

Energy Tidbits

OPEC+, We Expect Saudi Energy Minister Abdulaziz to Deliver Something More than a Minimum OPEC+ Deal

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	Highlights for the month
ſ	Indigenous crude oil and condensate production during October 2023 was 2.5 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.6 MMT whereas PSC registered production of 0.6 MMT during October 2023.
	There is a growth of 1.3% in crude oil and condensate production during October 2023 as compared to October 2022.
•	Total Crude oil processed during October 2023 was 20.6 MMT which is 0.7% higher than October 2022, where PSU/JV
	refiners processed 14.3 MMT and Private refiners processed 6.2 MMT of crude oil. Total indigenous crude oil processed was
	2.3 MMT and total imported crude oil processed was 18.3 MMT by all Indian Refineries (PSU+JV+PVT). There was a growth
	of 2.5 % in total crude oil processed in April October FY 2023 – 24 as compared to same period of FY 2022 – 23.
•	Crude oil imports increased by 2.2% and 0.6% during October 2023 and April-October 2023 respectively as compared to the
	corresponding period of the previous year. As compared to net import bill for Oil & Gas for October 2022 of \$11.9 billion,
	the net import bill for Oil & Gas for October 2023 was \$11.8 billion. Out of which, crude oil imports constitutes \$11.7 billion,
	LNG imports \$1.2 billion and the exports were \$3.6 billion during October 2023.
•	The price of Brent Crude averaged \$91.05/bbl during October 2023 as against \$94.00/bbl during September 2023 and
	\$93.33/bbl during October 2022. The Indian basket crude price averaged \$90.08/bbl during October 2023 as against
	\$93.54/bbl during September 2023 and \$91.70 /bbl during October 2022.
-	Production of petroleum products was 21.8 MMT during October 2023 which is 4.2% higher than October 2022. Out of 21.8
	MMT, 21.5 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 4.0 % in production
	of petroleum products in April October FY 2023 – 24 as compared to same period of FY 2022 – 23. Out of total POL
	production, in October 2023, share of HSD is 43.1 %, MS 15.1 %, naphtha 6.6 %, ATF 5.9 %, petcoke 5.0 %, LPG 4.4% which
	are of major products and rest are shared by bitumen, FO/LSHS, LDO, lubes & others.
	POL products imports increased by 12.1% and 12.8% during October 2023 and April-October 2023 respectively as compared
•	to the corresponding period of the previous year. Increase in POL products imports during April-October 2023 were mainly
	due to increase in imports of petcoke, bitumen and fuel oil (FO).

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Exports of POL products increased by 12.6% and decreased by 0.8% during October 2023 and April-October 2023 respectively as compared to the corresponding period of the previous year. Decrease in POL products exports during April-October 2023 were mainly due to decrease in exports of high-speed diesel (HSD) and naphtha.

- The consumption of petroleum products during April-October 2023, with a volume of 133.6 MMT, reported a growth of 6.0 % compared to the volume of 126 MMT during the same period of the previous year. This growth was led by 6.% growth in MS, 6.7% in HSD & 13.1% in ATF & 12.6% in Naptha consumption besides LPG, Lubes, Bitumen, Petcoke and LDO during the period. The consumption of petroleum products during October 2023 recorded a growth of 3.7% with a volume of 19.3 MMT compared to the same period of the previous year.
- Ethanol blending with Petrol was 12.38% during October 2023 and cumulative ethanol blending during December 2022-October 2023 was 12.06%.
- Total Natural Gas Consumption (including internal consumption) for the month of October 2023 was 5447 MMSCM which was 13.4% higher than the corresponding month of the previous year. The cumulative consumption of 38368 MMSCM for the current financial year till October 2023 was higher by 8.8% compared with the corresponding period of the previous year.
- Gross production of natural gas for the month of October 2023 (P) was 3161 MMSCM which was higher by 9.3% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 21040 MMSCM for the current financial year till October 2023 was higher by 4.8% compared with the corresponding period of the previous year.

 LNG import for the month of October 2023 (P) was 2337 MMSCM which was 18.2% higher than the corresponding month of the previous year. The cumulative import of 17753(P) MMSCM for the current financial year till October 2023 was higher by 13.4% compared with the corresponding period of the previous year.

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	1. S	elected ind	licators of	the Indiar	n economy	/		
	Economic indicators	Unit/ Base	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	Population (basis RGI projections)	Billion	1.323	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	7.8
			2nd RE	1st RE	1st RE	1st RE	PE	Q1, 2023-24 (E)
		MMT	285.2	297.5	310.7	315.7	323.6	
3	Agricultural Production					4th AE	2nd AE	-
	(Food grains)	Growth %	0.1	4.3	4.5	1.6	2.5	-
4	Gross Fiscal Deficit	%	3.4	4.6	9.5	6.7	6.4	7.8 (Q1)
4	(as percent of GDP)				RE	RE	RE	E
	Economic indicators	Unit/ Base	2021-22	2022-23	October		April-C	October
					2022-23	2023-24 (P)	2022-23	2023-24 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	11.4	5.5#	3.3*	5.8* QE	7.1#	6.0#
6	Imports^	\$ Billion	611.9	714.2	57.9	65.0	430.5	392.0
7	Exports^	\$ Billion	422.0	451.0	31.6	33.6	263.3	244.9
8	Trade Balance	\$ Billion	-189.9	-263.2	-26.3	-31.5	-167.1	-147.1

Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Sept'23 and #April-Sept'23; @2021, 2021-22 - as on March 26, 2022, Mar 2022 as on Mar 25, 2022, Mar 2023-as on Mar 31, 2023, September 2022 as on September 30, 2022 and September, 2023 as on September 29, 2023; ^Imports & Exports are for Merchandise for the month of September 23; E: Estimates; PE: Provisional Estimates: AE-Advanced Estimates: RE-Revised Estimates: QE-Quick Estimates. **Source:** Registrar General India, Ministry of Commerce & Industry, Ministry of Statistics and Programme Implementation, Ministry of

Source: Registrar General India, Ministry of Commerce & Industry, Ministry of Statistics and Programme Implementation, Ministry of Agriculture & Farmer's Welfare, Ministry of Finance, Reserve Bank of India

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	2. Crude o	il, LNG and	d petroleı	ım produo	cts at a gla	ince		
	Details	Unit/ Base	2021-22	2022-23	Oct	ober	April-C	october
			(P)	(P)	2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)
1	Crude oil production in India [#]	MMT	29.7	29.2	2.5	2.5	17.2	17.2
2	Consumption of petroleum products*	MMT	201.7	223.0	18.6	19.3	126.0	133.6
3	Production of petroleum products	MMT	254.3	266.5	20.9	21.8	152.3	158.4
4	Gross natural gas production	MMSCM	34,024	34,450	2,893	3,161	20,077	21,040
5	Natural gas consumption	MMSCM	64,159	59,969	4,806	5,447	35,256	38,368
6	Imports & exports:							
	Crude oil imports	MMT	212.4	232.7	18.1	18.5	133.6	134.4
	Crude on imports	\$ Billion	120.7	157.5	12.1	11.7	101.2	75.5
	Petroleum products (POL)	MMT	39.0	44.6	3.9	4.4	24.7	27.8
	imports*	\$ Billion	23.7	26.9	2.1	2.4	16.2	13.2
	Gross petroleum imports	MMT	251.4	277.3	22.1	22.9	158.3	162.2
	(Crude + POL)	\$ Billion	144.3	184.4	14.2	14.1	117.3	88.6
	Petroleum products (POL)	MMT	62.8	61.0	4.0	4.5	35.4	35.2
	export	\$ Billion	44.4	57.3	3.7	3.6	36.7	27.2
	LNG imports*	MMSCM	31,028	26,304	1,977	2,337	15,657	17,753
		\$ Billion	13.5	17.1	1.4	1.2	9.4	6.6
	Net oil & gas imports	\$ Billion	113.4	144.2	11.9	11.8	90.1	68.0
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	23.6	25.8	24.5	21.7	27.3	22.6
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	10.5	12.7	11.8	10.8	13.9	11.1
9	Import dependency of crude oil (on POL consumption basis)	%	85.5	87.4	86.9	87.4	86.6	87.6

#Includes condensate; *Private direct imports are prorated for the period Sept'23 to Oct'23 for POL. LNG Imports figure from DGCIS are prorated for Sept'23 to October 2023. Total may not tally due to rounding off.

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3. Indig	3. Indigenous crude oil production (Million Metric Tonnes)													
Details	2021-22	2022-23		October			April-Octobe	e r						
		(P)	2022-23 (P)	2023-24 Target*	2023-24 (P)	2022-23 (P)	2023-24 Target*	2023-24 (P)						
ONGC	18.5	18.4	1.6	1.6	1.5	10.9	11.4	10.6						
Oil India Limited (OIL)	3.0	3.2	0.3	0.3	0.3	1.8	2.0	1.9						
Private / Joint Ventures (JVs)	7.0	6.2	0.5	0.6	0.5	3.7	4.3	3.4						
Total Crude Oil	28.4	27.8	2.3	2.6	2.3	16.4	17.6	15.9						
ONGC condensate	0.9	1.0	0.09	0.0	0.09	0.6	0.0	0.6						
PSC condensate	0.3	0.31	0.03	0.0	0.1	0.2	0.0	0.6						
Total condensate	1.2	1.4	0.11	0.0	0.2	0.8	0.0	1.2						
Total (Crude + Condensate) (MMT)	29.7	29.2	2.5	2.6	2.5	17.2	17.6	17.2						
Total (Crude + Condensate) (Million Bbl/Day)	0.60	0.59	0.58	0.61	0.59	0.59	0.60	0.59						
*Provisional targets inclusive of condensate.			•		-			-						

4. Domestic and overseas oil & gas production (by Indian Companies)											
Details 2021-22 2022-23 October April-October											
		(P)	2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)					
Total domestic production (MMTOE)	63.7	63.6	5.4	5.7	37.3	38.2					
Overseas production (MMTOE)	21.8	19.5	1.6	1.6	11.3	11.5					

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

	5. High Sulphur (HS) & Low Su	ulphur (LS) crude o	il process	ing (MM1	Г)	
	Details	2021-22	2022-23	Octo	ober	April-October	
			(P)	2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)
1	High Sulphur crude	185.0	197.9	15.4	16.1	113.7	116.2
2	Low Sulphur crude	56.7	57.4	5.0	4.4	33.0	34.1
Total c	rude processed (MMT)	241.7	255.2	20.4	20.6	146.7	150.4
Total c	rude processed (Million Bbl/Day)	4.85	5.13	4.83	4.86	5.03	5.15
Percen	tage share of HS crude in total crude oil processing	76.6%	77.5%	75.7%	78.4%	77.5%	77.3%

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6. Qua	ntity and value of crud	le oil imports	
Year	Quantity (MMT)	\$ Million	Rs. Crore
2021-22	212.4	120,675	9,01,262
2022-23	232.7	157,531	12,60,372
April-Oct 2023-24(P)	134.4	75,464	6,23,188

	7. Self-sufficiency	in petroleu	m products	(Million M	letric Tonne	es)	
	Particulars	2021-22	2022-23	Octo	ober	April-C	october
	Faiticulais		(P)	2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)
1	Indigenous crude oil processing	27.0	26.4	2.3	2.3	15.9	15.6
2	Products from indigenous crude (93.3% of crude oil processed)	25.2	24.7	2.2	2.1	14.8	14.6
3	Products from fractionators (Including LPG and Gas)	4.1	3.5	0.3	0.3	2.1	2.0
4	Total production from indigenous crude & condensate (2 + 3)	29.3	28.2	2.4	2.4	16.9	16.6
5	Total domestic consumption	201.7	223.0	18.6	19.3	126.0	133.6
% Self	-sufficiency (4 / 5)	14.5%	12.6%	13.1%	12.6%	13.4%	12.4%

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8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT) SI. no. Refinery Installed Crude oil processing (MMT)													
Sl. no.	Refinery	Installed			Cru	ude oil prod	essing (MN	/Т)					
		capacity	2021-22	2022-23	October			April-October					
		(01.04.2023)		(P)	2022-23	2023-24	2023-24	2022-23	2023-24	2023-24			
		ΜΜΤΡΑ			(P)	(Target)	(P)	(P)	(Target)	(P)			
1	Barauni (1964)	6.0	5.6	6.8	0.6	0.6	0.5	4.0	3.8	3.8			
2	Koyali (1965)	13.7	13.5	15.6	1.3	1.2	1.3	9.2	8.0	8.8			
3	Haldia (1975)	8.0	7.3	8.5	0.7	0.7	0.7	5.0	4.1	4.5			
4	Mathura (1982)	8.0	9.1	9.6	0.8	0.9	0.9	5.4	5.1	5.2			
5	Panipat (1998)	15.0	14.8	13.8	1.2	1.4	1.3	8.4	8.9	8.7			
6	Guwahati (1962)	1.0	0.7	1.1	0.09	0.0	0.0	0.6	0.5	0.6			
7	Digboi (1901)	0.65	0.7	0.7	0.06	0.06	0.07	0.4	0.4	0.4			
8	Bongaigaon(1979)	2.70	2.6	2.8	0.3	0.3	0.3	1.5	1.7	1.8			
9	Paradip (2016)	15.0	13.2	13.6	1.2	1.2	0.7	6.8	8.8	8.5			
	IOCL-TOTAL	70.1	67.7	72.4	6.2	6.2	5.7	41.3	41.4	42.2			
10	Manali (1969)	10.5	9.0	11.3	0.7	0.9	1.0	6.5	5.6	6.7			
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	9.0	11.3	0.7	0.9	1.0	6.5	5.6	6.7			
12	Mumbai (1955)	12.0	14.4	14.5	1.3	1.0	0.7	7.9	8.2	8.8			
13	Kochi (1966)	15.5	15.4	16.0	0.6	1.3	1.5	8.6	9.1	9.9			
14	Bina (2011)	7.8	7.4	7.8	0.7	0.7	0.7	4.4	3.7	3.8			
	BPCL-TOTAL	35.3	37.2	38.4	2.6	2.9	3.0	21.0	21.0	22.5			
15	Numaligarh (1999)	3.0	2.6	3.1	0.3	0.3	0.3	1.8	1.4	1.1			

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Sl. no.	Refinery	Installed			Cruc	le oil proce	essing (MM	IT)				
		capacity	2021-22	2022-23		October		Α	April-October			
		(01.04.2023)			2022-23	2023-24	2023-24	2022-23	2023-24	2023-24		
		ΜΜΤΡΑ				(Target)	(P)		(Target)	(P)		
16	Tatipaka (2001)	0.07	0.08	0.07	0.01	0.01	0.005	0.04	0.04	0.04		
17	MRPL-Mangalore (1996)	15.0	14.9	17.1	1.5	1.3	1.4	9.8	8.7	9.0		
	ONGC-TOTAL	15.1	14.9	17.2	1.5	1.3	1.4	9.8	8.7	9.0		
18	Mumbai (1954)	9.5	5.6	9.8	0.8	0.8	0.9	5.6	5.5	5.9		
19	Visakh (1957)	11.0	8.4	9.3	0.8	1.1	1.0	5.2	6.6	7.2		
20	HMEL-Bathinda (2012)	11.3	13.0	12.7	1.1	1.0	1.1	7.4	6.5	7.6		
	HPCL- TOTAL	31.8	27.0	31.8	2.7	2.9	3.0	18.2	18.6	20.7		
21	RIL-Jamnagar (DTA) (1999)	33.0	34.8	34.4	2.9	2.9	2.9	20.8	20.8	20.1		
22	RIL-Jamnagar (SEZ) (2008)	35.2	28.3	27.9	1.8	1.8	1.6	15.4	15.4	16.2		
23	NEL-Vadinar (2006)	20.0	20.2	18.7	1.7	1.7	1.7	12.0	12.0	11.8		
All India	(MMT)	253.9	241.7	255.2	20.4	20.9	20.6	146.7	145.0	150.4		
All India	(Million Bbl/Day)	5.02	4.85	5.13	4.83	4.95	4.86	5.03	4.97	5.15		

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 01.11.2023)												
Det	ails	ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total			
Crude Oil	Length (KM)	1,284	1,193	688	1,017	5,819	937			10,938			
	Cap (MMTPA)	60.6	9.0	10.7	11.3	53.8	7.8			153.1			
Products	Length (KM)		654			12,235	2,600	5,123	2,399	23,011			
	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

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	11. Pro	duction	and cor	sumptio	on of pe	troleun	n produ	icts (Mil	lion Me	tric Ton	nes)	
Duradurate	202	1-22	2022-	23 (P)	Oct-	2022	Oct-2	023 (P)	Apr-O	ct 2022	Apr-Oct	2023 (P)
Products	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons
LPG	12.2	28.3	12.8	28.5	1.2	2.4	1.0	2.5	7.5	16.2	7.3	16.6
MS	40.2	30.8	42.8	35.0	3.3	3.0	3.3	3.1	24.4	20.4	25.7	21.7
NAPHTHA	20.0	13.2	17.0	12.2	1.2	0.9	1.4	1.1	10.0	6.8	10.3	7.7
ATF	10.3	5.0	15.0	7.4	1.3	0.6	1.3	0.7	8.3	4.1	9.7	4.7
ѕко	1.9	1.5	0.9	0.5	0.0	0.0	0.0	0.0	0.6	0.3	0.6	0.3
HSD	107.2	76.7	113.8	85.9	9.0	7.0	9.4	7.6	65.5	48.4	66.6	51.6
LDO	0.8	1.0	0.6	0.7	0.04	0.1	0.06	0.1	0.3	0.4	0.4	0.5
LUBES	1.2	4.5	1.3	3.7	0.1	0.4	0.1	0.3	0.7	2.1	0.8	2.3
FO/LSHS	8.9	6.3	10.4	7.0	1.0	0.6	0.7	0.5	6.2	4.0	6.6	3.8
BITUMEN	5.1	7.8	4.9	8.0	0.3	0.6	0.4	0.7	2.5	3.8	2.8	4.8
PET COKE	15.5	14.3	15.4	18.3	1.2	1.7	1.1	1.5	8.9	10.5	8.6	11.3
OTHERS	30.9	12.3	31.5	15.8	2.1	1.4	3.0	1.0	17.3	8.9	19.1	8.4
ALL INDIA	254.3	201.7	266.5	223.0	20.9	18.6	21.8	19.3	152.3	126.0	158.4	133.6
Growth (%)	-3.1%	-5.4%	4.8%	10.6%	-3.1%	5.7%	4.2%	3.7%	8.1%	13.2%	4.0%	6.0%

