Energy Tidbits

Continued Holdback to Oil: Iran Expects to Add 0.4 mmb/d to Reach 4.0 mmb/d by March 2025

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Highlights for the month

- Indigenous crude oil and condensate production during May 2024 was 2.5 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.6 MMT whereas PSC/RSC registered production of 0.6 MMT during May 2024. There is a degrowth of 1.1% in crude oil and condensate production during May 2024 as compared to May 2023.
- Total Crude oil processed during May 2024 was 23.0 MMT which is 1.3% higher than May 2023, where PSU/JV refiners processed 15.7 MMT and private refiners processed 7.3 MMT of crude oil. Total indigenous crude oil processed was 2.3 MMT and total Imported crude oil processed was 20.7 by all Indian refineries (PSU+JV+PVT). There was a growth of 1.1 % in total crude oil processed in April-May FY 2024 – 25 as compared to same period of FY 2023 – 24.
- Crude oil imports increased by 5.7% and 6.0% during May 2024 and April-May FY 2024-25 respectively as compared to the corresponding period of the previous year. As compared to net import bill for Oil & Gas for May 2023 of $ 10.8 billion, the net import bill for Oil & Gas for May 2024 was $ 12.4 billion. Out of which, crude oil imports constitutes $ 13.2 billion, LNG imports $1.1 billion and the exports were $ 3.8 billion during May 2024.
- The price of Brent Crude averaged $82.05/bbl during May 2024 as against $90.15/bbl during April 2024 and $75.55/bbl during May 2023. The Indian basket crude price averaged $83.56/bbl during May 2024 as against $89.46/bbl during April 2024 and $74.98 /bbl during May 2023.
- Production of petroleum products was 24.0 MMT during May 2024 which is 0.5% higher than May 2023. Out of 24.0 MMT, 23.7 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 2.2 % in production of petroleum products in April May FY 2024 – 25 as compared to same period of FY 2023 – 24. Out of total POL production, in May 2024, share of HSD is 41.6 %, MS 17.2 %, Naphtha 6.5 %, ATF 6.4 %, Pet Coke 5.3 %, LPG 4.5% which are of major products and rest are shared by Bitumen, FO/LSHS, LDO, Lubes & others.
- POL products imports decreased by 8.2% and increased by 7.1% during May 2024 and April-May FY 2024-25 respectively as compared to the corresponding period of the previous year. Increase in POL products imports during April-May FY 2024-25 were mainly due to increase in imports of liquified petroleum gas (LPG), petcoke etc.

•	Exports of POL products decreased by 0.9% and increased by 3.6% during May 2024 and April-May FY 2024-25 respectively as compared to the corresponding period of the previous year. Increase in POL products exports during April-May FY 2024-25 were mainly due to increase in exports of aviation turbine fuel (ATF), fuel oil (FO) etc.
•	The consumption of petroleum products during April-May 2024, with a volume of 40.3 MMT, reported a growth of 2.4 % compared to the volume of 39.4 MMT during the same period of the previous year. This growth was led by 7.7% growth in MS, 1.6% in HSD & 12% in ATF and 5.5% in LPG consumption besides growth in Lubes, Petcoke and others during the period. The Consumption of petroleum products for the month of May-2024 recorded de-growth of 1% with a volume of 20.5MMT compared to the same period of the previous year.
•	Ethanol blending with Petrol was 15.4% during May 2024 and cumulative ethanol blending during November 2023- May 2024 was 12.6%. As on 01.06.2024, 14,611 PSU outlets out of 81,698 total PSU Retail Outlets are dispensing E20 Ethanol Blended MS.
•	Total Natural Gas Consumption (including internal consumption) for the month of May 2024 was 5708 MMSCM which was 0.3 % higher than the corresponding month of the previous year. The cumulative consumption of 11265 MMSCM for the current financial year till May 2024 was higher by 3.6 % compared with the corresponding period of the previous year.
•	Gross production of natural gas for the month of May 2024 (P) was 3105 MMSCM which was higher by 6.7 % compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 6063 MMSCM for the current financial year till May 2024 was higher by 7.2 % compared with the corresponding period of the previous year.
•	LNG import for the month of March 2024 (P) was 2650 MMSCM which was 7.2 % lower than the corresponding month of the previous year. The cumulative import of 5299 (P) MMSCM for the current financial year till May 2024 is lower by 1.3 % compared with the corresponding period of the previous year.

1. Selected indicators of the Indian economy

	Economic indicators	Unit/ Base	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	Population (basis RGI projections)	Billion	1.309	1.337	1.351	1.365	1.377	1.388
2	GDP at constant (2011-12 Prices)	Growth %	6.5 2nd RE	4.0 1st RE	-6.6 1st RE	9.1 1st RE	7.2 PE	7.6 (E)
3	Agricultural Production (Food grains)	MMT	285.2	297.5	310.7	315.7 4th AE	323.6 2nd AE	323.6
		Growth %	0.1	4.3	4.5	1.6	2.5	0.0
4	Gross Fiscal Deficit (as percent of GDP)	%	3.4	4.6	9.5 RE	6.7 RE	6.4 RE	5.9 RE

	Economic indicators	Unit/ Base	2022-23	2023-24	May		April-May	
					2023-24	2024-25(P)	2023-24	2024-25 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	5.2	5.9	4.2	5.0* QE	5.9#	-
6	Imports^	$ Billion	714.2	677.2	49.1	54.0	49.1	54.1
7	Exports^	$ Billion	451.0	437.1	34.6	35.0	34.6	35.0
8	Trade Balance	$ Billion	-263.2	-240.1	-14.5	-19.0	-14.4	-19.1
9	Foreign Exchange Reserves @	$ Billion	578.4	645.6	589.1	651.5	-	-

Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Apr'24 and #April-Mar'24; @ 2022-23 as on March 31, 2023,2023-24 as on March 29,2024,May 2023 as on May 26, 2023 and May,2024 as on May 31, 2024; ^Imports & Exports are for Merchandise for the month of April 2023 and April 2024.; 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 Agriculture & Farmer's Welfare, Ministry of Finance, Reserve Bank of India

2. Crude oil, LNG and petroleum products at a glance

	Details	Unit/ Base	2022-23 (P)	2023-24 (P)	May		April-May	
					2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)
1	Crude oil production in India[#]	MMT	29.2	29.4	2.5	2.5	4.9	4.9
2	Consumption of petroleum products*	MMT	223.0	234.3	20.7	20.5	39.4	40.3
3	Production of petroleum products	MMT	266.5	276.1	23.9	24.0	46.4	47.4
4	Gross natural gas production	MMSCM	34,450	36,438	2,909	3,105	4,257	6,063
5	Natural gas consumption	MMSCM	59,969	67,512	5,692	5,708	10,877	11,265
6	Imports & exports:							
	Crude oil imports	MMT	232.7	233.1	20.6	21.8	40.6	43.1
		$ Billion	157.5	132.8	10.6	13.2	21.5	26.1
	Petroleum products (POL) imports*	MMT	44.6	48.7	4.3	3.9	7.4	7.9
		$ Billion	26.9	23.0	1.9	1.9	3.4	3.8
	Gross petroleum imports (Crude + POL)	MMT	277.3	281.8	24.8	25.7	48.0	51.0
		$ Billion	184.4	155.9	12.6	15.1	24.9	29.9
	Petroleum products (POL) export	MMT	61.0	62.4	5.3	5.3	9.7	10.0
		$ Billion	57.3	47.7	3.6	3.8	6.9	7.5
	LNG imports*	MMSCM	26,304	31,795	2,854	2,650	5,368	5,299
		$ Billion	17.1	13.3	1.8	1.1	3.2	2.2
	Net oil & gas imports	$ Billion	144.2	121.5	10.8	12.4	21.2	24.7
7	Petroleum imports as percentage of India's gross imports (in value terms)^^	%	25.8	23.0	25.6	27.9	25.4	27.7
8	Petroleum exports as percentage of India's gross exports (in value terms)^^	%	12.7	10.9	10.3	10.8	10.0	10.7
9	Import dependency of crude oil (on POL consumption basis)	%	87.4	87.8	88.6	88.0	88.6	88.2

#Includes condensate; *Private direct imports are prorated for the period April'24 to May'24 for POL. LNG Imports figure from DGCIS are prorated for Apr'24 to May'24.^^Petroleum import & Export as% of total import and Export for April-May 23 and April May'24 is prorated.Total may not tally due to rounding off.

3. Indigenous crude oil production (Million Metric Tonnes)

Details	2022-23 (P)	2023-24 (P)	May			April-May		
			2023-24 (P)	2024-25 Target*	2024-25 (P)	2023-24 (P)	2024-25 Target*	2024-25 (P)
ONGC	18.4	18.1	1.6	1.6	1.5	3.1	3.2	3.0
Oil India Limited (OIL)	3.2	3.3	0.3	0.3	0.3	0.5	0.6	0.6
Private / Joint Ventures (JVs)	6.2	5.7	0.5	0.6	0.5	1.0	1.2	0.9
Total Crude Oil	**27.8**	**27.2**	**2.3**	**2.6**	**2.3**	**4.6**	**5.1**	**4.5**
ONGC condensate	1.0	1.1	0.1	0.0	0.1	0.2	0.0	0.2
PSC condensate	0.3	1.1	0.1	0.0	0.1	0.1	0.0	0.2
Total condensate	**1.4**	**2.2**	**0.2**	**0.0**	**0.2**	**0.3**	**0.0**	**0.4**
Total (Crude + Condensate) (MMT)	**29.2**	**29.4**	**2.5**	**2.6**	**2.5**	**4.9**	**5.1**	**4.9**
Total (Crude + Condensate) (Million Bbl/Day)	0.59	0.59	0.59	0.61	0.58	0.59	0.61	0.59

*Provisional targets inclusive of condensate.

4. Domestic and overseas oil & gas production (by Indian Companies)

Details	2022-23 (P)	2023-24 (P)	May		April-May	
			2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)
Total domestic production (MMTOE)	63.6	65.8	6.8	5.6	9.1	11.0
Overseas production (MMTOE)	19.5	19.9	1.7	1.6	3.4	3.2

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

5. High Sulphur (HS) & Low Sulphur (LS) crude oil processing (MMT)

	Details	2022-23 (P)	2023-24 (P)	May		April-May	
				2023-24 (P)	2024-25 (P)	2023-24 (P)	2024-25 (P)
1	High Sulphur crude	197.9	205.2	17.9	18.7	34.7	36.0
2	Low Sulphur crude	57.4	56.3	4.8	4.3	9.5	8.6
Total crude processed (MMT)		**255.2**	**261.5**	**22.7**	**23.0**	**44.2**	**44.6**
Total crude processed (Million Bbl/Day)		5.13	5.25	5.37	5.44	5.31	5.36
Percentage share of HS crude in total crude oil processing		**77.5%**	**78.5%**	**79.0%**	**81.2%**	**78.6%**	**80.7%**

6. Quantity and value of crude oil imports			
Year	**Quantity (MMT)**	**$ Million**	**Rs. Crore**
2021-22	212.4	120675	9,01,262
2022-23	232.7	157531	12,60,372
2023-24 (P)	233.1	132838	11,00,589
April-May 2024-25(P)	43.1	26112	2,17,817

7. Self-sufficiency in petroleum products (Million Metric Tonnes)							
Particulars		**2022-23 (P)**	**2023-24(P)**	**May**		**April-May**	
				2023-24 (P)	**2024-25 (P)**	**2023-24 (P)**	**2024-25 (P)**
1	Indigenous crude oil processing	26.5	26.9	2.2	2.3	4.2	4.5
2	Products from indigenous crude (93.3% of crude oil processed)	24.7	25.1	2.0	2.2	3.9	4.2
3	Products from fractionators (Including LPG and Gas)	3.5	3.5	0.3	0.3	0.6	0.6
4	Total production from indigenous crude & condensate **(2 + 3)**	28.2	28.6	2.3	2.5	4.5	4.8
5	Total domestic consumption	223.0	234.3	20.7	20.5	39.4	40.3
% Self-sufficiency (4 / 5)		**12.6%**	**12.2%**	**11.4%**	**12.0%**	**11.4%**	**11.8%**

11. Production and consumption of petroleum products (Million Metric Tonnes)												
Products	2022-23 (P)		2023-24 (P)		May-23 (P)		May-24 (P)		Apr-May 2023 (P)		Apr-May 2024 (P)	
	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons
LPG	12.8	28.5	12.8	29.7	1.1	2.3	1.1	2.4	2.3	4.5	2.1	4.8
MS	42.8	35.0	45.1	37.2	3.8	3.3	4.1	3.4	7.4	6.2	7.8	6.7
NAPHTHA	17.0	12.2	18.3	13.8	1.6	1.2	1.6	1.1	3.0	2.3	3.1	2.2
ATF	15.0	7.4	17.1	8.2	1.4	0.7	1.5	0.7	2.8	1.3	3.0	1.5
SKO	0.9	0.5	1.0	0.5	0.1	0.04	0.05	0.02	0.13	0.07	0.2	0.05
HSD	113.8	85.9	115.9	89.6	10.1	8.2	10.0	8.4	19.5	16.0	19.8	16.3
LDO	0.6	0.7	0.7	0.8	0.04	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LUBES	1.3	3.7	1.4	4.1	0.1	0.3	0.1	0.3	0.2	0.6	0.2	0.6
FO/LSHS	10.4	7.0	10.3	6.5	0.8	0.6	0.9	0.5	1.9	1.2	1.9	1.0
BITUMEN	4.9	8.0	5.2	8.8	0.5	0.9	0.6	0.8	1.0	1.7	1.1	1.6
PET COKE	15.4	18.3	15.1	20.3	1.4	1.8	1.3	1.6	2.6	3.2	2.5	3.3
OTHERS	31.5	15.8	33.3	14.7	2.8	1.2	2.7	1.1	5.4	2.1	5.7	2.1
ALL INDIA	**266.5**	**223.0**	**276.1**	**234.3**	**23.9**	**20.7**	**24.0**	**20.5**	**46.4**	**39.4**	**47.4**	**40.3**
Growth (%)	**4.8%**	**10.6%**	**3.6%**	**5.0%**	**2.8%**	**12.6%**	**0.5%**	**-1.0%**	**0.7%**	**7.0%**	**2.2%**	**2.4%**

Note: Prod - Production; Cons - Consumption

15. LPG consumption (Thousand Metric Tonne)

LPG categorv	2021-22	2022-23	May			April-May		
			2023-24	2024-25(P)	Growth (%)	2023-24	2024-25 (P)	Growth (%)
1. PSU Sales :								
LPG-Packed Domestic	25,501.6	25,381.5	2,080.0	2,142.7	3.0%	4,018.0	4,256.8	5.9%
LPG-Packed Non-Domestic	2,238.8	2,606.0	224.1	204.4	-8.8%	415.5	399.5	-3.8%
LPG-Bulk	390.9	408.9	34.9	38.3	9.7%	52.4	79.5	51.8%
Auto LPG	122.0	106.7	8.0	6.1	-24.5%	15.1	12.3	-18.7%
Sub-Total (PSU Sales)	28,253.3	28,503.1	**2,347.1**	**2,391.5**	**1.9%**	**4,501.0**	**4,748.2**	**5.5%**
2. Direct Private Imports*	0.1	0.1	0.01	1.17	15479.2%	0.04	2.35	6016.5%
Total (1+2)	28,253.4	28,503.2	**2,347.1**	**2,392.7**	**1.9%**	**4,501.0**	**4,750.5**	**5.5%**

*Apr'24-May'24 DGCIS data is prorated.

16. LPG marketing at a glance

Particulars (As on 1st of April)	Unit	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	01.06.24 (P)
LPG Active Domestic Customers	(Lakh)			1486	1663	1988	2243	2654	2787	2895	3053	3140	3242	3264.5
	Growth				11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.9%	3.2%	3.8%
LPG Coverage (Estimated)	(Percent)			56.2	61.9	72.8	80.9	94.3	97.5	99.8	-	-	-	-
	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	1032.7	1033
	Growth						77.7%	101.9%	11.5%	-0.2%	12.2%	6.6%	7.7%	7.7%
LPG Distributors	(No.)	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25386	25481	25493
	Growth	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.5%	0.4%	0.4%
Auto LPG Dispensing Stations	(No.)	667	678	681	676	675	672	661	657	651	601	526	468	468
	Growth	2.3%	1.6%	0.4%	-0.7%	-0.1%	-0.4%	-1.6%	-0.6%	-0.9%	-8.5%	-12.5%	-11.0%	-11.0%
Bottling Plants	(No.)	185	187	187	188	189	190	192	196	200	202	208	210	211
	Growth	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	4.5%	1.0%	1.4%

Source: PSU OMCs (IOCL,BPCL and HPCL)

1.Growth rates as on 01.04.2024 are with respect to figs as on 01.04.2023. Growth rates as on 1 April of any year are with respect to figs as on 1 April of previous year.

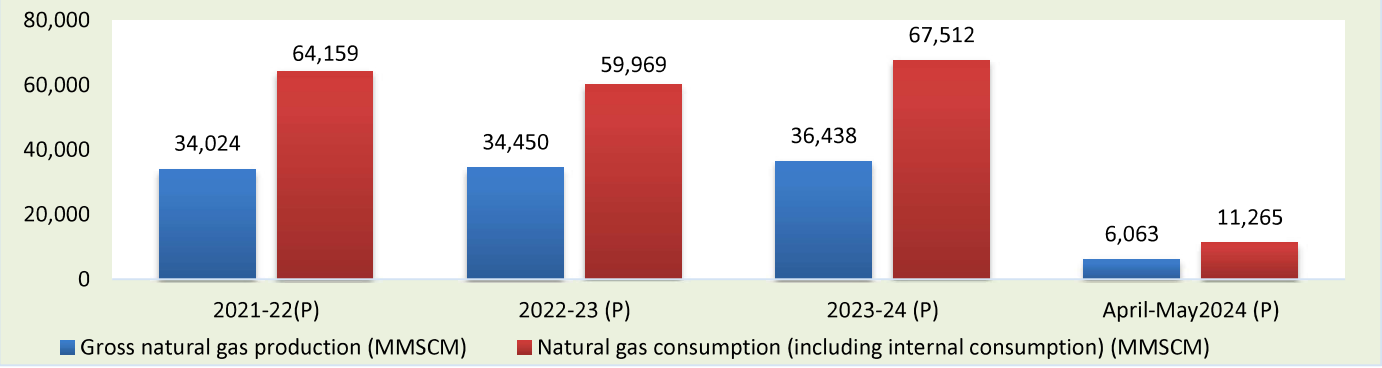
2. The LPG coverage is calculated by PSU OMCs based upon the active LPG domestic connections and the estimated number of households. The number of households has been projected by PSU OMCs based on 2011 census data. Factors like increasing nuclearization of families, migration of individuals/ families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

18. Natural gas at a glance

(MMSCM)

Details	2022-23	2023-24	May			April-May		
			2023-24 (P)	2024-25 (Target)	2024-25 (P)	2023-24 (P)	2024-25 (Target)	2024-25 (P)
(a) Gross production	34,450	36,438	2,909	4,018	3,105	4,257	6,486	6,063
- ONGC	19,969	19,316	1,684	1,660	1,608	3,291	3,268	3,132
- Oil India Limited (OIL)	3,041	3,090	251	323	270	488	625	531
- Private / Joint Ventures (JVs)	11,440	14,032	974	1,317	1,226	1,875	2,593	2,400
(b) Net production (excluding flare gas and loss)	33,664	35,717	2,838		3,058	5,509		5,966
(c) LNG import#	26,304	31,795	2,854		2649.60	5,368		5,299
(d) Total consumption including internal consumption (b+c)	59,969	67,512	5,692		5,708	10,877		11,265
(e) Total consumption **(in BCM)**	60.0	67.5	5.7		5.7	10.9		11.3
(f) Import dependency based on consumption (%), {c/d*100}	43.9	47.1	50.1		46.4	49.4		47.0

Apr-May'24 LNG DGCIS data prorated.



19. Coal Bed Methane (CBM) gas development in India

Prognosticated CBM resources		91.8	TCF
Established CBM resources		10.4	TCF
CBM Resources (33 Blocks)		62.8	TCF
Total available coal bearing areas (India)		32760	Sq. KM
Total available coal bearing areas with MoPNG/DGH		12254*	Sq. KM
Area awarded		21,177**	Sq. KM
Blocks awarded*		39	Nos.
Exploration initiated (Area considered if any boreholes were drilled in the awarded block)		11008	Sq. KM
Production of CBM gas	April-May 2024 (P)	113.46	MMSCM
Production of CBM gas	May 2024 (P)	58.69	MMSCM

*ST CBM Block awarded & relinquished twice- in CBM Round II and Round IV -Area considered if any boreholes were drilled in the awarded block. **MoPNG awarded 04 new CBM Blocks (Area 3862 sq. km) under Special CBM Bid Round 2021 in September 2022. ***Area considered if any boreholes were drilled in the awarded block.

19a. Status of Compressed Bio Gas (CBG) projects under SATAT (as on 01.05.2024) (Provisional)

Particulars	Units	IOCL	HPCL	BPCL	GAIL#	IGL	Total
No. of CBG plants commissioned and initiated sale of CBG	No. of plants	32*	9	8	15	6	**68***
Start of CBG sale from retail outlet(s)	Nos.	88	50	55	1	0	**194**
Sale of CBG in 2022-23	Tons	5,822	77	6	5322		**11,227**
Sale of CBG in 2023-24	Tons	6500	309	102	12813		**19724**
Sale of CBG in 2024-25 (up to April 2024)	Tons	604	22	163	2250		**3039**
Sale of CBG in CGD network	GA Nos				26		**26**

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

20. Common Carrier Natural Gas pipeline network as on 31.12.2023

Nature of pipeline		GAIL	GSPL	PIL	IOCL	AGCL	RGPL	GGL	DEPCL	ONGC	GIGL	GITL	Others*	Total
Operational	Length	11,009	2,716	1,483	143	107	304	73	42	24	0	0	0	**15,901**
	Capacity	167.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				**-**
Partially commissioned#	Length	4,743	0	0	1,080	0	0	0	0	0	1,302	0	365	**7,490**
	Capacity	55.0	0.0	0.0	84.7	0.0	0.0	0.0	0.0	0.0	122.5	0.0	0.0	**-**
Total operational length		**15,752**	**2,716**	**1,483**	**1,223**	**107**	**304**	**73**	**42**	**24**	**1,302**	**0**	**365**	**23,391**
Under construction	Length	1,347	3	0	352	0	0	0	0	0	899	36	1,488	**4,125**
	Capacity	26.3	3.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	**-**
Total length		**17,099**	**2,719**	**1,483**	**1,575**	**107**	**304**	**73**	**42**	**24**	**2,201**	**36**	**1,853**	**27,516**

Source: PNGRB; Length in KMs ; Authorized Capacity in MMSCMD (Arithmetic sum taken for each entity -capacity may vary from pipeline to pipeline); *Others-APGDC, , IGGL, IMC,GTIL,HPPL Consortium of H-Energy. Total authorized Natural Gas pipelines including Tie-in connectivity, dedicated & STPL is 33,347 Kms (P),however total operational and Under Construction Pipeline length is 35,217 Kms (P)

21. Existing LNG terminals

Location	Promoters	Capacity as on 01.06.2024 (MMTPA)	% Capacity utilisation (April- 2024)
Dahej	Petronet LNG Ltd (PLL)	17.5	101.1
Hazira	Shell Energy India Pvt. Ltd.	5.2	28.6
Dabhol	Konkan LNG Limited	5*	69.9
Kochi	Petronet LNG Ltd (PLL)	5	20.9
Ennore	Indian Oil LNG Pvt Ltd	5	25.6
Mundra	GSPC LNG Limited	5	33.8
Dhamra	Adani Total Private Limited	5	26.9
Total Capacity		**47.7**	

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

22. Status of PNG connections and CNG stations across India (Nos.) as on 01.05.2024(P)				
State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Andhra Pradesh	192	273,242	477	41
Andhra Pradesh, Karnataka & Tamil Nadu	43	9,889	6	6
Arunachal Pradesh	0	0	0	0
Assam	22	62,272	1,394	461
Bihar	131	157,953	127	10
Bihar & Jharkhand	15	8,605	5	0
Bihar & Uttar Pradesh	26	5,642	0	0
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	27	27,243	168	47
Chhattisgarh	18	3,499	0	0
Dadra & Nagar Haveli (UT)	6	12,413	57	62
Daman & Diu (UT)	5	5,388	74	52
Daman and Diu & Gujarat	15	6,793	23	0
Goa	12	13,946	30	44
Gujarat	1,002	3,327,453	23,592	5,820
Haryana	436	404,708	1,125	2,624
Haryana & Himachal Pradesh	10	49	1	0
Haryana & Punjab	27	1,286	0	0
Himachal Pradesh	13	7,775	25	1
Jammu & Kashmir, Ladakh	0	0	0	0
Jharkhand	102	138,031	30	6
Karnataka	372	444,307	593	364
Kerala	136	80,707	74	27
Kerala & Puducherry	13	3,482	0	0
Madhya Pradesh	301	241,956	475	520
Madhya Pradesh and Chhattisgrah	9	0	0	0
Madhya Pradesh and Rajasthan	35	929	0	0
Madhya Pradesh and Uttar Pradesh	20	3	0	3
Maharashtra	900	3,453,369	7,429	1,119
Maharashtra & Gujarat	71	187,689	10	34

State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Maharashtra and Madhya Pradesh	16	0	0	0
Manipur	0	0	0	0
Meghalaya	0	0	0	0
Mizoram	0	0	0	0
Nagaland	0	0	0	0
National Capital Territory of Delhi (UT)	491	1,576,654	4,063	1,932
Odisha	108	122,910	11	0
Puducherry	2	0	0	0
Puducherry & Tamil Nadu	8	340	0	0
Punjab	217	87,904	668	298
Punjab & Rajasthan	19	4,842	0	0
Rajasthan	320	315,790	224	1,709
Sikkim	0	0	0	0
Tamil Nadu	312	27,454	11	18
Telangana	184	212,143	111	118
Telangana and Karnataka	6	121	0	1
Tripura	18	62,836	508	62
UT of Jammu and Kashmir	1	0	0	0
Uttar Pradesh	1,005	1,641,638	2,743	3,396
Uttar Pradesh & Rajasthan	45	23,175	55	350
Uttar Pradesh and Uttrakhand	29	15,234	0	0
Uttarakhand	36	73,774	99	112
West Bengal	131	25,287	4	1
Grand Total	**6,907**	**13,068,731**	**44,212**	**19,238**

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.

https://www.ft.com/content/f7a34e3e-bce9-4db9-ac49-a092f382c526

Russia-China gas pipeline deal stalls over Beijing's price demands

Power of Siberia 2 project would offer lifeline to exporter Gazprom as Moscow's dependence on its neighbour grows

A deal on the pipeline was one of Russian President Vladimir Putin's top requests for Chinese leader Xi Jinping when they met last month, according to people familiar with the issue © Alexandr Demyanchuk/Sputnik/Pool/AP

Max Seddon in Riga, Anastasia Stognei in Tbilisi, Henry Foy in Brussels and Joe Leahy in Beijing YESTERDAY

Russia's attempts to conclude a major gas pipeline deal with China have run aground over what Moscow sees as Beijing's unreasonable demands on price and supply levels, according to three people familiar with the matter.

Beijing's tough stance on the Power of Siberia 2 pipeline underscores how Russia's invasion of Ukraine has left President Vladimir Putin increasingly dependent on Chinese leader Xi Jinping for economic support.

The people familiar with the matter said China had asked to pay close to Russia's heavily subsidised domestic prices and would only commit to buying a small fraction of the pipeline's planned annual capacity of 50bn cubic metres of gas.

Approval for the pipeline would transform the dire fortunes of Gazprom, Russia's state gas export monopoly, by linking the Chinese market to gasfields in western Russia that once supplied Europe.

Gazprom suffered a loss of Rbs629bn ($6.9bn) last year, its biggest in at least a quarter of a century, amid plummeting gas sales to Europe, which has had greater success than expected in diversifying away from Russian energy.

While Russia has insisted it is confident of agreement on Power of Siberia 2 "in the near future", two of the people said the impasse was the reason Alexei Miller, Gazprom's chief executive, had not joined Putin on the Russian leader's state visit to Beijing last month.

Miller, who was instead on a trip to Iran, would have been essential for any serious negotiations with China and his absence was "highly symbolic", said Tatiana Mitrova, a research fellow at Columbia University's Center on Global Energy Policy.

A deal on the pipeline was one of three main requests Putin made to Xi when they met, according to the people familiar with the matter, along with more Chinese bank activity in Russia and for China to snub a peace conference being organised by Ukraine this month.

China announced on Friday it would skip Ukraine's summit in Switzerland. Two of the people said Beijing and Moscow were discussing ringfencing one or more banks that would finance trade in components for Russia's defence industry — all but certainly incurring US sanctions that would cut any such bank out of the broader global financial system.

An agreement on the pipeline, however, remains distant, while the proposed co-operation with Chinese banks remains at a far smaller scale than Russia had requested, the people added.

Dmitry Peskov, Putin's spokesman, said Russia and China were still in talks on the pipeline.

"It's totally normal for each side to defend their own interests. Negotiations will continue, because the leaders of both countries have the political will for it, and commercial issues will continue to be worked out, and we have no doubt all the necessary agreements will be made," Peskov told reporters on Monday.

"As far as aspects of ongoing commercial negotiations go, they are, of course, not public," Peskov added. Gazprom declined to comment.

Asked about the gas talks, the Chinese foreign ministry said only that "the presidents of China and Russia agreed to look for areas where our interests converge . . . and enable each other's success".

China would "work with Russia to deliver on important common understandings reached between our two leaders and deepen our all-round cooperation [for] mutual benefit", the ministry said.

Russia's failure to secure the deal underscores how the war in Ukraine has made China the senior partner in the countries' relationship, according to Alexander Gabuev, director of the Carnegie Russia Eurasia Center in Berlin.

"China could need Russian gas strategically as a secure source of supply not based on maritime routes that would be affected in case of a maritime conflict around Taiwan or the South China Sea," Gabuev said. "But to make that worthwhile, China really needs a very cheap price and flexible obligations."

China's demand for imported gas is expected to reach about 250 bcm by 2030, up from less than 170 bcm in 2023, according to a paper published by Columbia's CGEP in May.

That paper said the 2030 level of demand could still be largely or entirely met through existing contracts for pipeline supply and for liquefied natural gas. However, by 2040, the gap between China's import demand and existing commitments would reach 150 bcm, it said.

Russia's lack of an alternative overland route for its gas exports means Gazprom would probably have to accept China's conditions, Gabuev said.

"China believes time's on its side. It has room to wait to squeeze the best conditions out of the Russians and wait for attention on the China-Russia relationship to move elsewhere," he said. "The pipeline can be built rather quickly, since the gasfields are already developed. Ultimately the Russians don't have any other option to market this gas."

Before the war in Ukraine, Gazprom relied on selling gas to Europe at high prices in order to subsidise Russia's domestic market.

China already pays Russia less for gas than to its other suppliers, with an average price of $4.4 per million British thermal units, compared with $10 for Myanmar and $5 for Uzbekistan, the CGEP researchers calculated from 2019-21 customs data.

During the same years Russia exported gas to Europe at about $10 per million Btu, according to data published by the Russian central bank.

Gazprom's exports to Europe fell to 22 bcm in 2023 from an average 230 bcm a year in the decade before the full-scale invasion of Ukraine. These are likely to dwindle further once a trans-shipment agreement with Ukraine expires at the end of this year.

Failure to agree increased supplies to China would be a hefty further blow. An unreleased report by a major Russian bank, seen by the Financial Times, recently excluded Power of Siberia 2 from its baseline forecast for Gazprom. That reduced the company's expected profit for 2029 — when the bank expected the project to launch — by almost 15 per cent.

China did not immediately respond to a request for comment.

This article has been amended since initial publication to reflect that the Ukraine peace summit is taking place at the Bürgenstock resort in Switzerland, not Geneva

06/13/2024 15:27:27 [BFW] Bloomberg First Word

BP Whiting Advances Work on Biggest CDU to July From September

By Barbara Powell

(Bloomberg) -- BP's Whiting, Indiana, refinery plans to conduct a turnaround beginning late July on the 255k b/d Pipestill 12 crude unit and the largest coker, people familiar with operations said.

- The work on the largest of three crude units and its 95k b/d companion coker is scheduled to extend into early September with additional days needed to restore operations to normal
- The turnaround was originally scheduled to begin in early September and run for 2 months
- No reason given for advancing the work
- The last turnaround for Pipestill 12 occurred in September and November 2018
    - The crude unit was converted in 2013 to process mostly heavy Canadian oil
- The shutdown of the biggest crude unit, coming in the middle of the summer gasoline season, could tighten Midwest fuel supplies, sending regional gasoline prices higher at the pump and margins higher
- No immediate response to email sent to BP seeking comment
- Whiting, the largest US inland refinery, has a total crude processing capacity of 435k b/d: EIA

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Refinery Capacity Report

June 2024

With data as of January 1, 2024

Independent Statistics and Analysis
U.S. Energy Information Administration

www.eia.gov
U.S. Department of Energy
Washington, DC 20585

The U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy (DOE), prepared this report. By law, our data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The views in this report do not represent those of DOE or any other federal agencies.

Table 1. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2024

PAD District and State	Number of Operable Refineries			Atmospheric Crude Oil Distillation Capacity					
				Barrels per Calendar Day			Barrels per Stream Day		
	Total	Operating	Idle [a]	Total	Operating	Idle [b]	Total	Operating	Idle [b]
PAD District I	**8**	**8**	**0**	**909,800**	**909,800**	**0**	**965,900**	**965,900**	**0**
Delaware	1	1	0	171,000	171,000	0	180,000	180,000	0
New Jersey	3	3	0	450,500	450,500	0	473,100	473,100	0
Pennsylvania	3	3	0	266,000	266,000	0	289,800	289,800	0
West Virginia	1	1	0	22,300	22,300	0	23,000	23,000	0
PAD District II	**25**	**25**	**0**	**4,245,662**	**4,245,662**	**0**	**4,480,440**	**4,480,440**	**0**
Illinois	4	4	0	1,045,214	1,045,214	0	1,102,620	1,102,620	0
Indiana	2	2	0	469,500	469,500	0	475,700	475,700	0
Kansas	3	3	0	408,200	408,200	0	418,100	418,100	0
Kentucky	1	1	0	300,000	300,000	0	316,000	316,000	0
Michigan	1	1	0	140,000	140,000	0	152,000	152,000	0
Minnesota	2	2	0	440,000	440,000	0	486,000	486,000	0
North Dakota	1	1	0	71,000	71,000	0	75,500	75,500	0
Ohio	4	4	0	606,600	606,600	0	630,000	630,000	0
Oklahoma	5	5	0	547,148	547,148	0	569,520	569,520	0
Tennessee	1	1	0	180,000	180,000	0	205,000	205,000	0
Wisconsin	1	1	0	38,000	38,000	0	50,000	50,000	0
PAD District III	**58**	**58**	**0**	**9,987,031**	**9,987,031**	**0**	**10,567,155**	**10,567,155**	**0**
Alabama	3	3	0	142,100	142,100	0	148,700	148,700	0
Arkansas	2	2	0	90,500	90,500	0	92,700	92,700	0
Louisiana	15	15	0	2,971,022	2,971,022	0	3,117,355	3,117,355	0
Mississippi	3	3	0	393,940	393,940	0	415,000	415,000	0
New Mexico	1	1	0	110,000	110,000	0	124,000	124,000	0
Texas	34	34	0	6,279,469	6,279,469	0	6,669,400	6,669,400	0
PAD District IV	**15**	**15**	**0**	**652,164**	**642,564**	**9,600**	**700,700**	**690,700**	**10,000**
Colorado	2	2	0	103,000	103,000	0	111,700	111,700	0
Montana	4	4	0	214,600	205,000	9,600	223,400	213,400	10,000
Utah	5	5	0	208,714	208,714	0	220,200	220,200	0
Wyoming	4	4	0	125,850	125,850	0	145,400	145,400	0
PAD District V	**26**	**26**	**0**	**2,589,571**	**2,589,571**	**0**	**2,738,400**	**2,738,400**	**0**
Alaska	5	5	0	165,500	165,500	0	180,000	180,000	0
California	14	14	0	1,680,371	1,680,371	0	1,783,900	1,783,900	0
Hawaii	1	1	0	93,500	93,500	0	95,000	95,000	0
Nevada	1	1	0	2,000	2,000	0	5,000	5,000	0
Washington	5	5	0	648,200	648,200	0	674,500	674,500	0
U.S. Total	**132**	**132**	**0**	**18,384,228**	**18,374,628**	**9,600**	**19,452,595**	**19,442,595**	**10,000**

Table 1. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2024

PAD District and State	Downstream Charge Capacity (Barrels per Stream Day)							
	Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro-Cracking	Catalytic Reforming	Hydrotreating/ Desulfurization	Fuels Solvent Deasphalting
			Fresh	Recycled				
PAD District I	**391,200**	**54,500**	**305,000**	**5,000**	**47,000**	**182,900**	**754,800**	**22,000**
Delaware	104,600	54,500	82,000	4,000	24,000	43,000	180,300	0
New Jersey	165,000	0	145,000	0	0	69,000	298,100	22,000
Pennsylvania	113,000	0	78,000	1,000	23,000	66,200	252,300	0
West Virginia	8,600	0	0	0	0	4,700	24,100	0
PAD District II	**1,863,142**	**610,805**	**1,367,535**	**8,800**	**369,000**	**904,858**	**4,190,985**	**19,000**
Illinois	491,800	214,420	324,300	0	108,000	250,100	977,710	0
Indiana	290,700	102,000	185,900	200	0	73,700	619,100	0
Kansas	163,500	75,000	104,800	500	43,000	85,500	406,400	0
Kentucky	134,000	0	109,000	0	0	58,000	281,500	14,500
Michigan	90,500	40,000	44,000	0	0	21,500	137,500	0
Minnesota	285,000	82,000	127,000	2,500	67,000	72,500	439,000	4,500
North Dakota	0	0	28,000	3,600	0	12,500	62,100	0
Ohio	164,500	59,000	206,300	0	110,500	172,300	523,400	0
Oklahoma	214,042	38,385	156,912	2,000	14,000	113,458	571,775	0
Tennessee	0	0	70,000	0	26,500	36,000	132,000	0
Wisconsin	29,100	0	11,323	0	0	9,300	40,500	0
PAD District III	**4,696,325**	**1,715,880**	**2,836,390**	**16,500**	**1,389,300**	**1,859,056**	**9,440,524**	**257,500**
Alabama	55,000	38,500	0	0	24,000	41,500	123,200	0
Arkansas	48,850	0	21,000	0	0	15,300	98,750	0
Louisiana	1,539,100	577,000	946,000	3,500	456,900	570,400	2,698,400	72,000
Mississippi	354,875	104,000	88,000	0	119,000	101,600	307,300	0
New Mexico	34,300	0	30,000	0	18,000	24,000	118,000	18,000
Texas	2,664,200	996,380	1,751,390	13,000	771,400	1,106,256	6,094,874	167,500
PAD District IV	**243,800**	**76,000**	**211,860**	**1,990**	**37,200**	**120,550**	**569,280**	**6,000**
Colorado	33,500	0	30,000	500	0	21,900	87,430	0
Montana	124,400	46,000	67,160	990	6,200	35,500	214,650	0
Utah	34,900	10,000	74,700	0	15,000	37,750	152,800	6,000
Wyoming	51,000	20,000	40,000	500	16,000	25,400	114,400	0
PAD District V	**1,422,106**	**562,400**	**766,400**	**16,600**	**557,600**	**534,400**	**2,347,600**	**80,000**
Alaska	26,000	0	0	0	13,000	13,500	24,500	0
California	1,033,256	464,600	619,000	13,600	459,600	365,500	1,783,500	56,000
Hawaii	40,000	11,000	0	0	20,000	13,500	13,000	0
Nevada	2,750	0	0	0	0	0	0	0
Washington	320,100	86,800	147,400	3,000	65,000	141,900	526,600	24,000
U.S. Total	**8,616,573**	**3,019,585**	**5,487,185**	**48,890**	**2,400,100**	**3,601,764**	**17,303,189**	**384,500**

[a] Refineries where distillation units were completely idle but not permanently shutdown on January 1, 2024.
[b] Includes capacity from refineries that are either completely or partially idle.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 2. Production Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2024

(Barrels per Stream Day, Except Where Noted)

PAD District and State	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen [a] (MMcfd)	Sulfur (short tons/day)
PAD District I	**47,800**	**5,191**	**45,260**	**19,280**	**20,945**	**13,620**	**109**	**1,074**
Delaware	12,500	5,191	0	6,000	0	13,620	65	596
New Jersey	18,800	0	21,000	4,000	12,000	0	31	320
Pennsylvania	16,500	0	23,560	9,280	2,945	0	10	157
West Virginia	0	0	700	0	6,000	0	3	1
PAD District II	**309,386**	**112,600**	**281,900**	**169,350**	**9,900**	**194,550**	**659**	**8,655**
Illinois	97,250	17,200	45,100	16,000	0	74,690	202	2,370
Indiana	34,400	16,800	33,200	31,750	0	30,000	0	1,913
Kansas	34,500	0	4,000	31,000	0	23,260	156	795
Kentucky	24,000	2,500	35,400	20,000	0	0	0	438
Michigan	8,500	0	32,000	0	0	12,850	0	435
Minnesota	21,000	0	64,500	33,500	0	28,400	209	1,339
North Dakota	5,500	0	0	0	0	0	0	15
Ohio	29,950	20,000	26,000	23,200	0	16,300	0	922
Oklahoma	35,586	21,000	21,700	13,900	9,900	9,050	62	275
Tennessee	17,000	29,000	0	0	0	0	30	116
Wisconsin	1,700	6,100	20,000	0	0	0	0	37
PAD District III	**678,593**	**229,265**	**206,125**	**345,870**	**192,900**	**505,031**	**747**	**24,343**
Alabama	0	0	26,000	9,650	0	8,000	45	233
Arkansas	5,000	0	21,300	8,000	6,000	0	13	90
Louisiana	225,700	34,400	88,000	115,720	66,000	164,436	118	5,979
Mississippi	22,000	15,600	16,125	0	48,000	35,500	242	1,264
New Mexico	9,500	0	7,000	0	0	0	38	224
Texas	416,393	179,265	47,700	212,500	72,900	297,095	291	16,553
PAD District IV	**45,350**	**0**	**62,000**	**16,068**	**0**	**23,900**	**208**	**664**
Colorado	0	0	13,200	0	0	0	22	116
Montana	17,350	0	39,000	6,750	0	15,600	134	243
Utah	21,700	0	1,800	9,318	0	2,500	0	92
Wyoming	6,300	0	8,000	0	0	5,800	52	213
PAD District V	**235,562**	**1,500**	**49,050**	**228,400**	**39,800**	**152,570**	**1,190**	**5,640**
Alaska	0	0	12,500	5,000	0	0	13	25
California	193,362	1,500	25,950	180,800	39,800	128,920	971	4,728
Hawaii	0	0	0	0	0	0	18	38
Nevada	0	0	1,600	0	0	0	0	0
Washington	42,200	0	9,000	42,600	0	23,650	188	849
U.S. Total	**1,316,691**	**348,556**	**644,335**	**778,968**	**263,545**	**889,671**	**2,913**	**40,376**

[a] Includes hydrogen production capacity of hydrogen plants on refinery grounds and operated by the refinery operator.

