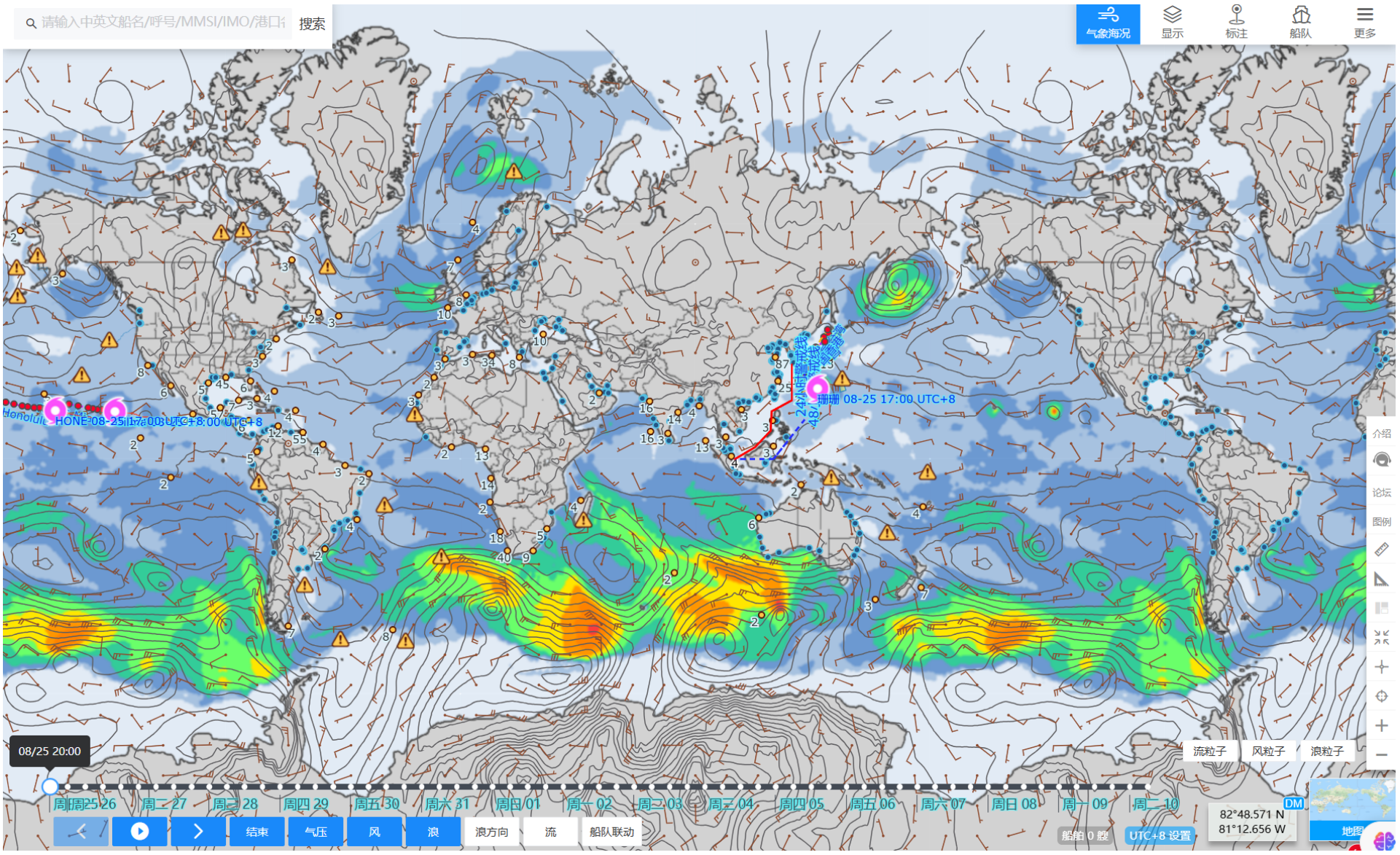
hiFleet 船队在线

2024年
第34周市场周报

Contents

上海迈利船舶科技有限公司

第一部分 航运安全 SHIPPING SAFETY



航行警告 Navigation Warning

HiFleet显示全球目前有效的航行警告有821个，东南亚和环加勒比海居多，请相关水域船舶注意航行警告内容。 There are currently 821 navigational warnings in effect around the ocean on hiFleet with the South East and around the coastal of Caribbean Sea still being the majority. Please pay attention to the navigational warnings in relevant waters.

航海气象 Meteorology

未来一周中国渤海海域风力维持3-4级，相关海域1米轻浪；黄海风力维持4-5级，相关海域中浪；东海风力未来将经历6-7级，相关海域大浪；台湾海峡风力将经历4-5级，台湾海峡中浪；南海大部海域风力4-5级，中浪。西北太平洋的热带风暴和台风开始频繁发生。The coming week the wind in Bohai Sea stays gentle breeze with slight seas. Yellow Sea stays moderate with moderate wave. And China East Sea shall experience near gale with rough wave. The wind in the Taiwan Strait will become moderate and sea there experience moderate. In most of the South China Sea the wind is moderate with moderate sea. There are low-pressures developing frequently in the North of the Pacific Ocean.

海盗事件 Piracy

最近一周没有海盗事件报道。There is no piracy report for the latest week.

海上事件 Marine Incidents

布宜诺斯艾利斯，8月20日路透社报道，阿根廷当局因一艘货船上怀疑出现猴痘病例，将其在巴拉那河的罗斯阿里奥内陆粮港隔离。BUENOS AIRES, Aug 20 (Reuters) – Argentine authorities have quarantined a cargo ship in the Parana River near the inland grains port of Rosario over a suspected case of mpox onboard.

其它 Others

没有 Nil

备注 Remark

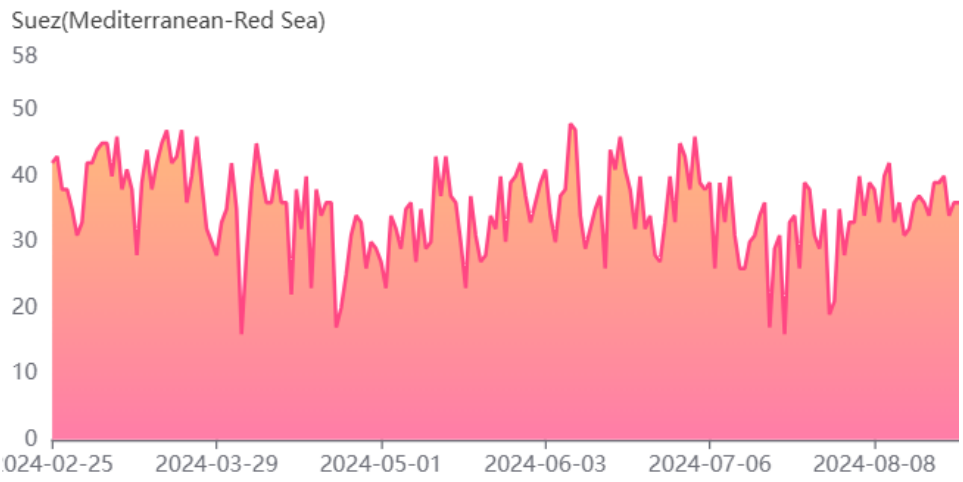
本报告数据截止时间为2024年8月25日北京时间17点；所有数据和或观点仅供参考，在任何情况下本公司及其员工不承担任何风险。 The data deadline for this report is Beijing time 17 hours on Aug 25th of 2024; All data and/or opinions are for reference only and under no circumstances do the Company and its employees assume any risk.