Note: Prod - Production; Cons - Consumption

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			15. LP	G cons	ump <u>ti</u>	on (T <u>h</u>	ousand	l Metri	ic Tonne)				
LPG category	202	1-22	2022	2-23			Octobe	r			A	oril-Octo	ber	
					202	2-23	2023-	24 (P)	Growth (%)	202	2-23	2023-	24 (P)	Growth (%)
1. PSU Sales :														
LPG-Packed Domestic	25,5	01.6	25,3	81.5	2,	109.9	2,	187.6	3.7%	14,	501.9	14,	631.5	0.9%
LPG-Packed Non-Domestic	2,23	38.8	2,60	06.0		243.8		238.7	-2.1%	1,	391.7	1,	598.3	14.8%
LPG-Bulk	39	0.9	408	3.9		31.4		62.0	97.0%		210.4		346.1	64.5%
Auto LPG	12	2.0	106	6.7		8.9		7.5	-15.9%		64.1		55.2	-13.9%
Sub-Total (PSU Sales)	28,2	53.3	28,5	03.1	2,	394.0	2,	495.7	4.2%	16,	168.1	16,	631.1	2.9%
2. Direct Private Imports*	0.	.1	0.	1		0.00		0.01	-		0.02		0.05	166.4%
Total (1+2)	28,2	53.4	28,5	03.2	2,	394.0	2,	495.7	4.2%	16,	168.1	16,	631.1	2.9%
*Sept-Oct'23 DGCIS data is	prorated							-						
				16.	LPG ma	arketin	g at a j	glance						
Particulars	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	1.11.23
(As on 1st of April)														(P)
LPG Active Domestic	(Lakh)				1486	1663	1988	2243	2654	2787	2895	3053	3140	
Customers	Growth					11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.9%	1.2%
LPG Coverage (Estimated)	(Percent)				56.2	61.9	72.8	80.9	94.3	97.5	99.8	-	-	-
LI O COVEI age (Estimated)	Growth					10.1%	17.6%	11.1%	16.5%	3.4%	2.3%	-	-	-
PMUY Beneficiaries	(Lakh)						200.3	356	719	802	800	899.0	958.6	967.1
PIVIOT Delleticiaries	Growth							77.7%	101.9%	11.5%	-0.2%	12.2%	6.6%	1.2%
LPG Distributors	(No.)	11489	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25386	25437
LPG DISTRIBUTORS	Growth	9.0%	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.5%	0.4%
Auto LPG Dispensing	(No.)	652	667	678	681	676	675	672	661	657	651	601	526	496
Stations	Growth	7.9%	2.3%	1.6%	0.4%	-0.7%	-0.1%	-0.4%	-1.6%	-0.6%	-0.9%	-8.5%	-12.5%	-13.0%
Dettline Dleate	(No.)	184	185	187	187	188	189	190	192	196	200	202	208	210
Bottling Plants	Growth	0.5%	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	4.5%	2.4%

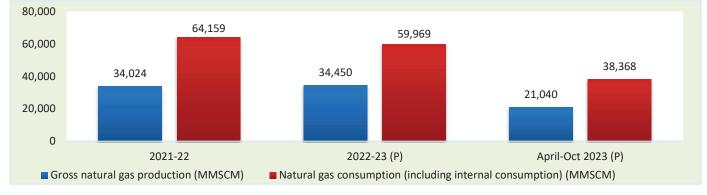
Source: PSU OMCs (IOCL, BPCL and HPCL)

1. Growth rates as on 01.11.2023 are with respect to figs as on 01.11.2022. 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.

Snapshot of India's Oil & Gas data -October, 2023

		18. Natura	al gas at a	glance				
								(MMSCM)
Details	2021-22	2022-23		October			April-Octob	er
	(P)	(P)	2022-23	2023-24	2023-24	2022-23	2023-24	2023-24 (P)
			(P)	(Target)	(P)	(P)	(Target)	
(a) Gross production	34,024	34,450	2,893	3,331	3,161	20,077	21,829	21,040
- ONGC	20,629	19,969	1,683	1,756	1,634	11,759	12,087	11,385
- Oil India Limited (OIL)	2,893	3,041	260	274	273	1,786	1,831	1,791
 Private / Joint Ventures (JVs) 	10,502	11,440	951	1,302	1,254	6,532	7,912	7,865
(b) Net production	33,131	33,664	2,829		3,111	19,600		20,615
(excluding flare gas and loss)	55,151	55,004	2,029		5,111	19,000		20,015
(c) LNG import [#]	31,028	26,304	1,977		2,337	15,657		17,753
(d) Total consumption including internal	64 150	F0.0C0	4 900		F 447	25.256	1	20.200
consumption (b+c)	64,159	59,969	4,806		5,447	35,256		38,368
(e) Total consumption (in BCM)	64.2	60.0	4.8		5.4	35.3		38.4
(f) Import dependency based on	10.1	42.0	41.1		42.0		1	46.2
consumption (%), {c/d*100}	48.4	43.9	41.1		42.9	44.4		46.3
# October 2023 DGCIS data prorated.								





19. Coal Bed	Methane (CBM) gas development	t 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		20,460**	Sq. KM
Blocks awarded*		36	Nos.
Exploration initiated (Area considered if any boreholes were drilled	l in the awarded block)	10670	Sq. KM
Production of CBM gas	April-Oct 2023 (P)	379.93	MMSCM
Production of CBM gas	Oct 2023 (P)	55.23	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.

cts under SATA	۲ (as on	01.11.	2023) (F	Provisio	nal)	
Units	IOCL	HPCL	BPCL	GAIL	IGL	Total
No. of plants	22	6	3	10	5	46
Nos.	52	31	45	1	3	132
Tons	5,822	77	6	5322		11,227
Tons	3699	84	27	5737*		9548
GA Nos.				18		18
	Units No. of plants Nos. Tons Tons	Units IOCL No. of plants 22 Nos. 52 Tons 5,822 Tons 3699	Units IOCL HPCL No. of plants 22 6 Nos. 52 31 Tons 5,822 77 Tons 3699 84	Units IOCL HPCL BPCL No. of plants 22 6 3 Nos. 52 31 45 Tons 5,822 77 6 Tons 3699 84 27	Units IOCL HPCL BPCL GAIL No. of plants 22 6 3 10 Nos. 52 31 45 1 Tons 5,822 77 6 5322 Tons 3699 84 27 5737*	No. of plants 22 6 3 10 5 Nos. 52 31 45 1 3 Tons 5,822 77 6 5322 Tons 3699 84 27 5737*

*Sale of CBG sourced under CBG-CGD synchronization scheme by GAIL through its own marketing channels as well as other CGDs/OMCs.

		20. (Commo	n Carrie	er Natur	al Gas I	pipeline	netwo	rk as on	30.06.2	2023			
Nature of pi	peline	GAIL	GSPL	PIL	IOCL	AGCL	RGPL	GGL	DFPCL	ONGC	GIGL	GITL	Others*	Total
Operational	Length	10,932	2,716	1,479	143	107	304	73	42	24				15,820
	Capacity	233.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				-
Partially	Length	4,342			386						1,279		365	6,371
commissioned [#]	Capacity													-
Total operational len	gth	15,274	2,716	1,479	529	107	304	73	42	24	1,279	0	365	22,191
Under construction	Length	4,327	100		1,110						1,053	220	4,361	11,171
	Capacity	-	3.0								-	-	-	-
Total lengt	th	19,601	2,816	1,479	1,639	107	304	73	42	24	2,332	220	4,726	33,363

Source: PNGRB; Length in KMs; Authorized Capacity in MMSCMD (Arithmetic sum taken for each entity -capacity may vary from pipeline to pipeline); *Others-APGDC, JGGL, IMC,GTIL,HPPL Consortium of H-Energy. Total authorized Natural Gas pipelines including Tie-in connectivity. dedicated & STPL is 35-515 Kms (P)

	21. E	xisting LNG terminals	
Location	Promoters	Capacity as on 01.11.2023	% Capacity utilisation (April-Oct 2023)
Dahej	Petronet LNG Ltd (PLL)	17.5 MMTPA	94.3
Hazira	Shell Energy India Pvt. Ltd.	5.2 MMTPA	39.8
Dabhol	Konkan LNG Limited	*5 MMTPA	29.0
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	19.9
Ennore	Indian Oil LNG Pvt Ltd	5 MMTPA	16.2
Mundra	GSPC LNG Limited	5 MMTPA	12.5
Dhamra	Adani Total Private Limited	5 MMTPA	26.4
	Total Capacity	47.7 MMTPA	

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

Snapshot of India's Oil & Gas data -October, 2023

22. Status of PNG connections and CNG station	is across India (Nos					
State/UT	CNG Stations	PNG connections				
(State/UTs are clubbed based on the GAs authorised by PNGRB)		Domestic	Commercial	Industrial		
Andhra Pradesh	168	263,433	450	36		
Andhra Pradesh, Karnataka & Tamil Nadu	41	3,311	1	5		
Assam	7	53,107	1,375	450		
Bihar	111	113,900	95	4		
Bihar & Jharkhand	6	7,658	2	0		
Bihar & Uttar Pradesh	14	0	0	0		
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	26	26,224	142	31		
Chhattisgarh	10	0	0	0		
Dadra & Nagar Haveli (UT)	7	11,563	55	60		
Daman & Diu (UT)	5	5,169	58	45		
Daman and Diu & Gujarat	15	3,325	15	0		
Goa	12	11,426	20	34		
Gujarat	999	3,128,413	22,790	5,758		
Haryana	357	362,734	937	2,010		
Haryana & Himachal Pradesh	10	10	0	0		
Haryana & Punjab	26	553	0	0		
Himachal Pradesh	10	6,559	8	0		
Jharkhand	83	114,540	14	2		
Karnataka	330	408,754	549	336		
Kerala	115	52,218	27	18		
Kerala & Puducherry	9	446	0	0		
Madhya Pradesh	254	218,603	400	475		
Madhya Pradesh and Chhattisgrah	7	0	0	0		
Madhya Pradesh and Rajasthan	32	586	0	0		
Madhya Pradesh and Uttar Pradesh	16	0	0	2		
Maharashtra	795	3,072,239	4,708	930		
Maharashtra & Gujarat	60	187,645	8	28		
Maharashtra and Madhya Pradesh	13	0	0	0		
National Capital Territory of Delhi (UT)	481	1,473,969	3,726	1,846		

Snapshot of India's Oil & Gas data -October, 2023

State/UT		F	NG connections	
(State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	Domestic	Commercial	Industrial
Odisha	70	93,776	6	0
Puducherry	2	0	0	0
Puducherry & Tamil Nadu	8	233	0	0
Punjab	211	76,690	471	272
Punjab & Rajasthan	12	0	0	0
Rajasthan	262	236,375	143	1,589
Tamil Nadu	243	10,384	3	10
Telangana	161	194,519	95	106
Telangana and Karnataka	4	0	0	0
Tripura	18	60,209	506	62
Uttar Pradesh	849	1,464,380	2,398	2,889
Uttar Pradesh & Rajasthan	42	19,116	45	346
Uttar Pradesh and Uttrakhand	26	12,089	0	0
Uttarakhand	31	71,069	73	88
West Bengal	77	1,623	3	1
Total	6,035	11,766,848	39,123	17,433

Source: PNGRB

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.

Snapshot of India's Oil & Gas data -October, 2023

2	23. Domestic natu	ural gas price and g	as pri	ce ceiling (GCV basis	
Period	Dor	mestic Natural Gas price i	n	Gas price ceiling	in US\$/MMBTU
November 2014 - March 2015		5.05		_	
April 2015 - September 2015		4.66		-	
October 2015 - March 2016		3.82		-	-
April 2016 - September 2016		3.06		6.0	
October 2016 - March 2017		2.5		5.	
April 2017 - September 2017		2.48		5.	
October 2017 - March 2018		2.89		6.	
April 2018 - September 2018		3.06		6.	
October 2018 - March 2019		3.36		7.0	
April 2019 - September 2019 October 2019 - March 2020		<u>3.69</u> 3.23		9.3	
April 2020 - September 2020		2.39		5.0	
October 2020 - March 2021		1.79		4.0	
April 2021 - September 2021		1.79		3.0	
October 2021 - March 2022		2.9		6.7	
April 2022 - September 2022		6.1		9.9	
October 2022 - March 2023		8.57		12.	
1 April 2023 - 7 April 2023		9.16		12.	12
Period	Domestic Gas calcula	ted Domestic Gas ceiling pr	ice for	Period	HP-HI Gas price ceiling in
Periou	price in USS/MMBT	U ONGC/OIL in US\$/MN	1BTU	Periou	US\$/MMBTU
8 April 2023 - 30 April 2023	7.92	6.50			
1 May 2023 - 31May 2023	8.27	6.50			
1 June 2023 - 30 June 2023	7.58	6.50		April 2023 - September 2023	12.12
1 July 2023 - 31 July 2023	7.48	6.50		April 2025 September 2025	12.12
1 Aug 2023 - 31 Aug 2023	7.85	6.50			
1 Aug 2023 - 31 Aug 2023	7.85	6.50			
1 Oct 2023 - 31 Oct 2023	9.20	6.50		October'2023 - March 2024	9.96
1 Nov 2023 - 30 Nov 2023	9.12	6.50		000000 2023 - March 2024	5.50
Natural Gas prices are on GCV basis					

		24. CNG/PNG prices		
City	CNG (Rs/Kg)		PNG (Rs/SCM)	Source
Delhi	74.59		48.59	IGL website (08.11.2023)
Mumbai	76.00		47.00	MGL website (08.11.2023)
	Indian Natura	I Gas Spot Price for Ph	ysical Delivery	
ICV Drice Index Month	Avg.	Price	Volume	Courses
IGX Price Index Month	INR/MMBtu	\$/MMBtu	(MMSCM)	Source
`Oct 2023	1012	12.20	147.00	As per IGX website:
000 2025	1012	12.20	147.00	www.igxindia.com

*Prices are weighted average prices |\$1=INR 83.23| 1 MMBtu=25.2 SCM (Data Excluding Ceiling Price Gas)

Snapshot of India's Oil & Gas data -October, 2023

https://www.bloomberglinea.com/latinoamerica/mexico/exclusiva-refineria-dos-bocas-producira-gasolinacomercial-hasta-2024-revela-pemex/

Exclusive: Dos Bocas refinery to produce commercial gasoline until 2024, Pemex reveals

Mexico's President Andrés Manuel López Obrador promised the first commercial gasoline production would be ready in November 2023



Exclusive: Dos Bocas **refinery to produce commercial gasoline in 2024**, Pemex reveals Signrero outside the Olmeca refinery, known as Dos Bocas of the stateowned company Petroleos Mexicanos (Pemex) in the municipality of Paraiso in the state of Tabasco, Mexico.(

By<u>Arturo Solís</u> Nov 21 2023 | 05:02 AM MEXICO CITY — The Dos Bocas refinery will produce commercial gasoline in January 2024, an executive at Petróleos Mexicanos, a state-owned company known as Pemex, told **Bloomberg Línea,** a date that exceeds the deadline promised by Mexican President Andrés Manuel López Obrador.



VIEW +

AMLO's Dos Bocas Refinery Will Be Profitable in 20 Years: Pemex

Héctor Ruíz, director of projects for gas, petrochemical and refining processes at Pemex, said that the final price of the Dos Bocas refinery will not be

Pemex's project director for gas, petrochemical and refining processes, Héctor Gustavo Ruíz Monjaraz, explained in an interview that the real risk conditions of the project have required more time than planned, but the start-up process of Pemex's seventh refinery is going "well."

"We're going to do diesel in a jiffy, and gasoline in the first few weeks of next year, there's going to be white smoke and everybody's going to be very happy," he said.

AMLO, as the president is known, assured that commercial production of gasoline and diesel in Dos Bocas would begin "at the latest" in November 2023, after multiple breaches in the start date, originally scheduled for July 1, 2022, when the refinery was inaugurated.

ADVERTISING

Dos Bocas refinery to start production no later than November: AMLO

The Mexican president said the Dos Bocas refinery will start producing 170,000 barrels of fuel and the rest up to two months later

Dos Bocas, located in Tabasco, will produce 170,000 barrels of gasoline and 120,000 barrels of diesel per day that will be shipped by ship to multiple Mexican ports in the Atlantic and Pacific Oceans in order to meet the demand of the Valley of Mexico.

Although he declined to share the final cost of Dos Bocas considering the surrounding works, the executive commented at a construction industry congress that the refinery will be profitable within 20 years, according to business estimates made by Pemex. The former Secretary of Energy, Rocío Nahle, estimated that the project had an Internal Rate of Return of 13% in 2019.

Ruiz Monjaraz said commercial diesel production will begin this year.

ADVERTISING

"It's much easier to make diesel than gasoline," he said.

He added that Pemex already has two storage tanks filled with primary gasoline waiting to remove the sulfur required by Mexican regulations.

"That's what we're doing now, starting up the hydrodesulphurisation plant, it's a complex system."

The Government of Mexico's energy policy is self-sufficiency in gasoline and diesel in order to lower prices. To achieve this, he proposed to rehabilitate Pemex's six refineries, build a new one, and bought the entirety of Deer Park, a refinery in Texas with his private partner Shell, in the middle of his six-year term.

AMLO's oil refining plan has been one of the main variables that has pressured its credit rating with the agencies Moody's and Fitch, which have placed Pemex's rating in a highly speculative range, a segment known in the financial world as 'junk bond'.

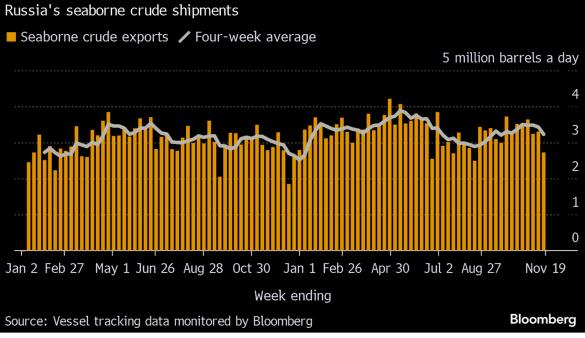
Russia Cuts Seaborne Crude Flows to Three-Month Low Before OPEC+ 2023-11-21 09:39:24.285 GMT

By Julian Lee

(Bloomberg) -- Russia cut back its seaborne crude exports to the lowest since August before a meeting of OPEC+ oil minsters this weekend when compliance with production cuts will be in sharp focus. The move came after shipments surged in October.

