beginning. "I was made aware of it. I hesitated — should I let it go or should I stop it — and I let it go. And it was a mistake. It did not work." Tavares pledged that the US inventory build-ups would be fixed by Christmas under a new management team following last week's reshuffle that led to the ousting of Stellantis's finance chief.

Tavares's own time at the group has now been firmly cut off at 2026, when his mandate as chief executive expires, after Stellantis's board last week formalised the search for his successor and confirmed he would retire then.

He will still have to show he can turn around the company in the meantime to see out the next 18 months.

Car dealers, suppliers and labour unions have criticised Tavares, saying his ruthless focus on cost cuts and margins had reached its limit and that the company needed to find other avenues to improve its profitability.

Tavares hit back, however, saying Stellantis needed to focus on making EVs more affordable to consumers and survive competition with the cheaper offering of Chinese competitors.

"<mark>There are no limits to what the customer's asking for," Tavares said, implying the pressure to cut costs would</mark> <mark>remain.</mark>

He added that car factories in Europe, already struggling with overcapacity issues, would come under further strain if Chinese companies succeeded in reaching a 10 per cent market share in the region in the coming years.

While Tavares has said there are "no taboos" on what Stellantis should do to survive, he added that he was not necessarily advocating purely for job cuts or factory closures, saying carmakers had other tools they could use too, including speeding up their research and development.



Vertu Motors plc ("Vertu", "Group") Unaudited interim results for the six months ended 31 August 2024 Resilient H1 performance in line with expectations

Vertu Motors plc, the automotive retailer with a network of 193 sales and aftersales outlets across the UK and with sector leading brands, announces its interim results for the six months ended 31 August 2024 ("the Period").

FINANCIAL SUMMARY

	H1 FY25	H1 FY24	H2 FY24	FY24
Revenue	£2,492.4m	£2,422.5m	£2,297.1m	£4,719.6m
Adjusted ¹ profit before tax	£23.5m	£31.5m	£6.3m	£37.8m
Basic EPS	4.77p	6.58p	1.02p	7.60p
Dividends per share	0.90p	0.85p	1.50p	2.35p
Net Debt ²	(£83.9m)	(£90.7m)	(£54.0m)	(£54.0m)

HIGHLIGHTS

- Total Group revenue for the Period increased by 2.9% compared to H1 FY24.
 - Group aftersales operations delivered a robust performance, delivering Core Group gross profit growth of £7.1m.
 - Used vehicle like-for-like volume growth of 3.9% and gross margin increased to 7.3%.
 - Group new retail vehicle sales volumes down 5.9% in the Period with significant market share gains as UK market saw an 11.2% decline.
 - BEV new retail sales volumes in UK fell in the Period by 7.0%, however, Group grew retail BEV sales volumes by 10.9% as the Group focused on this critical channel.
- Key steps taken to grow the Group's partnerships with Chinese Manufacturers.
- H1 profits lower than prior year levels as anticipated as costs increased due to cost inflation and increased headcount to drive activity.
- The Group's balance sheet remains strong with gearing levels below target, gearing³ ratio of 23.1%.
- Tangible net asset per share increased to 73.7p (H1 FY24: 70.9p).
- 3.3m shares (representing 1.0% of share capital in issue on 1 March 2024) repurchased at a cost of £2.4m since 1 March 2024: buyback continues with a further £3m programme in addition to £0.6m remaining of the existing authority.
- Increased interim dividend of 0.90p per share declared, payable in January 2025.

CURRENT TRADING AND OUTLOOK

- Group September trading performance in line with prior year levels. The Board anticipates that full year profits will be in line with current market expectations.
- Key plate change month of September saw like-for-like new retail sales volumes up 5.2% with retail market down 1.8% continuing strong market outperformance.
- Group like-for-like retail BEV sales volumes more than doubled year-on-year in September against a broadly static UK market.
- Profitability in H2 is expected to improve over prior year levels due to a stronger used car market and enhanced used vehicle trade values.

- Inflationary cost pressures remain in salaries and wages and the Group continues to focus on cost and efficiency.
- All UK retail outlets will trade under the Vertu brand by the end of April 2025. A single UK brand will enhance marketing ROI and deliver cost savings.
- Significant progress continues to be made in disposing of surplus properties generating cash and profits.
- ¹ Adjusted to remove share based payment charge, amortisation of intangible assets and other non-underlying items
- ² Excludes lease liabilities, includes used vehicle stocking loans
- ³ Net debt (excluding lease liabilities) / Shareholders funds

Commenting on the results, Robert Forrester, Chief Executive, said:

"I am pleased with the Group's first half performance against a fast-shifting market backdrop. Our high margin aftersales business delivered an excellent H1 performance, aided by higher technician numbers and execution of the Group's vehicle health check process.

The retail new car market declined as the Government's regulation to transition to battery electric vehicles ('BEV') introduced market volatility and negative effects in terms of affordability. We took considerable market share in the new retail market, and in the BEV market in particular, reflecting the Group's adaptability and strong operational execution.

The Group's strong balance sheet, excellent portfolio of brands, robust and scalable systems, and a strong and experienced leadership team with motivated colleagues puts us in a great position from which to deliver on our strategic goals. We are actively pursuing value accretive growth opportunities to enhance our portfolio, applying strict investment return metrics as well as returning cash to shareholders."

Webcast details

Vertu management will make a webcast available for analysts and investors this morning on the Group's website https://investors.vertumotors.com/results/

For further information please contact:

Vertu Motors plcTel: +44 (0) 191 491 2121Robert Forrester, CEOKaren Anderson, CFOPhil Clark, Investor RelationsTel: +44 (0) 207 710 7688Stifel (Nominated Adviser and Broker)Tel: +44 (0) 207 710 7688Matthew BlawatTel: +44 (0) 207 710 7688

Matthew Blawat Nick Harland

Camarco

Billy Clegg Tom Huddart Tel: +44 (0) 203 757 4983

CHAIRMAN'S STATEMENT

In a dynamic market environment, the Group once again showed its adaptability and high levels of operational excellence during the period ended 31 August 2024. Adjusted⁴ profit before tax of £23.5m was, as anticipated, below the levels achieved in the prior period due to a rise in costs. The Group delivered increased market share in the new retail vehicle market (and particularly the BEV market) and saw strong performances in the used car and aftersales channels. There is an expectation that a stronger used vehicle market will drive profitability to above prior year levels in the second half of the financial year.

There were several noteworthy highlights in the Period:

- The Group's strategic objective to grow as a leading automotive retail franchise is driven by our belief that the benefits of scale are maximised within a larger, well-structured Group. The Group is one of the six super groups that have emerged in the UK from consolidation in recent years. Strong, enduring partnerships with our Manufacturer partners remain central to achieving the Group's strategy. I am proud of the robust relationships we have cultivated with our carefully selected partners; built on mutual respect, operational excellence, and a shared commitment to delivering exceptional customer experiences. The Group has delivered on its growth objective in the Period and this is set to continue.
- The Group's scale supports investment in the in-house development of systems, enhancing customer and colleague experiences while driving cost efficiencies. These scalable platforms are rapidly integrated into acquired dealerships, and efforts continue to optimise group-wide efficiency through technology. During the Period, the Group enhanced its aftersales customer journey and profitability with completion of the rollout of an in-house deferred payment service, 'Pay Later', which has improved sales conversion rates within service operations. Significant progress has also been made in leveraging data through the Vertu Insights product, enabling frequent vehicle pricing adjustments to better respond to used car market conditions and improve used car stock and sales management.
- The Board is very focused on ensuring that steps are taken to mitigate the impact of rising costs in areas largely outside of the Group's control such as the National Minimum Wage, demonstrator vehicle costs and manufacturer stocking charges. Use of technology to improve productivity is critical in this area and good progress is being made.
- Having the right resource levels and leadership throughout the business is critical to deliver operational excellence. Vacancy levels have reduced in all areas and colleague retention is improving. These trends have a positive influence on delivering operational excellence.
- The Group currently operates three major brands in the retail market, Bristol Street Motors, Macklin Motors and Vertu. By the end of April 2025 all UK outlets will operate under the Vertu brand. Following a detailed review of our Brand strategy, we are confident this transition will be well received by customers and Manufacturers and yield immediate marketing efficiencies as well as other operational benefits which will help to mitigate continued cost pressure in other areas. Upfront costs incurred from this initiative will be more than offset by savings in the first 12 months of the rebranding.
- There has been continued application of stringent capital allocation disciplines:
 - Growth: The Group continues to implement its multi-franchise strategy to maximise profit potential at select locations, while aligning with Manufacturer representation plans. This approach is exemplified by the recent openings of Ducati in Sunderland, Peugeot in Carlisle, and the Group's new representation of the Chinese brands of BYD and Leap Motors. These additional franchises have or will be integrated into existing Group locations, complementing our broader brand portfolio.
 - Reinvestment: As at August 2024, the Group owned freehold and long-leasehold property with a net book value of £324.3m which is held at depreciated historic cost. The Group actively manages its property portfolio to create value and in the Period disposed of surplus property releasing capital for redeployment within the business or to be returned to shareholders.
 - 3. Acquisitions: As a leading Group with a strong balance sheet and reputation for swift integration, we see good flow of acquisition opportunities, from single sites to groups. We

have a disciplined approach which analyses all opportunities to consider how they can benefit the Group to deliver on our long-term strategic objectives and enhance returns to Shareholders.

- 4. Dividends: Since the Group began paying ordinary dividends in January 2011, over £56.0m has been paid to our shareholders. Our dividend for this interim period has been increased by 5.9% to 0.90p per share at an anticipated cost of £3.0m.
- 5. Share Buybacks: Since the Group began Share Buybacks in October 2018, over £33.0m has been returned to shareholders, reducing the Company's shares in issue by 15.9% over the same period. Over £7.7m was returned in 2023, and in February 2024 the Group announced a £3.0m Share Buybacks for the forthcoming year, of which £2.4m has been spent to purchase over 3.3m shares for cancellation to date (£0.6m remains unspent). The Group has announced an additional £3.0m for the Share Buyback programme today and remains below target gearing levels.

It has been widely reported that the Chancellor is expected to announce revisions to current Inheritance Tax legislation in the October budget, including the removal of Business Relief for qualifying companies listed on AIM. The Board continues to monitor this specific situation closely and encourages Government to carefully consider the impact of any changes to legislation which make AIM less attractive for growth companies.

AIM has been a key facilitator in Vertu's growth. Since IPO in 2006, Vertu has raised capital on a handful of occasions, with the last institutional equity capital raise taking place over 8 years ago in March 2016. Today Vertu stands as one of six UK super groups, and the only one listed in the UK. We employ over 7,500 colleagues across a UK network of over 190 locations representing 33 franchise brands. Our contribution to the nation's Exchequer in FY24 in corporation tax, national insurance and business rates alone was over £52m. We consistently invest in people, franchise relationships, property and systems. Our long-term commitment to operational excellence has enabled us to grow profits and fund our organic and inorganic growth. Our cash generation has funded significant dividend payments and share buybacks.

It's rewarding to see how each colleague has contributed to the success of the Group, and I would like to thank them for their efforts. The dedication they continue to demonstrate is both exemplary and humbling.

Andy Goss, Chairman

⁴ Adjusted to remove share based payment charge, amortisation of intangible assets other non-underlying items

CHIEF EXECUTIVE'S REVIEW

Strategy Summary

The Group's key long-term strategic goal remains: To deliver growing, sustainable cashflows from operational excellence in the franchise automotive retail sector. The strategic objectives of the Group, which have been recently reviewed and confirmed by the Board, are summarised below:

- To grow as a major scaled franchised dealership group, to develop our portfolio of Manufacturer partners, while being mindful of industry development trends and to maximise long-run returns.
- To be at the forefront of digitalisation in the sector, delivering a cohesive 'bricks and clicks' strategy with cost optimisation and efficiency:
 - Optimise omnichannel development, bringing bricks and clicks together.
 - Digitalise aftersales processes to improve customer service and efficiency.
 - Reduce the cost base of the Group by delivering efficiency using technology.
 - Utilise data driven decision making to generate enhanced returns.
- To develop and motivate the Group's colleagues to ensure operational excellence is delivered constantly across the business.
- To develop ancillary businesses to add revenue and returns that complement the automotive retail dealership business.

The Group continues to make progress in all four areas of its strategy.

Execution of Group Strategy

Developing the scale of the Group

The Group has an excellent platform allowing it to capitalise on growth opportunities and deliver scale benefits since it is one of the six super groups that have recently emerged in the UK with revenues in excess of £4bn. The franchised retail market in the UK remains very fragmented with the Group representing just 5% of the sector. The following changes to the scale of the Group have been delivered since 1 March 2024:

Acquisitions

On 22 July 2024, the Group added a Honda dealership in Exeter to its portfolio, following the purchase of the trade and assets of the site from Hendy Group Limited. The acquisition included leasehold dealership premises and total consideration, funded from the Group's existing cash resources was £1.1m. This acquisition further solidified the Group's position as Europe's largest Honda retailer, now representing a total of 17 Honda dealerships across the UK. The outlet augments the Group's existing Honda dealerships in Plymouth and Truro, further expanding the Group's significant presence in the South-West of England and creating a complete market area for the brand in Devon and Cornwall.

• Multi-franchising and new outlets

In July 2024, the Peugeot franchise opened in Carlisle, alongside the Group's existing Vauxhall, MG, SEAT and Cupra dealerships.

In August 2024, the first of the Group's BYD outlets opened in Worcester, alongside the Group's existing Ford and Citroen dealerships. A further BYD outlet is expected to open alongside an existing sales outlet in the coming months. In addition, in H2 it is anticipated that the Group will open five Leap Motors outlets alongside fellow Stellantis brands and a further smart outlet. These developments form part of a focused strategy to increase exposure to Chinese produced cars. Currently, the UK remains the only major Western country not to have significant tariffs on such products and market share of Chinese cars (particularly BEV) is expected to rise significantly in the next few years.

The Group opened a flagship outlet for Ducati motorbikes in August in Sunderland bringing the franchise to the Group for the first time.

The Group is continuing to develop businesses across the UK. Plymouth saw the opening of a Renault Dacia outlet in August and Volvo will also open in the city in H2.

In September 2024, the newly developed dealership for Toyota in Ayr opened for business. This completes the West of Scotland market area for the brand awarded to the Group in FY23. The Group now operates six Toyota outlets in the UK.