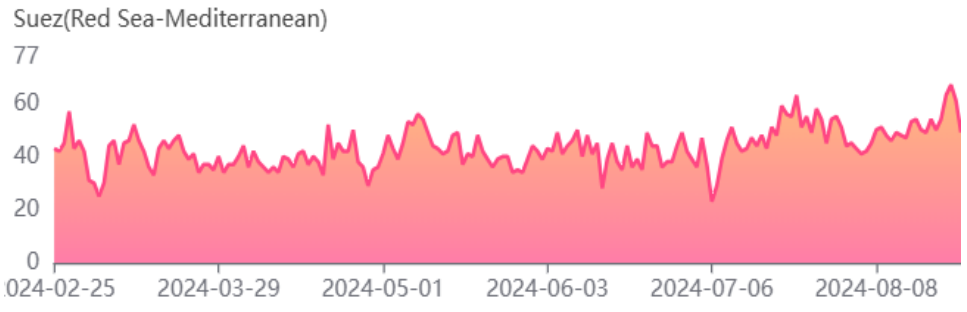
第二部分 航运数据 SHIPPING DATA

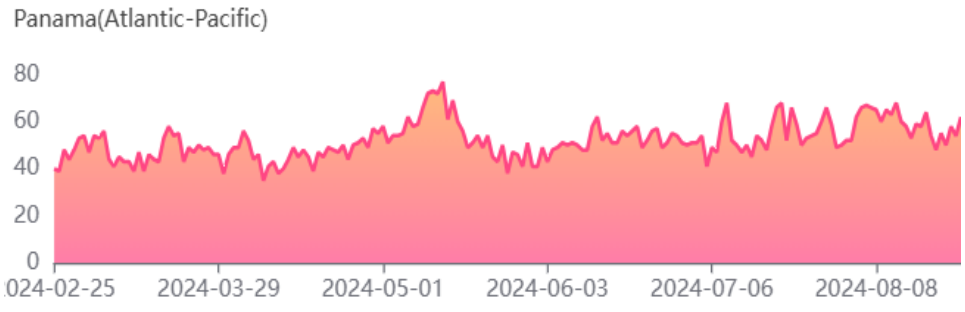
最近一周船舶运河/河口锚地等待数量

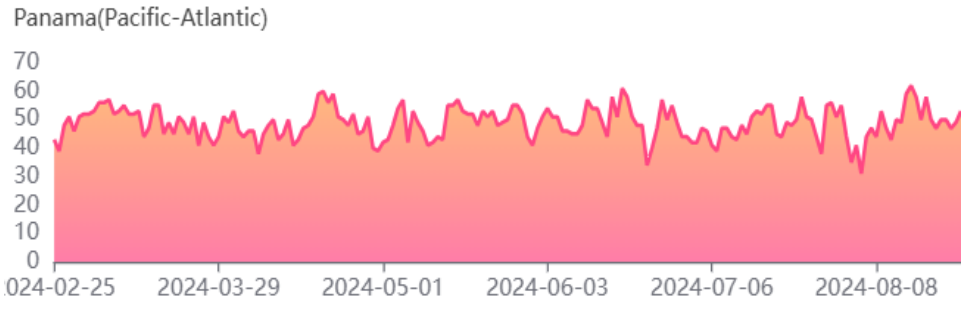
Latest Week Update Vessel Waiting Numbers Information in Anchorages of Canals and Rivers

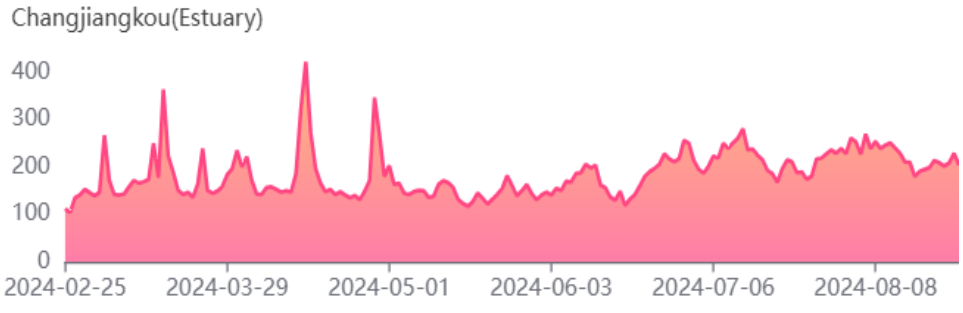
Canal/Riv.	P.N.	M.N.	WoW	MoM
Suez.Red	49	1462	51	113
Miss.Riv.	3	101	-3	32
CJK	204	6541	-46	261
Pa.Atlan.	62	1703	-38	142
Colum.Riv.	2	112	-4	-61
Suez.Med.	36	998	11	35
Pa.Pac.	53	1416	-25	54
ZJK	60	2904	-24	-446

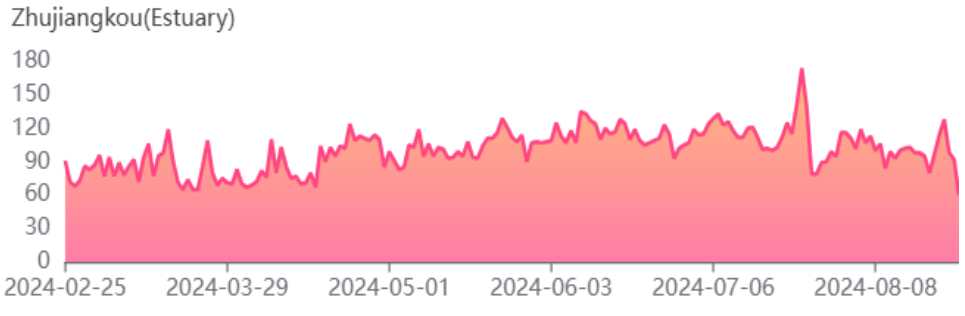


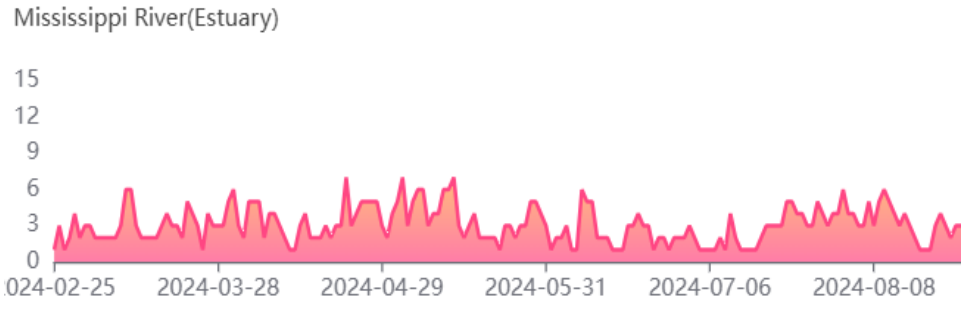


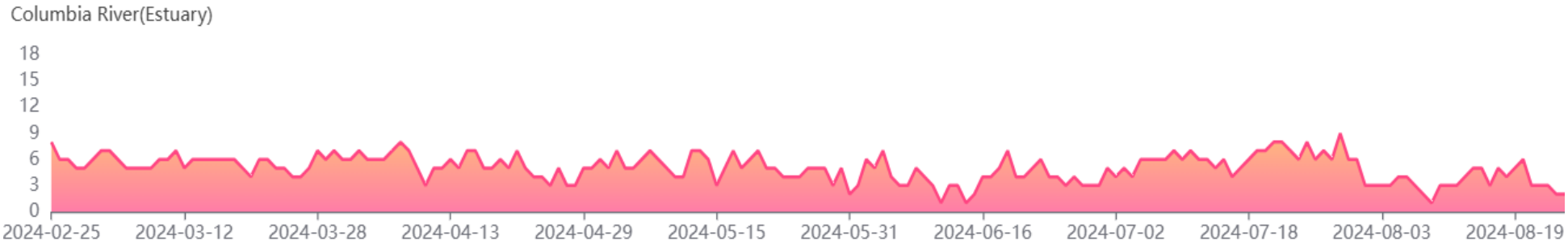










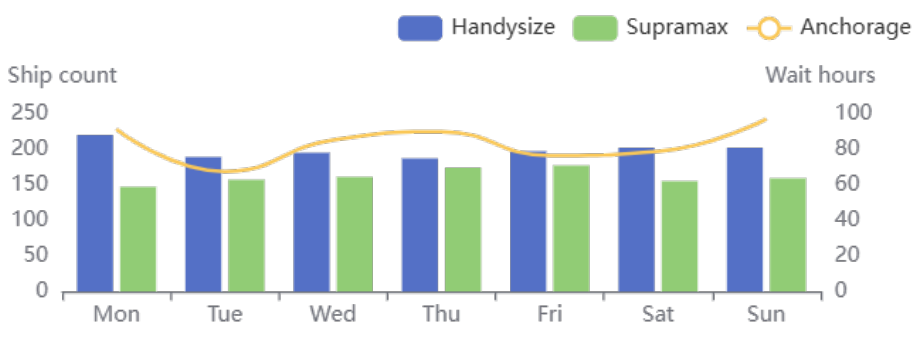


(P.N-Present Number; M.N.-Month Number; WoW-Week on Week; MoM-Month on Month)