About 2.7 million barrels a day of crude was shipped from Russian ports in the week to Nov. 19, tanker-tracking data monitored by Bloomberg show. That was down by 580,000 barrels a day from the revised figure for the period to Nov. 12, the biggest week-on-week drop in more than four months. Moscow said in early August that it would prolong export restrictions at a reduced rate of 300,000 barrels a day below their May-June average level until the end of the year, a policy confirmed earlier this month. If the burden falls entirely on crude, that would imply seaborne shipments of 3.28 million barrels a day. But Deputy Prime Minister Alexander Novak told Interfax last month that the reduction is spread across both crude and refined products. That complicated assessments of whether Russia was meeting its commitment after the government imposed a temporary fuel export ban in September. The OPEC+ group of oil producers, jointly led by Russia and Saudi Arabia, will meet in Vienna on Nov. 26 when they will consider how to respond to a weakening oil market outlook, as well as setting output targets for the first half of 2024.





The less volatile four-week average flow fell to 3.23 million barrels a day, down by about 200,000 barrels a day from the revised figure for the period to Nov. 12. That was the lowest in eight weeks, but still about 340,000 barrels a day above shipments in the period to Aug. 20, when Moscow's crude export cuts were at their deepest.

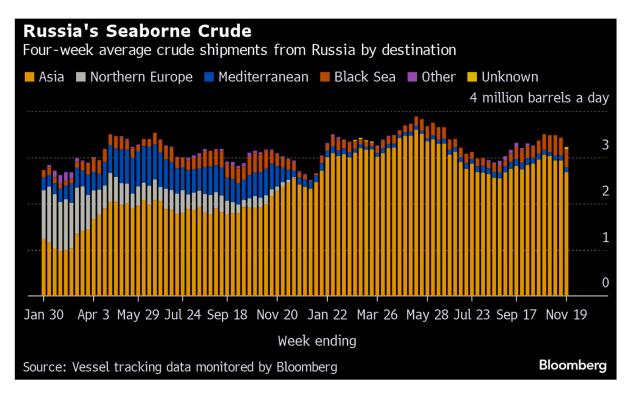
Russia's oil-processing jumped in the week to Nov. 15 to the highest in almost three months as the nation's refiners returned most of their capacity after seasonal maintenance. Meanwhile, the US sanctioned three shipping companies located in the United Arab Emirates for allegedly violating the \$60-per-barrel price cap on Russian oil in its second round of penalties for apparent breaches of the measure. This comes after the US Treasury Department sent notices to ship management companies with regard to more than 100 vessels it suspects may have violated the price cap imposed after the invasion of Ukraine.

The Kremlin's weekly revenues from oil export duties fell to the lowest in two months, with the drop in volume partly offset by a higher November duty rate.

From January, Russia's oil producers are set to pay a higher output tax to fund increased downstream subsidies, which were reinstated in October after being halved the previous month. Export duty is set to be abolished at the end of this year as part of Russia's long-running tax reform plans.

Flows by Destination

Russia's seaborne crude flows in the four weeks to Nov. 19 slipped to 3.23 million barrels a day. That was down from a revised 3.43 million barrels a day in the period to Nov. 12. Shipments fell to an eight-week low and were about 360,000 barrels a day below the average seen during the surge in volumes between April and June.



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 the Baltic port of 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 grade. Since Russia's invasion of Ukraine, Kazakhstan has rebranded its cargoes to distinguish them from those shipped by Russian companies.

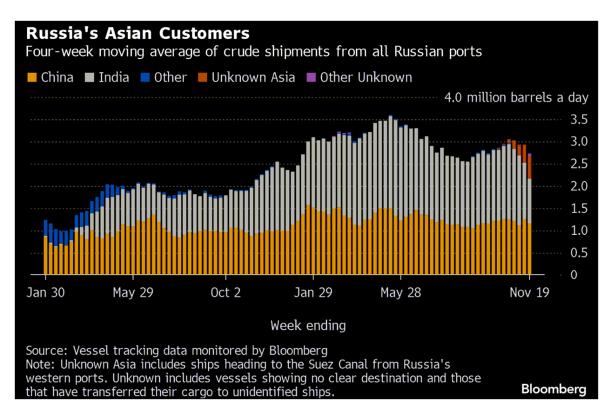
* Asia

Observed shipments to Russia's Asian customers, including those showing no final destination, fell to 2.73 million barrels a day in the four weeks to Nov. 19, down from a revised 2.93 million barrels a day in the period to Nov. 12. That's well below a peak of about 3.6 million barrels a day seen in May. About 1.17 million barrels a day of crude was loaded onto tankers heading to China in the four weeks to Nov. 19. China's seaborne imports are supplemented by about 800,000 barrels a day of crude delivered directly from Russia by pipeline, either directly, or via Kazakhstan.

Flows on ships signaling destinations in India averaged about 1 million barrels a day in the four weeks to Nov. 19. Both the Chinese and Indian figures will rise as the discharge ports become clear for vessels that are not currently showing final destinations.

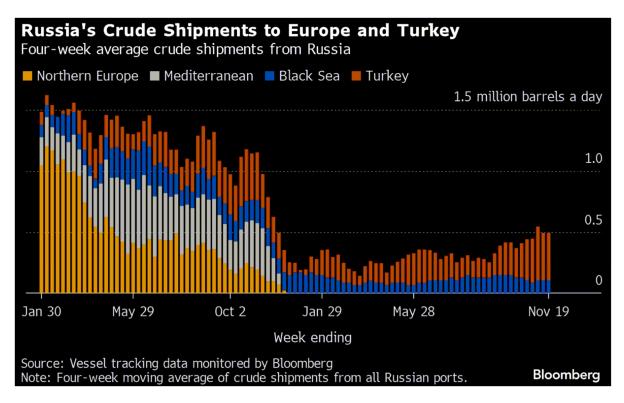
The equivalent of about 510,000 barrels a day was on vessels signaling Port Said or Suez in Egypt, or are expected to be transferred from one ship to another off the South Korean port of Yeosu. Those voyages typically end at ports in India or China and show up in the chart below as "Unknown Asia" until a final destination becomes apparent.

The "Other Unknown" volumes, running at about 50,000 barrels a day in the four weeks to Nov. 19, are those on tankers showing no clear destination. Most of those cargoes originate from Russia's western ports and go on to transit the Suez Canal, but some could end up in Turkey. Others could be moved from one vessel to another, with most such transfers now taking place in the Mediterranean, off the coast of Greece.



* Europe and Turkey

Russia's seaborne crude exports to European countries have collapsed since Moscow's troops invaded Ukraine in February 2022. A market that consumed about 1.5 million barrels a day of short-haul seaborne crude, coming from export terminals in the Baltic, Black Sea and Arctic has been lost almost completely, to be replaced by long-haul destinations in Asia that are much more costly and time-consuming to serve.



No Russian crude was shipped to northern European countries, or those in the Mediterranean in the four weeks to Nov. 19.

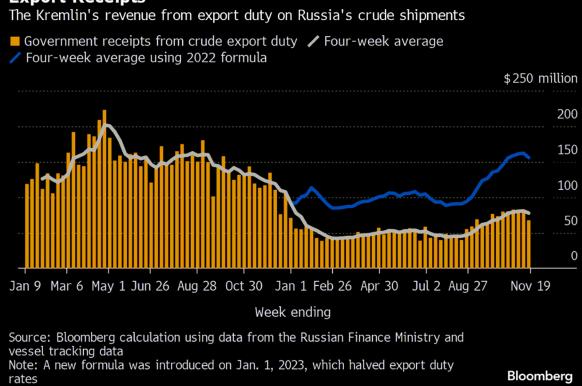
Flows to Bulgaria, now Russia's only European market for crude, were unchanged at about 104,000 barrels a day in the most recent four-week period.

Exports to Turkey were also unchanged at about 390,000 barrels a day in the four weeks to Nov. 19. They remain more than twice as high as they were in July and August. 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.

Export Revenue

Inflows to the Kremlin's war chest from its crude-export duty fell to \$68 million in the seven days to Nov. 19, while four-week average income dropped to \$78 million. The weekly income was the lowest in two months, with the drop in volume partly offset by a higher November duty rate.

Export Receipts



The duty rate for November has been set at \$3.57 a barrel, based on an average Urals price of \$83.35 during the calculation period between Sept. 15 and Oct. 14. That was about \$7.70 a barrel below Brent over the same period. November's duty rate sets another new high for the year.

The rate for December will be \$3.37 a barrel, based on an average Urals price of \$79.23 during the calculation period

between Oct. 15 and Nov. 14. That was about \$9.39 a barrel below Brent over the same period.

Origin-to-Location Flows

The following table shows the number of ships leaving each export terminal.

A total of 26 tankers loaded 19.1 million barrels of Russian crude in the week to Nov. 19, vessel-tracking data and port agent reports show. That's down by about 4 million barrels from the previous week. That was the smallest number of ships in three months.

There was one fewer shipment from Kozmino, Murmansk and Sakhalin Island compared with the previous week, while the number of vessels leaving Novorossiysk with Russian crude fell by three from a revised total for the week to Nov. 12. Destinations are based on where vessels signal they are heading at the time of writing, and some will almost certainly change as voyages progress. All figures exclude cargoes identified as Kazakhstan's KEBCO grade.

Tankers Loading Crude 26 tankers loaded Russian crue			
Week ending	Nov. 19	Nov. 12	Nov. 5
Primorsk (Baltic)	8	8	8
Ust-Luga (Baltic)	6	4	5
Novorossiysk (Black Sea)	2	5	4
Murmansk (Arctic)	1	2	2
Kozmino (Pacific)	7	8	9
De Kastri (Pacific)	2	2	2
Prigorodnoye (Pacific)	0	1	1
Total	26	30	31
Source: Vessel tracking data monit Note: Based on date of completion cargoes identified as Kazakhstan's	of cargo loading. E		Bloomberg

In addition, two cargoes of KEBCO were loaded at Novorossiysk during the week.NOTES

Note: This story forms part of a weekly series tracking shipments of crude from Russian export terminals and the export duty revenues earned from them by the Russian government. Weeks run from Monday to Sunday. The next update will be onTuesday, Nov. 28.

Note: All figures exclude cargoes owned by Kazakhstan's KazTransOil JSC, which transit Russia and are shipped from Novorossiysk and Ust-Luga as KEBCO grade crude.

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

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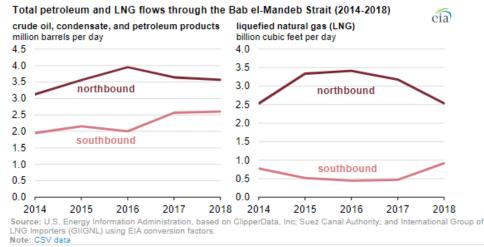
The Bab el-Mandeb Strait is a strategic route for oil and natural gas shipments



Source: U.S. Energy Information Administration

The Bab el-Mandeb Strait is a sea route chokepoint between the Horn of Africa and the Middle East, connecting the Red Sea to the Gulf of Aden and Arabian Sea. Most exports of petroleum and natural gas from the Persian Gulf that transit the <u>Suez Canal or the SUMED</u> <u>Pipeline</u> pass through both the Bab el-Mandeb and the <u>Strait of Hormuz</u>.

<u>Chokepoints</u> are narrow channels along widely used global sea routes that are critical to global energy security. The Bab el-Mandeb Strait is 18 miles wide at its narrowest point, limiting tanker traffic to two 2-mile-wide channels for inbound and outbound shipments. Closure of the Bab el-Mandeb Strait could keep tankers originating in the Persian Gulf from transiting the Suez Canal or reaching the SUMED Pipeline, forcing them to divert around the southern tip of Africa, which would increase transit time and shipping costs. In 2018, an estimated 6.2 million barrels per day (b/d) of crude oil, condensate, and refined petroleum products flowed through the Bab el-Mandeb Strait toward Europe, the United States, and Asia, an increase from 5.1 million b/d in 2014. Total petroleum flows through the Bab el-Mandeb Strait accounted for about 9% of total seaborne-traded petroleum (crude oil and refined petroleum products) in 2017. About 3.6 million b/d moved north toward Europe; another 2.6 million b/d flowed in the opposite direction mainly to Asian markets such as Singapore, China, and India.



Before 2015, volumes of liquefied natural gas (LNG) passing through the Bab el-Mandeb Strait matched those passing through the Suez Canal because the Red Sea did not have any LNG infrastructure. In 2015, both Jordan and Egypt began importing small volumes of LNG into Red Sea ports, and these countries' imports of LNG peaked in 2016 at 1.4 billion cubic feet per day, 80% of which was delivered through the Bab el-Mandeb Strait.

More recently, as new natural gas fields in Egypt have come online, the need for Egypt to import LNG has decreased. Like flows to Egypt, total northbound flows of LNG via the Bab el-Mandeb have also decreased since 2016 as northbound flows to other destinations have remained fairly constant.

Appendix

Table 11 - 4: Non-OPEC liquids production and OPEC natural gas liquids, mb/d*

Non-OPEC liquids production and		Change						Change						Change
OPEC NGLs	2022	2022/21	1Q23	2Q23	3Q23	4Q23	2023	2023/22	1Q24	2Q24	3Q24	4Q24	2024	2024/23
US	19.3	1.2	20.1	20.7	21.1	20.4	20.6	1.3	20.8	21.1	21.3	21.5	21.2	0.6
Canada	5.6	0.2	5.7	5.3	5.7	5.9	5.6	0.0	5.9	5.7	5.9	6.1	5.9	0.2
Mexico	2.0	0.1	2.1	2.1	2.1	2.1	2.1	0.1	2.1	2.1	2.1	2.0	2.1	0.0
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OECD Americas	26.9	1.5	27.9	28.2	28.9	28.4	28.3	1.4	28.8	28.8	29.3	29.6	29.1	0.8
Norway	1.9	-0.1	2.0	2.0	2.0	2.1	2.0	0.1	2.2	2.1	2.1	2.2	2.1	0.1
UK	0.9	0.0	0.8	0.8	0.7	0.8	0.8	-0.1	0.8	0.8	0.7	0.8	0.8	0.0
Denmark	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
OECD Europe	3.6	-0.2	3.7	3.6	3.5	3.7	3.6	0.1	3.9	3.7	3.7	3.8	3.8	0.1
Australia	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Other Asia Pacific	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	0.5	0.0	0.5	0.4	0.4	0.5	0.5	0.0	0.5	0.4	0.4	0.4	0.4	0.0
Total OECD	31.0	1.2	32.0	32.3	32.8	32.6	32.4	1.5	33.1	33.0	33.4	33.9	33.3	0.9
China	4.5	0.2	4.6	4.6	4.5	4.5	4.6	0.1	4.6	4.6	4.5	4.5	4.6	0.0
India	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Brunei	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
ndonesia	0.8	0.0	Û.9	0.9	0.8	U.8	0.8	0.0	0.8	U.8	0.8	0.8	0.8	0.0
Malaysia	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Thailand	04	-01	0.4	0.3	0.4	0.4	0.4	0.0	0.4	0.4	0.3	0.3	0.3	Ú.U
Vietnam	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	2.3	-0.1	2.3	2.3	2.2	2.4	2.3	0.0	2.3	2.3	2.2	2.2	2.2	0.0
Argentina	0.8	0.1	0.8	0.8	0.8	0.8	0.8	0.1	0.8	0.9	0.9	0.9	0.9	0.0
Brazil	3.7	0.1	3.9	4.0	4.3	4.1	4.1	0.4	4.2	4.1	4.2	4.3	4.2	0.1
Colombia	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Ecuador	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Guyana	0.3	0.2	0.4	0.4	0.4	0.4	0.4	0.1	0.5	0.5	0.6	0.6	0.5	0.2
Latin America	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	6.3	0.4	6.7	6.8	7.1	6.9	6.9	0.5	7.1	7.1	7.2	7.3	7.2	0.3
Bahrain	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	1.1	0.1	1.1	1.1	1.0	1.0	1.0	0.0	1.1	1.1	1.1	1.1	1.1	0.0
Qatar	1.9	0.0	1.9	1.9	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9	1.9	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Yemen	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Middle East	3.3	0.1	3.3	3.3	3.3	3.3	3.3	0.0	3.3	3.3	3.3	3.3	3.3	0.0
Cameroon	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Chad	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Egypt	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Ghana	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
South Africa	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Africa other	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.0
Africa	1.3	0.0	1.2	1.3	1.3	1.3	1.3	0.0	1.3	1.3	1.3	1.4	1.3	0.0
Russia	11.0	0.2	11.2	10.9	10.8	9.6	10.6	-0.4	10.4	10.5	10.7	10.8	10.6	0.0
Kazakhstan	1.8	0.0	2.0	1.9	1.8	1.9	1.9	0.1	2.0	2.0	2.0	2.0	2.0	0.1
Azerbaijan	0.7	0.0	0.7	0.6	0.6	0.8	0.7	0.0	0.7	0.7	0.7	0.7	0.7	
Eurasia others	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	
Other Eurasia	2.8	-0.1	3.0	2.9	2.8	3.0	2.9	0.1	3.0	3.0	3.0	3.0	3.0	0.1
Other Europe	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Non-OECD	32.4	0.6	33.2	32.9	32.8	31.9	32.7	0.3	32.9	33.0	33.2	33.4	33.1	0.0
Non-OPEC	63.4	1.8	65.2	65.2	65.6	64.5	65.1	1.7	66.0	66.0	66.6	67.3	66.5	
Processing gains	2.4	0.1	2.5	2.5	2.5	2.5	2.5	0.1	2.5	2.5	2.5	2.5	2.5	
Non-OPEC liquids	2.4	0.1	2.5	2.5	2.5	2.5	2.5	0.1	2.5	2.5	2.5	2.5	2.5	0.1
	65.0	10	67.7	67.0	60.4		67.0	10	60 F	60.5	60.4	60.0	60.0	
production	65.8	1.9	67.7	67.6	68.1	66.9	67.6	1.8	68.5	68.5	69.1	69.8	69.0	
OPEC NGL	5.3	0.1	5.3	5.4	5.3	5.3	5.3	0.0	5.4	5.4	5.4	5.4	5.4	0.1
OPEC Non-														
conventional	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	
OPEC (NGL+NCF)	5.4	0.1	5.4	5.5	5.4	5.4	5.4	0.0	5.5	5.5	5.5	5.5	5.5	0.1
Non-OPEC &														
OPEC (NGL+NCF)	71.2	2.0	73.2	70.4	73.5	70.0	70.0	1.8	74.0	74.0	74.0	75.0	74.5	1.4

Note: Totals may not add up due to independent rounding. Source: OPEC. 17 November 2023 - 23:22 News ID: 633158

Iran oil output up 50% despite sanctions, to hit 3.6m bpd by next March: Owji



SHANA (Tehran) – Iran's oil production has increased 50 percent since the 13th administration took office two years ago, said Oil Minister Javad Owji on Friday.