• Active Management

The Board continues to actively manage the Group's portfolio of properties and businesses. This includes assessing further growth opportunities as well as the future potential of existing businesses, utilising strict investment return metrics to ensure discipline in capital allocation.

The Group has continued to generate cash from the sale of surplus properties, including the sale in the Period of one property held for resale as of 28 February 2024. A surplus dealership in Taunton, acquired through the Helston acquisition, was sold for £0.8m, matching its book value. Subsequent to 31 August 2024, the Group exchanged contracts for the sale of a former dealership, the sale, expected to be completed in the second half of FY25, will generate gross cash proceeds of £2.3m, in excess of the net book value of the property of £2.0m. In addition, a further surplus property was sold for £1.6m in October 2024, in excess of the net book value of £0.9m.

The Group currently holds three additional surplus properties for resale which are expected to be sold in the coming months for gross cash proceeds of approximately £5.7m, compared to net book value of £4.9m. The largest of these, located in Glasgow, has faced delays in completion but the Board is confident realisation will take place.

Digitalisation Developments

The Group's scale enables it to invest in systems and operational development, enhancing its customer offerings and boosting profitability by maximising margins and increasing productivity to lower costs. The Group's internally developed systems provide standardised processes and controls, along with real-time management information, enabling swift and well-informed decision-making.

The following provide good examples of the work being done to add value:

- Vertu Insights continues to be developed as a used vehicle pricing tool, facilitating real-time price updates based on market conditions and forming the basis for part-exchange valuations for customers. The technology, which combines proprietary and third-party machine learning, allows for instant price adjustments across all vehicles at a given location in response to market supply and demand. During the Period, the Group repriced over 75% of its advertised stock each day using this system. Resulting used car pricing strategies have helped to drive a strong used car performance in the Period and freed up management time in the sales arena.
- The 'Pay Later' deferred payment option in the service area, developed in-house for service customers, has been fully implemented and is now a key driver of increased selling of additional work identified in the Vehicle Health Check process. This has aided the increase of average invoice values per customer visit and driven aftersales profitability. This solution allows customers to spread unexpected repair costs, interest-free, over a period of up to six months. During the Period, 6,800 customers utilised this option, with an average bill of £826. Compared to the previous outsourced solution, this option operates at a lower cost to the Group. As of 31 August 2024, £2.7m of working capital was tied up in this facility (29 February 2024: £1.3m), with no significant credit issues reported.
- The Period saw further development of digital self-service check-in in the Group's service departments. 63% of customers now check in for their service from home with 57% of these customers going on to use the instore kiosks to safely deposit their vehicle keys. The functionality of the kiosks has been further enhanced to allow courtesy vehicle collection, with the option for customer check out and payment now in pilot for roll out in the second half of FY25. In addition, opportunities for add-on sales and vehicle sales have been enhanced, with check-in questions now able to be amended centrally across multiple locations.
- A new project is significantly advanced investing substantial development resource to improve the productivity and efficiency of the Group's financial processing. The following are examples of these developments:

The first development of this project, the 'Vertu Transfer System' (VTS) has been successfully piloted and is now being rolled out across the Group. This allows the automated transfer of used car stock vehicles between Group dealerships, including the transfer of the accounting record,

supporting documentation and payment, immediately on the online approval of the transfer by the holding dealership. This system also speeds up the ability to sell cars in any dealership from the stock of another and gives increased customer benefits as a result.

An update to the Group's customer payment journey is also in the process of rolling out. This enhancement allows customers to pay by link, Apple Pay or online banking directly to our dealerships and the system will automatically post the cash receipt onto Group systems. This improves the efficiency of the Group's finance functions significantly, removing significant keying and transaction matching and is expected to reduce bank charges.

Additional efficiency improvements are in development in the finance area.

Recruiting, Retaining and Developing Colleagues

The Group prioritises the development and motivation of its colleagues to ensure operational excellence and exceptional customer experiences, which drive long-term, sustainable cash flows. Like many UK businesses, the Group has faced challenges in recruiting and retaining talent. However, during the Period, the Group successfully reduced vacancy levels across all areas and improved colleague retention. Towards the end of the Period, the Group adjusted remuneration for certain skilled roles where pay was close to the new National Minimum Wage, ensuring the retention of key positions. This has however increased the cost base of the Group further and this is likely to continue given Government wages policy.

The Group has long demonstrated a strong commitment to investing in its people, offering opportunities for talented, hardworking individuals to succeed. Development initiatives include degree apprenticeships, technician apprentice schemes, and progression programmes designed to support the advancement of colleagues into management roles. These schemes, along with the Group's broader talent programmes, are built to foster a meritocratic culture with equal opportunities for all.

Ancillary Businesses

The Group has a strategy to develop ancillary businesses to add revenue and improve returns that complement the core dealership businesses. Opportunities are reviewed to extend these operations further and one highlight is the launch of 'Repair Master' in the Period. This business provides smart repair services to fleet companies for their returning vehicles. The business now operates nine vans with six more being fitted out to further expand the business. There remains unfulfilled demand for these services and further significant expansion of this new operation is anticipated.

Sector Trends

Electrification

The UK's commitment to Net Zero and electrification goals continue to evolve. These policies represent a significant external change for the automotive sector which will have implications on the vehicle sales and repair sector in the years ahead. The previous government delayed the full ban on new petrol and diesel car sales to 2035, aligning with the EU. However, during the UK Labour Party's election campaign, Labour pledged to reinstate the ban to 2030. Despite the continued uncertainty around the timing of this full ban, the Zero Emission Vehicle (ZEV) mandate remains in place, requiring 22% of new car sales in 2024 to be BEVs, with this target increasing each year to 80% by 2030.

As of August 2024, BEVs accounted for 17.2% of new car registrations, compared to 16.4% in the previous year. BEV sales in the retail market reduced 7.0% in the Period year-on-year. The limited growth has been driven by fleet purchases, while private BEV demand remains low due to concerns about affordability and charging infrastructure and costs, particularly among consumers without access to off-street parking.

In response to weak retail demand (which is being mirrored across Europe), Manufacturers have introduced discounting of BEV product, supported subsidised financing, and in some cases rationed petrol and hybrid vehicle supplies to meet ZEV mandate targets and avoid fines of up to £15,000 per non-BEV car sold above the limits. The SMMT forecasts that BEVs will make up 18.5% of the market by the end of 2024, which would fall short of the government's 22% target (however, there are some flexibilities built into the Mandate providing some potential relief to Manufacturers). The UK new car market (and van market in due course) is likely to come under continued pressure if the current regulations are not amended. As Manufacturers cannot sustain price cuts indefinitely, government incentives like tax breaks or subsidies will likely be needed to boost BEV private sales

or changes to the Mandate will be required to take the pressure off the sector and to make the transition to BEV vehicles more achievable and sustainable.

The Group is very much at the forefront of discussions with Government and the wider sector on how the regulations impact the whole UK automotive sector. The outperformance of the Group in increasing sales volumes and market share of the retail BEV market has been marked.

• Financial Conduct Authority

The Financial Conduct Authority (FCA) investigation into Discretionary Commission Arrangements (DCAs) within automotive finance continues. Preliminary findings from the FCA review suggest that motor finance providers, and motor finance credit brokers (including motor dealers) who have engaged in motor finance agreements involving DCAs could be impacted. The Group ceased sales involving DCAs in January 2021. The FCA have now indicated that an update on this investigation will be given by May 2025. The Board does not currently consider that provisions are required to be made in respect of any exposures in this area and will update shareholders as the position becomes clearer.

Agency Distribution

Under the agency distribution model, the Manufacturer transacts with the customer for new vehicle sales while the retailer remains the physical touchpoint with the customer and undertakes the sales process, customer contact and vehicle delivery as an agent. The retailer-turned-agent receives a commission on each new vehicle sale. There are varying versions of the agency model, and the picture is evolving in terms of such factors as Manufacturers' appetite to change, the legal structure of the model and the details of operational implementation. Several of the Group's Manufacturers partners have implemented or are considering the application of the agency model in the future. Several Manufacturers that had previously announced a transition to agency have now announced this will not take place. The model has certain advantages and disadvantages to both Manufacturers and retailers, and these vary depending on prevailing market conditions. The Group has successfully implemented the new models where they have been introduced.

Current Trading and Outlook

The Board anticipates that profits for the financial year ending 28 February 2025 will be in line with current market expectations.

The Group's September performance delivered profits in line with prior year levels. Like-for-like new retail car sales growth of 5.2% was delivered with this significantly outperforming the SMMT reported 1.8% fall in UK retail registrations year-on-year and continuing the Group trend for increased retail market share delivered in the first half. The Group more than doubled year-on-year sales volumes of BEV product in the retail channel in the month, against a largely stable UK market. New vehicle margins remain weaker than in the prior year.

Fleet and commercial volumes declined, with some advantageous supply to the Group in the prior period now eroded by the improving overall supply situation. Margins in this key channel continued to be strong as the Group does not significantly engage in low margin sales such as to the daily rental market.

Used car volume trends were stable, but margins considerably strengthened compared to the comparative period, which marked the start of the used vehicle pricing correction in second half of FY24.

Aftersales demand remained strong and higher technician resource levels are helping to drive increased revenues and profits.

Cost control remains a major focus in the light of continued pay pressure driven by the National Minimum Wage. Recent further action on pay has been undertaken in some roles paid close to current Minimum Wage levels.

The mid-term outlook for the Group should be enhanced by the combination of reduced interest rates and the Group's strong operational capability. The Government imposed ZEV mandate, which increases BEV content targets with potential penal fines for Manufacturers, has the potential to create volume and pricing volatility in the months ahead. The Board is therefore cautious on the outlook for new vehicle profitability.

The Board believes that the Group is very well positioned to deliver on its stated strategy and to take advantage of the increasing opportunities in the UK sector. The pipeline of growth opportunities is strong at present and will allow further expansion of the Group's scale in the period ahead.

Robert Forrester, CEO

CHIEF FINANCIAL OFFICER'S REVIEW

The Group's income statement for the Period is summarised below:

	H1 FY25 £'m	H1 FY24 £'m	H1 FY25 Var to H1 FY24 %
Revenue	2,492.4	2,422.5	2.9%
Gross Profit	273.8	267.2	2.5%
Operating Expenses	(239.4)	(225.8)	(6.0%)
Adjusted Operating Profit	34.4	41.4	(16.9%)
Net Finance Charges	(10.9)	(9.9)	(10.1%)
Adjusted Profit Before Tax	23.5	31.5	(25.4%)
Non-Underlying Items ⁵	(1.4)	(1.4)	-
Profit Before Tax	22.1	30.1	(26.6%)
Taxation	(6.1)	(7.7)	20.8%
Profit After Tax	16.0	22.4	(28.6%)

⁵Non-underlying items represent share based payment charges, amortisation of intangible assets and other non-underlying items.

The Group delivered an adjusted profit before tax of £23.5m in the Period. This performance was, as anticipated, below that achieved in the prior year period.

Operating expenses and finance charges, particularly wages and salaries, demonstrator and courtesy car costs and Manufacturer stocking charges, rose at a faster rate than gross profit. Wages and salaries rose due to the impact of National Minimum Wage increases and knock-on effects, as well as higher productive head count levels to drive revenue in sales and aftersales. Demonstrator and courtesy car costs rose due to increased BEV mix and higher depreciation needed on BEV fleets. In recent years, reduced new vehicle supply constrained such fleets. Manufacturer stocking charges rose with interest rates and higher new vehicle pipeline inventory levels as increased supply interacted with muted demand. The Group sought to partially mitigate these impacts through cost savings in other areas.

Gross profit growth was muted due to declining profit generation in the new retail vehicle sales channel as volume and margins fell. This was despite significant outperformance by the Group in the channel with significant market share gains delivered especially in the BEV segment. All other channels saw growth in gross profits. Overall, gross margins were consistent at 11.0%. Operating margins fell to 1.4% (H1 FY24: 1.7%) as a result of increased operating expenses.

Revenue grew by £69.9m to £2.5bn, with an increase of £49.6m (2.1%) delivered in the Core Group, aided by an increase in the like-for-like number of vehicles sold and growth in Core Group aftersales revenues. Dealerships openings and businesses acquired contributed revenue growth of £45.1m, whilst the closure of dealership operations reduced revenues by £24.8m compared to the prior year period.

Revenue and Gross Profit by Department

An analysis of total revenue and gross profit by department is set out below:

			H1 FY25
	H1 FY25	H1 FY24	Var to H1
	£'m	£'m	FY24
Revenue			
New	771.8	744.0	3.7%
Fleet & Commercial	545.5	525.6	3.8%
Used	950.6	947.8	0.3%
Aftersales	224.5	205.1	9.5%
Total Group Revenue	2,492.4	2,422.5	2.9%
Gross Profit			
New	58 /	63.0	(7.3%)
Floot & Commorcial	28.2	26.9	(7.376) 5.2%
	20.2	20.0	1.0%
Aftersales	118 5	110.0	7.9%
Total Gross Brofit	273.8	267.2	2 59/
Total Gloss Front	275.0	207.2	2.5 /0
Gross Margin			
New	7.6%	8.5%	(0.9%)
Fleet & Commercial	5.2%	5.1%	0.1%
Used	7.2%	7.1%	0.1%
Aftersales ⁶	43.8%	43.8%	-
Total Gross Margin	11.0%	11.0%	-

⁶ Aftersales margin expressed on internal and external revenues

The total volumes of vehicles sold by the Group and like-for-like trends against market data are set out below:

	Total	Total units sold			Like-for-like units sold			
	H1 FY25	H1 FY24	% Variance	H1 FY25	H1 FY24	% Variance		
Used retail vehicles	46,073	43,921	4.9%	44,868	43,204	3.9%		
New retail cars ⁷	18,847	20,027	(5.9%)	18,441	19,507	(5.5%)		
Motability cars	10,688	8,626	23.9%	10,349	8,413	23.0%		
Direct fleet cars	10,396	9,688	7.3%	10,345	9,570	8.1%		
Agency fleet cars	3,545	3,725	(4.8%)	3,544	3,465	2.3%		
Total fleet cars	13,941	13,413	3.9%	13,889	13,035	6.6%		
Commercial vehicles	8,077	9,422	(14.3%)	7,989	9,396	(15.0%)		
Total New vehicles	51,553	51,488	0.1%	50,668	50,351	0.6%		
Total Vehicles	97,626	95,409	2.3%	95,536	93,555	2.1%		

		UK Market
	Variance ⁸	(SMMT)
New Retail Car	5.7%	(11.2%)
Motability Car	(14.5%)	37.5%
Fleet Car	(3.1%)	9.7%
Commercial	(17.0%)	2.0%

⁷ Including agency volumes

⁸ Represents the variance of like-for-like Group volumes to the UK trends reported by SMMT

New retail cars and Motability sales

Overall, UK car registrations increased 3.9%⁹ in the Period, with this growth driven by the Fleet and Motability channels. UK private registrations were back 11.2% in the Period as higher finance costs and vehicle prices weighed on demand for new cars. In part this was linked to the increasing supply and push of BEV vehicles driven by the ZEV mandate. Retail demand for electric vehicles remains weak compared to other powertrains, because of high vehicle prices and lack of charging infrastructure.

