

OVERVIEW

- In Fujairah, barge loadings resumed from terminals following a stormy weather on Tuesday. But deliveries in the Fujairah anchorage did not restart yet.
- Zhoushan VLSFO availabilities are expected to persist in May as refiners cut production.

Global marine biodiesel				\$/t
	Low	High	Mid	±
B24 marine biodiesel dob Singapore (VLSFO and Ucome blend)	769.50	779.50	774.50	-1.50
B24 marine biodiesel dob Algeciras-Gibraltar (VLSFO and Ucome blend)	831.50	841.50	836.50	-5.75
RED marine biodiesel ARA range (VLSFO blend)				
B10 advanced FAME dob	-	-	692.78	-2.76
B20 advanced FAME dob	-	-	745.56	-2.02
B30 advanced FAME dob	-	-	798.35	-1.27
B30 Ucome dob	-	-	856.75	-6.25
B50 advanced FAME dob	-	-	903.91	+0.21
B100 advanced FAME dob	-	-	1152.82	+3.91
B30 marine biodiesel dob (ULSD* blend)				
Houston	-	-	793.04	-23.25
New York	-	-	814.75	-23.57

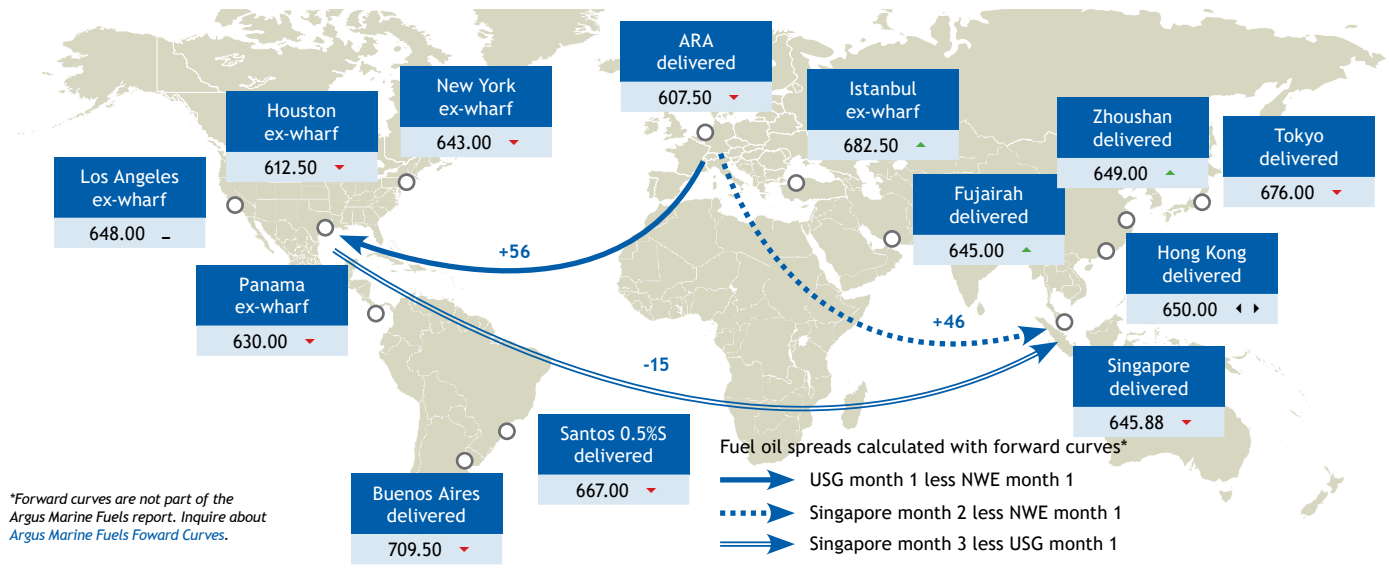
*ultra-low sulphur diesel

Key conventional bunker assessments, midpoint				
	Delivery	0.5%S fuel oil	MGO	3.5%S fuel oil
Singapore \$/t	cargo, fob	636.50	-	501.25
	bunker, dob*	645.88	782.46	511.00
Zhoushan \$/t	bunker, dob*	649.00	810.00	510.00
Fujairah \$/t	barge, fob	640.00	-	-
	bunker, dob*	645.00	890.00	508.00
ARA \$/t	bunker, dob*	607.50	766.50	-
Rotterdam \$/t	bunker, dob	-	-	480.00
NW Europe \$/t	barge, fob	600.50	769.75	482.00
US Gulf \$/bl	barge, fob	91.79	-	73.87
US Gulf \$/t	barge, fob	618.12	-	-
Houston \$/t	bunker, ex-wharf	612.50	830.50	539.50
Houston \$/t	bunker, dob	646.50	840.50	-
New York \$/bl	barge, dob	92.69	-	-
New York \$/t	barge, dob	624.18	-	-
New York \$/t	bunker, ex-wharf	643.00	821.00	494.00
Los Angeles \$/t	bunker, ex-wharf	648.00	813.00	488.00
	bunker, dob	673.00	850.00	500.50
Panama \$/t	bunker, ex-wharf	630.00	781.50	465.50

*volume weighted average
 The \$/bl and \$/t assessments for 0.5% sulphur fuel oil prices in the New York and US Gulf are assessed independent of each other. They are not directly correlated by fixed conversion factors due to density variables.
 Tables include hyperlinks to those values maintained in the Argus database.

0.5%S FUEL OIL BUNKERS AND BULK 0.5%S FUEL OIL

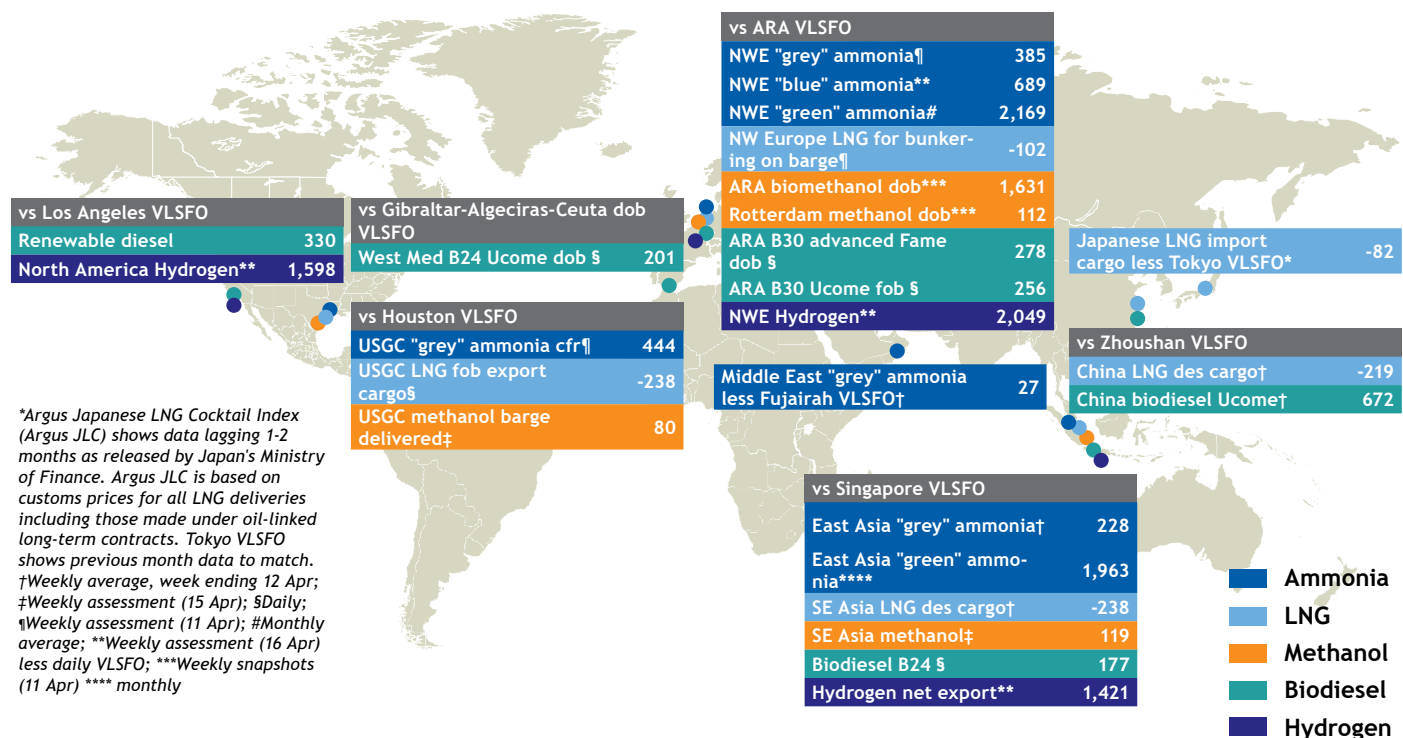
\$/t



*Forward curves are not part of the Argus Marine Fuels report. Inquire about Argus Marine Fuels Forward Curves.

ALTERNATIVE MARINE FUEL VS VLSFO

\$/t VLSFO-equivalent



*Argus Japanese LNG Cocktail Index (Argus JLC) shows data lagging 1-2 months as released by Japan's Ministry of Finance. Argus JLC is based on customs prices for all LNG deliveries including those made under oil-linked long-term contracts. Tokyo VLSFO shows previous month data to match. †Weekly average, week ending 12 Apr; ‡Weekly assessment (15 Apr); §Daily; ¶Weekly assessment (11 Apr); #Monthly average; **Weekly assessment (16 Apr) less daily VLSFO; ***Weekly snapshots (11 Apr) **** monthly

ALTERNATIVE VS CONVENTIONAL MARINE FUEL

Asia-Pacific and Middle East energy equivalent comparisons				
	\$/mn Btu	\$/t 0.5%S FOe	\$/t MGOe	\$/t 3.5%S FOe
Weekly average, week ending 12 Apr				
Grey ammonia East Asia (excl Taiwan) cfr	22.05	870.80	893.99	841.13
Green ammonia East Asia cfr, monthly, Mar	66.05	2,608.90	2,678.39	-
Methanol Southeast Asia delivered, weekly assessment, 15 Apr	19.30	762.30	782.60	736.32
LNG des Southeast Asia (ASEA) half-month net calorific value-adjusted	10.24	404.33	415.11	390.56
Singapore 0.5%S fuel oil delivered	16.27	642.83	-	-
Singapore 0.1%S MGO delivered	19.84	-	804.48	-
Singapore 3.5%S fuel oil delivered	13.17	-	-	502.37
Biodiesel B24 (VLSFO blend) Singapore delivered	20.85	823.37	845.30	795.31
Biodiesel Ucome (used cooking oil) RED bulk China fob	33.21	1,307.16	1,371.59	-
LNG des China half-month net calorific value-adjusted	10.59	416.94	437.49	-
Zhoushan 0.5%S fuel oil delivered	16.15	635.50	-	-
Zhoushan 0.1%S MGO delivered	19.71	-	814.20	-
Ammonia Middle East fob spot	16.76	664.21	684.07	-
Fujairah 0.5% fuel oil delivered	16.09	637.50	-	-
Fujairah 0.1% MGO delivered	21.59	-	881.10	-
Monthly average				
Japanese LNG cocktail (JLC) preliminary, net calorific value-adjusted, Feb	14.30	602.67	-	-
Tokyo 0.5%S fuel oil delivered, Mar	16.26	685.13	-	-