The minister, who made the announcement in a meeting with some religious sources of imitation, including Ayatollah Seyyed Hashem Hosseini Bushehri and Ayatollah Abdollah Javadi Amoli, in the holy city of Qom, north-central Iran, added the country's oil production stood at 2.2 million barrels per day (bpd) when the incumbent government took over in August 2021 while the output has now soared to 3.3m bpd and will hit 3.6m bpd by the end of the upcoming winter.

The country's oil production has witnessed a 50 percent hike and crude exports have increased 2.5 times under the 13th administration in spite of intensified sanctions, he pointed out.

Iran's oil industry was controlled by foreign advisers before the Islamic Revolution and they plundered the country's products, said Owji, adding, "The oil industry has witnessed great events after the victory of the Islamic Revolution and over the past 44 years. No foreign advisers are now present in the country's oil and gas industry and Iranian oil experts are developing domestic industry."

In the pre-revolution era, he continued, one gas refinery and one petrochemical plant had been built while 23 refineries and 68 petrochemical complexes are operating now, said the oil minister, adding \$14 billion revenues earned from petrochemical exports in the previous year were deposited into Iran's Integrated Forex Deals System (NIMA).

A few cities and villages were supplied with gas before the revolution, recalled Owji, adding 98 percent of urban population and around 84 percent of rural population have been now connected to the gas grid as 5,700 villages and 40 towns, mainly underprivileged and cold areas, have been provided with gas since two years ago.

The country is currently making 80 percent of products and equipment needed by domestic oil industry, mentioned the minister, underlining that the 13th administration has accelerated the implementation of oil projects.

"We have become self-sufficient oil and gas industry and are exporting technical and engineering services to countries sanctioned by the U.S.," said Owji, explaining Iran started exporting technical and engineering services to refineries in Venezuela and Latin America under the 13th administration and reactivated their oil industry, which had come to a standstill due to sanctions.

The incumbent administration has given top priority to the completing of partly-finished projects and the launching of new projects such as the newly-inaugurated Phase 11 of the South Pars (SP) gas field, he pointed out.

Qom Province's gas consumption in all sectors is between 4 and 5 million cubic meters per day (mcm/d), said Owji, adding SP Phase 11 produces some 14 mcm/d and its production will increase by drilling more wells.

Under the 13th administration, he said, domestic gas output has jumped 50 mcm/d and the country faced no problem with gas supply during the severe winter last year.

Shifting to projects for reducing air pollution, the oil minister referred to the collecting of associated petroleum gas (APG), stating 11.5 mcm of flare gas has been gathered a day since the 13th administration took office and the volume of APG to be captured by the end of the year (March 19, 2024) will be equal to the amount produced by one phase of the SP field.

He also pointed to the impacts of the oil industry on the country's economic growth, concluding that the oil and gas sectors' economic growth stood at 10.5 percent in the year to March 20, 2023 and rose to 19.6 percent in spring 2023.

Iran's oil output to reach 3.5 mln bpd by late September: NIOC chief

Wednesday, 09 August 2023 6:24 PM [Last Update: Wednesday, 09 August 2023 6:24 PM]



CEO of Iran's state-run NIOC says oil output in the country will reach 3.5 million bpd in late September.

Iran will reach a milestone oil production figure of 3.5 million barrels per day (bpd) in late September, according to the CEO of state oil company NIOC, despite sanctions imposed on the country by the US.

Mohsen Khojasteh Mehr said on Wednesday that Iran's oil output will increase by 150,000 bpd within the next week and by another 100,000 bpd by the end of the month to September 22 to reach a total of 3.5 million bpd.

The figure would be a major increase from 2.2 million bpd of oil production reported in August 2021 when the current administrative government led by President Raeisi took office, said Khojasteh Mehr.

He said the growth in oil output will entirely serve Iran's plans to increase its oil exports.

The comments, which came in a meeting with reporters at the headquarters of the National Iranian Oil Company, is the latest sign that Iran is pumping increased amounts of oil to the international markets despite continued pressure of the US sanctions.

Reports earlier this year had indicated that Iran's nominal oil production capacity had been restored to levels above 3.8 million bpd for a first time since 2018 when Washington imposed its sanctions on the country.

However, reaching an actual output of 3.5 million bpd shows Iran is effectively nearing export levels seen before the sanctions when the country used to sell 2.2 million bpd of oil to international customers.

Central Bank of Iran Governor Mohammad Reza Farzin also said on Wednesday that Iran's oil exports had risen by 41% year on year in the calendar month to late July to reach a record high in five years.

Press TV's website can also be accessed at the following alternate addresses:

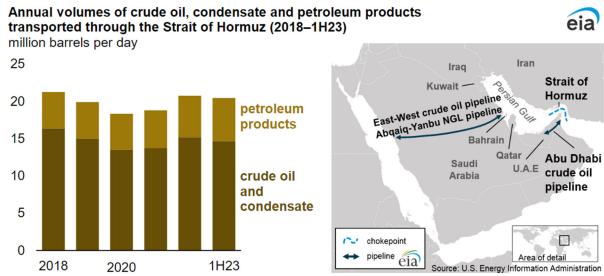
www.presstv.ir

www.presstv.co.uk

https://www.eia.gov/todayinenergy/detail.php?id=61002

NOVEMBER 21, 2023

<u>The Strait of Hormuz is the world's most important oil transit</u> <u>chokepoint</u>



Data source: U.S. Energy Information Administration analysis based on Vortexa tanker tracking and FACTS Global Energy Note: 1H23=first half of 2023

The Strait of Hormuz, located between Oman and Iran, connects the Persian Gulf with the Gulf of Oman and the Arabian Sea. The Strait of Hormuz is the world's most important oil chokepoint because large volumes of oil flow through the strait. In 2022, its oil flow averaged 21 million barrels per day (b/d), or the equivalent of about 21% of global petroleum liquids consumption. In the first half of 2023, total oil flows through the Strait of Hormuz remained relatively flat compared with 2022 because increased flows of oil products partially offset declines in crude oil and condensate.

Chokepoints are narrow channels along widely used global sea routes that are critical to global energy security. The inability of oil to transit a major chokepoint, even temporarily, can create substantial supply delays and raise shipping costs, increasing world energy prices. Although most chokepoints can be circumvented by using other routes, which often add significantly to transit time, some chokepoints have no practical alternatives.

Between 2020 and 2022, volumes of crude oil, condensate, and petroleum products transiting the Strait of Hormuz rose by 2.4 million b/d as oil demand recovered after the economic downturn from the COVID-19 pandemic. In the first half of 2023, shipments of crude oil and condensates dropped because OPEC+ members implemented crude oil production cuts starting in November 2022. Flows through the Strait of Hormuz in 2022 and the first half of 2023 made up more than one-quarter of total global seaborne traded oil. In addition, around one-fifth of global liquefied natural gas trade also transited the Strait of Hormuz in 2022.

Volume of crude oil, condensate, and petroleum products transported through the Strait of Hormuz (2018–1H23) million barrels per day

	2018	2019	2020	2021	2022	1H23
Total oil flows through Strait of Hormuz	21.3	19.9	18.3	18.8	20.8	20.5
Crude oil and condensate	16.4	15.0	13.5	13.7	15.2	14.7
Petroleum products	4.9	4.9	4.8	5.1	5.6	5.8
World maritime oil trade	77.4	77.1	71.9	73.2	75.2	76.3
World total petroleum and other liquids consumption	100.1	100.9	91.6	97.1	99.6	100.3
LNG flows through						
Strait of Hormuz	10.3	10.6	10.4	10.6	10.9	10.8
(billion cubic feet per day)			_	0 "		

Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, and U.S. Energy Information Administration analysis based on Vortexa tanker tracking and FACTS Global Energy

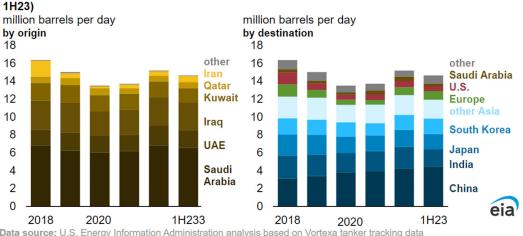
Note: World maritime oil trade excludes intra-country volumes except those volumes that transit the Strait of Hormuz.

LNG=liquefied natural gas. 1H23=first half of 2023.

Only Saudi Arabia and the United Arab Emirates (UAE) have operating pipelines that can circumvent the Strait of Hormuz. Saudi Aramco operates the 5-million-b/d East-West crude oil pipeline and temporarily expanded the pipeline's capacity to 7 million b/d in 2019 when it converted some natural gas liquids pipelines to accept crude oil. The UAE links its onshore oil fields to the Fujairah export terminal on the Gulf of Oman with a 1.5 million b/d pipeline.

Iran inaugurated the Goreh-Jask pipeline and the Jask export terminal on the Gulf of Oman with a single export cargo in July 2021. The pipeline's capacity was 0.3 million b/d at that time, although Iran has not used the pipeline since then. We estimate that around 3.5 million b/d of effective unused capacity from these pipelines could be available to bypass the strait in the event of a supply disruption. Based on tanker tracking data published by Vortexa, Saudi Arabia moves more crude oil and condensate through the Strait of Hormuz than any other country, most of which is exported to other countries. Around 0.5 million b/d transited the strait in 2022 from Saudi ports in the Persian Gulf to Saudi ports in the Red Sea.

We estimate that 82% of the crude oil and condensate that moved through the Strait of Hormuz went to Asian markets in 2022. China, India, Japan, and South Korea were the top destinations for crude oil moving through the Strait of Hormuz to Asia, accounting for 67% of all Hormuz crude oil and condensate flows in 2022 and the first half of 2023.



Annual volumes (crude oil and condensate) transported through the Strait of Hormuz (2018-

Data source: U.S. Energy Information Administration analysis based on Vortexa tanker tracking data Note: 1H23=first half of 2023.

In 2022, the United States imported about 0.7 million b/d of crude oil and condensate from Persian Gulf countries through the Strait of Hormuz, accounting for about 11% of U.S. crude oil and condensate imports and 3% of U.S. petroleum liquids consumption. U.S. crude oil imports from countries in the Persian Gulf have fallen by half since 2018 as domestic production has increased.

Principal contributors: Candace Dunn, Justine Barden



SAF Group created transcript of comments by Masrour Barzani (Prime Minister of the Kurdistan Region) with BBC's Maryam Moshiri on Nov 21, 2023.

Items in "italics" are SAF Group created transcript.

At 7:05 min mark, Moshiri "... let's talk about collaboration in the is country and the problems with that potentially. Anyone watching this from afar would see the tensions between Erbil and Baghdad, particularly with regards to oil exports to Turkey. What's your assessment of these issues now?" Barzani "Again this is an issue that dates back to many years ago. The conflict between Baghdad over oil is because the constitution was not interpreted or respected in the sense that it was written. Kurdistan has certain rights in the constitution, which unfortunately have been ignored. Those rights are extraction, and production and selling oil. Unfortunately, over the years, there has been conflict between Baghdad and Erbil.

And the main question is very clear. Are we are a federal state or is Baghdad a central government? I think that's the fundamental issue. We believe that there needs to be, in a federal state, there need to be power sharing and distribution of power to the regions as it's stipulated in the constitution. Unfortunately, there is a mentality in Baghdad and I'm not saying everyone, but there is a mentality that is dominant that believes that everything has to be controlled by the central government. And that's the main difference.

So If we break it down and come and look at the oil issue, in particular. We see that Kurdistan has done everything that requires by the constitution to do. We have done all of our duties but we have never enjoyed the rights that we also have in the constitution. Kurdistan has complied with the constitution and the regulations. We have worked with the federal government on the oil sales, and on the principles of oil production. But unfortunately, we haven't been receiving the support that we deserve from the federal government and from the federal institutions.

To be more specific, we have contracts with international oil companies. These contracts are valid and legal. And of course, the KRG respects these contracts. But there is a cost for the production of oil by these IOCs because they are the ones that have invested in Kurdistan. So it's not like Baghdad, we haven't invested in producing oil, the companies have invested so they need to have the investment cost, and also the production cost and also the profit based on the contract they have.

There is a price, there is a cost for the production of oil. Unfortunately, Baghdad is talking about a number that Is not real. They're introducing \$6 for the cost of production for each barrel in Kurdistan. There are similar wells in Kurdistan, for instance in [Qayara?], that the cost of production of oil in that well is \$34. So how come another well in Kurdistan, the cost should be \$6. Soi there is a huge difference. And when we confront Baghdad, they say well this is an average, we also have other wells in parts of the country that is about \$1 or \$2. True, but my question is when Baghdad is paying the cost of these wells, are they paying every well or every company \$6. Or are they paying \$34 here and \$1 over there.

Unfortunately, they haven't even counted the cost of production in Kurdistan to come up with a different figure. And in that case, it's important and this is the discussions that we have had with Baghdad. That together thru the KRG because KRG is the owner of the contracts. Is the side that has signed the contracts with the IOCs. And this is the right that the KRG has and we are not going to give that right up.

So we are talking to the government in Baghdad that, with us, we can talk to the IOCs to see what will be the actual cost of production. Once this is done, then the export can be done easily because without production, we cannot have exports. That's why I'm focusing on the production, that once we have production, then we can move into the next stage of exporting oil thru Turkey."

Moshiri ""Everyone one can see this is causing economic strife, do you foresee exports restarting before the new year given what you've just said to me?" Barzani "We are ready. As I said, we are in the KRG, the ministry of natural resources is ready as of today. Now the ball is in the Baghdad's court. Are they willing to give the actual cost of production to the IOCs that are operating in Kurdistan? If they are, we can definitely produce and they can produce. We are here regulators as the KRG and we are defending our constitutional rights. But we are also defending the rights of our partners that have trusted us and invested in Kurdistan. So once these contracts are respected and once the federal government pays these IOCs, then there is oil to be exported."

Moshiri "How likely is that going to happen?" Barzani "We are talking, in fact we had a delegation visiting us from Baghdad last week. And it was a very good meeting that I had with the Minister of Oil. I've had several conversations with the Prime Minister himself. And he is also himself very understanding. The ministry is very understanding. So I am hoping that they will come to some sort of agreement and we can produce and also export. I cannot tell you when."

Prepared by SAF Group https://safgroup.ca/news-insights/

https://www.apikur.uk/publications/statement-on-federal-government-of-iraq-goi-kurdistan-regional-government-krg-negotiations/

16 NOV 2023 Statement on Federal Government of Iraq (GOI) - Kurdistan Regional Government (KRG) Negotiations

November 17, 2023

Key Points:

• APIKUR notes the discussions between GOI and KRG officials represent a potentially positive step toward resumption of full production and exports.

• APIKUR members have communicated conditions precedent to resume full oil exports and remain committed to resolve outstanding issues.

• Production Sharing Contracts (PSCs) remain in-force and are governed by English law with dispute resolution via international arbitration at the London Court of International Arbitration.

APIKUR notes the recent discussions between leaders from the GOI and KRG as a potentially positive step towards resuming oil exports via the Iraq-Türkiye Pipeline (ITP).

Representatives from APIKUR member companies were not invited and have not received any official communications of the meeting's outcomes.

APIKUR members have communicated the following conditions precedent to resume full oil production and exports:

- Any addendums must be agreed between the GOI, the KRG, and APIKUR member companies.
- There must be payment surety for past and future oil exports.
- Prospective oil sale payments to APIKUR member companies must be remitted directly to those companies.
- The APIKUR member companies' current commercial terms and economic model must be maintained.

APIKUR remains committed to swiftly resolve remaining issues to resume full production and export through ITP for the benefit of all parties and the people of Iraq. Under the status quo, losses continue to climb with more than \$7 billion in export revenue lost since the pipeline closure in March 2023. The GOI is incurring over \$1 million per day in financial penalties for not meeting its obligations under the ITP agreement. - Ends -

About APIKUR:

APIKUR's objective and purpose is to promote the KRI as an attractive destination for international oil and gas companies, service providers and investors. In addition, APIKUR aims to advocate for and represent the common interests of its members, function as a joint and effective voice towards all relevant stakeholders whether in the KRI, or elsewhere, and provide a forum for its members to share appropriate public industry information and best practices.

For more information, visit www.apikur.uk

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Iraq, KRG to adjust IOC contracts, resume oil exports: Oil minister ^{1 hour ago}

Rudaw



Ats Oil Miniseq Hayyan Abdul-Ghani speaking to Rudaw on November 13, 2023. Photo: Rudaw

ERBIL, Kurdistan Region - Iraq's Oil Minister Hayyan Abdul-Ghani on Monday told Rudaw that both Erbil and Baghdad are working on adjusting the Region's contracts with the International Oil Companies (IOCs) to the Iraqi constitution and expressed optimism about a prompt resumption of Kurdish oil exports.

Ghani arrived in Erbil on Sunday accompanied by an Iraqi oil ministry delegation, and met with KRG Prime Minister Masrour Barzani and Natural Resources Minister Kamal Muhammad Salih, to discuss the outstanding issues between the Region and Baghdad over the resumption of the Kurdish oil exports.

The oil minister told Rudaw's Sangar Abdulrahman that during his meetings with Kurdish officials, the nature of the Region's contracts with the IOCs was discussed, noting that the KRG's natural resources ministry presented a "complete explanation" of the economic model and the details of the contracts.