New vehicle supply in the UK has been strong in the Period, particularly for BEVs, as Manufacturers aim to meet Government mix targets. This supply, coupled with weak retail demand, has led to significant discounting and attractive financing offers for electric models. Retailer margins have been put under pressure as retailers sought to hit BEV mix targets and increasing numbers of previous customers encountered negative equity due to the declining value of their current car in the period of ownership.

Against this backdrop, the Group delivered an excellent volume performance taking increased new retail market share. The Group's like-for-like new retail vehicle volumes fell by 5.5% in the Period, significantly outperforming the overall retail market trend. Overall, the Group increased UK retail market share to 4.8% (H1 FY24: 4.6%). The Group was also very successful in increasing its BEV retail sales volumes which grew 10.9% in the Period on a like-for-like basis compared to a 7.0% decline in UK BEV retail registrations (according to the SMMT).

UK Motability registrations rose a significant 37.5% over the Period. The Group's Motability volumes grew 23.0% on a like-for-like basis. This represented a reduced UK market share of 5.6% (H1 FY24: 6.2%). Motability volumes are highly dependent on Manufacturer offers and consequently will be impacted by the mix of the Group's brands and the stance of each Manufacturer on supplying into this low margin channel. The Group remains Motability's largest partner in the UK with over 43,000 vehicles on the fleet. These vehicles return to the Group's service departments for an annual service funded by Motability and Motability is therefore a vital customer in the Group's higher margin aftersales business.

The Group is seeing a dampening effect on new vehicle margins reflecting an increasing supply push market and significant increased mix of Motability sales. Core Group gross profit margins on new retail and Motability vehicle sales were 7.6% (H1 FY24: 8.5%). Like-for-like gross profits from the sale of new retail and Motability vehicles consequently declined by £4.9m.

⁹ Source: SMMT

Fleet & Commercial vehicle sales

The UK car fleet market has been the main driver of the increase in car registrations in the UK. This was aided by robust demand for BEV through the fleet channel driven by corporate tax incentives, and the push towards sustainability in corporate fleets. Registration volumes in the UK car fleet market have grown 9.7%¹⁰ in the Period compared to the six months ended 31 August 2023. Weakening retail demand and increased supply have led to increased registrations in the low margin daily rental space, which account for much of the growth seen in overall UK fleet registrations.

Like-for-like, the Group delivered 13,889 fleet cars in the Period, representing an increase of 6.6% compared to H1 FY24. The Group's performance was below the market trends as the Group kept pricing disciplines to maintain margin and did not undertake significant volumes of daily rental supply.

The Group saw a 15.0% decrease in the like-for-like volume of new commercial vehicles sold, with the market up 2.0%⁸ over the Period compared to the six months to 31 August 2023. The Group's performance against the market reflects strong performance in the comparative period. In recent periods, when the van market was severely supply constrained, the Group enjoyed much better supply and took market share with some significant large deals undertaken. A more normalised supply position in the van market has led this to this outperformance reversing. The Group had 4.6% of the UK van market in the Period. Like the car market, the daily rental sector has also grown substantially due to increased supply and the Group does not have a large share of this low margin supply channel. Despite the move in mix from Commercial to fleet car, an 8.1% increase arose in the average selling price of like-for-like fleet and commercial vehicles sold by the Group in the Period. This reflected an increase in higher value premium and BEV cars sold.

Pricing disciplines were maintained in the Period with, like-for-like gross profit per unit up to £1,271 (H1 FY24: £1,165) and gross margin remained stable at 5.2% despite higher average selling prices. Overall, like-for-like gross profit in the fleet and commercial channels pleasingly rose by £1.6m.

¹⁰ Source: SMMT

Used retail vehicles

A lower new retail market since 2020 has led to reduced numbers of three- to five-year-old used vehicles coming back in the market as part exchanges. This reduced supply of prime used car stock is exacerbated due to the weakness in the general private retail new car market in the Period. In contrast, increasing supply of nearly new vehicles from the demonstrator and pre-registration channels is also evident in the market, as expected in a period of new car supply exceeding demand.

Reduced overall used vehicle supply has helped to drive stability in overall used vehicle prices, with a 3-year, 60k mile car falling just 3.6% over the Period. This is low by historic standards. It is expected that reduced supply will continue to underpin strong residual values and therefore wholesale price stability in the months ahead, supporting used car margins. Indeed, there is recent evidence retail prices have started to rise. This contrasts with the position last year. The market has seen higher levels of depreciation in nearly new vehicles, especially of BEV product, reflecting the very strong offers in place from Manufacturers in the new car arena.

Despite the impact of cost of living and rising interest rates, for many, used vehicles remain a necessity purchase, so there remains consistent demand for used vehicles in the UK. In addition, there is evidence that higher new car prices and some reduced supply of non-BEV new cars, is leading some consumers to enter the used car market instead of the new car market so underpinning used car demand.

The Group monitors the pricing demand and supply environment and effectively applies its Vertu Insights real time pricing algorithm to optimise gross profit generation, stock turn and control inventory. The Period started with low levels of used vehicle inventory as the Group had reduced inventory at the end of FY24, following the significant wholesale pricing correction experienced in the second half of last year. Used vehicle inventory levels have increased over the Period from the low levels at 29 February 2024. The Group did not reduce used vehicle inventory ahead of the plate change month in September 2024 to ensure the Group had the appropriate stock levels for the resilient September market. Price stability also aided the judgement not to reduce stock levels. Used vehicle inventory levels were £21.4m below the level held at 31 August 2023.

Group like-for-like used vehicle volumes grew 3.9% in the Period. Like-for-like gross profit per unit of £1,509 was achieved which is broadly similar to the prior year (H1 FY24: £1,551) and up compared to H2 FY24 (£1,313). The slight moderation reflected the need to keep nearly new product (including exdemonstrators) competitive against very strong new cars offers particularly in the Premium franchise space. A decline in average selling prices, following the price correction seen in H2 FY24 resulted in a slight strengthening of Core Group margin on the sale of used vehicles to 7.3% (H1 FY24: 7.2%). Core Group gross profit from the sale of used vehicles totalled £67.1m for the Period, this represented a £0.7m increase in Core Group gross profit generated from used vehicle sales year-on-year.

¹¹ Source: CAPHI: September 2024 Car market overview

Aftersales

The Group's high margin aftersales operations are a vital contributor to Group profitability, generating over 43% of total gross profit. Overall, compared to the six-month period ended 31 August 2023, the following like-for-like trends in aftersales performance were witnessed and the Core operations generated £7.1m more gross profit.

	Accident &					
	Service £'m	Parts £'m	Smart Repair £'m	Forecourt £'m	Total £'m	
Revenue ¹²	105.9	135.6	14.1	9.1	264.7	
Revenue ¹² change	7.2	9.2	0.7	-	17.1	
Revenue ¹² change (%)	7.4%	7.3%	5.0%	0.1%	6.9%	
Gross profit change	5.5	0.8	0.7	0.1	7.1	
Gross margin ¹³ H1 FY25 (%)	73.0%	21.5%	61.1%	8.3%	43.8%	
Gross margin ¹³ H1 FY24 (%)	72.8%	22.4%	59.0%	7.5%	43.9%	
Margin change (%)	0.2%	(0.9%)	2.0%	0.8%	(0.1%)	

¹² includes internal and external revenues

¹³ Aftersales margin expressed on internal and external revenues

Service

Vehicle service and repair remains a crucial and resilient profit driver for the Group, with like-for-like service revenue increasing by £7.2m (7.4%) during the Period. This growth was achieved across retail labour sales, service add-ons such as tyre sales and warranty labour sales.

Several key factors contributed to this strong performance. The Group's retention and reward strategies significantly reduced technician vacancies, which had previously limited our service capacity. Enhanced execution of the Group's vehicle health check process also led to greater identification of necessary repairs during customer visits. Additionally, the rollout of the Group's 'Pay Later' option, allowing customers to spread repair costs over 3-6 months interest-free, helped drive both the conversion of identified work and tyre sales to service customers. Together, these initiatives resulted in an increased average invoice value for the Group's service department compared to the same period last year.

Gross margin percentages on vehicle servicing were 73.0% (H1 FY24: 72.8%) in the Core Group reflecting the above impacts. This is impressive in light of the additional pay given to technicians to enhance recruitment and retention and shows the Group has been successful in improving technicians' efficiency and recovery rates. Gross profit generation in the Group's service departments rose on a like-for-like basis by £5.5m.

• Parts

The Group's extensive parts operations encompass traditional wholesale activities, agency distribution centres, online parts retailing, and accessory sales to dealership customers. These operations support not only the Group's service and accident repair businesses but also supply parts to external businesses and retail customers. Parts revenue, which exceeds that of the Service department, grew by £9.2m in the Core Group compared to last year, driven by increased vehicle service and repair activity and a growth in wholesale parts sales.

Gross margin percentages on parts declined to 21.5% (H1 FY24: 22.4%) in the Core Group, reflecting a shift towards a higher proportion of warranty parts sales which are billed to Manufacturers at lower margin. Gross profit generation in the Group's parts departments rose on a like-for-like basis by £0.8m.

• Accident and Smart Repair

The Group's accident repair centres and smart repair operations are managed separately from the dealership businesses in a standalone division. The Group has delivered a like-for-like 5.0% increase in revenues generated from the Group's accident and smart repair operations and a £0.7m increase in gross profit.

The Group's substantial smart repair operations have predominantly focused on the provision of services to the Group's extensive dealership network. During the Period, the Group expanded its Smart Repair operations into retail work, with the addition of nine vans from March 2024. These vans branded 'Repair Master', provide work to large fleet centres handling corporate hire return vehicles. Early trading has been very positive and further growth of this business is planned.

Acquisitions and Closures

Dealerships acquired or closed since 1 March 2023 have contributed an additional £0.3m operating loss in the Period compared to prior year, as summarised below:

	Acquisitions £'m	Closures £'m	Total £'m
H1 FY25			
Revenue	51.6	-	51.6
Gross Profit	5.3	-	5.3
Operating Loss	(0.8)	-	(0.8)
H1 FY24			
Revenue	6.5	24.8	31.3
Gross Profit	0.6	2.6	3.2
Operating Loss	(0.3)	(0.2)	(0.5)
H1 FY25 variance to H1 FY24			
Revenue	45.1	(24.8)	20.3
Gross Profit	4.7	(2.6)	2.1
Operating (Loss)/Profit	(0.5)	0.2	(0.3)

Acquisitions include a significant number of new start-up operations opened in the last 12 months by the Group. These have incurred start-up losses. These operations are anticipated to see reduce losses in the next 12 months and move to profitability. In the Period these operations lost £0.8m reflecting their immature nature.

Outlets closed in the last 12 months led to a year-on-year improvement of profit of £0.2m.

Operating Expenses

A summary of Core Group operating expenses is set out below:

	H1 FY25	H1 FY24	24 H1 FY25 Var to H1	
	£'m	£'m	£'m	%
Salary costs	132.0	124.1	7.9	6.4%
Vehicle and valeting costs	28.7	24.3	4.4	18.1%
Property costs and rates	27.7	27.9	(0.2)	(0.7%)
Marketing costs	17.9	20.0	(2.1)	(10.5%)
Energy costs	3.6	4.9	(1.3)	(26.5%)
Other	23.4	20.9	2.5	12.0%
Core Group operating expenses	233.3	222.1	11.2	5.0%
Acquisitions	6.1	0.9	5.2	
Disposals	-	2.8	(2.8)	
Total Group underlying operating expenses	239.4	225.8	13.6	6.0%

Core Group operating expenses totalled £233.3m in the Period representing an increase of £11.2m (5.0%) compared to H1 FY24. Dealerships acquired in the period since 1 March 2023, contributed a further £5.3m of operating expenses in the Period.

Salary costs represent 57% of Core Group operating expenses and are the biggest single cost to the Group. The salary costs included in operating expenses exclude the productive cost of the Group's aftersales technicians, which are reflected in cost of sales. Salary costs in operating expenses rose by £7.9m in the Period. The Group has been successful in increasing headcount of front-line colleagues in the business in part through reduced vacancies. Additional sales executive levels have helped to drive outperformance in the retail new car market. Considerable investment has further been made in service technicians and service apprentices to feed further aftersales growth. Cosmetic repair operations were also expanded. The operational impact of this investment in headcount will improve over time, as colleagues mature in their roles. Total salary costs due to these actions rose £4.8m in the Core Group. The impact of the rise in National Minimum Wage, together with consequent salary actions to aid recruitment and retention added £3.1m to salary costs in the Period. 24.3% of the Group's colleagues are now paid at or within 5% of National Minimum Wage and this (and its knock-on effects) are expected to continue in the coming periods.

The most significant year-on-year percentage cost increase in the Core Group arose in vehicle and valet costs. Vehicle costs include the cost of the Group's demonstration and courtesy car fleet.

Manufacturers extended model ranges, including more expensive BEV vehicles, have added cost to the Group's demonstrator fleet compared to the prior year period. This has been exacerbated by the impact of having to depreciate BEV cars on the fleet by enhanced monthly writedown rates reflecting market depreciation. Valet costs increased by 10.4% as a consequence of the increase in National Minimum Wage.

The Group delivered significant savings in Marketing costs which reduced by 10.5% and £2.1m. These saving arose due to a focus on return on investment, reducing costs per sale in a number of areas. This also reflected the decline in the new retail car market as advertising was right sized to reflect this and yet aided the delivery of a gain in market share. The Board believes that further marketing savings and efficiencies will arise following the rebrand of all outlets under the Vertu brand and the consequent reduction in websites and complexity.