ALTERNATIVE VS CONVENTIONAL MARINE FUEL

NW Europe energy equivalent comparisons					
	\$/mn Btu	\$/t 0.5%S FOe	\$/t MGOe	\$/t	CO2 % price increase
NWE grey ammonia wholesale excluding duty, cfr, weekly assessment, 11 Apr	25.26	992.10	1,019.27	-	-
NWE blue ammonia modeled value, wholesale, ex-works, weekly, 16 Apr	33.01	1,296.71	1,332.22	-	-
NWE green ammonia modeled value, wholesale, duty paid, cfr, monthly avg Mar*	70.68	2,776.34	2,852.38	-	-
ARA B100, advanced Fame dob, snapshot, 11 Apr	37.80	1,484.79	1,525.45	1182.24	-
ARA B30 (advanced Fame VLSFO blend), dob, snapshot, 11 Apr	22.82	896.59	921.15	807.17	-
ARA B30 (Ucome and VLSFO blend), dob, snapshot, 11 Apr	27.82	1,092.96	1,122.89	870.25	-
Rotterdam grey methanol dob, snapshot, 11 Apr	18.30	719.00	738.69	-	-
RED bio-methanol dob ARA netback, snapshot, 11 Apr	56.99	2,238.86	2,300.17	-	-
NWE LNG bunker, dob on barge, weekly assessment, 11 Apr	12.88	505.99	519.84	-	-
NWE LNG bunker, dob on truck, weekly assessment 11 Apr	10.46	410.96	422.21	-	-
ARA 0.5%S fuel oil retail, dob, snapshot, 11 Apr	15.47	607.50	-	-	-
ARA 0.1%S MGO retail, dob, snapshot, 11 Apr	20.00	-	807.00	-	-
Algeciras-Gibraltar B24 (Ucome and VLSFO blend), dob, snapshot 17 Apr	26.74	1,050.57	1,079.34	837.5	-
Algeciras-Gibraltar-Ceuta 0.5%S fuel oil retail, dob, snapshot 17 Apr	16.18	653.00	-	-	-
Algeciras-Gibraltar-Ceuta 0.1%S MGO retail, dob, snapshot 17 Apr	21.53	-	869.75	-	-
CO2 added combustion cost, snapshot, 11 Apr†					
EU CO2	-	-	-	71.34	-
Rotterdam grey methanol delivered including CO2 cost, snapshot, 11 Apr	23.50	923.29	948.58	-	28%
RED bio-methanol delivered ARA netback including CO2 cost, snapshot, 11 Apr	62.20	2,443.15	2,510.06	-	9%
ARA B30, delivered, including CO2 cost, snapshot, 16 Apr	26.86	1,055.32	1,079.60	968.46	18%
NWE LNG bunker, delivered on barge including CO2 cost, snapshot, 11 Apr	16.62	653.04	670.93	-	29%
NWE LNG bunker, delivered on truck including CO2 cost, snapshot, 11 Apr	14.20	558.01	573.30	-	36%
ARA 0.5%S fuel oil retail, delivered including CO2 cost, snapshot, 11 Apr	21.19	832.29	-	-	37%
ARA 0.1%S MGO retail, delivered including CO2 cost, snapshot, 11 Apr	25.66	-	1,035.72	-	35%

*Monthly calculated price. For more information about ammonia inquire about the Argus Ammonia report

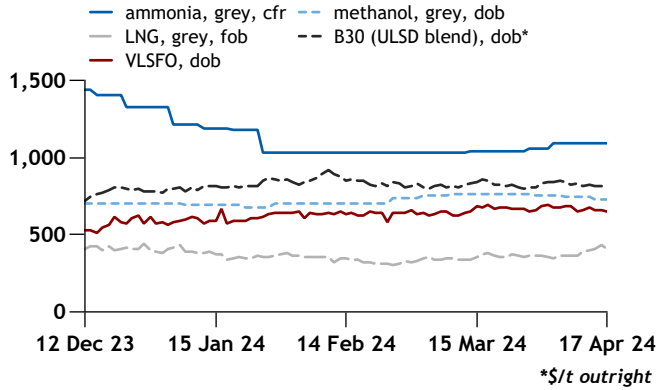
†1t of 0.5%S fuel oil emits 3.151t of CO2, 1t of MGO emits 3.206t of CO2, according to IMO's 2014 guidelines. 1t of LNG emits 2.755t of CO2, and 1t of methanol and biomethanol emits 1.375t of CO2 from burning, according to EU's renewable and low-carbon fuels in marine transport directive. For news and analysis on the EU Emission Trading Scheme market enquire about the Argus European Emissions Market report.

US energy equivalent comparisons, daily					
	\$/mn Btu	\$/t 0.5%S FOe	\$/t MGOe	\$/t	
US Gulf ammonia cfr spot, weekly assessment, 11 Apr	26.99	1,090.48	1,172.78	-	
US Gulf methanol barge delivered, weekly assessment, 15 Apr	17.98	726.58	781.41	-	
US Gulf LNG fob net calorific value-adjusted	10.11	408.49	439.32	-	
Houston B30 (ULSD blend) delivered	20.76	-	902.26	793.04	
Houston 0.5%S fuel oil ex-wharf	15.16	612.50	-	-	
Houston 0.5%S fuel oil delivered	16.00	646.50	-	-	
Houston 0.1%S MGO ex-wharf	19.12	-	830.50	-	
Houston 0.1%S MGO delivered	19.34	-	840.50	-	
New Orleans 0.5%S fuel oil ex-wharf	15.78	637.50	-	-	
New Orleans 0.1%S MGO ex-wharf	18.22	-	791.50	-	
New Orleans 0.1%S MGO delivered	19.96	-	867.00	-	
Los Angeles renewable diesel (R99) head of pipe	23.08	1,002.88	932.50	-	
Los Angeles 0.5%S fuel oil delivered	16.66	673.00	-	-	
Los Angeles 0.1%S MGO delivered	19.56	-	850.00	-	
New York B30 (ULSD blend) delivered	21.33	-	926.97	814.75	
New York 0.5%S fuel oil ex-wharf	15.91	643.00	-	-	
New York 0.1%S MGO ex-wharf	18.90	-	821.00	-	

ALTERNATIVE MARINE FUELS

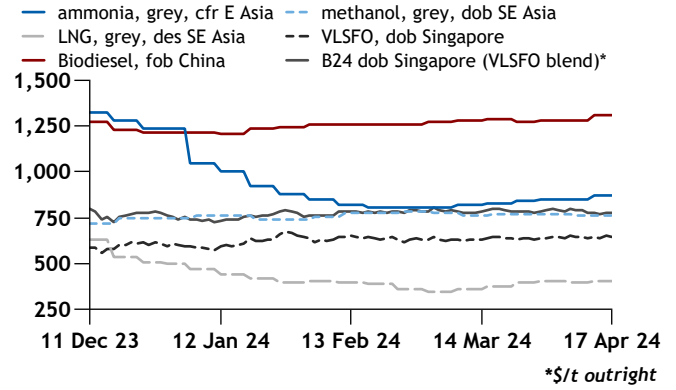
US Gulf alt fuels vs VLSFO

\$/t VLSFOe



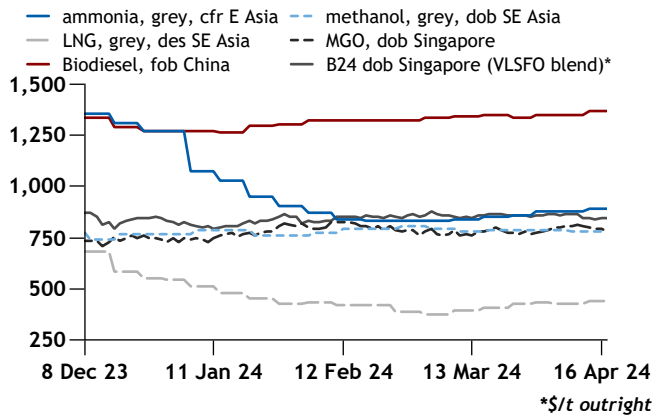
Asia alt fuels vs VLSFO

\$/t VLSFOe



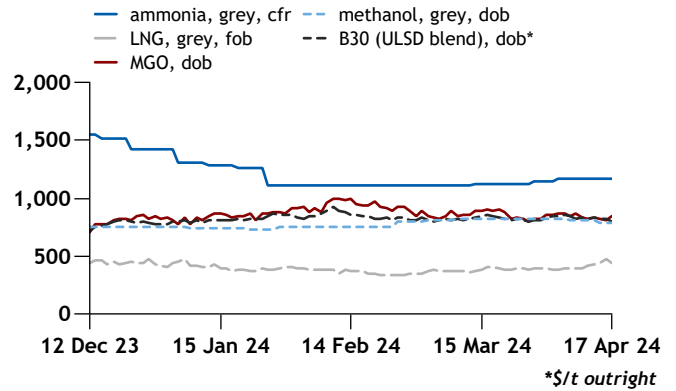
Asia alt fuels vs MGO

\$/t MGOe



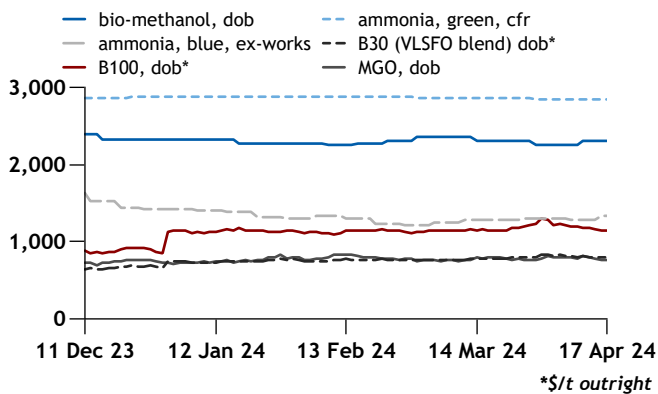
US Gulf alt fuels vs MGO

\$/t MGOe



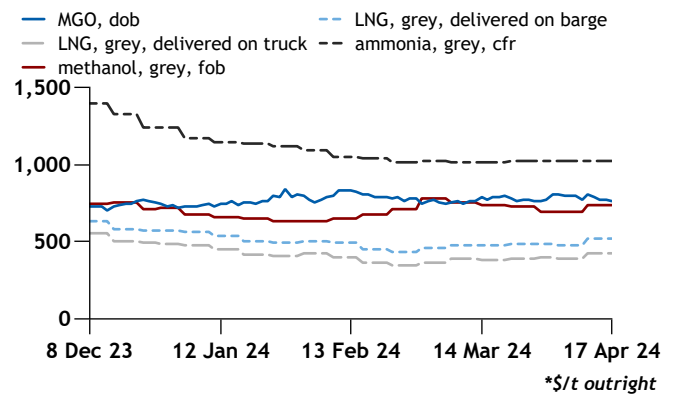
NW Europe "green/blue" alt fuels vs MGO

\$/t VLSFOe



NW Europe "grey" alt fuels vs MGO

\$/t MGOe



ASIA-PACIFIC

Singapore

Bunker fuel prices in Singapore slipped further on 17 April alongside a 44¢/bl decline in Ice Brent crude futures to \$89.70/bl. Singapore’s front month April HS 380cst swaps fell by \$1/t to \$500.75/t.