The IOCs and the KRG are bound by Production Sharing Contracts (PSCs), which Ghani noted are against the Iraqi constitution, adding that the Iraqi government licenses companies under Profit Sharing Contracts.

"We have a project to adjust those contracts with the laws that are allowed by the Iraqi constitution," Ghani said.

Under the Kurdistan Region's PSC model, the IOCs cover the entire cost of production while the KRG receives the lion's share of the profits from successful projects.

In August, Myles Caggins, the spokesperson of the Association of the Petroleum Industry of Kurdistan (APIKUR) told Rudaw English that the association members would not produce oil unless there was an agreement and a full understanding of how much they would get paid.

Caggins said the oil companies would receive \$6 per barrel based on discussions that have taken place with Baghdad, stressing that this is "not enough." He warned that if an agreement is not reached, APIKUR members would take the matter to a London arbitration court.

Ghani said the oil ministry has agreed with the KRG officials to hold meetings with the representatives of the IOCs in the Kurdistan Region, adding that they will try to reach a solution that satisfies all parties.

The Iraqi official said that the resumption of Kurdish oil exports through Turkey's Ceyhan port was also discussed at the meeting, stressing that both sides "were serious about restarting production and exports of oil," and expressing optimism that oil exports will soon resume. Exports of Kurdistan Region's oil through the Iraq-Turkey pipeline have been halted since March 23 when a Paris-based arbitration court ruled in favor of Baghdad against Ankara, saying Turkey had breached a 1973 agreement by allowing Erbil to begin independent oil exports in 2014.

According to the Iraqi federal budget the Kurdistan Region is obliged to hand over, on a daily basis, at least 400,000 barrels of crude oil to Iraq's State Oil Marketing Organization (SOMO) to be exported through Turkey's Ceyhan port, or be used domestically in case it is not exported.

There have been several meetings between Turkish, Iraqi, and Kurdish officials since the court ruling, but exports have yet to resume. Prior to the halt, around 400,000 barrels a day were being exported by Erbil through Ankara, in addition to some 75,000 barrels of Kirkuk oil daily through the same pipeline.

The KRG is heavily reliant on oil revenues and an inability to sell its crude has severely impacted its economy. Erbil has lost billions of dollars since the exports were halted.

Nov 24, 2023 04:35:13

OIL DEMAND MONITOR: Economic Woes to Weigh on Growth in 2024

Struggling economies to squeeze oil usage at start of new year Headwinds and energy efficiencies to constrain record demand

By John Deane

(Bloomberg) -- Oil demand growth is poised to slow at the start of next year amid lackluster economic performance in many consuming countries, even as global usage stays at a record level with the transition away from fossil fuels set to take many years.

The uncertain economic outlook and the prospect of slowing oil consumption – combined with swelling supplies – have sent futures prices tumbling over the past two months. Analysts have predicted that the 23-nation OPEC+ coalition will maintain production curbs into 2024 in order to shore up prices, though a postponement of the group's next discussions amid wrangling over quotas has put a question mark over the outcome.

In its monthly oil market assessment published Nov. 14, the International Energy Agency said demand growth will more than halve to 930,000 barrels a day next year on economic headwinds, energy efficiency gains, and an expanding electric vehicle fleet, with usage actually contracting within the Organization for Economic Cooperation and Development.

Still, the Paris-based adviser increased its estimate for demand growth this year by 110,000 barrels a day, seeing a year-on-year gain of 2.4 million barrels a day, with growth concentrated in a small set of non-OECD countries, led by China. And global demand should rise to a new record of 102.9 million barrels a day next year, the agency said.

While macroeconomic sentiment is deteriorating, oil demand is "actually holding up strongly," Toril Bosoni, head of the IEA's oil market division, said in an interview with Bloomberg Television. That demand is unevenly spread though, with Europe notable for its weakness.

"The strength that we are seeing in demand at the moment is concentrated in a handful of countries – China, India, Brazil account for more than 90% of growth in 2023, and China by far the biggest contributor with more than three-quarters of the growth," Bosoni said.



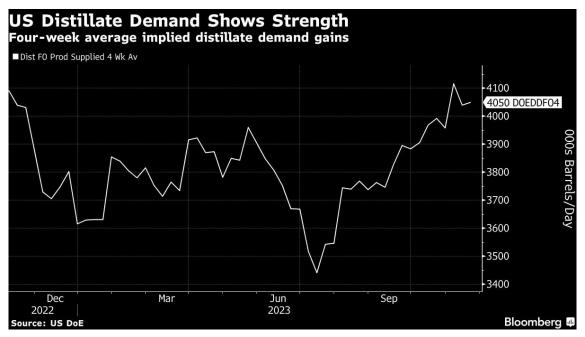
Global oil supplies are outpacing upward revisions to demand, causing markets to be less tight than expected this quarter, according to the International Energy Agency. Source: Bloomberg

In its equivalent report published a day earlier, the Organization of Petroleum Exporting Countries insisted global demand was demonstrating "strength and resilience."

OPEC marginally raised its 2023 demand growth estimate to 2.5 million barrels a day, with non-OECD nations seen driving the gains. For next year, demand was seen adding a "healthy" 2.2 million barrels

a day, to average 104.3 million barrels a day, with non-OECD accounting for about 2 million barrels a day.

The latest data from the US Energy Information Administration provided a mixed picture. While fourweek average implied distillate demand – diesel is closely watched as an indicator of economic growth – inched toward the highest in about a year, the equivalent gauge for gasoline demand eased.

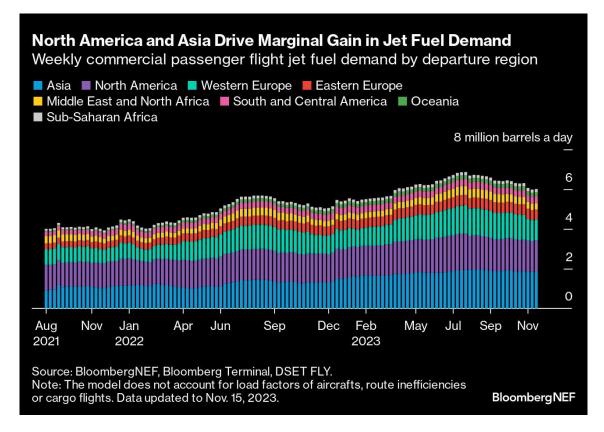


In France, total oil product deliveries gained 1.7% year-on-year to 4.84 million tons in October, the first monthly gain since July, according to data from industry group UFIP Energies et Mobilites. Gasoline and jet fuel sales strengthened year-on-year, while road diesel deliveries declined. In Italy, gasoline, transport diesel and jet fuel sales all gained year-on-year last month, though only gasoline beat pre-pandemic levels. In Portugal, gasoline, diesel and jet fuel consumption also rose in the month.

Read More: Road Traffic Indicators: China's Congestion Retreats Again

In the skies, global flights continued to track comfortably above last year's figures and 2019 levels in the week beginning Nov. 20, though they dipped on a month-on-month basis, figures from Flightradar24 showed. In Europe, where flights continue to trail pre-Covid levels, the numbers also fell on a month-on-month basis, according to Eurocontrol data.

Read More: Aviation Indicators Weekly: Demand for Jet Fuel to Tick Up



While the transition to cleaner forms of energy still looks like a work for decades, there are indications that consumption habits are beginning to change. In its Short-Term Energy Outlook on Nov. 7, the US's EIA forecast that the nation's gasoline usage will fall by 1% in 2024, to the lowest per-capita consumption in two decades. The agency cited an increase in remote working, improvements in fuel efficiency, high gasoline prices and stubborn inflation for reduced demand.

The Bloomberg oil demand monitor uses a range of high-frequency data to help identify emerging trends. Following are the latest indicators. The first two tables show fuel demand and road congestion, the next shows air travel globally and the last is refinery activity.

										T
Demand Measure	Location	%vs 2022	% vs 2021	% vs 2020	% vs 2019	% m/m	Freq	Lates	Latest	Source
licusure				2020		,				
Gasoline product supplied	US	+1.8	-9.1	+4.3	-7.7	-4.3	w	Nov.	17 <mark>8.48m</mark> 17 b/d	EIA
Distillates product supplied	US	+6.9	-6.4	-1.6	-4.9	+1	w	Nov.	17 <mark>4.11m</mark> b/d	EIA
Jet fuel product supplied	US	-0.3	unch.	+29	-8.8	-13	w	Nov.	17 <mark>1.</mark> 51m b/d	EIA
Total oil products supplied	US	+0.8	-7.9	+4.6	-5.8	-0.3	w	Nov.	17 ^{20.04m} b/d	EIA
Car use	UK	unch.	+1.1	+30	-8	-4.2	m	Nov.	13 92	DfT
Heavy goods vehicle use	UK	-3.7	-6.3	-1.9	+4	-1.9	m	Nov.	13 104	DfT
All motor vehicle use index	UK	unch.	+1	+24	-3	-4	m	Nov.	13 97	DfT
Gasoline (petrol) avg sales per filling station	UK	+5.2	+6.3	+15	-4.7	-1.2	m	Week to Oct.	29 6,850 liters/d	BEIS
Diesel avg sales per station	UK	-2.1	-6.3	-5.5	-17	-1.3	m	Week to Oct.	29 8,635 liters/d	BEIS

fuels sales U per station	IK						
		+1-1.1	+2.6	-12	-1.2 m	Week to Oct. 29 15,485 liters/d	BEIS
Diesel sales Ir	ndia	-12			+3.42/m	Nov. 1-15 3.12m tons	Bberg
sales	ndia	+1.2			+5.32/m	Nov. 1-15 1.24m tons	Bberg
Jet fuel Ir sales	ndia	+4			-0.62/m	Nov. 1-15 302k tons	Bberg
LPG sales Ir	ndia	-1.2		-	-0.03 2/m	Nov. 1-15 1.26m tons	Bberg
Diesel sales Ir	ndia	+9.3			+18 m	October 7.63m tons	PPAC
sales	ndia	+4.8			+2.7 m	October 3.14m tons	PPAC
Jet fuel Ir sales	ndia	+12			+5.2 m	October ^{691k} tons	PPAC
LPG sales Ir	ndia	+4.3			-2.2 m	October 2.5m tons	PPAC
Total oil Ir products	ndia	+3.7			+5.5 m	October 19.26m tons	PPAC
Gasoline deliveries Diesel (and	pain	+8.5			-0.4 m	October 558k m3	Exolum
heating oil) S deliveries	pain	-3.6			+2.4 m	October ^{2,217k} m3	Exolum
Jet fuel deliveries ^S Total oil	pain	+15			-1.5 m	October 653k m3	Exolum
	pain	+1.7			+1.2 m	October ^{3,428k} m3	Exolum
sales	rance	-0.6			+4.1 m	October 4.151m m3	UFIP
sales	rance	+13			m	October n/a	UFIP
sales	rance	-5.1			m	October n/a	UFIP
Jet fuel Fi sales Fi All	rance	+11		-7.5	+0.9 m	October 702k m3	UFIP
netroleum	rance	+1.7			+5.7 m	October <mark>4.835m</mark> tons	UFIP
trame	taly ı	unch.			-6 m	October n/a	Anas
Heavy vehicle It traffic	taly	+3			-3 m	October n/a	Anas
Sales	taly	+3.8		+8.8	+0.4 m	October ^{706k} tons	Energy Ministry
	taly	+0.9		-5.6	+0 . 5 m	October 2.01m tons	Energy Ministry
Diesel/gasoil It	taly	+2.6		-7.6	+2.7 m		Energy Ministry
LPG sales It	taly	-3.3		-14	+0.9 m	October 235k tons	Energy Ministry
Sales	taly	+26		-1.8	-5.9 m	October 432k tons	Energy Ministry
Total oil product It sales	taly	+4.5		-8.7	+1.3 m	October <mark>4.51m</mark> tons	Energy Ministry
Gasoline consumption P	ortugal	+8.1+7.2	+23	+15	+3.3 m	October 99,522 tons	ENSE
consumption	ortugal	+3.9+1.1	+5	-2.7	+8.5 m	October 425,287 tons	ENSE
consumption	ortugal	+11 +55	+192	+11	-7.2 m	October 159,665 tons	ENSE
kms traveled	rance	+6.6		+2	m	October n/a	Mundys
kms traveled	taly	+1		+0.4	m	October n/a	Mundys
	pain	+6.1		-2.4	m	October n/a	Mundys
kms traveled	razil	+3.1		+4	m	October n/a	Mundys

kms traveled					
% change in toll roads Chile	-2.7	+16	m	October n/a	Mundys
kms traveled					2
% change in toll roads Mexico	+2.2	+15	m	October n/a	Mundys
kms traveled					

Notes: Click here for a PDF with more information on sources, methods. The frequency column shows w for data updated weekly, 2/m for twice a month and m for monthly.

City congestion:

Measure	Location	Nov. 13	Nov. 6	Oct. 30	Oct. 23	0ct. 16	0ct. 9	0ct. 2	Sept. 25	Sept. 18	Sept. 11
Congestion	Tokyo	102	73	99	98	98	93	99	105	96	90
Congestion	Taipei	97	93	93	96	85	101	98	104	98	104
Congestion	Jakarta	75	74	71	67	68	69	61	67	65	64
Congestion	Mumbai	58	54	38	60	58	60	56	53	68	63
Congestion	New York	96	82	108	103	104	93	108	96	112	107
Congestion	Los Angeles	101	80	80	98	100	97	95	93	95	93
Congestion	London	126	136	136	98	120	124	126	135	124	110
Congestion	Rome	129	96	125	125	126	129	125	121	115	102
Congestion	Madrid	90	50	89	127	81	117	109	108	103	79
Congestion	Paris	116	91	96	118	111	112	112	90	110	104
Congestion	Berlin	110	104	103	116	114	101	105	108	107	103
Congestion	Mexico City	94	63	73	76	80	79	79	79	72	86
Congestion	Sao Paulo	92	56	84	82	66	89	81	79	87	64

Source: TomTom. Click here for a PDF with more information on sources, methods

Note: TomTom changed its methodology for calculating traffic delays with data for Feb. 20 and no longer publishes comparisons with pre-Covid levels. We have therefore switched to using figures calculated by BNEF, which show seven-day moving-average congestion indexed to average 2019 levels. See the linked PDF for more details.

Air Travel:

Measure	Location	vs 2022	vs 2021	vs 2020	vs 2019	m/m	w/w	Freq.	Latest Date	Latest Value	Source
			chan	ges sho	wn as %						
All flights	Worldwide	+9.2	+11	+38	+9.1	-7.5	-1	d	Nov. 20	207,723	Flightradar24
Commercial flights	Worldwide	+18	+31	+76	+5.7	-4.7	+0.4	d	Nov. 20	119,653	Flightradar24
Seat capacity per week	Worldwide	+15	+34	+86	-2.6		-0.6	w	Nov. 20 week	102.7m seats	OAG
Air traffic (flights)	Europe				-8.7	-17	-1.1	d	Nov. 20	25,437	Eurocontrol
Airline passenger throughput (7-day avg)	US	+9	+25	+200	+11	-3	+2	w	Nov. 19	2.43m	TSA
Air passenger traffic per month	China	+253	+44	+12	-1.6	+4.9		m	October	56 . 1m	CAAC
passengers	UK	+18	+129	+459	-0.5	-1.6		m	October	6 . 96m	Heathrow
Rome % change in passengers carried	Italy	+24			-3.4			m	October	n/a	Mundys

Note: Comparisons versus 2019 are a better measure of a return to normal for most nations, rather than y/y comparisons.

FlightRadar24 data shown above, and comparisons thereof, all use 7-day moving averages, except for w/w which uses single day data.

Refineries:

Measure Location vs 2022 vs 2021 vs 2019 m/m chg Latest as Latest Value Source

						of Date	
			Changes are	e in ppt un	less noted		
Crude intake	US	-5.5	-0.9%	-5.7	+2.1%	Nov. 17	15.5m b/d ^{EIA}
Utilization Utilization Utilization Utilization	US US Gulf US East US Midwest	-6.9 -7.6 -16.7 -3.8	-1.6 -1 -2.2 -4	-2.5 -4.1 +20.4 -2.9	+1.4 +2.2 +15.7 +2.3	Nov. 17 Nov. 17 Nov. 17 Nov. 17	87% EIA 88.3% EIA 86.2% EIA 88% EIA
Utilization (indep. refs)	Shandong, China	-8.3	-13.1	-10.9	-3.4	Nov. 24	57.56% Oilchem

Note: US refinery data is weekly. Changes are shown in percentages for the row on crude intake, while refinery utilization changes are shown in percentage points.

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This story was produced with the assistance of Bloomberg Automation.

Press Release

ATA Truck Tonnage Index Increased 1.1% in October

Nov 21, 2023

Washington — American Trucking Associations' advanced seasonally adjusted (SA) For-Hire Truck Tonnage Index increased 1.1% in October after declining 1.1% in September. In October, the index equaled 115.2 (2015=100) compared with 113.9 in September.



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"After hitting a floor in April, tonnage has slowly and inconsistently improved, but remains 3% below its recent peak in September 2022," said **ATA Chief Economist Bob Costello.** "Despite the monthly gain, truck freight remains soft as it continues to contract on a year-over-year basis. It is important to remember that our for-hire truck freight index, which includes both truckload and LTL freight, is dominated by contract freight with minimal amounts of spot market loads. The traditional spot market remains much weaker than contract tonnage."

September's decline was unchanged from our October 24 press release.

Compared with October 2022, the SA index fell 2.1%, which was the eighth straight year-over-year decrease. In September, the index was down 4.1% from a year earlier.

The not seasonally adjusted index, which represents the change in tonnage actually hauled by the fleets before any seasonal adjustment, equaled 119.7 in October, 6.3% above the September level (112.5). In calculating the index, 100 represents 2015. ATA's For-Hire Truck Tonnage Index is dominated by contract freight as opposed to spot market freight.

Trucking serves as a barometer of the U.S. economy, representing 72.6% of tonnage carried by all modes of domestic freight transportation, including manufactured and retail goods. Trucks hauled 11.46 billion tons of freight in 2022. Motor carriers collected \$940.8 billion, or 80.7% of total revenue earned by all transport modes.