Net Finance Charges

The movement in net finance charges is analysed below:

			H1 FY25 Var
	H1 FY25	H1 FY24	to H1 FY24
	£'m	£'m	£'000
Interest on bank borrowings	4.8	4.9	(0.1)
New vehicle Manufacturer stocking interest	4.5	3.3	1.2
Interest on lease liabilities	1.8	1.7	0.1
Used vehicle stock funding interest	0.3	0.7	(0.4)
Interest on bank deposits	(0.4)	(0.6)	0.2
Net finance income relating to defined benefit pension			
scheme	(0.1)	(0.1)	-
Net Finance Charges	10.9	9.9	1.0

The increase in overall net finance charges was largely driven by manufacturer new vehicle stocking interest, which increased £1.2m in the Period. Increased pipelines of new vehicle inventory, as retail sales have slowed and supply constraints have eased along with high rates of interest being charged and an increase in average new vehicle cost, have contributed to these increased charges in the Period. The trends started to reverse as H1 ended.

Interest on bank borrowings includes the cost of the 20-year mortgage facilities from BMW Financial Services, where £79.1m remains outstanding at 31 August 2024 (29 February 2024: £81.2m), as well as interest on the £44m drawn on the Group's revolving credit facility. Lower interest income on bank deposits reflected reduced cash on deposit levels.

Interest rate risk on the Group's borrowings is managed by interest rate cap contracts on £50m of mortgage borrowing and an interest rate swap over £30m of the revolving credit facility. On 9 September 2024 this swap was extended out to December 2026 reducing the underlying SONIA rate to 3.82% (previously 4.42%) which will reduce future interest costs.

Non-underlying items

	H1 FY25 £'m	H1 FY24 £'m
Share-based payments charge	1.1	1.0
Amortisation	0.3	0.4
Redundancy costs	-	0.8
Lease surrender premium	-	(0.8)
	1.4	1.4

FY25 will be the first financial year where the share based payment charge in both the reporting and comparative period includes four years' worth of partnership share awards. Consequently, it is intended to reclassify the share based payment charge in the full year report and accounts to 28 February 2025 into underlying items, restating the FY24 comparative on the same basis. This is to reflect the expected stability in future share based payment charges. Given the immaterial nature of amortisation costs, these will also be treated as underlying in the full year accounts.

Pensions

The Group has a closed defined benefit scheme which remains fully funded and requires no ongoing cash contribution from the Company.

The Scheme invests in an LDI portfolio which aims to fully hedge the Scheme's interest rate and inflation risk to maintain this fully funded position.

The accounting surplus on the scheme at 31 August 2024 increased to £3.1m (29 February 2024: £2.5m).

Тах

The Group's underlying effective rate of tax for the Period was 25.9% (H1 FY24: 25.5%). The total tax charge for the Period was £6.1m (H1 FY24: £7.7m). Following a review by HMRC in the Period, the Group continues to be classified as "low risk" and takes a pro-active approach to minimising tax liabilities whilst ensuring it pays the appropriate level of tax to the UK Government.

Dividend

An interim dividend of 0.90p per share (H2 FY24: 0.85p) in respect of FY25 will be paid on 17 January 2025. The ex-dividend date will be 12 December 2024 and the associated record date 13 December 2024.

Cash Flows

The Period started with low levels of used vehicle inventory as the Group had reduced inventory at the end of FY24, following the significant wholesale pricing correction experienced in the second half of last year. The Group did not reduce used vehicle inventory ahead of the plate change month in September 2024 to ensure the Group had the appropriate stock levels for the resilient September market. This decision, aided by price stability of used vehicles, absorbed £21.5m of cash over the Period. Used vehicle inventory levels were, however, £21.4m lower than those at 31 August 2023.

In addition, a reduction in new vehicle lead times, as supply improved and order-banks reduced, saw a £14.9m reduction in retail customer vehicle deposits and fleet customer advance payments in respect of forward orders. These movements were the main drivers of a net cash outflow in respect of working capital in the Period of £38.8m. This led to a Free Cash Outflow in the Period of £14.3m (H1 FY24: Free Cash Outflow of £0.4m).

In the Period, the Group successfully disposed of one of the properties held for resale at 29 February 2024, delivering a cash inflow of £0.8m with proceeds equivalent to net book value. These sales proceeds have been deducted in arriving at net capital expenditure of £11.2m incurred in the Period. £7.2m of this total was incurred in respect of projects which add additional capacity to the Group. This included £3.0m of expenditure in building the Group's new Toyota dealership in Ayr, an investment in additional capacity in Exeter and Sunderland BMW and MINI and the addition of franchises into existing dealership sites. This £7.2m has therefore been excluded from the calculation of Free Cash Flow in the Period.

Gross capital expenditure for the full year FY25 is expected to be below the previous guidance of £31.8m, with net capital expenditure lower at £25.7m as a result of the property disposals completed or exchanged in the financial year to date. Further proceeds of £5.7m from the sale of surplus properties are expected but not included in the forecast.

In the financial year to date, the Group has continued to buy back shares, repurchasing approximately 3.3m shares, representing 1.0% of opening shares in issue, for a total cost of £2.4m. The Board believes that this is an appropriate use of capital and will continue a programme of Buybacks as a relevant element of returns to shareholders, alongside dividend payments. The Board has agreed a further £3m buyback programme for deployment once the current remaining authority of £0.6m is utilised. The Group has now purchased 15.9% of its share capital because of buyback programmes which have operated from FY18. £5.0m was spent on dividends in the Period due to the final dividend paid in respect of the year ended 29 February 2024.

Karen Anderson, CFO

CONDENSED CONSOLIDATED INCOME STATEMENT (UNAUDITED)

For the six months ended 31 August 2024

		Six months ended 31 A		August 2024 Six months ended 31 Aug			ugust 2023 Year ended 29 Februa			ary 2024	
	Note	Underlying items £'000	Non- underlying items (note 4) £'000	Total £'000	Underlying items £'000	Non- underlying items (note 4) £'000	Total £'000	Underlying items £'000	Non- underlying items (note 4) £'000	Total £'000	
Revenue		2,492,432	-	2,492,432	2,422,454	-	2,422,454	4,719,587	-	4,719,587	
Cost of sales	-	(2,218,606)	-	(2,218,606)	(2,155,239)	-	(2,155,239)	(4,203,507)	-	(4,203,507)	
Gross profit		273,826	-	273,826	267,215	-	267,215	516,080	-	516,080	
Operating expense	es	(239,491)	(1,394)	(240,885)	(225,787)	(1,354)	(227,141)	(456,845)	(3,194)	(460,039)	
Operating profit / (loss)	,	34,335	(1,394)	32,941	41,428	(1,354)	40,074	59,235	(3,194)	56,041	
Finance income	5	555	-	555	749	-	749	1,254	-	1,254	
Finance costs	5	(11,429)	-	(11,429)	(10,672)	-	(10,672)	(22,728)	-	(22,728)	
Profit before tax		23,461	(1,394)	22,067	31,505	(1,354)	30,151	37,761	(3,194)	34,567	
Taxation	6	(6,067)	(45)	(6,112)	(8,029)	298	(7,731)	(9,430)	576	(8,854)	
Profit for the peri- attributed to equi holders	od ity	17,394	(1,439)	15,955	23,476	(1,056)	22,420	28,331	(2,618)	25,713	
	-										
Basic earnings pei share (p)	r 7			4.77			6.58			7.60	
Diluted earnings per share (p)	7			4.44			6.16			7.11	

CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (UNAUDITED)

For the six months ended 31 August 2024

		Six months	Six months	Year
		ended	ended	ended
		31 August	31 August	29 February
		2024	2023	2024
	Note	£'000	£'000	£'000
Profit for the period		15,955	22,420	25,713
Other comprehensive income / (expense)				
Items that will not be reclassified to profit or loss:				
Actuarial gain / (loss) on retirement benefit obligations	10	608	(51)	(737)
Deferred tax relating to actuarial (gain)/loss on				
retirement benefit obligations		(152)	13	184
Items that may be reclassified subsequently to profit or loss:				
Cash flow hedges		(248)	941	116
Deferred tax relating to cash flow hedges		45	(215)	(29)
Other comprehensive income / (expense) for the period,				
net of tax	_	253	688	(466)
Total comprehensive income for the period attributable to				
equity holders		16,208	23,108	25,247

CONDENSED CONSOLIDATED BALANCE SHEET (UNAUDITED)

As at 31 August 2024

		31 August	31 August	29 February
		2024	2023	2024
	Note	£'000	£'000	£'000
Non-current assets				
Goodwill and other indefinite life assets	12	129,332	127,462	129,092
Other intangible assets		1,705	2,105	1,971
Retirement benefit asset	10	3,060	3,129	2,477
Property, plant and equipment		339,024	331,085	335,295
Right of use assets		81,527	74,600	72,886
Derivative financial instruments		-	1,365	203
	_	554,648	539,746	541,924
Current assets	_			
Inventories		785,718	694,493	761,996
Trade and other receivables		86,897	89,740	93,702
Current tax assets		-	-	203
Cash and cash equivalents		38,649	47,885	70,599
	—	911,264	832,118	926,500
Property assets held for sale		7,780	4,984	7,881
Total current assets	—	919,044	837,102	934,381
Total assets	—	1,473,692	1,376,848	1,476,305
	=			
Current liabilities				
Trade and other payables		(850,196)	(750,743)	(869,931)
Current tax liabilities		(1,547)	(978)	-
Contract liabilities		(11,662)	(13,528)	(13,400)
Borrowings		(4,395)	(16,033)	(4,395)
Lease liabilities		(19,272)	(9,706)	(17,710)
Total current liabilities	-	(887,072)	(790,988)	(905,436)
Non-current liabilities				
Borrowings		(118,129)	(122,536)	(120,183)
Lease liabilities		(72,250)	(75,092)	(65,214)
Deferred income tax liabilities		(23,036)	(20,701)	(22,024)
Contract liabilities	_	(9,956)	(11,963)	(10,075)
Total non-current liabilities	_	(223,371)	(230,292)	(217,496)
Total liabilities	_	(1,110,443)	(1,021,280)	(1,122,932)
Net assets	-	363,249	355,568	353,373
Capital and reserves attributable to equity holders of	the Group			
Ordinary share capital		33,452	34,157	33,760
Share premium		124,939	124,939	124,939
Other reserve		10,645	10,645	10,645
Hedging reserve		17	859	220
Treasury share reserve		(3,175)	(2,143)	(2,056)
Capital redemption reserve		6,275	5,570	5,967
Retained earnings		191,096	181,541	179,898
Total equity	-	363,249	355,568	353,373

CONDENSED CONSOLIDATED CASH FLOW STATEMENT (UNAUDITED)

For the six months ended 31 August 2024

		Six months	Six months	Year
		ended	ended	ended
		31 August	31 August	29 February
		2024	2023	2024
Ν	lote	£'000	£'000	£'000
Cash flows from operating activities				
Operating profit		32,941	40,074	56,041
Profit on sale of property, plant and equipment		(58)	(468)	(516)
Loss / (profit) on lease modification		67	(547)	(411)
Amortisation of intangible assets		284	408	568
Depreciation of property, plant and equipment		8,590	8,515	17,449
Depreciation of right of use assets		10,597	8,895	18,254
Impairment charges		-	-	128
Movement in working capital	11	(38,849)	(29,973)	16,708
Share based payments charge		900	777	1,965
Cash inflow from operations		14,472	27,681	110,186
Tax received		1,291	7	552
Tax paid		(4,748)	(3,724)	(5,296)
Finance income received		495	475	1,099
Finance costs paid		(11,198)	(9,803)	(22,576)
Net cash inflow from operating activities	_	312	14,636	83,965
Cash flows from investing activities				
Acquisition of husinesses net of cash overdrafts and				
horrowings acquired	9	(1.030)	_	(5 966)
Acquisition of freehold and long leasehold land and buildings	5	(1,000)	(2.084)	(3,003)
Disposal of businesses		-	204	204
Purchases of intangible assets		(19)	(100)	(253)
Purchases of other property, plant and equipment		(11.953)	(11.864)	(23.686)
Proceeds from disposal of property, plant and equipment		800	2.239	3.589
Net cash outflow from investing activities		(12,202)	(11,605)	(29,115)
	_			
Cash flows from financing activities				
Repayment of borrowings	8	(2,188)	(15,976)	(29 <i>,</i> 836)
Principal elements of lease repayments		(10,640)	(8,461)	(18,183)
Sale of treasury shares		34	91	-
Purchase of treasury shares		-	-	115
Cash settled share options		-	(109)	(109)
Repurchase of own shares		(2,234)	(4,762)	(7,463)
Dividends paid to equity holders	_	(5,032)	(4,913)	(7,759)
Net cash outflow from financing activities	_	(20,060)	(34,130)	(63,235)
Net decrease in cash and cash equivalents	8	(31.950)	(31.099)	(8.385)
Cash and cash equivalents at beginning of period	-	70,599	78,984	78,984
Cash and cash equivalents at end of period	_	38,649	47,885	70,599

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)

For the six months ended 31 August 2024

					Treasury	Capital		
	Ordinary	Share	Other	Hedging	share	redemption	Retained	Total
sl	hare capital	premium	reserve	reserve	reserve	reserve	earnings	equity
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
As at 1 March 2024	33,760	124,939	10,645	220	(2 <i>,</i> 056)	5,967	179,898	353,373
Profit for the period	-	-	-	-	-	-	15,955	15,955
Actuarial gains on retirement								
benefit obligations	-	-	-	-	-	-	608	608
Tax on items taken directly to	1							
equity	-	-	-	45	-	-	(152)	(107)
Fair value losses	-	-	-	(248)	-	-	-	(248)
Total comprehensive income								
for the period	-	-	-	(203)	-	-	16,411	16,208
Sale of treasury shares	-	-	-	-	(1,119)	-	1,153	34
Cancellation of repurchased								
shares	(308)	-	-	-	-	308	-	-
Repurchase of own shares	-	-	-	-		-	(2,234)	(2,234)
Dividends paid	-	-	-	-	-	-	(5,032)	(5,032)
Share based payments charge	e	-	-	-	-	-	900	900
As at 31 August 2024	33,452	124,939	10,645	17	(3,175)	6,275	191,096	363,249

The repurchase of own shares in the period was made pursuant to the share buyback programmes announced on 13 June 2023 and 9 October 2023.

3,082,017 ordinary shares to the value of £2,234,000 had been repurchased in the six months ended 31 August 2024. These shares were cancelled immediately and accordingly, the nominal value of these shares has been transferred to the capital redemption reserve.

