

Argus Jet Fuel

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LATEST NEWS

- US jet stocks hit 9-month highs: EIA
- US airline jet fuel consumption up 12pc: BTS
- LatAm well placed for SAF, but rules still lacking
- Pemex's crude processing edges up 2pc in 1Q
- Panama sets green H2 targets for transport

OVERVIEW

- Singapore's jet fuel swaps fell by more than Dubai crude values, weakening margins. Indian state-controlled refiner MRPL sold jet fuel for end-May loading.
- Outright European jet fuel prices slipped as liquidity remained low.
- US jet fuel prices deepened multi-year lows as fresh data revealed national stockpiles at nine-month highs.

NEWS

US jet stocks hit 9-month highs: EIA

US jet fuel stocks built to a nine-month high last week as imports increased and exports eased.

Total inventories in the week ended 28 April rose to 41.6mn bl, up by 2pc from the prior week and the highest level since the week ended 29 July 2022, according to US Energy Information Administration (EIA) data. Stockpiles ended the week 15pc higher than a year earlier.

US imports of jet fuel increased by 40.4pc on the week to 125,000 b/d. Still, imports were down by 41.6pc from a year earlier.

Jet fuel exports from the US declined on the week by 11.6pc to 99,000 b/d, according to EIA data. They were down by 67.5pc from a year earlier.

US jet fuel demand increased last week to 1.54mn b/d, up by less than 1pc from a week earlier and 6.9pc higher than a year earlier.

PRICE SUMMARY

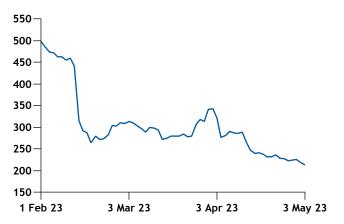
Price			
	¢/USG	\$/t	\$/bl
Singapore	203.10	672.16	85.30*
South Korea	200.24	662.54	84.10*
Mideast Gulf	192.14	635.92	80.70*
Rotterdam	205.97	681.50*	86.51
Rotterdam SAF	790.56	2,747.96*	332.04
New York	212.73*	697.00	89.35
Houston	204.61*	670.38	85.93
Los Angeles	218.23*	715.02	91.66

Change on day			
	¢/USG	\$/t	\$/Ы
Singapore	-12.50	-41.37	-5.25*
South Korea	-12.50	-41.36	-5.25*
Mideast Gulf	-12.50	-41.37	-5.25*
Rotterdam	-7.63	-25.25*	-3.21
Rotterdam SAF	-7.53	-26.19*	-3.16
New York	-5.69*	-18.64	-2.39
Houston	-7.32*	-23.97	-3.07
Los Angeles	-5.19*	-17.00	-2.18

^{*}assessed unit

New York barge prompt jet fuel

¢/USG



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 $^{^*}$ Tables include hyperlinks to those values maintained in the Argus database.

Refinery output of jet fuel eased to 1.63mn b/d, down by 3pc from the prior week. Compared with a year earlier, jet fuel production was up by 3.1pc.

By Andrea Agee

US airline jet fuel consumption up 12pc: BTS

US airline jet fuel consumption in March was the second highest for that month in four years as travel demand continued to improve from the Covid-19 pandemic.

Airlines used 1.54mn USG of jet fuel in March, up by 12pc from a year earlier, according to the US Bureau of Transportation Statistics (BTS). This is the highest since December 2019 when consumption was 1.55mn USG for the month.

Fuel consumption on international flights saw the sharpest rise, surpassing March 2022 levels by 20pc at 480.2mn USG, while consumption on domestic flights rose by 8.6pc to 1.06mn USG from a year earlier.

US airlines spent \$4.5bn USG on jet fuel in the month, up by 7.7pc from a year earlier and the highest for any March since BTS began reporting the data in 2000. Fuel costs on international flights rose by 14pc to \$1.38bn from March 2022, and costs rose by 5pc to \$3.1bn on domestic flights.

This came as airlines paid an average of \$2.91/USG for jet

DATA AND DOWNLOADS

SAF offtake agreements >> click here SAF Refinery Database >> click here fuel in March, down by 4.2pc from a year earlier and up by 44pc from March 2019 pre-Covid-19 prices.

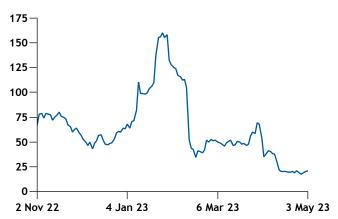
By Deyzhah Knox

LatAm well placed for SAF, but rules still lacking

Latin America is expected to produce close to 9.2mn t/yr of sustainable aviation fuel (SAF) by 2028 from projects announced in Panama, Paraguay and Brazil. But the region still needs to put clear regulations in place to provide certainty to investors and bring in more money, the senior manager of external affairs and sustainability at air transport association lata, Pedro de la Fuente, says.