Robust trading activity was seen in Singapore, with at least 17 bunker deals reported sold totaling 33,540t, a jump from 13,300t traded on 16 April.

The Argus-assessed very low sulphur gasoil (VLSFO) price fell by \$3.62/t to \$645.88/t on a delivered on board (dob) basis on the back of three trades done in the \$645-647/t dob Singapore range today. Another five non-index relevant trades were concluded in the \$644-646/t dob Singapore range.

Singapore prices for high sulphur gasoil (HSFO) held firm at \$511/t on a dob basis today. The assessment was in line with a

Singapore assessed bunker prices

Grade	HS 380cst	LSFO 0.5%S	MGO 0.1%S
Assessment VWA \$/t	511.00	645.88	782.46
Reported quantity t	3,375	24,185	5,980
	Low	High	Mid
HS 500cst \$/t	503.50	508.50	506.00
B24 biodiesel VLSFO blend \$/t	769.50	779.50	774.50

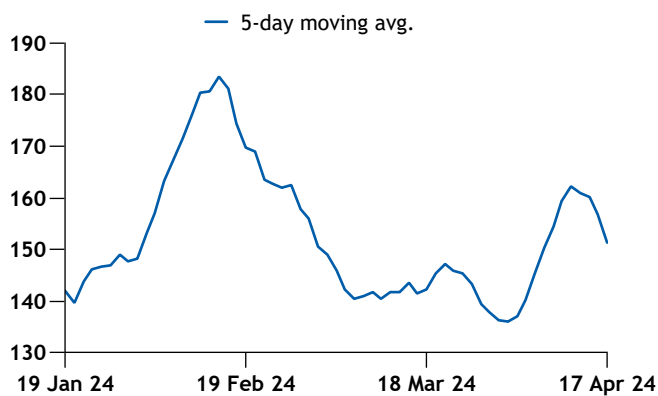
Singapore cargo prices

	Low	High	Mid	±
Singapore 0.5%S 30cst min fuel oil fob	636.00	637.00	636.50	▼
Singapore 3.5%S 180cst fuel oil fob	516.50	517.50	517.00	▲
Singapore 3.5%S 380cst fuel oil fob	500.75	501.75	501.25	▼

The total volumes published above include trades excluded from the volume-weighted average prices for failing to meet size, timing or statistical price tests.

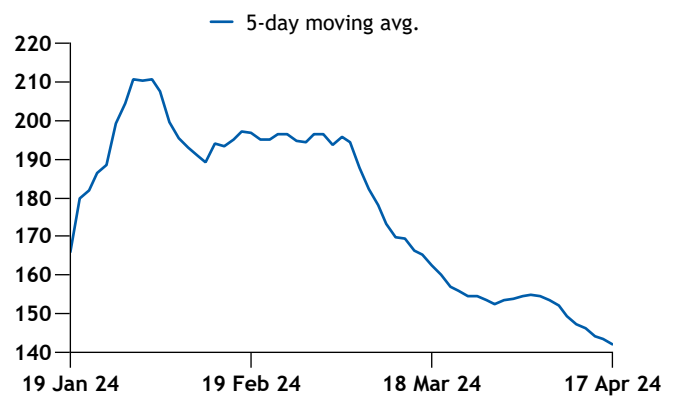
Singapore: MGO 0.1%S less fuel oil 0.5%S

\$/t



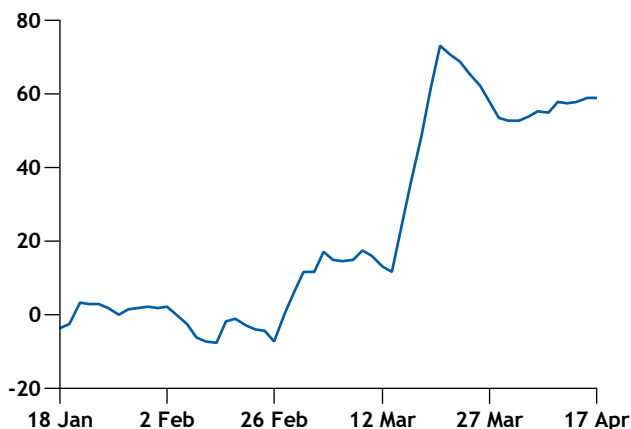
Singapore: fuel oil 0.5%S less fuel oil 3.5%S

\$/t



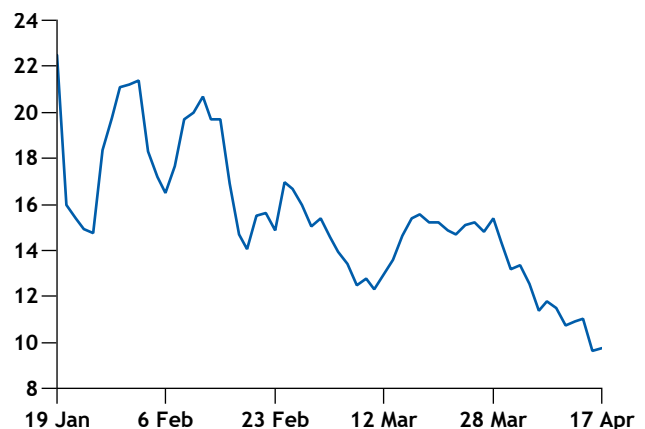
HS 380cst bunkers - Shanghai less Singapore

\$/t



Singapore - 380cst bunkers less bulk cargoes

\$/t



ASIA-PACIFIC

Assessed bunker prices													\$/t
Location	0.5%S 380cst				Sulphur max %	MGO				HS 380cst			
	Low	High	Mid	±		Low	High	Mid	±	Low	High	Mid	±
China delivered													
Guangzhou	648.00	658.00	653.00	◀ ▶	-	-	-	-	-	-	-	-	-
Hong Kong			650.00	◀ ▶	0.05	795.00	805.00	800.00	◀ ▶	505.00	515.00	510.00	◀ ▶
Reported quantity t			0	◀ ▶									
Qingdao	655.00	665.00	660.00	◀ ▶	-	-	-	-	-	565.00	575.00	570.00	◀ ▶
Shanghai			650.50	◀ ▶	0.10	845.00	855.00	850.00	▲	515.00	525.00	520.00	◀ ▶
Reported quantity t			5,850	▼									
Asia-Pacific (other) delivered													
Russian far east	590.00	625.00	607.50		0.10	810.00	835.00	822.50	◀ ▶	510.00	560.00	535.00	◀ ▶
Ulsan/Busan/Yeosu	642.50	647.50	645.00	▼	0.10	773.50	778.50	776.00	▼	527.50	532.50	530.00	▲
Sydney	940.88	945.88	943.38	▼	0.10	977.46	982.46	979.96	▼	806.00	811.00	808.50	◀ ▶
Tokyo*	675.00	677.00	676.00	▼	-	-	-	-	-	575.00	582.00	578.50	▲
Indian Ocean delivered													
Mumbai	704.00	706.00	705.00		0.10	1,580.00	1,600.00	1,590.00	▼	664.00	666.00	665.00	▼

*0.5%S maximum viscosity 180cst

Posted bunker prices													\$/t
Location	0.5%S 380cst				Sulphur max %	MGO				HS 380cst			
	Low	High	Mid	±		Low	High	Mid	±	Low	High	Mid	±
Saudi Aramco delivered													
Saudi Arabia eastern region	-	-	695.00	▼	0.05	-	-	1,250.00	▲	-	-	545.00	▼
Saudi Arabia western region	-	-	695.00	▼	0.10	-	-	1,250.00	▲	-	-	545.00	▼

Fujairah assessed bunker prices			
	HS 380cst	LSFO 0.5%S	MGO 0.1%S
Assessment \$/t	508.00	645.00	890.00
Reported quantity t	1,200.00	4,570.00	250.00

Zhoushan			
	HS 380cst	LSFO 0.5%S	MGO 0.1%S
Bunker Index, delivered \$/t	510.00	649.00	810.00
Reported quantity t	0.00	6,300.00	0.00
Barge, ex-wharf \$/t	-	650.00	-

trade for 3,000t of HSFO for 23-25 April delivery at \$511/t dob Singapore today. A non-index relevant HSFO deal was concluded at \$515/t dob Singapore.

The scrubber spread was down by \$3.62/t from 16 April to \$134.88/t today. The delivered HS380cst and the front-month Ice Brent futures contract differential narrowed further to -\$9.23/bl from -\$9.67/bl on 16 April.

The Argus-assessed marine gasoil (MGO) price in Singapore

CPC, Taiwan, delivered, valid from 17 Apr				\$/t
Location	3.5%S	0.5%S	0.1%S	MGO
	380cst	180cst		
Hualien, Suao*	-	671.00	902.00	
Keelung	-	671.00	902.00	
Taichung	-	671.00	902.00	
Kaohsiung	545.00	671.00	902.00	

*Hualien, Suao MGO is 0.5%S maximum

Pertamina, Indonesia, bunkers for ocean-going vessels, delivered, valid from 15 Apr					\$/t
	LSFO 0.5%S	HS 180cst	MGO 0.005%S	B35 0.2%S (MGO blend)*	
Jakarta	679.00	725.00	1,550.00		1,046.00
Surabaya	696.00	728.00	1,535.00		1,014.00
Balikpapan	696.00	756.00	-		1,057.00
Benoa	-	-	1,496.00		1,136.00
Batam	-	-	1,324.00		-

*Indonesian B35 officially has 0.2%S content which refers to the government's regulation on B35. But test reports show Indonesian B35 has below 0.1%S.

ASIA-PACIFIC

declined by \$11.21/t to \$782.46/t on a dob basis, in line with three trades done in the range of \$780-788/t dob Singapore. Four other non-index relevant deals totaling 5,330t concluded at \$781-786/t dob Singapore.

B24 Singapore prices on a dob basis were assessed at \$769.50-779.50/t in line with VLSFO cargo prices.

For a full list of daily, spot bunker deals and firm price quotes collected by Argus globally [click here](#).

China

Delivered bunker prices remained largely stable on limited supplies with barge constraints, despite crude prices edging lower during Asian trading.

Tight supplies of very-low sulphur fuel oil (VLSFO) in Zhoushan will continue until May. Market participants noted local refineries intend to further cut VLSFO production in May. Bunker barge availabilities were also tight.