ATA calculates the tonnage index based on surveys from its membership and has been doing so since the 1970s. This is a preliminary figure and subject to change in the final report issued around the 5th day of each month. The report includes month-to-month and year-over-year results, relevant economic comparisons, and key financial indicators.

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TEXAS UPSTREAM EMPLOYMENT INCREASES WITH RECORD PERMIAN BASIN PRODUCTION

Austin, Texas – Citing the latest Current Employment Statistics (CES) report from the U.S. Bureau of Labor Statistics (BLS), the Texas Independent Producers and Royalty Owners Association (TIPRO) today highlighted new employment figures showing an increase in upstream employment for the month of October. According to TIPRO's analysis, direct Texas upstream employment for October 2023 totaled 212,900, an increase of 2,200 jobs from September employment numbers. Texas upstream employment in October 2023 represented the addition of 19,200 positions compared to October 2022, including an increase of 2,500 jobs in oil and natural gas extraction and 16,700 jobs in the services sector.

TIPRO's new employment data yet again indicated strong job postings for the Texas oil and natural gas industry during the month of October. According to the association, there were 10,843 active unique jobs postings for the Texas oil and natural gas industry in October, including 3,965 new job postings added during the month by companies. In comparison, the state of California had 3,066 unique job postings last month, followed by Oklahoma (1,512), Louisiana (1,409) and Pennsylvania (1,041). TIPRO reported a total of 47,517 unique job postings nationwide last month within the oil and natural gas sector.

Among the 17 specific industry sectors TIPRO uses to define the Texas oil and natural gas industry, Gasoline Stations with Convenience Stores led in the ranking for unique job listings in October with 2,824 postings, followed by Support Activities for Oil and Gas Operations (2,008) and Crude Petroleum Extraction (1,178). The leading three cities by total unique oil and natural gas job postings were Houston (3,208), Midland (818) and Odessa (446), said TIPRO.

The top three companies ranked by unique job postings in October were Cefco (1,151), Love's (954) and Baker Hughes (332), according to TIPRO. Of the top ten companies listed by unique job postings last month, five companies were in the services sector, followed by two in the gasoline stations category with convenience stores, two midstream companies, and one in oil and natural gas extraction. Top posted industry occupations for October included first-line supervisors of retail sales workers (686), maintenance and repair workers (512) and heavy tractor-trailer truck drivers (252). The top posted job titles for October included store managers (230), assistant store managers (203) and customer service representatives (188).

Top qualifications for unique job postings included valid driver's license (1,758), commercial driver's license (CDL) (204), and Master of Business Administration (MBA) (147). TIPRO reports that 40 percent of unique job postings had no education requirement listed, 36 percent required a bachelor's degree, and 25 percent required a high school diploma or GED. There are 1,156 advertised salary observations (11 percent of the 10,843 matching postings) with a median salary of \$55,200. The highest percentage of advertised salaries (26 percent) were in the \$85,000 to \$500,000 range. TIPRO also notes that the current average annual wage of \$122,000 for all Texas oil and natural gas industry sectors has increased by 17 percent since 2013.

Additional TIPRO workforce trends data:

- A sample of 500 industry job postings in Texas for October 2023 can be viewed here.
- The top three posting sources in October included <u>www.indeed.com</u> (4,400), <u>www.simplyhired.com</u> (1,939) and <u>www.dejobs.org</u> (1,751).
- - Average annual wages for the Texas oil and natural gas industry can be viewed here.
- – Leading industry positions in Texas with median hourly earnings, education, work experience and typical on-the-job training is available <u>here</u>.

TIPRO also highlights recent data released from the Texas comptroller's office showing tax contributions provided by the Texas oil and natural gas industry in October. Texas energy producers last month paid \$586 million in oil production taxes, up from the prior month and 8 percent higher than October 2022. Producers also in the month of October contributed \$192 million in natural gas production taxes. Oil and natural gas severance taxes remain an important source of revenue for state and local governments and continue to be used help to support and pay for road and infrastructure investments, water conservation projects, schools and education, first responders and other essential public services across the Lone Star State.

Oil output from the Permian Basin – the nation's top shale-producing region – is forecasted to expand leading up to the end of the year, with producers pumping a record 5.98 million barrels per day (bpd) in the Permian in December, according to new production estimates published by the U.S. Energy Information Administration (EIA). In recent months, the EIA had projected declines in oil output in the Permian, but now experts at the agency have revised their forecasting, indicating production volumes in the region will in fact rise. Natural gas production in the Permian is also expected to grow in December, totaling 24.86 billion cubic feet per day (bcf/d), higher than the anticipated 24.75 bcf/d produced in the basin during November. Oil and gas drilling in other leading basins around the country, meanwhile, is expected to slow before the end of 2023, noted the EIA, with U.S. oil production forecasted to dip to 9.653 million bpd in December from an estimated 9.654 million bpd in November. Total natural gas production in the nation's biggest shale basins also is projected to decline next month by 0.3 bcf/d to 99.6 bcf/d, EIA projections show.

"We are pleased to see continued growth in employment, production and direct economic contributions from the Texas oil and natural gas industry," said Ed Longanecker, president of TIPRO. "Market volatility will continue due to competing factors, including inflationary pressures and geopolitical tensions, but we expect global supply to remain tight and demand growth to continue, supported in large part by the state of Texas," added Longanecker.

TIPRO also commented that investors are currently more focused on a slower demand outlook than the impact geopolitical conflicts will have on supply. EIA's recent <u>Short Term Energy Outlook</u> for November notes that despite expected increases in oil production in 2023 and 2024 and geopolitical issues in the Middle East and Iran, ongoing cuts from OPEC+ will keep global production growth lower than consumption, contributing to upward oil price pressure in early 2024.

Overall, despite geopolitical issues in the Middle East, Iran and Russia, <u>EIA</u> expects global oil production to remain largely the same. If there is an escalation in conflict in the Middle East because of the recent attacks on Israel, production may drop. However, TIPRO expects crude oil supply in the region to remain unchanged in the short-term.

TIPRO added that Russian and Iranian supply will largely remain flat in 2024, with Russia expected to maintain its mid-2023 production despite facing new U.S. sanctions over price cap violations. Iran may see a small increase in crude production as it continues to export to China. However, with insufficient upstream investment, sanctions on their crude oil and limited oil consumption growth in China, production in Iran will also remain limited.

TIPRO expects the price of WTI to remain in <u>its forecasted range of \$75-\$80</u> for the remainder of 2023 with no meaningful reduction in oil exports. However, the association emphasized continued uncertainty in the market due to stubborn inflation, poorly conceived U.S. energy policy and federal fiscal policy having its desired economic dampening effect on consumer spending, which will continue to play out in early 2024.

TIPRO also noted that LNG demand in Asia and Europe is rising, but supply, especially from the U.S., is being viewed as more than adequate by investors, coupled with European gas storage reaching capacity, thus avoiding a typical bump in price this time of year. U.S. natural gas futures saw an increase due to higher, weather-related demand, which could be short-lived with above-normal temperatures expected across most of the U.S. Regardless, TIPRO remains bullish on natural gas demand in the U.S. and rising LNG exports in the long-term, with EIA noting natural gas future prices remain <u>high</u> enough to encourage robust LNG exports to both Europe and East Asia.

"We would like to express our sincere gratitude to the hundreds of thousands of hardworking men and women in the Texas oil and natural gas industry for providing the critical energy needed to meet growing demand here and abroad and the outsized contributions from an economic and national security perspective," concluded Longanecker.

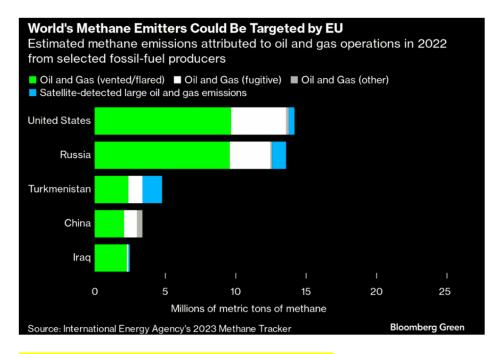
Europe Warns Methane Polluters as Bloc Pushes to Slash Emissions 2023-11-14 04:00:00.2 GMT

By John Ainger

(Bloomberg) -- The European Union aims to slash methane emissions by clinching a deal that could have global ramifications if major energy importers are targeted over leaks of one of the most potent greenhouse gases. Negotiators from parliament and member states will enter what is likely to be the final round of talks Tuesday over the shape of rules cracking down on methane leaked into the atmosphere by the energy sector. The goal is to get a deal in place before the COP28 climate summit in Dubai later this month. The rules will require energy companies to regularly inspect infrastructure such as pipelines and oil wells to look for methane — a gas that's 80 times more powerful than CO2 over a 20-year time frame — escaping into the atmosphere. Differences remain over how big a leak needs to be to require repair, while some EU states are concerned about the implications for energy security.

Applying the rules to imports over the next decade would be one step beyond regulations in countries like Canada and Nigeria. That could have an outsized impact on the climate, because the 27-nation bloc relies on foreign supplies for over 90% of its oil and gas.

"We're watching you," Jutta Paulus, the Green lawmaker who is parliament's lead negotiator, said in a message to fossil fuel companies outside of the bloc. "We want to do something that's really meaningful for the climate."



If the EU were to apply the same level of ambition to imports as they do to domestically produced fossil fuel supplies, then global methane emissions in the oil and gas

sector could be reduced by at least 30%, according to Clean Air Task Force, a climate non-profit.

However, EU member states are concerned over the possible knock-on impact on the bloc's security of energy supplies at a time when it is shedding its dependency on Russian fossil fuel imports.

The European Commission, the bloc's executive branch, has floated gradually phasing in rules so that imports reach a "certain level of methane intensity performance" by the end of the decade, according to a document seen by Bloomberg News. The EU relies on Norway for around 44% of its pipeline gas and on the US for almost half of its liquefied natural gas. Methane emissions from pipeline gas tend to be higher than for LNG, mainly due to activities in producing countries, according to Berkley Research Group. Algeria makes up around 17% of the EU's pipeline gas imports. Several super emitting events from the country have been tracked by satellites. "As the world's largest natural gas importer, the EU can no longer outsource pollution while claiming climate leadership," said Flavia Sollazzo, senior director of EU Energy Transition at Environmental Defense Fund Europe. "The bloc's external 'methane footprint' is up to 8 times higher than its domestic emissions." Scientists using satellite observations have consistently found that operators and governments significantly under report the climate impact of fossil fuels. A study published in Nature Communications in August found that observed methane releases from global oil and gas operations are 30% higher than estimates provided by countries to the United Nations. Industry meanwhile is lobbying against stricter rules. Leak detection and repair thresholds being negotiated are equivalent to a fraction of a dairy cow's methane emissions, while other measures like quantifying emissions from subsea wells are unfeasible, according to the International Association of Oil & Gas Producers.

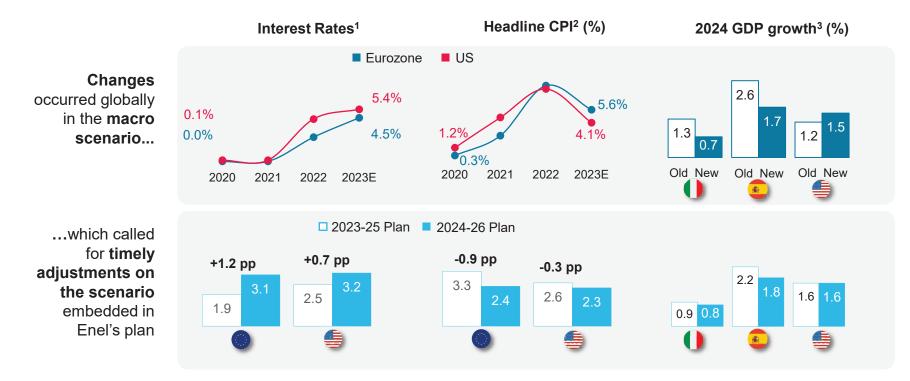
"The EU Methane Regulation is at risk of being impossible to implement by the European oil and gas industry because of certain requirements that are disconnected from reality," said Nareg Terzian, head of strategy and communications at the group. "Some requirements rely on technologies that do not exist. Others are entirely disproportionate."

--With assistance from Aaron Clark and Anna Shiryaevskaya.

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To view this story in Bloomberg click here: https://blinks.bloomberg.com/news/stories/S41XYIT0AFB4

A rapidly changing macro environment with hawkish monetary policies to address inflationary trends...



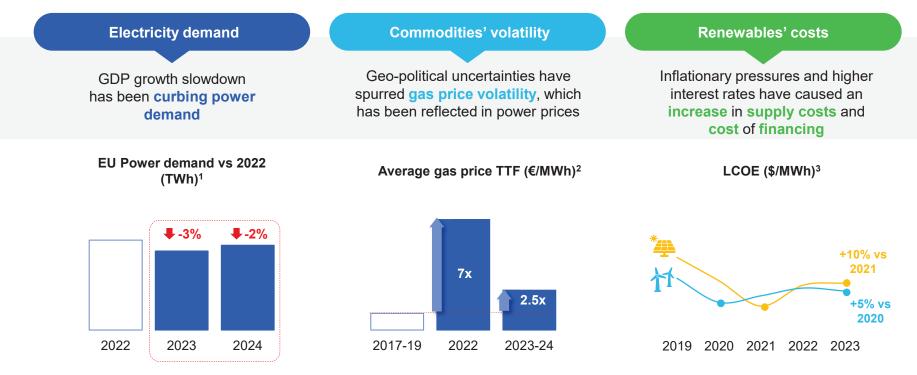
1. Year end Central banks' terminal rate: Federal Funds Rate and Main Refinancing Operations Interest Rate; 2. Annual average; 3. World Economic Outlook Projections (IMF) @Oct'22 vs @Oct'23

4

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...have caused a temporary setback in some trends in the short-term...



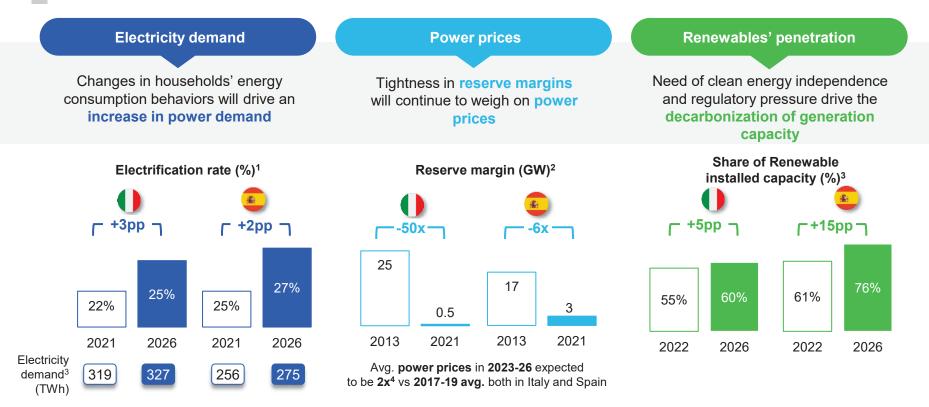


1. IEA, Electricity Market Report, 2023; 2.Historical values (source: Bloomberg), Enel's internal elaboration for future; 3. Average value for Italy, Spain and USA from BNEF's LCOE database

5

...though not impacting the medium-term direction...

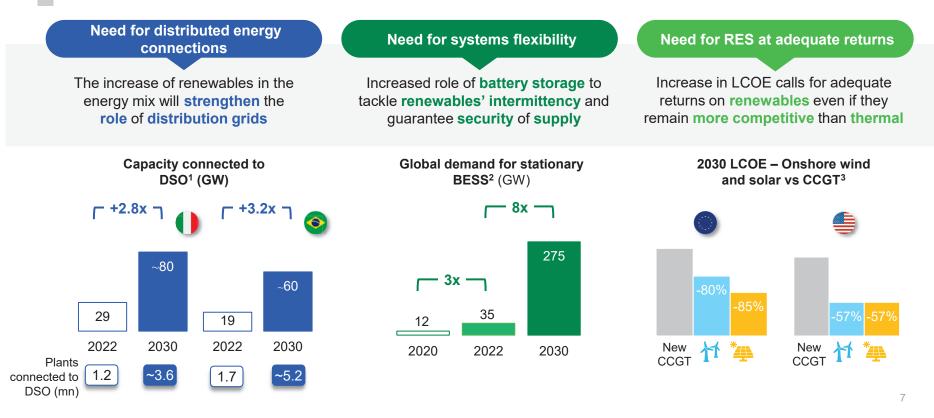




1. Eurostat energy balances for historical data; Enel's internal elaboration for future values 2. Terna (Italy), Enel's internal elaboration based on Red Electrica data (Spain) 3. Terna (Italy) and Red Electrica (Spain) for historical data; Enel's internal elaboration for future values 4. Historical values (source: Bloomberg), Enel's internal elaboration for future values 6

...triggering long-term trends emerging stronger...





1. Terna, GSE, ANEEL; 2, BNEF 2023; 3. IEA, WEO 2023

...leading to a reassessment of our key business drivers

enel

8

Regulated business

- Increase investments in grids to improve quality, resiliency and to accommodate connection requests
- Focus on countries with favorable regulatory frameworks that allow a fair remuneration
- Increase investments in BESS to compensate renewables' intermittency

Emission-free generation

- Select investments based on a weighted risk-reward matrix diversified by country and technology
- Concentrate investments in countries/techs with stable and secured IRR-WACC spread
- Leverage on partnerships

Sales to customers

- Maximize value of our large customers' portfolio
- Increase efficiency and effectiveness in customers acquisition and customer care
- Lead customers towards a more electrified world with no disruptions

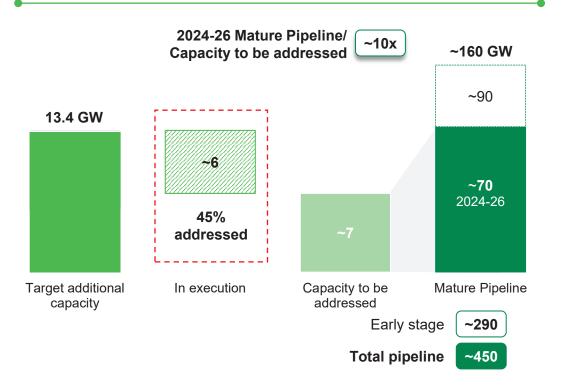
Flexible sourcing approach to grab opportunities from make and buy strategy

Value driven approach in an integrated company with efficiency and effectiveness supporting competitiveness and enhancing results and delivery



Pipeline size and maturity enable a low-risk and profitable growth

2024-26 renewables growth: addressed share vs pipeline (GW)



GU

- > Focus on **mature projects** with higher investment return and full eligibility in terms of hedging/risk assessment
- > Value crystallization of pipeline:
 - non-core geographies
 - core countries with limited fitting with the targeted risk/return level
- Non-core countries: focus on actionable and relevant asset development and profit-driven projects. Limited capital at risk balanced by stewardship model

fuel duty receipts by £1.2 billion a year, on average.¹⁰ The downward revision to our assumption regarding take up of EVs, explained in Box 4.2, increases fuel duty receipts by a further £0.7 billion per year, on average.