The nature of the region's agricultural sector means that it is in a good position to become a production hub for a fuel that emits less greenhouse gas than traditional petroleumbased jet fuel. Soybean oil, used cooking oil and tallow are feedstocks used in the SAF production process.





ANNOUNCEMENT

Argus successfully completes annual losco assurance review

Argus has completed the 11th external assurance review of its price benchmarks covering crude oil, oil products, LPG, chemicals, thermal and coking coal, natural gas, biofuels, biomass, metals, fertilizers and agricultural markets. The review was carried out by professional services firm PwC. Annual independent, external reviews of oil benchmarks are required by international regulatory group losco's Principles for Oil Price Reporting Agencies, and losco encourages extension of the reviews to non-oil benchmarks. For more information and to download the review visit our website https://www.argusmedia.com/en/about-us/governance-compliance



					Daily s	pot price	s		(ontract avera	ges
				Differenti		pot price	Prices			Prior month	
Asia-Pacific	Timing	Basis	Low	High	Moan	Low	High	Mean	Moan	Mean	Moa
Singapore fob cargo \$/bl	Prompt	Mops	+0.40	High +0.60	Mean +0.50	85.20	85.40	85.30	Mean 93.19	96.78	Mea 87.9
South Korea fob cargo \$/bl	Prompt	Mops	-0.80	-0.60	-0.70	84.00	84.20	84.10	91.87	95.69	86.7
. •		Mops	-0.00	-0.00	-0.70	89.10	89.30	89.20	97.56	101.09	92.0
Japan c+f cargo \$/bl Mideast Gulf	Prompt	Basis	Low	- High	Mean	Low		Mean	Mean	Mean	Mea
	Timing			High			High		88.47	92.00	83.3
Mideast Gulf fob cargo \$/bl	Prompt	Mopag	+4.15	+4.35	+4.25	80.60	80.80	80.70	-2.66	-4.69	-2.5
Mideast Gulf fob diff to Ice \$/bl	Prompt	Ice				94.40	9440	94 50	92.23		
Fujairah fob cargo \$/bl	Prompt	Mopag	+4.15	+4.35	+4.25	84.40	84.60	84.50	Mean	96.73	87.1
Africa	Timing Prompt	Basis	Low	High	Mean	Low	High	Mean		Mean	Mea
Durban c+f cargo \$/t						663.91	664.11	664.01	738.35	769.33	688.3
West Africa delivered \$/t	Prompt	Danie	Lave	Lliab	Maan	Lave	ماسنالا	715.00	782.00	836.07	727.1
FSU	Timing	Basis	Low	High	Mean	Low	High	Mean	Mean	Mean	Mea
Moscow formula incl VAT Rbs/t	Prompt			-	20.00	-	-	61,842	66,943	69,763	61,84
Moscow formula ex VAT \$/t	Prompt	lce	-	-	-20.89	-	-	640.11	684.51	718.20	640.1
Moscow spot fit incl VAT Rbs/t	Prompt			•	-	68,700	70,450	69,575	68,995	68,418	69,57
Moscow spot fit ex VAT \$/t	Prompt		-	•	-	711.10	729.21	720.16	705.47	703.90	720.1
Omsk fca incl VAT \$/t	Prompt		-	-	-	825.99	830.34	828.17	826.20	823.04	828.1
Yaroslavl fca incl VAT \$/t	Prompt		-	-	-	819.78	821.64	820.71	803.25	795.99	820.7
Kirishi fca incl VAT \$/t	Prompt		-	-	-	782.52	782.52	782.52	768.10	773.43	782.5
Chimkent fca incl VAT \$/t, 3 May*	Prompt		-	-	-	na	na	na	811.00	804.13	832.5
Pavlodar fca incl VAT \$/t, 3 May*	Prompt		-	-	-	na	na	na	811.00	809.88	821.5
Atyrau fca incl VAT \$/t, 3 May*	Prompt		-	-	-	na	na	na	800.00	797.25	816.0
Russian-Kazakh border dap \$/t, 2 May*	Prompt		-	-	-	710	750	730	745.00	753.75	730.0
Russian-Kazakh border fca \$/t, 2 May*	Prompt		-	-	-	795	840	818	834.50	844.13	817.5
Europe	Timing	Basis	Low	High	Mean	Low	High	Mean	High	High	Higl
Northwest Europe fob cargo \$/t	Prompt		-	-	-	670.75	671.75	671.25	740.95	776.51	684.0
Northwest Europe cif cargo \$/t	Prompt	Ice	+44.25	+45.25	+44.75	681.00	682.00	681.50	753.70	792.42	694.6