MMcfd = Million cubic feet per day.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

https://www.pemex.com/saladeprensa/boletines_nacionales/Paginas/2024_13-nacional.aspx

Octavio Romero Oropeza highlights the transformation of PEMEX during the inauguration of the XVIII Mexican Petroleum Congress

20/06/2024 | 13

- Debt reduction, production of 54 new fields, greater crude oil processing, fertilizer production, recovery of sales in the domestic market and labor justice, are some of the achievements achieved by the current administration

The CEO of Petróleos Mexicanos (PEMEX), Octavio Romero Oropeza, on behalf of the President of Mexico, Andrés Manuel López Obrador, inaugurated the work of the XVIII Mexican Petroleum Congress 2024, an event that takes place for the first time in the city of Tampico, Tamaulipas, from June 20 to 22.

At the Tampico Convention and Exhibition Center (Expo), Romero Oropeza explained to the attendees that this administration achieved the stabilization and growth of the proven reserve (1P) by 7,500 million barrels of crude oil equivalent (MMboe). In addition, the liquids production goal was reached by achieving 1,852 thousand barrels per day (Mbd). In 2024, PEMEX contributes 97% to oil production and 98% of national gas.

He said that investment was redirected to onshore basins and shallow waters, which has allowed 54 new fields to be put into production: 31 offshore and 23 onshore, which contribute 567 thousand barrels per day of incremental production, that is, more than 5 times the 99 thousand barrels of the previous administration.

Similarly, he stressed that it has been possible to reduce the development times of the new fields, from 8 years to one, thanks to the optimization of resources, construction and installation of structures and pipelines, as well as the acquisition and modernization of drilling equipment.

The Head of PEMEX pointed out that by the end of 2024 the crude oil process is projected to reach 1,439 thousand barrels per day (Mbd) thanks to the National Refining System (SNR), in conjunction with Deer Park and the entry into operation of the Olmeca Refinery. As for the production of petroleum products (gasoline, diesel and jet fuel), it is expected to reach 1,258 Mbd by September 2024 including SNR and Deer Park.\

On the subject of fertilizers, he said that, in June, the production of the second ammonia plant and the second urea plant began, which will double production, reaching, by the end of 2024, a volume of 1,535 thousand tons, which will guarantee that the program of the Government of Mexico is supplied 100% with PEMEX fertilizers.

During his speech, he stressed that this management allocated 12,700 million pesos to address 852 critical risks and by the end of 2024 they will be fully addressed.

On the other hand, he stressed that the institution has recovered its sales in the domestic market in items such as gasoline, diesel, jet fuel and LP gas. In the period from 2021 to 2024, there was an evolution of the share of domestic sales in PEMEX's total revenues, whose percentage grew almost 10 points, from 66.1 to 75.5, a factor that contributes to its financial strengthening.

The director of PEMEX shared that in the financial aspect the results of the oil company continue to be favorable, since it was possible to reduce the balance of the debt by 30 billion dollars during this management. He added that, although PEMEX has received 952 billion pesos (mmdp) from the Federal Government, of which 561 billion pesos were allocated to debt payment and 391 billion pesos to infrastructure, the institution has contributed 4,025 billion pesos in contributions for the payment of taxes and duties, bringing the net contribution to 3,073 billion pesos.

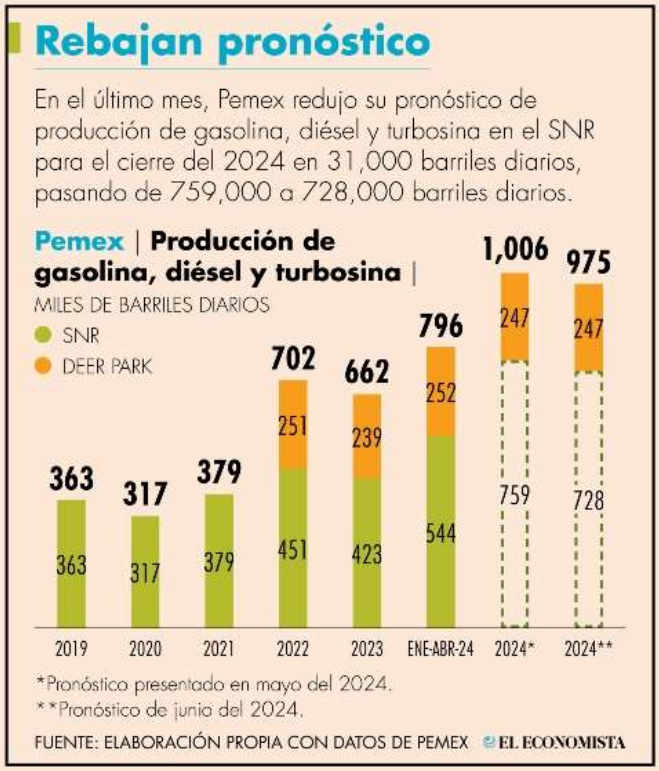
In environmental matters, this administration has reduced greenhouse gas emissions, 64% of the emissions index of the gas process and increased water reuse. In addition, energy efficiency has been prioritized in PEMEX's industrial processes and the Jaguaroundi and Tuzandépetl ecological parks are maintained as protected conservation areas.

Regarding labor justice, he mentioned that, from January 2019 to June 2024, PEMEX has basified 28 thousand 978 workers, projecting to reach a total of 30 thousand by the end of the administration; Likewise, 85,770 promotions have been applied and 20,991 workers have retired. Both promotions and basifications have not increased spending on personal services.

Finally, he recognized the work carried out every year by the organizers to successfully develop this congress which, in its 18th edition, will be attended by 144 companies related to the energy industry, more than six thousand participants and 794 stands of different companies.

https://www.eleconomista.com.mx/empresas/Sigue-aplazandose-arranque-integral-de-refineria-Olmeca-20240621-0003.html

Comprehensive start-up of Olmeca refinery continues to be postponed



By Karol García

Friday, June 21, 2024 - 00:05

ReadSpeaker

With the extension, the expectation of crude oil processing in the complex for all of 2024 is also reduced from 177,000 to 163,000 barrels per day; The director of the state-owned company projects "a shortage" of 84,000 barrels per day of fuels by the end of the year that will continue to be imported.

Petróleos Mexicanos (Pemex) again delayed the full start of operations of its new Olmeca refinery located in Paraíso, Tabasco, which will now produce fuel until the second half of this year, to close at an average annual volume of 163,000 barrels per day processed of crude oil, which is 8% lower than the government's latest estimate.

This was explained by the general director of the company, Octavio Romero Oropeza, who appeared at the Mexican Petroleum Congress in Tampico, Tamaulipas, where he also admitted that this six-year term will not reach the promised goal that they called "energy sovereignty", which meant stopping importing automotive fuels.

"It is not going to be possible, we are no longer there," he said in front of businessmen and high-level officials of the national oil exploration and production industry, since, according to forecasts, there will be a lack of 84,000 barrels per day that will still be purchased from other companies in the world by the end of 2024, but the rest of the national demand for gasoline, diesel and jet fuel, which will be 1.2 million barrels per day, will be produced by Pemex, in the country or at its Deer Park plant.

The projected increase in fuel production will be 33.5% between the actual production reported by Pemex Industrial Transformation in the average between January and April, which is 545,000 barrels per day and the 728,000 barrels per day with which it intends to close the year, only in the National Refining System.

To this production will be added the 248,000 barrels per day that Pemex will maintain as imports from the Deer Park refinery, 50% of which it bought from the Anglo-Dutch Shell two years ago, so although it is a product made by personnel and with equipment that belongs to Pemex, it is imported fuel.

Romero Oropeza also explained that the level of operation of the six refineries in the country will be 1,002 million barrels per day of crude oil processing in the annual average of 2024, although between January and April it has averaged 976,000 barrels per day.

"This increase will come from the fact that we will finish the historical repair that has been made to the refineries that almost left us as scrap metal, because they wanted to get rid of them, but we have made historic investments so that they continue to belong to Mexicans and continue to generate value for us," he said. In total, Pemex has invested more than 75,000 million pesos in the rehabilitation of refineries, which began the six-year term with a crude process of less than 560,000 barrels per day.

However, the executive regretted that self-sufficiency will not be achieved by the end of the six-year term, because the placement of the new coker plant in Tula, Hidalgo, to process fuel oil in Salamanca, Guanajuato, and this refining center will be completed this year, but the similar plant in Salina Cruz, Oaxaca, is 64% complete and will be completed until next year.

In the most recent commemoration of the Anniversary of the Oil Expropriation, Romero Oropeza promised that it would end 2024 with an annual average of 177,000 barrels per day of process, which again reduced the outlook of Dos Bocas, a refinery that is still in tests processing the unfinished diesel that arrives by ship from Madero, Tamaulipas.

In this six-year term, the state oil company received contributions of 952,000 million pesos. "See it as if they gave it to us or as if they stopped charging us (...) no government had ever done what the president of the Republic did in the current administration, but Pemex is delivering more than three billion to the federation in these years, what is the bottomless barrel?" said the official. Of the 952,000 million received, 561,000 million were destined to pay the debt, 320,000 were for the construction of the Olmeca refinery, 48,000 million to complement the rehabilitation of the six refineries and 23,000 million for the purchase of Deer Park.

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https://www.reuters.com/markets/commodities/venezuelas-may-oil-exports-rise-30-during-us-wind-down-period-2024-06-03/?taid=665e07058625040001a4b992&utm_campaign=trueAnthem:+Trending+Content&utm_medium=trueAnthem&utm_source=twitter

Venezuela's May oil exports rise 30% during US wind-down period

By Marianna Parraga and Mircely Guanipa
June 3, 20247:06 AM MDTUpdated 5 hours ago

- Summary

- Companies
- Increase reflects buyers taking oil before US sanctions return
- Top destinations for oil were Asia, United States and Europe
- OPEC-member nation rebuilds stocks of Merey 16, diluted crude

HOUSTON/MARACAY, Venezuela, June 3 (Reuters) - Venezuela's oil exports recovered in May from a low figure the previous month as state oil company PDVSA's customers rushed to take cargoes ahead of the resumption of U.S. sanctions on the South American country.

The U.S. Treasury Department in April did not renew a broad license that had allowed Venezuela to freely export its oil, but gave companies until the end of May to complete transactions, including crude and fuel sales. It also began issuing individual authorizations to energy firms doing business with Venezuela.

A total of 50 vessels departed Venezuelan waters last month carrying an average 708,900 barrels per day (bpd) of crude and fuel, and 614,000 tons of petrochemicals and oil byproducts, according to internal PDVSA documents and shipping data from financial firm LSEG.

The volume of oil shipped in May was 30% larger than in April, and 7% above the same month a year earlier. Exports of petrochemicals and byproducts were the highest in 13 months, the data showed.

Over a third of total exports, or 250,000 bpd, were bound for Asia. The United States was the second largest recipient with an average of 205,000 bpd sent by U.S. oil major Chevron, opens new tab(CVX.N), opens new tab to its own refineries and others, followed by Europe with 129,000 bpd.

Shipments to political ally Cuba rose to some 70,000 bpd from 23,000 bpd the previous month, driven by larger crude oil deliveries, according to the data.

Following the completion of maintenance work at some crude upgraders and more imports of diluents, PDVSA's inventories of diluted crude oil rose to almost 5 million barrels. Stocks of the OPEC-member nation's flagship Merey 16 crude also recovered to almost 3 million barrels at the end of the month, one of the documents showed.

Venezuela imported some 68,000 bpd of heavy naphtha and blendstock for producing gasoline, above the 57,000 bpd of April.

Washington since mid-April has granted individual licenses to companies including France's Maurel & Prom (MAUP.PA), opens new tab, Spain's Repsol (REP.MC), opens new tab and (BP.L), opens new tab to do oil and gas business with Venezuela. More than a dozen others are waiting for green light.

Reporting by k in Houston and Mircely Guanipa in Maracay, Venezuela; editing by David Evans
Our Standards: The Thomson Reuters Trust Principles., opens new tab

NORWEGIAN OFFSHORE DIRECTORATE

https://www.sodir.no/en/whats-new/news/general-news/2024/high-price-to-pay-for-halting-exploration-for-oil-and-gas/

High price to pay for halting exploration for oil and gas

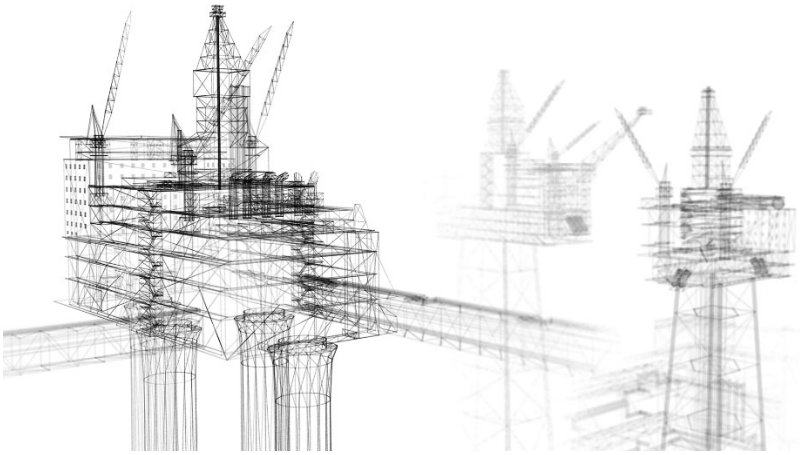


Illustration of a production facility on the Norwegian Continental Shelf.

11/03/2024 Stopping exploration activity on the Norwegian shelf will accelerate the scale-down of the oil and gas industry.

The Climate Change Committee's report was broadly covered when it was published last autumn. The deadline for comments regarding the report has now expired, and the Norwegian Offshore Directorate has submitted a comprehensive consultation response in which we point out significant deficiencies in this report. In light of this, Torgeir Stordal, Director General of the Norwegian Offshore Directorate, wrote this article, which was first published on altinget.no on 11 March.

This will be very harmful for the Norwegian economy and will complicate Europe's situation. Is that truly what we want?

Among other things, the Committee has proposed the development of a strategy for the tail-end phase of Norwegian petroleum activities. Until this strategy is in place, the Committee recommends not awarding new licences for exploration, production or installation and operation.

The Norwegian Offshore Directorate just submitted its input on the report. We believe that the Committee's proposals will have a substantial socio-economic impact if they are adopted. The purpose of a tail-end phase strategy is to discontinue profitable activity faster than what would otherwise have been the case.

The Committee has not addressed the major consequences this will have for value creation, employment around the country and state revenues. It could also weaken the EU's security of supply.

A temporary hiatus will immediately result in reduced exploration activity on the Norwegian shelf, and will weaken the basis for new discoveries that can be developed. Time-critical and profitable oil and gas resources could be lost and existing infrastructure will be shut down earlier than planned.

The 2050 Climate Change Committee has bolstered its mandate and is advocating for an amendment to the Climate Act when it proposes to cut emissions from Norwegian territory by 90-95 per cent by 2050 compared with 1990. This means disregarding the possibility of purchasing emission credits - which are among the most

effective ways to attempt to reach climate targets. The cost of domestic cuts can be much higher than equivalent cuts in the EU.

163,000 jobs in play

Exploration activity on the Norwegian shelf has provided substantial values to society over the last 20 years. Overall net revenues are estimated at more than NOK 3000 billion.

163,000 people were directly or indirectly employed by the petroleum industry in 2020, which means about 6 per cent of total employment in Norway. The industry creates jobs throughout the country and helps maintain less centralised population patterns.

Production is declining on its own

The Committee presumes that activity in the oil and gas industry on the Norwegian shelf is too high leading up to 2050, which means that measures must be implemented to cut production.

On the other hand, the Norwegian Offshore Directorate expects activity in the industry to naturally decline following a production peak in 2025. The production decline towards 2050 is within what the Intergovernmental Panel on Climate Change and the IEA have projected is in line with successfully following up the Paris Agreement.

Despite the decline in activity, the Norwegian Offshore Directorate expects the industry to continue creating significant values leading up to 2050. The net cash flow in 2030-2050 is expected to amount to 4.5 thousand billion 2024-NOK. While the estimate is uncertain, the State's revenues in the form of taxes and ownership will account for close to 90 per cent of this.

Significant values could be lost

The Committee does not want to build new infrastructure that commits us to emissions toward 2050 and beyond. This means that no new export capacity will be built in the Barents Sea. If so, society will be losing out on substantial values.

The Norwegian Offshore Directorate projects that there are significant resources left to discover in the Barents Sea, but the LNG plant on Melkøya has no available export capacity beyond the gas from Snøhvit. This lack of capacity affects the companies' interest in exploration. Gas discoveries are of little value if the gas cannot be transported to the market. Without increased capacity, all other gas resources in the Barents Sea will remain stranded for a long time, which means that society can lose out on substantial values. At the same time, the energy situation in Europe indicates that there will be a need for gas for a long time to come.

Security for Europe

The energy crisis following Russia's invasion of Ukraine demonstrates the importance of stable gas deliveries from Norway to Europe. In 2022, Norway increased its gas exports by about 100 TWh of energy, the equivalent of about 65 per cent of all Norwegian power generation that year. Without Norwegian gas, it would have been more difficult to cover Europe’s demand for gas, and the price of energy would have been higher for all Europeans. Norway can be a safe and stable supplier to Europe for many years to come, but security of supply and geopolitics are crucial considerations that the 2050 Climate Change Committee does not appear to emphasise in its assessments.

The Norwegian Offshore Directorate would like to see calculations of the cost of these proposed measures for the petroleum industry for the broader society. As no such calculations have been made, the Committee's recommendations are deficient and misleading, given that socio-economically profitable measures are being replaced by more costly measures.

Updated: 11/03/2024

opened their arbitrage, that's been closed for quite a while. So that's, of course, a positive indicator for the crude differential.

And then your question on Valhall and the impairment case. Valhall is not impaired in this quarter. And I don't think there are any changes to the 2C reserves or resources on Valhall in this quarter either.

A - David Tonne {BIO 20925193 <GO>}

I can qualify that. So there's impairment of technical goodwill on Valhall this quarter, together with Edvard Grieg and Ivar Aasen, which is, of course, is a bit specific. But it's not impairment of resources. So this is, of course, driven, as you know, and most of you on the line know, by previous acquisitions and the way that we have to account for the differences in accounting and tax. So, that's to be expected over time, specifically in quarters, when the forward curve for oil and gas prices drops. And as you are producing out, call it volumes in the asset.

Q - Yoann Charenton {BIO 17372477 <GO>}

Thank you. Have a nice day, then.

A - Karl Johnny Hersvik {BIO 18337255 <GO>}

Thank you. Let's move on, Kjetil.

A - Kjetil Bakken {BIO 20629786 <GO>}

Yes, absolutely. It's from John Olaisen from ABG. Please, John, go ahead.

Q - John Olaisen {BIO 4949660 <GO>}

Yeah, thank you for taking my question. And good morning, everybody. I can see from fax [ph] pages from the Norwegian offshore directorate that the water production is increasing significantly at the Johan Sverdrup field. So I just wonder if the watering production is higher than expected? And also I had hoped for plateau to be taken -- coming off the plateau would be taking place a little bit later than 2024. But if you could elaborate a little bit about that, do you have sufficient water handling capacity on the top sides, et cetera? And is there anything you could do to handle the water -- increase the water handling capacity and thereby extend plateau? And also maybe if you could elaborate a little bit of what kind of depletion rates we should expect from Johan Sverdrup once it goes off the plateau. And what can be done to fight that apart from, of course, a Phase 3? Thank you.

A - Karl Johnny Hersvik {BIO 18337255 <GO>}

Good. Excellent question. Yes, you are right. We are seeing water in some wells in Johan Sverdrup. The behavior is really related to well by well coning and not -- it's not an overall well. It's not an overall field water-cut development. It's a well issue. We are, in the course of 2024, putting another eight wells on stream on Johan Sverdrup, which will limit the issue as it's directly correlated and linked to well rates.

And of course, the total field rails are capped to the water handling and oil handling capacity. Oil handling, of course, standing at 755,000 barrels of oil equivalents.

So I think the main issue here is to get more wells on stream and therefore more or less production per well. And then, of course, the water handling capacity is at the moment significant and quite in line with what we expected and sufficient for treating the water. And then, of course, the last issue will be mass balance in the reservoir, and we're just doing a turnaround to change out the water injection pump, which are now basically done I think, to make sure that there is sufficient capacity. So those are the three main initiatives that is ongoing in 2024 to extend the plateau. And then, of course, the next line of things will be new wells. And this is as with all oil and gas fields, as you reach the end of the plateau, the way to extend the plateau is to increase capacity, particularly water treatment capacity and gas treatment capacity, and add IOR wells. I mean, this is bread and butter for the oil and gas industry. This is what we do in all fields.

Q - John Olaisen {BIO 4949660 <GO>}

And then on depletion rates once it goes off plateau, please?

A - Karl Johnny Hersvik {BIO 18337255 <GO>}

Yeah. That's -- I don't think I'll guide on that John, at this point in time. And the reason is that, yeah, of course, from a technical perspective, you will see the largest depletion rates, relatively speaking, in the first few months after you go off battle. But they will depend on water volume, on the increase in water volume, well stock, et cetera, et cetera. So that's a pretty difficult assessment to make at this point in time.

Q - John Olaisen {BIO 4949660 <GO>}

But the potential plateau in the second half of 2024, is that what you had expected and what you already have in your charts showing the expected production profile for (inaudible) in the years to come, or is it a little bit earlier?

A - Karl Johnny Hersvik {BIO 18337255 <GO>}

So I would say that this -- as you know, we increased the plateau level quite significantly above nameplate capacity in 2023. And it's been producing extremely well at this level, with nearly 100% uptime, low cost, highly energy efficient. One year ago, I would say we expected it to continue that well into 2025. And the operator has now basically said that they assume that this level can be sustained. It's probably a good word until late 2024 or early 2025.

And it's the uncertainty and that timing that is basically incorporated into the guidance of 2024. And of course, that means that maybe starting another -- but that means that when we assessed this earlier, we had an assumption that it'll carry well into 2025. That, of course, means that the guidance for 2024 is a bit lower than we assumed a year ago, but it also means that in the next couple of years, we'll be impacted by this, call it, a little bit more conservative phasing of production. But it's important to note that there are no reserve changes. This is essentially a phasing of production related to the production strategy at the field.

06/18/2024 07:58:05 [BN] Bloomberg News

Russian Crude Flows Climb Despite Pledge to Stiffen Output Curbs

Seaborne exports have recovered about one-third of their recent decline

By Julian Lee

(Bloomberg) -- Russia's four-week average crude exports rose for a second straight week in the period to June 16, even as Moscow said it would strictly comply with its OPEC+ output target this month.

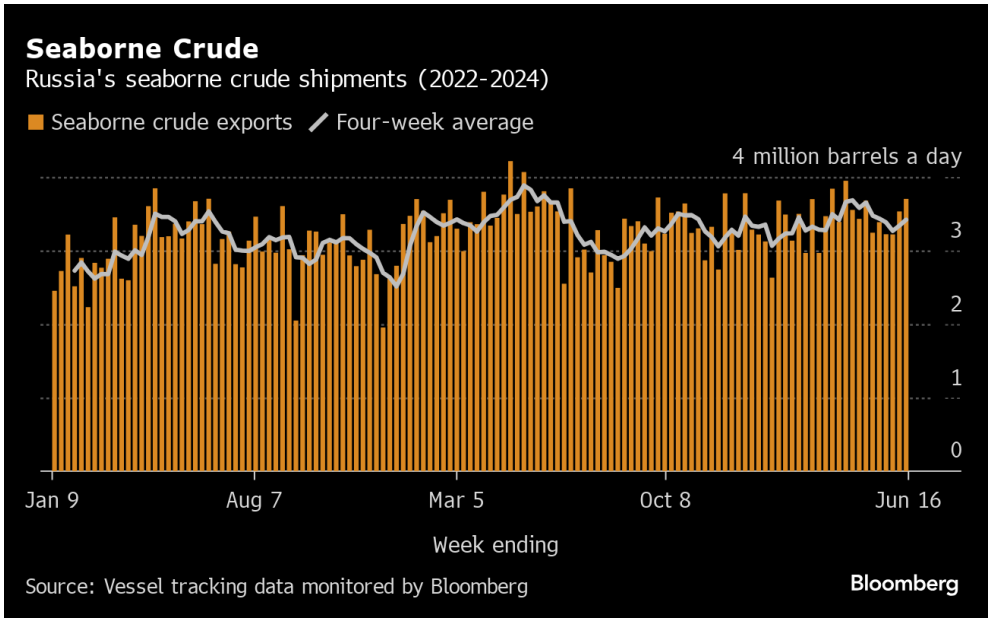
After hitting a year-to-date high in mid-April, shipments had been on a downward trend, dropping by 420,000 barrels a day, or 11%, by the start of June. Since then, though, the four-week average has clawed back one-third of the earlier drop. The gain of 80,000 barrels a day in the latest number was driven by a jump in weekly shipments to a two-month high.

Moscow has dropped an earlier mixture of production and export restrictions in favor of a single output target that's preferred by its partners in the OPEC+ group of oil producers. That makes it more difficult to determine from export flows whether Russia is meeting its commitments, as production and shipments aren't perfectly correlated.

Moscow has pledged to compensate for pumping oil above its target in April and for the "limited excessive" output seen in May. It has also said that it will start to report production in barrels to the analysts who provide OPEC's so-called "secondary sources" production estimates, rather than the tons typically used by former Soviet nations. This will allow Russia to determine the conversion factor employed, with early indications suggesting that they've selected a number well below that used by most analysts, improving their compliance at a stroke.

A five-day gap in the Primorsk loading program will likely drag flows lower in the week to June 23.

Higher weekly export volumes were compounded by a week-on-week increase in oil prices to boost the gross value of Russia's crude shipments by 9% in the seven days to June 16.

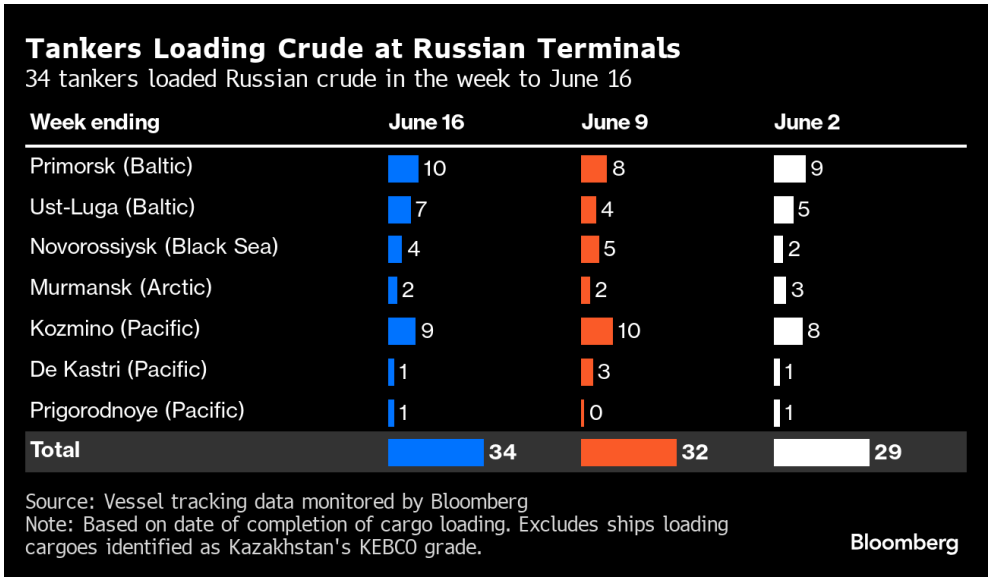


The UK has announced wide-ranging sanctions on Russia. The targets include four vessels in the shadow-fleet of tankers transporting the country's oil and Ingosstrakh Insurance Co, the largest Moscow-based company that covers shipping risks.

The move comes as Moscow continues to test the effectiveness of sanctions imposed in response to its invasion of Ukraine in February 2022. Three of 21 tankers owned by state-controlled Sovcomflot PJSC have now loaded cargoes of crude after lying idle for several months. The first, the SCF Primorye, has switched its cargo to another vessel while anchored in the Riau archipelago east of Singapore. The other two, the Bratsk and the Belgorod, are heading in the same direction.

Crude Shipments

A total of 34 tankers loaded 25.91 million barrels of Russian crude in the week to June 16, vessel-tracking data and port agent reports show. That was up from 24.72 million barrels the previous week.



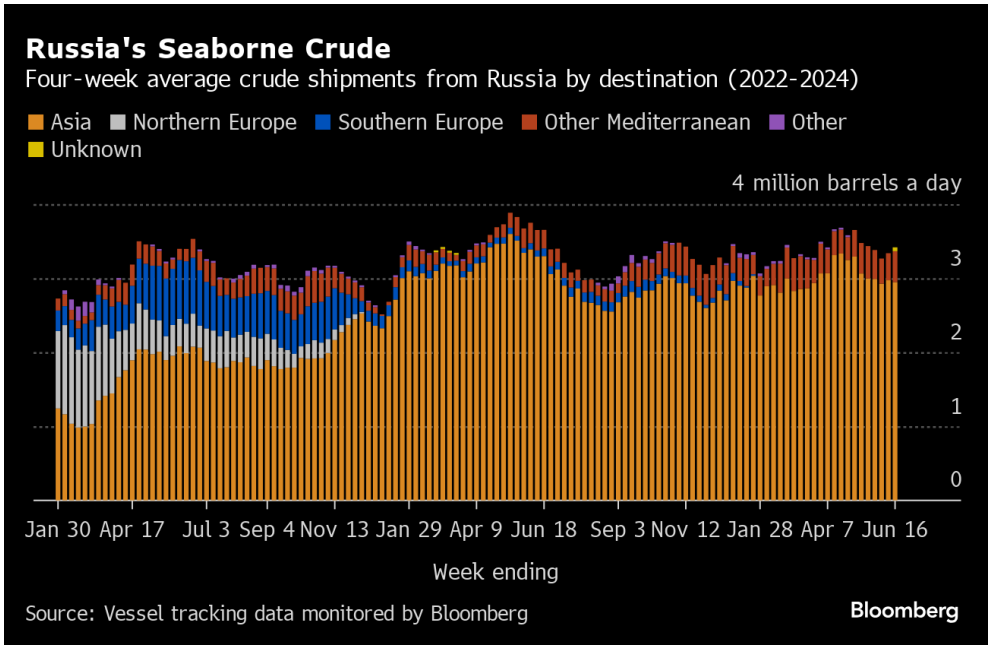
Russia's seaborne crude flows in the week to June 16 rose by 5% to a two-month high of 3.7 million barrels a day. The less volatile four-week average was also up, increasing by about 80,000 barrels a day to 3.42 million, the second straight increase.

A week-on-week increase in shipments from the Baltic Sea ports of Primorsk and Ust-Luga was partly offset by fewer ships leaving Novorossiysk and the Pacific ports of Kozmino and De Kastri.

A five-day gap in the Primorsk loading program, with no loadings scheduled to commence between June 18 and June 22, suggests a period of maintenance work that will halt flows from the port for most of the coming week.

After almost two months out of service, the Zaliv Vostok shuttle tanker is heading back to Sakhalin Island from a shipyard in China. It is due to arrive on Saturday and will bring the number of vessels hauling crude from the Sakhalin 1 project up to two, with the third ship normally employed by the project now also undergoing work in China.

Crude shipments so far this year are running about 30,000 barrels a day above the average for 2023.



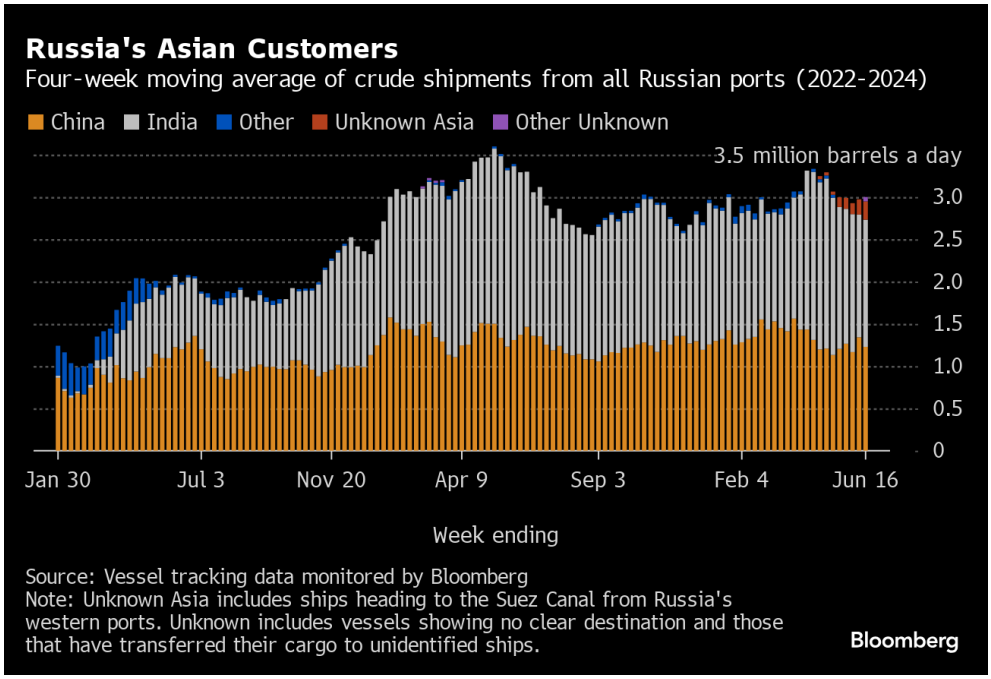
Russia terminated its export targets at the end of May, opting instead to restrict production, in line with its partners in the OPEC+ oil producers' group. The country's output target is set at 8.978 million barrels a day until the end of September, after which it is scheduled to rise at a rate of 39,000 barrels a day each month until September 2025, as long as market conditions allow.

Two cargoes of Kazakhstan's KEBCO were loaded at Novorossiysk during the week.

Flows by Destination

- **Asia**

Observed shipments to Russia's Asian customers, including those showing no final destination, edged higher to 3 million barrels a day in the four weeks to June 16 from a revised 2.97 million in the period to June 9.



About 1.23 million barrels a day of crude was loaded onto tankers heading to China. The Asian nation's seaborne imports are boosted by about 800,000 barrels a day of crude delivered from Russia by pipeline, either directly, or via Kazakhstan.

Flows on ships signaling destinations in India averaged about 1.5 million barrels a day, compared with a revised 1.45 million barrels a day in the period to June 9.

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

The equivalent of about 220,000 barrels a day was on vessels signaling Port Said or Suez in Egypt. Those voyages typically end at ports in India or China and show up as "Unknown Asia" until a final destination becomes apparent.

The "Other Unknown" volumes, running at about 50,000 barrels a day in the four weeks to June 16, are those on tankers showing no clear destination. Most originate from Russia's western ports and go on to transit the Suez Canal, but some could end up in Turkey. Others may be moved from one vessel to another, with the majority of such transfers now taking place in the Mediterranean, most recently off Morocco, or near Sohar in Oman.

Russia's oil flows continue to be complicated by the Greek navy carrying out exercises in an area that's become synonymous with the transfer of the nation's crude. These activities have now been extended to July 15.

Crude Shipments to Asia
Shipments of Russian crude to Asian buyers in million barrels a day

4 weeks ending	China	India	Other	Unknown Asia	Other Unknown	Total
May 12, 2024	1.13	1.86	0.04	0.04	0.00	3.06
May 19, 2025	1.20	1.68	0.00	0.12	0.00	3.00
May 26, 2024	1.26	1.59	0.00	0.13	0.00	2.99
June 2, 2024	1.17	1.63	0.00	0.13	0.00	2.93
June 9, 2024	1.34	1.45	0.00	0.18	0.00	2.97
June 16, 2024	1.23	1.50	0.00	0.22	0.05	3.00

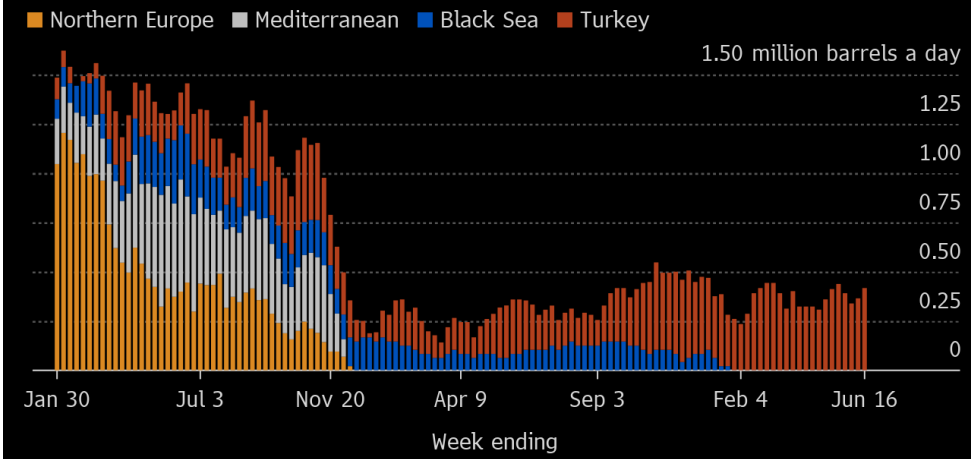
Source: Vessel tracking data compiled by Bloomberg Bloomberg

- **Europe and Turkey**

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

Turkey is now the only short-haul market for shipments from Russia's western ports, with flows in the 28 days to June 16 rising to about 420,000 barrels a day, their highest in a month.

Russia's Crude Shipments to Europe and Turkey
Four-week average crude shipments from Russia (2022-2024)



Source: Vessel tracking data monitored by Bloomberg
Note: Four-week moving average of crude shipments from all Russian ports. Bloomberg

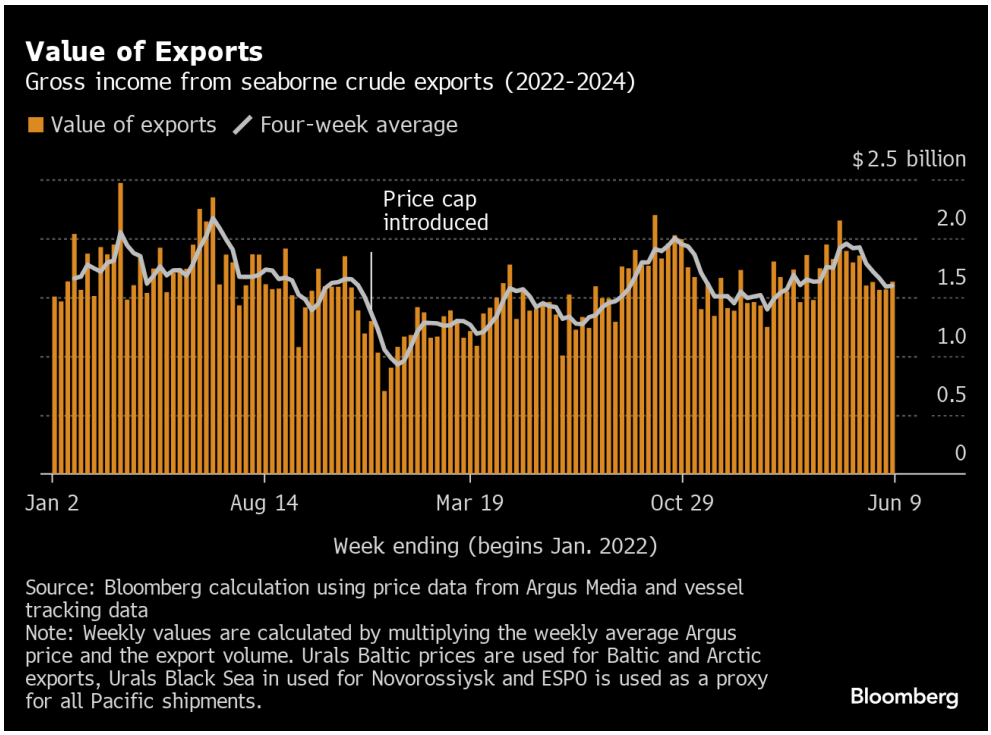
Export Value

The gross value of Russia's crude exports rose to a six-week high of $1.79 billion in the seven days to June 16 from

about $1.63 billion in the period to June 9, boosted by a combination of higher flows and a week-on-week increase in prices. Export values at Baltic and Black Sea ports were up week-on-week by almost $4.50 a barrel, while key Pacific grade ESPO rose by about $2.50 a barrel. Delivered prices in India also rose, up by about $4.15 a barrel, all according to numbers from Argus Media.

Four-week average income was also up, rising by about $40 million to $1.64 billion a week. The four-week average peak of $2.17 billion a week was reached in the period to June 19, 2022.

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



NOTES

This story forms part of a weekly series tracking shipments of crude from Russian export terminals and the gross value of those flows. The next update will be on Tuesday, June 25 .

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

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

If you are reading this story on the Bloomberg terminal, click 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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06/19/2024 06:46:23 [BN] Bloomberg News

Saudi Arabia Dethrones China as Top Emerging-Market Borrower

- Kingdom accelerates global borrowing to drive Vision 2030
- Chinese international-bond sales 68% below five-year average

By Selcuk Gokoluk

(Bloomberg) -- Saudi Arabia has displaced China as the most prolific issuer of international debt among emerging markets, breaking Beijing's 12-year run at the top.

Data for new-bond sales by both governments and corporates this year reveal the kingdom is borrowing at a record pace as global debt investors begin to back Crown Prince's Mohammed bin Salman's Vision 2030 plan. Chinese borrowers, on the other hand, are witnessing a buying frenzy in local-currency bonds and have slowed international issuance to one of the slowest paces in recent years.

Overtaking China is meaningful for Saudi Arabia – which has 1/16th of the Asian nation's the gross domestic product and the drive to become a global business hub by the end of the decade. The latest data suggest improving sentiment as Riyadh seeks funding for projects to diversify the economy from oil and position it as a link between Asia and Europe. Meanwhile, the rest of emerging markets are also witnessing a blockbuster year for bond issuance, amid falling borrowing costs and a hunt for juicy yields.