Spot demand for VLSFO in Zhoushan shrank to 6,300t, down by 340t from 16 April. Zhoushan prices edged up to \$649/t from \$648.50t the previous day.

Selling indications for high-sulphur fuel oil (HSFO) in Zhoushan were stable at \$510/t. The Zhoushan scrubber spread, or the difference between VLSFO and HSFO prices, was largely stable at \$139/t compared with \$138.50/t on 16 April.

Shanghai's VLSFO trading volumes fell to 5,850t, down by 4,000t from 16 April. VLSFO prices in Shanghai were unchanged from the previous day at \$650.50/t.

Japan: prices mixed

Bunker prices in Japan were mixed as activity remained limited.

Spot trading activity was muted in Tokyo bay. An offer for 300-350t of VLSFO with 27 April delivery emerged at \$677/t dob Tokyo, but no deal was concluded by market close.

On the production front, a key refiner's 128,000 b/d No.4 crude distillation unit in Marifu has restarted operations after maintenance from late January this year to 10 April, but bunker production has yet to resume.

Middle East

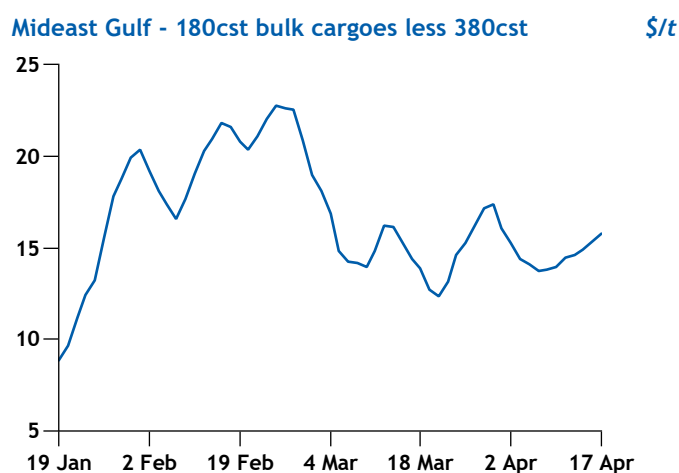
Fujairah suppliers and trading firms submitted nine delivered spot bunker deals on Wednesday for a total of 6,020t of marine fuels, from 13 deals for 11,635t in the previous trading session.

The deals comprised 4,570t of very low-sulphur fuel oil (VLSFO), 1,200t of high-sulphur fuel oil (HSFO), and 250t of low-sulphur marine gasoil (MGO).

The delivered VLSFO premium against the Singapore 0.5pc sulphur marine fuel value, used as a price basis by Fujairah traders, was assessed at \$9/t from \$5.50/t previously.

The scrubber spread – the difference between delivered VLSFO-HSFO prices – was assessed at \$138/t from \$135.50/t in the previous session.

Barge loadings have resumed from terminals following stormy weather on Tuesday, but deliveries have not begun in the Fujairah anchorage area yet, suppliers said.



EUROPE AND AFRICA

Assessed bunker prices														\$/t
Location	0.5%S 380cst				Sulphur max %	MGO				HS 380cst				
	Low	High	Mid	±		Low	High	Mid	±	Low	High	Mid	±	
Europe delivered														
ARA VWA			607.50	▼	0.10			766.50		-	-	-		
Reported quantity t			0					0						
Diff to Ice gasoil			-					-40.25	▲					
Rotterdam			-					-	▼	477.50	482.50	480.00	◀ ▶	
Antwerp			-					-		477.50	482.50	480.00	◀ ▶	
Skaw/Gothenburg	641.00	646.00	643.50	▼	0.10	895.00	900.00	897.50	▲	550.00	555.00	552.50	▼	
Hamburg	627.00	632.00	629.50	▲	0.10	852.50	857.50	855.00	▼	540.00	545.00	542.50	▲	
Algeciras/Gibraltar/Ceuta VWA			635.50	▼	0.10			868.75		-	-	-		
Reported quantity t			680					260						
Gibraltar	649.50	654.50	652.00	▲	0.10	860.00	865.00	862.50	▲	550.50	555.50	553.00	▲	
Algeciras	629.50	634.50	632.00	▼	0.10	867.50	872.50	870.00	▲	557.50	562.50	560.00	▲	
Barcelona dob	647.00	652.00	649.50	▲	0.10	850.00	855.00	852.50	▼	545.00	550.00	547.50	▼	
Genoa ex-wharf	652.00	657.00	654.50		0.10	901.50	906.50	904.00	▲	555.00	560.00	557.50	◀ ▶	
Malta	626.00	631.00	628.50		0.10	833.00	838.00	835.50	▼	569.00	574.00	571.50	▶	
Piraeus	697.50	702.50	700.00		0.10	867.50	872.50	870.00	▼	532.50	537.50	535.00	▲	
Kali Limenes	700.00	705.00	702.50		0.10	927.50	932.50	930.00	▼	539.50	544.50	542.00	▲	
Istanbul ex-wharf	680.00	685.00	682.50	▲	0.10	875.00	880.00	877.50	▲	610.00	615.00	612.50	▼	
Africa delivered														
Canary islands	666.50	671.50	669.00	▲	0.10	855.50	860.50	858.00	▼	583.00	588.00	585.50	▼	
Cape Town*	763.00	768.00	765.50		0.50	1,078.50	1,083.50	1,081.00	▼	-	-	-		
HS 180cst*										623.75	628.75	626.25	▼	
Durban*	729.00	734.00	731.50		0.10	1,017.00	1,022.00	1,019.50	▼	-	-	-		
HS 180cst*										673.00	678.00	675.50	▼	
Lome	840.00	845.00	842.50	◀ ▶	0.10	1,190.00	1,195.00	1,192.50	◀ ▶					
Suez	708.50	713.50	711.00	▼	0.10	1,080.50	1,085.50	1,083.00	▼	636.00	641.00	638.50	▲	
Russia delivered														
Arkhangelsk†	565.00	605.00	585.00	◀ ▶	0.10	765.00	805.00	785.00	◀ ▶	-	-	-		
Murmansk†	565.00	610.00	587.50	◀ ▶	0.10	765.00	810.00	787.50	◀ ▶	-	-	-		
Krasnodar region†	485.00	525.00	505.00	◀ ▶	0.10	750.00	815.00	782.50	◀ ▶	390.00	410.00	400.00	◀ ▶	
St Petersburg†	475.00	520.00	497.50	◀ ▶	0.10	640.00	690.00	665.00	◀ ▶	300.00	320.00	310.00	◀ ▶	
Ust-Luga†	475.00	525.00	500.00	◀ ▶	0.10	640.00	695.00	667.50	◀ ▶	300.00	325.00	312.50	◀ ▶	
ECA 0.1% fuel oil														
Rotterdam	751.50	756.50	754.00	▼	-	-	-	-		-	-	-		
St Petersburg	560.00	610.00	585.00	◀ ▶	-	-	-	-		-	-	-		
Ust-Luga	560.00	615.00	587.50	◀ ▶	-	-	-	-		-	-	-		

*0.5%S and 3.5%S fuel oil has maximum viscosity of 180cst †0.5%S maximum viscosity not specified

For a full list of daily, spot bunker deals and firm price quotes collected by Argus globally [click here](#).

Bunker fuel prices mostly fell across Europe and Africa in line with falling crude and gasoil futures values in the midweek session.

Market participants reported mostly thin trading activity. But some pointed to firmer bunker fuel demand in the Mediterranean compared with northwest Europe.

In the ARA trading and refining hub, very-low sulphur fuel oil (VLSFO) values slipped by \$3.50/t and marine gasoil (MGO)

Barge prices				\$/t
	Low	High	Mid	±
NWE 0.5% fuel oil fob	598.50	602.50	600.50	▼
NWE 1.0% fuel oil fob	499.75	503.75	501.75	▼
NWE 3.5% RMG fob	480.00	484.00	482.00	▼
NWE 3.5% RMK fob	-	-	479.50	▼
NWE 0.1% MGO fob	767.75	771.75	769.75	▼

prices declined by \$3.25/t as market participants reported thin spot trading activity and lacklustre bunker fuel demand. The front-month Ice Brent crude futures contract decreased to

EUROPE AND AFRICA

\$88.86/bl from \$90.23/t at 16:30 BST. And the front-month Ice gasoil futures contract lost \$11/t to \$806.75/t at 16:30 BST.

The scrubber spread – the spread between VLSFO and high-sulphur fuel oil (HSFO) doab bunker fuels in ARA – narrowed by \$3.50/t to \$127.50/t at the close.

Marine fuel prices in Murmansk and Arkhangelsk held steady following thin buying interest. Trading activity at the Russian northern ports at the middle of the week remained thin due to competitive prices at neighbouring European ports. Local bunkering companies offered VLSFO at \$586/t and MGO at \$787.50/t but no deals were reported.

In the Gibraltar-Algeciras-Ceuta (GAC) bunkering hub, VLSFO prices decreased by \$14.75/t but those for MGO gained \$18.75/t. The west Mediterranean hub's delivered VLSFO premium to ARA narrowed to \$28/t from \$39.25/t at the previous close.

In Malta, participants reported sluggish spot bunker fuel demand. Marine fuel availability was ample. Consequently, VLSFO values fell by \$18.50/t and MGO prices decreased by \$6.50/t. Malta's VLSFO discount to the GAC bunkering hub widened more than four-fold, to \$33.25/t from \$8/t at the previous close.

In Genoa, spot bunker fuel demand was firm. Marine fuel availability was described as ample. As a result, VLSFO and MGO prices climbed higher by \$3/t each. Genoa's VLSFO premium to Malta widened to \$26/t from \$5/t at the previous session.

In Piraeus, market views on marine fuel availability was mixed. Some described availability as ample with the exception of deliveries for Wednesday due to strikes in Greece. But others pointed to tightening VLSFO availability at the port. Spot trading activity for marine fuels was described as thin and marine fuel demand was lacklustre. VLSFO and MGO values fell by \$2.50/t each. Piraeus' MGO premium to Malta widened by \$4/t to \$34.50/t.

In neighbouring Kali Limenes, participants reported moderate spot bunker fuel demand for lower quantities on the day. Bunkers availability remained sufficient. VLSFO prices at Kali Limenes declined by \$5/t, while MGO levels fell lower by \$7.50/t. Kali Limenes' VLSFO premium to Piraeus halved on the day, narrowing to \$2.50/t from \$5/t.

European bio-bunkers

Marine biodiesel prices mostly fell across Europe in outright terms, pressured by lower fossil and biodiesel values.

Market participants reported an uptick in spot marine biodiesel buying interest following easing demand in the previous session. But outright values declined across most grades, in line with lower prices in the underlying markets.

The front-month Ice Brent crude futures contract decreased to \$88.86/bl from \$90.23/t at 16:30 BST. And the front-month Ice gasoil futures contract lost \$11/t to \$806.75/t at 16:30 BST. Further, Advanced fatty acid methyl ester (Fame) 0 assessments fell by \$10.88/t to \$1,396.82/t.