Northwest Europe fob barge \$/t	Prompt	Ice	+40.50	+41.00	+40.75	677.25	677.75	677.50	749.45	790.22	690.3
Mediterranean fob cargo \$/t	Prompt	-	-	-	-	658.75	659.75	659.25	727.00	754.17	672.3
Mediterranean cif cargo \$/t	Prompt	Ice	+44.25	+45.25	+44.750	681.00	682.00	681.50	753.70	792.42	694.6
Mediterranean cif diff to Med fob \$/t	Prompt	fob	+21.75	+22.75	+22.25	-	-	-	+27.20	+38.75	+22.7
US	Timing	Basis	Low	High	Mean	Low	High	Mean	Mean	Mean	Mea
New York cif waterborne 54 grade ¢/USG	Prompt	Jun	-10.75	-10.25	-10.50	212.48	212.98	212.73	227.33	255.59	218.9
New York del Colonial 54 grade ¢/USG	cycle 23	Jun	-11.00	-10.00	-10.50	212.23	213.23	212.73	226.08	257.58	219.1
New York fob barge 54 grade ¢/USG	Prompt	Jun	-11.00	-10.00	-10.50	212.23	213.23	212.73	227.33	255.59	218.9
New York fob Buckeye 54 grade ¢/USG	Prompt	Jun	-11.00	-10.00	-10.50	212.23	213.23	212.73	227.33	255.59	218.9
Philadelphia fob Laurel 54 grade ¢/USG	Prompt	Jun	-11.00	-10.00			213.23	212.73	227.33	255.59	218.9
del Port Everglades, FL 54 grade ¢/USG	Prompt	-	-	-	-			215.50	230.10	247.76	222.8
del Tampa, FL 54 grade ¢/USG	Prompt	-						214.07	228.66	246.49	221.3
US Gulf fob waterborne 54 grade ¢/USG	Prompt	Jun	-17.00	-16.75	-16.88	206.23	206.48	206.36	220.91	238.41	213.6
US Gulf fob Colonial 54 grade ¢/USG	cycle 27	Jun	-18.75	-18.50	-18.63	204.48	204.73	204.61	219.16	236.66	211.9
US Gulf fob Colonial 54 wgt avg ¢/USG	Prompt	Jun	-10.73	-10.50	-18.67	207.70	204.73	204.56	219.18	236.67	211.9
Jet fuel export cargo ¢/USG	Prompt	Dec	+4.00	+8.00	+6.00	207.97	211.97	209.97	225.09	241.18	217.4
Colonial Pipeline Jet Fuel Weight Average			17.00	10.00	10.00	201.71	211.77		223.07	271.10	217.7
Strip	Prompt	-	-	-	-	-	-	203.97	-	-	
Tulsa fob Group Three Q grade ¢/USG	Prompt	Jun	-5.75	-5.25	-5.50	217.48	217.98	217.73	237.86	253.26	224.6
West Shore/Badger fob ¢/USG	Prompt	Jun	-14.00	-11.50	-12.75	209.23	211.73	210.48	227.35	251.30	216.7
Los Angeles fob ¢/USG	Prompt	Jun	-5.25	-4.75	-5.00	217.98	218.48	218.23	234.28	240.24	224.7
LAX fob ¢/USG	Prompt	Jun	-6.25	-5.75	-6.00	216.98	217.48	217.23	233.43	239.36	223.9
San Francisco fob ¢/USG	Prompt	Jun	-9.25	-8.75		213.98		214.23	234.28	240.24	223.4
Argus US Jet Fuel Index™ ¢/USG	Prompt	Juli	7.23	0.75	7.00	213.70	214.40	211.51	227.03	245.95	218.1
California LCFS premium per carbon intensity		SC.						1.09	227.03	2-13.73	210.1
Oregon LCFS premium per carbon intensity p								1.69			
Latin America	Timing	Basis	Low	High	Mean	Low	High	Mean	Mean	Mean	Mea
		Dasis	Low	High	Mean	210.37				242.90	
del east coast Mexico ¢/USG del Rosarito ¢/USG	Prompt Prompt					221.89	210.62 222.14	210.50 222.02	223.77 235.52	256.02	217.1 228.3
			-	•	-						
del Lazaro Cardenas ¢/USG	Prompt		-		-	220.69	220.94	220.82	234.32	254.81	227.1
del Progresso \$/m3	Prompt		-	-	-	211.41	211.66	211.54	224.82	243.95	218.1
del Santos \$/m3	Prompt		-		-			584.27	619.72	675.51	600.9
del Rio de Janeiro \$/m3	Prompt		-	-	-			583.55	619.06	674.67	600.3
del Suape \$/m3	Prompt		-	-	-			577.61	613.61	667.73	594.7
del Itaqui \$/m3	Prompt		-	-	-			573.82	610.13	663.31	591.2
	•										
del Barranquilla \$/m3 del Callao \$/m3	Prompt Prompt		-	-	-			560.88 583.72	596.00 619.49	646.73 673.54	578.4 600.6

"The waste from these agricultural [processes] such as sugar bagasse and the shells of the palm trees can be used to produce SAF," de la Fuente tells *Argus*.