"Sentiment for Saudi bonds is very healthy," said Apostolos Bantis, the Zurich-based managing director of fixed-income advisory at Union Bancaire Privee Ubp SA. "It's not a surprise that the Kingdom has become the largest EM bond issuer given its large funding needs for large infrastructure projects."

Bond sales from Saudi Arabian entities have increased 8% so far this year and exceeded $33 billion. The government accounts for more than half of this, including a $5 billion dollar-denominated sukuk deal last month.

The kingdom is working to find alternative sources of funding to help cover an expected fiscal shortfall of about $21 billion this year. It expects total funding activities for the year to reach about $37 billion, to help accelerate Vision 2030. In fact, the country has turned to the bond market on such a scale partly because foreign direct investment has fallen short of its targets, while oil revenue has been crimped by supply cuts.

Read more: Saudi Arabia Ramps Up Bonds to Help Fund MBS's Big Projects

The nation's borrowing is already inviting caution from some money managers. Barclays Plc downgraded Saudi Arabia's sovereign credit to underweight from market weight, citing "recurrent" bond issuance, lower oil prices and Middle East tensions.

"Saudi can not keep up the current bond issuance pace for too long as that would start to have an impact on its fundamentals and cost of funding," said Bantis of UBP.

Overall, EM international bond sales have increased 28% from a year earlier to $291 billion, the highest for comparable periods since 2021. The extra yield investors demand to buy EM bonds – sovereign and corporate combined – rather than Treasuries is now about 266 basis points, below the five-year average of 336 basis points,

according to a Bloomberg index.

China's Falling Share

Meanwhile, China Development Bank in Beijing and Chinese companies have together sold $23.3 billion of dollar–and euro–denominated bonds this year. That's a 68% drop from the country's average government and corporate–bond sales for this time for the year since 2019. China now accounts for only 8.1% of emerging–market borrowing, a far cry from 2017 when it accounted for one third of all issuances with a $224 billion spree.

Unlike the trend in dollar bonds, the country is witnessing unprecedented bond issuance in local–currency debt as borrowing costs tumble to record low.

Read more: China's Hottest Credit Market Ever Is Even Luring Global Issuers

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Islamic Republic News Agency

https://en.irna.ir/news/85516526/Minister-Iran-oil-production-to-reach-4-million-bpd

Jun 22, 2024, 1:20 PM

Minister: Iran oil production to reach 4 million bpd

Tehran, IRNA – Iranian Oil Minister Javad Owji has said that the country plans to increase its daily crude production to 4 million barrels per day (bpd) by late March 2025.

The minister made the announcement on Saturday as he was elaborating on the achievements by the administration of the late President Ebrahim Raisi in the oil industry over the past three years. He was speaking at a joint press conference with Government Spokesman Ali Bahadori Jahromi and Head of the Department of the Environment Ali Salajegheh.

Owji said that the Raisi administration has already managed to increase oil production from 2.2 to 3.6 million bpd and is now planning to increase the daily output to 4 million barrels by the end of the current Iranian year, which falls on March 20, 2025.

The administration also increased the annual gas production by 53 million cubic meters, which marked a 5% growth, he added.

Gas extraction from the South Pars gas field, which is shared with Qatar, has increased as well, he said, adding that Iran's extraction is 75 to 100 million cubic meters higher.

According to the minister, Iran's annual petrochemical production has now reached 100 million metric tons following a 10-percent growth. At least four petrochemical projects are also set to be inaugurated, Owji said, without specifying the projects and the timing of the inauguration.

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https://www.presstv.ir/Detail/2024/06/19/727755/Iranian-Oil-Minister-Javad-Owji-oil-exports-US-sanctions

No US govt. can stop Iran's oil exports; sales jump despite sanctions: Oil minister

Wednesday, 19 June 2024 9:20 AM **[Last Update: Wednesday, 19 June 2024 10:46 AM]**

Iranian Oil Minister Javad Owji

Iranian Oil Minister Javad Owji says no administration in the United States can curb the Islamic Republic's oil exports and that the oil sales has "jumped" over the past three years despite US sanctions.

Owji made the statement while presenting a report on the country's latest status of oil and gasoline output during a plenary session at the Iranian Parliament (Majlis) on Wednesday.

He said Iran's crude oil production increased by more than 1.4 million barrels through round-the-clock work and relentless efforts in the past three years, adding, "Despite more than 600 new sanctions on the export of oil and petrochemical products, today, we are witnessing a jump in the export of oil and collection of the country's arrears."

Owji asserted that the amount of Iran's oil exports has tripled compared to the beginning of the sitting administration in 2020 and the foreign exchange revenue has also increased.

"With the measures taken by the government in the field of oil industry and the preparations made in the field of exporting oil and agricultural products, I must announce that any administration assuming office in the United States cannot hinder the Islamic Republic of Iran's oil export and production," he added.

Pointing to the fuel imbalance at the onset of the current administration, Owji said the Oil Ministry was taken over at a time that Iran's daily output stood at 2.1 million barrels and that the oil exports had reached its lowest rate in the past decade.

"We had about 87 million barrels of oil aboard tankers at sea, of which 30 million were heavy and extra heavy crude. We had no sales in heavy and extra heavy oil at the beginning of the 13th administration," he said.

'Not even one cent in arrears'

The Iranian Oil Ministry also underlined in a statement on Wednesday that the administration of late president Ebrahim Raeisi laid the ground for the sale of oil and gas without o the JCPOA and the Western-led financial crime watchdog Financial Action Task Force (FATF).

"The 13th government without JCPOA and FATF, and under its smart, robust and active diplomacy was able to pave the way for the sale of oil and gas.

"Today, crude oil and gas condensate shipments are exported to many countries, and at the apex of the sanctions, we do not even have one cent in arrears," the ministry said.

The United States under former president Donald Trump reinstated crippling sanctions on Iran after unilaterally walking out of Iran's nuclear deal in May 2018, despite the Islamic Republic's full compliance with the terms of the 2015 deal between Tehran and world powers, known as Joint Comprehensive Plan of Action (JCPOA).

The administration of US President Joe Biden, which has claimed a diplomatic approach to Iran and efforts to return to the 2015 nuclear program, has not only failed to return to the agreement but has also tightened the sanctions regime against the Islamic Republic.

https://x.com/CENTCOM/status/1801431768722993508

U.S. Central Command
@CENTCOM

June 13 U.S. Central Command Update

In the past 24 hours, U.S. Central Command (USCENTCOM) forces successfully destroyed one air defense sensor in a Houthi controlled area of Yemen.

Then, USCENTCOM forces successfully destroyed one Iranian-backed Houthi uncrewed surface vessel (USV) and two Houthi patrol boats in the Red Sea.

Separately, USCENTCOM forces successfully destroyed one uncrewed aerial system (UAS) launched from a Houthi controlled area of Yemen over the Red Sea.

It was determined these systems presented an imminent threat to U.S., coalition forces, and merchant vessels in the region. This action was taken to protect freedom of navigation and make international waters safer and more secure for U.S., coalition, and merchant vessels.

Additionally, Iranian-backed Houthis launched two anti-ship ballistic missiles (ASBM) from a Houthi controlled area of Yemen into the Red Sea. There were no injuries or significant damage reported by U.S., coalition, or merchant vessels.

NO SIGNIFICANT DAMAGE

Later, M/V Verbena, a Palauan flagged, Ukrainian owned, Polish operated bulk cargo carrier, was struck for a second time in 24 hours, by one ASBM launched from Houthi controlled area of Yemen into the Gulf of Aden.

This continued malign and reckless behavior by the Iranian-backed Houthis threatens regional stability and endangers the lives of mariners across the Red Sea and Gulf of Aden. The Houthis claim to be acting on behalf of Palestinians in Gaza and yet they are targeting and threatening the lives of third country nationals who have nothing to do with the conflict in Gaza. CENTCOM will continue to act with partners to hold the Houthis accountable and degrade their military capabilities.

7:49 PM · Jun 13, 2024 · **248K** Views

https://x.com/CENTCOM/status/1803922258529763458

U.S. Central Command
@CENTCOM

June 20 U.S. Central Command Update

TAMPA, Fla.- In the past 24 hours, U.S. Central Command (USCENTCOM) forces successfully destroyed four Iranian-backed Houthi uncrewed surface vessels (USV) in the Red Sea and two uncrewed aerial systems (UAS) over the Red Sea.

There were no injuries or damage reported by U.S., coalition, or merchant vessels.

NO DAMAGE

It was determined these systems presented an imminent threat to U.S., coalition forces, and merchant vessels in the region. These actions were taken to protect freedom of navigation and make international waters safer and more secure for U.S., coalition, and merchant vessels.

4:45 PM · Jun 20, 2024 · **161.4K** Views

149 367 1.2K 45

https://www.rudaw.net/english/business/21062024

IOCs endorse export of Kurdish oil through SOMO: Spox

yesterday at 11:59

Karwan Faidhi Dri@KarwanFaidhiDri

Myles Caggins speaking to Rudaw in Washington on June 21, 2024. Photo: Rudaw

Also in ECONOMY

ERBIL, Kurdistan Region - The international oil companies (IOCs) support the export of the Kurdistan Region's oil through Iraq's State Organization for Marketing of Oil (SOMO), the spokesperson for the companies said on Friday.

Myles Caggins, spokesperson for the Association of the Petroleum Industry of Kurdistan (APIKUR), an association of oil companies working in the Kurdistan Region, told Rudaw's Diyar Kurda on Friday that the association believes that the "direct sales [of the Kurdish oil] through SOMO and exports at Ceyhan port are the best option to resolve the impasse for the Iraq-Turkey Pipeline."

The Kurdistan Regional Government (KRG) initially refused to hand over its oil to SOMO but now it is willing to do so following the suspension of its oil exports through Turkey.

Oil exports from the Kurdistan Region through the Iraq-Turkey pipeline have been halted since March 2023 after a Paris-based arbitration court ruled in favor of Baghdad against Ankara, saying the latter had breached a 1973 pipeline agreement by allowing Erbil to begin independent oil exports in 2014.

Caggins added that exports through SOMO and through the Iraq-Turkey Pipeline "needs to include a guarantee of either upfront payments or payments through an escrow account where the financial transactions are held in an independent banking facility or payments in kind with barrels of oil at Ceyhan port. And this arrangement could happen between the international oil companies and SOMO, and it is the best option to rapidly resolve the issue of exports through the Iraq-Turkey pipeline."

Despite several talks between Kurdish, Iraqi, and Turkish officials, the exports have yet to resume and many international oil companies have suspended production.

Before the halt, around 400,000 barrels a day were being exported by Erbil, in addition to some 75,000 barrels of Kirkuk's oil.

The KRG said in a statement on June 5 following a weekly meeting that the Prime Minister Masrour Barzani and the Kurdish negotiating team "deliberated on the efforts and measures required to resume oil exports. They agreed on the importance of continuing negotiations with the Iraqi government to find a solution and expedite the resumption of oil exports."

Baghdad, Erbil and the OICs held a meeting in Baghdad on June 9. There was no joint statement from the

parties.

The goal of the meeting on Sunday was to resolve all obstacles that have prevented resuming exports of Kurdistan Region's oil since they were halted last year.

In March, the Iraqi oil ministry said that in accordance with the federal budget, the average cost for producing one barrel of oil is $6.90, while the IOCs operating in the Kurdistan Region are asking for three times that amount as well as repayment of billions of dollars of debts that are "unknown to the federal government."

"APIKUR member companies are willing to consider modifications to existing contracts—if agreed between the Government of Iraq, Kurdistan Regional Government, and international oil companies—provided this is necessary to secure payment surety for past and future exports, direct payment and preservation of the current economic framework of their Production Sharing Contracts," Caggins told Rudaw on Friday.

Kamal Mohammed, acting minister of KRG's natural resources ministry, said on June 6 that the oil companies operating in the Kurdistan Region "have invested large amounts of money in the Region's oil fields and Baghdad should take this into consideration."

"The main obstacle before the resumption of Kurdistan Region's oil is that the Iraqi oil ministry says the production cost is too much. The reason behind that is that the companies invested in the oil sector. However, Iraq spends trillions of dinar annually in the oil sector. Therefore, the management of the oil sector in Iraq and the Kurdistan Region are different: the sector is general in Iraq while it is private in the Region," he explained.

Updated at 8:20 am on June 22, 2024 with a new remark from the APIKUR spokesperson

HONG KONG TOURISM BOARD 香港旅遊發展局

PRESS RELEASE 新聞稿

Date: 17 June 2024 Total pages: 1

HKTB Announces an 80% Year-on-Year Increase for Visitor Arrivals of the First 5 Months of 2024

The Hong Kong Tourism Board (HKTB) announced that the provisional visitor arrivals for May were 3.4 million, showing a 20% year-on-year increase. Mainland visitors accounted for 2.63 million, about 15% increase from the same period last year. Non-Mainland visitors increased by 43% year on year, recording more than 770,000. Cumulatively, a total of 18 million visitors arrived in Hong Kong from January to May this year, increasing by 80% from the same period last year.

Provisional visitor arrivals in May 2024

Markets	May (year-on-year change)	January to May (year-on-year change)
Mainland	2,627,401（+14.8%）	13,804,878（+73.5%）
Non-Mainland*	771,057（+42.6%）	4,213,759（+93.5%）
Short-haul	419,261（+52.5%）	2,302,279（+124.3%）
Long-haul	206,035（+41.6%）	1,194,583（+107.8%）
New markets	62,021（+116.8%）	261,075（+174.9%）
Total	3,398,458（+20.2%）	18,018,637（+77.8%）

Note: Because of rounding, the total may differ from the sum of the individual figures.
**Includes figures from long-haul, short-haul and new markets, as well as the Macao SAR.*
(Full details of May 2024 visitor arrivals will be released on 28 June.)

– Ends –

Members of the media can download the press release from the link below:
https://www.discoverhongkong.com/eng/hktb/newsroom/press-releases.html

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https://www.straitstimes.com/asia/se-asia/malaysia-rebuffs-us-on-iran-oil-sales-says-it-recognises-only-un-sanctions

Malaysia rebuffs US on Iran oil sales, says it recognises only UN sanctions

Zunaira Saieed Malaysia Correspondent

UPDATED MAY 09, 2024, 11:51 PM

KUALA LUMPUR – Malaysia will recognise sanctions imposed by the United Nations only and not by individual countries, said Home Minister Saifuddin Nasution Ismail on May 9, following claims by a top US official that Iran has relied on Malaysian service providers to sell US-sanctioned oil in the region.

"I emphasised that we will only recognise sanctions if they are imposed by the United Nations Security Council.

"The delegation from the US respected our stance," Datuk Seri Saifuddin told reporters following a meeting with the US Treasury Department's top sanctions official Brian Nelson, who was visiting Kuala Lumpur.

Washington has imposed sanctions on Iran and its proxies, including on the sale of Iranian oil, aimed at choking money flows that it claimed were being used to foment instability in the Middle East.

Mr Nelson, speaking to the local media after the meeting, said of the Washington claims against Malaysian service providers: "I would only say we have seen and we've promulgated some sort of guidance to the (Malaysian) marine sector about the type of services that they are engaging in.

"These are ship-to-ship transfers, particularly at night, which we see from time to time.

"They are really designed to obfuscate the origin of the commodity, in this case, Iranian oil," he told Malaysiakini.

Mr Nelson had said that the capacity of Iran to move its oil depended on parties such as port administrators and tugboat operators.

"Typical markers that we see are like when they turn off their location device and when they're trying to obscure the name of the ship, or they falsify or forge critical documents about the commodities that were issued," he added.

A recent Reuters report cited an unnamed senior US Treasury official as saying that there has been an uptick in money moving to Iran and its proxies, including Hamas, through the Malaysian financial system.

In the meeting with Mr Nelson, Mr Saifuddin said he underlined Malaysia's commitment to combating terrorism financing, with a clear strategic plan to tackle illicit financing activities and money laundering.

The minister also acknowledged concerns raised by US officials over possible money laundering activities involving certain individuals and organisations in Malaysia with purported ties to Iran and its proxies like Hamas, and said these needed verification.

Malaysian government spokesman Fahmi Fadzil, speaking to reporters on May 8, said the country would comply with UN sanctions, but not necessarily with those imposed by individual countries.

"We want to assert that Malaysia, as a sovereign nation, we comply with UN sanctions," Mr Fahmi told reporters.

"But when it comes to unilaterally applied sanctions, then I think we have to assess this situation."

Commenting on the issue, economics professor Geoffrey Williams at the Malaysia University of Science and Technology said: “Malaysian businesses can do business with anyone unless there are UN sanctions regulations to stop it, but the US cannot stop Malaysian companies doing business with others.

“However, if Malaysian companies are involved in activities that the US does not like, then the Americans can stop doing business with them,” he said.

Malaysian Prime Minister Anwar Ibrahim has been vocal in his support for Hamas amid the ongoing war in Gaza, even at the risk of US sanctions against those who support the group that Washington has deemed a terrorist organisation.

Meanwhile, Mr Nelson, who earlier visited Singapore, had said that sanctions imposed in 2023 against four Malaysian firms accused of helping Iran’s drone production have been impactful, while also highlighting the issue of the illicit sale of Iranian oil in the region.

“Malaysia clearly doesn’t want its financial institutions and its shipping industry to be abused by rogue nations and outside actors. We don’t want that because of the central importance of Malaysia, both as a trading nation and as a financial centre, and given America’s significant business presence here,” Mr Nelson, who is the US Treasury Department’s undersecretary for terrorism and financial intelligence, told reporters on May 9.

Mr Halmie Azrie Abdul Halim, a senior analyst at political risk consultancy Vriens and Partners, said the US delegation trip to Malaysia is an “intimidation tactic” because of Datuk Seri Anwar’s pro-Palestine stance.

Still, the “US would also not want to lose the support of Malaysia, which is one of its key Asean partners, as the country will assume the role of Asean chair next year”, he said.

Malaysia is among the US’ top 20 trading partners, with bilateral trade between the two nations amounting to US$78.3 billion (S$106 billion) in 2022.

06/20/2024 04:09:59 [BN] Bloomberg News

OIL DEMAND MONITOR: China Casts a Pall Even as Skies Get Busy

- Asian nation's refining expected to be flat or lower this year
- Jet fuel usage and Middle East crude burning boost consumption

By John Deane and Julian Lee

(Bloomberg) -- China's economic woes continue to dim the outlook for oil demand, even as buoyant jet fuel consumption gives a fillip to the global market.

Refining in the top crude importer is expected to be flat or fall for the first time in data back to 2004 — excluding a hit during the Covid pandemic — according to market watchers. Processing slowed last month to the lowest this year after plants shut units for maintenance amid weakening margins.

Softness is visible elsewhere in Asia. Saudi Aramco lowered prices for all of its oil to buyers there next month, the first reduction since February. India's gasoline sales dropped 3.6% month-on-month in the first 16 days of June.

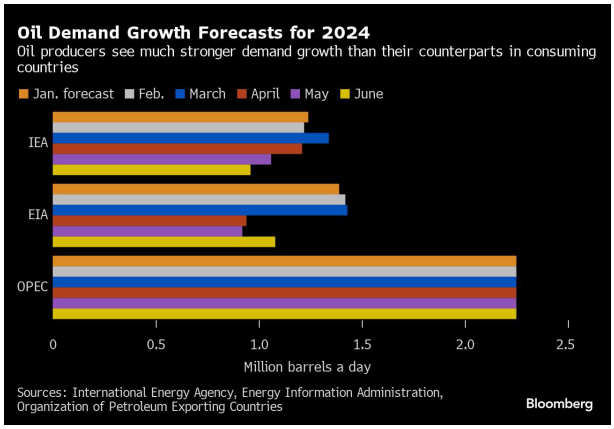
In the Americas, inflation remains a headwind for demand, with Fed officials dialing back expectations for interest-rate cuts. Hedge funds' bullish bets on US gasoline remain near a seven-month low despite the summer driving season. Oil will "buckle" if rapid global inventory builds persist, according to Bank of America Corp. analysts.

Still, there are bullish signals. In futures markets, key timespreads have ballooned, suggesting stronger near-term demand. Gauges of US gasoline consumption look solid if not spectacular, with demand hovering around nine million barrels a day. Asian oil refiners are bringing back idled capacity. And a hot start to the summer in the Middle East may drive up power generators' need for fuel. Goldman Sachs Group Inc. analysts including Yulia Zhestkova Grigsby see a summer deficit starting to show " more vividly" in stockpiles.

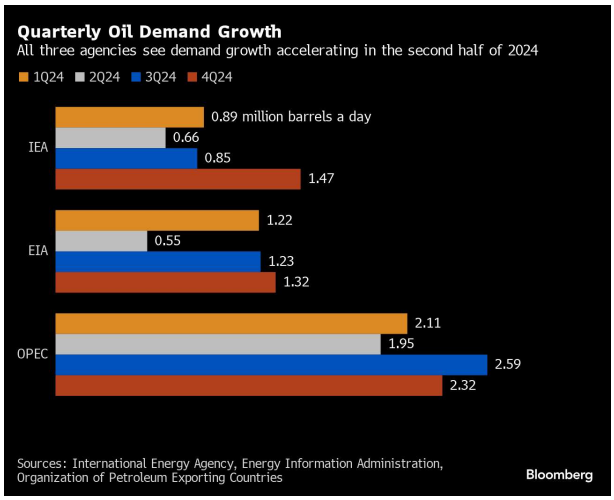
One of the brightest spots is air travel, largely back to pre-pandemic levels and with the onset of summer travel set to provide a seasonal boost for jet fuel. Flight numbers are tracking well above year-earlier and pre-pandemic levels, according to Flightradar24 data. The US dollar's strength is driving visitors to Europe, OAG Aviation said in a report, with the Atlantic region now "full of US tourists capitalising on the strength of the dollar with markets such as Italy, Spain and France benefitting."

Read More: July Fourth Travel Seen Hitting Record in Boost for Oil Bulls

Meanwhile, the International Energy Agency and the Organization of Petroleum Exporting Countries are growing further apart on their outlooks. OPEC left its estimate for consumption growth this year at 2.25 million barrels a day in its latest report, while the IEA cut its forecast by 100,000 barrels a day to just 960,000.



OPEC+ Producers Caught Between Diverging Oil Views



Demand by Country:

Demand Measure	Location	%vs 2023	%vs 2022	% vs 2021	% vs 2020	% vs 2019	% m/m	Freq	Latest Date	Latest Value	Source
Gasoline product supplied	US	-1.7	-0.6	+6.6	+14	-8.5	+1.9	w	June 7	9.04m b/d	EIA
Distillates product supplied	US	+2.1	+0.8	+6.9	+11	-16	-4.8	w	June 7	3.65m b/d	EIA
Jet fuel product supplied	US	+9.9	+12	+64	+137	-4.7	+3.7	w	June 7	1.7m b/d	EIA
Total oil products supplied	US	-5.8	-2.5	+8.5	+9.4	-9	-4.2	w	June 7	19.22m b/d	EIA
Car use	UK	-1	+2.1	+3.2	+56	-2	unch.	m	June 10	98	DfT
Heavy goods vehicle use	UK	-1	-1	-1	+24	+8	unch.	m	June 10	108	DfT
All motor vehicle use index	UK	-1	+3	+4	+51	+3	unch.	m	June 10	103	DfT
Diesel sales	India	-3.9					+0.1	2/m	June 1-16	3.545m tons	Bblg
Gasoline sales	India	+0.9					-3.6	2/m	June 1-16	1.423m tons	Bblg
Jet fuel sales	India	+2.3					-4.5	2/m	June 1-16	331k tons	Bblg
LPG sales	India	+0.9					-5.2	2/m	June 1-16	1.241m tons	Bblg
Gasoline deliveries	Spain	+15						m	May	615k m3	Exolum
Diesel (and heating oil) deliveries	Spain	+3.6						m	May	2,324k m3	Exolum
Jet fuel deliveries	Spain	+15						m	May	707k m3	Exolum
Total oil products deliveries	Spain	+7.5						m	May	3,646k m3	Exolum
Road fuel sales	France	-0.5						m	May	4.05m m3	UFIP
Gasoline sales	France	+6.5						m	May	n/a	UFIP
Road diesel sales	France	-3.4						m	May	n/a	UFIP
Jet fuel sales	France	+7.1						m	May	704m3	UFIP
All petroleum products sales	France	-1						m	May	4.49m tons	UFIP
All vehicles traffic	Italy	+4					+1	m	May	n/a	Anas
Heavy vehicle traffic	Italy	+1					+6	m	May	n/a	Anas
% change y/y in toll roads kms traveled	France	-1						m	May	n/a	Mundys
As above	Italy	unch.						m	May	n/a	Mundys
As above	Spain	+5.5						m	May	n/a	Mundys

As above	Brazil	+3.7	m	May	n/a	Mundys
As above	Chile	−4.2	m	May	n/a	Mundys
As above	Mexico	+2.3	m	May	n/a	Mundys

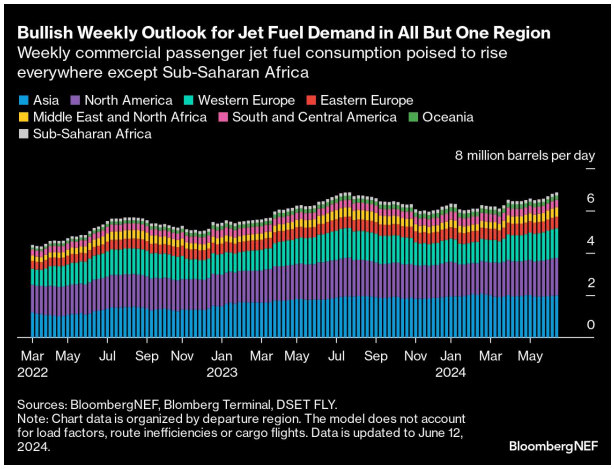
More:

Click here for India's May oil products consumption; here for Portugal data; here for more on sources

Air Travel:

Measure	Location	vs 2023	vs 2022	vs 2021	vs 2020	vs 2019	m/m	w/w	Freq.	Latest Date	Latest Value	Source
					changes shown as %							
All flights	Worldwide	+5.3	+13	+25	+102	+20	−1.1	−1.8	d	June 17	244,872	Flightradar24
Commercial flights	Worldwide	+8	+33	+61	+200	+12	+4.3	−0.5	d	June 17	137,056	Flightradar24
Seat capacity per month	Worldwide	+7.1	+23	+68	+198	+3.2		+1	w	June 17 week	119.3m	OAG
Air traffic (flights)	Europe					−3.1	+9.5	+0.3	d	June 17	34,375	Eurocontrol
Heathrow airport passengers	UK	+6.7	+34	+963	+3,047	+6	+7		m	May	7.18m	Heathrow. See related story

Aviation Indicators Weekly: Warming Up for Summer Peak



Refineries:

Measure	Location	vs 2023	vs 2022	vs 2021	vs 2019	m/m chg	Latest as of Date	Latest Value	Source
				Changes are in ppt unless noted					
Crude intake	US	+2.8	+4.5	+7	−0.1	+4.9	June 7	17.05m b/d	EIA

Utilization	US	+1.3	+1.3	+3.7	+1.8	+4.6	June 7	95	EIA
Utilization	US Gulf	+0.2	−0.6	+3	+1.7	+3.2	June 7	95.9	EIA
Utilization	US East	−3.8	−13	−4.5	−7	−2.4	June 7	85.2	EIA
Utilization	US Midwest	+5.3	+5.3	+7.3	+10	+7.4	June 7	98.2	EIA
Utilization (indep. refs)	Shandong, China	−10	−14	−20	−8.3	−3	June 14	51.88	Oilchem

Note: Changes in percentages for crude intake; refinery utilization changes shown in percentage points.

Congestion:

- Oil Price Weekly: More Stock Draws Key To Sustaining Rally

--With assistance from Prejula Prem.

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https://newsroom.aaa.com/2024/06/july-4th/

Nearly 71 Million People Expected to Travel over July 4th Week

This year's extended Independence Day forecast exceeds pre-pandemic numbers, sets new record

Aixa DiazMedia Relations Manager ADiaz@national.aaa.com

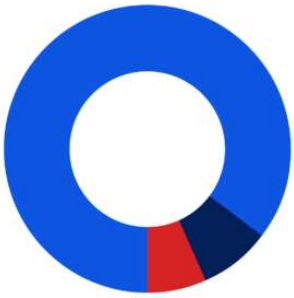
6/20/2024

WASHINGTON, DC (June 20, 2024) – AAA projects 70.9 million travelers will head 50 miles or more from home over the Independence Day holiday travel period*. For the first time, AAA looked at the entire July 4th week, plus the Saturday before and the Sunday after the holiday. This year's projected number of travelers for that time period is a 5% increase compared to 2023 and an 8% increase over 2019.

"With summer vacations in full swing and the flexibility of remote work, more Americans are taking extended trips around Independence Day," said Paula Twidale, Senior Vice President of AAA Travel. "We anticipate this July 4th week will be the busiest ever with an additional 5.7 million people traveling compared to 2019."

2024 Independence Day Travel Forecast

Share of Travelers by Mode



Number of Travelers by Mode

	Auto	Air	Other	Total
2024 (forecast)	60.6M	5.74M	4.62M	70.9M
2023	57.8M	5.37M	4.24M	67.4M
2019	55.3M	5.11M	4.79M	65.2M
Growth* (2023 to 2024)	4.8%	6.8%	9.0%	5.2%
Growth* (2019 to 2024)	9.5%	12.3%	-3.5%	8.8%

*Percentages may differ due to rounding. | *Source:* S&P Global Market Intelligence

AAA projects a record 60.6 million people will travel by car over Independence Day week – that's an additional 2.8 million travelers compared to last year. This year's number also surpasses 2019 when 55.3 million people traveled by car over July 4th week. AAA car rental partner Hertz says Dallas, Denver, Salt Lake City, Los Angeles, and San Francisco are the cities displaying the highest rental demand during the holiday week. The busiest

pick-up days are projected to be Friday, June 28, Saturday, June 29, and Wednesday, July 3.

Gas prices are lower than last year when the national average was $3.53. Pump prices will likely continue going down leading up to Independence Day. At that point, they will likely level off and remain relatively stable until after Labor Day, similar to last year. An important caveat is hurricane season – underway now – which could affect gas prices should a storm negatively impact Gulf Coast oil production and refining centers.

The number of air travelers is also expected to set a new record. AAA projects 5.74 million people will fly to their July 4th destinations. That's an increase of nearly 7% compared to last year and a 12% increase over 2019. AAA booking data shows domestic airfare is 2% cheaper this Independence Day week compared to last year, and the average price for a domestic roundtrip ticket is $800. Airports will be packed throughout the week. AAA recommends arriving 2 hours early, reserving parking ahead of time, and traveling with carry-on luggage versus checked bags to save time and money.

More than 4.6 million people are expected to travel by other modes of transportation, including buses, cruises, and trains. This category is seeing an increase of 9% compared to last year, but this year's number is shy of 2019's figure of 4.79 million. Cruising continues its remarkable post-pandemic comeback. This time of year, Alaska cruises are in high demand, making Seattle and Anchorage top domestic destinations. Cruise travelers are also finding deals this summer. With new ships coming onto the market – and going for a premium – some cruise lines have been offering targeted discounts to fill older inventory for remaining cabins.

Best/Worst Times to Drive and Peak Congestion by Metro

INRIX, a provider of transportation data and insights, says the worst times to travel by car before and on July 4th are between 2pm and 7pm. Drivers should hit the road in the morning, and travelers returning on Monday, July 8th should avoid rush hour traffic in the morning and afternoon.

"Drivers in large metro areas can expect the worst traffic delays on Wednesday, July 3rd, as they leave town, and Sunday, July 7th, as they return," said Bob Pishue, transportation analyst at INRIX. "Road trips over the holiday week could take up to 67% longer than normal. Travelers should monitor 511 services, local news stations, and traffic apps for up-to-the-minute road conditions."

Please note that the times listed below are for the time zone in which the metro is located.

For example, Atlanta routes = ET and Los Angeles routes = PT.

Best and Worst Times to Travel by Car

Date	Worst Travel Time	Best Travel Time
Monday, Jul 1	Minimal Traffic Impact Expected	
Tuesday, Jul 2	2:00 – 6:00 PM	After 7:00 PM
Wednesday, Jul 3	2:00 – 7:00 PM	Before Noon
Thursday, Jul 4	2:00 – 7:00 PM	Before Noon
Friday, Jul 5	11:00 AM – 4:00 PM	Before 10:00 AM
Saturday, Jul 6	10:30 AM – 2:30 PM	Before 10:00 AM
Sunday, Jul 7	2:00 – 8:00 PM	Before 11:00 AM
Monday, Jul 8	1:00 – 5:00 PM	After 7:00 PM

Source: INRIX

Peak Congestion by Metro

Metro	Route	Peak Congestion Period	Est. Travel Time	Increase Compared to Typical
Atlanta	Birmingham to Atlanta via I-20 E	Sunday 7th 6:30 PM	3 hours 36 minutes	42%
Boston	Boston to Hyannis via Pilgrim Hwy S	Thursday 4th 1:45 PM	1 hour 51 minutes	31%
Chicago	Chicago to Indianapolis via I-65 S	Wednesday 3rd 2:45 PM	4 hours 59 minutes	61%
Denver	Fort Collins to Denver via I-25 S	Monday 8th 7:30 AM	1 hour 37 minutes	56%
Detroit	Toronto to Detroit via I-94 W	Monday 8th 3:30 PM	5 hours 35 minutes	29%
Houston	San Antonio to Houston via I-10 E	Saturday 6th 1:30 PM	3 hours 48 minutes	41%
Los Angeles	Bakersfield to Los Angeles via I-5 S	Monday 8th 2:15 PM	1 hour 47 minutes	29%
Minneapolis	Eau Claire to Minneapolis via I-94 W	Monday 8th 4:45 PM	1 hour 43 minutes	31%
New York	Jersey Shore to New York via Garden State Pkwy N	Sunday 7th 2:15 PM	1 hour 25 minutes	40%
Philadelphia	Poconos to Philadelphia via PA Turnpike	Monday 8th 8:30 AM	3 hours 17 minutes	50%
Portland	Portland to Eugene via I-5 S	Wednesday 3rd 5:00 PM	2 hours 20 minutes	35%
San Diego	San Diego to Palm Springs via I-15 N	Thursday 4th 6:00 PM	2 hours 55 minutes	16%
San Francisco	San Francisco to Monterey via Santa Cruz Hwy S	Tuesday 2nd 5:45 PM	2 hours 31 minutes	19%
Seattle	Ellensburg to Seattle via I-90 E	Sunday 7th 4:30 PM	2 hours 19 minutes	35%
Tampa	Tampa to Orlando via I-4 E	Wednesday 3rd 10:15 AM	1 hour 54 minutes	58%
Washington DC	Baltimore to Washington DC via Balt/Wash Pkwy S	Monday 8th 3:15 PM	1 hour 1 minute	67%

Source: INRIX

Top Destinations

This July 4th week, travelers are cooling off in the Pacific Northwest and Alaska – and by the ocean! Seattle, Vancouver, and Anchorage are top destinations because of the

popularity of Alaska cruises this time of year. Beaches in South Florida, Honolulu, Punta Cana, and Barcelona are in high demand. Historical sites in European cities like London, Rome, Dublin, Paris, and Athens are also popular. The top 10 domestic and international destinations below are based on AAA booking data.

DOMESTIC	INTERNATIONAL
Seattle, WA	Vancouver, BC, Canada
Orlando, FL	London, England
Anchorage, AK	Rome, Italy
Honolulu, HI	Dublin, Ireland
Miami, FL	Paris, France
New York, NY	Calgary, AB, Canada
Fort Lauderdale, FL	Amsterdam, Netherlands
Las Vegas, NV	Punta Cana, Dominican Republic
Denver, CO	Athens, Greece
Anaheim/Los Angeles, CA	Barcelona, Spain

Family Road Trip Checklist

With road trips expected to set a new record this July 4th week, AAA teamed up with Chicco to share safety tips for families with young children.

- **Check car seat fit.** Before you hit the road, check your child's weight and height to ensure they're in the right seat and mode of use – especially when it comes to transitioning from rear to forward-facing. Children should remain rear-facing as long as possible for better protection of their head, neck, and spine in the event of a crash. If you are unsure which car seat is best for your child, Chicco offers a car seat comparison guide.

- **Double check car seat installation.** Even if your car seat is already installed in the car, it's worth checking everything is safe and secure. An easy at-home way to do this is with the "inch test." Simply grab the seat at the car seat belt path and pull side to side and front to back. If it moves more than one inch in any direction, uninstall and start over until a secure fit is achieved. For any questions, utilize the car seat manual, QR codes, or online resources like those offered by Chicco.

- **Secure loose items in the car.** Take time to organize and clean up your car before hitting the road. Storage organizers that secure to the back of the driver and passenger seats are simple solutions to make sure everything has a spot, especially loose items that can become projectiles in case of a sudden stop.

- **Be prepared for the unexpected.** Pack an emergency kit with first-aid supplies, water, snacks, blankets, jumper cables, and flares. Make sure your phone is fully charged – and keep a charger in the car – to call AAA or request roadside assistance digitally if your battery dies, you lock yourself out, or you need a tow.

- **Map your route.** Families with young children should plan for frequent and longer stops along the way. Map out your route ahead of time with AAA TripTik and browse hotels, restaurants, and other activities along the way on AAA Trip Canvas.

- **Bring entertainment.** Make sure to place toys and books within reach to keep children entertained. If your kids use tablets or other electronics, make sure the devices are fully charged and pre-downloaded before leaving home. Another fun way to get the whole family excited for the road trip is to create a family playlist of everyone's favorite songs!

Holiday Forecast Methodology

Travel Forecast

In cooperation with AAA, S&P Global Market Intelligence (SPGMI) developed a unique methodology to forecast actual domestic travel volumes. The economic variables used to forecast travel for the current holiday are leveraged from SPGMI's proprietary databases. These data include macroeconomic drivers such as employment, output, household net worth, asset prices, including stock indices, interest rates, housing market indicators, and variables related to travel and tourism, including gasoline prices, airline travel, and hotel stays. AAA and SPGMI have quantified holiday travel volumes going back to 2000.

Historical travel volume estimates come from DK SHIFFLET's TRAVEL PERFORMANCE/MonitorSM. The PERFORMANCE/MonitorSM is a comprehensive study measuring the travel behavior of U.S. residents. DK SHIFFLET contacts over 50,000 U.S. households each month to obtain detailed travel data, resulting in the unique ability to estimate visitor volume and spending, identify trends, and forecast U.S. travel behavior, all after the trips have been taken.

The travel forecast is reported in person-trips. In particular, AAA and SPGMI forecast the total U.S. holiday travel volume and expected mode of transportation. The travel forecast presented in this report was prepared the week of May 27, 2024.

Because AAA forecasts focus on domestic leisure travel only, comparisons to TSA passenger screening numbers should not be made. TSA data includes all passengers traveling on both domestic and international routes. Additionally, TSA screens passengers each time they enter secured areas of the airport, therefore each one-way trip is counted as a passenger tally. AAA focuses on person-trips, which include the full round-trip travel itinerary. As a result, direct comparisons of AAA forecast volumes and daily TSA screenings represent different factors.

***Independence Day Holiday Travel Period**

For this forecast, the Independence Day holiday travel period is defined as the nine-day period from Saturday, June 29 to Sunday, July 7. Historically, the Independence Day holiday period included only one weekend. This is the first year the Independence Day holiday travel period is a longer timeframe with two weekends included.

About AAA

Started in 1902 by automotive enthusiasts who wanted to chart a path for better roads in America and advocate for safe mobility, AAA has transformed into one of North America's largest membership organizations. Today, AAA provides roadside assistance, travel, discounts, financial and insurance services to enhance the life journey of 64 million members across North America, including 57 million in the United States. To learn more about all AAA has to offer or to become a member, visit AAA.com.

About S&P Global

S&P Global (NYSE: SPGI) provides essential intelligence. We enable governments, businesses, and individuals with the right data, expertise, and connected technology so that they can make decisions with conviction. From helping our customers assess new investments to guiding them through ESG and energy transition across supply chains, we unlock new opportunities, solve challenges, and accelerate progress for the world. We are widely sought after by many of the world's leading organizations to provide credit ratings, benchmarks, analytics, and workflow solutions in the global capital, commodity, and automotive markets. With every one of our offerings, we help the world's leading organizations plan for tomorrow today. For more information, visit www.spglobal.com.

About DKSA

DK SHIFFLET boasts the industry's most complete database on U.S. resident travel both in the U.S. and worldwide. Data is collected monthly from a U.S. representative sample, adding over 60,000 traveling households annually, and is used daily by leading travel organizations and their strategic planning groups. DK SHIFFLET is an MMGY Global company.

About INRIX

Founded in 2004, INRIX pioneered intelligent mobility solutions by transforming big data from connected devices and vehicles into mobility insights. This revolutionary approach enabled INRIX to become one of the leading providers of data and analytics into how people move. By empowering cities, businesses, and people with valuable insights, INRIX is helping to make the world smarter, safer, and greener. With partners and solutions spanning across the entire mobility ecosystem, INRIX is uniquely positioned at the intersection of technology and transportation – whether it's keeping road users safe, improving traffic signal timing to reduce delay and greenhouse gasses, optimizing last mile delivery, or helping uncover market insights. Learn more at INRIX.com.