EU emissions trading system (ETS) prices retraced its gains, falling to \$72.67/t from \$76.54/t after hitting a three-month high in the previous session. Consequently, premiums held by marine biodiesel blends against fossil counterparts, when ETS costs are factored in, mostly widened on the day.

Calculated B30 Advanced Fame 0°C CFPP doab ARA range – which incorporates a deduction of the value of Dutch HBE-G renewable fuel tickets – were marked at a premium of \$163.37/t to very-low sulphur fuel oil (VLSFO) doab ARA with ETS costs included, wider by \$3.69/t. And B100 Advanced Fame 0 doab ARA held a premium of \$293.13/t to MGO doab ARA, higher by \$12.13/t when ETS costs were added.

B24 doab Algeciras-Gibraltar widened its ETS-inclusive premium to VLSFO doab Gibraltar-Algeciras-Ceuta (GAC) by \$10.17/t to just above \$179/t. But the premium held by B30 used cooking oil methyl ester (Ucome) doab ARA against VLSFO doab ARA edged narrower by \$1.28/t to \$221.77/t with ETS costs added on.

In outright terms, B30 doab ARA blend values fell by \$6.25/t to \$856.75/t. B24 doab Algeciras-Gibraltar declined by \$5.75/t to \$836.50/t, and B30 Advanced Fame 0 ARA lost \$1.27/t to \$798.35/t. Only B100 Advanced Fame 0 doab ARA values diverged increasing by \$3.91/t to \$1,152.82/t.

NORTH AMERICA

Assessed bunker prices													\$/t
Location	0.5%S 380cst				Sulphur max %	MGO				HS 380cst			
	Low	High	Mid	±		Low	High	Mid	±	Low	High	Mid	±
Atlantic coast ex-wharf													
Halifax	-	-	-		0.10	1,056.00	1,060.00	1,058.00	◀ ▶	-	-	-	
Montreal delivered	756.00	761.00	758.50	▼	0.10	860.00	865.00	862.50	◀ ▶	639.00	644.00	641.50	▼
CFR cost*	-	-	-		-	-	-	35.65	▲	-	-	-	
New York	641.00	645.00	643.00	▼	0.10	819.00	823.00	821.00	▼	491.50	496.50	494.00	▼
Philadelphia	655.00	660.00	657.50	▼	0.10	820.00	825.00	822.50	▼	502.00	507.00	504.50	▼
Gulf coast ex-wharf													
Houston	610.50	614.50	612.50	▼	0.10	828.50	832.50	830.50	▲	537.00	542.00	539.50	▼
New Orleans†	635.00	640.00	637.50	▼	0.10	791.00	792.00	791.50	▼	554.50	559.50	557.00	▼
Gulf coast delivered													
Houston	644.50	648.50	646.50		0.10	838.00	843.00	840.50	▲	-	-	-	□
New Orleans	-	-	-		0.10	865.00	869.00	867.00	▼	-	-	-	□
West coast ex-wharf													
Los Angeles	646.00	650.00	648.00	-	0.10	811.00	815.00	813.00	▼	485.50	490.50	488.00	▼
Portland	-	-	-		0.10	868.00	873.00	870.50	◀ ▶	-	-	-	
San Francisco	634.50	638.50	636.50	▼	0.10	825.00	830.00	827.50	▼	498.00	503.00	500.50	▼
Seattle	792.50	797.50	795.00	▼	0.10	873.00	878.00	875.50	◀ ▶	484.00	489.00	486.50	▲
HS 500cst	-	-	-		-	-	-	-		478.50	483.50	481.00	▲
Vancouver‡	704.00	709.00	706.50	▼	0.10	825.00	830.00	827.50	◀ ▶	518.00	523.00	520.50	▲
West coast delivered													
Los Angeles	671.00	675.00	673.00	▼	0.10	848.00	852.00	850.00	▼	498.00	503.00	500.50	▼
Portland	-	-	-		0.10	914.00	919.00	916.50	◀ ▶	-	-	-	
San Francisco	658.50	663.50	661.00	▼	0.10	891.00	896.00	893.50	▼	511.00	516.00	513.50	▼
Seattle	811.00	816.00	813.50	▼	0.10	913.00	918.00	915.50	◀ ▶	500.00	505.00	502.50	▲
HS 500cst	-	-	-		-	-	-	-		495.00	500.00	497.50	▲

*Canadian clean fuel regulation (CFR) marine gasoil compliance cost †0.5%S product viscosity maximum not specified ‡180cst

US Gulf bunker demand inched up on Wednesday and remained soft on the US Atlantic. Market prices declined and most participants waited to see where prices settle.

There were two combined ex-wharf deals heard in New Orleans. First, 250t of very low-sulphur fuel oil (VLSFO) sold at \$635/t with 150t of marine gasoil (MGO) at \$791/t for 5 May. The other was 350t of VLSFO at \$640/t with 120t of MGO at \$792/t for 23-27 April.

In Houston, 100-150t of MGO was offered at \$843/t delivered.

A clip of 350t of VLSFO went for \$643/t in New York with 125t of MGO at \$821/t ex-wharf for 25 April. MGO, sized at 900t, was offered at \$920/t ex-wharf.

At the port of Philadelphia, 400t of VLSFO was offered at \$660/t with 200t of MGO at \$825/t ex-wharf.

At the port of Providence, Rhode Island, 250t of MGO sold

Barge prices				
	Low	High	Mid	±
USG 0.5% fuel oil fob \$/t	616.43	619.80	618.12	▼
NYH 0.5% fuel oil delivered \$/t	622.49	625.86	624.18	▼
USG 0.5% fuel oil fob \$/bl	91.54	92.04	91.79	▼
USG 3.0% fuel oil fob \$/bl	73.62	74.12	73.87	▲
USG 3.5% fuel oil fob \$/bl	73.62	74.12	73.87	▼
NYH 0.5% fuel oil delivered \$/bl	92.44	92.94	92.69	▼
NYH 1.0% fuel oil delivered \$/bl	90.29	90.48	90.39	▼
NYH 0.5% MGO €/USG	241.22	242.22	241.72	▼

The \$/bl and \$/t assessments for 0.5% sulphur fuel oil prices in the New York and US Gulf are assessed independent of each other. They are not directly correlated by fixed conversion factors due to density variables.

delivered at \$1,040/t.

West coast bunker demand was up in Los Angeles on lower prices, and it stayed muted elsewhere. Higher prices kept market activity down outside of Los Angeles. A clip of 400t of

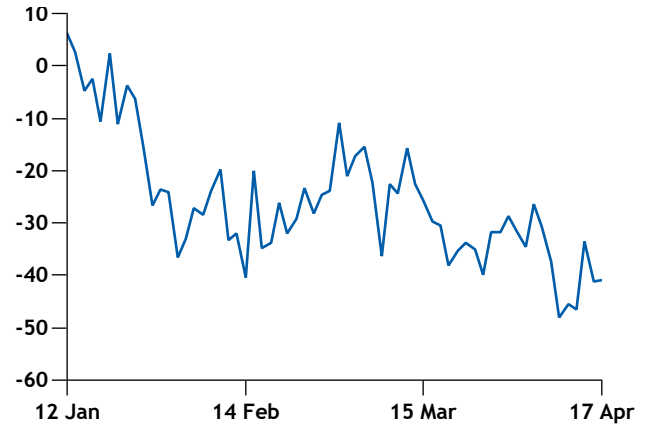
NORTH AMERICA

VLSFO sold delivered in Long Beach, California, at \$673/t with 270t of MGO at \$850/t. At the same port, 105t of MGO was offered at \$880/t delivered. The Los Angeles - Singapore VLSFO premium ticked down to \$27/t.

For a full list of daily, spot bunker deals and firm price quotes collected by Argus globally [click here](#).