Some projects have been announced in Panama and

Paraguay supported by tax incentives, de la Fuente says. In Panama, a consortium led by SGP BioEnergy in partnership with the government has announced the construction of a biorefinery to produce a combined 7.8mn t/yr of SAF and



Argus jet fuel forward curve										
	Singapore cargo swap \$/bl Northwest Europe cargo swap \$/t		New York barge ¢/USG			Houston Colonial pipeline ¢/USG				
Timing	Mean	Change	Mean	Change	Timing	Mean	Change	Timing	Mean	Change
Month 1	84.80	-5.35	49.00	-1.00	Prompt	212.73	-5.69	cycle 27	204.61	-7.31
Month 2	84.85	-5.50	52.00	0.00	10 days fwd	209.98	-5.94	cycle 28	204.36	-7.31
Month 3	85.15	-5.50	55.25	-1.50	15 days fwd	207.23	-6.19	cycle 29	204.11	-7.31
Quarter 1	85.65	-5.35	55.25	-1.50	20 days fwd	204.48	-6.44	cycle 30	203.86	-7.31
Quarter 2	86.60	-4.90	55.75	-0.75				cycle 31	203.86	-7.31
Quarter 3	87.25	-4.25						cycle 32	203.86	-7.31

rana postea prices, rimiada									
3 May	2 May	19 Apr	17 Apr	14 Apr					
246.00	255.00	273.00	279.00	292.00					
Sustainable aviation fuel (SAF)*									
		Bid	Ask	±					
soil** \$/m³,	28 Apr	1,545.00	1,555.00	0.00					
soil** \$/t, 2	8 Apr	2,032.89	2,046.05	0.00					
		2,083.45	2,093.45	-19.90					
		2,741.38	2,754.54	-26.19					
II) \$/t		2,002.82	2,015.64	-25.53					
netback \$	/t	2,648.88	2,662.04	-26.19					
5G		682.28	683.84	-16.25					
			Mid	±					
	3 May 246.00 rel (SAF)* soil** \$/m³, soil** \$/t, 2	3 May 2 May 246.00 255.00 rel (SAF)* soil** \$/m³, 28 Apr soil** \$/t, 28 Apr	3 May 2 May 19 Apr 246.00 255.00 273.00 rel (SAF)* Bid soil** \$/m³, 28 Apr 1,545.00 soil** \$/t, 28 Apr 2,032.89 2,083.45 2,741.38 10 \$/t 2,002.82 p netback \$/t 2,648.88	3 May 2 May 19 Apr 17 Apr 246.00 255.00 273.00 279.					

1,819.80

-32.20

SAF fob ARA range less HBE-IXB \$/t

Paria posted prices Trinidad

^{**}SAF-escalated

Spot market deals done									
Market	Spec	Timing	Basis	Price	Volume				
USGC Colonial	Jet A	cycle 27	Jun Nymex	-18.75	100000 bl				
USGC Colonial	Jet A	cycle 27	Jun Nymex	-18.75	25000 bl				
USGC Colonial	Jet A	cycle 27	Jun Nymex	-18.75	25000 bl				
USGC Colonial	Jet A	cycle 27	Jun Nymex	-18.50	25000 bl				
USGC Colonial	Jet A	cycle 27	Jun Nymex	-18.50	25000 bl				
USGC Colonial	Jet A	cycle 27	Jun Nymex	-18.50	25000 bl				
LA	Jet A	May	Jun Nymex	-5.00	25000 bl				
LA	Jet A	Jun	Jul Nymex	-6.50	250000 bl				

ammonia. The Biorefineria Ciudad Dorada is scheduled to be completed by 2028.

In Paraguay, Brazilian biodiesel producer ECB is developing an \$800mn-1bn plant that will produce around 800,000 t/yr of SAF starting in 2024. The plant will use soy oil as its feedstock.

But projects are also being developed in areas that lack government incentives. Brasil BioFuels is working on a plant to produce around 500,000 t/yr of SAF in Brazil. The project is expected to begin production in 2027, using palm oil as its feedstock, de la Fuente says.