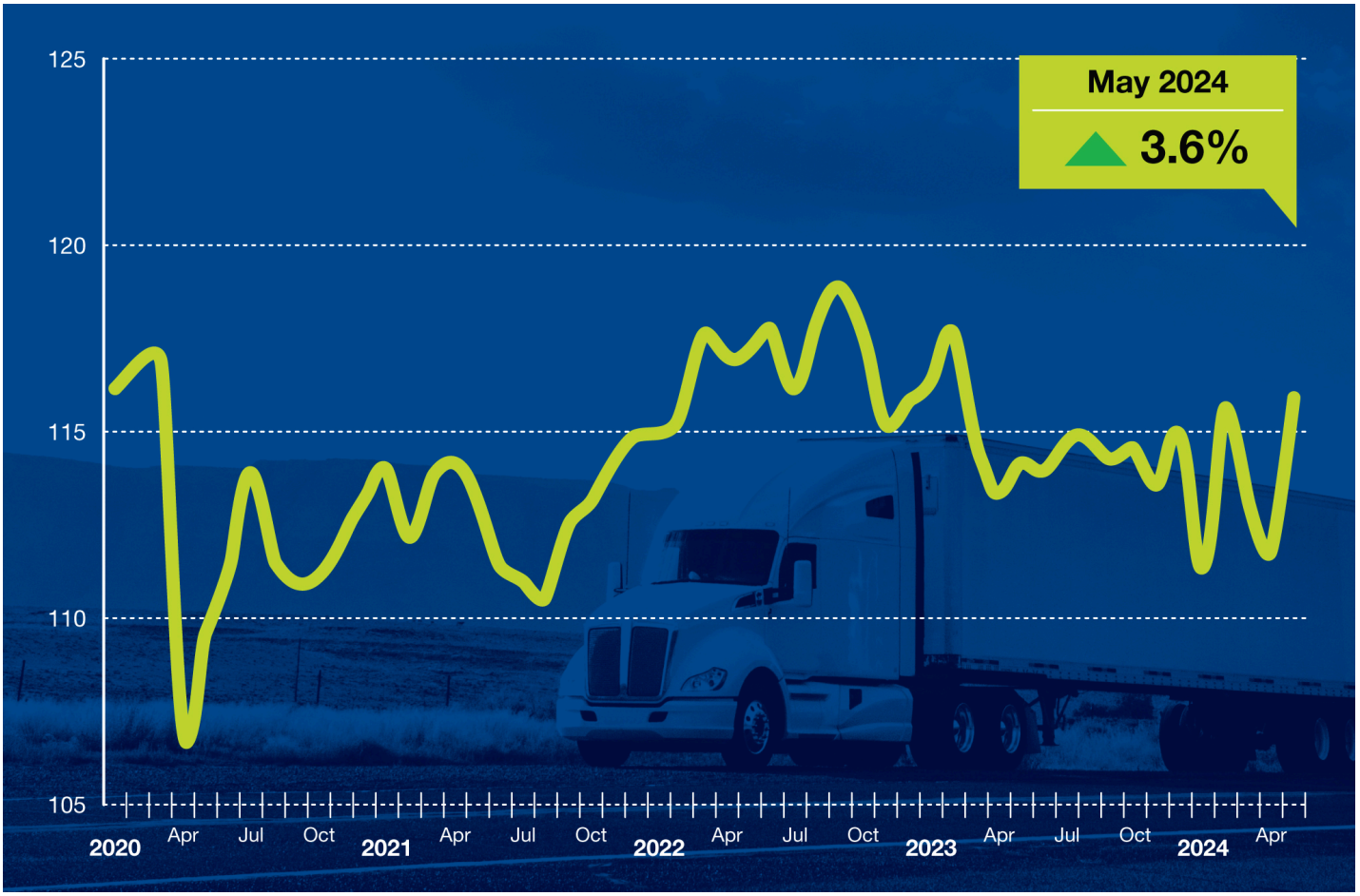
Press Release

ATA Truck Tonnage Index Jumped 3.6% in May

Jun 18, 2024

Index Rose 1.5% from May 2023

Washington — American Trucking Associations' advanced seasonally adjusted For-Hire Truck Tonnage Index increased 3.6% in May after decreasing 1% in April. In May, the index equaled 115.9 (2015=100) compared with 111.9 in April.



“May was the first month since February 2023 that tonnage increased both sequentially and from a year earlier,” said **ATA Chief Economist Bob Costello.** “While there was clearly an increase in freight before the Memorial Day holiday, it is still too early to say whether this is the start of a long-awaited recovery in the truck freight market.”

April’s decrease was revised up slightly from our May 21 press release.

Compared with May 2023, the index rose 1.5%, the first year-over-year gain in fifteen months. In April, the index was down 1.3% 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 120.4 in May, 7.1% above April. ATA’s For-Hire Truck Tonnage Index is dominated by contract freight as opposed to spot market freight.

In calculating the index, 100 represents 2015.

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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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

https://www.nhc.noaa.gov/aboutgloss.shtml

Glossary of NHC Terms

Advisory:

Official information issued by tropical cyclone warning centers describing all tropical cyclone watches and warnings in effect along with details concerning tropical cyclone locations, intensity and movement, and precautions that should be taken. Advisories are also issued to describe: (a) tropical cyclones prior to issuance of watches and warnings and (b) subtropical cyclones.

Best Track:

A subjectively-smoothed representation of a tropical cyclone's location, intensity, type, and size over its lifetime. The best track contains the cyclone's latitude, longitude, maximum sustained surface winds, minimum sea-level pressure, stage (e.g., tropical, extratropical, remnant low, etc.), and size (e.g., radius of maximum winds, hurricane-force winds, 50-kt winds, and tropical storm-force winds) at 6-hourly intervals and at landfall for tropical storms and hurricanes. These best track attributes, based on a post-storm assessment of all available data, may differ from values contained in system advisories. The best track locations also generally will not reflect the erratic motion implied by connecting individual center fix positions.

Center:

Generally speaking, the vertical axis of a tropical cyclone, usually defined by the location of minimum wind or minimum pressure. The cyclone center position can vary with altitude. In advisory products, refers to the center position at the surface.

Center / Vortex Fix:

The location of the center of a tropical or subtropical cyclone obtained by reconnaissance aircraft penetration, satellite, radar, or synoptic data.

Central Dense Overcast:

A dense mass of clouds that covers the eyewall or the most tightly curved inner bands of a tropical cyclone.

Central North Pacific Basin:

The region north of the Equator between 140W and the International Dateline. The Central Pacific Hurricane Center (CPHC) in Honolulu, Hawaii is responsible for tracking tropical cyclones in this region.

Cyclone:

An atmospheric closed circulation rotating counter-clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.

Direct Hit:

A close approach of a tropical cyclone to a particular location. For locations on the left-hand side of a tropical cyclone's track (looking in the direction of motion), a direct hit occurs when the cyclone passes to within a distance equal to the cyclone's radius of maximum wind. For locations on the right-hand side of the track, a direct hit occurs when the cyclone passes to within a distance equal to twice the radius of maximum wind. Compare indirect hit, strike.

Eastern North Pacific Basin:

The portion of the North Pacific Ocean east of 140W. The National Hurricane Center in Miami, Florida is responsible for tracking tropical cyclones in this region.

Eye:

The roughly circular area of comparatively light winds that encompasses the center of a severe tropical cyclone. The eye is either completely or partially surrounded by the eyewall cloud.

Eyewall / Wall Cloud:

An organized band or ring of cumulonimbus clouds that surround the eye, or light-wind center of a tropical cyclone. Eyewall and wall cloud are used synonymously.

Extratropical:

A term used in advisories and tropical summaries to indicate that a cyclone has lost its "tropical" characteristics. The term implies both poleward displacement of the cyclone and the conversion of the cyclone's primary energy source from the release of latent heat of condensation to baroclinic (the temperature contrast between warm and cold air masses) processes. It is important to note that cyclones can become extratropical and still retain winds of hurricane or tropical storm force.

Extratropical Cyclone:

A cyclone of any intensity for which the primary energy source is baroclinic, that is, results from the temperature contrast between warm and cold air masses.

Fujiwhara Effect:

The tendency of two nearby tropical cyclones to rotate cyclonically about each other.

Gale Warning:

A warning of 1-minute sustained surface winds in the range 34 kt (39 mph or 63 km/hr) to 47 kt (54 mph or 87 km/hr) inclusive, either predicted or occurring and not directly associated with tropical cyclones.

High Wind Warning:

A high wind warning is defined as 1-minute average surface winds of 35 kt (40 mph or 64 km/hr) or greater lasting for 1 hour or longer, or winds gusting to 50 kt (58 mph or 93 km/hr) or greater regardless of duration that are either expected or observed over land.

Hurricane / Typhoon:

A tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is 64 kt (74 mph or 119 km/hr) or more. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline.

Hurricane Local Statement:

A public release prepared by local National Weather Service offices in or near a threatened area giving specific details for its county/parish warning area on (1) weather conditions, (2) evacuation decisions made by local officials, and (3) other precautions necessary to protect life and property.

Hurricane Season:

The portion of the year having a relatively high incidence of hurricanes. The hurricane season in the Atlantic, Caribbean, and Gulf of Mexico runs from June 1 to November 30. The hurricane season in the Eastern Pacific basin runs from May 15 to November 30. The hurricane season in the Central Pacific basin runs from June 1 to November 30.

Hurricane Warning:

An announcement that sustained winds of 64 knots (74 mph or 119 km/hr) or higher are *expected* somewhere within the specified area in association with a tropical, subtropical, or post-tropical cyclone. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds. The warning can remain in effect when dangerously high water or a combination of dangerously high water and waves continue, even though winds may be less than hurricane force.

Hurricane Watch:

An announcement that sustained winds of 64 knots (74 mph or 119 km/hr) or higher are *possible* within the specified area in association with a tropical, subtropical, or post-tropical cyclone. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours in advance of the anticipated onset of tropical storm force winds.

Indirect Hit:

Generally refers to locations that do not experience a direct hit from a tropical cyclone, but do experience hurricane force winds (either sustained or gusts) or tides of at least 4 feet above normal.

Inter-Tropical Convergence Zone:

A zonally elongated axis of surface wind confluence of northeasterly and southeasterly trade winds in the tropics.

Invest:

A weather system for which a tropical cyclone forecast center (NHC, CPHC, or JTWC) is interested in collecting specialized data sets (e.g., microwave imagery) and/or running model guidance. Once a system has been designated as an invest, data collection and processing is initiated on a number of government and academic web sites, including the Naval Research Laboratory (NRL) and the University of Wisconsin Cooperative Institute for Meteorological Satellite Studies (UW-CIMSS). The designation of a system as an invest does not correspond to any particular likelihood of development of the system into a tropical cyclone; operational products such as the Tropical Weather Outlook or the JTWC/TCFA should be consulted for this purpose.

Inundation:

The flooding of normally dry land, primarily caused by severe weather events along the coasts, estuaries, and adjoining rivers. These storms, which include hurricanes and nor'easters, bring strong winds and heavy rains. The winds drive large waves and storm surge on shore, and heavy rains raise rivers. (A tsunami — a giant wave caused by earthquakes or volcanic eruptions under the sea or landslides into the sea — is another kind of coastal inundation, but should not be confused with storm surge.)

Landfall:

The intersection of the surface center of a tropical cyclone with a coastline. Because the strongest winds in a tropical cyclone are not located precisely at the center, it is possible for a cyclone's strongest winds to be experienced over land even if landfall does not occur. Similarly, it is possible for a tropical cyclone to make landfall and have its strongest winds remain over the water. Compare direct hit, indirect hit, and strike.

Major Hurricane:

A hurricane that is classified as Category 3 or higher.

Maximum Sustained Surface Wind:

The standard measure of a tropical cyclone's intensity. When the term is applied to a particular weather system, it refers to the highest one-minute average wind (at an elevation of 10 meters with an unobstructed exposure) associated with that weather system at a particular point in time.

Monsoon:

A large-scale, seasonally-reversing surface wind circulation in the tropics accompanied by large amplitude seasonal changes in precipitation.

Monsoon Trough:

A surface trough in association with a monsoon circulation. This is depicted by a line on a weather map showing the location of minimum sea level pressure coinciding with the maximum cyclonic turning of the surface winds, with southwesterly or northwesterly flow prevailing equatorward and northeasterly flow prevailing poleward of the typically zonally oriented trough axis.

National Geodetic Vertical Datum of 1929 [NGVD 1929]:

A fixed reference adopted as a standard geodetic datum for elevations determined by leveling. The datum was derived for surveys from a general adjustment of the first-order leveling nets of both the United States and

Canada. In the adjustment, mean sea level was held fixed as observed at 21 tide stations in the United States and 5 in Canada. The year indicates the time of the general adjustment. A synonym for Sea-level Datum of 1929. The geodetic datum is fixed and does not take into account the changing stands of sea level. Because there are many variables affecting sea level, and because the geodetic datum represents a best fit over a broad area, the relationship between the geodetic datum and local mean sea level is not consistent from one location to another in either time or space. For this reason, the National Geodetic Vertical Datum should not be confused with mean sea level.

Post-storm Report:

A report issued by a local National Weather Service office summarizing the impact of a tropical cyclone on its forecast area. These reports include information on observed winds, pressures, storm surges, rainfall, tornadoes, damage and casualties.

Post-tropical Cyclone:

A former tropical cyclone. This generic term describes a cyclone that no longer possesses sufficient tropical characteristics to be considered a tropical cyclone. Post-tropical cyclones can continue carrying heavy rains and high winds. Note that former tropical cyclones that have become fully extratropical...as well as remnant lows...are two classes of post-tropical cyclones.

Potential Tropical Cyclone:

A term used in NWS advisory products to describe a disturbance that is not yet a tropical cyclone, but which poses the threat of bringing tropical storm or hurricane conditions to land areas within 48 hours.

Preliminary Report:

Now known as the "Tropical Cyclone Report". A report summarizing the life history and effects of an Atlantic or eastern Pacific tropical cyclone. It contains a summary of the cyclone life cycle and pertinent meteorological data, including the post-analysis best track (six-hourly positions and intensities) and other meteorological statistics. It also contains a description of damage and casualties the system produced, as well as information on forecasts and warnings associated with the cyclone. NHC writes a report on every tropical cyclone in its area of responsibility.

Present Movement:

The best estimate of the movement of the center of a tropical cyclone at a given time and given position. This estimate does not reflect the short-period, small scale oscillations of the cyclone center.

Radius of Maximum Winds:

The distance from the center of a tropical cyclone to the location of the cyclone's maximum winds. In well-developed hurricanes, the radius of maximum winds is generally found at the inner edge of the eyewall.

Rapid Intensification:

An increase in the maximum sustained winds of a tropical cyclone of at least 30 kt in a 24-h period.

Relocated:

A term used in an advisory to indicate that a vector drawn from the preceding advisory position to the latest known position is not necessarily a reasonable representation of the cyclone's movement.

Remnant Low:

A post-tropical cyclone that no longer possesses the convective organization required of a tropical cyclone...and has maximum sustained winds of less than 34 knots. The term is most commonly applied to the nearly deep-convection-free swirls of stratocumulus in the eastern North Pacific.

Saffir-Simpson Hurricane Wind Scale:

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time. The scale provides examples of the type of damage and impacts in the United States associated with winds of the indicated intensity. The following table shows the scale broken down by winds:

Category	Wind Speed (mph)	Damage
1	74 - 95	Very dangerous winds will produce some damage
2	96 - 110	Extremely dangerous winds will cause extensive damage
3	111 - 129	Devastating damage will occur
4	130 - 156	Catastrophic damage will occur
5	> 156	Catastrophic damage will occur

A detailed description of the Saffir-Simpson Hurricane Wind Scale is available at http://www.nhc.noaa.gov/aboutsshws.php.

Storm Surge:

An abnormal rise in sea level accompanying a hurricane or other intense storm, and whose height is the difference between the observed level of the sea surface and the level that would have occurred in the absence of the cyclone. Storm surge is usually estimated by subtracting the normal or astronomic high tide from the observed storm tide.

Storm Surge Warning:

The danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours, in association with an ongoing or potential tropical cyclones, a subtropical cyclone or a post-tropical cyclone. The warning may be issued earlier when other conditions, such as the onset of tropical-storm-force winds are expected to limit the time available to take protective actions for surge (e.g., evacuations). The warning may also be issued for locations not expected to receive life-threatening inundation but which could potentially be isolated by inundation in adjacent areas.

Storm Surge Watch:

The possibility of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 48 hours, in association with an ongoing or potential tropical cyclones,

a subtropical cyclone or a post-tropical cyclone. The watch may be issued earlier when other conditions, such as the onset of tropical-storm-force winds are expected to limit the time available to take protective actions for surge (e.g., evacuations). The warning may also be issued for locations not expected to receive life-threatening inundation but which could potentially be isolated by inundation in adjacent areas.

Storm Tide:

The actual level of sea water resulting from the astronomic tide combined with the storm surge.

Storm Warning:

A warning of 1-minute sustained surface winds of 48 kt (55 mph or 88 km/hr) or greater, either predicted or occurring, not directly associated with tropical cyclones.

Strike:

For any particular location, a hurricane strike occurs if that location passes within the hurricane's strike circle, a circle of 125 n mi diameter, centered 12.5 n mi to the right of the hurricane center (looking in the direction of motion). This circle is meant to depict the typical extent of hurricane force winds, which are approximately 75 n mi to the right of the center and 50 n mi to the left.

Subtropical Cyclone:

A non-frontal low-pressure system that has characteristics of both tropical and extratropical cyclones. Like tropical cyclones, they are non-frontal, synoptic-scale cyclones that originate over tropical or subtropical waters, and have a closed surface wind circulation about a well-defined center. In addition, they have organized moderate to deep convection, but lack a central dense overcast. Unlike tropical cyclones, subtropical cyclones derive a significant proportion of their energy from baroclinic sources, and are generally cold-core in the upper troposphere, often being associated with an upper-level low or trough. In comparison to tropical cyclones, these systems generally have a radius of maximum winds occurring relatively far from the center (usually greater than 60 n mi), and generally have a less symmetric wind field and distribution of convection.

Subtropical Depression:

A subtropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.

Subtropical Storm:

A subtropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 34 kt (39 mph or 63 km/hr) or more.

Synoptic Track:

Weather reconnaissance mission flown to provide vital meteorological information in data sparse ocean areas as a supplement to existing surface, radar, and satellite data. Synoptic flights better define the upper atmosphere and aid in the prediction of tropical cyclone development and movement.

Tropical Cyclone:

A warm-core non-frontal synoptic-scale cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation about a well-defined center. Once formed, a tropical cyclone is maintained by the extraction of heat energy from the ocean at high temperature and heat export at the low temperatures of the upper troposphere. In this they differ from extratropical cyclones, which derive their energy from horizontal temperature contrasts in the atmosphere (baroclinic effects).

Tropical Cyclone Plan of the Day:

A coordinated mission plan that tasks operational weather reconnaissance requirements during the next 1100 to 1100 UTC day or as required, describes reconnaissance flights committed to satisfy both operational and research requirements, and identifies possible reconnaissance requirements for the succeeding 24-hour period.

Tropical Depression:

A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.

Tropical Disturbance:

A discrete tropical weather system of apparently organized convection -- generally 100 to 300 nmi in diameter -- originating in the tropics or subtropics, having a nonfrontal migratory character, and maintaining its identity for 24 hours or more. It may or may not be associated with a detectable perturbation of the wind field.

Tropical Storm:

A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) ranges from 34 kt (39 mph or 63 km/hr) to 63 kt (73 mph or 118 km/hr).

Tropical Storm Warning:

An announcement that sustained winds of 34 to 63 knots (39 to 73 mph or 63 to 118 km/hr) are *expected* somewhere within the specified area within 36 hours in association with a tropical, subtropical, or post-tropical cyclone.

Tropical Storm Watch:

An announcement that sustained winds of 34 to 63 knots (39 to 73 mph or 63 to 118 km/hr) are *possible* within the specified area within 48 hours in association with a tropical, subtropical, or post-tropical cyclone.

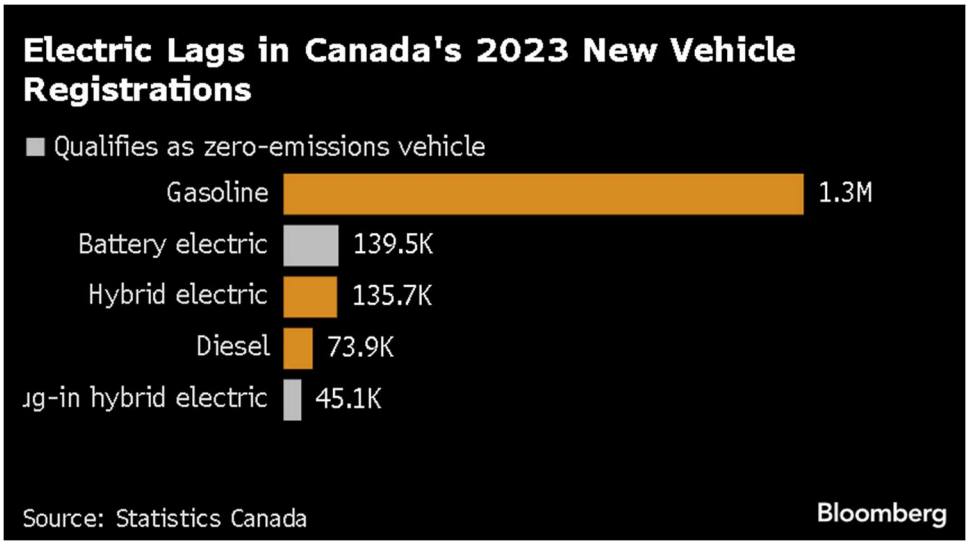
Tropical Wave:

A trough or cyclonic curvature maximum in the trade-wind easterlies. The wave may reach maximum amplitude in the lower middle troposphere.

within 48 hours in association with a tropical, subtropical, or post-tropical cyclone.

Canada Can’t Meet Goal of 100% EV Sales by 2035, Automakers Say
2024-06-19 13:27:48.153 GMT

By Monique Mulima
(Bloomberg) -- Automakers in Canada say it’s doubtful there will be enough consumer demand for electric vehicles to reach the government’s target of phasing out new gasoline-powered vehicles by 2035.
Executives at Toyota Motor Corp. and Honda Motor Co. expect that consumers will switch to EVs if they are more affordable, can meet their range needs and if there is sufficient charging infrastructure. But those conditions haven’t been met.
“We need to make sure that we’re revisiting targets to align targets with reality,” Frank Voss, president of Toyota Motor Manufacturing Canada, said in an interview with Bloomberg. “The government can only do so much to entice consumers to purchase vehicles that they would like to see implemented. Consumers will choose what they need.”
EVs are still a small part of the market. Just 11% of new vehicles registered in Canada in 2023 were battery electric, plug-in hybrid electric or hydrogen fuel cell. BloombergNEF recently lowered its estimates for EV sales in Canada, estimating that by 2035, they will make up around 70% of new passenger vehicle sales.



The average price of a new vehicle in Canada is C$66,000 (about $48,000), while the average price of a new battery electric vehicle is C$73,000, according to Canadian Black Book.
The government says its incentive program, which provides as much as C$5,000 to buyers of zero-emissions vehicles, has helped make EVs more affordable and increase sales.
Yet many potential EV buyers are hesitant. In below freezing temperatures, lithium-ion batteries can lose over 20%

of their range, according to Recurrent, a Seattle-based startup that assesses EV batteries. But automakers like Toyota say range is an issue they are trying to address, while balancing weight and size concerns.

Then there's range anxiety in a huge country where there's often long distances between major cities. Canada aims to have 84,500 chargers and 45 hydrogen stations by 2029, funded in part through the government's Zero Emission Vehicle Infrastructure Program. Natural Resources Canada estimates the nation will need around 200,000 public chargers by 2035, but is hopeful the private sector will fund chargers as well.

Members of the auto parts industry have been calling on the Canadian government to more closely align its emissions targets with the US, which has a less aggressive emissions target that may imply more than 50% of new vehicle sales being battery electric by 2032.

But Prime Minister Justin Trudeau's government is sticking with its environmental goals. "The Government of Canada will continually assess progress towards its ambitious zero-emission vehicle sales targets to meet our climate change commitments," Hicham Ayoun, a Transport Canada spokesperson, said in an email.

Despite Honda's concerns about the pace of consumer adoption, it is still planning to invest billions on EV manufacturing in Canada, from which it will also serve parts of the US market.

"There's a lot of things that need to fall into place to give people the confidence to make the transition," Jean Marc Leclerc, chief executive officer of Honda Canada, said in an interview. "It may not be fully there today to support the rate of adoption that we're asked to deliver, but we know it's going to be there."

Read More: Honda to Spend $11 Billion on Canada Electric Vehicle Plan

The plan is expand the carmaker's operation in Alliston, Ontario, to make hybrid and electric vehicles to respond to changing consumer needs, Leclerc said. Hybrid vehicles can be an easier sell for consumers who have hesitations about going all-electric. But if they don't plug in, they don't count toward the government's zero-emission vehicle targets because they still use internal combustion engines.

Leclerc said Honda aims to lower battery costs by 20% and manufacturing costs by 35% for cars manufactured in Ontario by using a local supply chain for raw materials, which will reduce transportation costs.

Toyota, however, is holding off on building EVs in Canada for now. The company is cautious as the demand and support for electrification aren't there yet, Voss said. It's focusing on the transition to hybrid vehicles in the meantime.

"Even with my plug-in hybrid, last week I was in Toronto, I

went to two different locations, all five chargers didn't work," Voss said. "Infrastructure, as it becomes more capable and catches up, it'll be a great support to that."

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Press Summary

20 June 2024

R (on the application of Finch on behalf of the Weald Action Group) (Appellant) *v* Surrey County Council and others (Respondents)

[2024] UKSC 20

On appeal from [2022] EWCA Civ 187

Justices: Lord Kitchin, Lord Sales, Lord Leggatt, Lady Rose and Lord Richards

Background to the Appeal

Before planning permission can be granted for a development project which is likely to have significant effects on the environment, legislation in the United Kingdom (and many other countries) requires an environmental impact assessment ("**EIA**") to be carried out. The legislation applicable in this case is contained in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the '**2017 Regulations**'), which implemented European Union Directive 92/11/EU (the '**EIA Directive**') in the UK. This requires an EIA to identify, describe and assess the likely "direct and indirect significant effects" of the project on the environment, including (among other factors) the impact on climate (for example, the nature and magnitude of greenhouse gas emissions). The process of assessment must include public consultation. The legislation does not prevent the planning authority from giving consent for a project that is likely to cause significant harm to the environment; but it requires the authority to reach a reasoned conclusion on the environmental impact and to take this conclusion into account in making its decision.

In this case a developer applied to Surrey County Council for planning permission to expand oil production from a well site at Horse Hill near Horley in Surrey. The proposed project would involve the extraction of oil from six wells over a period of 20 years. The project comes within a category for which an EIA is compulsory ("Extraction of petroleum … for commercial purposes where the amount extracted exceeds 500 tonnes/day").

The developer argued that, as regards the impact of the project on climate, the scope of the EIA should be confined to the direct releases of greenhouse gases from within the well site boundary during the lifetime of the project; and that the EIA need not include an assessment of the greenhouse gas emissions that would occur when the oil extracted from the wells was ultimately burnt elsewhere as fuel. The council accepted this approach. Its decision to grant

planning permission for the project was therefore made without assessing or taking into account the emissions that will occur upon combustion of the oil produced.

The claimant, a local resident, applied for judicial review of the council's decision. She argued that the decision was unlawful because the EIA was required to, but did not, include an assessment of the combustion emissions. The High Court rejected the claim, holding that the combustion emissions were not within the legal scope of the EIA Directive and 2017 Regulations; alternatively, whether to assess them was a matter of evaluative judgment for the council, which had given legally valid reasons for deciding not to do so. By a majority, the Court of Appeal upheld the judge's decision on the second of those grounds.

The claimant appealed to the Supreme Court.

Judgment

By a three-to-two majority, the Supreme Court allows the appeal and holds that the council's decision was unlawful because the emissions that will occur when the oil produced is burnt as fuel are within the scope of the EIA required by law.

Lord Leggatt, with whom Lord Kitchin and Lady Rose agree, gives the majority judgment. Lord Sales, with whom Lord Richards agrees, dissents.

Reasons for the Judgment

It is an agreed fact that, if the project goes ahead, it is not merely likely but inevitable that the oil produced from the well site will be refined and, as an end product, will eventually undergo combustion, and that that combustion will produce greenhouse gas emissions [**45**]. It is not disputed that these emissions will have a significant impact on climate. It is agreed that the amount of these emissions can be estimated using an established methodology; indeed, the council has provided such an estimate as part of its evidence in this case [**81**]. The issue is whether the combustion emissions constitute "direct or indirect … effects of the project" within the meaning of the EIA Directive and 2017 Regulations. If they are, they must be assessed as part of the EIA.

The Supreme Court is unanimous in rejecting the view of the Court of Appeal that this question requires an evaluative judgment about whether there is a sufficient causal connection between the extraction of the oil and its eventual combustion, on which different planning authorities could reasonably take opposite views. It is unreasonable to interpret the EIA Directive in a way that treats inconsistent answers to the question whether the combustion emissions are "effects of the project" as equally valid [**59**]–[**60**], [**321**]–[**325**].

The majority of the Court considers this question to be one of causation to which, on the agreed facts, only one answer can reasonably be given. The emissions that will occur on combustion of the oil produced are "effects of the project" because it is known with certainty that, if the project goes ahead, all the oil extracted from the ground will inevitably be burnt thereby releasing greenhouse gases into the earth's atmosphere in a quantity which can readily be estimated [**79**]–[**81**].

The EIA Directive does not impose any geographical limit on the scope of the environmental effects of a project that must be assessed. The council was therefore wrong to confine the EIA in this case to emissions expected to occur at the project site. It is in the very nature of "indirect" effects that they may occur away from their source [**101**]–[**103**]. Moreover, the impact of greenhouse gas emissions on climate does not depend on where the release occurs [**97**].

The judge considered that the emissions occurring on combustion cannot in law be regarded as effects of the project because what is burnt as fuel will not be the crude oil produced from the well site but an end product made at a separate facility where the oil will be refined. The Supreme Court rejects this argument. The process of refining crude oil does not alter its basic nature or intended use and cannot reasonably be regarded as breaking the causal connection between the extraction of the oil and its subsequent combustion. The judge was concerned about the implications of this conclusion for other projects: for example, a project to produce steel which is then used to manufacture parts for use in making motor vehicles or aircraft. If the greenhouse gas emissions that will result from the use of the motor vehicles or aircraft were regarded as indirect effects of the production of the steel, the EIA process would be unduly onerous and unworkable. The Court considers these concerns to be misplaced. Raw materials such as steel can be put to many possible uses, and the view might reasonably be taken that no meaningful assessment or estimate can be made of what emissions will ultimately result from its use. Oil is a very different commodity. There is no element of conjecture about what will ultimately happen to the oil; refining the oil does not change it into a different type of object (unlike the incorporation of a part in a motor vehicle or aircraft); and a reasonable estimate can readily be made of the emissions that will occur upon its inevitable combustion [**112**]–[**139**].

An argument that national planning policy is relevant to the scope of the EIA required by the EIA Directive is also rejected. The UK's national policy of encouraging domestic production of oil and gas is relevant to the decision of the planning authority whether to grant permission for the project. But it does not dispense with the requirement to assess the environmental impact of the project or justify limiting the scope of that assessment before the planning decision is taken. The purpose of the EIA is to ensure that, whatever the decision taken, it is taken with full knowledge and public awareness of the likely significant environmental consequences [**140**]–[**154**].

Consequently, the council's failure to assess the effect on climate of the combustion of the oil that would be produced from the proposed well site means that its decision to grant planning permission for the project was unlawful [**174**].

Lord Sales, dissenting, observes that the EIA Directive contemplates that decisions on the grant of planning consent will often be taken by local or regional authorities [**252**]. Downstream emissions are addressed by central governments at the level of national policy [**253**]. In his view, it would be constitutionally inappropriate for a local planning authority to assume practical decision-making authority based on its own views regarding downstream emissions [**256**] and it would also be contrary to the EU principle of proportionality [**260**].

The general scheme of the EIA Directive further indicates that the entirety of downstream emissions do not qualify as indirect effects of a project [**261**]. This is also clear from its text [**273**]. The formula used in the EIA Directive indicates that even indirect effects still have to be effects 'of the project' which on a natural reading does not include downstream emissions [**276**]. Lord Sales therefore agrees with the approach of the High Court in which the question is to be determined by a proper interpretation of the EIA Directive as a matter of law [**327**].

References in square brackets are to paragraphs in the judgment.

https://www.beehive.govt.nz/release/government-reverse-oil-and-gas-exploration-ban
9 JUNE 2024

Government to reverse oil and gas exploration ban

HON SHANE JONES

Resources

Removing the ban on petroleum exploration beyond onshore Taranaki is part of a suite of proposed amendments to the Crown Minerals Act to deal with the energy security challenges posed by rapidly declining natural gas reserves, Resources Minister Shane Jones says.

“Natural gas is critical to keeping our lights on and our economy running, especially during peak electricity demand and when generation dips because of more intermittent sources like wind, solar and hydro,” Mr Jones says.

“When the exploration ban was introduced by the previous government in 2018, it not only halted the exploration needed to identify new sources, but it also shrank investment in further development of our known gas fields which sustain our current levels of use.

“Without this investment, we are now in a situation where our annual natural gas production is expected to peak this year and undergo a sustained decline, meaning we have a security of supply issue barrelling towards us.”

Rebuilding investor confidence in New Zealand’s petroleum sector will require more than removing the ban. The Coalition Government is proposing further changes, agreed by Cabinet, to re-establish New Zealand as an attractive and secure destination for international investment. These changes were agreed in the New Zealand First and Act coalition agreements with the National Party.

“Our job as the Government is to provide the right policy settings to enable the sector to get to work, and that’s exactly what we are aiming to achieve through these amendments,” Mr Jones says.

“Some of our current settings are a barrier to attracting investment in exploration and production because they are overly costly and onerous on industry. Some obligations lack necessary flexibility, and compliance obligations are uncertain and unclear.

“As well as removing the ban, we are proposing changes to the way petroleum exploration applications are tendered and allocated, aligning the petroleum decommissioning regime with international best practice, and improving regulatory efficiency.”

New Zealand cannot ignore the significant economic contributions the petroleum and resources sector delivers, and the opportunities further strategic development represents.

“Our petroleum and minerals sectors contributed $1.9 billion to GDP in 2020-21 and $236 million in Crown revenue in 2022-23. In 2023 mining employed around 6000 people, the majority of which are based in regional communities,” Mr Jones says.

“I want a considered discussion about how we use our natural resources to improve the security and affordability of energy and resources supplies, stimulate regional economic development opportunities, and increase New Zealand’s self-sufficiency to protect against volatile international markets.”

The Crown Minerals Amendment Bill will be the latest piece of legislative reform introduced by the Government aimed at cutting red tape to enable crucial resources and infrastructure projects across New Zealand, and benefits to flow to communities. The Bill will be introduced to Parliament in the second half of 2024.

For more information, visit 2024 Proposed amendments to the Crown Minerals Act 1991 | Ministry of Business, Innovation & Employment (mbie.govt.nz)

Editors' note:

The Crown Minerals Act Amendment Bill proposes:

- Reversing the 2018 ban on new petroleum exploration outside onshore Taranaki.
- Removing the 2018 restriction preventing new petroleum permit-holders from accessing some Taranaki conservation land for petroleum activities other than minimum impact activities. Conservation land protected by Schedule 4 of the CMA, including Mount Taranaki, would still have the same protections in place. This change ensures conservation land across New Zealand is treated consistently.
- Changes to how petroleum exploration permits are allocated. Currently permits are allocated through a competitive tender process. The bill proposes allowing for a choice between a tender and a non-tender (called priority in time) method.
- Changes to the petroleum decommissioning requirements to align with international best practice, and better balance regulatory burden and risk. Specifically:
    - Technical changes to financial securities requirements, the primary tool to manage the risk of a permit-holder failing to carry out or fund decommissioning. These changes will make financial securities more flexible to allow industry to set aside this money in a way that is cost-efficient and best suit the circumstances.
    - Changes to trailing liability which allows the Crown to go back to previous permit-holders and make them decommission or recover the money for decommissioning. It is not proposed to remove trailing liability but limiting it to the most recent transferor, providing greater certainty to previous permit-holders.
    - Post-decommissioning liability remains on a permit-holder who decommissioned if something goes wrong after they have plugged and abandoned a well or left infrastructure in situ. This is a change from the current requirement to provide a payment or financial security for post-decommissioning liabilities, which sought to quantify the likely risk and cost in the future.
- Other changes to provide important signals to the industry that New Zealand is open for business, including reintroducing the term 'promote' into the purpose statement of the Act, giving the Government the mandate to actively promote prospecting, exploration and mining of minerals.
- Introducing a new tier of mineral permitting that will make it easier for people to undertake small-scale non-commercial gold mining activity, and
- Other technical legislative changes to ensure processes are working as intended, including fixing inconsistencies of terms and drafting errors.

Opportunity Knocks

Mid-Year Outlook for 2024

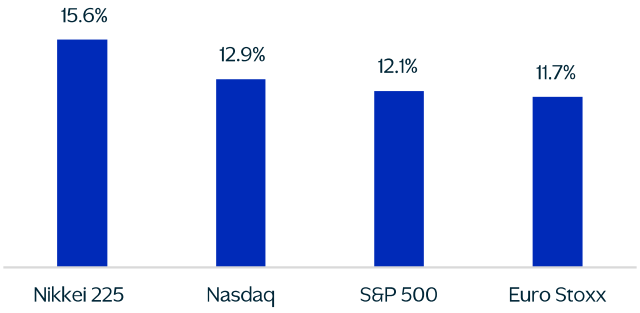
Despite intensifying politcal uncertainty, heightened geopolitical tensions, and volatile commodity prices, we continue to see compelling investment opportunities across the global macro landscape. Accelerating AI demand for electricity, reorientation of global supply chains, improving labor productivity, and retirement security all represent important macro themes behind which to invest. We also remain really encouraged by the technical backdrop, as net issuance of Equities and Credit remains well below trend. However, it is definitely not business as usual in the world of macro and asset allocation, as our *Regime Change* thesis requires a different approach to portfolio management. To build upon this view, we have done more analysis to underscore the value of adding more non-traditional assets to one's portfolio. Indeed, unlike in the past, today's volatility in portfolios is being driven by stock-bond correlation, not by single asset volatility. Importantly, most of today's CIOs have not invested in this type of environment. In terms of areas to lean in, we think that the current vintage will be a strong one for Private Equity, especially opportunities linked to value creation by operational improvement and/or corporate carve-outs. Meanwhile, we continue to pound the table on many parts of Real Assets, including Real Estate Credit, Infrastructure, and Asset-Based Finance. Finally, we see a lot of potential in Opportunistic Credit and Capital Solutions. On the risk side, we believe higher rates – especially if productivity should tail off – are a more challenging scenario than lower rates and slower earnings. We are also keeping an eye on employment trends. Our bottom line: *Opportunity Knocks*, as we still think the current economic cycle has further to run, a backdrop that should accrue to the benefit of long-term investors, especially ones who have dry powder to lean into the inevitable periodic dislocations that are likely to occur during a *Regime Change*.

> A pessimist complains about the noise when opportunity knocks.
>
> — **Oscar Wilde**, Irish poet and playwright

We are often asked, especially heading into the second half of 2024, if we still believe that the glass is half full for global allocators when it comes to deployment opportunities, particularly in an environment of heightened complexity, 'sticky' inflation, and higher for longer interest rates. (See *Glass Half Full Outlook for 2024*). With an uncertain presidential election around the corner in the United States, and many other important elections taking place across the world, there is certainly a lot to consider. On the more cautious side, equity markets are now nicely higher, and credit spreads are now sharply tighter since late December 2023 when we laid out our thesis that investors might regret looking at the glass as half empty. In fact, our KKR proprietary market-implied default model suggests HY spreads are pricing in about a two percent default rate today, compared with about three percent at the beginning of the year and a historical average of 5.7%.

Exhibit 1: Equity Markets Have Withstood Substantial Volatility to Enjoy Glass Half Full Returns and Then Some in the 1H24...

Equity Performance Across Regions, YTD Performance

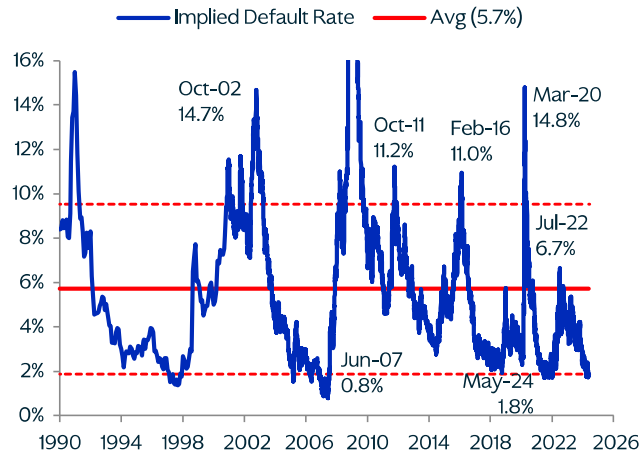


Data as at June 7, 2024. Source: Bloomberg.

Indeed, unlike in the past, today's volatility in portfolios is being driven by stock-bond correlation, not by single asset volatility.

Exhibit 2: ...While Investors Have Also Gotten More Optimistic About the Outlook for Credit, High Yield in Particular

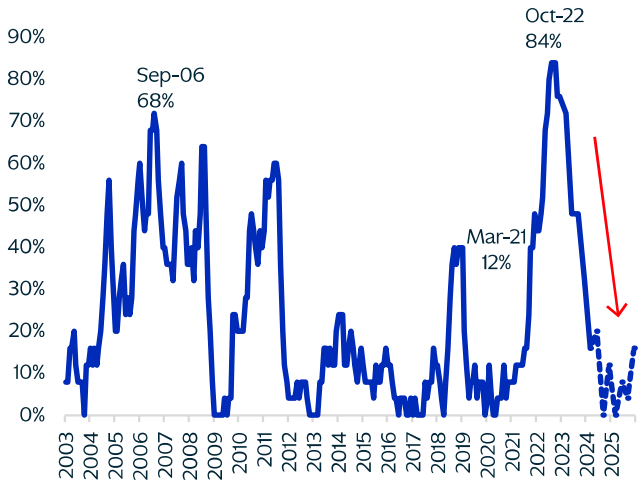
U.S. High Yield Implied Default Rate, %



Data as at May 24, 2024. Source: Bloomberg.

Exhibit 3: Risk Assets Have Responded Favorably to the Idea That There Will Be Fewer Tightenings and More Easings

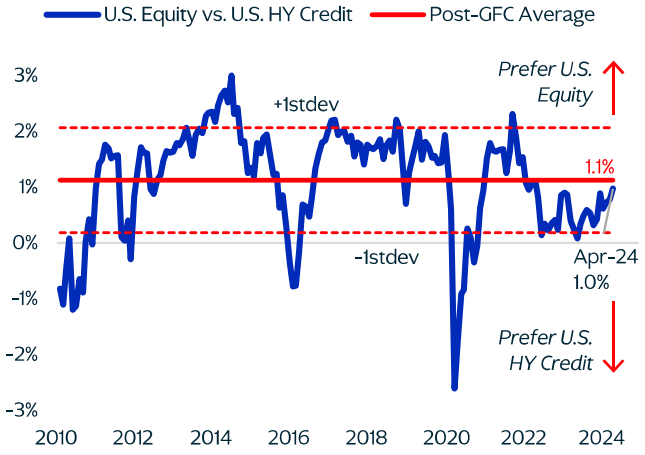
Consensus Forecast: % of Global Central Banks Hiking Rates



Hiking rates is defined as an increase in rates over the past three months. Data for U.S., JP, CN, AU, CA, E2, NZ, NO, SE, GB, JP, CH, IN, ID, KR, PH, TW, TH, VN, BR, CL, ZA, TR, IL, CZ, HU, PL. Data as at May 31, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 4: Overall, Our Models Still Favor Credit, But Now Only at the Margin

Relative Value: Equities vs. Credit, Internal Rate of Return for Equities vs. HY YTW



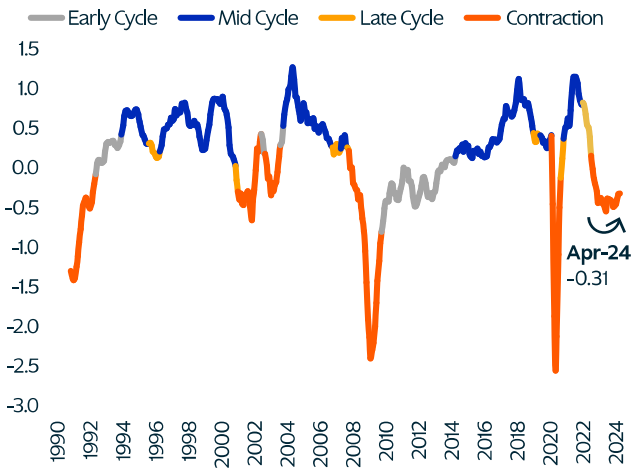
Data as at May 24, 2024. Source: Bloomberg.