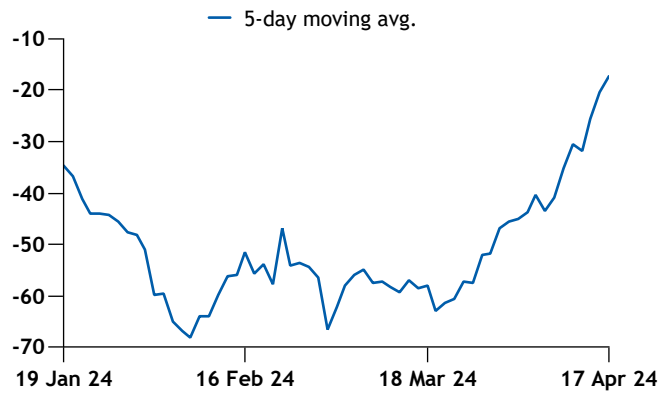
Bulk HSFO - US Gulf less Singapore

\$/t



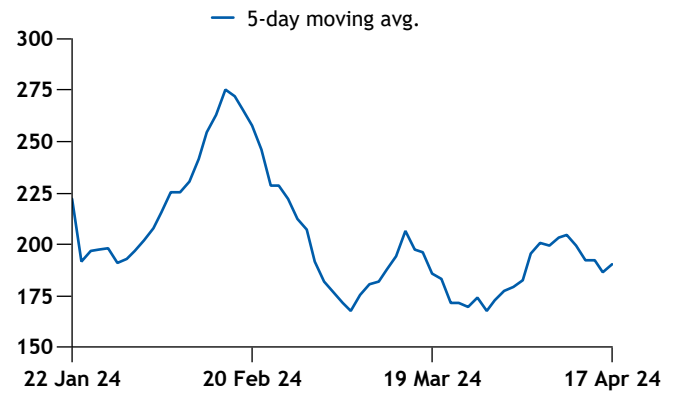
Fuel oil 0.5%: Rotterdam less Houston

\$/t



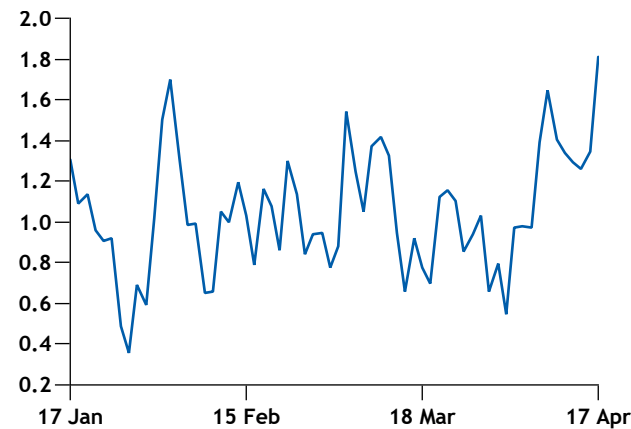
Houston: MGO less fuel oil 0.5%

\$/t



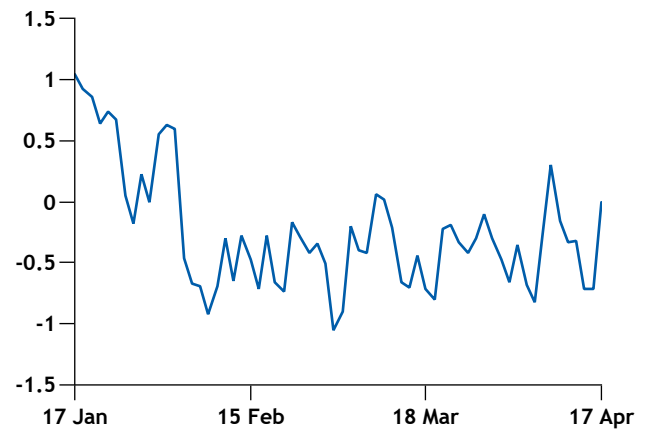
New York LSFO - month 1 less month 2

\$/t



US Gulf HSFO - month 1 less month 2

\$/t



LATIN AMERICA

Assessed bunker prices													\$/t
Location	0.5%S 380cst				Sulphur max %	MGO				HS 380cst			
	Low	High	Mid	±		Low	High	Mid	±	Low	High	Mid	±
Panama canal ex-wharf	627.50	632.50	630.00	▼	0.10	779.00	784.00	781.50	▼	463.00	468.00	465.50	▼
Atlantic coast delivered													
Belem†	733.50	738.50	736.00	▼	0.50	988.50	993.50	991.00	◀▶	-	-	-	-
Buenos Aires	707.00	712.00	709.50	▼	0.10	1,113.00	1,118.00	1,115.50	▼	-	-	-	-
Montevideo	845.00	850.00	847.50	◀▶	0.10	1,118.00	1,122.00	1,120.00	◀▶	-	-	-	-
Paranaguá†	721.00	725.00	723.00	▼	0.10	983.00	987.00	985.00	◀▶	-	-	-	-
Rio de Janeiro	710.00	714.00	712.00	▼	0.50	871.00	876.00	873.50	◀▶	-	-	-	-
Rio de Janeiro	-	-	-	-	0.10	1,031.00	1,036.00	1,033.50	◀▶	-	-	-	-
Santos†	665.00	669.00	667.00	▼	0.10	908.00	913.00	910.50	◀▶	-	-	-	-
Caribbean delivered													
Cartagena	694.50	699.50	697.00	▼	0.10	758.00	762.00	760.00	▼	457.50	462.50	460.00	▼
Pacific coast delivered													
El Callao	779.00	791.00	785.00	◀▶	0.10	1,070.00	1,075.00	1,072.50	◀▶	-	-	-	-
Guayaquil†	773.00	778.00	775.50	◀▶	0.50	1,027.00	1,032.00	1,029.50	◀▶	500.50	504.50	502.50	◀▶
Libertad†	773.00	778.00	775.50	◀▶	0.50	993.00	998.00	995.50	◀▶	490.00	495.00	492.50	◀▶
Quintero/Valparaiso*	983.00	987.00	985.00	◀▶	0.10	1,205.00	1,210.00	1,207.50	◀▶	748.00	753.00	750.50	◀▶
San Antonio*	986.50	991.50	989.00	◀▶	0.10	1,207.00	1,212.00	1,209.50	◀▶	749.00	754.00	751.50	◀▶

*0.5%S maximum viscosity 180cst †0.5%S maximum viscosity not specified

Posted bunker prices													\$/t
Location	0.5%S				Sulphur max %	MGO				HS 380			
	Low	High	Mid	±		Low	High	Mid	±	Low	High	Mid	±
Trafigura delivered - valid from 12 April 2024													
Bahia Blanca	-	-	740.00	◀▶	0.10	-	-	1,110.00	◀▶	-	-	-	-
PdV - valid until 09:00, 1 April 2022													
Venezuelan ports ex-wharf/ex-pipe	-	-	-	-	0.50*	-	-	633.20	◀▶	-	-	436.60	◀▶
HS 180 cst†	-	-	-	-	-	-	-	-	-	-	-	474.80	◀▶

*typical sulphur content †3.5%S fuel oil has maximum viscosity of 180 cst

Latin American bunker demand was moderate on the Atlantic coast and quiet elsewhere despite lower prices.

In Zona Comun, Argentina, 400-600t of very low-sulphur fuel oil (VLSFO) was offered at \$712/t delivered. One supplier in Argentina restarted offering product on Wednesday after maintenance to its delivery vessel kept it out of the market for over a week. The supplier indicated marine gasoil (MGO) at \$1,118/t but did not see buying interest.

A clip of 250t of VLSFO went for \$667/t delivered in Santos, Brazil for 24 April.

MGO, sized at 100t, sold at \$760/t delivered in Cartagena, Colombia.

For a full list of daily, spot bunker deals and firm price

Pemex - valid from 16 April 2024			
Location	Basis	HS 180	
		Ps/m3	\$/t
Lazaro Cardenas	ex-terminal	11,369.25	657.14
Madero	ex-terminal	11,322.28	654.42
Pajaritos	ex-terminal	10,475.19	605.46
Progreso	ex-terminal	10,470.82	605.21
Salina Cruz	ex-terminal	11,065.44	639.58

\$/t prices are converted, not posted. HS 180 uses conversion factor 0.980m3 for 1t.

quotes collected by Argus globally [click here](#).

NEWS

Singapore and IEA unite on maritime decarb

The Maritime and Port Authority of Singapore (MPA) and the IEA have signed an initial deal to push the transition to zero and near zero emission fuels, while working on technology as well as digitalisation to meet the maritime decarbonisation agenda.

The agreement, signed by MPA chief executive Teo Eng Dih and IEA executive director Faith Birol, was announced at the Singapore Maritime Week 2024 (SMW) this week.

“Greater international collaboration in maritime and energy industries is critical for international shipping to meet international decarbonisation goals,” Teo said.

“Shipping is one of the hardest sectors to decarbonise and we need to spur development and deployment of new technologies to slow and then reverse the rise in its emissions,” said IEA chief economist Tim Gould. “This will require strong collaboration at a national and international level.”

Training programmes will be built to support the adoption of new fuels. There will also be partnerships made towards fuel-related projects and initiatives such as the International Maritime Organisation-Singapore NextGen project.

The IEA plans to open its first regional co-operation centre in Singapore, which will be its first regional office outside of its headquarters in Paris, France.

By Mahua Chakravarty

Call for action key to decarbonisation: IMO

The International Maritime Organisation (IMO) is committed to moving maritime decarbonisation forward and feels that the industry is on the “right track”, said its secretary-general Arsenio Dominguez.

His opening speech of the Accelerating Digitalisation and Decarbonisation Conference held during the Singapore Maritime Week 2024 stressed the call for action to meet maritime decarbonisation goals by 2050.

The “focus should be on actions” to meet decarbonisation targets, and to that end, the 2023 IMO Strategy on Reduction of GHG Emissions from Ships signed by IMO member states.

“We are on track to adopt mid-term measures by late 2025 to cut greenhouse gas (GHG) emissions to reach net zero targets,” Dominguez said. These mid-term measures, which are currently being discussed by member states, include a goal-based marine fuel standard and a pricing mechanism for maritime GHG emissions. These measures are expected to

assist the maritime sector progress towards achieving net zero GHG emissions by or around 2050, with indicative checkpoints in 2030 and again in 2040.

The 2023 IMO guidelines have the maritime sector cutting GHG emissions by at least 20pc, striving for 30pc by 2030, and then reducing GHG emissions by at least 70pc, striving for 80pc, in the following decade.

“The targets are for the entire shipping sector,” Dominguez stressed.

Singapore was mentioned as a key contributor towards global green and digital transition in the maritime sector. Singapore will support the transition, as well as introducing least developed countries and small island developing countries into the transition. Projects that include these are the Nextgen initiative between the IMO and the Maritime and Port Authority of Singapore, encompassing green and efficient navigation. The IMO-Singapore Single Window for Facilitation of Trade project also aims to develop a system to allow electronic submission of all information required by various government agencies when a ship calls at a port.

By Mahua Chakravarty

Seaspan to retrofit container ships to methanol

Vessel owner and lessor Seaspan will retrofit five container ships to dual fuel – methanol and conventional bunkers – and will time-charter them to ship owner and operator Hapag-Lloyd.

The five vessels - *Seaspan Amazon*, *Seaspan Ganges*, *Seaspan Thames*, *Seaspan Yangtze*, and *Seaspan Zambezi* - are 10,000 twenty-foot equivalent unit (TEU), each. German engine manufacturer MAN will deliver the engines. The conversion can result in CO2 emissions reduction from 50,000-70,000 metric tonnes (t)/yr per vessel when operating on green methanol, Seaspan said.

Separately, Hapag-Lloyd won a tender from retail coalition Zero Emission Maritime Buyers Alliance (ZEMBA). The coalition was looking for container ship companies to transport 600,000 TEUs-worth of its goods using zero and low-carbon fuels from 2025-2026. ZEMBA members, which include Amazon, Nike and Patagonia, among others, will cut at least 82,000t of CO2 equivalent over the term of this deal. Hapag-Lloyd could potentially use the retrofitted, time-chartered, Seaspan vessels for its ZEMBA operations.

Grey methanol was pegged at \$698/t very low-sulphur fuel

NEWS

oil equivalent (VLSFOe) and biomethanol at \$2,218/t VLSFOe average from 1-17 April in Amsterdam-Rotterdam-Antwerp. Those are about 1.2 times and 3.7 times, respectively, the price of VLSFO, Argus assessments showed.

By Stefka Wechsler

Hapag-Lloyd wins low-carbon fuel tender

German container shipping Hapag-Lloyd won the first tender from a retail coalition looking to cut its carbon footprint starting next year.

The Zero Emission Maritime Buyers Alliance (ZEMBA) group [awarded the tender it released last year](#) soliciting bids from containership companies to use marine fuels that will reduce greenhouse gas emissions by 90pc on a well-to-wake basis compared with a conventional fossil fuel.

“Climate-leading customers of the maritime shipping sector are stepping up in support of zero-emission shipping and the supply chain is responding. As we embark on this partnership, we commend Hapag-Lloyd’s transparency, collaborative spirit, and willingness to innovate with ZEMBA on this inaugural tender,” said Ingrid Irigoyen, chief executive of ZEMBA and an associate director at the Aspen Institute, a non-profit group that helped launch ZEMBA.

It is unclear which containership companies submitted bids other than Hapag-Lloyd. The Aspen Institute did not immediately respond to a request for comment.

Amazon, Nike, and Patagonia are among the retail companies that have joined ZEMBA. These companies formed this group in 2023 to try to negotiate lower freight rates for ships using zero-emission fuel.

ZEMBA members will cut at least 82,000 metric tonnes (t) of carbon dioxide equivalent (CO₂e) over the term of this deal, which will run from 2025 to 2026, according to the group.

“To reach our goal of net-zero ship operations by 2045, we need partners like ZEMBA to support us on our decarbonization journey and push the boundaries of what’s possible. By offering our service, we aim to reduce greenhouse gas emission significantly and contribute to a greener future for global shipping,” said Hapag-Lloyd chief executive Rolf Habben Jansen.