In Colombia, state-controlled Ecopetrol is considering pilot projects to produce SAF and hydrotreated vegetable oil (HVO),

Argus jet fuel differential to gasoil							
	Prior week		Prior three months	Prior six months			
Singapore jet vs 0.5%	+4.82	+3.97	+4.47	+2.08			
Rotterdam jet vs 0.1%	+2.39	+1.74	+2.22	+3.95			
Houston jet vs heating oil	+32.25	+32.86	+37.22	+36.54			

Argus jet fuel differential to crude								
	Prior week	Prior month	Prior three months	Prior six months				
Singapore jet vs Dubai Jul 23	+12.89	+13.38	+19.51	+26.92				
Rotterdam jet vs North Sea Dated	+13.49	+15.68	+23.78	+33.11				
Houston jet vs Nymex WTI Jun 23	+15.71	+19.96	+32.76	+43.74				

Related marke	ets			
	Nymex heating oil	Ice gasoil	Nymex WTI	Ice Brent
	benchmark ¢/USG	benchmark \$/t	settlement \$/bl	settlement \$/bl
Jun 23	223.23	637.25	68.60	-
Jul-23	223.45	638.75	68.55	72.33
Aug-23	224.12	641.50	68.37	72.18
Sep-23	225.05	644.75	68.08	71.93
Oct-23	225.95	648.50	67.75	71.65
Nov-23	226.37	648.00	67.44	71.40
Dec-23	226.38	645.00	67.16	71.15
Jan-24	226.80	645.25	66.89	70.92
Feb-24	226.88	645.25	66.64	70.70
Dec-24	221.41	636.25	64.85	69.17
Dec-25	217.93	628.50	63.15	67.93
Dec-26	211.68	630.00	61.70	66.93
Dec-27	-	627.25	60.37	66.06
Dec-28	-	625.00	-	65.50

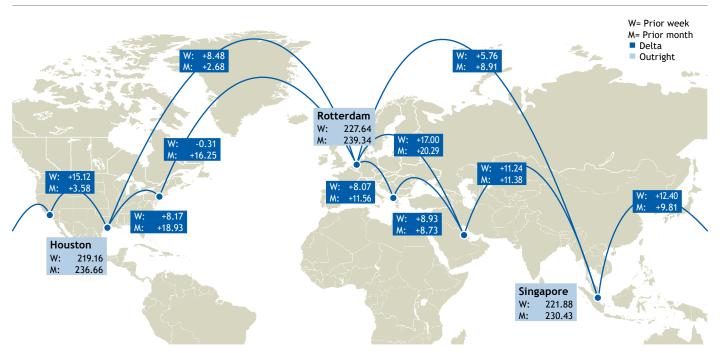
the firm's product and petrochemicals manager Felipe Trujillo says.

The company's Cartagena refinery could produce around 45,000 b/d of SAF and 45,000 b/d of HVO, according to Trujillo, with the project scheduled to start in the second quarter of 2024. The company is also analysing the possibility of modifying an existing plant at its 245,000 b/d Barrancabermeja refinery to produce SAF and HVO.



^{*}Hydrotreated Esters and Fatty Acids (HEFA-SPK)

ARGUS MARKET MAP



Geographic comparisons									
First center less se	cond center	Pri	ce spreads in ¢	/USG		P	Price spreads in \$/t		
		Prior week	Prior month	Prior three months	Prior six months	Prior week	Prior month	Prior three months	Prior six months
Rotterdam	Singapore	+5.76	+8.91	+11.56	+19.69	+18.86	+29.29	+38.06	+64.94
Los Angeles	Singapore	+12.40	+9.81	+22.83	+31.88	+33.27	+24.51	+66.85	+95.93
Singapore	Mideast Gulf	+11.24	+11.38	+10.57	+11.69	+37.19	+37.67	+34.99	+38.69
Rotterdam	Mideast Gulf	+17.00	+20.29	+22.13	+31.38	+56.06	+66.96	+73.04	+103.63
Mediterranean	Mideast Gulf	+8.93	+8.73	+9.90	+19.25	+29.36	+28.71	+32.56	+63.47
Rotterdam	Mediterranean	+8.07	+11.56	+12.23	+12.14	+26.70	+38.25	+40.48	+40.16
New York	Rotterdam	-0.31	+16.25	+57.21	+64.80	-8.36	+45.51	+179.31	+203.36
Rotterdam	Houston	+8.48	+2.68	-8.69	-13.01	+35.13	+16.51	-20.34	-33.67
New York	Houston	+8.17	+18.93	+48.52	+51.79	+26.77	+62.02	+158.97	+169.69
Los Angeles	Houston	+15.12	+3.58	+2.58	-0.82	+49.54	+11.73	+8.45	-2.69

Similarly, Colombia's largest biodiesel producer Bio D plans to start producing SAF by 2028 to supply Bogota international airport. Bio D would produce 50mn USG of SAF in the first year of operation.