However, perhaps more important for long-term investors, there are a lot of political and social crosscurrents that are increasingly bleeding their way into markets. Not surprisingly, the introduction of social media into our political process has created more discord. This type of disruption is like other post-industrial revolutions where technological change ushered in periods of social and political unrest. As our colleague Ken Mehlman explains, just as the invention of the printing press around 1440 introduced years of political, religious, social, and scientific disruption, the combination of the Internet and social media is a 'Gutenberg 2' moment that has produced and portends similar disturbances.

At the same time, complicated issues around immigration and inequality are also driving tense debates across the Western world that increasingly seem to push the left and right further apart. See Section IV, question #3 for a full discussion, but the upcoming U.S. presidential election only increases our conviction that policy from either a Trump or a Biden administration is likely to maintain an inflationary bent (which further heightens discord), given the threat of tariffs and the need for security spending, contributing to an increasing 'normalization' of wider than usual deficits. Finally, great power rivalries around the globe have intensified notably in recent quarters. As such, investors should expect more barriers to trade and capital flows in the coming years under almost all scenarios. Key to our collective thinking is that the intensifying focus on 'homeland economics' is a post-COVID, post-Ukraine global phenomenon that is likely to continue almost regardless of electoral outcomes in most countries.

Exhibit 5: After Two Years of Being in Late Cycle and Contraction, Our Proprietary KKR Cycle Indicator Is About to Move Into Its Early Cycle Phase

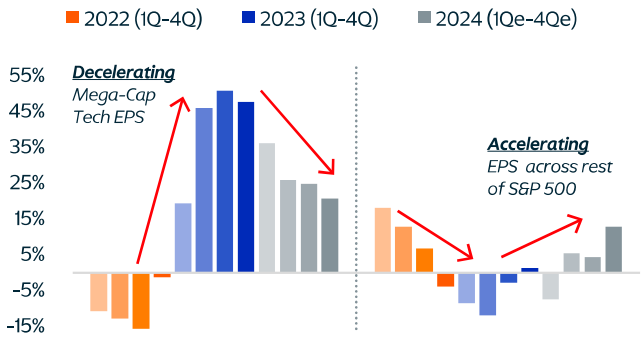
KKR Cycle Indicator (1990-Present, Z-Score)



Data as at April 30, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 6: We Think Earnings Growth Is Set to Broaden Beyond Mega Cap Technology and Become More Balanced in Coming Quarters, Driven by Positive Operating Leverage and Margin Growth in Other Sectors

S&P 500 EPS Growth Disaggregation



Data as at April 30, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

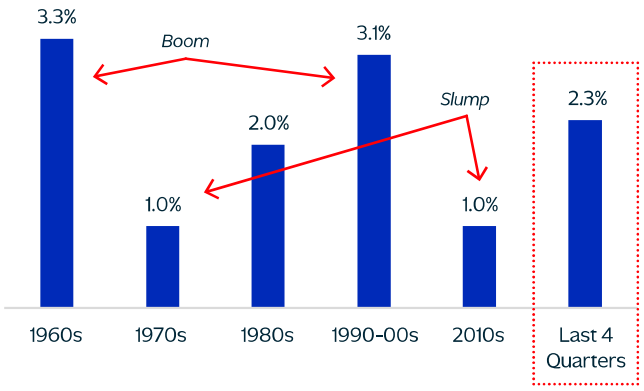
Exhibit 7: Long Periods of Equity Outperformance Have Been Driven by Productivity and/or Central Bank Intervention...

Productivity vs. Equity Markets		Labor Productivity, %QoQ, SAAR	S&P 500 Average Annual Return	Average U.S. Budget Deficit as a % of Nominal GDP	Average Fed Balance Sheet as a % of Nominal GDP
High Productivity Period	1960s	3.3%	8.4%	-1.0%	5.4%
	1990s-2000s	3.1%	8.8%	-0.8%	6.0%
Low Productivity Period	1970s	1.0%	-0.9%	-2.3%	6.4%
	2010s	1.0%	11.8%	-4.8%	20.9%
All Periods	1958-2018	2.1%	7.20%	-2.6%	8.3%
Today	4Q22-1Q24	2.2%	8.5%	-5.7%	29.8%

Note: 1960s and 90s-00s are the 'high' productivity growth (>3%) periods, referring to 1958-1968 and 1995-2005, respectively. 1970s and 2010s are the 'low' productivity growth (<1.0%) periods, referring to 1973-1979 and 2010-2019, respectively. Data as at April 30, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 8: ...As We Look Forward, Our Thesis Is That Productivity Is Again Set to Reaccelerate, Which Would Be Quite Positive for Capital Markets

U.S. Annual Labor Productivity Growth, %



Note: 1960s refers to 1958-68; 1990s-00s refers to 1995-05; 1970s refer to 1973-79; 2010s refer to 2010-19; 1980s refers to 1980-88. Data as at March 31, 2024. Source: Bloomberg, Federal Reserve Bank of San Francisco.

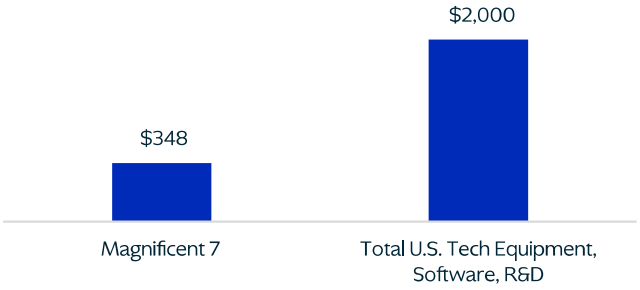
On the positive side of the ledger, growth and earnings – as our models have been suggesting for some time – are all performing better than the consensus expected in a higher nominal GDP growth environment. True, the U.S. consumer is not driving massive demand growth the way he or she was post-COVID, but unemployment has stayed low *(Exhibit 10)*, inventories are in check, and housing activity is stabilizing. Also, we have seen a massive capex cycle being led by the Technology sector *(Exhibit 9)*. Our view is that, similar to the Internet boom in the 1990s (and the corresponding period of solid economic growth leading up to 2000), the AI boom will drive a sustained period of higher capex before it is actually reflected in corporate profitability results. Implicit in what we are saying, though, is that the recent ongoing surge in productivity has actually occurred *before* AI benefits have been realized at scale, further underscoring our view that the corporate sector could enjoy a longer-tailed profitability renaissance. Importantly, though, unlike the dot-com bubble 20+ years ago, the companies financing this spending this cycle have bullet proof balance sheets, lower costs of capital, and a more consolidated market.

As we look ahead, we also want to signal another positive: Corporate earnings growth is beginning to broaden beyond just the Technology sector. One can see this in *Exhibit 6*. We think this increased breadth should create a more balanced tone within the liquid Equity markets. In addition, the technical picture remains quite compelling, with a lack of both *net* equity and corporate debt issuance (*Exhibit 11*), which generally bodes well for returns (*Exhibit 12*), especially in Private Equity.

Our view is that, similar to the Internet boom in the 1990s (and the corresponding period of solid economic growth leading up to 2000), the AI boom will drive a sustained period of higher capex before it is actually reflected in corporate profitability results.

Exhibit 9: The Magnificent 7 Reinvests 61% of Their Operating Free Cash Flow Back Into Capex and R&D. They Now Also Account for Almost 20% of Total Capex

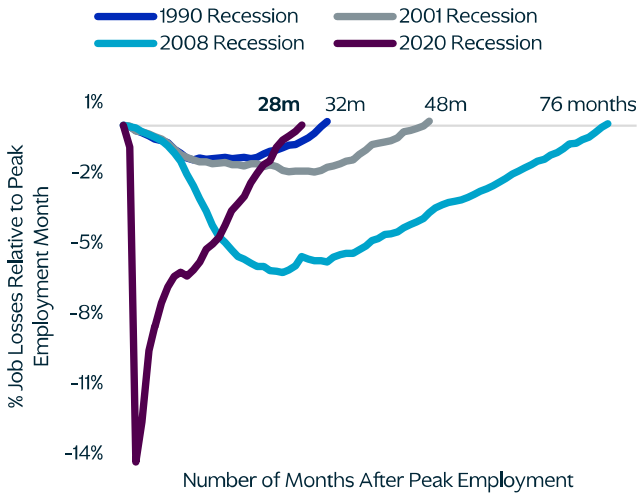
2024 Capex by Tech Magnificent 7 Compared to Total for U.S. Tech Equipment, Software, and R&D, US$ Billions



Data as at May 20, 2024. Source: Goldman Sachs.

Exhibit 10: We Think the Jobs Environment Is Much More Akin to the 1990s Than Post-GFC

Historic U.S. Job Losses and Recovery Trajectories



Data as at December 31, 2023. Source: U.S. Bureau of Labor Statistics, Haver Analytics.

At the same time, we think that many investors are still actually underweight their target allocations, including holding too much Cash at a time when most central banks have finished raising rates (*Exhibit 3*). Our proprietary survey work within the Family Office (see Loud and Clear) and Insurance (see No Turning Back) segments supports this view, while money market/cash balances in the individual investor market are also quite high relative to trend.

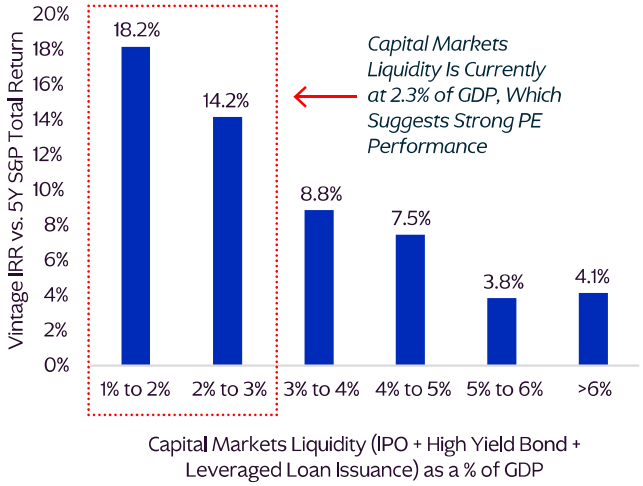
Exhibit 11: Our Liquidity Indicator Is Still Recovering From Near-Trough Levels

Capital Markets Liquidity Trailing 12 Months as a % of GDP (IPO, HY Bond, Leveraged Loan Issuance)

Data as at March 31, 2024. Source: Preqin, Bank of America, Bloomberg , KKR Global Macro & Asset Allocation analysis.

Exhibit 12: Private Equity Tends to Outperform Public Markets in Low Liquidity Environments

Private Equity Outperformance Across Liquidity Regimes, 1997-2023

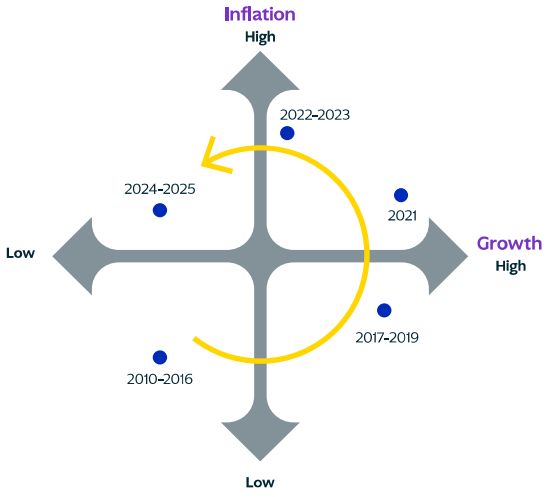


PE returns from Preqin on a 5-year forward returns from 1997 - 2019 basis. Data as at December 31, 2023. Source: Preqin, Bank of America, Bloomberg, KKR Global Macro & Asset Allocation analysis.

Against this unique macroeconomic backdrop, however, we continue to argue that as investors we are experiencing a *Regime Change*. There remain four pillars to our original thesis: ongoing fiscal stimulus, heightened geopolitics, a messy energy transition, and stickier wages (driven largely by a shortage of skilled workers). If we are right, then global allocators and macro investors need to view their portfolios through a different lens. In particular, we think that more diversification across asset classes as well as less dependence on global sovereign bonds is warranted, especially given correlations between stocks and bonds have turned decidedly positive (*Exhibit 14*).

Exhibit 13: While Inflation Should Continue to Cool, We Don't Think It Will Return to Previous Levels. As a Result, We Maintain Our Regime Change Thesis

Low and High Growth and Inflation Regimes



Data as at June 14, 2024. Source: KKR Global Macro & Asset Allocation analysis.

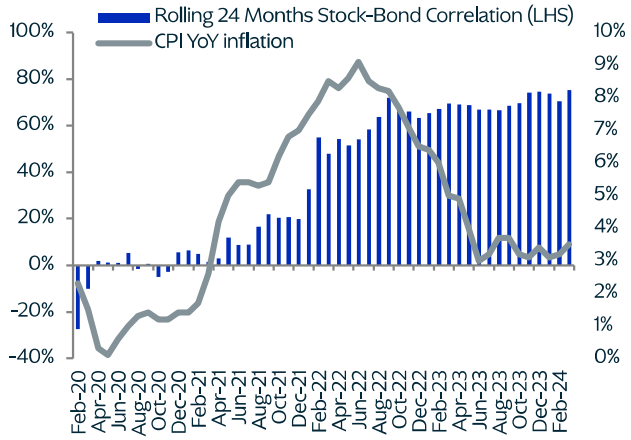
So, where do we land as we look ahead to the second half of the year and into 2025 and beyond?

Most importantly, we retain our optimistic viewpoint for the following four reasons:

1. **We think that we have entered a structurally higher level of productivity in the United States, a backdrop that we believe will benefit capital markets globally**. We were not around for the 1960s, but the surge in productivity that followed tech investment in the 1990s is likely an apt parallel, we believe. Importantly, this increase in productivity will at least partially offset some of our concerns about wider deficits in the near-term. As we detail below in Section II, we are also raising our long-term run rate for U.S. GDP to two percent from 1.5%, signaling a structural improvement in growth that we believe warrants investor attention.
2. **We think that central banks, especially the Bank of Japan and the U.S. Federal Reserve, have adopted policies that are actually not that restrictive from a historical perspective**. For one thing, the Fed and other central banks' steady states for balance sheets are still plump relative to history *(Exhibit 15)*. If we are right that U.S. real rates peak at two percent in the coming quarters and decline below one percent over time (note: we forecast one Fed cut in 2024 and an additional four in 2025), then this Fed tightening cycle will have been a fairly mild one by historical standards. One can see this in *Exhibit 16,* which shows that, if our forecasts are correct, the real fed funds rate will not spend a very long time in truly restrictive territory this cycle (i.e., at or above the level of potential GDP growth).

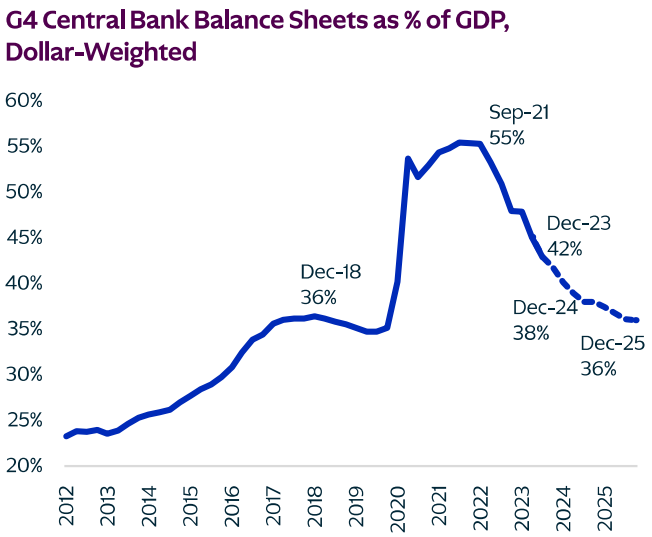
Exhibit 14: Despite Inflation Falling on a Cyclical Basis, the 'New' Positive Relationship Between Stocks and Bonds Remains Strong

U.S. Stock-Bond Correlation and U.S. CPI, %



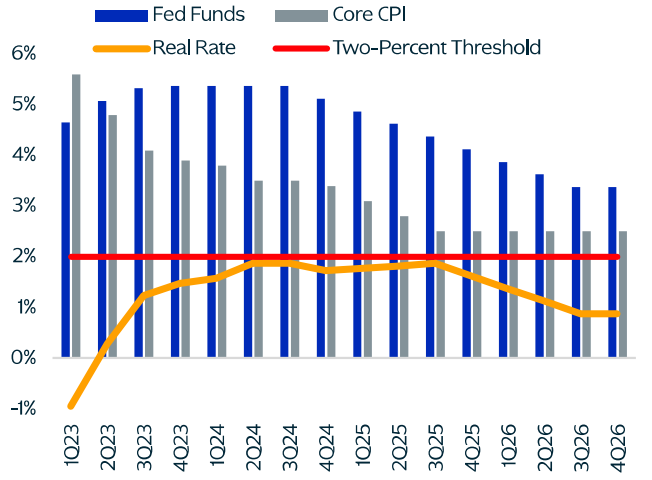
Data as at March 31, 2024. Source: Bloomberg, KKR GBR analysis.

Exhibit 15: Despite Record Tightening at the Front End, Central Bank Balance Sheets Will Remain Plump With Assets



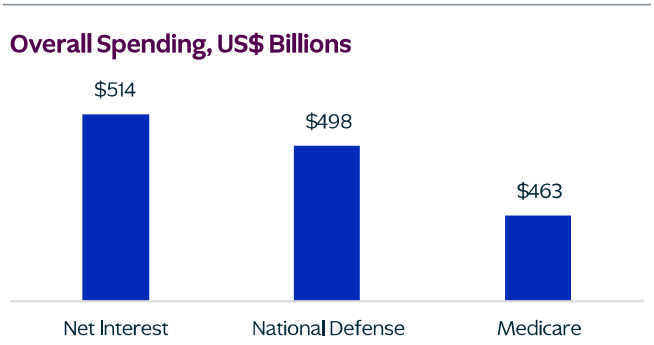
G4 = Federal Reserve, the ECB, the Bank of England, and the Bank of Japan. Data as at September 30, 2023. Source: Haver Analytics, national central banks and statistical agencies, KKR Global Macro & Asset Allocation analysis.

Exhibit 16: We Think The Fed Will Bring Real Rates to Two Percent This Cycle, But No Higher



Data as at June 12, 2024. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 17: Annual Spending on the U.S. Debt Service Burden Is Now More Than Spending on National Defense or Medicare, and More Than the U.S. Spends on Veterans, Education, and Transportation Combined



Data as at April 30, 2024. Source: CBO.

Traditional Macro Relationships Are No Longer Behaving the Same as in the Past	
1	Japan is experiencing inflation, while China has disinflationary headwinds.
2	U.S. Treasuries and the Japanese yen are no longer the 'risk-off' assets of choice. They are, in fact, driving much of the volatility in the capital markets during periods of uncertainty.
3	European growth is coming from the periphery, not the core, this cycle.
4	The interest rate easing cycle has started in Europe, not in the U.S., for the first time.
5	We have actually raised our long-term forecast for U.S. GDP growth, despite an inverted yield curve and a low savings rate. In the past, these two macro variables were recession signals.
6	It is the government, not the consumer or corporates, that is most leveraged this cycle.

At the same time, we think that many investors are still actually underweight their target allocations, including holding too much Cash at a time when most central banks have finished raising rates.

3. **Third, we think that the employment market holds up better this cycle**. Some of our optimism is actually driven by demographics, especially given the exit that we have seen of aged 55+ workers from the workforce since the onset of COVID. While we do expect immigration in the U.S. to create more slack in some sectors, we think this is a positive development for growth as unemployment from excess supply feels very different from the 'typical' cyclical dynamics of over-hiring and layoffs.

Exhibit 18: The U.S. Has Been Able to Grow Its Workforce Through Demographic Growth; Meanwhile, Europe and Japan Have Offset Aging Populations by Improving Participation Rates. Looking Ahead, We Think That Aging Demographics Will Require a Rethink of Both Workforce Participation and Immigration

Contributions to Workforce Growth, Millions

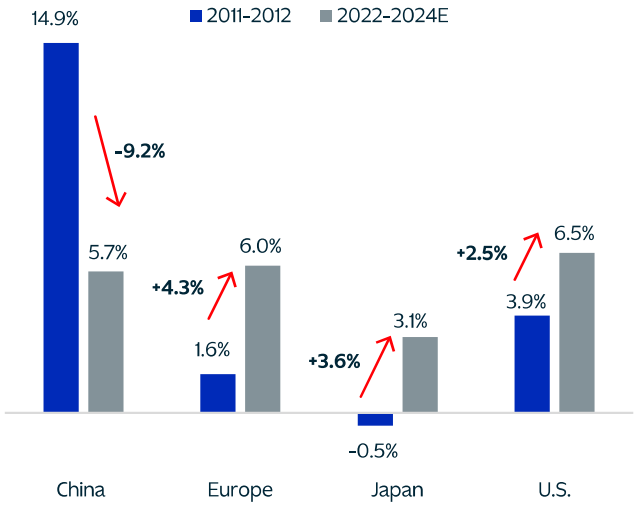
	U.S.	Europe	Japan
1Q2010 Workforce	**153.7**	**159.8**	**65.7**
Demographics	**11.3**	**-3.0**	**-3.4**
Change in Participation	**2.7**	**14.8**	**7.0**
Change in Prime-Age Male Participation	-0.3	0.1	0.0
Change in Prime-Age Female Participation	1.3	3.0	2.7
Change in 55-64 Participation	0.5	9.6	2.0
Change in 65+ Participation	1.2	2.2	2.3
4Q23 Workforce	**167.8**	**171.5**	**69.4**

Europe data based on the 'Euro-Area 19' subset of E.U. members. Latest available data as at December 31, 2023. Source: U.S. Bureau of Labor Statistics, Eurostat, Japan Statistics Bureau.

4. **Finally, consistent with our *Regime Change* thesis, and because we are mostly living in a higher nominal GDP environment,** we retain our conviction that a hard landing is not in the cards. The most cyclical areas of the global economy already dipped in 2022-23 and are now improving from below-trend levels. We are becoming more constructive around the potential for cyclical wage dynamics, as well as structural considerations related to technology and automation, to drive higher and faster nominal GDP growth globally.

Exhibit 19: Besides China, Most Economies Are Experiencing Higher Nominal GDP This Cycle

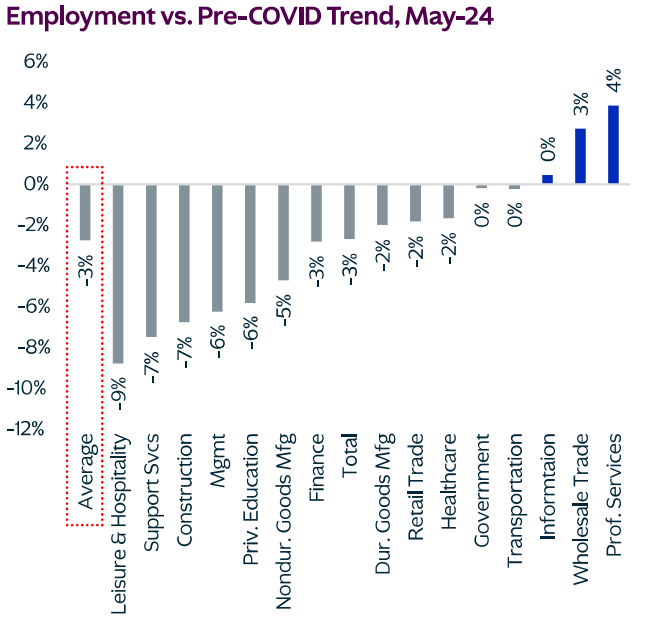
Annual Nominal GDP Growth, %



2024 are KKR GMAA estimates. Data as at May 31, 2024. Source: China National Bureau of Statistics, Statistical Office of the European Union, Cabinet Office of Japan, U.S. Bureau of Economic Analysis, KKR Global Macro & Asset Allocation analysis.

Against this unique macroeconomic backdrop, however, we continue to argue that as investors we are experiencing a *Regime Change*. There remain four pillars to our original thesis: ongoing fiscal stimulus, heightened geopolitics, a messy energy transition, and stickier wages (driven largely by a shortage of skilled workers).

Exhibit 20: Pent-Up Demand in Key Pandemic-Affected Services Sectors Continues to Fuel Above-Average Job Growth in the U.S.



Pre-COVID trend based on linear extrapolation of 2014-19. Data as at May 31, 2024. Source: U.S. Bureau of Economic Affairs, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

As our colleague Ken Mehlman explains, just as the invention of the printing press around 1440 introduced years of political, religious, social, and scientific disruption, the combination of the Internet and social media is a 'Gutenberg 2' moment that has produced and portends similar disturbances.

However, while our longer-term thesis remains largely intact, we are constantly refining and evolving our convictions. To this end, we wanted to highlight what's changed since December and why we think adding more ballast to portfolios is warranted, particularly given the optimism being priced by markets during an asynchronous cycle where some sectors are slowing more quickly and inflation remains too sticky. So, as part of the next chapter of our *Regime Change* framework, we note the following:

What Is Changing or Being Amplified Since Our Outlook for 2024?

1

Increasing Importance of Non-Correlated Assets

After two major deep dive surveys across the Family Office and Insurance universes, we have even greater conviction in our thesis around owning more non-correlated assets. Key to our thinking is that, in a world where the efficient frontier for expected returns is now flatter, the importance of diversification increases. As a result, CIOs need more diversifiers in their portfolios so that they do not get whipsawed, especially when short-term performance can be quite volatile. One can see this in *Exhibit 27*. If we are right, then our insight has significant implications for allocators, particularly CIOs who have embraced long-duration bonds and/or VC on the equity side, or that do not believe in linear deployment.

2

Portfolio Volatility Is Increasing Because of the Changing Relationship Between Stocks and Bonds, Not an Increase in Single-Asset Volatility

There is another important influence to consider as well. Specifically, given all the movement around interest rates these days, the changing nature of government bonds in a portfolio, and greater use of concentrated ETFs by market participants (e.g., 40% of the High Yield market is now daily liquidity), the volatility of most benchmarks we track is surging to the upside, which increases the risk that a portfolio allocation change can be made at the wrong time. Some great work by Racim Allouani and Rachel Li suggests that today's heightened portfolio volatility is actually driven more by stock/bond correlation than by a surge in single-asset volatility, which was typically the case pre-COVID. This new reality is a big deal as it adds risk to a typical 60/40 portfolio, and it speaks to our view that we are indeed in a *Regime Change* when it comes to portfolio construction.

3

We Are More Focused On the Positive Path of Productivity, Especially in the U.S.

Given increasing debt loads amidst larger government deficits, we are now extremely focused on the one catalyst that is best equipped to keep stagflation at bay: Productivity. As we detail in *Exhibits 7* and *49*, the best decades of equity performance are usually linked to periods of strong productivity gains. Against today's backdrop of stickier wages, we think that strong productivity will be needed to allow corporate margins to hold. Were productivity to slip, we likely would take a more defensive stance on risk assets, a reality that is new to our macro thinking in 2024.

4

The Mismatch Between Energy Supply and Demand Is More Pronounced

The mismatch between energy demand and energy supply seems even bigger than our previously bullish view. Demand is once again rising on electrification trends for EVs and heat pumps and the explosive growth in energy-intensive users such as data centers, semi fabs, EV battery plants, and steel mills. In the U.S., for example, overall electricity demand is poised to grow 2.4% annually, compared to essentially zero in prior years. We believe as much as one-third of this growth could come from data centers, and that data centers could account for 7-10% percent of total electricity demand in the next few years, compared to two to three percent at the end of 2023. While demand is increasing, our work shows that most developed market economies don't have the infrastructure in place to meet this need. Moreover, a lot of the power demand is not where the power supply is currently located. We view this current set-up as a major opportunity for investors, especially on the Infrastructure side.

5

A Broadening of Earnings Growth Across Sectors and Geographies

As we show in *Exhibit 76*, we have raised our 2024 and 2025 S&P 500 EPS forecasts to $250 and $270, respectively. What is changing in our data is that corporate earnings growth is set to broaden beyond mega-cap

Tech in coming quarters. We think this shift will represent more balance in the equity markets, and as a result, we are raising our 2024 target to 5,700 from 5,400 previously, which is roughly 10% above the 'top-down' consensus estimate of 5,172. Our 2025 target of 6,130 implies about 13% of upside from today's level of around 5,414. Meanwhile, in Europe, we think the economy is bottoming at a time when most investors are underweight the region. Stronger tourism, rebounding sentiment, and an increase in real wages (at last) will lead to a perkier consumer in the coming quarters. As part of this improvement in growth, the services economy is accelerating nicely. Additionally, the end of quantitative easing breathed life back into, and produced strong returns for, the financial services sector. We expect this trend to continue as valuations normalize.

6

More Sustained Deficits Amid Election Volatility Reinforces Our Regime Change Thesis

Regardless of the electoral outcome, the 2024 U.S. election is likely to further strengthen our *Regime Change* thesis. Though actual fiscal policy under Biden or Trump is not likely to loosen much given the expiration of some 2017 tax cuts or the imposition of tariffs, we continue to think that under either administration the deficit will stabilize at historically wide levels. As a result, we think Treasury term premium will stabilize at wider levels, too – which will make it harder for bonds to rally the way they did in past cycles. That said, there are also several policy proposals that could skew inflationary under a second Trump presidency, including writing stimulus checks for households, deporting undocumented immigrants (which would aggravate labor shortages), cutting off Iranian and Venezuelan oil, and potentially pressing for a more dovish Fed.

7

The Labor Supply and Demand Mismatch Could Create Unprecedented Demand for Worker Retraining

We think the U.S. labor force is in the early innings of an inflow of about four million additional potential workers amidst a record surge in immigration. However, our best guess is that limited formal skills training means the overwhelming majority of these workers will be competing to fill a small portion (perhaps about two million) of the 8.1 million open jobs in the U.S. As a result, we think the opportunity set for worker retraining may be as large as it has ever been, in part because there will be a lot of pressure to bring unemployed workers from low-skilled sectors (where we expect more of a labor glut in some cases) into high-skilled jobs left open by COVID-era retirements.

So, while we certainly believe in the opportunity set and our glass half full perspective, we do want to acknowledge that we are entering a volatile period in the second half of 2024 at a time when spreads are already very tight. To be sure, we are not signaling a more sustained bearish tilt the way we did in 2022 (see Walk, Don't Run). Rather – if we could steal a page from our Outlook for 2023: Keep It Simple – now is not a time to get over-extended when it comes to leverage or liquidity. The current environment, we believe, is more akin to the Oscar Wilde quote when he says that, "A pessimist complains about the noise when opportunity knocks." Said differently, if *Opportunity Knocks* in the form of a capital markets draw-down linked to election uncertainty, then you should have your portfolio in position to 'answer the door.' Don't just be the 'pessimist', particularly when many of today's macroeconomic headwinds can be overcome through a combination of thoughtful asset allocation and directed thematic investing.

Six Areas Where We Differ From Consensus

#1: Bumpy, But Faster Growth

Across all regions, we are again more bullish on growth than the consensus. In the U.S., stronger assumptions around both job growth and productivity lead us to raise our 2024 forecast to 2.5%, 10 basis points ahead of the consensus, and our 2025 forecast at 2.0%, 20 basis points above consensus. More importantly, we have raised our long-term forecast for U.S. structural GDP growth to two percent from 1.5% in the past. In Europe, data surprises are no longer lagging the U.S. as economic momentum turns positive. We are increasing our 2024 GDP growth forecast to 0.8% from 0.5% versus a consensus estimate of 0.7%. For 2025, our growth forecast is 1.4%, the same as consensus. We think growth in China is bottoming and likely in the early recovery stage. Our 2024 forecast is at 5.0% versus 4.7% at the beginning of the year and a consensus of 4.9%, while 2025 is at 4.6%, 10 basis points above consensus. In Japan, we forecast 0.6% GDP growth in 2024 and 1.2% in 2025, 20 basis points and 10 basis points above consensus, respectively.

#2: We Are Not as Worried About a Lower U.S. Savings Rate Signaling an Over-Extended Consumer This Cycle

While we do think U.S. consumer spending will slow in coming quarters, we are not seeing the type of imbalances that were observed in the run-up to past recessions. Specifically, although savings rates today are at the lowest levels since the GFC (currently around four percent, versus two to three percent in 2005-2006), we think this simple comparison doesn't account for the increase in the 65+ population over the last two decades (17% today versus around 12% prior to the GFC). Personal savings rates become sharply negative once households retire, meaning aging demographics likely explain some of the savings pullback. In fact, our estimates suggest that the 'neutral' savings rate has actually fallen to around 5.6%, down from 9-10% in the mid-2000s, implying that savings rates today are just 100-200 basis points below 'normal', while the savings rates that prevailed before the GFC were actually 700-800 basis points too low. Therefore, while we do expect some retrenchment, households do not look nearly as overspent as they have in the lead-up to past downturns.

#3: Bigger Regional Differences in Interest Rates. In the U.S., What's the Rush?

In the U.S., we are above consensus on interest rates this year as part of our higher for longer thesis. We see the Fed cutting rates just once this year, to 5.125% (which puts our forecasts about 25 basis points above market forwards) before falling to 4.125% in 2025 (also about 25 basis points above market pricing). For the U.S. 10-year, we stick to our forecast of 4.25% for year-end 2024 and four percent for year-end 2025, which remains a bit more hawkish than consensus of 4.2% for 2024 and 3.9% for 2025. In Europe, we have the bund at 2.6% for end-2024 (above consensus of 2.2%) and 2.8% in end-2025 (also above consensus of 2.2%). We think sustained higher inflation volatility means a return to a longer-term average term premium of approximately 50 basis points, leading to a long-term bund yield target of approximately 3.0%. In China, by comparison, we are actually below consensus for the 10-year for both 2024 and 2025 at 2.2% vs. 2.4%, and 2.0% vs. 2.4%, respectively. Against this backdrop, we think FX volatility will remain elevated and will serve as an important source of information for markets alongside the yield on government bonds.

#4: Better EPS, Driven By Higher Margins

We believe the cycle has further room to run, with margin expansion (as opposed to multiple re-rating) powering the next leg of the recovery. Our 2024 S&P 500 price target of 5,700 remains 10% above the 'top-down' consensus estimate of 5,172. For 2025, our target of 6,130 implies about 13% of upside from today's level of around 5,414. For 2024 and 2025 EPS, our targets are $250 and $270, versus the top-down consensus of $240 and $253, respectively. Our framework linking real GDP growth and unit labor costs to operating margins points to 20-30 basis points of margin expansion this year and next so long as labor productivity stays supportive.

#5: Oil – $80 is the New $60

We expect oil prices to settle in the mid-$70-80s range in 2024 amid slower global demand and better global supply. Longer term, though, we still think '$80 is the new $60.' As such, our longer-term forecasts remain well above futures, which continue to embed prices falling to the mid-$60-70s in 2025 and beyond.

#6: Where Could We Be Wrong?

Our base view is that there is an asymmetric risk for the economy and markets if rates go higher versus lower. We still see six percent short rates as somewhat of a tipping point, given this level limits operating cash flow for most levered entities as well as encourages more deposit flight from traditional financial intermediaries. Also, because policymakers did not remove as much stimulus from the markets this cycle, we continue to caution that the currency markets could be a source of unexpected stress for investors to consider in their portfolios. Finally, an extreme spike in unemployment, which is not our base case (as we think unemployment stays lower this cycle) would likely be unsettling for both our thesis and the markets, we believe.

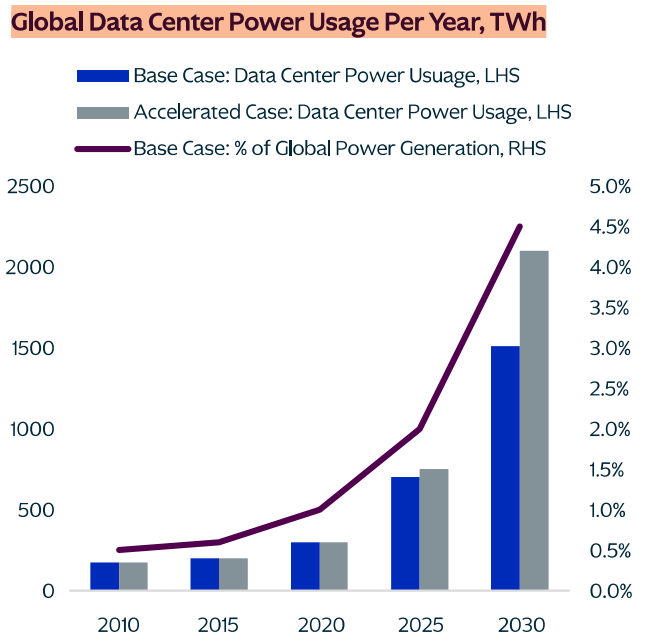
6

Intersection of AI and Energy Supply

In recent months we spent a substantial amount of time with internal and external constituents digging into whether we have the power supply to handle all the bullish demand sentiment we are now seeing. Our conclusion is that the constraint is on the supply side, not on the demand side, and that this mismatch will be one of the biggest investment stories over the next few years across North America, Europe, and Asia. All told, our best estimate is that power demand in the U.S. will increase at a CAGR of 2.0-2.5% over the next five years, compared to zero for the past five years. As this growth accelerates, data centers alone are expected to account for 7-10% of total energy demand by 2029, compared to two to three percent today. If we are right, then billions of dollars will be required across natural gas, renewables, transmission, and other forms of infrastructure. As part of our thesis, we expect energy efficiency, including cooling procedures, to become a significant area of growth. A recent trip to Spain in early June to drill down on this topic not only reinforced our conviction about the growing demand side of the equation, but also the emerging bottleneck in production that will need to be met in Europe through more supply of renewables as well as additional grid upgrades.

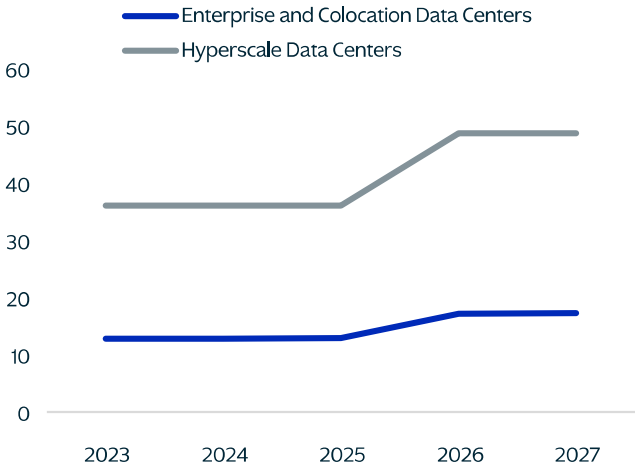
All told, our best estimate is that power demand in the U.S. will increase at a CAGR of 2.0-2.5% over the next five years.

Exhibit 36: By 2030, Data Centers Could Account for 4.5% of Global Energy Power Generation



Data as at March 31, 2024. Source: SemiAnalysis.

Exhibit 37: Hyperscalers, Which Are the Biggest and Fastest Growing Part of the Market, Require More Energy, Racks, and Cooling Systems



Data as at March 31, 2024. Source: JLL.

AI IN FINANCE

Bot, Bank & Beyond

AI will transform money and finance.

Artificial Intelligence (AI) could be the General-Purpose Technology (GPT) of the 2020s-2030s. And it will profoundly change finance and money.

GPTs have the potential to transform entire economies, changing the way we live and work. They create new opportunities for growth and innovation, often improving our overall quality of life. They also destroy existing ways of doing things. And as such they also create losers. Especially in the short term.

The steam engine commoditized production and physical movement, powering the industrial revolution. More recently, the Internet revolutionized communication and ushered in the age of information. Similarly, AI may commoditize human intelligence, including analysis, decision making and content creation.

Artificial intelligence may commoditize human intelligence.

Finance will be at the forefront of the changes. Existing jobs have disappeared in prior cycles, to be replaced by new ones. So have firms. What a bank or financial firm looks like in the mid-2020s, be it retail or wholesale finance, looks very different to the mid-1980s, or the mid-1940s! AI will repeat this cycle, possibly speeding it up.

AI itself has gone through many waves of hype and disillusionment from the 1950s onwards (see Appendix for a summary history, especially Figure 40). We wrote about AI in Finance in our 2018 GPS report (**The Bank of the Future – The ABCs of Digital Disruption in Finance**), but interest in the topic is much higher now.

Advances in generative AI (GenAI), including the release of ChatGPT in November 2022, marked a turning point. GenAI brought a user interface (UI) to AI and placed it literally in the palm of our hands. The advent of GenAI brought AI to the masses, sparking interest among consumers and key decision makers alike.

Generative AI, a subset of AI, refers to models that can generate high-quality text, images, videos, and other data. For now, GenAI in finance is largely at a proof of concept (POC) stage, but it is rapidly transitioning. In this report, we discuss what use cases are likely in 2024-25, and also look further ahead.

Based on the results of a recent Citi TTS Client Survey, we estimate the global banking sector 2028E profit pool could increase 9% or $170 billion from the adoption of AI, rising from just over $1.7 trillion to close to $2 trillion.

Most incumbents' technology adoption strategy involves adding it on top of existing products. Disruptive startups create new products/services that are native to the new technology.

The tech adoption strategy of most incumbents involves adding it on top of existing products or using the new technology to improve productivity. Startups, by contrast, use new technology to unbundle what incumbents do. Disruptive startups create new products and services that are native to the new technology. [1]

[1] Benedict Evans in Slush Conference in Helsinki, AI and Everything Else, December 2023

As AI-powered agents, bots and beyond, become increasingly prevalent, how will money and finance change? How will the underlying concepts and structures of finance be reshaped? In a bot-to-bot world, where machines transact with minimal human intervention, what does the world of money look like?