ZEMBA and Hapag-Lloyd will use a book and claim system to verify the zero-emission fuel used onboard.

The group will launch a second tender later this year that will begin in 2027, ZEMBA said.

Hapag-Lloyd recently purchased [2,200t of bio-LNG from](#)

[Dutch LNG bunkering firm Titan Clean Fuels](#) at the port of Rotterdam.

By Luis Gronda

EPS to register 6 ammonia-powered newbuilds

Shipping firm Eastern Pacific Shipping (EPS) will register six dual-fuel ammonia powered vessels, due to be delivered from 2026, with the Singapore Registry of Ships (SRS).

The commitment is part of an initial agreement with Singapore’s Maritime and Port Authority (MPA), vessel classification organisation American Bureau of Shipping (ABS) and Lloyd’s Register. EPS said the collaboration with the MPA will extend to supporting crew and seafarer training on the vessels powered by “zero and near-zero emission fuels”, in addition to pilot trials of these fuels, and building on the capacity and infrastructure required for ammonia bunkering.

Argus assessed the price of green ammonia do east Asia on a very-low sulphur fuel oil energy density equivalent (VLSFOe) at \$2,608.90/t in March, a premium of over \$1,975.08/t against VLSFO do Singapore. Grey ammonia in east Asia was assessed at an average of \$829.52/t VLSFOe across March, a premium of \$195.70/t to VLSFO do Singapore.

By Hussein Al-Khalisy

S Korea zero emission shipping gets a boost

South Korea’s Ulsan Port Authority and US environmental organisation Pacific Environment will work together to accelerate zero-emission shipping and ports in South Korea and across transpacific and global corridors.

The two signed an initial agreement on the sidelines of the Singapore Maritime Week from 15-19 April. Possible cooperation areas include supporting South Korea in its efforts to decarbonise its shipping and harbour craft industry, as well as supporting Ulsan and other South Korean ports in transitioning to green fuels.

South Korea is one of the largest bunker supply hubs and producers of very low-sulphur fuel oil in Asia, with most bunkering taking place in the country’s southern ports of Ulsan and Busan.

The Ulsan Port Authority has ambition to turn the South Korean port into a low-carbon energy hub in northeast Asia, aiming to build infrastructure for methanol, ammonia and hydrogen there. The Ulsan Port Authority previously signed an initial deal with classification society the Korean Register to

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[allow vessels to bunker methanol at the port.](#)

“Ulsan Port has been designated as the only green ship fuel supply port in the Republic of Korea, and aims to become a green energy logistics hub,” Pacific Environment’s executive director Shannon Wright said. “We look forward to supporting the port with strategic policy and planning assistance to support the efforts towards zero-emission shipping and ports.”

Other possible areas of cooperation are supporting Ulsan and other South Korean ports in providing electric power and zero-emission lifecycle fuels for vessels, to allow decarbonisation goals to be met by 2050.

“As the largest bunkering port in the Republic of Korea, we hope to do our part to address climate change and move shipping to a 1.5 degree Celsius future,” Ulsan Port Authority’s vice-president Soonyo Jeong said.

By Mahua Chakravarty

Singapore, Australia tie up to decarb shipping

Singapore’s Marine Port Authority (MPA) and Australia’s National Science Agency (CSIRO) have formed a partnership to work on decarbonising shipping, they said during Singapore Maritime Week 2024.

The Australia-Singapore Initiative on Low Emissions Technologies (ASLET) will research and attempt to scale up solutions for a green and digital shipping corridor between the two countries. Both governments [signed an initial agreement to develop the green corridor](#) in March.

The ASLET initiative aims to accelerate research, demonstration and commercialisation of low-emissions technologies and fuels for maritime shipping and port operations, as well as opportunities for Singapore and Australia to cooperate in these areas. “We need to focus on transitioning to low-emissions fuels such as ammonia and hydrogen by developing accessible technology and infrastructure at ports that supports a range of vessels,” CSIRO chief executive Dr Doug Hilton said.

Singapore will commit up to S\$10mn (\$7.3mn) and Australia will give up to A\$10mn (\$6.4mn) to deliver projects under the ASLET initiative, which also aims to attract industry co-funding. ASLET’s steering committee – led by representatives of MPA, CSIRO and Singapore’s Agency for Science, Technology and Research – will hold its first meeting on 19 April at the Singapore Maritime Week 2024 and will issue a grant call to develop a pipeline of projects.

“ASLET has the potential to translate research outcomes

from the scientific community... to help scale up the production and deployment of low-emissions fuels and technologies at scale”, given Singapore’s position as the world’s largest bunkering hub and Australia’s potential for green fuel production, MPA chief executive Teo Eng Dih said.

By Lauren Moffitt

EU ETS in pricing ‘no man’s land’

The EU emissions trading system (ETS) is sitting in a period between traditional price signals from the power sector and expected future industrial sources of price direction, delegates at a conference in Florence, Italy, heard today.

The EU ETS is “right in the middle” of the transition phase from a power-centric to industrial-driven market, head of carbon markets at Spanish bank BBVA, Ingo Ramming, told the event, pointing to the fall in hedging of carbon allowances by the power sector as a result of renewable capacity buildout and reduced power demand in the current economic slowdown.

Improvements in the economy could see more forward hedging by industrials, Ramming said. Aviation and shipping – the other sectors covered by the EU ETS in which decarbonisation has so far been limited – could be further ahead on this if they had synchronised their carbon hedging with their fuel hedging, Ramming added.

But until industry steps in to fill the current gap, the EU ETS is “in no man’s land”, head of research at fund manager Andurand Capital, Mark Lewis, said.

“Carbon this year is a price taker, not a price maker,” head of market research and analysis at environmental commodities trading firm Vertis, Stefan Feuchtinger, said. “Carbon doesn’t matter to the carbon price.”

But while Lewis sees this gap leaving space in the market open to the financial sector, attributing recent price direction and volatility to speculators, Feuchtinger believes there is still “significant” power hedging in the EU ETS, even if at much lower levels than in the past.

Feuchtinger expects the carbon market to continue to be priced by the utility sector until 2026-27, when there is no longer sufficient coal in the market to justify this and pricing shifts to the industrial side.

Where the carbon price will sit once it is set by industrials is “less straightforward”, Feuchtinger said. Carbon capture and storage is key to this, he said, but depends on where it is

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based and which technology is used, requiring carbon prices in a range of €90-150/t of CO₂ equivalent.

And while carbon prices sitting well below these levels mean less action is currently being taken to develop solutions for industrial decarbonisation, this time delay will lead to larger price spikes in the future, he said.

By Victoria Hatherick

Methanol EU imports rise in February

Methanol imports into the EU in February were up from the same period last year, according to latest trade data available from Global Trade Tracker (GTT)/Eurostat, driven mainly by an increase in imports from the US.

Methanol imports into EU countries totalled 563,000t in February, up from 438,000t in the same month last year, with a rise in imports from the US to 175,000t from 93,000t and 49,000t in February 2022 and 2023, respectively.

Total methanol imports into the EU were also up from the previous month, with January inflows totalling 497,000t.

A market source in Europe said they had seen more imports in the first week of February than during January as a whole. But other feedback on inflows in the first quarter of the year has been mixed, and some sources said turnarounds at methanol units in the US could impact trade flows during the first few months of this year.

But total methanol imports into the EU in February were down from 676,000t in the same month in 2022.

Europe is a net short market – it relies on methanol imports to meet domestic demand, which has come under pressure in recent years from increasing energy and operating costs combined with inflationary pressures on consumer spending.

Imports from Russia fell from 131,000t in February 2022 to 36,000t in 2023, with no imports this year, according to the GTT/Eurostat import data, following sanctions imposed by the EU.

[Changes in methanol supply routes](#) in the past few years across Europe have come with the reduction in inflows from Russia, as Europe has increasingly eyed imports from emerging structural supply routes, such as from the US.

Europe has “constantly” been trying to build inventories despite also adjusting to accommodate lower demand, a source said last week, noting a volatile market.

In addition to product from the US, imports have also

arrived from Oman, with total annual imports of 85,000t, 33,000t and 40,000t arriving in the EU in 2022, 2023 and 2024, respectively, according to GTT/Eurostat data. Imports were also seen from Azerbaijan, at 261,000t in 2022, 259,000t in 2023 and 27,000t recorded in the first two months of 2024.

By Victoria Baghdjian

Japan's Idemitsu builds stake in refiner Fuji Oil

Idemitsu has agreed to buy an additional stake in fellow Japanese refiner Fuji Oil from domestic power producer Jera, adding to their existing partnership.

Idemitsu on 16 April said it will buy Jera's entire 8.75pc share of Fuji, raising its stake to 21.79pc, for ¥2.5bn (\$16.2mn). It is unclear when the companies will complete the deal. Jera declined to disclose the reasons for selling its stake.

Idemitsu in March also bought domestic petrochemical producer Sumitomo Chemical's stake in Fuji to [boost its share to 13.04pc](#) from 6.58pc, becoming its main shareholder.

It aims to further optimise fuel oil production and sales including refinery operations, while promoting decarbonisation of its businesses. Idemitsu is enhancing its partnership with Fuji in the face of shrinking domestic oil and petrochemical demand and growing consumption in overseas, especially in southeast Asia.

Idemitsu owns the 190,000 b/d Chiba refinery in the Keiyo industrial complex in east Japan's Chiba prefecture where Fuji operates the 143,000 b/d Sodegaura refinery. Their refineries are connected to Sumitomo Chemical's Chiba plant.

Idemitsu's refineries also include the 150,000 b/d Hokkaido in the northernmost prefecture of Hokkaido, the 160,000 b/d Aichi in Aichi prefecture in central Japan and the 255,000 b/d Yokkaichi in Mie prefecture in the country's west. Idemitsu's subsidiary Toa Oil operates the 70,000 b/d Kawasaki refinery in east Japan's Kanagawa prefecture.

By Nanami Oki

Cepsa, Evos sign green methanol storage deal

Spanish energy company Cepsa has signed an agreement for storage operator Evos to provide space at its terminals in Algeciras and Rotterdam for the green methanol Cepsa plans to produce at its oil refineries and chemicals plants in southern Spain.

The deal also covers Cepsa's use of Evos' Algeciras hub for the storage of its green ammonia production – expected to

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start with the planned opening of a 750,000 t/yr plant in 2027 by Cepsa as part of its 2GW [Andalusian Green Hydrogen Valley Initiative](#).

Cepsa has so far only announced plans for one green methanol plant – a [300,000 t/yr e-methanol production facility](#) with Danish shipping firm AP Moller-Maersk's affiliate C2X to be located 60 miles from Algeciras at its second refining and chemicals complex in Huelva.

This plant will combine hydrogen produced from the planned 1GW of electrolysis capacity it plans at its 220,000 b/d oil refinery in Huelva or from the steam reforming of biomethane with biogenic CO₂ to produce the methanol, but Cepsa and C2X have not ruled out further green methanol production facilities in Spain.