Call for regulation

Latin America will need to build 730 plants with a combined investment of \$180bn to produce 54mn t/yr of SAF by 2050, according to lata calculations. This would help create 2mn jobs.

But to make these projections become a reality, the region

needs to develop regulations and blending mandates to underpin the development of the sector. "We need clear rules to bring tranquility to the chain of this business and to stakeholders," Trujillo says, adding that most market participants are not investing in the technologies yet in Colombia because there are no clear regulations.

The Brazilian sector is also calling for the government to establish blending mandates as well as regulations as a matter of urgency so that the country does not undershoot its SAF and HVO output potential.

Producers will also need to meet the challenge of certify-



ing the agricultural crops used as feedstocks in the production process, de la Fuente says. "The certification of the supply chain for this industry is very important," de la Fuente adds.

Pemex's crude processing edges up 2pc in 1Q

Mexico's state-owned Pemex processed 2pc more crude at its six domestic refineries in the first quarter of this year compared to a year earlier on higher operating rates at the Tula, Salina Cruz and Cadereyta refineries.

Crude throughput rose to 835,000 b/d in the first quarter, a modest increase of 13,000 b/d compared to the same period of 2022, Pemex's downstream executive vice president Reynaldo Wences said during the company's earning call today.

Mexico's refining system has a combined capacity to process 1.64mn b/d of crude, but in the first quarter, throughput averaged 51pc of that capacity, an increase of 0.8 percentage points from the same period of 2022.

The Tula refinery stood out from the rest in the first quarter, with 69pc utilization.

Pemex's oil products output, including its 340,000 b/d Deer Park refinery in Texas, increased by 16pc in the first quarter, compared with the same period of 2022, with an average of 856,000 b/d.

From the total production during the first quarter, 270,000 b/d were gasoline, 133,000 b/d diesel, 40,000 b/d jet fuel, and 412,000 b/d were other oil products and LPG.

Pemex's gasoline, diesel and jet fuel production averaged 443,000 b/d in the first quarter, boosted by 121,000 b/d of output of those products at its Tula refinery, Wences said.

From the total crude throughput in the first quarter, the Tula refinery processed 217,000 b/d, Salina Cruz 182,000 b/d, Salamanca 123,000 b/d, Cadereyta 122,000 b/d, Minatitlan 106,000 b/d and Madero 85,000 b/d.

The national refinery system is key for the Mexican government's goal to achieve self-sufficiency and reduce dependency on fuel imports that come mainly from the US.

But Pemex missed its crude processing goal of 1.2mn b/d for the quarter, although throughput ticked up to 923,000 b/d afterwards in April, Wences said.

"We've had days above 1mn b/d [of crude processing]," Wences said. "For 2023, we are looking at an average of 950,000 b/d and frequently we reach that rate. We seek the necessary reliability to reach that goal."

The government says it will achieve that goal once the

new 340,000 b/d Olmeca refinery in Tabasco starts operations, which the government has said will happen in July. Outside estimates point to a full start possibly in 2024 as the plant is still under construction.

In the first quarter, Pemex's refining margin decreased by 0.87pc to \$16.75/bl year over year, but remained the second-highest margin to date, Wences said.

The number of Pemex-branded service stations increased by 2pc to 7,030 as of 31 March, compared with the first quarter of 2022. Out of those, 6,985 are owned by franchisees. By Antonio Gozain

Panama sets green H2 targets for transport

Panama has launched a green hydrogen strategy that sets consumption targets for its maritime, aviation and heavy duty transport sectors.

The plan foresees 500,000t of green hydrogen production and its derivatives by 2030 to meet 5pc of bunkering demand. It expects to produce 2mn t/yr of green hydrogen and derivatives to cover 30pc of the bunkering segment and 20pc of fuel demand for heavy duty machinery and vehicles by 2040.

"By 2050, 40pc of ship bunkering demand will be provided by green hydrogen and its derivatives such as methanol and ammonia and 30pc of aviation fuel from e-gasoline," deputy energy secretary Rosilena Lindo says.

The aim of the project, which is open for comments until 28 May, is to turn Panama into a hub for the production and supply of green hydrogen, energy secretary Jorge Rivera Staff says. "Green hydrogen will consolidate Panama as a regional hub for sustainable energy, serving sectors such as maritime transport, aviation and heavy road transport," he says.