最近一周中国区域超大灵便型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra and Handy Num. and Waiting Time Information in Anchorages of China

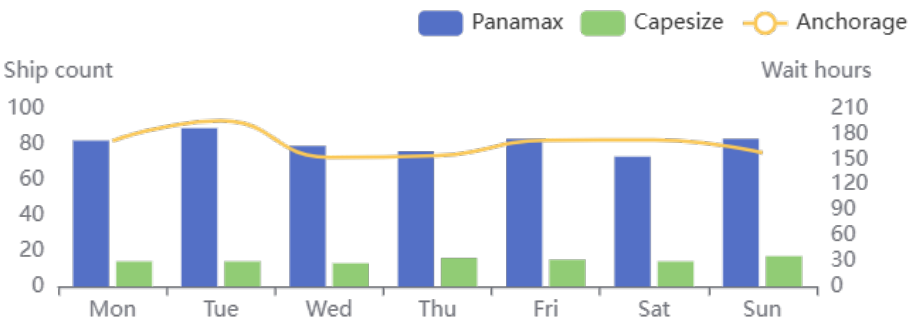
Type	M	T	W	Th	F	Sat	Sun
HDY	220	189	195	187	197	202	202
SMX	147	157	161	174	177	155	159
WT.h.	91.2	67.5	85.2	89.8	76.4	78.8	97



最近一周巴西区域好望角型和巴拿马型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Capesize and Panamax Num. and Waiting Time Information in Anchorages of Brazil

Type	M	T	W	Th	F	Sat	Sun
Pan.	82	89	79	76	83	73	83
Cap	14	14	13	16	15	14	17
WT.h.	172	195.7	152.4	154.4	172.6	173	158



最近一周澳大利亚区域好望角型和巴拿马型散货船舶锚泊数量和平均锚泊时长

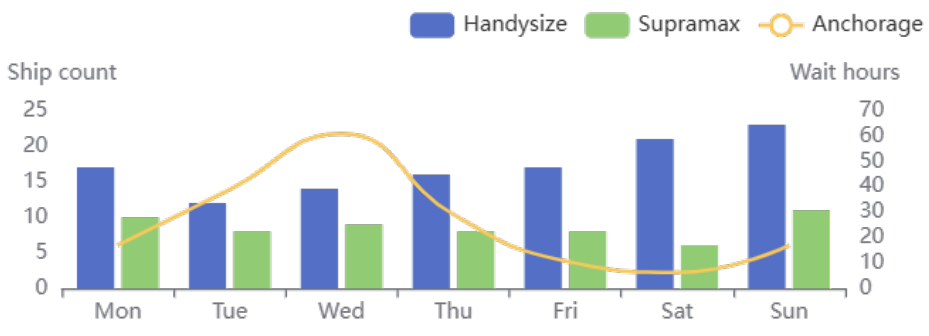
Latest Week Update for Capesize and Panamax Num. and Waiting Time Information in Anchorages of Australia

Type	M	T	W	Th	F	Sat	Sun
Pan.	57	51	41	49	52	51	50
Cap	49	53	48	48	49	47	49
WT.h.	88.3	113.35	136.3	113.7	122.8	119.25	191

最近一周黑海区域超大灵便型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra & Handy Num. and Waiting Time Information in Anchorages of Black Sea

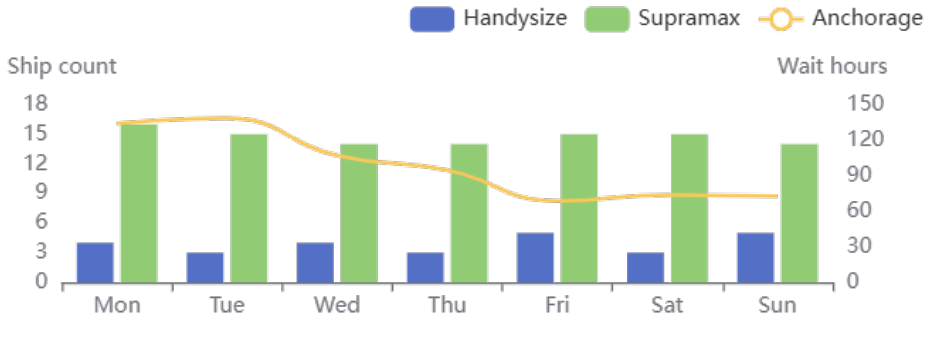
Type	M	T	W	Th	F	Sat	Sun
HDY	17	12	14	16	17	21	23
SMX	10	8	9	8	8	6	11
WT.h.	17	38.95	60.9	29.1	10.8	6.3	17



最近一周美湾区域超大灵便型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra and Handy Num. and Waiting Time Information in Anchorages of US Gulf

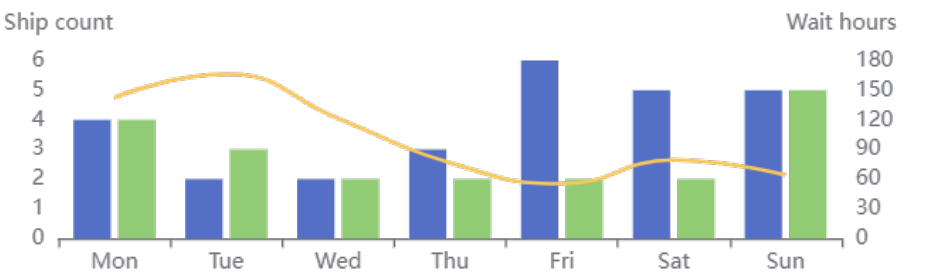
Type	M	T	W	Th	F	Sat	Sun
HDY	4	3	4	3	5	3	5
SMX	16	15	14	14	15	15	14
WT.h.	134	138.6	107.0	94.8	68.8	73.9	73



最近一周拉普拉特河区域超大型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra and Handy Num. and Waiting Time Information in Anchorages of Plate River

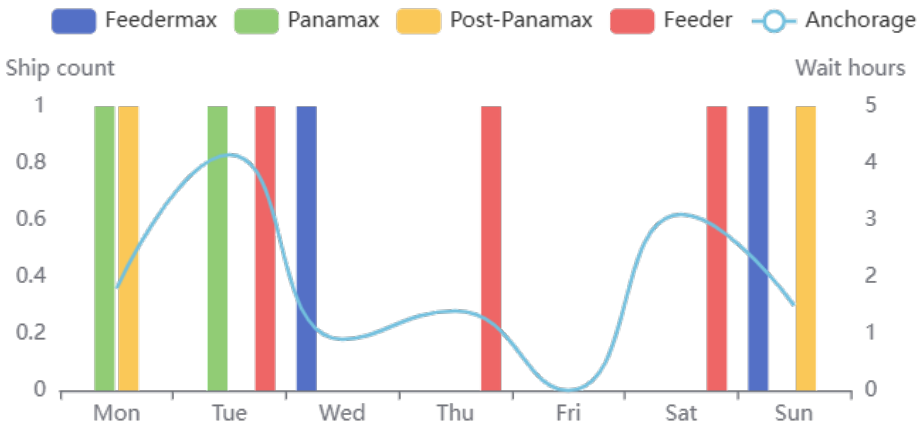
Type	M	T	W	Th	F	Sat	Sun
HDY	4	2	2	3	6	5	5
SMX	4	3	2	2	2	2	5
WT.h.	142.5	166.5	121.55	76.6	55.4	79.4	64



最近一周香港区域集装箱船锚泊数量和平均等待时长

Latest Week Update for Container Vessels Num. and Waiting Time Information on Anchorages of HongKong