Most of us have already been wowed by AI. Many of us now want to know how we will use it.

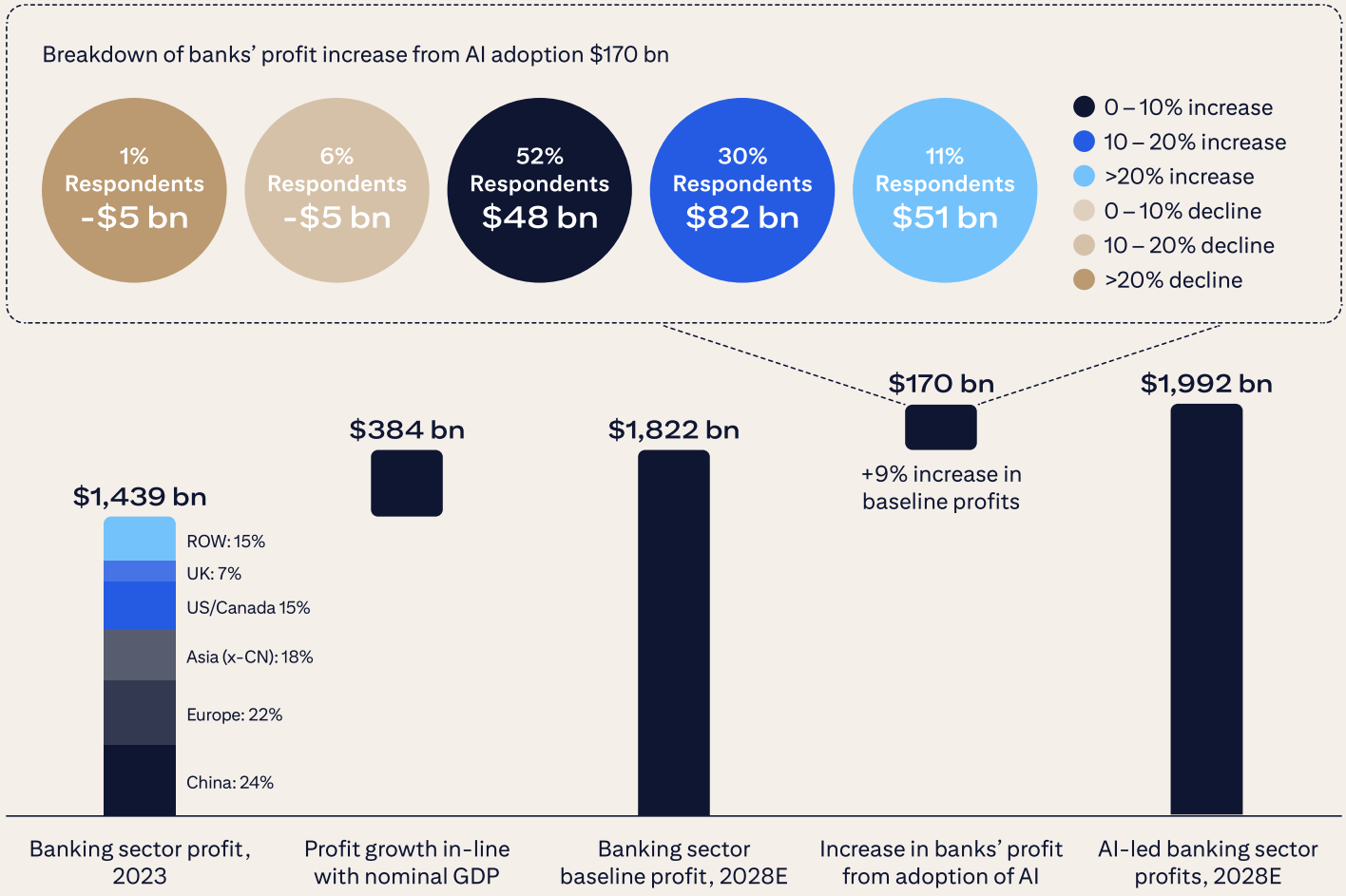
AI In Finance: Bot, Bank & Beyond

Impact of Adopting AI on Banks' Profitability

In 5 years time, will AI increase or decrease profits?

Source: Citi Treasury & Trade Solutions Survey 2024
Number of respondents =90 including banks, insurers, and asset managers.

AI Could Add $170 billion or 9% to Global Banks Sector Profit Pool by 2028E



Source: SNL Financial, IMF World Economic Outlook, Citi Treasury and Trade Solutions Survey 2024, Citi Global Insights

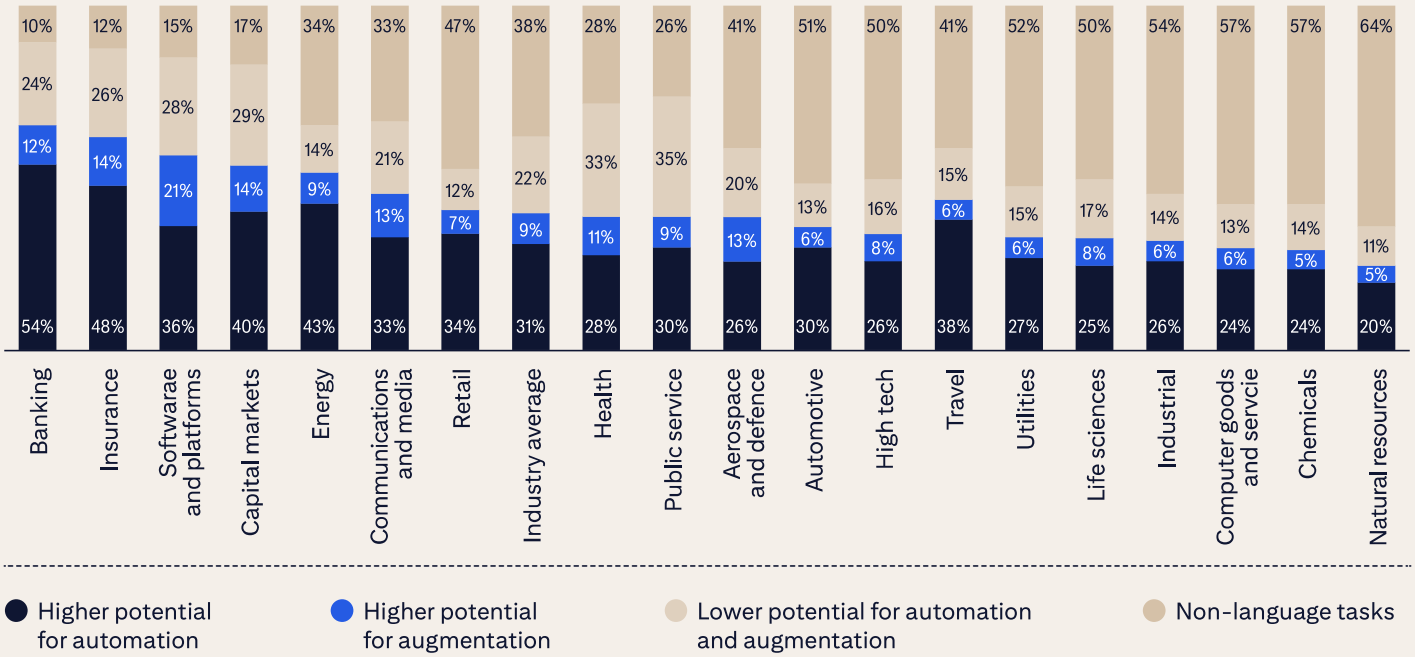
Paving the Way for AI in Financial Services

Source: Citi Global Insights

Potential for AI-Led Job Displacement

Source: Accenture Research Report "A New Era of Generative AI for Everyone", 2023.

Work time distribution by industry and potential AI impact (Based on their employment levels in the US in 2021)



(A.) Finance: What Will Bots Mean?

Technology is a strategic priority for both the Board and the C-suite. It's become commonplace to hear bank leaders referring to banks as technology companies with a banking license. Financial firms increasingly use sophisticated technology to deliver their services and manage their operations, and that tech is often a vector of competitive differentiation.

Banks were early movers in the first technology wave -- investing in the first mainframe computers as far back as the 1950s -- before falling behind in the recent Internet and mobile era.

We believe generative AI (GenAI) has revolutionary potential in financial services because the sector is information rich. Data is its raw material.

In many respects, finance is the perfect sector for the application of AI.

> Generative AI has the potential to change the world in ways that we can't even imagine. It has the power to create new ideas, products, and services that will make our lives easier, more productive, and more creative…
>
> – BILL GATES, CO-FOUNDER, MICROSOFT[2]

Finance, in a world of AI-powered agents, bots and beyond, will likely face change across the board: in terms of market share, employment, and client experience. In the medium term, by 2030 or before, AI-powered bots will play an increasing role in banking and finance. This will challenge many existing ways of doing business.

David Griffiths, Citi's Chief Technology Officer, said: "The pace of adoption and impact of Gen AI across industries has been astounding as it becomes clear that it has the potential to revolutionize the banking industry and improve profitability."

The changes we expect are a continuation of many themes we have been writing about since our first 2016 GPS on the future of finance: technology and culture are changing, and with it so is society. This is leading to a reshaping of the business of money and the role of the players within it. This change is about to re-accelerate.

> The biggest new thing will be the growth of non-human customers.
>
> – SHAMEEK KUNDU, CHIEF DATA OFFICER AND AI ENTREPRENEUR

AI challenges that old French saying: *plus ça change, plus c'est la même chose* ("the more things change, the more they stay the same"). And the biggest new thing will be the growth of non-human bots and agents. he more things change, the more they stay the same"). This time some things really will change.

Bankers may think that they lead the way. But many users are adopting technology faster than banks or big business. AI, and GenAI, may be the latest chapter in the ***digital internet story of the crowds running ahead of the crown***.

[2] Forbes, "The Most Thought-Provoking Generative Artificial Intelligence Quotes Of 2023", 29 November 2023.

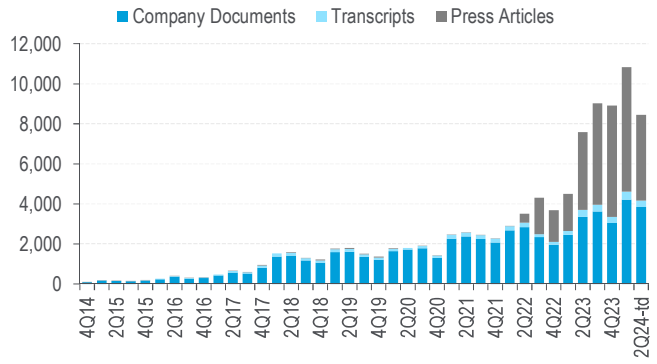
Let's Talk A-bot AI and Finance

Banks have been discussing AI in filings since 2018, but broader public interest took off in 2023.

Financial institutions have been regularly mentioning AI in regulatory filings since 2018, the year we first discussed AI in Finance in our GPS report (**The Bank of the Future – The ABCs of Digital Disruption in Finance**). Before that, references to AI in company filings around the world were relatively limited.

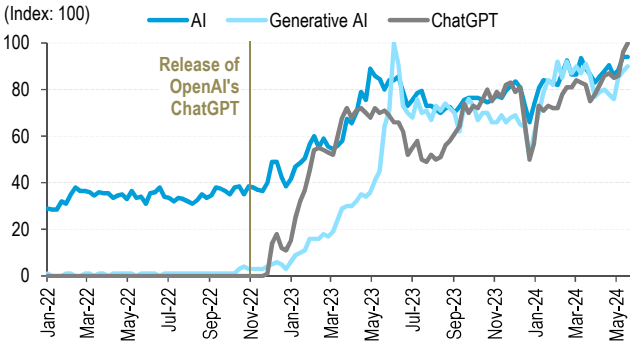
An even bigger spike in external references is evident in media references to AI by financial institutions. These were exceedingly rare pre-2022. Alongside the growth in public interest in AI, and especially GenAI, financial institutions began to discuss the topic much more in press and media.

Figure 1. Mentions of the Term "AI" by Financial Institutions in Company Fillings and Press Articles, 2014-2024



Note: Latest data as of 23 May 2024.
Source: AlphaSense, Citi Global Insights

Figure 2. Google Keyword Search Trends for AI-Related Terms, 2022-2024



Note: [1] Results for the term "AI" represents average of search results for the terms "artificial intelligence" and "AI". [2] Results for all keywords pulled out individually.
Source: Google Trends, Citi Global Insights

For many years, AI – or, strictly speaking, machine learning (ML) – has been used in finance on structured data and for quantitative tasks. GenAI will now expand these use cases to unstructured data. Most enterprise data (about 80-90%) is unstructured – locked away in emails, transcripts, documents, and reports.

The industry's reliance on data is massive, driving everything from customer insights to risk management and fraud detection. With the advent of advanced AI analytics, banks can extract valuable insights to personalize customer products and services, optimize operational processes, and comply with regulatory requirements.

- **Will AI Increase Finance Profits?** According to a recent Citi TTS Client Survey[3], there is a very clear consensus: an overwhelming 93% of financial institution respondents said adoption of AI could improve profitability in the next 5 years, based on productivity gain expectations (Figure 10).
- **What Magnitude of Profits?** Applying the survey results to our forecast of the global banking sector profit pool, suggests AI could boost the total banking industry's 2028E profits by 9%, or $170 billion, from just over $1.8 trillion to close to $2 trillion (Figure 11). This excludes non-bank financial sector profits.
- **Why More Profits?** AI could drive productivity gains for banks by automating routine tasks, streamlining operations, and freeing up employees to focus on higher value activities. GenAI will likely have a big impact on internal facing tasks such as content and information management, coding, and software.

[3] N = 90; where 71 banks, 16 insurance companies, 3 asset managers responded.

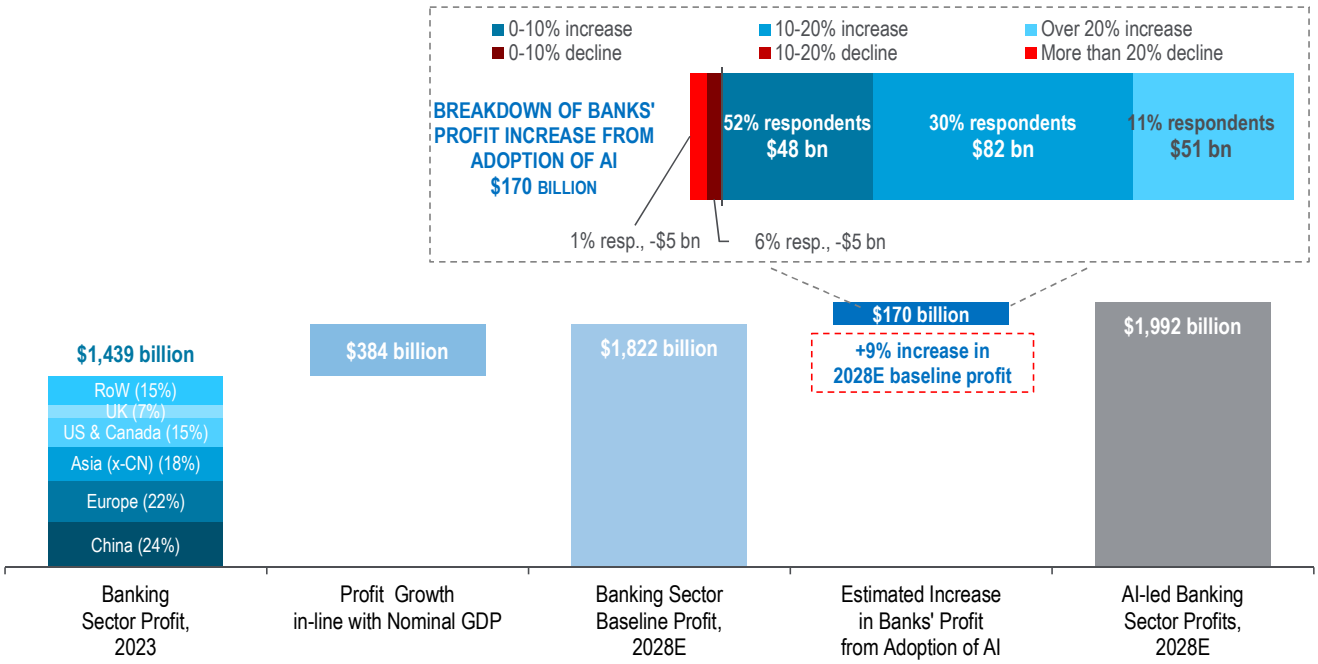
- **Innovation versus Industrialization:** While finance sector leaders are optimistic about the profit impact of AI, driven by productivity gain potential, we are cautious about implementation timelines, talent costs, risk of increased competition, rising client expectations, and the costs associated with increased AI-generated activity.
- **Will Resource Use Grow?** AI is going to make finance firms and others much better at managing, analyzing, and creating information. But the information in the world is exploding: global data creation +50% CAGR, 2023-25E (Figure 12). Jevon's paradox: efficiency gains lower costs which creates more demand[4].
- **Will AI Reduce or Grow Finance Jobs?** Historical technology adoption has not led to reduction of finance workforce but has changed the workforce mix over time. New jobs are constantly created. For example, the US economy has 3x more compliance officers from 2000 to 2023 (Figure 16).
- **Governance and Talent:** The growth of AI may lead to fewer low-skilled roles in operations and technology, but governance and compliance roles will continue to grow. Our survey responses suggest AI talent availability is a challenge for banks and others (Figure 15). Talent wars are not over. Humans are still in demand.
- **Will AI Drive Better Value for Clients?** Integration of AI-powered bots into retail and corporate banking represents a significant potential transformation, offering clients benefits such as automated decision making and the search for best offers, and banks enhanced operational efficiency.
- **Challenges from AI-powered Bots:** A shift to a bot-powered world also poses concerns on data security, regulatory/compliance, and ethical considerations. Since AI models are known to hallucinate and create information that does not exist, organizations run the risk of AI chatbots going fully autonomous and negatively affecting the business financially or its reputation. AI-powered clients could increase price competition in the finance sector, especially in retail financial services. The balance of power may shift. Profit margins may fall.
- **Can Banks Keep Up?** Between the 1950s and 1990s, big business usually had better technology. As the Internet and mobile waves spread across the world over the past two decades, the hierarchy between big business and consumers, when it came to technology, became inverted. GenAI may be the latest such wave.
- **The Race to Adapt:** AI is likely to be adopted faster by digitally native, cloud-based firms, such as FinTechs and BigTechs, with agile incumbent banks as fast followers. Many incumbents, weighed down by tech and culture debt, may lag in AI adoption and lose market share (Figure 3).

As financial firms grapple with the transition from 'Wow' to 'How', the gap between the AI hype and development remains wide.

- **Trough of Disillusionment Ahead?** All technology goes through cycles: hype, disillusionment, and then mass adoption. AI expectations have been high since 2Q23. As financial firms grapple with the transition from 'Wow' to 'How', the gap between hype and mass production currently remains wide.
- **Digital Leviathans:** Many of the largest technology companies are in an arms race to become the AI provider of choice to banks and companies. Similar to the concentration in cloud computing, AI may reinforce single points of control and thus also single points of failure.

[4] The Ben & Marc Show, a16z Podcast, 9 May 2024

Figure 11. Adoption of AI Could Add $170 billion or 9% to the Global Banking Sector Profit Pool by 2028E



Notes: **[1]** Global banking sector profit sourced from SNL Financial, represents sum of over 3,700 diversified/regional commercial banks, thrift & savings banks FY2023 data. **[2]** Profit growth 2023-28E estimated in-line with nominal GDP growth (2024: 4.5%; 2025: 4.8%; 2026: 5.0%; 2027: 4.9%; and 2028: 4.9% (IMF World Economic Outlook). **[3]** Increase in banks' profit from AI adoption based on weighted average findings from survey (Figure 10). N = 90 includes banks, insurance companies, & asset managers.
Source: SNL Financial, IMF World Economic Outlook, Citi Treasury and Trade Solutions Survey 2024, Citi Global Insights

Activity Levels will Explode, Due to GenAI

Yes, AI will enable service providers, including banks and finance companies, to become more productive. But remember clients, competitors, and regulators will all also have AI in their toolkit. And many clients may adopt AI faster than the banks themselves, especially if they work in digitally native sectors.

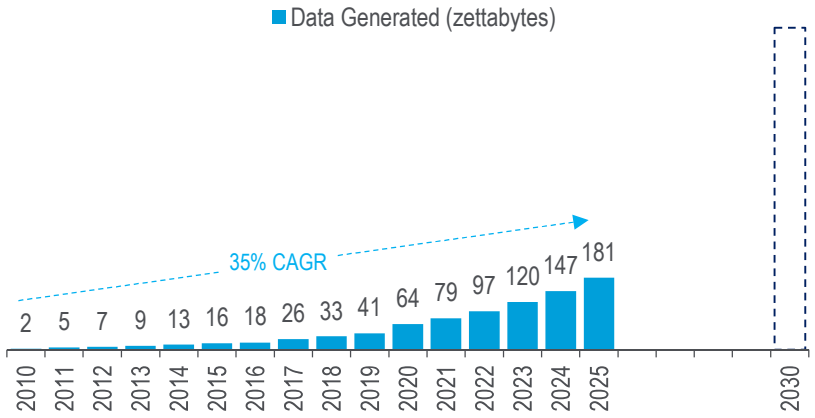
AI/GenAI will lead to a new explosion of data and information. An almost incomprehensible amount of data is created every day. In 2023, the amount of data created globally was estimated at 120 zettabytes (ZB) compared to 64 ZB of data in 2020. 1 zettabyte (ZB) is equivalent to 1 trillion gigabytes (GB).

Estimates suggest global data creation in 2025 could increase to nearly 181 ZB, representing an increase of nearly 51% over 2023. Since 2010, the amount of data created in the world has grown at a CAGR of 35%. With the increasing use of GenAI, even faster growth rates of data creation are likely.

AI will likely bring productivity gains, but activity levels will grow exponentially.

As the amount of data in the world explodes, the GenAI-powered bank or finance firm employee will have to deal with even more information requests from their clients and regulators that will also be GenAI-powered. There will likely be an arms race between AI generating productivity gains and creating more activity.

Figure 12. Amount of Data Generated Each Year Has Grown 60x Since 2010[11]



Note: **[1]** Refers to the amount of data that is newly generated, captured, copied, or consumed.
[2] 1 zettabyte (ZB) is equivalent to 1 billion terabyte (TB) or 1 trillion gigabytes (GB).
Source: Exploding Topics (Statista, Bernard Marr & Co.) (for data from 2010 to 2025)

The importance of regulation in finance will also slow productivity gains from AI. As we discuss later in the report, policy and regulatory approaches vary a lot between countries. But in most countries, banking and finance are highly regulated industries and the adoption of AI by firms in this space will be heavily scrutinized.

Furthermore, regulators are likely to make increased information and analytical demands from financial services companies using AI themselves. Regulators will likely be able to take data from banks and ingest it into their AI tools, scanning for any red flags, inconsistencies, and potential deviations from guidelines.

This may mean finance firms do not witness material decline in headcount as the volume of activity soars. And any gains made due to a reduction in content and coding-related headcount may be partially or completely offset by an increase in the headcount for AI-related compliance managers and ethics and governance staff.

Clients Powered by AI Could Change Behavior and Profits

The stickiness in client relationships helps support revenue and profit margins in consumer banking which, especially for market leaders with scale economies, can be highly attractive. Consumer and SME clients are typically price takers and can exhibit inertia in their banking behavior, which helps bank profits.

AI agents could disrupt the customer relationship stickiness that supports bank revenues and profit margins.

The stickiness of consumer banking client relationships remains remarkable. Adults in the US, on average, continue with the same savings and checking accounts for about 17 years. Even members of the younger generation (aged 26-32) have held their checking account (9 years) and savings account (7 years) for a relatively long time.

Sticky client relationships have been attributed to reasons such as: **[1]** these were the accounts they always had; **[2]** happy with the customer service; and **[3]** too much of a hassle to switch.[12] Also, crucially, most consumers do not want to spend time thinking about money – which is usually a means to do something else. The typical client desire not to think about financial services reinforces client inertia.

[11] Exploding Topics, "Amount of Data Created Daily", 13 December 2023
[12] Bankrate, Survey: Consumers stick with the same checking account for an average of 17 years, 04 January 2022.

(C.) Navigating AI's Potential Pitfalls

AI systems come with inherent risks, and we are in the early stages of developing frameworks to manage the dark side of AI.

While AI promises advancements for finance and economic productivity, considerable challenges also exist. The dark side of AI is not just a speculative dystopia. Algorithms can reinforce existing social inequalities, GenAI can be used for misinformation and manipulation, as well as outright fraud, AI systems can obscure human accountability. We are in the early stages of developing ethical/safe usage frameworks to manage these threats.

- **Bias and Discrimination:** AI algorithms are only as good as the data they are trained on. Algorithms can perpetuate and amplify societal biases. For example, AI-powered credit decisioning models could inadvertently favor certain sections of society, potentially resulting in an increase in social and economic disparities. Addressing algorithmic bias requires attention to data collection, pre-processing, and algorithmic design to ensure fairness and inclusivity.

- **Lack of Transparency:** AI systems can be opaque, obscuring the decision-making process and underlying logic. This poses a challenge as humans cannot comprehend how the AI system arrived at its conclusion, leading to distrust and resistance to adoption. Explicability of AI models is a growing area of concern, especially since enterprise and societal adoption of AI is growing.

> "GenAI creations can be so convincing that they create a false sense of reality. This has the potential to spread misinformation, incite panic, and even destabilize economic or financial systems."
>
> – HERVÉ TOURPE, HEAD OF DIGITAL ADVISORY UNIT, INTERNATIONAL MONETARY FUND (IMF) [52]

- **Misinformation and Manipulation:** AI-generated content could contribute to the spread of false information or misleading content at scale, manipulating public opinion, undermining trust in reliable sources and leading to confusion in society. A particular risk of AI is its ability to tell stories that resonate with an individual's pre-existing beliefs/viewpoints, reinforcing echo chambers and ideological silos.

- **Hallucination:** GenAI models are prone to hallucinate i.e., generate information not based on real data or events, but presents it as fact. Hallucination of AI models is often caused by training data limitations, the model's probabilistic nature, etc. When the model encounters a prompt for which it has insufficient/no training data, it creates a plausible but incorrect response.

- **AI-Generated Deepfakes:** AI-powered tools can generate audio, images or texts of humans that are not real. For example, deepfake technology can be used to create convincing but entirely fabricated images or videos of individuals and objects doing things they never did, which could result in defamation, blackmail, or financial fraud.

- **Amplifies Social Engineering:** AI introduces new cybersecurity risks as bad actors leverage AI capabilities to launch more sophisticated and personalized cyberattacks. Advanced AI algorithms could be exploited by malicious actors to evade traditional detection methods using GenAI-driven malware that adapts its behavior based on the target's defenses.

[52] International Monetary Fund (IMF), Herve Tourpe, "Artificial Intelligence's Promise and Peril", December 2023.

- **Centralization:** AI models used by consumers, businesses and governments may be provided by a small number of private sector companies, largely based in the US or China. AI supplier dominance may echo the concentration and single point of failure risks that already exist in cloud computing. One answer is blockchain-based Decentralized AI, which we discussed in the earlier chapter. Policymakers are also focused on this risk and regulation will play an important role – as we discuss in the next chapter of this report.

Data centre power demand likely to grow at 17% CAGR to 100 GW by 2030.

- **Energy Intensive:** The coming AI boom will increase our usage of data centers. Powering these centers is compute and energy intensive. According to the International Energy Agency, data centers already represent around 1% of global electricity consumption[53] and they are likely to account for an increasing share in the coming years.

In the subsequent pages we delve deeper into some of the prominent risks and challenges associated with the use of AI tools.

[53] IEA, Data Centres and Data Transmission Networks, 11 July 2023

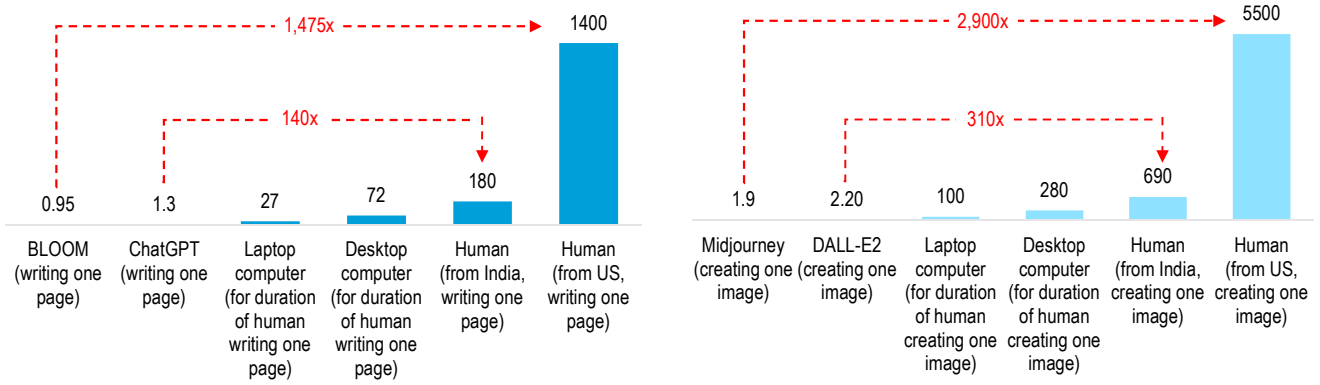
AI – An Energy Guzzler

The computational power required for AI is doubling every 100 days and projected to increase exponentially in the next 5 years.

The computational power required for sustaining AI's rise is doubling roughly every 100 days and is projected to increase exponentially in the next five years.[76] Japan envisages electricity output needs to increase 35-50% by 2050 to 1.35-1.50 trillion kWh to meet the increasing demand for data centers, chip manufacturing and other energy consuming technology businesses.[77]

By contrast, some research suggest AI systems are getting more efficient than humans at writing content and making illustrations. For example, AI systems emit between 140 and 1,475 times less CO2e per page of text generated compared to human writers, while AI illustration systems emit between 310 and 2900 times less CO2e per image than their human counterpart (Figure 32).[78]

Figure 32. Carbon Footprint (grams CO2e) for Text Writing (LHS) and for Image Creation (RHS)



Note: Original data used to create a linear scale chart.
Source: Tomlinson, B., Black, R.W., Patterson, D.J. et al. The carbon emissions of writing and illustrating are lower for AI than for humans. Sci Rep 14, 3732 (2024).

With the current stage of AI revolution characterized by a race to train increasingly larger models, it is crucial to understand the emission cost of these models. We can bifurcate the potential emission costs into three primary buckets:

- **Production of Chips and Infrastructure:** Involves the environmental impact associated with the extraction of raw materials and manufacture/shipping of hardware components such as CPU, GPU and other specialized chips used for AI computations, as well as the building and maintaining of data centre infrastructure like servers, routers, modems etc.
- **Training the LLM:** Involves running of computationally intensive algorithms to pre-train and fine-tune model parameters using large datasets. Environmental costs at this stage tends to be high due to massive computation resources and energy needs as data centres are run for extended periods.
- **Ongoing Use (inference phase):** Refers to the environmental impact from the ongoing use of trained AI models in generative applications to perform tasks. This includes energy for computational power and water used in cooling servers.

[76] Intelligent Computing, The Latest Advances, Challenges and Future, 30 January 2023
[77] Reuters, Japan Sees Need for Sharp Hike in Power Output by 2050 to Meet Demand from AI, Chip Plants, 14 May 2024
[78] Tomlinson, B., Black, R.W., Patterson, D.J. et al., The carbon emissions of writing and illustrating are lower for AI than for humans. Sci Rep 14, 3732 (2024), 14 February 2024 https://doi.org/10.1038/s41598-024-54271-x

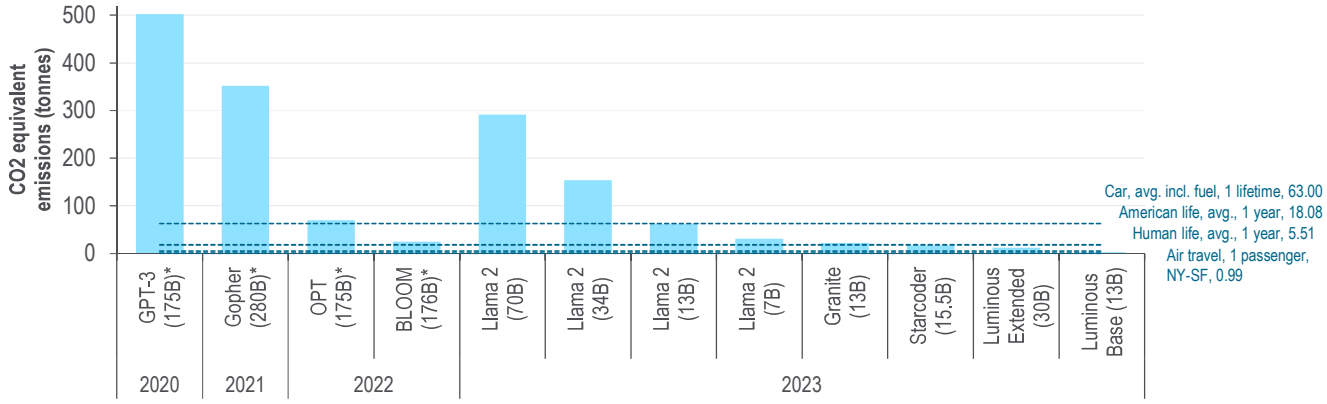
While each segment contributes to the emissions cost of AI, training an AI model is computationally intensive and results in significant consumption. Training larger models generally emits more carbon. However smaller models can still have high emissions if trained on energy grids powered by less efficient energy sources.

Studies show AI emits carbon surpassing 290x plane trips between New York to San Francisco, and 16x carbon emitted by an average American in a year.

A study on the environmental impact of AI systems by Stanford University and other researchers suggest emission data varies widely. Models such as GPT-3 (175B) emitted over 500 tons of carbon. Meta's Llama 2 (70B) released 291.2 tons of carbon, which is over 290 times the emissions released by a single traveler on a round-trip flight from New York to San Francisco, and roughly 16 times the amount of annual carbon emitted by an average American in one year.

Foundation model providers are taking steps to mitigate their emission costs including the use of renewable energy, improved energy efficiency of data centres, efficient model training practices and carbon offsetting.

Figure 33. CO2 Equivalent Emissions (Tons) for Training Select Machine Learning Models and Real-Life Examples, 2020-23



Note: Emissions data of models marked with an asterisk were estimated by independent researchers as they were not disclosed by their developers.
Source: Stanford University Human Centered Artificial Intelligence (HAI), Artificial Intelligence Index Report 2024.

Training an AI model is just one phase in the lifecycle and can regarded as a one-off cost. The emission costs as an AI model goes into service (inference phase), varies by task – image generation tends to have higher emissions than text classification.[79] For now, overall emission costs in the inference phase appear to be limited, likely due to the still evolving scope of AI and scant research in this space.

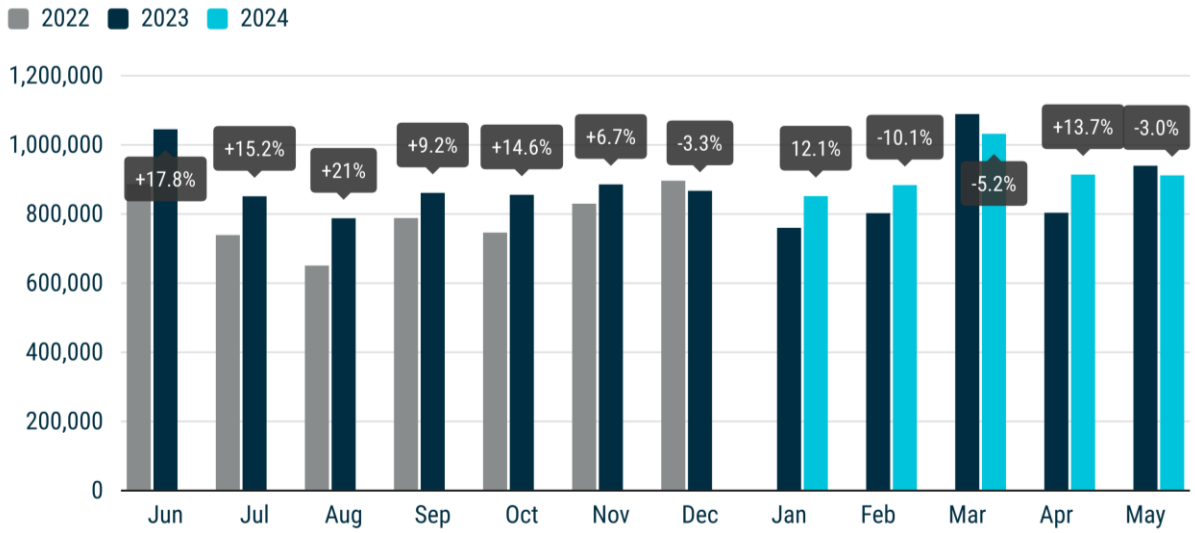
However, as AI gains mass adoption and applications get more ubiquitous/diverse, emission costs could increase significantly. Even with relatively low per query emissions, total environmental impact from use of AI models could surpass that of training the model, as models are queried thousands, if not millions, of times daily.

[79] Stanford University Human Centered Artificial Intelligence, Artificial Intelligence Index Report 2024.

NEW CAR REGISTRATIONS, EUROPEAN UNION

EMBARGOED PRESS RELEASE
8.00 CEST (6.00 GMT), 20 June 2024

New car registrations: -3% in May 2024; battery electric 12.5% market share



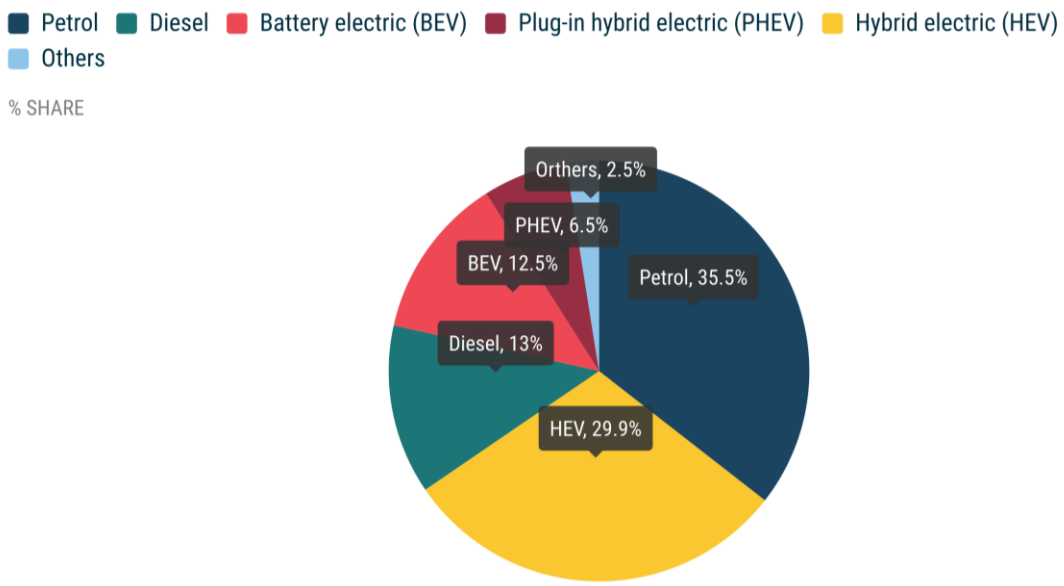
In **May 2024**, car registrations in the European Union decreased by 3%, with declines observed in three out of the region's four major markets: Italy (-6.6%), Germany (-4.3%), and France (-2.9%). Spain, on the other hand, achieved a modest growth of 3.4% last month.

Despite the downturn in May, year-to-date car registrations over the **first five months of 2024** increased by 4.6% to 4.6 million units. The bloc's largest markets all showed a similar performance, with Spain (+6.8%), Germany (+5.2%), France (+4.9%), and Italy (+3.4%) recording growth so far this year.

NEW EU CAR REGISTRATIONS BY POWER SOURCE

In **May**, battery-electric cars accounted for 12.5% of the EU car market, a decrease from 13.8% the previous year. Meanwhile, hybrid-electrics continued to expand their presence, growing from 25% to nearly 30% of the market. The combined share of petrol and diesel cars fell to 48.5%, down from 52.1%, now representing less than half of the market.

Data source: the European Automobile Manufacturers' Association (ACEA), based on aggregated data provided by national automobile associations, ACEA members and S&P Global Mobility.



Electric cars

In **May 2024**, registrations of battery-electric (BEV) cars declined by 12% to 114,308 units, with their total market share dropping to 12.5%. Belgium – now the third-largest market by volume for BEVs – and France were the only key markets to record growth, at 44.8% and 5.4%, respectively. In contrast, Germany (-30.6%) and the Netherlands (-11.7%) experienced significant declines last month. From January to May, a total of 556,276 new battery-electric cars were registered, marking a 2% increase from the same period the previous year.

Plug-in hybrid car registrations also saw a decline of 14.7% last month, with significant decreases in two of the largest markets: Belgium (-36.6%) and France (-19.4%). Germany managed a modest increase of 1.7%, but this was not enough to offset the overall negative trend. In May, plug-in hybrids accounted for 6.5% of the total car market, with 59,333 units sold.

Despite the overall market decline, hybrid-electric was the only segment to post growth, with car registrations increasing by 16.2% in May to over 272,568 units. Three of the four largest markets for this segment – France (+38.3%), Spain (+25.4%), and Italy (+7.4%) – recorded solid gains, while Germany experienced a slight decline of 0.7%. This growth pushed the hybrid-electric market share to nearly 30%, up from 25% in May 2023.

Petrol and diesel cars

In **May 2024**, petrol car sales decreased by 5.6% to 323,551 units, with notable declines in key markets such as France (-20.3%) and Spain (-1.8%). On the other hand, Italy and Germany posted modest growth rates of 4.1% and 2.1%, respectively. As a result, the petrol market share declined from 36.5% to 35.5% compared to May of the previous year.

The diesel car market saw an even steeper decline of 11.4% to 118,733 units, accounting for 13% of the market. Significant decreases were observed in major markets like Italy (-30.5%), France (-24.8%), and Spain (-15.4%). Germany experienced a modest increase of 3.2%.