The 'Other reserve' is a merger reserve, arising from shares issued as consideration to the former shareholders of acquired companies.

For the six months ended 31 August 2023

					Treasury	Capital		
	Ordinary	Share	Other	Hedging	share	redemption	Retained	Total
s	hare capital	premium	reserve	reserve	reserve	reserve	earnings	equity
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
As at 1 March 2023	34,894	124,939	10,645	133	(2,653)	4,833	168,586	341,377
Profit for the period	-	-	-	-	-	-	22,420	22,420
Actuarial losses on retirement								
benefit obligations	-	-	-	-	-	-	(51)	(51)
Tax on items taken directly to								
equity	-	-	-	(215)	-	-	13	(202)
Fair value gains	-	-	-	941	-	-	-	941
Total comprehensive income for	or							
the period		-	-	726	-	-	22,382	23,108
Sale of treasury shares	-	-	-	-	510	-	(419)	91
Purchase of treasury shares	-	-	-	-	-	-	-	-
Cancellation of repurchased								
shares	(737)	-	-	-	-	737	-	-
Repurchase of own shares	-	-	-	-	-	-	(4,762)	(4,762)
Dividends paid	-	-	-	-	-	-	(4,913)	(4,913)
Share based payments charge	-	-	-	-	-	-	667	667
As at 31 August 2023	34,157	124,939	10,645	859	(2,143)	5,570	181,541	355,568

For the year ended 29 February 2024

	Ordinary share capital £'000	Share premium £'000	Other reserve £'000	Hedging reserve £'000	Treasury share reserve £'000	Capital redemption reserve £'000	Retained earnings £'000	Total equity £'000
As at 1 March 2023	34,894	124,939	10,645	133	(2,653)	4,833	168,586	341,377
Profit for the year	-	-	-	-	-	-	25,713	25,713
Actuarial losses on retirement benefit obligations Tax on items taken directly to	-	-	-	-	-	-	(737)	(737)
equity	-	-	-	(29)	-	-	184	155
Fair value gains	-	-	-	116	-	-	-	116
Total comprehensive income for								
the year	-	-	-	87	-	-	25,160	25,247
Sale of treasury shares	-	-	-	-	597	-	(482)	115
Purchase of treasury shares	-	-	-	-	-	-	-	-
Issuance of treasury shares	-	-	-	-	-	-	-	-
Repurchase of own shares	-	-	-	-	-	-	(7,463)	(7,463)
Cancellation of repurchased								())
shares	(1,134)	-	-	-	-	1,134	-	-
Dividends paid	-	-	-	-	-	-	(7,759)	(7,759)
Share based payments charge	-	-	-	-	-	-	1,856	1,856
As at 29 February 2024	33,760	124,939	10,645	220	(2,056)	5,967	179,898	353,373

NOTES

For the six months ended 31 August 2024

1. Basis of preparation

Vertu Motors plc is a Public Limited Company which is quoted on the AiM Market and is incorporated and domiciled in the United Kingdom. The address of the registered office is Vertu House, Fifth Avenue Business Park, Team Valley, Gateshead, Tyne and Wear, NE11 0XA. The registered number of the Company is 05984855.

The financial information for the period ended 31 August 2024 and similarly the period ended 31 August 2023 has neither been audited nor reviewed by the auditors. The financial information for the year ended 29 February 2024 has been based on information contained in the audited financial statements for that year.

The information for the year ended 29 February 2024 does not constitute statutory accounts as defined in section 434 of the Companies Act 2006. A copy of the statutory accounts for that year has been delivered to the Registrar of Companies. The Auditors' Report on those accounts was not qualified under section 498 of the Companies Act 2006.

2. Accounting policies

In line with International Accounting Standard 34 and the Disclosure and Transparency Rules of the Financial Conduct Authority, these condensed interim financial statements have been prepared applying the accounting policies and presentation that were applied in the preparation of the Company's published consolidated financial statements for the year ended 29 February 2024.

3. Segmental information

The Group adopts IFRS 8 "Operating Segments", which determines and presents operating segments based on information provided to the Group's Chief Operating Decision Maker ("CODM"), Robert Forrester, Chief Executive Officer. The CODM receives information about the Group overall and therefore there is one operating segment.

The CODM assesses the performance of the operating segment based on a measure of both revenue and gross margin. However, to increase transparency, the Group has included below an additional voluntary disclosure analysing revenue and gross margin within the reportable segment.

Circumstation and ad 24 America 2024	Revenue	Revenue	Gross Profit	Gross Profit	Gross
Six months ended 31 August 2024	£'m	Mix %	£'m	Mix %	Margin %
Aftersales ¹⁴	224.5	9.0	118.5	43.3	43.8
Used vehicles	950.6	38.1	68.7	25.1	7.2
New retail and Motability	771.8	31.0	58.4	21.3	7.6
New fleet & commercial	545.5	21.9	28.2	10.3	5.2
Total	2,492.4	100.0	273.8	100.0	11.0
	_	_		•	_
Six months ended 31 August 2023	Revenue	Revenue	Gross Profit	Gross Profit	Gross
	£'m	Mix %	£'m	Mix %	Margin %
Aftersales ¹⁴	205.1	8.5	110.0	41.2	43.8
Used vehicles	947.8	39.1	67.4	25.2	7.1
New retail and Motability	744.0	30.7	63.0	23.6	8.5
New fleet & commercial	525.6	21.7	26.8	10.0	5.1
Total	2,422.5	100.0	267.2	100.0	11.0
Year ended 29 February 2024	Revenue	Revenue	Gross Profit	Gross Profit	Gross
	£'m	Mix %	£'m	Mix %	Margin %
Aftersales ¹⁴	413.5	8.7	218.4	42.3	43.5
Used vehicles	1,816.2	38.5	122.5	23.7	6.7
New retail and Motability	1,452.5	30.8	119.6	23.2	8.2
New fleet & commercial	1,037.4	22.0	55.6	10.8	5.4
Total	4,719.6	100.0	516.1	100.0	10.9

¹⁴ Aftersales margin expressed on internal and external revenue

4. Non-underlying items

	Six months	Six months	Year
	31 August	31 August	29 February
	2024	2023	2024
	£'000	£'000	£'000
Impairment charges	-	-	(128)
Redundancy costs	-	(778)	(872)
Lease surrender premium	-	845	840
Share based payment charge	(1,110)	(1,013)	(2,466)
Amortisation	(284)	(408)	(568)
Non-underlying loss before tax	(1,394)	(1,354)	(3,194)
Non-underlying taxation charge	(45)	298	576
Non-underlying loss after tax	(1,439)	(1,056)	(2,618)

5. Finance income and costs

	Six months ended	Six months ended	Year ended
	31 August	31 August	29 February
	2024	2023	2024
	£'000	£'000	£'000
Interest on short-term bank deposits	413	672	1,099
Net finance income relating to Group pension scheme	60	77	155
Other interest	82	-	-
Finance income	555	749	1,254
Bank loans and overdrafts	(4,897)	(4,885)	(9,924)
Vehicle stocking interest	(4,693)	(4,054)	(9,347)
Lease liability interest	(1,839)	(1,733)	(3,457)
Finance costs	(11,429)	(10,672)	(22,728)

6. Taxation

The Group's underlying effective rate of tax is 25.9% (H1 FY24: 25.5%), which is higher than the standard rate of corporation tax in the UK as a result of the impact of non-qualifying depreciation and non-deductible expenses. The overall effective tax rate of 27.7% (H1 FY24: 25.7%) includes tax on non-underlying items. The Group continues to be classified as "low risk" by HMRC and takes a pro-active approach to minimising tax liabilities whilst ensuring it pays the appropriate level of tax to the UK Government.

7. Earnings per share

Basic and diluted earnings per share are calculated by dividing the earnings attributable to equity shareholders by the weighted average number of ordinary shares during the period or the diluted weighted average number of ordinary shares in issue in the period.

The Group only has one category of potentially dilutive ordinary shares, which are share options. A calculation has been undertaken to determine the number of shares that could have been acquired at fair value (determined as the average annual market price of the Group's shares) based on the monetary value of the subscription rights attached to the outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming the exercise of the share options.

Adjusted earnings per share is calculated by dividing the adjusted earnings attributable to equity shareholders by the weighted average number of ordinary shares in issue during the period.

	Six months	Six months	Year
	31 August	31 August	29 February
	2024	2023	2024
	£'000	£'000	£'000
Profit attributable to equity shareholders	15,955	22,420	25,713
Non-underlying loss after tax items	1,439	1,056	2,618
Underlying earnings attributable to equity shareholders	17,394	23,476	28,331
Weighted average number of shares in issue ('000s)	334,324	340,685	338,355
Potentially dilutive shares ('000s)	25,137	23,253	23,376
Diluted weighted average number of shares in issue ('000s)	359,461	363,938	361,731
Basic earnings per share	4.77p	6.58p	7.60p
Diluted earnings per share	4.44p	6.16p	7.11p
Underlying earnings per share	5.20p	6.89p	8.37p
Diluted underlying earnings per share	4.84p	6.45p	7.83p

At 31 August 2024, there were 334,520,133 shares in issue (including 2,001,184 held by the Group's employee benefit trust).

8. Reconciliation of net cash flow to movement in net debt

	31 August	31 August	29 February
	2024	2023	2024
	£'000	£'000	£'000
Net decrease in cash and cash equivalents	(31,950)	(31,099)	(8,385)
Cash outflow from repayment of borrowings	2,188	15,976	29,836
Cash movement in net debt	(29,762)	(15,123)	21,451
Capitalisation of loan arrangement fees	-	-	186
Amortisation of loan arrangement fees	(117)	(85)	(184)
Increase in accrued loan interest	(17)	(121)	(76)
Non-cash movement in net debt	(134)	(206)	(74)
Movement in net debt (excluding lease liabilities)	(29,896)	(15,329)	21,377
Opening net debt (excluding lease liabilities)	(53,979)	(75,356)	(75 <i>,</i> 356)
Closing net debt (excluding lease liabilities)	(83,875)	(90,685)	(53,979)
Opening lease liabilities	(82,924)	(83,457)	(83,457)
Capitalisation of new leases	(20,063)	(11,953)	(20,586)
Disposal of lease liabilities	825	2,152	2,936
Interest element of lease repayments	(1,839)	(1,732)	(3,457)
Cash outflow from lease repayments	12,479	10,193	21,640
Closing lease liabilities	(91,522)	(84,797)	(82,924)
Closing net debt (including lease liabilities)	(175,397)	(175,482)	(136,903)

9. Acquisitions

On 22 July 2024, the Group acquired the trade and assets of a Honda car dealership in Exeter from Hendy Group Limited. Total consideration of £1,030,000 was settled from the Group's cash resources.

10. Retirement benefit asset

The Group operates a trust based defined benefit pension scheme, "Bristol Street Pension Scheme", which has three defined benefit sections which were closed to new entrants and future accrual on 31 May 2003, with another section closed to new entrants in July 2003 and future accrual in October 2013. The Group has applied IAS 19 (revised) to the scheme. The scheme remains fully funded and in surplus on the accounting basis.

During the six month period ended 31 August 2024, there have been changes in the financial and demographic assumptions underlying the calculation of the liabilities. In particular, inflation assumptions are lower and life expectancy assumptions have been modified. The effect of these changes in assumptions was a decrease in liabilities of £439,000. The performance of the growth assets within the scheme investment portfolio meant that the period also saw an increase in the market value of scheme assets of £144,000. In total, an actuarial gain of £608,000 was recognised in the Consolidated Statement of Comprehensive Income.

11. Cash flow from movement in working capital

The following table reconciles the movement in balance sheet headings to the movement in working capital as presented in the Consolidated Cash Flow Statement.

For the six months ended 31 August 2024

	Inventories £'000	Trade and other receivables £'000	Trade and other payables £'000	Total working capital movement £'000
I rade and other payables			(850,196)	
Contract liabilities			(21,618)	
At 31 August 2024	785,718	86,897	(871,814)	
At 29 February 2024	761,996	93,702	(893 <i>,</i> 407)	
Balance sheet movement	(23,722)	6,805	(21,593)	
Acquisitions	734	48	(24)	
Movement excluding business combinations	(22,988)	6,853	(21,617)	(37,752)
Pension related balances				85
Increase in capital creditor				(1,039)
Increase in interest accrual				(16)
Derivative financial instruments				(127)
Movement in working capital				(38,849)
For the six months ended 31 August 2023

	Inventories £'000	Trade and other receivables £'000	Trade and other payables £'000	Total working capital movement £'000
Trade and other payables			(750,743)	
Contract liabilities		-	(25,491)	
At 31 August 2023	694,493	89,740	(776,234)	
At 28 February 2023	674,380	86,316	(784,175)	
Balance sheet movement	(20,113)	(3,424)	(7,941)	
Acquisitions	(104)	(27)	9	
Movement excluding business combinations	(20,217)	(3,451)	(7,932)	(31,600)
Pension related balances				85
Decrease in capital creditor				1,925
Increase in interest accrual				(383)
Movement in working capital			=	(29,973)

For the year ended 29 February 2024

	Inventories	Trade and other receivables	Trade and other payables	Total working capital movement
	£'000	£'000	£'000	£'000
Trade and other payables			(869,931)	
Contract liabilities			(23,475)	
At 29 February 2024	761,996	93,702	(893,406)	
At 28 February 2023	674,380	85,827	(784,175)	
Balance sheet movement	(87,616)	(7,875)	109,231	
Acquisitions	4,199	281	(2,661)	
Deferred consideration	-	-	(250)	
Disposals	(104)	(27)	9	
Movement excluding business combinations	(83,521)	(7,621)	106,329	15,187
Pension related balances				129
Decrease in capital creditor				1,049
Decrease in interest accrual				61
Derivative financial instruments				282
Movement in working capital			_	16,708

12. Goodwill and other indefinite life assets

	31 August	31 August	29 February
	2024	2023	2024
	£'000	£'000	£'000
Goodwill	85,429	83,559	85,189
Other indefinite life assets – Franchise relationships	43,903	43,903	43,903
At end of period	129,332	127,462	129,092

13. Risks and uncertainties

There are certain risk factors which could result in the actual results of the Group differing materially from expected results. These factors include: failure to deliver on the strategic goal of the Group to acquire and consolidate UK motor retail businesses, failure to meet competitive challenges to our business model or sector, advances in vehicle technology providing customers with mobility solutions which bypass the dealer network, inability to maintain current high quality relationships with Manufacturer partners, economic conditions impacting trading, market driven fluctuations in used vehicle values, litigation and regulatory risk, failure to comply with health and safety policy, failure to attract, develop and retain talent, failure of Group information and telecommunication systems, malicious cyber-attack, availability of credit and vehicle financing, use of estimates, currency risk, impact of the transition to lower emission alternatives, changes in cost base driven by climate goals and other climate related physical risks.