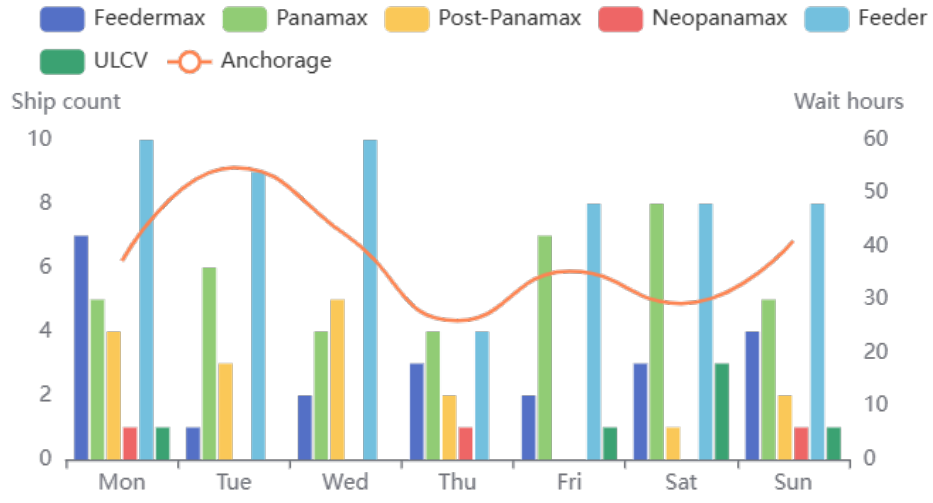
Type	M	T	W	Th	F	Sat	Sun
F.ma.	0	0	1	0	0	0	1
Pan.	1	1	0	0	0	0	0
PPx	1	0	0	0	0	0	1
NPx	0	0	0	0	0	0	0
Fd	0	1	0	1	0	1	0
WT.h.	1.8	4.15	0.9	1.4	0.0	3.1	1.5
Ulcv	0	0	0	0	0	0	0



最近一周上海区域集装箱船锚泊数量和平均等待时长

Latest Week Update for Container Vessels Num. and Waiting Time Information in Anchorages of Shanghai

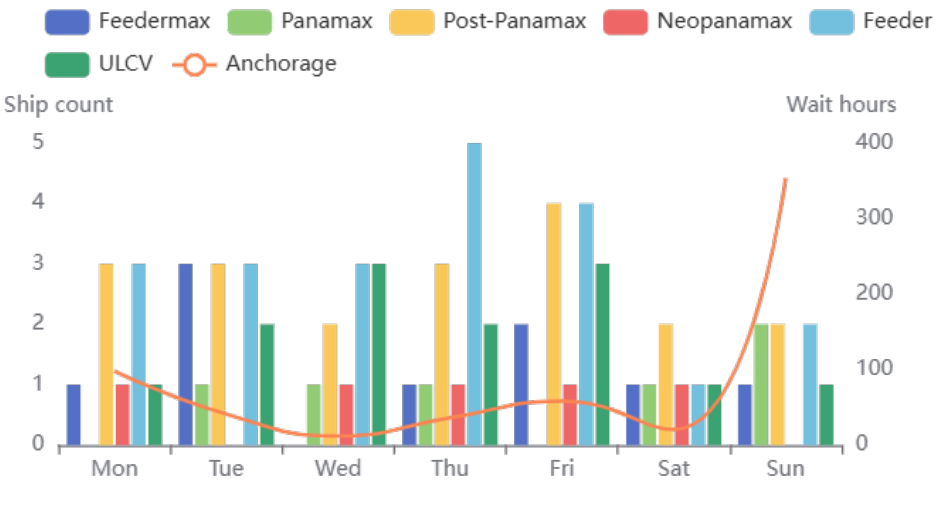
Type	M	T	W	Th	F	Sat	Sun
F.ma.	7	1	2	3	2	3	4
Pan.	5	6	4	4	7	8	5
PPx	4	3	5	2	0	1	2
NPx	1	0	0	1	0	0	1
Fd	10	9	10	4	8	8	8
Ulcv	1	0	0	0	1	3	1
WT.h.	37.3	54.8	42.2	26.05	35.35	29.3	41



最近一周新加坡区域集装箱船锚泊数量和平均锚泊时长

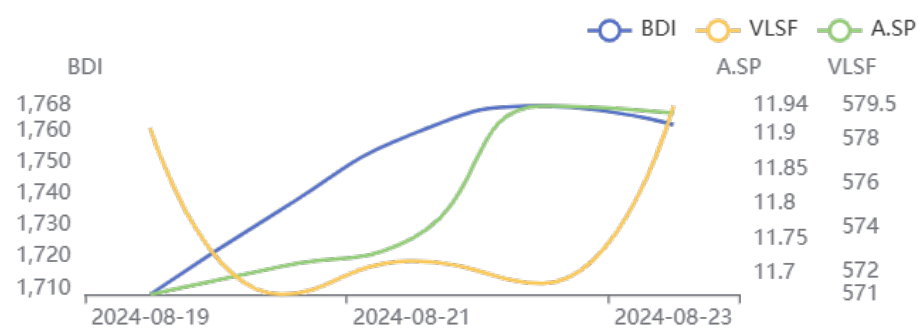
Latest Week Update for Container Vessels Num. and Waiting Time Information in Anchorages of Singapore

Type	M	T	W	Th	F	Sat	Sun
F.ma.	1	3	0	1	2	1	1
Pan.	0	1	1	1	0	1	2
PPx	3	3	2	3	4	2	2
NPx	1	0	1	1	1	1	0
Fd	3	3	3	5	4	1	2
Ulcv	1	2	3	2	3	1	1
WT.h.	98	41.15	12.1	36.1	58.4	20.7	353.5



最近一周空载散货船平均航速Latest Weekly Average Speed for Bulkers during Ballast Voyage

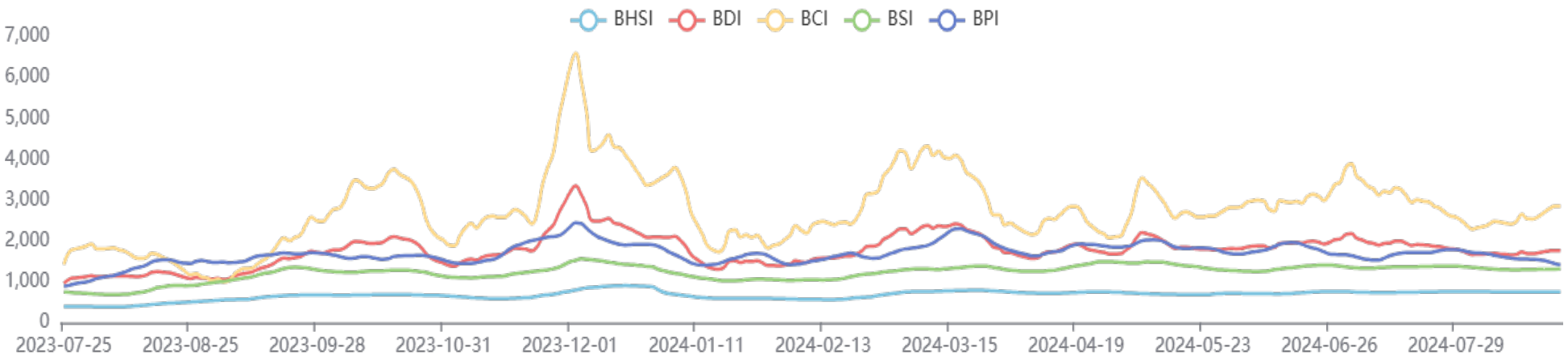
Type	M	T	W	Th	F	Sat	Sun
BDI	1544	1521	1487	1444	1414		
VLSF	578.50	571.00	572.50	571.50	579.50		
A.SP	11.67	11.71	11.75	11.94	11.93	11.89	