NEW CAR REGISTRATIONS BY MARKET AND POWER SOURCE

MONTHLY

	BATTERY ELECTRIC			PLUG-IN HYBRID			HYBRID ELECTRIC[1]			OTHERS[2]			PETROL			DIESEL			TOTAL		
	May 2024	May 2023	% change 24/23	May 2024	May 2023	% change 24/23	May 2024	May 2023	% change 24/23	May 2024	May 2023	% change 24/23	May 2024	May 2023	% change 24/23	May 2024	May 2023	% change 24/23	May 2024	May 2023	% change 24/23
Austria	3,448	4,130	-16.5	1,263	1,276	-1.0	4,444	4,429	+0.3	1	2	-50.0	6,788	6,831	-0.6	3,876	3,955	-2.0	19,820	20,623	-3.9
Belgium	10,418	7,194	+44.8	5,624	8,875	-36.6	3,110	2,986	+4.2	239	402	-40.5	17,271	18,306	-5.7	2,245	3,596	-37.6	38,907	41,359	-5.9
Bulgaria	118	134	-11.9	46	23	+100.0	74	55	+34.5	0	0	#DIV/0!	2,241	2,276	-1.5	747	680	+9.9	3,226	3,168	+1.8
Croatia	265	131	+102.3	117	63	+85.7	1,788	1,561	+14.5	134	190	-29.5	4,134	3,713	+11.3	2,085	1,507	+38.4	8,523	7,165	+18.95
Cyprus	41	42	-2.4	47	37	+27.0	589	618	-4.7	0	0	#DIV/0!	587	959	-38.8	37	56	-33.9	1,301	1,712	-24.0
Czechia	747	575	+29.9	472	362	+30.4	4,432	3,370	+31.5	382	348	+9.8	8,807	10,480	-16.0	4,896	5,163	-5.2	19,736	20,298	-2.8
Denmark	7,239	4,442	+63.0	631	1,505	-58.1	2,557	2,970	-13.9	0	0	#DIV/0!	3,515	4,261	-17.5	627	828	-24.3	14,569	14,006	+4.0
Estonia	130	149	-12.8	64	54	+18.5	887	796	+11.4	10	5	+100.0	530	987	-46.3	284	298	-4.7	1,905	2,289	-16.8
Finland	2,223	3,275	-32.1	1,362	1,597	-14.7	2,727	2,417	+12.8	15	42	-64.3	1,077	1,586	-32.1	377	519	-27.4	7,781	9,436	-17.5
France	23,892	22,667	+5.4	10,202	12,657	-19.4	47,573	34,395	+38.3	4,946	6,382	-22.5	43,275	54,267	-20.3	11,410	15,168	-24.8	141,298	145,536	-2.9
Germany	29,708	42,780	-30.6	14,038	13,803	+1.7	57,413	57,842	-0.7	875	1,336	-34.5	89,498	87,700	+2.1	44,893	43,505	+3.2	236,425	246,966	-4.3
Greece	405	720	-43.8	646	725	-10.9	5,977	3,715	+60.9	157	277	-43.3	5,592	6,144	-9.0	983	1,376	-28.6	13,760	12,957	+6.2
Hungary	781	479	+63.0	468	432	+8.3	3,873	3,384	+14.5	18	37	-51.4	3,047	3,504	-13.0	1,344	1,185	+13.4	9,531	9,021	+5.7
Ireland	1,039	1,715	-39.4	678	670	+1.2	1,160	1,529	-24.1	0	0	#DIV/0!	2,386	2,063	+15.7	1,138	1,568	-27.4	6,401	7,545	-15.2
Italy	5,052	6,181	-18.3	4,579	6,592	-30.5	55,655	51,820	+7.4	9,265	12,751	-27.3	44,856	43,081	+4.1	20,102	28,911	-30.5	139,509	149,336	-6.6
Latvia	112	179	-37.4	30	37	-18.9	585	464	+26.1	25	39	-35.9	651	883	-26.3	283	268	+5.6	1,686	1,870	-9.8
Lithuania	167	225	-25.8	114	116	-1.7	1,427	974	+46.5	22	49	-55.1	785	986	-20.4	328	345	-4.9	2,843	2,695	+5.5
Luxembourg	990	911	+8.7	284	417	-31.9	790	802	-1.5	0	0	#DIV/0!	1,291	1,677	-23.0	492	595	-17.3	3,847	4,402	-12.6
Malta	181	102	+77.5	45	58	-22.4	130	200	-35.0	1	0	#DIV/0!	281	333	-15.6	70	73	-4.1	708	766	-7.6
Netherlands	9,681	10,962	-11.7	4,086	4,334	-5.7	8,291	7,413	+11.8	96	158	-39.2	5,745	9,718	-40.9	462	357	+29.4	28,361	32,942	-13.9
Poland	1,291	1,362	-5.2	1,073	1,193	-10.1	20,932	14,028	+49.2	944	958	-1.5	15,611	16,880	-7.5	3,803	4,155	-8.5	43,654	38,576	+13.2
Portugal	3,147	3,378	-6.8	2,601	2,309	+12.6	3,306	2,612	+26.6	1,275	1,054	+21.0	7,498	8,375	-10.5	2,023	2,088	-3.1	19,850	19,816	+0.2
Romania	754	1,402	-46.2	0	0	#DIV/0!	5,239	4,157	+26.0	1,716	1,559	+10.1	5,710	4,982	+14.6	2,224	1,541	+44.3	15,643	13,641	+14.7
Slovakia	189	284	-33.5	141	318	-55.7	2,222	2,078	+6.9	148	164	-9.8	3,214	3,699	-13.1	1,380	1,496	-7.8	7,294	8,039	-9.3
Slovenia	283	383	-26.1	111	102	+8.8	430	730	-41.1	42	32	+31.3	3,083	2,741	+12.5	918	865	+6.1	4,867	4,853	+0.29
Spain	4,393	4,409	-0.4	4,787	6,009	-20.3	34,079	27,184	+25.4	2,287	2,314	-1.2	39,820	40,534	-1.8	9,792	11,574	-15.4	95,158	92,024	+3.4
Sweden	7,614	11,657	-34.7	5,824	5,975	-2.5	2,878	2,034	+41.5	606	598	+1.3	6,258	5,829	+7.4	1,914	2,387	-19.8	25,094	28,480	-11.9
EUROPEAN UNION	**114,308**	**129,868**	**-12.0**	**59,333**	**69,539**	**-14.7**	**272,568**	**234,563**	**+16.2**	**23,204**	**28,697**	**-19.1**	**323,551**	**342,795**	**-5.6**	**118,733**	**134,059**	**-11.43**	**911,697**	**939,521**	**-3.0**
Iceland	168	942	-82.2	235	211	+11.4	623	648	-3.9	0	0	#DIV/0!	549	326	+68.4	433	450	-3.8	2,008	2,577	-22.1
Norway	7,893	10,773	-26.7	544	1,092	-50.2	1,250	1,042	+20.0	0	1	-100.0	129	157	-17.8	437	277	+57.8	10,253	13,342	-23.2
Switzerland	3,568	4,313	-17.3	1,779	1,683	+5.7	6,595	5,900	+11.8	2	9	-77.8	6,881	7,486	-8.1	2,440	2,179	+12.0	21,265	21,570	-1.4
EFTA	**11,629**	**16,028**	**-27.4**	**2,558**	**2,986**	**-14.3**	**8,468**	**7,590**	**+11.6**	**2**	**10**	**-80.0**	**7,559**	**7,969**	**-5.1**	**3,310**	**2,906**	**+13.9**	**33,526**	**37,489**	**-10.6**
United Kingdom	26,031	24,513	+6.2	11,866	9,025	+31.5	51,736	46,142	+12.1	0	0	#DIV/0!	53,643	59,766	-10.2	4,402	5,758	-23.5	147,678	145,204	+1.7
EU + EFTA + UK	**151,968**	**170,409**	**-10.8**	**73,757**	**81,550**	**-9.6**	**332,772**	**288,295**	**+15.4**	**23,206**	**28,707**	**-19.2**	**384,753**	**410,530**	**-6.3**	**126,445**	**142,723**	**-11.4**	**1,092,901**	**1,122,214**	**-2.6**

[1] Includes full and mild hybrids
[2] Includes fuel-cell electric vehicles, natural gas vehicles, LPG, E85/ethanol, and other fuels

NEW CAR REGISTRATIONS BY MARKET AND POWER SOURCE

YEAR TO DATE

	BATTERY ELECTRIC			PLUG-IN HYBRID			HYBRID ELECTRIC[1]			OTHERS[2]			PETROL			DIESEL			TOTAL		
	Jan-May 2024	Jan-May 2023	% change 24/23	Jan-May 2024	Jan-May 2023	% change 24/23	Jan-May 2024	Jan-May 2023	% change 24/23	Jan-May 2024	Jan-May 2023	% change 24/23	Jan-May 2024	Jan-May 2023	% change 24/23	Jan-May 2024	Jan-May 2023	% change 24/23	Jan-May 2024	Jan-May 2023	% change 24/23
Austria	17,482	18,760	-6.8	6,888	7,013	-1.8	23,896	21,076	+13.4	12	6	+100.0	35,378	35,147	+0.7	20,764	20,177	+2.9	104,420	102,179	+2.2
Belgium	50,690	34,459	+47.1	39,514	39,226	+0.7	19,478	15,571	+25.1	1,733	1,827	-5.1	90,480	99,276	-8.9	11,851	22,356	-47.0	213,746	212,715	+0.5
Bulgaria	726	743	-2.3	216	96	+125.0	363	224	+62.1	0	1	-100.0	13,486	9,893	+36.3	4,156	2,868	+44.9	18,947	13,825	+37.0
Croatia	494	815	-39.4	583	399	+46.1	8,063	5,775	+39.6	659	752	-12.4	14,919	13,776	+8.3	6,501	5,599	+16.1	31,219	27,116	+15.1
Cyprus	434	236	+83.9	300	169	+77.5	3,339	2,244	+48.8	0	0	#DIV/0!	3,093	3,640	-15.0	208	243	-14.4	7,374	6,532	+12.9
Czechia	2,640	2,370	+11.4	2,166	1,972	+9.8	20,268	15,977	+26.9	2,113	1,705	+23.9	48,279	50,525	-4.4	21,421	22,519	-4.9	96,887	95,068	+1.9
Denmark	29,020	19,802	+46.6	3,146	6,926	-54.6	12,723	13,240	-3.9	0	0	#DIV/0!	19,638	22,934	-14.4	2,304	3,108	-25.9	66,831	66,010	+1.2
Estonia	529	506	+4.5	306	215	+42.3	3,607	3,768	-4.3	62	30	+106.7	2,454	4,101	-40.2	1,397	1,250	+11.8	8,355	9,870	-15.3
Finland	8,667	12,209	-29.0	6,750	7,110	-5.1	10,921	10,370	+5.3	103	184	-44.0	4,356	6,110	-28.7	1,592	1,727	-7.8	32,389	37,710	-14.1
France	128,565	104,639	+22.9	59,644	60,055	-0.7	218,316	159,015	+37.3	31,323	29,328	+6.8	239,203	269,707	-11.3	56,126	76,185	-26.3	733,177	698,929	+4.9
Germany	140,713	167,256	-15.9	74,158	63,135	+17.5	291,387	261,759	+11.3	6,580	5,909	+11.4	438,810	412,769	+6.3	222,664	205,903	+8.1	1,174,312	1,116,731	+5.2
Greece	2,589	2,575	+0.5	3,441	2,925	+17.6	24,193	15,909	+52.1	1,022	1,525	-33.0	26,499	25,837	+2.6	6,129	8,197	-25.2	63,873	56,968	+12.1
Hungary	3,789	2,532	+49.6	2,440	2,259	+8.0	24,054	18,775	+28.1	72	328	-78.0	15,363	17,676	-13.1	5,893	5,559	+6.0	51,611	47,129	+9.5
Ireland	10,056	12,875	-21.9	7,060	6,137	+15.0	16,687	15,756	+5.9	0	0	#DIV/0!	25,787	23,252	+10.9	17,856	16,592	+7.6	77,446	74,612	+3.8
Italy	21,566	26,516	-18.7	23,423	31,507	-25.7	281,267	248,245	+13.3	65,134	63,234	+3.0	227,105	196,745	+15.4	107,256	135,520	-20.9	725,751	701,767	+3.4
Latvia	476	739	-35.6	191	148	+29.1	2,459	2,200	+11.8	166	148	+12.2	2,669	3,497	-23.7	1,147	1,287	-10.9	7,108	8,019	-11.4
Lithuania	737	843	-12.6	572	404	+41.6	5,492	4,134	+32.8	239	211	+13.3	3,502	4,717	-25.8	1,441	1,402	+2.8	11,983	11,711	+2.3
Luxembourg	5,210	4,189	+24.4	1,704	2,032	-16.1	4,381	4,035	+8.6	0	0	#DIV/0!	6,623	7,759	-14.6	2,840	3,712	-23.5	20,758	21,727	-4.5
Malta	1,112	469	+137.1	244	526	-53.6	703	739	-4.9	1	1	+0.0	1,370	1,267	+8.1	240	304	-21.1	3,670	3,306	+11.0
Netherlands	48,828	44,375	+10.0	22,345	21,762	+2.7	46,510	36,631	+27.0	1,032	733	+40.8	38,150	54,915	-30.5	1,938	1,990	-2.6	158,803	160,406	-1.0
Poland	6,746	6,688	+0.9	6,024	5,494	+9.6	106,396	73,351	+45.1	6,829	5,222	+30.8	81,492	87,162	-6.5	19,249	19,176	+0.4	226,736	197,093	+15.0
Portugal	15,394	13,783	+11.7	11,902	9,698	+22.7	15,596	13,879	+12.4	7,290	4,106	+77.5	37,868	34,857	+8.6	8,173	11,791	-30.7	96,223	88,114	+9.2
Romania	4,882	5,423	-10.0	0	0	#DIV/0!	21,512	16,835	+27.8	5,909	8,548	-30.9	20,488	22,766	-10.0	9,356	6,900	+35.6	62,147	60,472	+2.8
Slovakia	1,017	856	+18.8	893	999	-10.6	11,478	9,883	+16.1	825	781	+5.6	17,667	18,277	-3.338	6,516	6,290	+3.6	38,396	37,086	+3.5
Slovenia	1,424	1,836	-22.4	488	495	-1.4	2,492	3,363	-25.9	176	254	-30.7	14,807	12,720	+16.4	4,167	3,973	+4.9	23,554	22,641	+4.0
Spain	19,610	18,418	+6.5	25,543	25,212	+1.3	153,557	121,440	+26.4	13,103	8,975	+46.0	176,981	175,290	+1.0	43,090	55,004	-21.7	431,884	404,339	+6.8
Sweden	32,880	41,487	-20.7	25,690	23,335	+10.1	10,585	9,816	+7.8	3,464	2,750	+26.0	25,848	24,564	+5.2	8,426	10,423	-19.2	106,893	112,375	-4.9
EUROPEAN UNION	**556,276**	**545,399**	**+2.0**	**325,631**	**319,249**	**+2.0**	**1,339,723**	**1,104,010**	**+21.4**	**147,847**	**136,558**	**+8.3**	**1,632,315**	**1,639,179**	**-0.4**	**592,701**	**650,055**	**-8.8**	**4,594,493**	**4,394,450**	**+4.6**
Iceland	743	3,017	-75.4	772	874	-11.7	1,136	1,681	-32.4	0	2	-100.0	929	960	-3.2	1,176	1,166	+0.9	4,756	7,700	-38.2
Norway	38,017	42,475	-10.5	1,173	3,334	-64.8	2,803	3,301	-15.1	0	1	-100.0	461	609	-24.3	1,292	1,261	+2.5	43,746	50,981	-14.2
Switzerland	17,171	17,938	-4.3	8,821	8,331	+5.9	30,652	27,204	+12.7	13	53	-75.5	31,903	35,605	-10.4	9,969	9,408	+6.0	98,529	98,539	-0.0
EFTA	**55,931**	**63,430**	**-11.8**	**10,766**	**12,539**	**-14.1**	**34,591**	**32,186**	**+7.5**	**13**	**56**	**-76.8**	**33,293**	**37,174**	**-10.4**	**12,437**	**11,835**	**+5.1**	**147,031**	**157,220**	**-6.5**
United Kingdom	133,062	121,268	+9.7	64,918	49,385	+31.5	287,660	243,356	+18.2	0	0	#DIV/0!	316,673	327,210	-3.2	25,187	31,235	-19.4	827,500	772,454	+7.1
EU + EFTA + UK	**745,269**	**730,097**	**+2.1**	**401,315**	**381,173**	**+5.3**	**1,661,974**	**1,379,552**	**+20.5**	**147,860**	**136,614**	**+8.2**	**1,982,281**	**2,003,563**	**-1.1**	**630,325**	**693,125**	**-9.1**	**5,569,024**	**5,324,124**	**+4.6**

[1] Includes full and mild hybrids
[2] Includes fuel-cell electric vehicles, natural gas vehicles, LPG, E85/ethanol, and other fuels

NEW CAR REGISTRATIONS BY MANUFACTURER

EUROPEAN UNION (EU)

	MAY					JANUARY-MAY				
	% share[1]		Units		% change	% share[1]		Units		% change
	2024	2023	2024	2023	24/23	2024	2023	2024	2023	24/23
Volkswagen Group	**27.3**	**26.0**	**248,664**	**244,706**	**+1.6**	**25.9**	**26.1**	**1,189,053**	**1,147,155**	**+3.7**
Volkswagen	11.3	11.0	103,190	103,112	+0.1	10.5	10.9	484,405	479,996	+0.9
Audi	5.1	5.5	46,435	51,452	-9.8	4.7	5.4	217,851	237,749	-8.4
Skoda	5.8	5.3	53,084	49,715	+6.8	5.9	5.5	269,341	240,209	+12.1
Seat	2.3	1.9	21,130	18,282	+15.6	2.2	2.1	101,228	93,913	+7.8
Cupra	1.9	1.6	17,637	15,241	+15.7	1.6	1.4	73,956	60,559	+22.1
Porsche	0.7	0.7	6,614	6,224	+6.3	0.9	0.7	39,593	31,671	+25.0
Others[2]	0.1	0.1	573	680	-15.8	0.1	0.1	2,679	3,058	-12.4
Stellantis	**17.4**	**18.1**	**158,389**	**170,180**	**-6.9**	**18.2**	**18.9**	**834,973**	**831,166**	**+0.5**
Peugeot	5.3	5.9	48,406	55,706	-13.1	5.6	6.0	255,792	263,022	-2.75
Opel/Vauxhall	3.4	3.3	31,094	31,127	-0.1	3.3	3.5	149,684	152,621	-1.9
Fiat[3]	2.9	3.2	26,884	30,307	-11.3	3.3	3.5	149,477	155,569	-3.9
Citroen	3.3	2.9	30,113	27,614	+9.0	3.6	3.3	165,226	145,395	+13.6
Jeep	1.2	1.2	10,997	10,862	+1.2	1.2	1.1	54,822	49,825	+10.0
DS	0.3	0.5	2,798	4,721	-40.7	0.4	0.5	17,028	21,210	-19.7
Alfa Romeo	0.4	0.5	3,750	4,444	-15.6	0.4	0.5	19,851	20,598	-3.6
Lancia/Chrysler	0.4	0.5	3,847	4,712	-18.4	0.4	0.4	20,655	19,416	+6.4
Others[4]	0.1	0.1	500	687	-27.2	0.1	0.1	2,438	3,510	-30.5
Renault Group	**10.8**	**11.0**	**98,200**	**103,771**	**-5.4**	**10.6**	**10.9**	**485,623**	**481,089**	**+0.9**
Renault	6.3	6.2	57,745	58,681	-1.6	5.6	5.9	256,044	257,598	-0.6
Dacia	4.4	4.8	40,127	44,697	-10.2	5.0	5.1	228,100	222,512	+2.5
Alpine	0.0	0.0	328	393	-16.5	0.0	0.0	1,479	979	+51.1
Toyota Group	**7.6**	**6.6**	**69,742**	**61,742**	**+13.0**	**8.0**	**6.9**	**369,079**	**302,339**	**+22.1**
Toyota	7.1	6.1	65,186	57,701	+13.0	7.6	6.5	347,830	286,653	+21.3
Lexus	0.5	0.4	4,556	4,041	+12.7	0.5	0.4	21,249	15,686	+35.5
Hyundai Group	**8.1**	**8.3**	**73,395**	**78,309**	**-6.3**	**7.9**	**8.4**	**364,042**	**370,891**	**-1.8**
Hyundai	4.2	3.9	37,924	36,734	+3.2	4.0	4.0	184,630	175,209	+5.4
Kia	3.9	4.4	35,471	41,575	-14.7	3.9	4.5	179,412	195,682	-8.3
BMW Group	**6.4**	**7.5**	**58,247**	**70,754**	**-17.7**	**6.5**	**6.6**	**297,556**	**289,857**	**+2.7**
BMW	5.7	6.3	51,879	59,003	-12.1	5.6	5.4	259,033	236,331	+9.6
Mini	0.7	1.3	6,369	11,751	-45.8	0.8	1.2	38,523	53,526	-28.0
Mercedes-Benz	**5.0**	**5.1**	**45,905**	**47,607**	**-3.6**	**5.0**	**5.4**	**231,798**	**237,441**	**-2.4**
Mercedes	4.8	4.8	43,735	45,373	-3.6	4.8	5.2	221,775	227,417	-2.5
Smart	0.2	0.2	2,170	2,234	-2.9	0.2	0.2	10,023	10,024	-0.0
Ford	**3.0**	**3.5**	**26,982**	**32,808**	**-17.8**	**3.0**	**3.7**	**136,531**	**162,278**	**-15.9**
Volvo Cars	**2.9**	**2.2**	**26,461**	**20,590**	**+28.5**	**2.8**	**2.1**	**128,192**	**90,666**	**+41.4**
Nissan	**1.6**	**1.4**	**14,606**	**13,622**	**+7.2**	**2.1**	**1.9**	**97,235**	**81,860**	**+18.8**
Tesla	**1.6**	**2.4**	**14,568**	**22,138**	**-34.2**	**2.0**	**2.3**	**92,054**	**102,502**	**-10.2**
Suzuki	**1.6**	**1.4**	**14,137**	**13,516**	**+4.6**	**1.7**	**1.4**	**79,629**	**61,262**	**+30.0**
Mazda	**1.4**	**1.1**	**12,315**	**10,669**	**+15.4**	**1.3**	**1.4**	**60,373**	**60,571**	**-0.3**
SAIC Motor	**1.5**	**1.4**	**13,227**	**13,252**	**-0.2**	**1.3**	**1.1**	**59,073**	**46,796**	**+26.2**
Mitsubishi	**0.5**	**0.4**	**4,578**	**3,630**	**+26.1**	**0.6**	**0.3**	**29,614**	**14,822**	**+99.8**
Jaguar Land Rover Group	**0.6**	**0.6**	**5,888**	**5,292**	**+11.3**	**0.6**	**0.6**	**28,466**	**27,776**	**+2.5**
Land Rover	0.6	0.5	5,382	4,430	+21.5	0.6	0.5	25,499	23,558	+8.2
Jaguar	0.1	0.1	506	862	-41.3	0.1	0.1	2,967	4,218	-29.7
Honda	**0.3**	**0.2**	**3,027**	**2,043**	**+48.2**	**0.4**	**0.3**	**17,613**	**11,009**	**+60.0**

[1] ACEA estimation based on total by market
[2] Bentley, Bugatti, Lamborghini, and MAN
[3] Includes Abarth
[4] Dodge, Maserati, and RAM

NEW CAR REGISTRATIONS BY MANUFACTURER

EU + EFTA + UK

	MAY					JANUARY-MAY				
	% share[1]		Units		% change	% share[1]		Units		% change
	2024	2023	2024	2023	24/23	2024	2023	2024	2023	24/23
Volkswagen Group	**27.1**	**25.9**	**296,446**	**291,113**	**+1.8**	**25.5**	**25.9**	**1,420,858**	**1,376,374**	**+3.2**
Volkswagen	11.0	10.6	120,141	119,128	+0.9	10.2	10.6	567,839	562,710	+0.9
Audi	5.4	5.9	59,096	65,768	-10.1	5.0	5.7	279,466	303,998	-8.1
Skoda	5.7	5.2	62,372	58,254	+7.1	5.6	5.2	311,216	279,286	+11.4
Seat	2.3	1.9	25,162	20,777	+21.1	2.2	2.1	121,169	109,827	+10.3
Cupra	1.9	1.6	20,324	17,733	+14.6	1.6	1.4	87,281	72,482	+20.4
Porsche	0.8	0.8	8,567	8,554	+0.2	0.9	0.8	50,140	43,843	+14.4
Others[2]	0.1	0.1	784	899	-12.8	0.1	0.1	3,746	4,228	-11.4
Stellantis	**15.9**	**17.0**	**173,969**	**190,606**	**-8.7**	**16.9**	**17.5**	**938,744**	**933,848**	**+0.5**
Peugeot	4.9	5.5	53,447	61,568	-13.2	5.2	5.5	288,554	292,407	-1.3
Opel/Vauxhall	3.4	3.6	37,463	40,616	-7.8	3.4	3.7	190,560	194,401	-2.0
Fiat[3]	2.5	2.8	27,766	31,766	-12.6	2.8	3.1	158,678	165,689	-4.2
Citroen	3.0	2.7	32,521	30,231	+7.6	3.2	3.0	180,214	161,012	+11.9
Jeep	1.0	1.0	11,384	11,160	+2.0	1.1	1.0	58,647	52,103	+12.6
DS	0.3	0.4	2,882	5,003	-42.4	0.3	0.4	17,666	22,782	-22.5
Alfa Romeo	0.4	0.4	4,052	4,736	-14.4	0.4	0.4	20,901	21,819	-4.2
Lancia/Chrysler	0.4	0.4	3,847	4,712	-18.4	0.4	0.4	20,655	19,418	+6.4
Others[4]	0.1	0.1	607	814	-25.4	0.1	0.1	2,869	4,217	-32.0
Renault Group	**9.8**	**9.8**	**106,570**	**110,232**	**-3.3**	**9.5**	**9.7**	**529,200**	**514,767**	**+2.8**
Renault	5.7	5.5	62,565	61,839	+1.2	5.1	5.2	282,174	274,242	+2.9
Dacia	4.0	4.3	43,647	47,946	-9.0	4.4	4.5	245,293	239,368	+2.5
Alpine	0.0	0.0	358	447	-19.9	0.0	0.0	1,733	1,157	+49.8
Hyundai Group	**8.4**	**8.6**	**92,196**	**96,917**	**-4.9**	**8.3**	**8.8**	**461,758**	**468,784**	**-1.5**
Kia	4.2	4.6	45,499	51,513	-11.7	4.2	4.7	233,393	250,146	-6.7
Hyundai	4.3	4.0	46,697	45,404	+2.8	4.1	4.1	228,365	218,638	+4.4
Toyota Group	**7.4**	**6.7**	**81,175**	**75,035**	**+8.2**	**7.7**	**6.9**	**427,918**	**367,978**	**+16.3**
Toyota	6.9	6.2	75,031	69,310	+8.3	7.2	6.5	399,094	346,647	+15.1
Lexus	0.6	0.5	6,144	5,725	+7.3	0.5	0.4	28,824	21,331	+35.1
BMW Group	**6.8**	**7.6**	**74,318**	**85,094**	**-12.7**	**6.9**	**6.8**	**384,202**	**361,637**	**+6.2**
BMW	5.9	6.2	64,923	69,796	-7.0	5.9	5.4	326,682	287,655	+13.6
Mini	0.9	1.4	9,395	15,298	-38.6	1.0	1.4	57,519	73,982	-22.3
Mercedes-Benz	**5.1**	**4.9**	**55,412**	**55,324**	**+0.2**	**5.1**	**5.3**	**282,529**	**283,806**	**-0.4**
Mercedes	4.9	4.7	53,127	53,045	+0.2	4.9	5.1	272,002	273,505	-0.5
Smart	0.2	0.2	2,285	2,279	+0.3	0.2	0.2	10,527	10,301	+2.2
Ford	**3.2**	**4.0**	**35,272**	**44,997**	**-21.6**	**3.4**	**4.2**	**188,021**	**224,987**	**-16.4**
Volvo Cars	**3.1**	**2.4**	**34,101**	**26,984**	**+26.4**	**2.9**	**2.2**	**160,145**	**118,191**	**+35.5**
Nissan	**2.0**	**1.9**	**21,706**	**20,968**	**+3.5**	**2.6**	**2.3**	**146,497**	**122,424**	**+19.7**
Tesla	**1.7**	**2.7**	**19,108**	**29,819**	**-35.9**	**2.1**	**2.6**	**119,533**	**138,556**	**-13.7**
SAIC Motor	**1.9**	**1.8**	**20,992**	**19,959**	**+5.2**	**1.7**	**1.5**	**97,251**	**79,945**	**+21.6**
Suzuki	**1.6**	**1.4**	**17,001**	**15,964**	**+6.5**	**1.7**	**1.4**	**93,546**	**73,609**	**+27.1**
Mazda	**1.4**	**1.2**	**15,385**	**13,570**	**+13.4**	**1.3**	**1.4**	**74,313**	**76,393**	**-2.7**
Jaguar Land Rover Group	**1.2**	**1.0**	**12,688**	**10,685**	**+18.7**	**1.3**	**1.1**	**69,802**	**60,005**	**+16.3**
Land Rover	1.0	0.8	10,806	8,476	+27.5	1.0	0.9	57,303	50,277	+14.0
Jaguar	0.2	0.2	1,882	2,209	-14.8	0.2	0.2	12,499	9,728	+28.5
Honda	**0.5**	**0.3**	**5,220**	**3,729**	**+40.0**	**0.6**	**0.4**	**35,237**	**23,810**	**+48.0**
Mitsubishi	**0.4**	**0.3**	**4,766**	**3,814**	**+25.0**	**0.6**	**0.3**	**30,871**	**15,633**	**+97.5**

[1] ACEA estimation based on total by market
[2] Bentley, Bugatti, Lamborghini, and MAN
[3] Includes Abarth
[4] Dodge, Maserati, and RAM

https://www.diu.mil/work-with-us/submit-solution/PROJ00488

Advanced Nuclear Power for Installations (ANPI)

We look forward to your solution —
To submit, scroll to the form at the bottom of this page.

Project Description

Problem Statement

The US Army seeks to prototype on-site micro-reactor nuclear power plant(s) to address its energy resilience needs through the Advanced Nuclear Power for Installations (ANPI) program to provide electricity generation and distribution.

Currently, the US Army is reliant on off-site electricity providers to obtain energy in support of its critical mission to ensure our nation's security. The Army is also dependent on off-site electricity to conduct its globe-spanning missions in air, land, sea, space, and cyberspace. This energy dependence creates mission risks due to disruptions from extreme weather and cybersecurity attacks. While current renewable energy solutions, such as wind and solar energy are carbon-free, they are intermittent, and require battery storage or other solutions to mitigate the intermittency.

Therefore, the Army is seeking a novel approach using recent advances in the nuclear industry that can provide continuous/reliable power regardless of weather conditions to 1) maintain military mission continuity and 2) comply with Congressional mandate under the 2021 National Defense Authorization Act to provide its critical missions with a goal of 99.9 percent reliable energy by 2030.

The objectives of the prototype include:

- Provide mission readiness through energy resilience.
- Deploy nuclear power to Army installations and demonstrate the capability of nuclear power to provide safe, secure, reliable, and environmentally compliant electricity in support of Army installation readiness goals for mission critical assets and empower the warfighter.
- Address resiliency needs of the US Government's critical infrastructure while simultaneously stimulating micro reactor development and supply chain in the U.S.

The US Army is seeking Solution Briefs for a full lifecycle micro reactor power plant that would notionally start operations at an Army installation located in the Continental United States before the end of calendar year 2030. Briefs should include all stages of a micro reactor's lifecycle: design, construction, operation, deconstruction, and returning the site to an unrestricted release status.

Final solutions will follow a regulatory process such as the US Army Regulatory Authority[1] or Nuclear Regulatory Commission (NRC) process for the entire lifecycle. At minimum, this includes an integrated and phased approach to compliance with planning and design, planning and construction, architecture and engineering, building construction, environmental, operating, safety and physical/cyber protection, deconstruction, and spent fuel management requirements. Reactor designers may propose one or more preferred approach(es) to regulatory and government affairs addressing at least the above set forth attributes inclusive of procedure, policy and process.

A successful prototype proposal solution provides a sound technological path coupled with an integrated solution for the regulatory, transactional, and environmental certainty; the outcome will make both parties eligible to enter into a sole-sourced, follow-on contract(s) or production agreement(s) for the continued purchase of electricity and decommissioning at the end of the operating life.

Desired Solution Features

Desired solution features include the following attributes and capabilities:

- Solutions should utilize fuel that is enriched to 20% or less U-235 that will be made available to meet the timeline.

- Evidence that proposed fuel form can be provided within the proposed schedule.

- Capable of producing enough electrical power to meet 100% of all critical loads, anticipated to preferably be within 3MW and 10MW of electrical power.Vendors that provide compelling solutions, outside the anticipated range may also be considered for further evaluation.

- Capable of local control and dispatch and integrated to the greatest extent practicable into existing infrastructure, operations centers (if applicable), workflows, and operations and maintenance systems.

- Capable of startup/shutdown and monitoring operations both with and without commercial power availability (both black start and grid-connected start capability).

- Capable of reactor plant operations with a commercial shore power connection, and alternative credited independent power source as a backup.

- The microreactor should be operated only from the control room located within the Army installation (remote or wireless operation is not allowed).
    - Remote maintenance and diagnostics capabilities that comply with relevant cyber security US Government standards, e.g., NIST 800-171 Rev. 2 for Federal Contractors, may be considered.
    - All operations, maintenance, and support staff to operate the reactor for the useful life of the electricity generation asset, anticipated to be 20 years.

- The ANP should include passive safety features to the extent practical to ensure reactor key safety functions are satisfied under all conditions, states, and modes.

- Radiation exposure at the ANPI site boundary should not exceed the limits provided in 10 CFR 20 during routine operations.
    - This assumes proposals will sufficiently account for relevant factors including sky shine, emissions from activated site materials, and surrounding buildings at various elevations around the site boundary.

- Capability to provide power supply for a minimum of 20 years, including operations, maintenance, sustainment, and refueling activities refueling and maintenance activities as needed to meet electricity production and availability (in percentages) objectives.
    - There are no restrictions on the proposed strategy to achieve this desired feature i.e., refueling or ‘replaceable’ modules to maintain continuity of operations. The overall

economic strategy by the Offeror will be evaluated and must include associated costs/risks with that strategy.

- Non-core irradiated material should be removed or qualified for unrestricted release within 2 years upon completion or termination of the power production contract. This plan, along with associated finance structure, must be approved by the Army.

- Irradiated core material should be removed from the site notionally within 5 years of completion or termination of the power production contract, or as otherwise agreed upon by the Army.

- The available footprint for the ANPI site (including radiation boundaries) should not exceed 5 acres (protected area of less than 540-ft diameter).

Reasonable and appropriate safety, physical and cyber, and safeguards measures should be implemented. In addition to the above desired solution features, proposals must describe an approach satisfying the parameters below:

- Business viability of proposal and organizational readiness of company to complete a complex nuclear design-build within the required timeline (initiate power production by the end of CY 2030).

- Nuclear supply chain for nuclear grade equipment is clearly identified and credibly available to supply equipment to meet the notional timeline.

- Equipment included in the design will be evaluated against the technology readiness level and manufacturing readiness level.

- Regulatory engagement plan is identified and workable.

Vendors are encouraged to submit responses as single solutions, or as other business arrangements (i.e. teaming). Vendors may submit multiple solutions.

Vendors may be selected to provide solutions for additional installations across the federal government. Additionally, vendors who successfully meet the evaluation requirements of Phase I (as stated within the CSO), and who are invited to Phase II Pitches, may be requested to participate in further dialogue with the Government.

Innovative financing solutions are highly encouraged and shall be provided to the Government for consideration within the submitted ROM.

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[1] 1 The U.S. Army's regulatory authority is derived from section 91b of the Atomic Energy Act (42 U.S.C. § 2121(b)), as implemented pursuant to the Presidential Directive of 23 September 1961. To facilitate this prototyping effort, the Army initiated revisions to the Army's primary regulatory document, Army Regulation 50-7, and a new Army guidance document, Army Pamphlet 50-7. The final regulation and pamphlet are expected to be published during the concept of design phase of the ANPI program. Relevant Army regulatory documents are found at: https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/r50-7_Web_FINAL.pdf.

Eligibility Requirements

Awarding Instrument

This Area of Interest solicitation will be awarded in accordance with the Commercial Solutions Opening (CSO) process detailed within HQ0845-20-S-C001 (DIU CSO), posted to Sam.gov in March 2020.

Follow-on Production

Companies are advised that any prototype Other Transaction (OT) agreement awarded in response to this Area of Interest may result in the award of a follow-on production OT agreement or contract without the use of further competitive procedures. The follow-on production OT agreement or contract will be available for use by one or more organizations in the Department of Defense and, as a result, the magnitude of the follow-on production OT agreement or contract could be significantly larger than that of the prototype OT. As such, any prototype OT will include the following statement relative to the potential for follow-on production:

"In accordance with 10 U.S.C. § 4022(f), and upon a determination that the prototype project, or portions thereof, for this transaction has been successfully completed, this competitively awarded prototype OT agreement may result in the award of a follow-on production OT agreement or contract without the use of competitive procedures."

Awarding Process

DIU

FAQs

1. Question: Does DIU have a strong opinion on teaming vs. individual bids for the Advanced Nuclear Power for Installations solicitation?

1. Answer: Vendors may submit partial solutions, by line of effort; or as a full/complete solution. Vendors may submit more than one solution in response to the AOI, but shall do so individually. Each solution will be evaluated on its own merit, in accordance with the evaluation criteria stated within Commercial Solutions Opening (CSO) HQ0845-20-S-C0001.

2. Question: Would nuclear fusion microreactor approaches be considered for this solicitation? We are in the experimental stage of developing a nuclear fusion microreactor, the compactness of which would allow quicker design/build/test iteration to help get a fusion microreactor prototype by 2030.

2. Answer: The US Army seeks to prototype on-site micro-reactor nuclear power plant(s) to address its energy resilience needs through the Advanced Nuclear Power for Installations (ANPI) program. Vendors are encouraged to provide their unique and innovative solutions. Vendors are encouraged to review the Area Of Interest (AOI) for details.

Before You Submit

What we recommend you include when you submit a solution brief.

When you submit to a DIU solicitation, we'll ask you to include a solution brief. **Here's some guidance about what that entails.**

Potential Follow-On Production Contract for Prototype Other Transaction Agreements

Companies are advised that any Prototype Other Transaction (OT) agreement awarded in response to this solicitation may result in the direct award of a follow-on production contract or agreement without the use of further competitive procedures. Follow-on production activities will result from successful prototype completion.

The follow-on production contract or agreement will be available for use by one or more organizations within the Department of Defense. As a result, the magnitude of the follow-on production contract or agreement could be significantly larger than that of the Prototype OT agreement. All Prototype OT agreements will include the following statement relative to the potential for follow-on production: “In accordance with 10 U.S.C. § 4022(f), and upon a determination that the prototype project for this transaction has successfully been completed, this competitively awarded Prototype OT agreement may result in the award of a follow-on production contract or transaction without the use of competitive procedures.”

06/19/2024 01:32:50 [BN] Bloomberg News

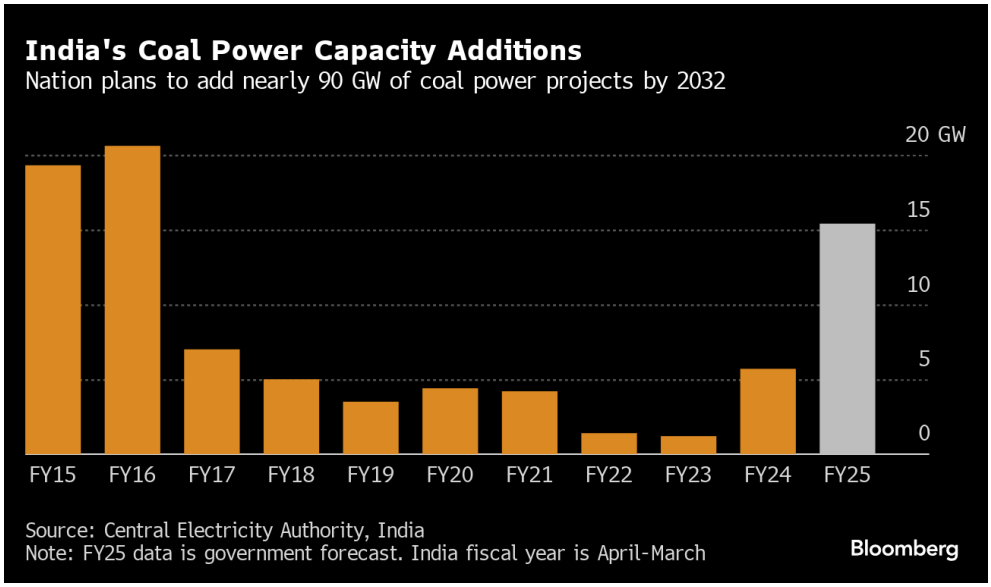
India Set to See Biggest Jump in Coal-Fired Power In a Decade

By Rajesh Kumar Singh

(Bloomberg) -- India will add more new coal power capacity than it has in almost a decade this year, as the country rushes to deploy generation to cope with surging electricity demand.

The world's most populous nation expects to add 15.4 gigawatts in the year through March 2025, the most in nine years, said people familiar with the matter, asking not to be named as the information isn't yet public.

New Delhi is pursuing ambitious clean-power targets, but the reality of rapid economic growth has prolonged reliance on the dirtiest fossil fuel. Increasingly severe heat waves are making matters worse, pushing electricity consumption to fresh records every year. Coal still generates about three-quarters of India's electricity, and the government sees it remaining the mainstay fuel for at least another decade.



India has managed to add more than 100 gigawatts of renewables capacity over the past decade, outpacing growth in thermal power generation. However, insufficient energy storage is holding back expansion of environmentally friendly electricity.

Battery storage is still not affordable in India's competitive power market and most pumped hydro projects – an alternative storage technology – are still at a nascent stage. Other low-carbon options, such as large dams and nuclear plants are also moving at a slow pace.

Read More: Coal Keeps Powering India as Booming Economy Crushes Green Hopes

India said last year that it plans to add close to 90 gigawatts of coal-fired capacity by 2032, lifting a forecast from just months before by more than half. The country has 28.5 gigawatts of coal power currently being built and more than 50 gigawatts that are planned to be awarded for construction over the next three years, according to the people.

Officials at the country's power ministry didn't immediately reply to a request for comment.

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https://www.capp.ca/en/media/capp-statement-bill-c-59-competition-act-amendments-effectively-muzzles-canadian-businesses/

CAPP Statement: Bill C-59 Competition Act Amendments Effectively Muzzles Canadian Businesses

Calgary, Alberta (June 20, 2024)

Statement from Lisa Baiton, CAPP President & CEO:

The Canadian Association of Petroleum Producers (CAPP) has worked diligently to be the source of non-partisan and credible information about Canada's upstream oil and natural gas industry supported by the values of transparency, accuracy, and data with veracity.