All of the above principal risks are consistent with those detailed in the Annual Report for the year ended 29 February 2024.

The Board continually review the risk factors which could impact on the Group achieving its expected results and confirm that the above principal factors will remain relevant for the final six months of the financial year ending 28 February 2025.

ALTERNATIVE PERFORMANCE MEASURES

Set out below are the definitions and sources of various alternative performance measures which are referred to throughout the Interim Financial Report. All financial information provided is in respect of the Vertu Motors plc Group.

Definitions

Like-for-like	Dealerships that have comparable trading periods in two consecutive financial years, only the comparable period is measured as "like-for-like".
H1 FY25	The six month period ended 31 August 2024.
H1 FY24	The six month period ended 31 August 2023.
Adjusted	Adjusted for amortisation of intangible assets, share based payment charges and other non-underlying items as these are unconnected with the ordinary business of the Group.
Aftersales gross margin	Aftersales gross margin compares the gross profit earned from aftersales activities to total aftersales revenues, including internal revenue relating to service and vehicle preparation work performed on the Group's own vehicles. This is to properly reflect the real activity of the Group's aftersales departments.

Alternative Performance Measures

Adjusted Profit Before Tax (PBT)	Six months	Six months
	ended	ended
	31 August	31 August
	2024	2023
	£'000	£'000
Profit before tax	22,067	30,151
Share based payment charge	1,110	1,013
Amortisation	284	408
Redundancy costs	-	778
Lease surrender premium	-	(845)
Adjusted PBT	23,461	31,505

Free Cash Flow

	Six months	Six months
	31 August	31 August
	2024	2023
	£'000	£'000
Net cash inflow from operating activities	312	14,636
Purchase of other property, plant and equipment	(11,953)	(11,864)
Enhancement capital expenditure included in above	7,174	3,121
Purchase of intangible assets	(19)	(100)
Proceeds from disposal of property, plant and equipment	800	2,239
Principal elements of lease repayments	(10,640)	(8,461)
Free Cash Flow	(14,326)	(429)

Tangible net assets per share	31 August	29 February
	2024	2024
	£'000	£'000
Net assets	363,249	353,373
Less:		
Goodwill and other indefinite life assets	(129,332)	(129,092)
Other intangible assets	(1,705)	(1,971)
Add:		
Deferred tax on above adjustments	12,774	12,668
Tangible net assets	244,986	234,978
Tangible net assets per share	73.7p	70.5p

At 31 August 2024, there were 334,520,133 shares in issue (29 February 2024: 337,602,150), of which 2,001,184 were held by the Group's employee benefit trust (29 February 2024: 4,391,449). Rights to dividends on shares held in the Group's employee benefit trust have been waived and therefore such shares are not included in the tangible net asset per share calculation.

Like-for-like reconciliations:

Revenue by department

	H1 FY25			H1 FY25
	Group	Acquisitions	Disposals	Like-for-like
	revenue	revenue	revenue	revenue
	£'m	£'m	£'m	£'m
New retail and Motability	771.8	(17.7)	-	754.1
New fleet and commercial	545.5	(3.8)	-	541.7
Used vehicles	950.6	(25.7)	-	924.9
Aftersales	224.5	(4.4)	-	220.1
Total revenue	2,492.4	(51.6)	-	2,440.8
	H1 FY24			H1 FY24
	Group	Acquisitions	Disposals	Like-for-like
	revenue	revenue	revenue	revenue
	£'m	£'m	£'m	£'m
New retail and Motability	744.0	-	(6.1)	737.9
New fleet and commercial	525.6	-	(3.7)	521.9
Used vehicles	947.8	(6.3)	(13.1)	928.4
Aftersales	205.1	(0.2)	(1.9)	203.0
Total revenue	2,422.5	(6.5)	(24.8)	2,391.2

Gross profit by department

	H1 FY25			H1 FY25
	Group gross profit	Acquisitions gross profit	Disposals gross profit	Like-for-like gross profit
	£'m	£'m	£'m	£'m
New retail and Motability	58.4	(0.9)	-	57.5
New fleet and commercial	28.2	(0.1)	-	28.1
Used vehicles	68.6	(1.5)	-	67.1
Aftersales	118.6	(2.8)	-	115.8
Total gross profit	273.8	(5.3)	-	268.5

	H1 FY24			H1 FY24
	Group gross	Acquisitions	Disposals	Like-for-like
	profit	gross profit	gross profit	gross profit
	£'m	£'m	£'m	£'m
New retail and Motability	63.0	-	(0.6)	62.4
New fleet and commercial	26.8	-	(0.3)	26.5
Used vehicles	67.4	(0.4)	(0.6)	66.4
Aftersales	110.0	(0.2)	(1.1)	108.7
Total gross profit	267.2	(0.6)	(2.6)	264.0

The Daily Telegraph: Petrol cars 'rationed to meet eco targets'

03/09/2024 16:32



The Daily Telegraph: Petrol cars 'rationed to meet eco targets'

The Daily Telegraph, Tuesday 3rd September 2024: Petrol cars 'rationed to meet eco targets'

Warning comes as consumer demand for expensive electric cars continues to wane.

Car makers are rationing sales of petrol and hybrid vehicles in Britain to avoid hefty net zero fines, according to one of the country's biggest dealership chains.

Robert Forrester, chief executive of Vertu Motors, said manufacturers were delaying deliveries of cars until next year amid fears they will otherwise breach quotas set for them by the Government.

This means someone ordering a car today at some dealerships will not receive it until February, he said.

At the same time, Mr Forrester warned manufacturers and dealers were grappling with a glut of more expensive electric vehicles (EVs) that are "not easily finding homes".

He said: "In some franchises there's a restriction on supply of petrol cars and hybrid cars, which is actually where the demand is.

"It's almost as if we can't supply the cars that people want, but we've got plenty of the cars that maybe they don't want.

"They [manufacturers] are trying to avoid the fines. So they're constraining the ability for us to supply petrol cars in order to try and keep to the government targets."

The chief executive blamed the zero emission vehicle (ZEV) mandate, which requires at least 22pc of cars sold by manufacturers to be electric from this year.

This target will gradually rise each year before reaching 80pc in 2030, with manufacturers made to pay £15,000 for every petrol car that exceeds their quota – unless they have so-called carbon credits to spend. But the scheme has prompted stark warnings from bosses at major brands, such as Vauxhall owner Stellantis and Ford, which have said they cannot sacrifice profits by selling EVs at large discounts indefinitely. Instead, they have previously warned they may be forced to restrict petrol car supplies to artificially boost their ZEV mandate performance.

The warning from Vertu is the first confirmation that carmakers have now begun doing so.

Mr Forrester added that although some people might cheer falling electric car prices, supporters of the ZEV mandate in its current form were "economic buffoons, because car manufacturers are being forced to discount EVs to such an extent that they're making losses... and that is not a good thing for business".

He said: "What the Government's actually doing is constraining the new car market, which has a big impact on VAT receipts for them, and creates a business environment in the UK where manufacturers may question whether they want to make cars here.

"As Carlos Tavares [chief executive of Stellantis] has said, why should they sell cars at a loss because of UK government policy?

"The new car market is no longer a market, unfortunately. It's a state-imposed supply chain."

His comments came as Vertu said it expected lower first half profits as demand for new cars and more expensive electric vehicles remained under pressure. The group, which has 192 showrooms and after-sales sites across the UK, said new car sales by volume fell 5.8pc in the five months to July 31.

By contrast, Vertu says there is strong demand for used cars with September expected to be a particularly busy month.

Mr Forrester's warning comes after the Society for Motor Manufacturers and Traders (SMMT), which represents car makers, slashed its forecast for electric car sales this year amid the ongoing slowdown in demand.

The group now predicts electric vehicles (EVs) will account for 18.5pc of the new car market in 2024, down from an earlier prediction of 19.8pc.

EV registrations surged higher in July but sales to private consumers continued to slump.

Mike Hawes, chief executive of the SMMT, said the weakening demand for EVs among private consumers – despite heavy discounting by car makers – remained the industry's "overriding concern".

<mark>A utility promised to stop burning coal. Then Google and Meta came to</mark> <mark>town.</mark>

An energy crunch forces continued coal burning in a low-income area as data centers strain the regional power supply.



"A promise was made, and then they broke it," said Cheryl Weston, who has lived for five decades in Omaha's largely minority neighborhood of North Omaha. The North Omaha Station stands in the background. (Misty Prochaska for The Washington Post)

By Evan Halper

October 12, 2024 at 5:00 a.m. EDT

OMAHA — Residents in the low-income, largely minority neighborhood of North Omaha celebrated when they learned a 1950s-era power plant nearby would finally stop burning coal. The community has some of the region's worst air pollution and <u>high rates of asthma</u>.

But when the 2023 deadline to rid that plant of coal arrived, the power company that owns it balked. Eliminating toxic emissions conflicted with a competing priority: serving massive, power-hungry Meta and Google data centers the utility <u>helped recruit</u> to the region before it secured enough new energy to meet the extra demand.

The fast-growing data centers — which provide computing power for artificial intelligence — are driving explosive growth in the area's energy use. Electricity demand in Omaha has increased so much overall, according to the Omaha Public Power District, that permanently switching off the two coal-burning generators at its North Omaha plant <u>could buckle</u> the area's electricity system.

"A promise was made, and then they broke it," said Cheryl Weston, who has lived for five decades in North Omaha. "The tech companies bear responsibility for this. The coal plant is still open because they need all this energy to grow."

<u>Coal is now planned to burn</u> in North Omaha through 2026, according to the utility, although Weston and other critics are skeptical it will stop then. The disputes in Omaha over data centers and power demand are playing out across the United States. Rapid data center growth has also been accompanied by utility plans to prolong the use of coal in Georgia, Utah and Wisconsin. The Nebraska story reveals in detail how the race by giant technology companies to gain the advantage in AI is conflicting with climate goals and potentially harming public health.

Power Grab

The artificial intelligence industry is driving a nationwide data center building boom. These sprawling warehouses of computing infrastructure are creating explosive demand for power, water and other resources. <u>Power Grab</u> investigates the impacts on America and the risks AI infrastructure creates for the environment and the energy transition.

The Omaha Public Power District blames the missed closure date for its North Omaha coal-burning units on the slow arrival of clean energy supplies from wind and solar, which have met with heavy opposition in rural areas. It also cites regulatory delays that have slowed a plan to replace coal-burning units with natural gas, pointing to <u>long waits</u> to connect new projects to the regional electrical grid and mandates for minimum power supplies. But others in the energy industry say that's not the full story.

The electricity that Google and Meta — the parent company of Facebook and Instagram — are devouring is a major factor in the extension of coal burning, they say. According to the utility's own estimates, twothirds of projected growth in demand in the Omaha area is attributable to the massive data centers rising largely on former farmland in the surrounding prairie.



A sign outside the Google data center in Papillion, Neb. (Misty Prochaska for The Washington Post)

"If not for the data centers and poor planning by the utility, they would not need to push to keep those coal units open," said Devi Glick, a principal at the consulting firm Synapse Energy Economics. "It is disingenuous to say that is not what is driving this."

The data centers' need for electricity is enormous. Meta's Nebraska data center alone used nearly as much energy as the North Omaha coal units produced in 2023, company and federal energy disclosures show. It is enough electricity to power more than half the homes in Omaha.

States with Meta's most reserved data center megawatt capacity

Nebraska is Meta's seventh-ranked state for live energy use but will slip to 10th once data centers under construction are complete.



Source: DC Byte

ANDREW BA TRAN / THE WASHINGTON POST

States with Google's most reserved data center megawatt capacity

Two Google data centers in Nebraska use the most energy but will be overshadowed once two projects in Ohio are completed.



Google's electricity use in the Omaha region eclipses that of Meta, according to tracking by the research firm DC Byte. The data shows Google uses more total electricity in Nebraska than anywhere in the United States.

The conflicts in Omaha are not unique. Companies are scouring the nation for alternative sites for data centers as they encounter land and <u>energy shortages</u> in tech hubs such as Northern Virginia and California's Bay Area. Communities that recently landed on the radar of Silicon Valley are being visited by battalions of tech executives, energy developers and real estate brokers looking for power.

Omaha emerged as prime territory because of its bountiful, cheap electricity and seemingly endless opportunities to convert cornfields into vast solar and wind farms.

Despite the slow arrival of new solar and wind sources into the utility's portfolio, tech companies insist their data center operations in Nebraska are green. By signing contracts with distant renewable power developers, they claim to have "net zero" impact on greenhouse gas emissions, even as the North Omaha coal plant continues to pollute locally. Residents say those faraway clean power purchases offer little comfort. Asthma rates in North Omaha, where people of color make up 68 percent of the population, are among the highest in the country, according to a study released last year. Coal power plants have been <u>linked</u> to asthma and <u>elevated mortality rates in neighboring communities nationwide</u>.

The newest Omaha-area data centers are so massive, and so unexpected among the corn stalks and sorghum plants, that they seem like science fiction come to life. Meta's <u>sprawling facility</u> is 4 million square feet spread over nine giant complexes. The largely windowless Google and Meta buildings are filled with the racks and servers that power the world's cloud computing needs today and increasingly power the revolution in AI.



Meta's data center outside Omaha. (Misty Prochaska for The Washington Post)

Data centers could consume as much as 17 percent of all U.S. electricity by 2030, according to new research from <u>Bloomberg Intelligence</u>, nearly quadruple what they consume today. In the Omaha region, utility officials have announced they will need to <u>double the amount of electricity</u> they generate by that time.

Meta originally passed over Omaha. To woo the tech company, local utility executives created a special industrial electricity rate in 2017. The utility then aggressively marketed the rate to Google. Then-Gov. Pete Ricketts (R) said in 2020 that the Omaha Public Power District was the "linchpin" to getting Google to come to Nebraska.

"It took us 75 years to get where we are today," Omaha Public Power District CEO Javier Fernandez said in a blog post. "By 2030, we are going to nearly double our generation portfolio. That's incredible." Utility officials say they will eventually bring online a huge amount of wind and solar energy — enough to meet as much as 60 percent of the new electricity demand. Much of the rest would come from gas.