第三部分 航运市场 SHIPPING MARKET

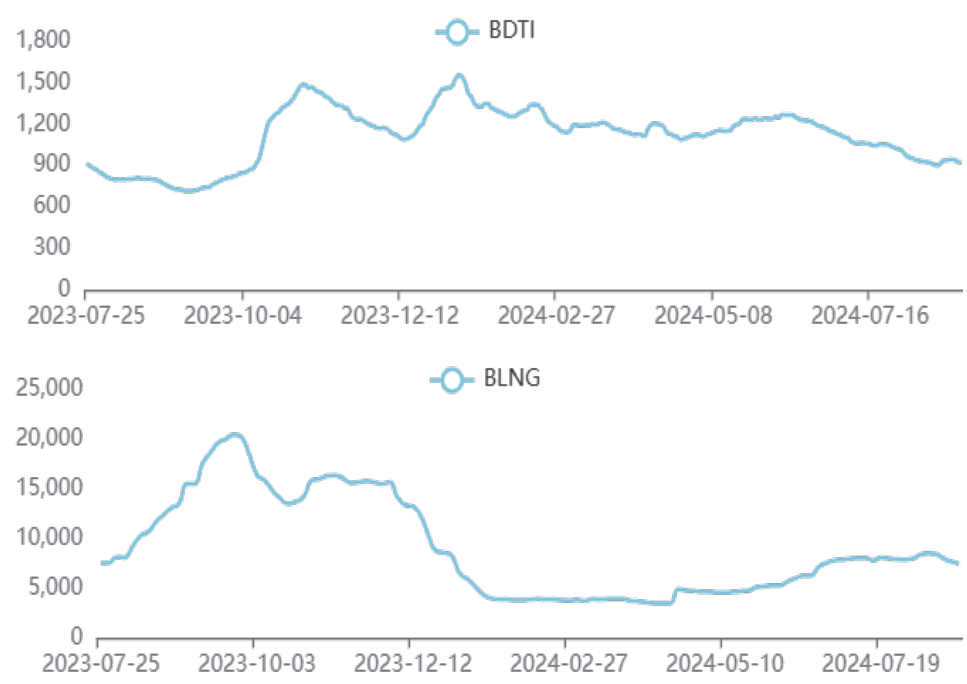
波罗的海干散货指数Baltic Dry Index

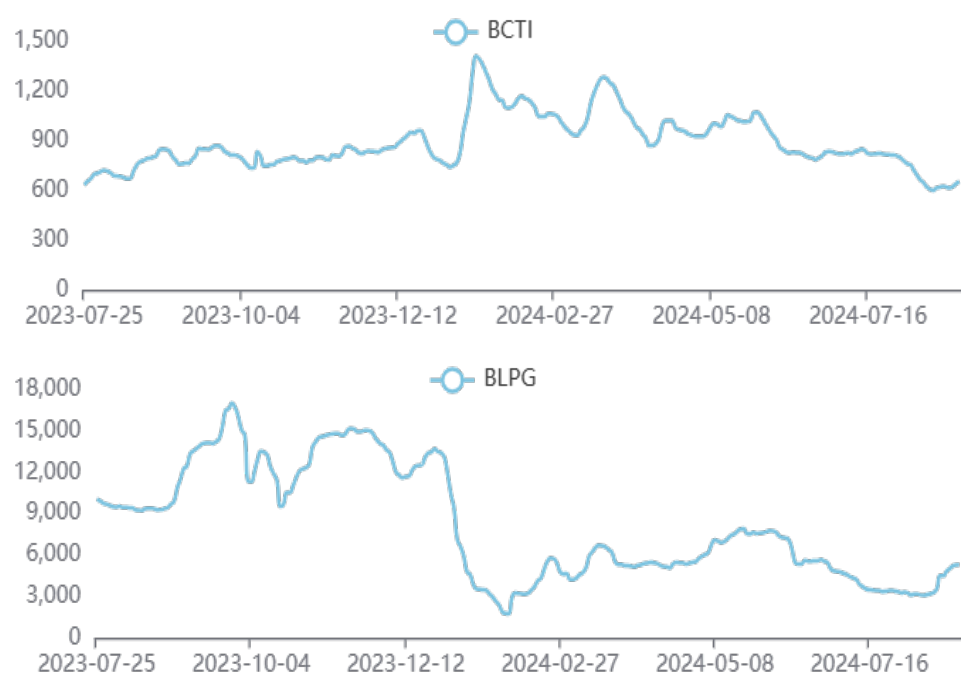
Type	PI	WoW	W%	M%	y%
BDI	1762	71.0	4.2	-2.54	53.08
BCI	2851	314.0	12.38	9.07	109.02
BPI	1414	-138.0	-8.89	-21.09	-4.07
BSI	1318	14.0	1.07	-4.91	44.84
BHSI	753	-1.0	-0.13	-0.79	53.36



能源运价指数Energy Shipping Index

Type	PI	WoW	W%	M%	y%
BDTI	920	-16.0	-1.71	-10.07	14.71
BCTI	652	27.0	4.32	-19.9	-17.88
BLNG	7420	-566.0	-7.09	-5.92	-43.2
BLPG	5282	793.0	17.67	56.32	-43.06





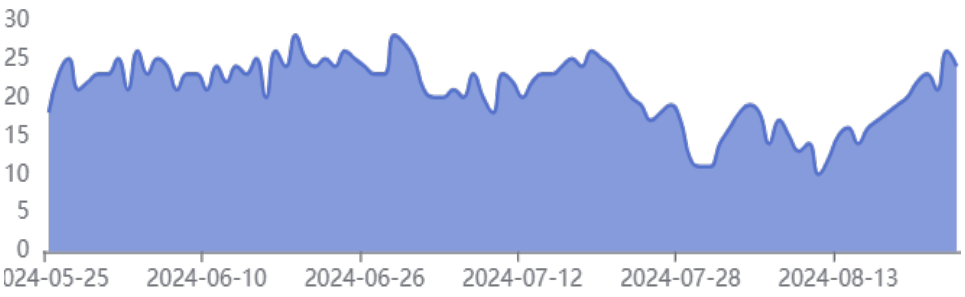
第四部分 运力分布 SUPPLY DISTRIBUTION

好望角型散货船 Capesize

区域：巴西，最近一周好望角型散货船准备装货船舶数量

Area: Brazil, The latest week update number for Capesize with cargo loading intention.

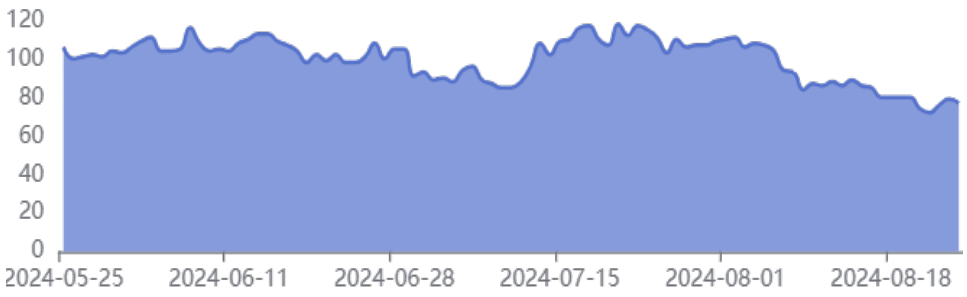
Type	M	T	W	Th	F	Sat	Sun
Cape	19	20	22	23	21	26	24



区域：澳大利亚。最近一周好望角型散货船准备装货船舶数量。

Area: Australia. The latest week update number for Capesize with cargo loading intention.

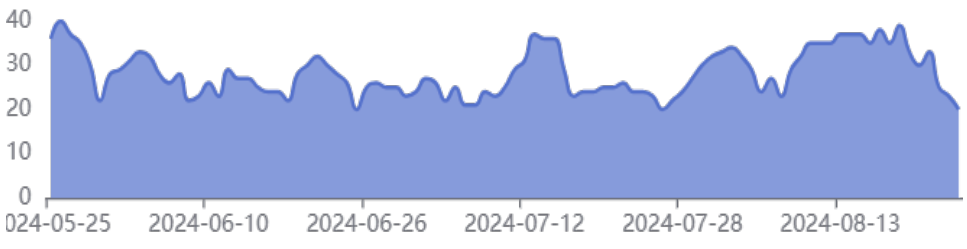
Type	M	T	W	Th	F	Sat	Sun
Cape	80	80	74	72	76	79	77



区域：南非，最近一周好望角型散货船准备装货船舶数量

Area: South Africa, The latest week update number for Capesize with cargo loading intention.