Box 4.2: Updated electric vehicle assumptions and their fiscal implications

As the share of electric vehicles (EVs) increases, receipts from fuel duty, and to a lesser extent Vehicle Excise Duty (VED), will decline. Fuel duty raised £25.1 billion (1.0 per cent of GDP) in 2022-23, has been falling as share of GDP since 1998-99, and is expected to fall to zero in cash terms as EVs replace petrol and diesel cars in line with the Government's planned transition to net zero by 2050.^a

In previous forecasts the EV share of new car sales had repeatedly exceeded our expectations, increasing from 0.5 per cent of new car sales in 2017-18 to 13.6 per cent in 2021-22. To reflect this, in our March 2022 forecast, we made an upward revision to our assumption on the pace of EV take-up which we assumed would rise to 59.6 per cent of new car sales by 2026-27.^b However, in 2022-23, growth in EV take-up slowed, accounting for just 16.5 per cent of new car sales, which was more than one percentage points below our March 2023 forecast of 17.7 per cent. Evidence points to a number of reasons for the slowdown:

- The decline in EV price gap at point of purchase relative to internal combustion engine vehicles (ICEVs) has begun to slow, with a 15 percentage point fall in the two years to March 2022 but only a 6 percentage points fall since.^c The generally higher upfront costs of EVs relative to ICEVs will likely still be disincentivising many consumers, especially purchasers using car finance as interest rates are significantly higher than we had anticipated in 2022. In the absence of low cost EVs, the steep sales growth of the past years, boosted by (usually high-income) early adopters, is expected to slow.^d
- EVs have lower running costs for consumers who can charge vehicles at home. However, the cost advantage of EVs charged away from home is significantly less and can become negative, and the availability of public charging points seems to be a concern for many drivers.^{ef} Moreover, petrol and diesel prices have declined from the spike in 2022, due to a combination of both wholesale price falls and fuel duty cuts, though are still high relative to the past.

The main policy driver for EV uptake is now the Zero Emission Vehicle (ZEV) mandate which takes effect in January 2024. We have therefore revised our EV assumption to match the path of the mandate over the forecast horizon. The mandate sets a minimum share of cars and vans sold by each manufacturer to be zero emission. We judge sales are unlikely to materially exceed this across the forecast horizon due to flexibilities that allow trading of allowances and borrowing against future allowances in the first three years of the mandate.⁹ Furthermore, the Government recently announced a 5-year delay on the ban of new ICEV sales, from 2030 to 2035, which may result in some consumers delaying a switch to EVs.

The announced ZEV mandate reduces our forecast of EV uptake (compared to March 2023) from 25 per cent to 18 per cent in 2023, and from 67 per cent to 38 per cent in 2027 (Chart C).

Economic and fiscal outlook

¹⁰ This includes the impact from updated LGV and HGV efficiencies.

This has increased the fuel duty forecast on average by £0.7 billion a year and the VED forecast by £0.1 billion a year since March.



^b OBR, Economic and fiscal outlook, March 2022 (Box 3.3)

^c Auto Trader, The road to 2030, accessed 18 November 2023

^d Reuters, EV demand in Europe to slow as customers await affordable electric cars, accessed November 2023

^e World Economic Forum, Electric vehicles: The 3 main factors holding back sales, accessed November 2023

^f RAC, More drivers than ever expect to go electric next time but many likely to delay making the switch, accessed November 2023 ^a Department for Transport, Zero emission vehicle (ZEV) mandate consultation: summary of responses and joint government response, October 2023

Other receipts

- 4.28 Stamp duty land tax receipts are expected to fall by 21.9 per cent this year to £13.0 billion and by a further 2.6 per cent to £12.7 billion the following year, reflecting the downturn in the housing market coupled with the September 2022 policy measure to increase the nilrate thresholds that will come to an end in March 2025. The remainder of the profile is driven by housing transactions which rise steadily over the forecast, with receipts reaching £22.2 billion by the end of the forecast. Relative to our March forecast, we have revised up receipts in the near term, but down from 2025-26 reflecting lower expected housing transactions.
- 4.29 Capital gains tax (CGT) receipts are expected to be £16.5 billion in 2023-24, a 2.5 per cent fall from last year, and to fall by a further 4.2 per cent in 2024-25. Receipts are then expected to rise over the remainder of the forecast following the profile of equity prices. Relative to March, receipts have been revised down by an average £4.4 billion each year of the forecast due to downward revisions to the equity price forecast and a smaller proportion

Ford Downsizes Plan for Michigan Battery Factory, Citing Slower EV Demand

Automaker restarts work on plant, which will use tech from China's CATL

By Mike Colias Follow Updated Nov. 21, 2023 11:49 am ET



Just a few months ago, Ford announced it had paused construction on the politically divisive EV battery plant. PHOTO: NICK HAGEN FOR THE WALL STREET JOURNAL

Ford Motor is moving forward on construction of a battery plant in Michigan but at a reduced size from original plans, citing a pullback in the outlook for <u>future electric-vehicle demand</u>.

Ford in September <u>paused work on the factory</u>, in Marshall, Mich. At the time, the company said it was reassessing its ability to competitively operate the plant, which will make batteries using technology from China's <u>Contemporary Amperex Technology</u> Co. Congressional Republicans have criticized the China connection and argued against the project qualifying for federal tax subsidies.

On Tuesday, Ford said it has resumed work at the site, but downsized the scope of the project, with plans to produce roughly 40% fewer batteries than originally planned. It now expects to employ about 1,700 workers at the facility when the plant opens, scheduled for 2026, down from about 2,500.

"We're still very bullish on EVs," a Ford spokesman told reporters Tuesday. "Clearly, the growth isn't at the rate that we and others had expected."



A battery pack for a Ford Mustang Mach-E. PHOTO: REBECCA

COOK/REUTERS

Ford's investment in the project, <u>originally planned for \$3.5 billion</u>, will be reduced, although the company didn't provide an updated number.

The project <u>has faced political blowback</u> because of the plan to license intellectual property from CATL, the world's largest battery maker. Many Republicans have argued against any federal subsidies for battery production going to the factory under the federal Inflation Reduction Act, arguing it would benefit China. Some House committees have opened investigations into the deal.

Republicans also have said EVs that use batteries from the future Michigan plant shouldn't qualify for the \$7,500 consumer credit under the IRA, which requires mostly domestically sourced batteries.

Many Michigan Democrats support the project, saying it would generate jobs and economic activity. On Tuesday, Gov. Gretchen Whitmer's office praised Ford's decision to restart the project, saying it would lead to billions of dollars in investment.

Ford has said the factory would be wholly owned by Ford and create American jobs. On Tuesday, the Ford spokesman said the decision to reduce the project's size wasn't related to the political scrutiny.

"We're confident in terms of the IRA benefits," he said.

In recent months, automakers have responded to a cooling in EV demand by dialing back their electric vehicle investments or the pace of their new-model rollouts.

Sales of electric vehicles still are growing rapidly compared with the broader car market. But the pace of that growth has cooled, despite a number of new electric-model introductions in the U.S. this year.

EV sales this year rose 49% through October, compared with 69% from the same period last year, according to data from research firm Motor Intelligence. Sales overall, including EVs and internal-combustion-engine vehicles, were up 12.5%.

Ford plans to make batteries at the Michigan factory that use a different, less-expensive type of chemistry, called lithium-iron-phosphate, or LFP.

The technology is commonly used in China and is lower cost than the chemistry primarily used in North America, a combination of nickel, cobalt and manganese. Ford is building three other battery factories, in Tennessee and Kentucky, to make batteries that use that chemical mix.

Ford's move to halt work on the plant in September came during <u>the United Auto Workers strike</u> and drew criticism from UAW President Shawn Fain, who called it a threat to cut jobs. A spokesman on Tuesday declined to comment on Ford's decision to resume the project at a reduced scale.

Ford and other automakers have cited the need to offer more-affordable EVs to entice buyers. Ford executives have said the use of the less-expensive LFP batteries would allow it to offer more-competitive prices and ultimately sell more electrics.

"With our LFP batteries, we'll have the lowest or one of the lowest-cost batteries assembled in the U.S.," Ford Chief Executive Jim Farley told analysts in September.

Write to Mike Colias at mike.colias@wsj.com

Germany's Top Court Strikes Down €60 Billion Climate Funding (3) 2023-11-15 11:02:11.36 GMT

By Karin Matussek and Kamil Kowalcze

(Bloomberg) -- Germany's top court struck down a key element of the government's plans to address climate change and transform the economy, dealing Chancellor Olaf Scholz's coalition a major setback that throws its budget policy into disarray.

The Federal Constitutional Court ruled that the shifting of €60 billion (\$65.2 billion) earmarked to tackle the Covid-19 pandemic into an off-budget fund violated German constitutional law. The challenge was filed by lawmakers from the main opposition conservative alliance, who said they wanted to ensure the sustainability of the country's public finances. In a statement issued Wednesday in Karlsruhe, the court

said that the scope of the fund, which in August was topped up to €212 billion for the period 2024 through 2027, must now be reduced by €60 billion. The ruling doesn't in any way limit the amount the government can spend on tackling climate change but rather the budgetary methods it can use.

"If this means that obligations already entered into can no longer be met, the legislator must compensate for this in some other manner," Doris Koenig, vice president of the court, said in delivering the ruling, which was carried live on German television.

Funds raised must be spent in the year they were authorized and the government may not circumvent these rules by shifting them to a off-budget fund, she added.

Scholz will give his reaction to the ruling in a statement at 12:45 p.m. in Berlin alongside Finance Minister Christian Lindner and Economy Minister Robert Habeck.

At issue was whether the government violated the rules

enshrined in Germany's so-called debt brake — created in the aftermath of the 2008 financial crisis — which limits annual net new borrowing to 0.35% of gross domestic product. Exceptions are permitted to help deal with natural disasters and other emergencies.

Parliament approved a suspension of the mechanism for three years through 2022 to fight the pandemic but the government subsequently switched untapped borrowing worth €60 billion into its Climate and Transformation Fund, known as the KTF. Opposition lawmakers argued that by channeling those debt authorizations into the KTF, Scholz's administration had broken the debt-brake rules.

Coalition lawmakers failed to show that the funds were still linked strongly enough to tackling the fallout from the pandemic to justify the maneuver, according to the court ruling. They also violated the constitution by approving the additional new borrowing in early 2022 when the 2021 budget year had already elapsed, the judges ruled.

Evelyne Gomez-Liechti, a strategist at Mizuho International, said the decision could lead to an adjustment of the funding needs for the KTF that means lower than expected debt issuance for 2024 and beyond.

Dirk Schumacher, an economist at Natixis SA, said it's not clear how much fiscal tightening the ruling implies, noting that "there are other ways the government can raise the money, though less convenient than the one it chose."

Budget policy has been one of the main points of contention in Scholz's coalition of his Social Democrats, the Greens and the Free Democrats and Wednesday's ruling could spark renewed infighting.

Lindner, the FDP leader, is a self-styled budget hawk who insisted on the restoration of the debt brake, while the SPD and Greens are broadly more open to relaxing the borrowing rules. The issue is likely to be prominent in campaigning for the next general election due in the fall of 2025. *T

Read More About Germany's Budget:

Scholz Promises Long-Term Boost to German Military Spending

Germany's Next Election Campaign Is Already Getting Started

German Economy Chief Urges Broad Rethink of Budget Constraints *T

The KTF supports a wide range of measures to accelerate Germany's transition to a less-polluting economy, including the rollout of heat pumps, electromobility or hydrogen infrastructure.

It also funds investments in the nation's rail network and in building out semiconductor production, including €10 billion in subsidies for a new Intel Corp. plant in the eastern German city of Magdeburg. The funds specific to the case dealt with on Wednesday weren't earmarked for that project. The court's ruling may have significance for some of Germany's other off-budget special funds, including one worth €100 billion for investing in the nation's armed forces. They currently number around 30 and Lindner has vowed to gradually scale them back. The Federal Court of Auditors has criticized the funds as a violation of budget transparency. Helge Braun@HBraun

Das Bundesverfassungsgericht hat heute die Schuldenbremse gerettet und damit einen wichtigen Beitrag zur finanziellen Generationengerechtigkeit geleistet. Sent via Twitter for iPhone.

View original tweet.

"Today, the Federal Constitutional Court saved the debt brake and thus made an important contribution to intergenerational financial justice," CDU lawmaker Helge Braun, who chairs the lower house of parliament's budget committee, said in a post on X.

"This has made it clear that the government's policy of ostensibly fulfilling the debt brake in the federal budget, but booking large amounts of additional debt into the past through illusory shadow budgets, is a breach of the constitution," he added.

*T

MLIV Pulse survey

Are green stocks about to hit the bottom? Share your views.

*T

The case is: BVerfG, 2 BvF 1/22.

--With assistance from Michael Nienaber, James Hirai and Anchalee Worrachate.

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To view this story in Bloomberg click here: https://blinks.bloomberg.com/news/stories/S45U20T1UM0W

Germany's Habeck Calls For Radical Reform of Borrowing Limit 2023-11-23 19:51:42.48 GMT

By Arne Delfs

(Bloomberg) -- German Economy Minister Robert Habeck said that his country's constitutional limit on net new borrowing weakens its economy and called for radical reform. "We have voluntarily tied our hands behind our backs and are going into a boxing match. Is this how we want to win?" Habeck said in a speech at the Green party convention in Karlsruhe on Thursday. "The others are wrapping horseshoes in their gloves; we don't even have our arms free." Read More: Germany to Suspend Borrowing Limit Again After Budget Shock

Habeck was speaking after Finance Minister Christian Lindner from the liberal Free Democratic party announced hours earlier that he will present a revised 2023 budget next week. That move will force Lindner to suspend the constitutional limit on net new borrowing for a fourth consecutive year. Lindner views himself as a guardian of Germany's fiscal stability and previously insisted on the restoration of the rule after it was suspended for three years because of the pandemic and energy crisis. He has so far ruled out a complete removal or fundamental reform of the limit.

"An unchanged debt rule prevents investments and climate protection, it weakens the German economy in times of need," Habeck said.

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To view this story in Bloomberg click here: https://blinks.bloomberg.com/news/stories/S4LBR1DWX2PS



THE INVESTMENT L'I FUNDS INSTITUTE D' OF CANADA DI

L'INSTITUT DES FONDS D'INVESTISSEMENT DU CANADA

IFIC Monthly Investment Fund Statistics – October 2023 Mutual fund and exchange-traded fund (ETF) assets and sales

November 24 2023 (Toronto) – The Investment Funds Institute of Canada (IFIC) today announced investment fund net sales and net assets for October 2023.

Mutual fund assets totalled \$1.808 trillion at the end of October. Assets decreased by \$28.3 billion or 1.5 per cent since September. Mutual fund net redemptions were \$12.5 billion in October.

ETF assets totalled \$345.3 billion at the end of October, down by \$1.2 billion or 0.3 per cent from September 2023. ETF net sales were \$2.9 billion in October.

October insights

- Year to date, mutual fund assets decreased by 0.1 per cent or \$1.8 billion, while ETF assets increased by 10.1 per cent or \$31.6 billion.
- October was the eighth consecutive month of mutual fund net redemptions. Outflows for the month amounted to 0.7 per cent of September's total assets. Despite overall net redemptions, 30 per cent of all mutual funds had positive net sales.
- Every major ETF asset class generated positive net sales. Of the asset classes, bond funds accounted for the largest inflows at 49.5 per cent.

Asset class	Oct 2023	Sep 2023	Oct 2022	YTD 2023	YTD 2022
Long-term funds					
Balanced	(8 <i>,</i> 565)	(6,187)	(5 <i>,</i> 660)	(45,754)	(19,964)
Equity	(4,142)	(2,197)	(1,968)	(19 <i>,</i> 886)	(2,377)
Bond	(1,028)	(890)	(1,662)	6,628	(10,512)
Specialty	199	133	(2)	2,971	1,213
Total long-term funds	(13,537)	(9,142)	(9,291)	(56,042)	(31,640)
Total money market funds	997	1,572	1,189	12,815	4,832
Total	(12,540)	(7,570)	(8,102)	(43,226)	(26,807)

Mutual fund net sales/net redemptions (\$ millions)*

Mutual fund net assets (\$ billions)*

Asset class	Oct 2023	Sep 2023	Oct 2022	Dec 2022
Long-term funds				
Balanced	845.5	861.1	876.5	880.6
Equity	659.4	672.4	643.8	649.6
Bond	228.3	229.5	221.9	222.7
Specialty	25.5	25.4	22.0	22.2
Total long-term funds	1,758.8	1,788.4	1,764.1	1,775.1
Total money market funds	48.9	47.6	32.0	34.5
Total	1,807.7	1,836.0	1,796.2	1,809.6

* See below for important information about this data.

ETF net sales/net redemptions (\$ millions)*

Asset class	Oct 2023	Sep 2023	Oct 2022	YTD 2023	YTD 2022
Long-term funds					
Balanced	100	188	35	1,391	1,487
Equity	551	334	894	7,847	10,508
Bond	1,410	1,040	746	9,537	4,434
Specialty	102	18	178	1,164	1,257
Total long-term funds	2,163	1,581	1,853	19,940	17,685
Total money market funds	687	1,297	1,501	8,848	6,537
Total	2,850	2,878	3,354	28,788	24,222

ETF net assets (\$ billions)*

Asset class	Oct 2023	Sep 2023	Oct 2022	Dec 2022
Long-term funds				
Balanced	13.5	13.6	11.8	12.0
Equity	208.0	211.6	190.4	194.9
Bond	86.3	85.4	74.9	80.4
Specialty	12.2	11.5	10.5	10.2
Total long-term funds	320.1	322.1	287.6	297.5
Total money market funds	25.2	24.4	12.9	16.3
Total	345.3	346.5	300.5	313.7

* See below for important information about this data.