Local activists are dismayed by what they say is a muted tech company response to the continued use in Omaha of fossil fuels, not just coal but also natural gas. They say these companies need to be clear that they will not continue to expand if the power company serving them is using dirty energy.

"They're sitting on the sidelines and watching," said Preston Love, a longtime North Omaha community organizer who is running for the U.S. Senate as a Democrat. "They're not in the game. Shame on them. They need to be speaking up." The tech companies, which declined interview requests, said every watt of power they use for their data centers is matched with purchases of clean energy elsewhere on the regional power grid. But those contracts feed into a vast <u>power grid</u>, spanning 14 states from Louisiana to Montana. Many experts and activists say much of that clean power would probably get produced whether the tech companies were signing contracts or not.

"These tech companies are doing a lot of paper pushing in Nebraska, and there are not enough real projects being built that get new wind and solar on the grid now," said Jane Kleeb, founder of Bold Nebraska, which played a key role in killing the proposed Keystone XL pipeline project.

She said tech companies should help overcome rural opposition that has emerged to huge wind and solar arrays. "The Googles and Metas are basically saying 'Yes, we're net zero' and then leaving all the responsibility of actually building clean energy to us, without supporting our efforts," she said.

"These tech companies are doing a lot of paper pushing in Nebraska, and there are not enough real projects being built that get new wind and solar on the grid now," said Jane Kleeb, founder of Bold Nebraska. (Misty Prochaska for The Washington Post)

The Omaha Public Power District's marquee solar project in development, a 2,800 acre industrial-scale project on York County farmland, 100 miles from Omaha, is getting a frosty reception from locals. At community meetings they have expressed alarm about the project size, its impact on agriculture, alleged chemicals in solar panels and worries the solar generation will be noisy. Some of the anxieties are spawned from what experts say is misinformation spreading online, but others are concerns of a rural community fearing its farming heritage is under threat.

Some of the tension is rooted in resentment that Omaha recruited the data centers and is getting the tax revenue and jobs they bring, but is now looking to far-flung, rural communities to host the industrial-scale energy installations needed to power them.

"I guarantee the people who say they are in favor of this project wouldn't want to have them in their backyard," local resident Jim Jackson said at a county meeting in June, according to the <u>meeting minutes</u>.

"Why pick on prime farm ground?" York County commissioner Stan Boehr said to Omaha utility officials at the gathering. "Why not go to places where you are not interfering with people's lives?" County officials did not respond to requests for comment. York County's draft ordinance would prohibit large solar projects from being installed within a half-mile of other properties.

Fernandez, the Omaha Public Power District CEO, called the York County measure "unreasonable and detrimental to crucial clean energy projects."

Omaha Public Power itself sided against a battery project that clean energy advocates say is needed to support wind and solar farms in the state. (Batteries maintain a steady flow of electricity when solar and wind are not producing energy.)

The Omaha Public Power District ruled in April that the developer, Eolian, could not connect to the grid batteries it plans to install on an industrial lot near Omaha's coal-fired plant. The power company said <mark>private companies are prohibited from hooking up such projects because Nebraska is a "public power"</mark> state where infrastructure must be community owned.

Eolian officials, after working on their plan for six years, say they were blindsided by the decision. They argue Nebraska law has specific exemptions allowing the purchase of clean energy from private firms.

"Given the large and growing data center footprint in Omaha, it is confounding that the local utility would intentionally impede the addition of multi-hour battery energy storage resources," said Eolian CEO Aaron Zubaty. The utility said in a statement that the exceptions are limited and do not allow for "a privately owned, stand-alone battery storage facility." Eolian and the utility will now make their case to the Nebraska Power Review Board, which has authority to approve the project.

As these controversies play out, North Omaha residents accuse the power company and tech firms of dealing with the challenges not by curbing energy use, but by turning North Omaha into a "sacrifice zone."

Residents in the community say it has been neglected and underserved for decades. The average household income of \$47,300 is far below that of the rest of the city. While tech companies and local politicians say the data centers have brought hundreds of millions of dollars in investment and thousands of jobs to the region, North Omaha residents say they are seeing little of it. But they are stuck with two more years of coal emissions.

"This would never be allowed to happen to an affluent White community," said Anthony Rogers-Wright, a North Omaha activist. "People here are seen as expendable. ... If the power company was not ready to provide clean energy, it should not have been recruiting these data centers to come to Omaha."

About this story

Andrew Ba Tran contributed to this report. Photo editing by Haley Hamblin. Design by Allison Mann. Design editing by Betty Chavarria. Editing by Christopher Rowland and Sandhya Somashekhar. Project editing by KC Schaper. Copy editing by Sue Doyle.







How Significant Will AI Data Centers' Electricity Demand Be? ဖ









Source: BloombergNEF, Electric Reliability Council of Texas (Ercot). Note: 2024 generation is a combination of historical values for January to July and forecast values for January to July and forecast values for August to December. Forecast is the average of the weather years.

14 How Significant Will AI Data Centers' Electricity Demand Be?

BloombergNEF





BloombergNEF



Uniper CEO Green Projects Beyond 2030: FAZ 2024-10-10 20:05:33.431 GMT

By Monica Raymunt

(Bloomberg) -- Uniper SE said a lack of demand is forcing the German utility to postpone €8 billion-worth (\$8.7 billion) of investments into green hydrogen and other emissions-friendly technology beyond 2030.

"We must not ignore developments in our business environment," Chief Executive Officer Michael Lewis said in an interview with Germany's Frankfurter Allgemeine Zeitung. The company had planned to invest €8 billion by the end of the decade, but Lewis said reaching that target will "probably take a few years longer," namely until "the early 2030s."

"We cannot invest where we don't expect a good return," Lewis said, adding delays were necessary due in part to lacking demand for green hydrogen. "There are hardly any major customers who buy green hydrogen. That's why we have to put the brakes on a bit."

Read More: Germany Said to Tap Citi, Deutsche Bank, UBS for Uniper Deal

Uniper had previously said it wanted 80% of its installed generating capacity to be emissions-free by 2030, and that it would end coal-fired power generation by 2029 at the latest.

To contact the reporter on this story:

Monica Raymunt in Berlin at <u>mraymunt@bloomberg.net</u> To contact the editors responsible for this story: Stefan Nicola at <u>snicola2@bloomberg.net</u> Jeff Sutherland

To view this story in Bloomberg click here: https://blinks.bloomberg.com/news/stories/SL5NFCT0AFB4 EUROPEAN COURT OF AUDITORS

Renewable hydrogen-powered EU: auditors call for a reality check

16/07/2024

Energy, environment and climate action

Research and innovation

- 2030 goals for renewable hydrogen production and demand were overly ambitious
- Chicken-and-egg problem: supply depends on demand, and vice versa
- Risk of less competitive key industries and new strategic dependencies

The EU has had mixed success in providing the building blocks for the emerging renewable hydrogen market, according to a report by the European Court of Auditors. While the European Commission has taken a number of positive steps, challenges remain all along the hydrogen value chain, and the EU is unlikely to meet its 2030 targets for the production and import of renewable hydrogen. The auditors call for a reality check to ensure that the EU's targets are realistic, and that its strategic choices on the way ahead will not impair the competitiveness of key industries or create new dependencies.

Renewable or "green" hydrogen carries significant implications for the future of key EU industries, as it can help to decarbonise especially hard-to-electrify sectors such as steel production, petrochemicals, cement, and fertilisers. It can also help the EU to meet its 2050 climate goals of zero carbon emissions and further reduce the EU's reliance on Russian fossil fuels.

"The EU's industrial policy on renewable hydrogen needs a reality check," said Stef Blok, the ECA Member in charge of the audit. "The EU should decide on the strategic way forward towards decarbonisation without impairing the competitive situation of key EU industries or creating new strategic dependencies."

To start with, the Commission set overly ambitious targets for the production and import of renewable hydrogen, i.e. 10 million tonnes each by 2030. These targets were not based on a robust analysis, but were driven by political will. Moreover, achieving them has had a bumpy start. Firstly, member states' differing ambitions were not always aligned with the targets. Secondly, in coordinating with the member states and industry, the Commission failed to ensure that all parties were pulling in the same direction.

On the other hand, the auditors give credit to the Commission for proposing most legal acts within a short period of time: the legal framework is almost complete, and has provided certainty that is key to establishing a new market. However, agreeing on the rules that define renewable hydrogen took time, and many investment decisions were deferred. Project developers also defer investment decisions because supply depends on demand, and vice versa.

Building up an EU hydrogen industry requires massive public and private and investment, but the Commission does not have a full overview of needs or of the public funding available. At the same time, EU funding – estimated by the auditors at 18.8 billion euros for the 2021-2027 period – is scattered between several programmes, thus making it difficult for companies to determine the type of funding best suited for a given project. The bulk of EU funding is used by those member states with a high share of hard-to-decarbonise industry, and which are also more advanced in terms of planned projects, i.e. Germany, Spain, France, and the Netherlands. However, there is still no guarantee that the EU's hydrogen production potential can be fully harnessed, or that public funding will allow the EU to transport green hydrogen across the bloc from countries with good production potential to those with high industrial demand.

The auditors call on the Commission to update its hydrogen strategy, based on a careful assessment of three important areas: how to calibrate market incentives for renewable hydrogen production and use; how to prioritise scarce EU funding and which parts of the value chain to focus on; and which industries the EU wants to keep and at what price, given the geopolitical implications of EU production compared to imports from non-EU countries.

Background information

Hydrogen can be produced in different ways, e.g. from water using electricity (electrolysis), or from (reforming) natural gas. Renewable hydrogen – i.e. hydrogen produced using either renewable electricity or biomass – is one way to make the EU's heavy industries climate-friendly.

However, renewable hydrogen comes with its own challenges, including the cost of production, and the need for renewable electricity and water. In 2022, hydrogen accounted for less than 2 % of Europe's energy consumption, with the largest share of demand coming from refineries. According to the report, the demand that is expected to be stimulated will not even reach 10 million tonnes by 2030, let alone the 20 million tonnes initially envisaged by the Commission. The auditors also note that, as things stand, there is no overall EU hydrogen import strategy.

Special report 11/2024, "The EU's industrial policy on renewable hydrogen: legal framework has been mostly adopted – time for a reality check", is available on the ECA website. The ECA has previously issued several reports on the EU's industrial policy, including on energy storage technologies and on batteries.

Related links













This means green hydrogen production costs are much higher than expected



Latest pilot auction results for European hydrogen projects € per kilogram Source: European Commission. Shows disclosed average levelized cost of RFNBO hydrogen in the European Hydrogen Bank pilot auction. Note: 'RFNBO' stands for renewable fuel of non-biological origin and refers to the <u>EU definition</u> for electrolytic hydrogen that qualifies for European Hydrogen Bank subsidies and quotas under the Revision of the Renewable Energy Directive, REFuelEU Aviation and FuelEU Maritime. Excludes values for countries with less than five bids.

15 End of the Hydrogen Hype Cycle?

BloombergNEF





Developers are cancelling projects

The oil major cites a lack of demand for low-carbon hydrogen produced from fossil gas with carbon capture, compared to molecules derived from renewables project leaves €10m hole inPlanned hydrogen pipeline hetween ^waccounts amid spiralling ccNorway and Germany 'Green hydrogen is clearly favoured' Uncertainty over demand and price of renewable H2 countibu Equinor Hannover scheme Hannover scheme Project to produce up to 10CW of blue hydrogen in Project in Norway The oil major cites a tack of demand for low-carbon hydrogen produced from fossil Failed hydrogen hydrogen-to-methan'No firm customers' **Orsted scraps FlagshipONE areen** years after FID



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23 End of the Hydrogen Hype Cycle?

BloombergNEF

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End of the Hydrogen Hype Cycle?


Hurricane Track Map Rule of Thumb.

Hurricanes that move south of the Dominican Republic are the ones that are likely to hit Yucatan Peninsula or come into the GoM to hit Gulf Coast.

Last 4 yrs of @NHC_Atlantic track maps - are indicative of track maps since 2000.

#OOTT #NatGas



3:44 PM · Oct 13, 2024 · 4,759 Views

SAF @Energy_Tidbits

Brent down \$2.42 to \$75.04 post NYMEX close.

See report - "Netanyahu Tells U.S. That Israel Will Strike Iranian Military, Not Nuclear Or Oil, Targets, Officials Say". Thx @shira_rubin @nakashimae

#OOTT

washingtonpost.com/world/2024/10/...



4:25 PM · Oct 14, 2024 · 1,464 Views

sar --- Dan Tsubouchi 🤡 @Energy_Tidbits

Warm winters are never good for #NatGas

@accuweather forecasts warmer than normal (less heating demand) winter for 2/3 of the Lower 48 including the more populous east and south. Thx @wxlada

👇 03/08/24 tweet: Winter 2023/24 was warmest on record.

#OOTT #NatGas



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Dan Tsubouchi 🥝 SAF @Energy_Tidbits

No Green Hydrogen = Need #NatGas #Coal for longer.

Uniper delays €8b in green projects.

CEO " There are hardly any major customers who buy green hydrogen. That's why we have to put the brakes on a bit." "We cannot invest where we don't expect a good return" reports @MonicaRaymunt

Fits - 10/09/24 tweet @BloombergNEF "End of the Hydrogen Hype Cycle?"

#OOTT

Uniper CEO Green Projects Beyond 2030: FAZ 2024-10-10 20:05:33.431 GMT

By Monica Raymunt

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Read More: Germany Said to Tap Citi, Deutsche Bank, UBS for Uniper Deal

Uniper had previously said it wanted 80% of its installed generating capacity to be emissions-free by 2030, and that it would end coal-fired power generation by 2029 at the latest.

To contact the reporter on this story:

Monica Raymunt in Berlin at mraymunt@bloomberg.net To contact the editors responsible for this story: Stefan Nicola at snicola2@bloomberg.net Jeff Sutherland

SAF @Energy_Tidbits

#EnergyTransition reality check.

"Making a transition for [EVs] longer is a big trap," "When you make a longer transition, in fact, you don't replace the old world by the new one. You add up the new world to the old." @Stellantis CEO

It's exactly what happens when **#EVs** take way longer to displace ICE, solar/wind to displace **#NatGas** generation, green hydrogen to displace NatGas & **#Coal** for heavy industry, hydrogen to displace bunker fuel for ships, etc.