Private-sector investors would develop the green hydrogen projects with investment of more than \$710mn in a first phase, according to Lindo.

One project, in Colon province, will deliver 65,000 t/yr of green ammonia for ships and 70,000 t/yr of green hydrogen for heavy-duty vehicles in Panama and Colon provinces, Lindo says. The government has not yet agreed on a developer.

The e-kerosine plant will cost about \$208mn and will be located in a province where existing wind and solar farms will allow for the production of about 12,000 t/yr of green hydrogen by 2040.

Renewable sources accounted for roughly two-thirds of Panama's installed power capacity at the end of last year.



MARKET COMMENTARY

Asia-Pacific

Singapore's jet fuel swaps fell by more than Dubai crude values, weakening margins. Indian state-controlled refiner MRPL sold jet fuel for end-May loading.

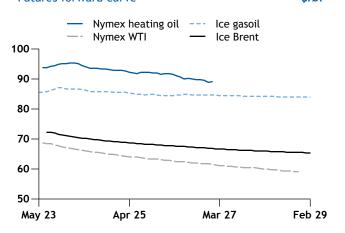
The May-June spread narrowed to -\$0.05/bl in contango from last session's -\$0.20/bl. The May and June swaps were assessed weaker at \$84.80/bl and \$84.85/bl respectively, compared to \$90.15/bl and \$90.35/bl on 2 May.

Indian state-controlled refiner MRPL sold jet fuel for loading from New Mangalore over 20-22 May. The refiner had offered either a 40,000t (315,000 bl) or 60,000t cargo, but it could not be confirmed which volume was sold. TotalEnergies' trading arm Totsa bought the cargo around slight premiums of \$0.05/bl against the average of *Argus*' and Platts' Singapore spot jet fuel assessments, traders said. The tender closed on 28 April with same-day validity. MRPL had previously sold to PetroChina another similar-sized cargo for 4-6 May loading, at a discount of likely around \$0.20/bl to the same pricing basis.

Chinese jet fuel exports are still expected to be slightly above 1mn t in May, possibly around 1.1mn t, market participants said. The rising regrade could prompt refiners to produce more jet fuel as well, a trader said. The balance May regrade was assessed around \$0.05/bl on 3 May, compared to -\$0.85/bl on 2 May. The country still has excess jet fuel supplies with high refinery run rates, and as China's flight bookings on international routes are yet to recover.

China's international airline capacity is now 37pc of the April 2019 level, although Chinese carriers' domestic capacity has surpassed pre-Covid levels, according to flight data provider OAG.

Futures forward curve \$/bl



Europe

Outright European jet fuel prices slipped on Wednesday, as liquidity remained low.

The underlying Ice gasoil futures contract dropped by a further \$24.25/t to \$636.75/t on Wednesday, as macroeconomic uncertainty persists ahead of an expected interest rate hike by the US Federal Reserve. Traders added that buying interest had dipped ahead of the Federal Reserve's decision later on Wednesday.

Market participants meanwhile continued to point to weak demand in Asia as the main factor behind Europe's jet fuel oversupply at present.

Europe received around 879,000t of seaborne jet fuel deliveries in the week between 24-30 April, according to Vortexa data. That marked on increase of 260,000t from the week before, taking weekly imports to their highest of this year so far.

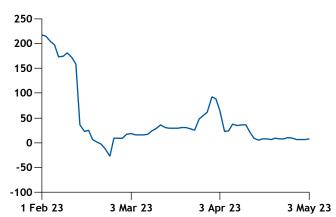
Low-cost European airline Ryanair's passenger traffic continued to increase in April, rising by 13pc on the year. Ryanair carried 16mn passengers in April, up from 14.2mn a year earlier and up from pre-pandemic levels of 13.5mn in April 2019. Meanwhile, the passenger load factor rose to 94pc, up from 91pc a year earlier, but remained below 96pc in April 2019.

European air safety organisation Eurocontrol data shows there were nearly 817,000 flights in Europe in April, up by 9.7pc on the year, but 8.9pc below pre-pandemic levels.

There was no jet fuel cargo trades reported in northwest Europe on Wednesday. Jet fuel cargoes delivered to northwest Europe were assessed at a \$44.75/t premium to Ice May gasoil, down by \$1/t since Tuesday, moving in line with signals from the paper markets.

No jet fuel barges trades were reported at FARAG. BP offered twice; at a \$1/t discount and at a \$3/t discount to spot





quotes. Shell bid at a \$2/t premium to spot quotes, while Unipec bid at a \$5/t discount to spot quotes. Jet fuel barges loading at FARAG were assessed at a \$40.75/t premium to the May gasoil futures, down by \$1 /t since Tuesday. Barges retained their \$4/t discount to cargoes from the previous session, while shadowing the latter's price movements.