Type	M	T	W	Th	F	Sat	Sun
Cape	39	33	30	33	25	23	20

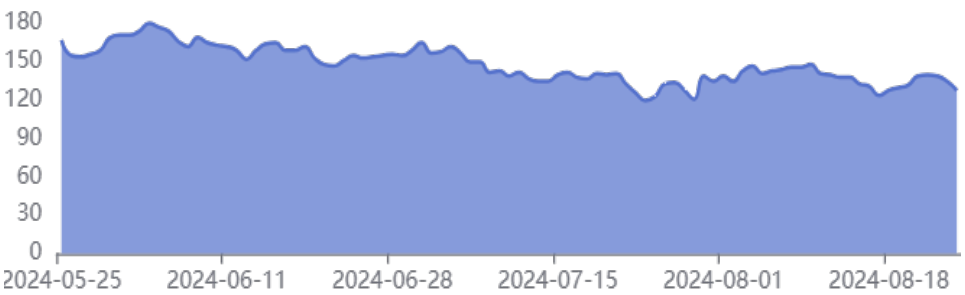


巴拿马型散货船 PANAMAX

区域：南美北部和东部。最近一周巴拿马型散货船准备装货船舶数量。

Area: South America. The latest week update number for Panamax with cargo loading intention.

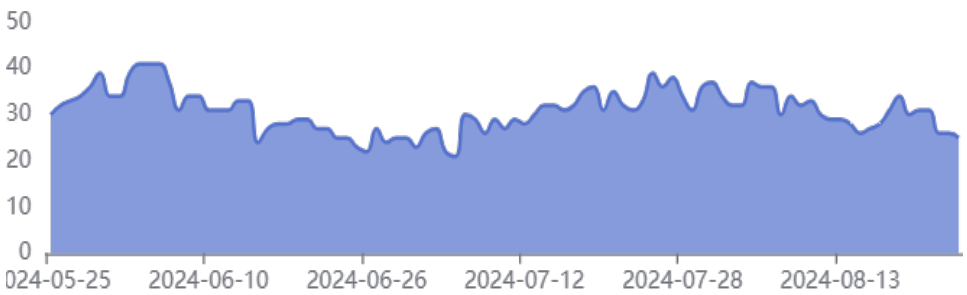
Type	M	T	W	Th	F	Sat	Sun
Pan.	129	131	138	139	138	134	127



区域：黑海。最近一周巴拿马型散货船准备装货船舶数量。

Area: Black Sea. The latest week update number for Panamax with cargo loading intention.

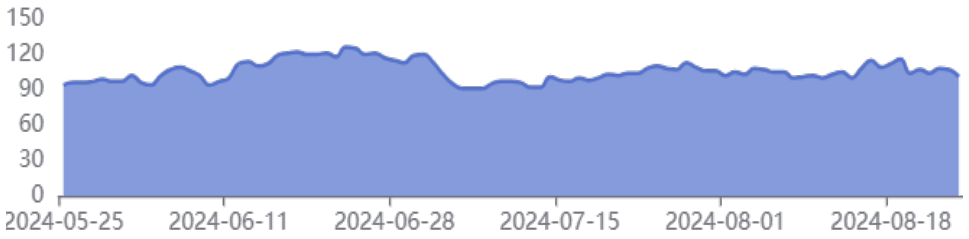
Type	M	T	W	Th	F	Sat	Sun
Pan.	17	19	18	17	18	18	17



区域：澳大利亚。最近一周巴拿马型散货船准备装货船舶数量。

Area: Australia. The latest week update number for Panamax with cargo loading intention.

Type	M	T	W	Th	F	Sat	Sun
Pan.	116	104	107	104	108	107	101

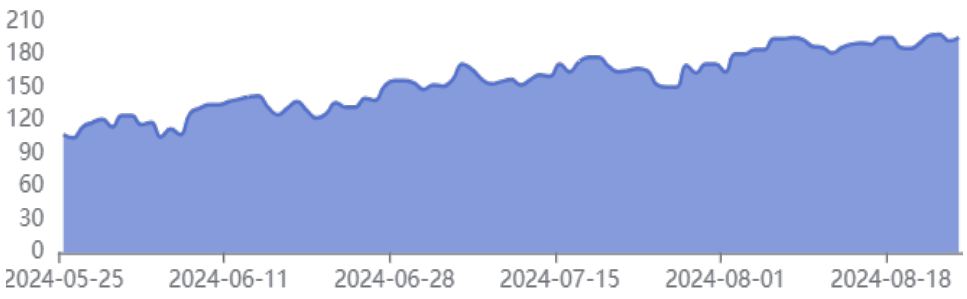


超大灵便型散货 SUPRAMAX

区域：北中国。最近一周超大灵便型散货船准备装货船舶数量。

Area: North China. The latest week update number for Supramax with cargo loading intention.

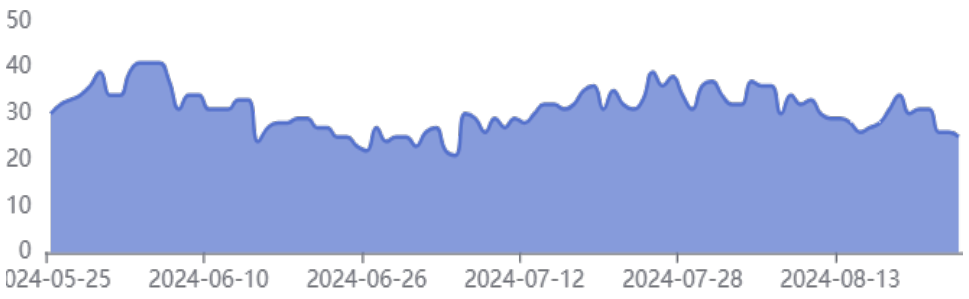
Type	M	T	W	Th	F	Sat	Sun
SMX	186	185	190	197	198	192	195



区域：黑海。最近一周巴拿马型散货船准备装货船舶数量。

Area: Black Sea. The latest week update number for Panamax with cargo loading intention.

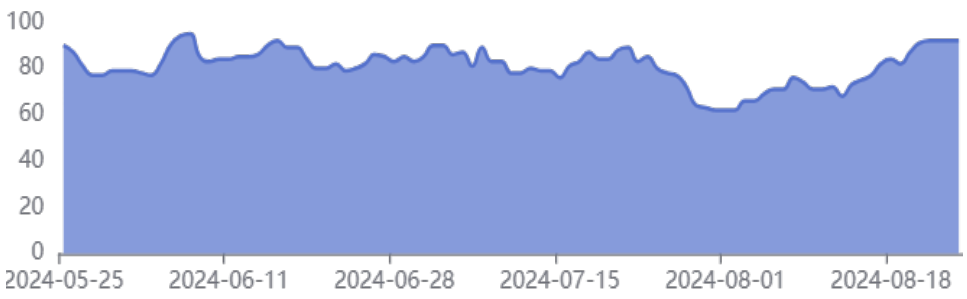
Type	M	T	W	Th	F	Sat	Sun
SMX	34	30	31	31	26	26	25



区域：美湾。最近一周超大灵便型散货船准备装货船舶数量。

Area: US Gulf. The latest week update number for Supramax with cargo loading intention.

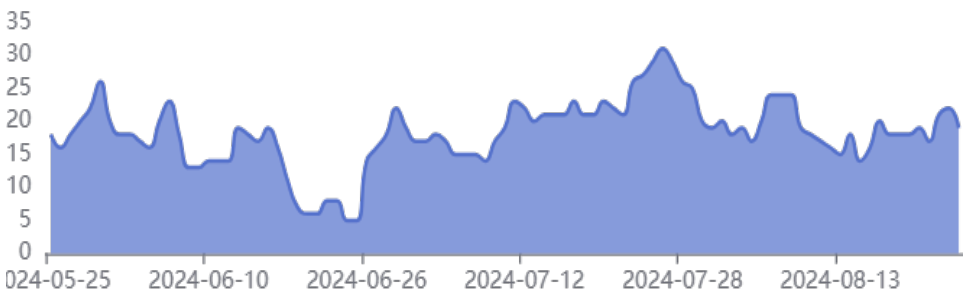
Type	M	T	W	Th	F	Sat	Sun
SMX	18	18	19	17	21	22	19



区域：南美的北部和东部。最近一周超大灵便型散货船准备装货船舶数量。

Area: South America. The latest week update number for Supramax with cargo loading intention.