CAPP is extremely disappointed with, and opposed to, the Competition Act's amendments related to environmental representations with respect to the benefits of a business or business activity included in Bill C-59.

Debates around the environment and environmental policy are some of the most important issues facing Canadians today. Parliament's approach with this legislation and its threat of very significant penalties will curtail the ability of many Canadians to participate in debates around climate and environmental policy. The effect of this legislation is to silence the energy industry and those that support it in an effort to clear the field of debate and to promote the voices of those most opposed to Canada's energy industry.

Buried deep into an omnibus bill and added at a late stage of Committee review, these amendments have been put forward without consultation, clarity on guidelines, or the standards that must be met to achieve compliance. As a result, businesses across Canada are being put at significant risk for communicating their efforts to reduce their impact on the environment.

The burden of proof provision included in the amendments means those making the complaint face no risk or accountability. Rather, the burden falls entirely on companies to justify how the comments they have made on public policy issues like climate and the environment accord with the newly introduced and nebulous "internationally recognized methodology".

The amendments also empower private parties to compel companies to appear before the Competition Tribunal to defend themselves. This radical shift from current practice, where only the Competition Bureau enforces misleading advertising laws, opens the floodgates for frivolous, resource-draining complaints.

The ambiguity of these amendments to the Competition Act coupled with very significant penalties for violating these provisions, effectively prevents not only CAPP, but any business that wants to communicate its environmental efforts, from having important discussions with Canadians.

As a result, CAPP has chosen to reduce the amount of information it makes available on its website and other digital platforms until the Competition Bureau has released further guidance on how these amendments will be implemented.

CAPP will continue to support its members in their drive to lower emissions and it is our hope the Competition Bureau will undertake the consultation with Canadians and Canadian businesses that has not been done. In the implementation of these amendments, there needs to be a pathway that enables businesses to communicate their efforts to reduce their impact on the environment, their goals for the future, and their performance against those goals.

About CAPP

The Canadian Association of Petroleum Producers (CAPP) is a non-partisan, research-based industry association that advocates on behalf of our member companies, large and small, that explore for, develop, and produce oil and natural gas throughout Canada. Our associate members provide a wide range of services that support the upstream industry. CAPP's members produce nearly three quarters of Canada's annual oil and natural gas production and provide approximately 450,000 direct and indirect jobs in nearly all regions of Canada. According to the most recently published data, the industry contributes over $70 billion to Canada's GDP, as well as $45 billion in taxes and royalties to governments across the country. CAPP is a solution-oriented partner and works with all levels of government to ensure a thriving Canadian oil and natural gas industry.

We strive to meet the need for safe, reliable, affordable, and responsibly produced energy, for Canada and the world. We are proud to amplify industry efforts to reduce GHG emissions from oil and gas production and support Indigenous participation and prosperity.

https://www.bdplaw.com/insights/update-on-bill-c-59-more-far-reaching-and-substantive-changes-to-the-competition-act/

BD&P LAW FIRM

Update on Bill C-59: More Far-Reaching and Substantive Changes to the Competition Act

Contributors

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Published May 23, 2024

In our **previous Guide**, we reviewed several of the most significant changes to the Competition Act (Canada) (**Act**) made pursuant to **Bill C-19** (*An Act to implement certain provisions of the budget tabled in Parliament on April 7, 2022 and other measures*), which received Royal Assent on June 23, 2022, **Bill C-56** (An Act to amend the Excise Tax Act and the Competition Act), which received Royal Assent on December 15, 2023 and **Bill C-59** (*Fall Economic Statement Implementation Act, 2023*), which is anticipated to receive Royalty Assent early in 2024.

The House of Commons completed its second reading of Bill C-59 on March 18, 2024 and the Bill was sent to the House of Commons Standing Committee on Finance (**Standing Committee**) for review. In his submissions to the Standing Committee made by letter dated March 1, 2024, and by his remarks to the Standing Committee made April 18, 2024, (collectively, **Commissioner's Additional Submissions**), the Commissioner of Competition advocated for additional amendments to the Act.

The Standing Committee completed its review on May 6, 2024 and presented its report with several amendments to Bill C-59 recommended in the Commissioner's Additional Submissions. As it pertains to the Act, these amendments, if enacted, are even more significantly far-reaching and substantive in two principal areas: (a) deceptive marketing practices, with respect to "greenwashing" claims; and (b) the merger provisions, with respect to the onus of proof and available remedies.

Bill C-59 is currently in its third reading at the House of Commons, following which the Senate will review it before becoming law.

Deceptive Marketing Practices – Environmental Claims

The current deceptive marketing practices provisions are focused on claims with respect to a product or service and are not well suited to capture general claims related to disclosures a company makes regarding its commitment to the environment or steps it may be taking to reduce its carbon footprint or get to "net-zero". The Commissioner raised this concern with the Standing Committee and requested "studying whether the reverse onus approach to greenwashing claims could be expanded to require that all environment claims made to promote a product or business interest be supported by adequate and proper substantiation."

In response, the Standing Committee revised Bill C-59 to broaden deceptive marketing practices to include misrepresentations concerning the benefits of business activities generally. Proposed new section 74.01(1) (b.2) reads as follows:

(b.2) makes a representation to the public with respect to *the benefits of a business or business activity for protecting or restoring the environment or mitigating the environmental and ecological causes or effects of climate change that is not based on adequate and proper substantiation in accordance with internationally recognized methodology*, the proof of which lies on the person making the representation; or

While statements related to a "product's" benefits must be based on "an adequate and proper test", statements related to the benefits of a business or business activity, which may be difficult to test, require "adequate and proper substantiation". In any case, these provisions put a reserve onus on the party making the statement to establish that it is not a misrepresentation.

Under these new provisions, statements must be based on adequate and proper substantiation using an "internationally recognized methodology". It is unclear what an "internationally recognized methodology" is given the multitude of methodologies and standards that have been adopted by international organizations, as well as national and provincial or state governments.

Environmental groups, who are already actively asking the Competition Bureau to investigate "greenwashing" claims against companies involved in the oil and gas sector, such as the Royal Bank of Canada, Shell Canada, the Pathways Alliance and the Canadian Gas Association, will be emboldened by these provisions. They may ask the Competition Bureau to investigate, or they may request leave of the Competition Tribunal (**Tribunal**) to take action against companies they consider to be engaged in "greenwashing". The latter remedy, which is a private right of action, will come into effect one year after the amendments come into force and effect. This itself will be a significant departure from the status quo. Prior to these amendments, the only remedy available to private parties was to launch a complaint to the Bureau, which the Bureau then determined whether they wanted to review.

Every company that makes public representations and warranties with respect to the environment and/or climate change, will need to review the same (with the assistance of outside experts) and prepare to substantiate them and/or amend them. Some things to keep in mind:

- Regulatory Frameworks: Understand the specific anti-greenwashing regulations and standards that apply or that you are using to substantiate your claims. For example, are you subject to, or using, the SEC's *Final Climate Disclosure Rules* (which focuses on Scope 1 and 2 disclosures) applicable in the United States, or the European Union's *Corporate Sustainability Reporting Directive* (CSRD), applicable to non-E.U. entities, which requires Scope 1, 2 and 3 disclosures for companies of a certain size.
- Transparency: Be transparent about how you define and measure ESG factors and the impact of these factors on your business. Identify or make it easy to identify the internationally recognized methodology you are using.

- Data Quality: Use reliable and standardized ESG data sources. In instances where data is not available, this may require using estimated data. Ensure the use of estimates is reasonable and transparent.
- Third-Party Verification: Where possible, use data sources that have been verified by third party experts.
- Internal Compliance: Establish internal compliance procedures and governance structures for climate reporting to ensure that your statements adhere to both regulatory standards and internal policies.
- Documentation: Ensure you maintain a fulsome record of your assessments and compliance efforts. It is important to document your due diligence and commitment to regulatory compliance.

Dan Tsubouchi @Energy_Tidbits · 1h

One continued hold back on #Oil.

Yesterday, Iran said expects to increase #Oil production by 0.4 mmb/d to 4.0 mmb/d by end of March 2025 reports IRNA.

Given their recent track record of oil production growth, no reason to doubt for now that they can do it.

#OOTT

Islamic Republic News Agency

https://en.irna.ir/news/85516526/Minister-Iran-oil-production-to-reach-4-million-bpd

Jun 22, 2024, 1:20 PM

Minister: Iran oil production to reach 4 million bpd

Tehran, IRNA – Iranian Oil Minister Javad Owji has said that the country plans to increase its daily crude production to 4 million barrels per day (bpd) by late March 2025.

The minister made the announcement on Saturday as he was elaborating on the achievements by the administration of the late President Ebrahim Raisi in the oil industry over the past three years. He was speaking at a joint press conference with Government Spokesman Ali Bahadori Jahromi and Head of the Department of the Environment Ali Salajegheh.

Owji said that the Raisi administration has already managed to increase oil production from 2.2 to 3.6 million bpd and is now planning to increase the daily output to 4 million barrels by the end of the current Iranian year, which falls on March 20, 2025.

The administration also increased the annual gas production by 53 million cubic meters, which marked a 5% growth, he added.

Gas extraction from the South Pars gas field, which is shared with Qatar, has increased as well, he said, adding that Iran's extraction is 75 to 100 million cubic meters higher.

According to the minister, Iran's annual petrochemical production has now reached 100 million metric tons following a 10-percent growth. At least four petrochemical projects are also set to be inaugurated, Owji said, without specifying the projects and the timing of the inauguration.

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Dan Tsubouchi @Energy_Tidbits · Jun 19

Expect Trump to remind Iran that its oil exports were almost zero pre Biden.

Iran Oil minister "*I must announce that any administration assuming office in the United States ...*

2 5 1.3K

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Dan Tsubouchi @Energy_Tidbits · 13h

Daily Europe air traffic -2.5% below pre-Covid

7-day moving average as of:
Jun 20: -2.5% below pre-Covid
Jun 13: -2.6%
Jun 6: -3.2%
May 30: -0.8%
May 23: -1.9%
May 16: -1.2%
May 9: -3.2%...
Show more

1 4 1.5K

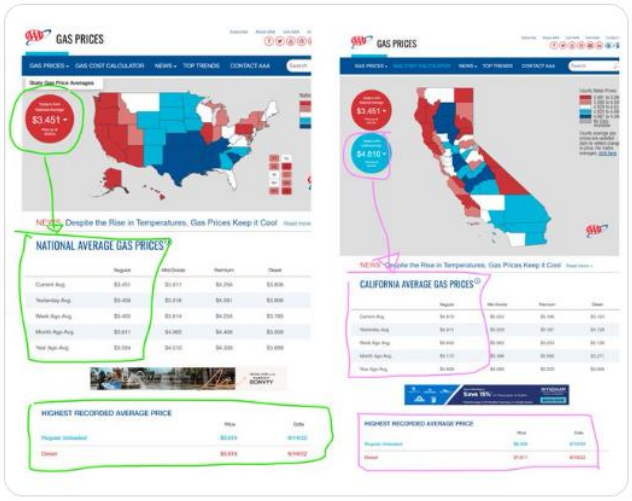
Dan Tsubouchi @Energy_Tidbits · 13h

US gasoline prices continue down MoM.

AAA National average prices flat WoW at $3,45 on June 22, down $0.16 MoM and down $0.13 YoY.

California at $4.81 on June 22 down $0.04 WoW, down $0.36 MoM & down $0.05 YoY.

Thx @AAAnews
#OOTT



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Dan Tsubouchi @Energy_Tidbits · 13h

Vortexa oil floating storage est +9.97 mmb WoW to 93.21 mmb at Jun 21.

Negative. 4 of last 5 wks are >90 mmb and haven't been any >90 mmb wks since early Aug 2023.

And then Saudi extra voluntary cuts on July 2023 started to kick in.

Thx @vortexa @business
#OOTT

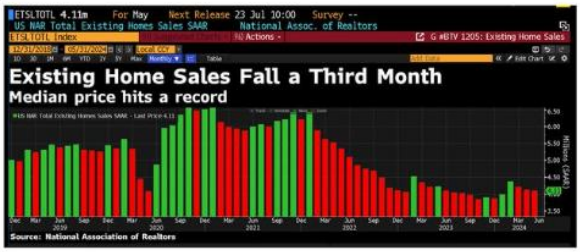
1 4 9 2.4K

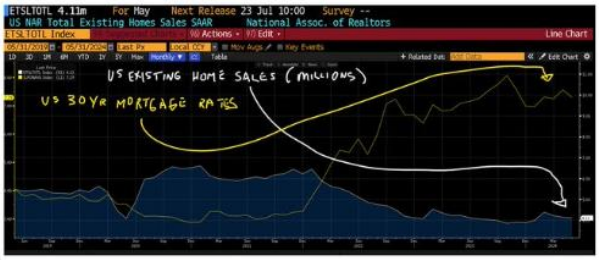
Dan Tsubouchi @Energy_Tidbits · Jun 21

Higher mortgage rates = low existing home sales.

US existing home sales 4.11 million in May 2024, basically at Covid levels.

May 24: 4.11 million
May 23: 4.23
May 22: 5.35
May 21: 5.88
May 20: 4.09
May 19: 5.46...
Show more





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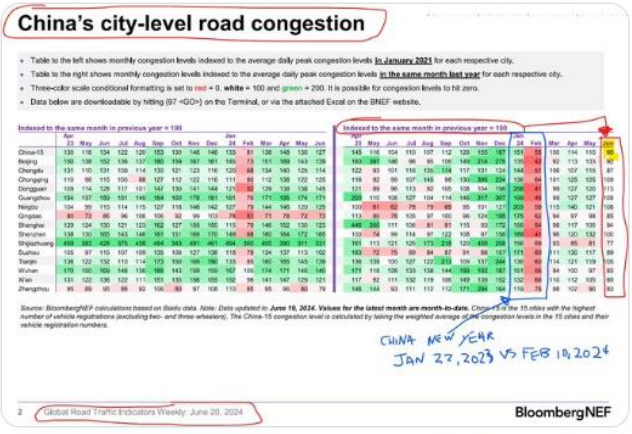
Dan Tsubouchi @Energy_Tidbits · Jun 21

Negative indicator, less traffic in China.

Only MTD to Jun 19, but Baidu city-level road congestion for top 15 cities is first down YoY month and 9 of 15 top cities are down YoY.

Feb was down big but that was timing of Chinese New Year in 2024 vs 2023

Thx @BloombergNEF #OOTT



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Dan Tsubouchi @Energy_Tidbits · Jun 21

321 crack +$0.91 WoW to $24.36 on Jun 21.

WTI was +$2.28 WoW to $80.73 but that was driven more by factors like EIA oil inventory data, drone hits on RUS refineries, etc.

321 cracks at $24.36 alone shouldn't drive up oil.

Thx @business
#OOTT

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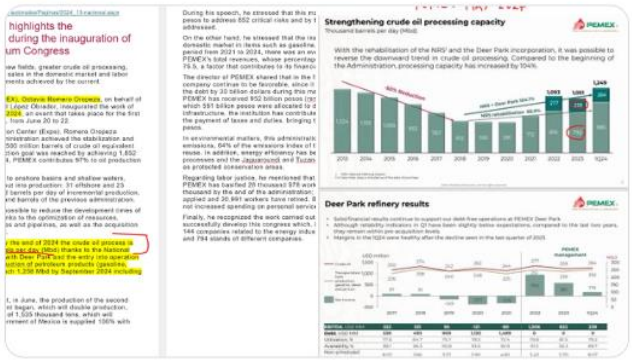
Dan Tsubouchi @Energy_Tidbits · Jun 20

Here's why Biden is letting Venezuela ramp up oil production & imports into the US Gulf Coast.

Pemex expects to refine 1.439 mmb/d by yr-end with 340,000 b/d Olmeca refinery finally ramping up.

This means less oil for export by 0.2 mmb/d vs Q1/24, and by 0.4 mmb/d vs 2023.

Show more



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Dan Tsubouchi @Energy_Tidbits · 2h

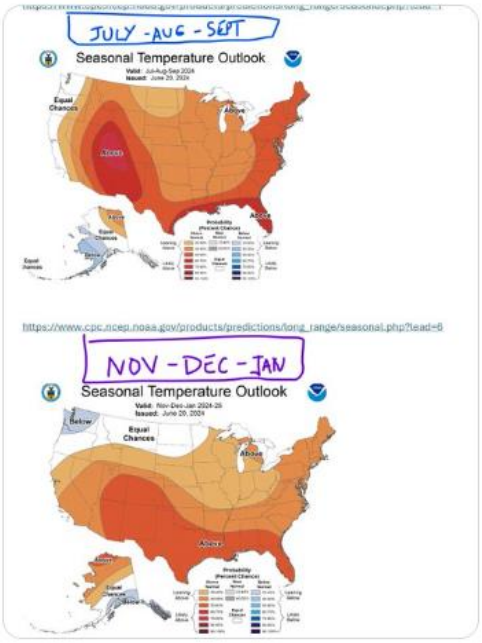
Good news/Bad news.

@NOAA updated seasonal temperature outlook.

Hot Jul/Aug/Sep to support near term HH #NatGas price.

It's still early BUT a warm Nov/Dec/Jan start to winter would be negative to HH #NatGas carrying thru Q1 as seen this year.

#OOTT



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Dan Tsubouchi @Energy_Tidbits · 4h

For those, like me, who weren't near their laptop, @EIAgov released #Oil #Gasoline #Distillates inventory as of June 14 at 9:00am MT. Table below compares EIA data vs @business expectations and vs @APIenergy yesterday. #OOTT

Oil/Products Inventory June 14: EIA, Bloomberg Survey Expectations, API

(million barrels)	EIA	Expectations	API
Oil	-2.54	-2.80	2.26
Gasoline	-2.29	1.05	-1.08
Distillates	-1.72	1.05	0.54
	-6.55	-0.70	1.72

Note: Oil is commercial. So excludes a +0.4 mmb build in SPR for the June 14 week
Note: Included in the oil data, Cushing had a 0.31 mmb build for June 14 week
Source EIA, Bloomberg
Prepared by SAF Group https://safgroup.ca/news-insights/

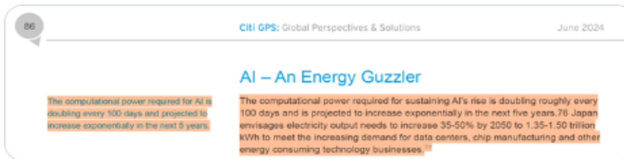
3 · 789

Dan Tsubouchi @Energy_Tidbits · 6h

What but #NatGas is 1st choice for 24/7 electricity to meet exponential growth rate in AI demand ?

"*computational power required for AI is doubling every 100 days and projected to increase exponentially in the next 5 years*" Citi AI in Finance report.

#OOTT...
Show more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Citi GPS: Global Perspectives & Solutions June 2024

AI – An Energy Guzzler

The computational power required for AI is doubling every 100 days and projected to increase exponentially in the next 5 years.

The computational power required for sustaining AI's rise is doubling roughly every 100 days and is projected to increase exponentially in the next five years.76 Japan envisages electricity output needs to increase 35-50% by 2050 to 1.35-1.50 trillion kWh to meet the increasing demand for data centers, chip manufacturing and other energy consuming technology businesses.77

1 · 3 · 8 · 1.7K

Dan Tsubouchi @Energy_Tidbits · 6h

WOW!

Must read 👇 UK Supreme Court ruling. If this gets applied/challenged to all #Oil #NatGas development and exploration drilling, in the UK incl North Sea, how can any drilling get approved?

No development = declining oil produciton.

If UK declines, positive for oil.
#OOTT


Press Summary

20 June 2024

R (on the application of Finch on behalf of the Weald Action Group) (Appellant) v Surrey County Council and others (Respondents)

[2024] UKSC 20
On appeal from [2022] EWCA Civ 187

Justices: Lord Kitchin, Lord Sales, Lord Leggatt, Lady Rose and Lord Richards

Background to the Appeal

Reasons for the Judgment

3 · 10 · 21 · 4K

Dan Tsubouchi @Energy_Tidbits · 7h

Iran #Oil keeps getting rebranded as Malaysia oil

China imported 1.39 mmb/d Malaysia oil in May, 0.99 mmb/d in Apr, 1.13 mmb/d in March.

Malaysia total oil production ~0.6 mmb/d.

Recall Malaysia says only recognizes UN sanctions, not individual country sanctions.

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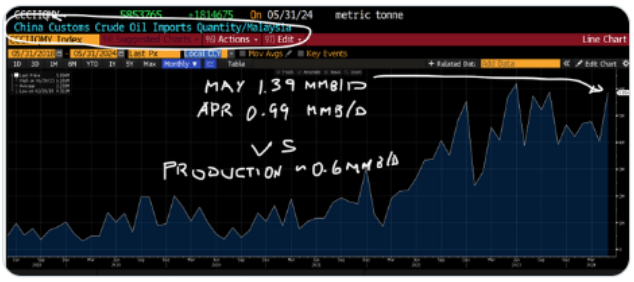

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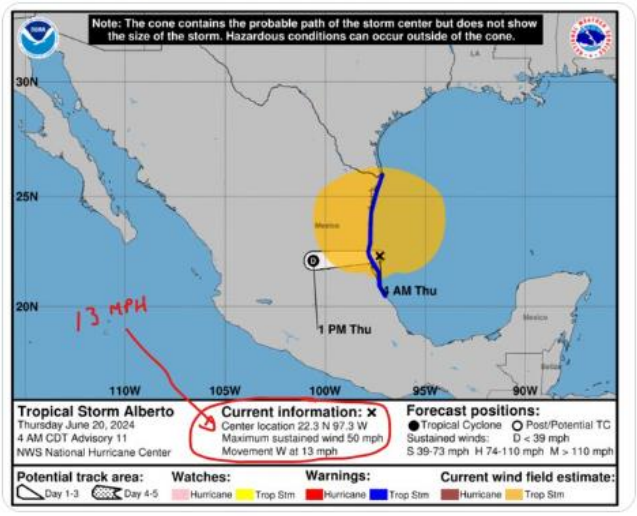
Dan Tsubouchi @Energy_Tidbits · 8h

Anyone who has hunkered down during a Tropical Storm knows it is never good but Tropical Storm Alberto is moving fast at 13 mph, which should limit the large amount of rainfall and flooding.

#OOTT #NatGas



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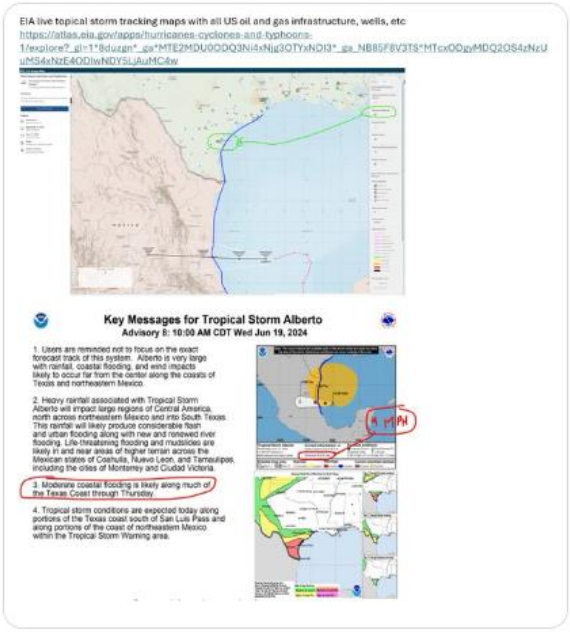
Dan Tsubouchi @Energy_Tidbits · Jun 19

.@EIAgov has a great live tropical storm/hurricane tracking map that can layer on oil/gas wells, refineries, infra etc.

Alberto still expected to be Tropical Storm strength when it hits south Texas coast incl Corpus Christi refineries & oil terminals.

But moving at 9 mph so...

Show more



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Dan Tsubouchi @Energy_Tidbits · 2h

EU's fundamental economy weakness.

"*Energy is really important for an economy at the end of the day*" "EU "*Energy costs are 5x US. Gas is 5x the cost of US. Electricity is 5x the price of US. It's not 5% 10% or 50% more, it's 500% more.*" Ineos Jim Ratcliffe to @flacqua.

#OOTT

Europe "*Energy costs are five times America. Gas is five times the cost of America. Electricity is five times the price of America. It's not 5% 10% or 50% more, it's 500% more.*" Ineos Group Founder, Jim Ratcliff

SAF Group created transcript of comments by Jim Ratcliffe (Head and Founder of Ineos Group) with Bloomberg's Francine Lacqua on June 18, 2024. https://www.bloomberg.com/news/videos/2024-06-19/billionaire-ratcliffe-slams-europe-s-chemical-industry-video

Items in "italics" are SAF Group created transcript.

At 1:28 min mark, Ratcliffe "*Places like America are a great place for manufacturing because they've got cheaper energy. They've got no carbon taxes. They've got a government which is very interested in it. They've got social costs which are very manageable. But then you look at Europe. Europe's a mess for petrochemicals today. Everybody's leaving petrochemicals in Europe. I've never seen in my working life before. But if you look at, I'm talking mainland Europe but sort of it applies to the UK as well really. Energy costs are five times America. Gas is five times the cost of America. Electricity is five times the price of America. It's not 5% 10% or 50% more, it's 500% more. Anything where, any sort of activity which involves using energy in some form or another is disadvantaged in Europe compared to America, or the Middle East. And then on top of that, you've got a carbon tax. So if you emit anything, which has got carbon in it, you pay a carbon tax. You don't pay carbon tax in America. And on top of that you've got social costs.*"

Lacqua "*Do you think that's changing? We had European elections*". Ratcliffe "*Is it changing?*". Lacqua "*Yeah. Will policies in Europe change because of the European elections. There seems to have been a vote*". Ratcliffe "*Well I think they're listening because we met Ursula von der Leyen and Alexander de Croo three or four months ago and we had quite a long chat about sort of the state of industry in Europe. So I think they're listening. And they were quite sympathetic with the arguments but I haven't seen any changes. Energy is, energy is really important for an economy at the end of the day. Obviously labor costs and energy costs.*"

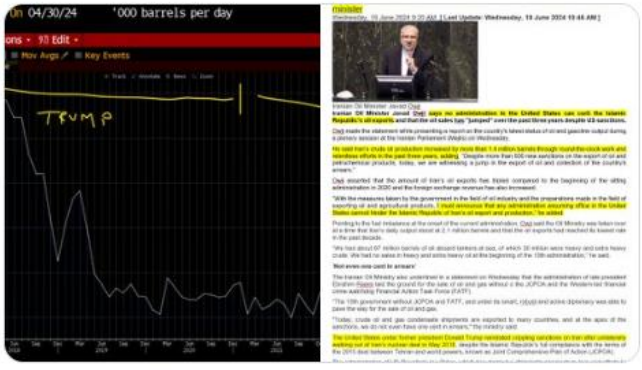
5 7 891

Dan Tsubouchi @Energy_Tidbits · 3h

Expect Trump to remind Iran that its oil exports were almost zero pre Biden.

Iran Oil minister "*I must announce that any administration assuming office in the United States **cannot** hinder the Islamic Republic of Iran's oil export and production*"

#OOTT



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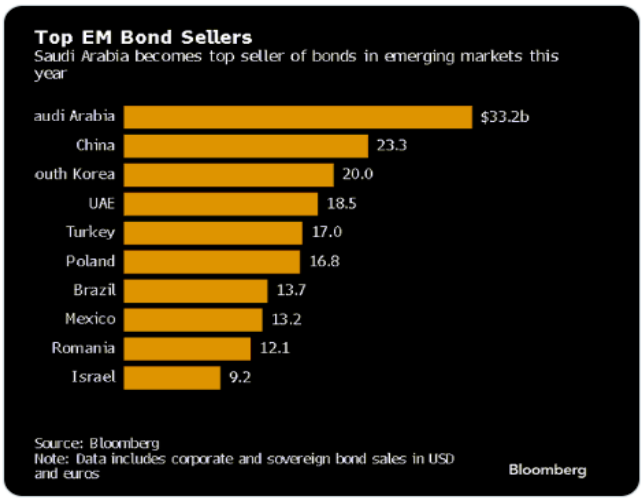
Dan Tsubouchi @Energy_Tidbits · 3h

Reinforces #1 financial theme for Saudi Arabia in the 2020s is accessing more Other People's Money for Vision 2030.

Saudi #1 in EM bond sales by large margin!

Also reminds why Saudi will do all it can to keep strong #Oil prices at Brent $80 or more.

Thx @selcukgokoluk
#OOTT



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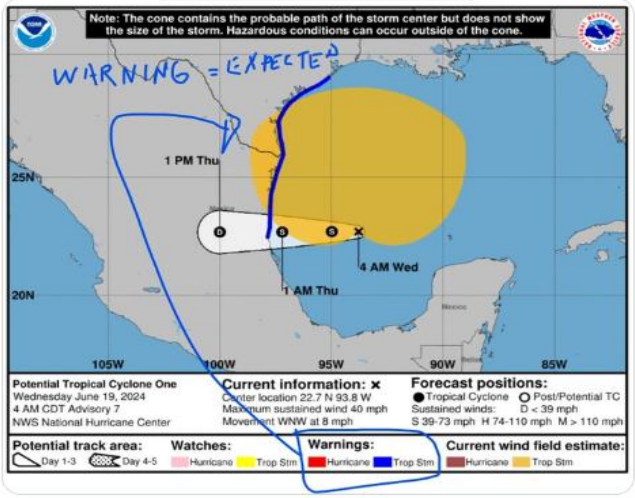
Dan Tsubouchi @Energy_Tidbits · 5h

Still expected to be Tropical Storm strength when it hits south Texas on Thurs morning.

Biggest impact from tropical storms or hurricanes tends to come from flooding.

Reminder a "warning" means "expected" vs a "watch" means "possible"

#OOTT #NatGas



> **Dan Tsubouchi** @Energy_Tidbits · Jun 18
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> **Tropical Storm "watch"** means TS possible vs **Tropical Storm "warning"** means TS expected.
>
> Even though @NHC_Atlantic cone is hitting Mexico, they still see Tropical Strom warning for south Texas....

1 1 1 1.7K

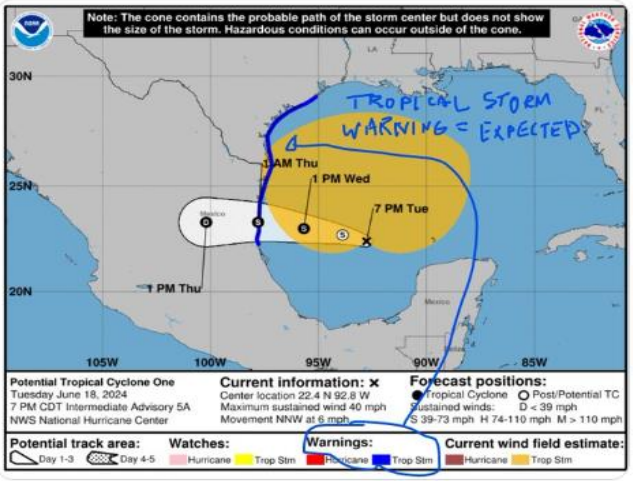
Dan Tsubouchi @Energy_Tidbits · 13h

Still expected to hit Texas coast at Tropical Storm strength.

Key will be if its slow moving and how much water is dumped as flooding tends to cause more damage than winds.

@NHC_Atlantic update as of 7pm CT

#NatGas #Oil



> **Dan Tsubouchi** @Energy_Tidbits · Jun 18
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>
> Even though @NHC_Atlantic cone is hitting Mexico, they still see Tropical Strom warning for south Texas....

3 3 6 3.3K

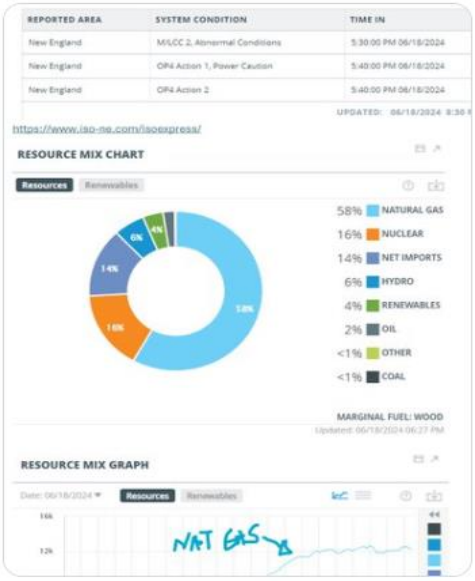
Dan Tsubouchi @Energy_Tidbits · 15h

Good thing New England has access to #NatGas power generation.

@isonewengland declares Level 1 power emergency

Note how #NatGas is the only energy source that can significantly ramp up to meet peak demand.

#OOTT



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Dan Tsubouchi @Energy_Tidbits · 4h

Another endorsement for #NatGas for 24/7 power for 2020s.

Just now w/ @BeckyQuick, @KKR_Co Henry McVey on its mid-yr outlook 👇 a key theme is back-end of AI growth - accelerated growth in US electricity consumption.

That includes @NatGas!

#OOTT
kkr.com/insights/mid-y...

> **Dan Tsubouchi** @Energy_Tidbits · 17h
>
> 
>
> US Army wants **micro-nuclear power plants** to avoid disruptions from extreme weather & cyber.
>
> **Not intermittent wind + solar** even if battery storage or other solutions to mitigate the intermittency....

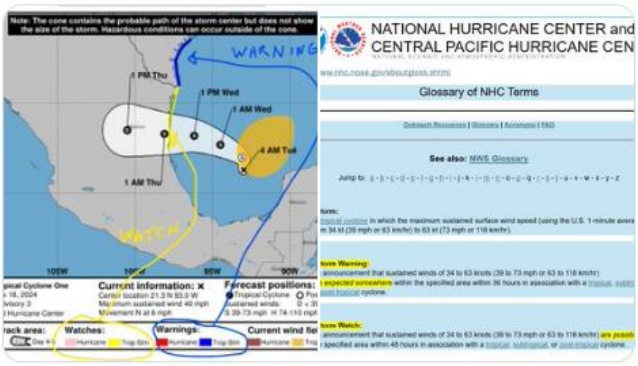
3 5 8.9K

Dan Tsubouchi @Energy_Tidbits · 4h

Tropical Storm "watch" means TS possible vs **Tropical Storm "warning"** means TS expected.

Even though @NHC_Atlantic cone is hitting Mexico, they still see Tropical Strom warning for south Texas.

#OOTT #NatGas



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Dan Tsubouchi @Energy_Tidbits · 17h

US Army wants **micro-nuclear power plants** to avoid disruptions from extreme weather & cyber.

Not intermittent wind + solar even if battery storage or other solutions to mitigate the intermittency.

Looks like competing vs AI data centers for 24/7 power ie. maybe #NatGas until...

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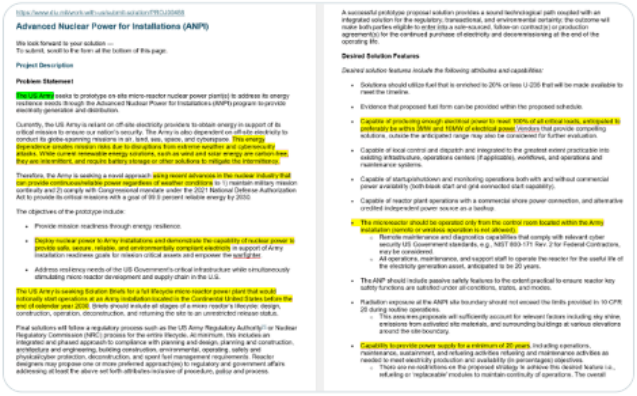

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Dan Tsubouchi @Energy_Tidbits · 22h

Hmmm!

Doesn't take much to flip IEA's peak oil demand by 2030 to growth thru 2030.

From pg 16 of IEA Oil 2024 "..*a 15% slowdown in the pace of global EV adoption would be sufficient for oil consumption to cross the narrow dividing line back from shrinkage to growth at the end...*

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> **Dan Tsubouchi** @Energy_Tidbits · Jun 16
>
> SAF Group June 16, 2024 Energy Tidbits memo is posted on news/insights section of SAF Group website. this 67-pg energy research memo covers more items than tweeted this week. Hope it helps your energy views. #Oil #OOTT #LNG #NatGas #EnergyTransition #EVs safgroup.ca/news-insights/

SAF GROUP

Energy Tidbits

June 16, 2024

Produced by: Dan Tsubouchi

IEA Forecasts Peak Oil Demand by 2030 But Its Key Assumption EVs Displace 6 mmb/d of Fuels Has to be Questioned

Welcome to new Energy Tidbits memo readers. We are continuing to add new readers to our Energy Tidbits memo, energy blogs and tweets. The focus and concept for the memo was set in 1999 with input from PMs, who were looking for research (both positive and negative items) that helped them shape their investment thesis to the energy space, and not just focusing on daily trading. My priority was and still is to not just report on events, but also try to interpret and point out implications therefrom. The best example is the review of investor days, conferences and earnings calls focusing on sector developments that are relevant to the sector. My target is to write on 50 weekends per year and to post by noon MT on Sunday. The Sunday noon timing was because PMs said they didn't have research to read on Sundays and Sundays are a day when they start to think about the investing week ahead.

This week's memo highlights:

1. IEA continues to forecast peak oil demand by 2030 but it's key assumption that EVs displace 6 mmb/d of fuels is based on govt policies AND objectives rather than what has happened in EVs market in last year. [click here]
2. IEA keeps increasing its lookback at 2023 oil demand such that its 2024 oil demand forecast from March of 103.2 mmb/d is unchanged despite the IEA cutting its growth rate for 2024 oil demand for 3rd consecutive month. [click here]
3. US shale/tight oil been flat for last 4 mths around 8.35 mmb/d, which is below Dec 2023 exit of 8.42 mmb/d. [click here]
4. Vortexa's crude oil floating storage last 7-weeks average is now up to 81.28 mmb. [click here]
5. Will European Parliament election results shift Europe away from left to centre right and delay climate initiatives? [click here]
6. Please follow us on Twitter at [LINK] for breaking news that ultimately ends up in the weekly Energy Tidbits memo that doesn't get posted until Sunday noon MT.
7. For new readers to our Energy Tidbits and our blogs, you will need to sign up at our blog sign up to receive future Energy Tidbits memos. The sign up is available at [LINK].

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Ryan Haughn, Managing Director, rhaughn@safgroup.ca

Dan Tsubouchi @Energy_Tidbits · Jun 16

Continued big negative to getting Chinese back to spending - their home values keep going down.

May was worst month for China home owners for ~10 yrs.

May New homes -0.71% MoM (Apr -0.58% MoM).

May Used homes -1.00% MoM (Apr -0.94% MoM).

Thx @business @DavidInglesTV...
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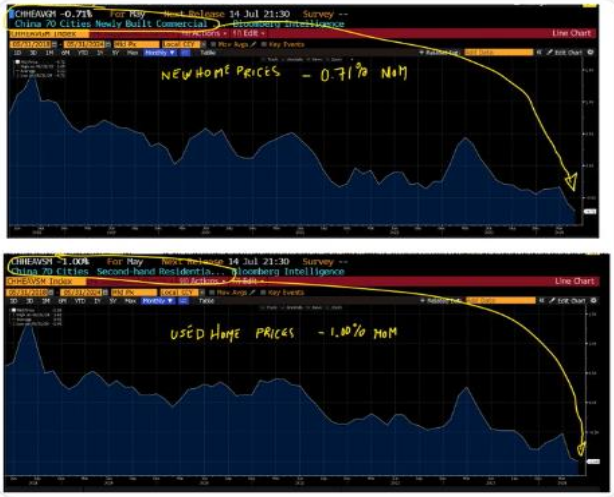

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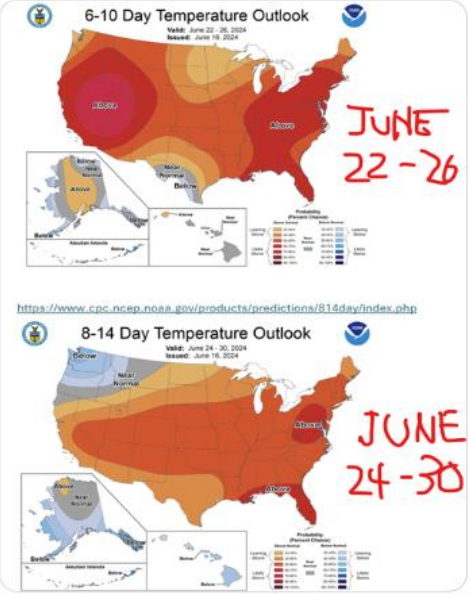
Dan Tsubouchi @Energy_Tidbits · Jun 16

And expected to continue hot the following week from June 22 - 30.

@NOAA's updated 6-10 and 8-14 day temperature outlook.

Should be continued weather driven demand support for HH #NatGas prices.

#OOTT



> **Dan Tsubouchi** @Energy_Tidbits · Jun 16
>
> 
>
> Crank up the air conditioning this week!
>
> @NWSWPC warns
>
> "*dangerous and **long duration** heat is expected this ...*

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Dan Tsubouchi @Energy_Tidbits · Jun 16

Crank up the air conditioning this week!

@NWSWPC warns

"*dangerous and **long duration** heat is expected this week*"
"***longevity of dangerous heat** forecasted for some locations **has not been experienced in decades**"*

Positive for HH #NatGas
...
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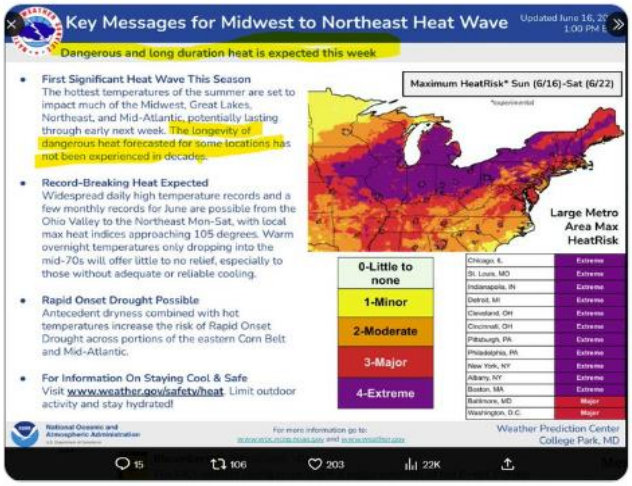

> **NWS Weather Prediction Center** @NWSWPC · Jun 16
>
> 
>
> Record-breaking #heat is forecast to expand from the Midwest and Great Lakes to the Northeast this week, potentially lingering through early next week. The duration of this heat wave is notable and potentially the longest experienced in decades for some locations.

3 5 13 11K