IFIC direct survey data (which accounts for approximately 85 per cent of total mutual fund industry assets and approximately 83 per cent of total ETF industry assets) is complemented by estimated data to provide comprehensive industry totals.

IFIC makes every effort to verify the accuracy, currency, and completeness of the information, however, IFIC does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current.

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* Important information about investment fund data

- 1. Mutual fund data is adjusted to remove double counting arising from mutual funds that invest in other mutual funds.
- Starting with January 2022 data, ETF data is adjusted to remove double counting arising from Canadian-listed ETFs that invest in units of other Canadian-listed ETFs. Any references to IFIC ETF assets and sales figures prior to 2022 data should indicate that the data has not been adjusted for ETF of ETF double counting.

- 3. The balanced funds category includes funds that invest directly in a mix of stocks and bonds or obtain exposure through investing in other funds.
- 4. Mutual fund data reflects the investment activity of Canadian retail investors.
- 5. ETF data reflects the investment activity of Canadian retail and institutional investors.

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The Investment Funds Institute of Canada is the voice of Canada's investment funds industry. IFIC brings together 150 organizations, including fund managers, distributors and industry service organizations to foster a strong, stable investment sector where investors can realize their financial goals. By connecting Canada's savers to Canada's economy, our industry contributes significantly to Canadian economic growth and job creation. Learn more about IFIC

For more information, please contact: Christine Harminc Senior Manager, Communications and Public Affairs <u>charminc@ific.ca</u> 416-309-2313



Dan Tsubouchi 🤣 @Energy_Tidbits · 42m

Did you know?

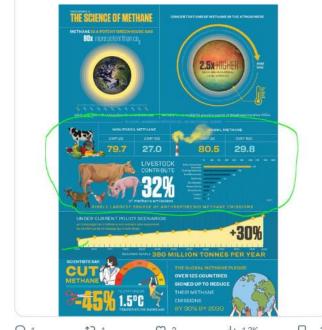
Methane emissions from livestock is more than from #Oil #NatGas. See 11/14/22 tweet.

#COP28 chatter in last couple days on west cutting back meat consumption will bring cow methane emissions back in headlines.

#OOTT

w- Dan Tsubouchi 🥺 @Energy_Tidbits · Nov 14, 2022 #Methane emissions are much more than #Oil #NatGas. @IATP report "How emissions from big meat and dairy are heating up the planet", livestock contribute 32% of #Methane emissions, single largest source of anthropogenic methane emissions. #OOTT

Show more



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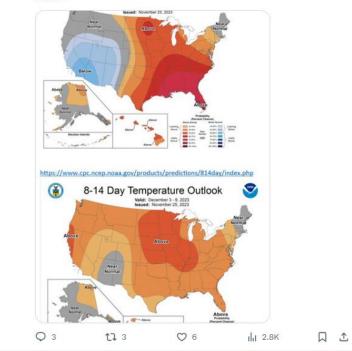
SAF

Dan Tsubouchi 🤣 @Energy_Tidbits · 17h No surprise, HH #NatGas prices were -7% WoW.

Never a positive for #NatGas prices when forecasts are to start Dec warmer than normal.

Today's @NOAA 6-10 & 8-14 day temp outlook call for warmer than normal temps.

#OOTT



SAF ----

Dan Tsubouchi 🤣 @Energy_Tidbits · 21h

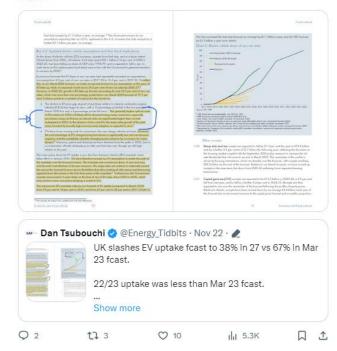
Will steep growth rate of EV sales "boosted by (usually high-income) early adopters" be maintained?

...

UK says No.

Price matters so higher EV upfront costs are an increasing factor moving from high to middle to lower income.

#Oil #Gasoline will needed for longer #OOTT



SAF ----

Dan Tsubouchi ⊘ @Energy_Tidbits · 22h · ℓ Floating storage creeping higher?

2nd wk floating #Oil storage in high 80's after 6 wks in 70s/60s.

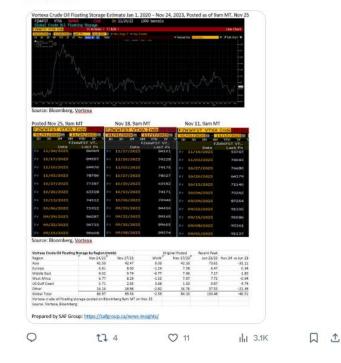
11/24 was -2.59 mmb WoW to 86.97 mmb but that was after 11/17 revised +5.46 mmb.

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All other prior revisions were very small.

Thx @Vortexa @business ... Show more



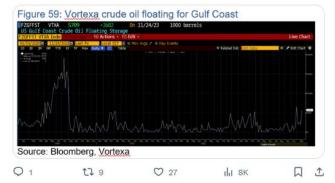
saF → Dan Tsubouchi ⊘ @Energy_Tidbits · 22h Panama Canal backup impact?

Crude tankers can't pre-book canal slots.

2nd recent spike up in floating #Oil storage in Gulf Coast.

11/24 was +3.68 mmb to 5.71 mmb & 10/28 was 6.64 mmb. Norm is 1-2 mmb.

Thx @Vortexa @business ... Show more

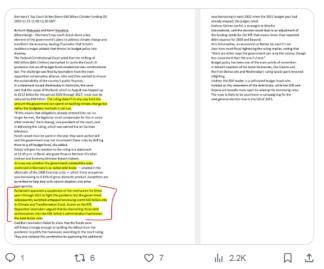


Dan Tsubouchi 🤣 @Energy_Tidbits · 4h SAF Busted!

> Top court says Germany wrongly tapped debt relief to fight Covid to switch "*untapped borrowing worth €60b into its Climate and Transformation* Fund"

Who else used Covid emergency funding to fund Energy Transition?

Thx @kmatussek @KowalczeKamil #OOTT



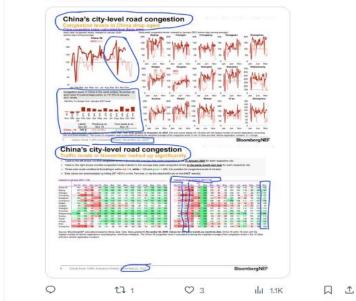
SAF

Dan Tsubouchi ♀ @Energy_Tidbits · 4h · · · China Baidu city-level road congestion for Nov/23 MTD. Top 15 cities are 130% of Nov/21 levels. Nov/22 was 81% of Nov/21 levels.

Still a way to go. Covid restrictions pre 23.

1st China New Year post Covid restrictions Feb/20 was 240% of Feb 2021.





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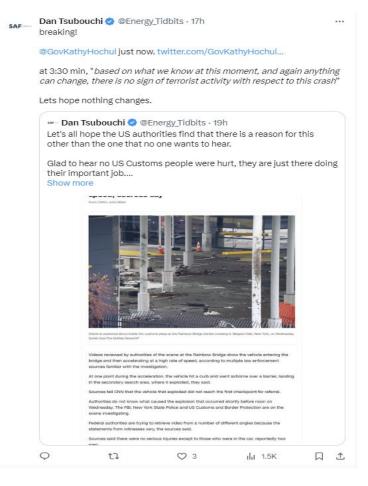
SAF Dan Tsubouchi 🧇 @Energy_Tidbits · 13h Breaking. More Houthi drones shot at US navy

@CENTCOM. US destroyer shot down multiple #Houthi drones, "ship and crew sustained no damage or injury." twitter.com/CENTCOM/status...

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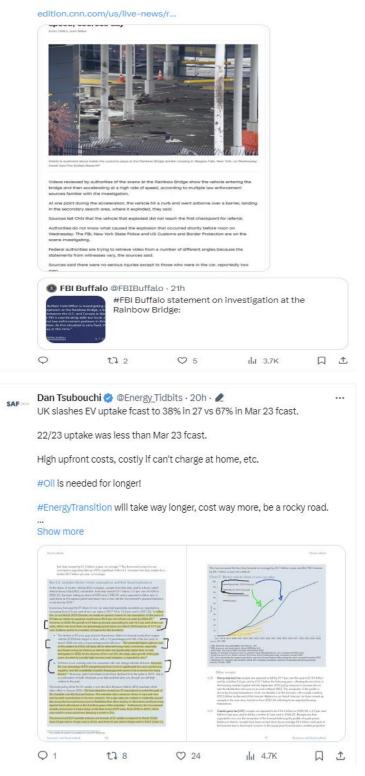
Suez Canal 101. All tankers/cargo ships thru Suez have to go thru Red Sea/Bab el Mandeb.

	an Tsubouchi 🤣 @Energy_Tidbits · Oct 28	
Suez	Canal 101	
Tanke Mand	er/cargo ships thru the Suez have to go thru Red Se	ea & Bab el
 Show	/ more	
	The Ideal of Monde Strait is a strategic route for oil and natural gas shipments	
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Let's all hope the US authorities find that there is a reason for this other than the one that no one wants to hear.

Glad to hear no US Customs people were hurt, they are just there doing their important job.



SAF	For those not near t #Oil #Gasoline #Di EIA data vs @busine	Dan Tsubouchi 🤡 @Energy_Tidbits · 2h ···· For those not near their laptops. @ElAgov just released at 8:30am MT its #Oil #Gasoline #Distillates inventory as of Nov 17. Table below compares ElA data vs @business expectations and vs @APIenergy yesterday. Prior to release, WTI was \$74.25 #OOTT						
	Oil/Products Inventory Nov 17: EIA, Bloomberg Survey Expectations, API							
	API							
	Oil	8.70	1.75	9.05				
	Gasoline	0.75	-1.10	-1.79				
	Distillates	-1.02	-1.29	-3.51				

Distillates		-1.02	-1.29	-3.51
		8.43	-0.64	3.75
Note: Oil is c	ommercial so bui	lds in no change in	SPR for the Nov 17	week
Note: Include	ed in the oil data, (Cushing had a 0.86	mmb build for Nov	17 week
Source EIA,	Bloomberg			
Prepared by	SAF Group https	://safgroup.ca/news	s-insights/	
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SAF ----

Dan Tsubouchi 🤣 @Energy_Tidbits • 5h

Sounds like this is part of Saudi dissatisfaction with other $\#\mbox{OPEC}$ members.

#OOTT

••• - Dan Tsubouchi 🤣 @Energy_Tidbits · Nov 13 Time for The Man, KSA Energy Minister Abdulaziz to remind others to get back in line.

#OPEC production keeps sneaking up.

Show more

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 27.90 mb/d in October 2023, higher by 80 tb/d, m-o-m. Crude oil output increased mainly in Angola, IR Iran and Nigeria, while production in Libya, Saudi Arabia and Kuwait decreased.

Notes: Totals may not a Source: OPEC.	dd up due to ir	idependent	rounding, g	iven availat	ile second	ary sources	to date.		
Total OPEC	26,340	28,863	28,840	28,268	27,555	27,501	27,820	27,900	80
Venezuela	554	683	696	737	761	757	758	751	-7
UAE	2,727	3,066	3,045	2,941	2,910	2,911	2,924	2,940	16
Saudi Arabia	9,114	10,531	10,358	10,149	8,993	8,920	9,018	8,992	-26
Nigeria	1,373	1,205	1,347	1,233	1,269	1,249	1,399	1,416	17
Libya	1,138	981	1,157	1,164	1,152	1,159	1,169	1,143	-20
Kuwalt	2,419	2,704	2,684	2,585	2.560	2,551	2,577	2,553	-24
Iraq	4,046	4,439	4,393	4,147	4,295	4,300	4,314	4,329	- 15
IR Iran	2,392	2,554	2,572	2,698	2,996	3,050	3,069	3,115	46
Gabon	182	197	194	206	207	211	206	216	10
Equatorial Guinea	98	84	53	59	61	69	54	56	2
Congo	263	261	268	265	261	261	252	257	5
Angola	1,122	1,140	1,058	1,104	1,137	1,124	1,121	1,172	51
Algeria	913	1,017	1,013	979	952	940	958	961	3
sources	2021	2022	1023	2023	3023	Aug 23	Sep 23	Oct 23	Oct/Se
Secondary									Change

SAF

Dan Tsubouchi ② @Energy_Tidbits · 5h Breaking!

@FerroTV just said delegates saying #OPEC+ Sunday meeting "may be delayed"

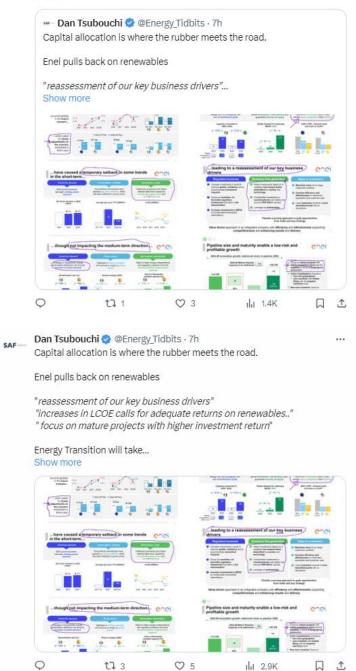
Brent falling, now down \$1.25 to \$80.80.

#OOTT

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sAF → Dan Tsubouchi 🤡 @Energy_Tidbits · 6h Another set back to #RenewableEnergy.

#OOTT



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Dan Tsubouchi 🤣 @Energy_Tidbits · 17h When will Kurdistan resume #Oil exports? Doesn't sound soon!							
they willing to g	ani "I cannot tell give he actual co ırdistan". See 👇	st of product	ion to the IOCs		re		
Thx @BBCMary	/am #OOTT						
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Dan Tsubouchi 🤣 @Energy_Tidbits · 20h Big reduction in forecast US EV demand growth

••••

#Ford downsizes plant to produce ~40% less batteries. Says "We're very bullish on EVs" "Clearly the growth isn't at the rate that we and others had expected"

#Oil is needed for longer! Thx @MikeColias #OOTT



Q6 t⊒4 ♡12 ılıı 2K Д ±

saF Dan Tsubouchi 🔗 @Energy_Tidbits · Nov 21 Negative to #Oil.

Friday, Iran said at 3.3 mmb/d, adding 300,000 b/d to hit 3.6 mmb/d by end of winter.

Iran delivering on Aug warning it was adding 0.6 mmb/d. See \P 08/13 tweet.

Will US clamp down on sanctions like said last week or keep turning blind eye?...

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SAF Dan Tsubouchi 🤡 @Energy_Tidbits · Nov 21

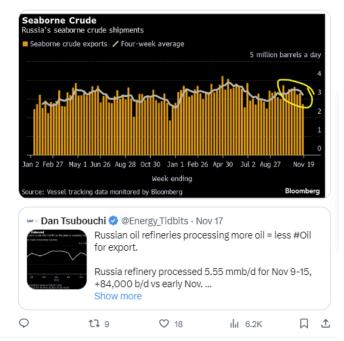
It's just math.

Russia refinery runs up = Less #Oil for export.

11/19 wk: RUS oil shipments -580,000 b/d WoW to ~2.7 mmb/d

And 4-wk average down to 3.23 mmb/d ie. less than commitment to cut exports to 3.23 mmb/d $\,$

Thx @JLeeEnergy... Show more



SAF---

Dan Tsubouchi 🤣 @Energy_Tidbits · Nov 20 Recovering China travel.

Macau visitors back to 85.9% of pre-Covid.

Oct 23: 2.757 mm incl 1.950 f/ mainland Oct 22: 0.580 mm incl 0.519 f/mainland Oct 19: 3.210 mm incl 2.342 f/mainland

Sep 23 was 83.2% of pre-Covid, 2.301 mm incl 1.589 f/mainland.

... Show more



saF Dan Tsubouchi 🔗 @Energy_Tidbits · Nov 20 Looks like Iran oil being rebranded

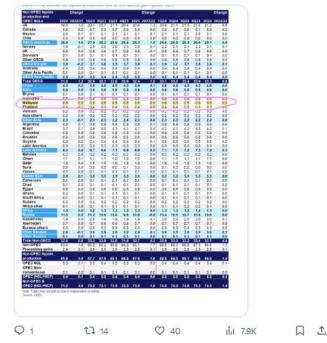
@business reports China #Oil imports from Malaysia: 1.4 mmbd in Oct, up vs 1.3 mmbd in Sept.

And no reported imports from Iran.

Yet OPEC est Malaysia only produces 0.6 mmbd.

Thx @business....





SAF

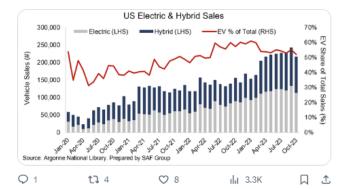
Dan Tsubouchi 🤣 @Energy_Tidbits · Nov 20 Hybrid vs EVs.

Even EV skeptics likely see last few months sales as a pause and not a trend.

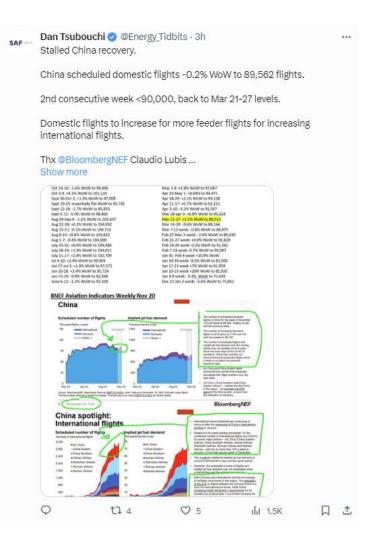
But EV fans have to wonder if hybrid taking market share from EVs is a trend.

Hybrid 48%/EVs 52% in Oct.

Show more



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Dan Tsul Breaking	bouchi 🤣 @Energ	y_Tidbits • 23h		
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