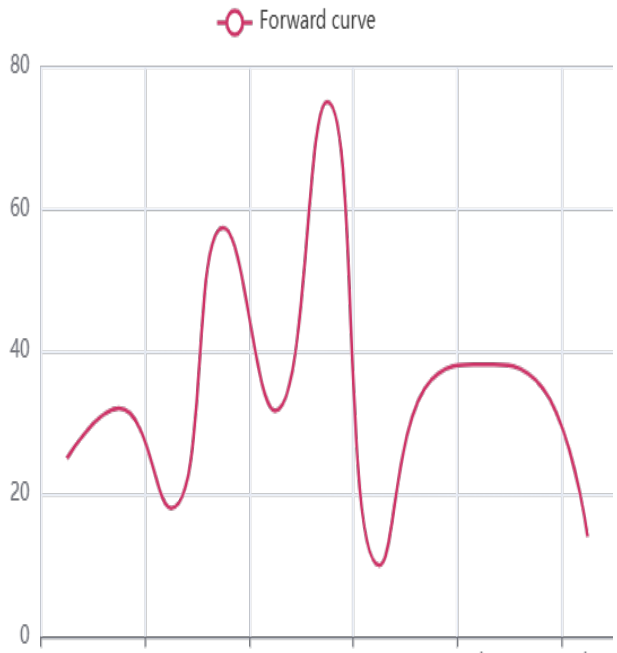
Type	M	T	W	Th	F	Sat	Sun
SMX	82	87	91	92	92	92	92



第五部分 远期运价协议 FFA

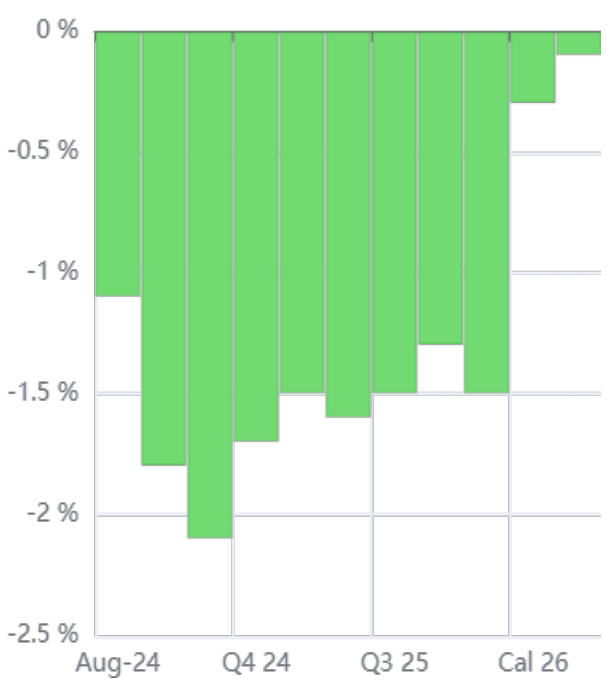
好望角型散货船Capesize

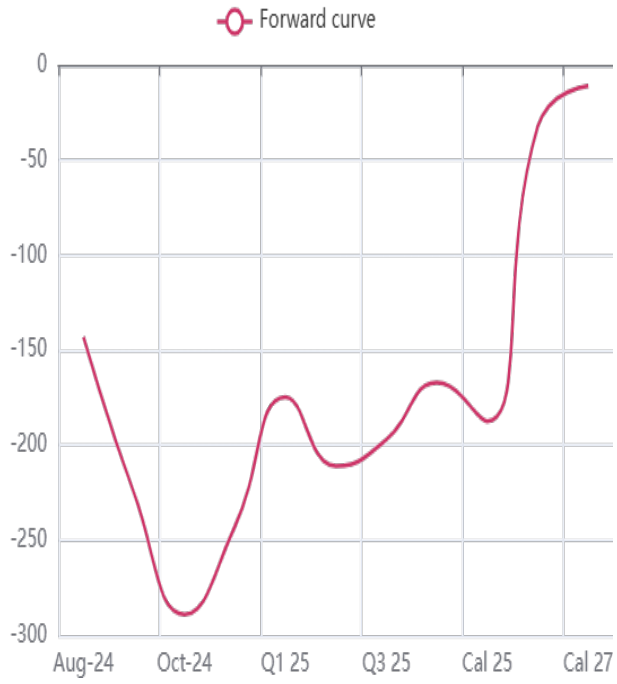
5TC	$/day	WoW	
Aug-24	21,757.00	25.0	0.1 %
Sep-24	26,346.00	32.0	0.1 %
Oct-24	27,879.00	18.0	0.1 %
Q4 24	27,081.33	57.33	0.2 %
Q1 25	15,764.00	31.67	0.2 %
Q2 25	20,421.00	75.0	0.4 %
Q3 25	24,814.00	10.0	0.0 %
Q4 25	24,868.00	36.0	0.1 %
Cal 25	21,466.75	38.17	0.2 %
Cal 26	20,982.00	36.0	0.2 %
Cal 27	20,121.00	14.0	0.1 %



巴拿马型散货船Panamax

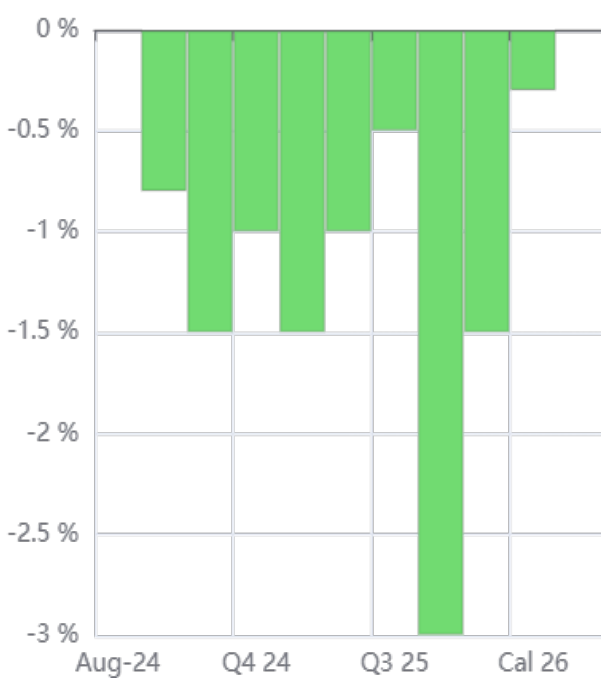
4TC	$/day	WoW	
Aug-24	12,446.00	-143.0	-1.1 %
Sep-24	12,346.00	-225.0	-1.8 %
Oct-24	13,529.00	-289.0	-2.1 %
Q4 24	13,793.00	-242.67	-1.7 %
Q1 25	11,671.33	-174.67	-1.5 %
Q2 25	13,268.00	-211.0	-1.6 %
Q3 25	13,139.00	-197.0	-1.5 %
Q4 25	12,854.00	-167.0	-1.3 %
Cal 25	12,733.08	-187.42	-1.5 %
Cal 26	12,413.75	-32.25	-0.3 %
Cal 27	12,293.00	-11.0	-0.1 %