Americas

US jet fuel prices deepened multi-year lows on Wednesday as fresh data revealed national stockpiles at nine-month highs.

US Atlantic coast Buckeye jet fuel with prompt 8-10 May timing was bid at June Nymex ultra-low sulphur diesel -11.00¢/USG against offers at -10.00¢/USG. Colonial 54-grade jet fuel for newly prompt cycle 23 remained assessed at parity with Buckeye jet, and cash differentials for both delivery modes were unchanged. Cash prices tracked the underlying Nymex, down 5.69¢/USG to \$2.13/USG.

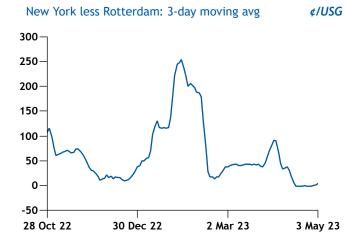
The Colonial jet fuel arbitrage between the US Gulf coast and the US northeast grew to $1.55 \ensuremath{\rlap/e}/\text{USG}$ on Wednesday, up from $0.08 \ensuremath{\rlap/e}/\text{USG}$ the prior day.

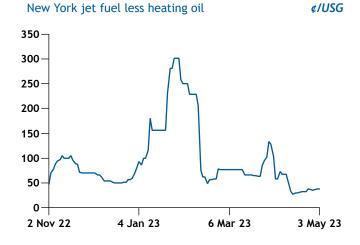
US Atlantic coast jet fuel stockpiles rose to their highest level in over three-and-a-half years last week, despite lower regional production in the area. EIA data showed PADD 1 jet fuel ending stockpiles built to around 12.4mn bl for the week ending 28 April, up 0.9mn bl and the third consecutive week of rising inventories. The increase contrasted with lower jet fuel output, as refiner and blender net production declined to 65,000 b/d on the Atlantic coast. Jet fuel imports eased higher to 34,000 b/d on the week, up from 31,000 b/d in the prior report.

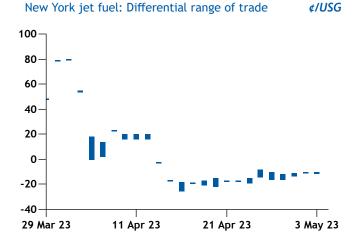
US Gulf coast jet fuel prices declined to \$2.05/USG, down by $7.32 \, \epsilon / \text{USG}$ from Tuesday. This set the lowest price since 20 December 2021. Prompt 54 grade jet fuel cash differentials declined by $1.63 \, \epsilon / \text{USG}$ from the prior day's assessed midpoint with trades done at June Nymex $-18.75 \, \epsilon / \text{USG}$ and $-18.50 \, \epsilon / \text{USG}$. Bids and offers for the jet prompt cycle roll were reported from flat to the prompt cycle to $+0.50 \, \epsilon / \text{USG}$, keeping the forward curve in backwardation.

At the US midcontinent, Chicago's West Shore/Bagder jet fuel received valuations in a range of 14 ¢/USG to 11.50 ¢/USG below the Nymex, increasing cash differentials by 0.75 ¢/USG from the previous session.

West Shore/Badger jet fuel prices fell by 4.94¢/USG to \$2.10/USG on Nymex losses.







Group Three jet fuel prices fell by 5.69¢/USG to \$2.17/ USG on steady cash differentials and falling Nymex futures. The arbitrage to Group Three remained open at a 13.13¢/USG premium to the Gulf coast.

US west coast jet fuel cash differentials increased while cash prices sank. Prompt Los Angeles jet fuel traded at June Nymex -5¢/USG, rising 0.5¢/USG above the last assessment. Cash prices fell by 5.2¢/USG to close the day at \$2.18/USG. San Francisco jet fuel was flat to Los Angeles.

US west coast jet fuel production decreased last week ending 28 April. Output on the west coast fell to 392,000 b/d, down from 424,000 b/d as fuel imports climbed to 89,000 b/d, up from 57,000 b/d in the previous week, per the EIA's weekly report. West coast jet fuel stockpiles fell to 8.9mn bl, from 9.6mn bl.

METHODOLOGY

Argus has been assessing daily global jet fuel prices since 1986. These prices appear in the Argus European Products, Argus Asia-Pacific Products, and Argus US Products reports. We have consolidated all our daily jet fuel prices, market commentary, and news into the Argus Jet Fuel report in order to better serve the airline and supplier community. The methodologies for all of the prices in this report are located at www.argusmedia.com within the methodology document for the above named market report. On our website you will also find the Argus Global Compliance Policy and other useful reference material.

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