The "new" system doesn't displace the existing, it adds on top and costs go higher for longer.

Thx @SarahWhites @KanaInagaki #OOTT

Financial Times 😍 @FT · Oct 14 Stellantis boss warns longer EV shift poses high cost 'trap' for carmakers on.ft.com/3U9dICD

8:45 PM · Oct 14, 2024 · 3,689 Views

SAF @Energy_Tidbits

•••

Coal is needed for longer.

A utility promised to stop burning coal. Then Google and Meta came to town. @evanhalper

Data centers will take as much solar & wind as possible BUT need 24/7 power.

So for next decade or more until mini-nukes or multi-day battery send out is available, THE only real choices are more #NatGas and keep #Coal running for longer.

#OOTT

washingtonpost.com/business/2024/...

8:45 PM · Oct 14, 2024 · 2,880 Views



Negative China indicator

Will stimulus finally get Chinese consumer out spending?

Chinese normally add to savings in Sept, but Sept 2024 is new record. +\$531b to \$21.34T.

MoM: Sep 24: +531b Sep 23: +\$247b Sep 22: -\$186b Sep; 21: +\$359b Sep 20: +\$398b Sep 19: +\$228b Sep 19: +\$147b Sep 17: +99b Sep 16: +\$165b

Thx @business #OOTT





8:01 PM · Oct 15. 2024 · 1.896 Views

sar ---- Dan Tsubouchi @ @Energy_Tidbits

More UK BEVs reality check from Vertu @vertumotorsCEO

UK BEV in retail customer market -7% YoY, concerns not just price and charging infra, but also costs.

UK BEV growth due to fleet.

Some car manufacturers rationing ICE & HEV to meet ZEV mandate.

UK needs either more incentives or reduce % of new sales to be BEV.

#OOTT



sar---- Dan Tsubouchi 🤣 @Energy_Tidbits

Need to find a way for broader prosperity.

44% of Americans with financial assets (housing, stocks, bonds, etc.) net worth is +45% or +\$50T since beginning of Covid.

But those that don't own financial assets are struggling.

@AliciaLevinePhD to @andrewrsorkin yesterday. #OOTT



8:06 AM · Oct 16, 2024 · 1,424 Views

SAF @Energy_Tidbits

#NatGas & #Coal also win in Amazon & Google sign up for to-be regulatory approved & built n nuclear SMRs

For next decade, what else but #NatGas and #Coal generation can provide 24/7 reliable electricity for #DataCenters until nuclear power is available?

See \P 10/11 tweet <code>@BloombergNEF</code> need more <code>NatGas</code> & Coal for data centers.

#OOTT



SAF --- Dan Tsubouchi 🤡 @Energy_Tidbits

NW Europe #LNG imports -24% WoW to 4.69 bcfd in Oct 7-13 week.

Storage would be full if NW EU hadn't cut back LNG imports in Q2/Q3.

YTD Oct 13, NW EU <code>#LNG</code> imports down ~454 bcf or ~1.58 bcfd YoY to 5.77 bcfd.

If not for Israel/Iran risk, EU #NatGas prices would be lower in shoulder season.

Thx @BloombergNEF

#OOTT

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	Total exports	7.88	7.99	8.20	7.57	7.46	0.41	3%	14.55	14.24	-0.31	-2%	319.61	323.58	3.97	11
e	Pacific Basin	2.53	2.79	2.88	2.89	2.94	0.05	2%	5.30	6.23	-0.07	.1%	117.00	119 56	2.54	2%
옱	Atlantic Basin	3.02	3.15	2.99	2.67	3.02	0.36	13%	5.40	6.33	4.07	-1%	113.54	118.13	4.58	475
â	Middle East	1.90	2.05	2.32	2.00	2.01	0.01	0%	3.84	3.68	-0.18	416	89.05	85.89	3.18	-4%
1	Gater	1.49	1.39	1.61	1.42	1.67	0.18	10%	2.62	2.74	0.22	4%	63.18	62.48	0.72	15
*	Australia	1.56	1.48	1.54	1.58	1.52	-0.07	-4%	2.86	2.81	-0.05	12%	62.81	63.38	0.45	1%
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_	Nelaysia	0.50	0.53	0.50	0.50	0.35	-0.IE	-30%	09.0	0.73	-0.07	10.000	20.06	20.34	0.30	1%
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1	Total imports	8.11	6.47	8.15	7.80	7.37	-0.40	-5%	13.48	14.23	0.75	6%	309.57	314.83	5.28	8%
	JKCT	3.97	3.62	4.84	2.35	4.43	5.08	125	0.81	7.39	0.58	616	161.92	162.33	10.41	2.4
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-	Japan	1.16	1.15	1.68	123	1.32	0.10	35	2.34	2.36	0.01	1%	50.39	\$1.11	0.72	1%
	South Korea	0.70	0.76	0.77	1.01	1.12	0.11	11%	1.61	1.99	0.38	23%	33.97	35.42	1.45	4%
	Mainland China	1.60	1.28	1.99	0.76	1.54	0.75	65%	2.14	2.26	0.12	6%	52.01	59,18	7.15	14%
8	Taivon	0.61	0.03	0.53	0.03	0.45	0.12	37%	0.72	0.78	0.06	8%	15.55	16.63	1/07	.7%
	India	0.60	0.98	0.35	0.74	0.60	-0.14	-10%	0.78	1.20	0.42	1545	15.93	21.17	4.24	25%
≥	Theiland	0.14	0.14	0.07	0.35	0.06	0.31	-83%	0.43	0.37	-0.05	-14%	0.19	9.69	0.61	675
	France	0.24	0.30	0.24	0.47	0.34	-0.18	-27%	0.64	0.74	0.09	15%	15.61	14.17	-1.43	-9%
	Netherlands	0.34	9.29	0.07	0.41	0.21	0.21	160%	0.55	0.62	0.07	13.2	12.74	11.03	1.72	
	Spein	0.18	0.10	0.51	0.20	0.21	0.01	3%	0.73	0.41	-0.32	-	14.24	10.51	13.73	- 200

1:19 PM · Oct 16, 2024 · 1,147 Views

OOPS.

10/15. <a>@CAgovernor signs law.

10/16. @Phillips66Co to cease operations at Wilmington (Los Angeles) 139,000 b/d refinery. "With the long-term sustainability of our Los Angeles Refinery uncertain and affected by market dynamics"

...

Wonder how much this will add to CA gasoline prices?

#OOTT



Show more

6:38 PM · Oct 16, 2024 · 5,166 Views

Dan Tsubouchi 🤣 SAF @Energy_Tidbits

China new and 2nd home values for Sept is released tonight.

See 👇 09/13 tweet for Aug data of 15th straight MoM drop in new home values and 16th straight M/M drop in second hand home values.

#OOTT

🗤 – Dan Tsubouchi 🤣 @Energy_Tidbits · Sep 13 No wonder Chinese consumer is still on sidelines. Their most important asset, home values keep going lower. New home prices: 15th straight MoM % drop. Aug -0.73%. July -0.65%. June ... Show more Figure 44: China new home prices MoM % change incl Aug 2024 CHEAWGH -0.73% For Aug Next Release 17 Oct 21:30 Survey -China 70 Cities Newly Built Commercial ... Bloomberg Intelligence CHINA NEW HOME PRICES MOM & CHANGE AUG IS 15 " LONSECUTIVE NOM DECLINE HJ6 - 0.73% Nom



4:08 AM · Oct 17, 2024 · 1,615 Views

rce: Bloomberg, National Bureau of Statistics



Do VLCC rates point to normal seasonal lower Q1 demand moving into Q4?

"the fact that there has been no seasonal uplift [in tanker rates] for Very Large Crude Carriers as yet, it's a sign the [oil] demand is not really as strong as it should be for this time of the year." @Michellewb_

#OOTT @gulf_intel @DyalaSabbagh_GI



6:54 AM · Oct 17, 2024 · 2,305 Views

saF Dan Tsubouchi ? @Energy_Tidbits

...

For those who aren't near their laptops, at 9:00am MT, @EIAgov released #Oil #Gasoline #Distillates inventory as of Oct 11. Table below compares EIA data vs @business expectations and vs @APIenergy estimates yesterday. Prior to release, WTI was \$70.75. #OOTT

(million barrels)	EIA	Expectations	API
Oil	-2.19	1.50	-1.60
Gasoline	-2.20	-2.00	-5.90
Distillates	-3.53	-2.50	-2.70
	-7.92	-3.00	-10.20

Note: Oil is commercial. So excludes a +1.0 mb build in SPR for the Oct 11 week Note: Included in the oil data, Cushing had a 0.11 mmb build for Oct 11 week Source EIA, Bloomberg

Prepared by SAF Group https://safgroup.ca/news-insights/

9:02 AM · Oct 17, 2024 · 5,600 Views



Warm winters and a warm start to winter are never good for #NatGas

@NOAA forecasts warmer than normal (less heating demand) Nov/Dec/Jan start to winter across almost all of the Lower 48 especially the populous east and south.

#OOTT #NatGas



10:11 AM · Oct 17, 2024 · 2,834 Views

saF---- Dan Tsubouchi 🤣 @Energy_Tidbits

Look for Pemex Mexico #Oil production to decline in H1/25.

Must read \P @edgarsigler thread.

New E&P head to cut 20% or \$1.38b from Q4 capex incl some level of well maintenance capex.

Pemex reportedly thinks only hit production by ~6,000 b/d on 1.73 mmb/d in Aug.

Any level of cut to capex to maintain well production on a 1.73 mmb/d has to hit by way more than 6,000 b/d.

Thx @edgarsigler @ArgusMedia #OOTT

🚯 Édgar Sígler @edgarsigler · 18h

Hace unos días el nuevo equipo de @Pemex Exploración y Producción liderado por el ex comisionado de @CNH_MX Néstor Martinez mandó un oficio a las unidades de la subsidiaria para decirles que se vienen recortes al gasto en los siguientes meses. Les cuento un poco de esto:

5:41 PM · Oct 17, 2024 · 6,014 Views



Chinese consumer's most important asset, their home values keep going lower.

New home prices: 16th straight MoM % drop. Sept -0.71%. Aug -0.73%. July -0.65%.

2nd hand home prices: 17th straight MoM % drop. Sept -0.93%. Aug -0.95%. July -0.80%.

Can China stimulus change this?

Thx @business #OOTT



7:55 PM · Oct 17, 2024 · 2,260 Views



"Cautious macro environment" for oil & gas activity.

\$SLB also seeing decline in Latin America oil & gas spending in addition to Lower 48 oil & gas spending remaining "subdued".

Q3 just posted, conference call at 7:30am MT.

#OOTT



5:38 AM · Oct 18, 2024 · 6.433 Views

"Cautious macro environment" for oil & gas activity.

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Q3 just posted, conference call at 7:30am MT.

#OOTT



5:38 AM · Oct 18, 2024 · 6,433 Views



321 crack spreads -\$0.50 WoW to \$16.92.

WTI -\$6.34 WoW to \$69.22.

This wk's big WTI WoW drop reinforces WTI is impacted more by global markets than by crack spreads.

Seems China & Israel/Iran premium has mostly come & gone with big WTI drop this week.

Since 09/27, 321 cracks +\$0.90 whereas WTI +\$1.04.

Thx @business

#OOTT



saF @ Dan Tsubouchi @ @Energy_Tidbits

Continued positive to Cdn #Oil in H2/24

Looks like ramp up of volumes on new 590,000 b/d TMX has, at least so far, kept WCS less WTI differentials from the normal Sept/Oct widening.

WCS less WTI diffs: 10/18/24: \$12.75 10/18/23: \$23.00 10/18/22: \$26.10

Thx @garquake #OOTT



4:52 PM · Oct 18, 2024 · 7,787 Views

Daily Europe air traffic close but still stuck below pre-Covid. 7-day moving average as of: Oct 17: -1.9% below pre-Covid Oct 10: -1.7% Oct 3: -2.9% Sept 26: -2.9% Sept 19: -2.8% Sept 19: -2.8% Aug 29: -3.1% Aug 29: -3.1% Aug 15: -2.2% Thx @eurocontrol #OOTT #OTT Diffe Variation -States Difference of the state of	saF Dan Tsubouchi 🥑 @Energy_Tidbits
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Good to see Florida average gasoline prices -\$0.01 WoW & -\$0.07 MoM. MoM comp is vs Sept 19 and Helene hit Sept 26.

AAA National average prices +\$0.02 WoW to \$3.18 on Oct 19, -\$0.04 MoM & -\$0.39 YoY.

US election is Nov 5. National average prices were ${\sim}\$3.80$ at time of 2022 mid-terms.

Thx @AAAnews #OOTT





Wine of the week. Opening old red wines that would have been opened w/o Covid.

2004 Artadi Pagos Viejos Rioja.

It was excellent. No wonder Wine Advocate said should drink well thru 2047. No rush for the last few.

Label beaten up, was in cellar during Alberta 2013 flood



Last edited 9:33 AM · Oct 19, 2024 · 931 Views

saF Dan Tsubouchi 🤣 @Energy_Tidbits •••

Floating Oil Storage

Vortexa crude #Oil floating storage -6.12 mmb WoW to 55.61 mmb.

Only been 6 wks <60 mmb since Covid incl 3 of last 7. Last 7 wks average 58.56 mmb.

Oct 4 revised -0.82 mmb to 46.33 mmb, the only wk <50 mmb since 09/17/19.

Thx @vortexa @business #OOTT





It's Fall so that is mostly leave the windows open temps during daytime and turn on the furnaces a little bit at night.

@NOAA updated 6-10 & 8-14 day temp outlook for Oct 25-Nov 2.

#OOTT #NatGas



Caution unless it gets cold in Nov?

Other than 2022 where global #NatGas markets were driven up post Russia 02/24/22 invasion of Ukraine, HH prices have weakened in Nov/Dec with warm or even normal temps in Nov/Dec.

#OOTT





BC election results won't be known for days even with 99.77% reporting.

Who will win & will Greens will hold the balance of power.

Seats as of 3:45am MT NDP 46 Conservatives 45 Green 2

BUT will likely be recounts in some very close ridings.

#OOTT

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SAF @Energy_Tidbits

Is Israel about to attack Iran or did Biden embellish?

Q ... do you have a good understanding right now what Israel is going to do in response to Iran's October 1st attacks and when they will actually respond to Iran? THE PRESIDENT: Yes and yes.

Would Israel risk telling Biden too far in advance?

#OOTT



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