Cepsa chief executive Maarten Wetselaar said the agreement with Evos will "create an end-to-end solution" to bringing "green molecules to our customers in northwest Europe."

Cepsa and Evos plan to further develop their agreement by jointly studying logistics for biofuels, including sustainable aviation fuel (SAF), as well as renewable fuels from non-biological origin and future forms of carrying hydrogen in its liquid form such as Liquid Organic Hydrogen Carriers (LOHCs) at other Evos terminals in northwest Europe, such as Amsterdam.

Evos operates a 403,000m³ terminal at the port of Algeciras, close to Cepsa's 246,000 b/d refinery, which currently offers storage for gasoil/diesel, fuel oil and methanol in 22 tanks with capacities ranging from 2,000m³ to 40,000m³.

Its 256,500m³ Rotterdam terminal stores methanol and ethanol in 19 tanks of 10,000-21,000m³.

The agreement with Evos is the second deal between Cepsa – Spain's dominant marine fuels supplier and second largest oil refiner – and a storage operator resulting from its 2022 agreement with the Port of Rotterdam to [create a corridor](#) between the company's ambitious green hydrogen electrolysis projects in southern Spain and the Dutch port.

The company signed a deal in February 2023 with Ace Terminal – a hydrogen import hub being developed in Rotterdam by Dutch gas infrastructure operator Gasunie and storage operators Vopak and Hess – for the storage and conversion into hydrogen of its planned Spanish green ammonia production.

Cepsa is controlled by Abu Dhabi sovereign wealth fund Mubadala, with US private equity firm Carlyle Group holding a 37pc stake.

Evos is controlled by funds linked to private equity firm

Igneo Infrastructure Partners and operates eight liquids terminals across Europe with total storage capacity of 6.4bn m³.

By *Jonathan Gleave*

Idemitsu books rare US Gulf-Vancouver HVO cargo

Japanese oil company Idemitsu provisionally hired a medium range (MR) tanker to carry hydrotreated vegetable oil (HVO) from the US Gulf coast to Vancouver on 16 April, a sign of the growing HVO trade from the region into west coast North America.

Idemitsu put the *Stolt Sisto* MR on subjects for a US Gulf coast-Vancouver voyage from 20-25 April at \$2.35mn lumpsum. The fixture may be part of an agreement under which Vertex Energy supplies Idemitsu's California-based subsidiary, Idemitsu Apollo, with [all of its renewable diesel production from its plant](#) in Mobile, Alabama. The plant's exports are targeting "growing regional markets in the western United States and Canada", according to Vertex.

High freight costs for US domestic shipments because of the Jones Act may be encouraging Idemitsu to focus on the Canadian market. In comparison, freight for a US-flagged MR on a New Orleans-Los Angeles voyage was equivalent to \$4.34mn, nearly double the cost of a voyage to more distant Vancouver.

"I think [demand from Vancouver] will keep expanding with the subsidies/grants," a shipbroker said. "There is not much production in Vancouver, just Parkland [refinery]."

Canadian oil company Suncor typically books one MR vessel a month to carry HVO from the US Gulf coast to Vancouver, with two charters in October 2023 standing out as a particularly active month for the trade, according to ship fixtures compiled by Argus. But Idemitsu has been "jumping in on the action" in recent months, according to the shipbroker, provisionally hiring at least one MR tanker on the spot market in January and February before yesterday's deal.

Vancouver buyers are also getting HVO from Asia-Pacific suppliers, and countries like [South Korea could become increasingly competitive in the renewable trade](#) overall as they ramp up their sustainable aviation fuel (SAF) and HVO production in the coming years.

Vancouver imported around 29,500 b/d of HVO in January 2024, including 16,612 b/d from the US, 7,548 b/d from South Korea, and 5,351 b/d from Taiwan, according to Kpler data.

By *Ross Griffith*

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US House aid bills leave out repeal of LNG pause

Republican leaders in the US House of Representatives appear to have abandoned a push to rescind President Joe Biden's "pause" on US LNG export licensing as part of the text of \$95bn in supplemental aid for Ukraine, Israel and the Indo-Pacific.

House speaker Mike Johnson (R-Louisiana) on 31 March said he intended to pair the chamber's aid package with language to "unleash" natural gas exports, an apparent reference to repealing the US Department of Energy's (DOE) pause on issuing new LNG export licenses. That could have delivered a win to Republicans skeptical of providing more aid for Ukraine and eased uncertainty for major projects such as Venture Global's proposed 20mn t/yr CP2 LNG project in Louisiana.

But the supplemental aid bills – which Republicans released today ahead of an anticipated floor vote on Saturday – do not include legislative text related to natural gas exports or LNG. The bills instead are similar to a consolidated aid package the US Senate approved 70-29 in February, except for a section that seeks repayment of some of the Ukraine aid. Johnson's office did not immediately respond to a request for comment.

Biden said today he "strongly supports" the three aid bills, and he urged the US Congress to vote to pass them this week so he could sign them immediately.

Johnson is expected to need Democratic votes to pass the bills in the House, where he can only afford to lose two votes. US representatives Chip Roy (R-Texas) and Bob Good (R-Virginia) are among the far-right members that have already said they will vote against a procedural vote on the aid bills. House Democrats have mostly oppose lifting the LNG licensing pause – 200 in the caucus voted against lifting the pause and nine voted in favor during a [vote](#) in February – so including it in the aid bills could have jeopardized their passage.

The apparent collapse of momentum on LNG legislation means the gas industry will need to shift its focus to other efforts to restart licensing. Louisiana and 15 other states last month filed a lawsuit that [seeks](#) to throw out DOE's licensing pause, based on arguments that it was arbitrary and lacked adequate support.

US energy secretary Jennifer Granholm, in congressional testimony on Tuesday, said the administration's intent was not to "deny all future" LNG export licenses but instead to take "several months to do a study to determine" the effects of authorizing additional US LNG capacity, beyond the 48 Bcf/d of

export capacity that is already fully licensed.

DOE's pending study should be complete "around the end of the year," Granholm testified, and will analyze how approving additional US LNG exports could affect issues such as climate change, US natural gas prices and energy security.

Natural gas groups have dismissed concerns that more US LNG exports would cause domestic prices to spike or could harm the climate. The group LNG Allies released a study on Tuesday that said US LNG exported to Europe and Asia in 2022 had less than half of the greenhouse gas intensity of coal on a lifecycle basis, when it is used in power generation, and a lower carbon intensity than most of the pipeline gas that currently supplies Europe and Asia.

That finding contrasts with a recent study from a professor at Cornell University that estimated US LNG had a carbon footprint that was 44-180pc more than coal, primarily driven by methane released by LNG tankers. The LNG Allies recent study pulled from the "best available data" on tanker methane emissions by tracking every US LNG cargo exported in 2022, Berkeley Research Group managing director Chris Goncalves and study author said. The Cornell study is still undergoing peer review.

Industry officials have faulted the LNG pause by citing risks to European energy security. A group of 35 current and former parliamentarians in European, in a letter to Biden on Tuesday, said the pause could have "significant negative impacts" on their energy security and urged him to reconsider. The European Commission, in contrast, earlier this year said that it does not expect any "short-to-medium term impacts" on energy security because the pause is only temporary.

By Chris Knight

South Korea's LNG imports fall further in March

South Korea's March LNG imports continued to fall from a year and month earlier, reflecting the onset of the shoulder season when weather-related gas demand tends to weaken. Demand for gas-fired power generation was also limited by firm solar power generation output.

South Korea imported 3.61mn t in March, down by 7.7pc on the year and by 14pc on the month, customs data show ([see table](#)).

Supplies from Indonesia were the lowest priced, averaging \$7.35/mn Btu in March. Deliveries from Papua New Guinea were the second least expensive, averaging \$9.03/mn Btu.

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Imports from Qatar and Oman were the most expensive, averaging \$15.26/mn Btu and \$14.92/mn Btu respectively in March. Imports from these two fell by 30pc and 39pc on the year to around 621,000t and 299,000t respectively.

The average price of South Korea's March LNG imports was \$11.67/mn Btu, about 5.6pc lower on the month and 34pc lower on the year. But the lower cost failed to lead to more spot demand.

The ANEA price, the Argus assessment for spot prices to northeast Asia, averaged \$10.113/mn Btu and \$9.371/mn Btu for the first and second half of February respectively, compared with \$21.864/mn Btu and \$18.027/mn Btu for the same period a year earlier.

State-owned gas importer Kogas' sales to the power sector also [continued to slide in March](#), dropping by 39,000t on the year to 1.4mn t in March. This marked its seventh consecutive month of weaker power sector sales. This was in line with an announcement by South Korea's energy ministry in mid-March that the country's power market imbalance was widening because of record-low power demand and surging solar output, which was to be balanced through controlling output across thermal plants.

By Naomi Ong

Canada adds biofuels funding

Canada will direct up to C\$500mn in funding from its new low-carbon fuel standard to support new domestic biofuel production under a new federal budget.

The budget would also direct the Canada Infrastructure Bank to invest "at least C\$500mn" (\$363mn) in biofuel production capacity through a funding mechanism that also includes zero-emissions vehicle infrastructure and building energy efficiency upgrades.

The funding would be essential to helping Canada compete with US biofuels incentives including the Inflation Reduction Act, industry group Advanced Biofuels Canada said.

"Increasing production of low carbon sustainable fuels means we can meet our climate action targets with 'made-in-Canada' clean fuels," said Doug Hooper, director of policy and regulation.

Low-carbon fuel standards require yearly reductions to transportation fuel carbon intensity. Higher-carbon fuels that exceed the annual limits incur deficits that suppliers must offset with credits generated from the distribution of approved,

lower-carbon alternatives.

Canada began enforcement on its Clean Fuel Regulations in July 2023, with a 2030 target to reduce transportation fuel carbon intensity by 15pc. Unlike US LCFS programs, the CFR includes a mechanism to generate credits by funding approved projects that can quickly deliver emissions reductions. Obligated parties may generate credits at a rate of C\$364 per metric tonne (\$264/t) this year by funding federally designated projects. Credits generated through the Registered Emission-Reduction Funding Program may not satisfy more than 10pc of a party's annual obligation.

By Elliott Blackburn

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Argus Green Marine Fuels Conference

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Amsterdam, The Netherlands

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www.argusmedia.com/green-marine-fuels-conference

ANNOUNCEMENT

Publishing dates

There will be no marine fuel price data and commentary for the following regions on these dates:

- 29 April for Japan
- 29 April - 1 May for Russia
- 1 May for Japan, Singapore, South Korea and Sydney
- 1-3 May for China
- 3 May for Japan
- 6 May for Japan, Europe and Africa
- 9-10 May for Russia
- 22 May for Japan, Singapore, South Korea and Sydney
- 27 May for Europe, North America and Latin America

ANNOUNCEMENTS

Argus successfully completes annual losco assurance review

Argus has completed the 12th 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>



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