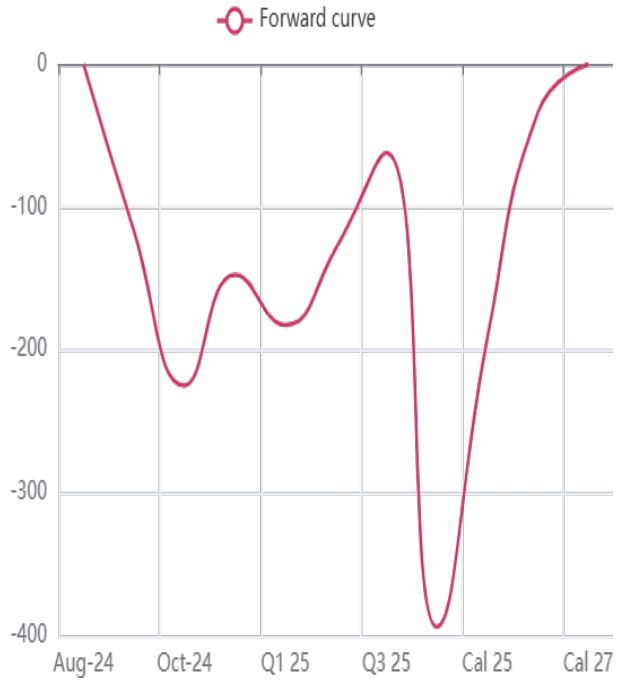




超大灵便型散货船Supramax

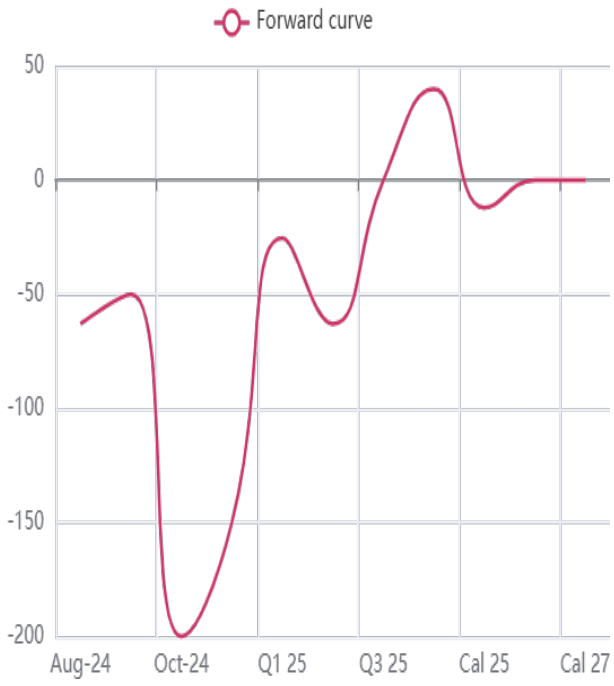
10TC	$/day	WoW	
Aug-24	14,392.00	0.0	0.0 %
Sep-24	14,358.00	-117.0	-0.8 %
Oct-24	14,808.00	-225.0	-1.5 %
Q4 24	14,597.00	-147.33	-1.0 %
Q1 25	11,767.33	-182.67	-1.5 %
Q2 25	13,379.00	-129.0	-1.0 %
Q3 25	13,421.00	-62.0	-0.5 %
Q4 25	12,865.00	-394.0	-3.0 %
12,858.08	Cal 25	-191.92	-1.5 %
Cal 26	12,458.00	-34.0	-0.3 %
Cal 27	12,267.00	0.0	0.0 %





灵便型散货船Handysize

7TC	$/day	WoW	
Aug-24	13,600.00	-63.0	-0.5 %
Sep-24	13,575.00	-50.0	-0.4 %
Oct-24	13,838.00	-200.0	-1.4 %
Q4 24	13,771.33	-150.0	-1.1 %
Q1 25	11,125.00	-25.33	-0.2 %
Q2 25	12,625.00	-63.0	-0.5 %
Q3 25	12,588.00	0.0	0.0
Q4 25	13,114.00	40.0	0.3 %
Cal 25	12,363.00	-12.08	-0.1 %
Cal 26	11,738.00	0.0	0.0 %
Cal 27	11,513.00	0.0	0.0 %



第六部分 燃油价格 BUNKER PRICE

MP	LO	HO	MO	SP	WoW	W%	M%
zhoushan	600.0	489.0	737.0	111.0	13.0	13.27	27.59
Singapore	601.5	472.0	692.0	129.5	15.0	13.1	18.81
Rotterdam	552.5	478.0	681.0	74.5	-18.5	-19.89	2.05
Fujairah	560.0	457.0	709.0	103.0	-0.5	-0.48	-8.85
Houston	600.5	459.5	790.0	141.0	15.5	12.35	27.03

(MP-Bunkering Main Ports; LO-Heavy Low Sulphur Fuel Oil; HO-Heavy Hight Sulphur Fuel Oil; MO-MGO; SP-Spread;)

第七部分 最新商品价格 LATEST COMMODITIES PRICE

Grains and Oilseeds	Index	+/-	Weekly	Monthly	YTD
Wheat	198.0	3.0	1.54	-1.0	-15.19
Maize	199.0	13.0	6.99	1.02	-9.88
Soybeans	196.0	-10.0	-4.85	-9.26	-25.62
Rice	245.0	3.0	1.24	-0.81	-1.16
Barley	205.0	5.0	2.5	-3.3	-10.78
Energy	Index	+/-	Weekly	Monthly	YTD
Crude Oil	USD/Bbl	75.97	3.93	5.46	-3.71	-8.43
Brent	USD/Bbl	79.08	3.68	4.88	-4.69	-8.5
Natural Gas	USD/MMBtu	2.12	0.21	10.99	-2.3	-24.56
Gasoline	USD/Gal	2.3	0.03	1.32	-6.5	-21.5
Heating Oil	USD/Gal	2.31	0.03	1.32	-4.94	-25.96
Ethanol	USD/Gal	1.81	0.01	0.56	-0.55	-16.59
Naphtha	USD/T	657.99	13.3	2.06	-4.62	1.4
Propane	USD/Gal	0.76	0.03	4.11	-3.8	7.04
Uranium	USD/Lbs	81.2	-1.4	-1.69	-3.73	43.08
Methanol	CNY/T	2402.0	-54.0	-2.2	-2.6	1.91
TTF Gas	EUR/MWh	39.8	-0.02	-0.05	26.23	8.65
UK Gas	GBp/thm	96.85	7.01	7.8	32.67	4.63
Industrial	Index	+/-	Weekly	Monthly	YTD
Copper	USD/Lbs	4.16	0.16	4.0	-1.19	12.13
Coal	USD/T	146.75	2.65	1.84	8.62	1.91
Steel	CNY/T	3054.0	14.0	0.46	-5.62	-14.6
Iron Ore	USD/T	97.81	-6.19	-5.95	-9.81	-7.29
Aluminum	USD/T	2404.0	161.5	7.2	2.8	11.22
Lithium	CNY/T	73500.0	-6000.0	-7.55	-14.04	N/A
Metals	Index	+/-	Weekly	Monthly	YTD
Gold	USD/t.oz	2502.4	82.6	3.41	4.14	30.67
Silver	USD/t.oz	29.0	1.5	5.45	-0.34	27.53
Platium	USD/t.oz	949.0	26.9	2.92	-1.17	3.87
Currencies	Index	+/-	Weekly	Monthly	YTD
EUR/USD	1.1	0.01	0.92	0.92	0.0
USD/CNY	7.14	0.03	0.42	-2.06	-1.79

第八部分 本周话题 WEEKLY TOPIC

生物甲烷船舶燃料

2024年新造船替代燃料主机方向正在发生微妙的变化，液化天然气（LNG）作为新建船主要替代燃料的回归，凸显了一种更环保的市场尝试，因为其液化生物甲烷的负碳优势。液化生物甲烷，也称生物LNG，在考虑其全生命周期排放时，有可能被视为一种负碳燃料。正如专家们所解释的那样，即将在明年生效的欧盟燃油法规FuelEU Maritime，会逐步收紧船舶的碳排放强度，但允许船东联合他们的船只以图共同达到排放目标。那么其它船舶可以与负碳燃料船舶形成合规池以享受负碳排放带来的综合平衡降低碳排放强度的优势。

使用30%液化生物甲烷和70%化石LNG混合燃料的船舶，其减少的碳排放可以使得30艘使用通常超低硫燃料油的船舶达到符合欧盟燃油法规的要求，以形成碳排放合规池。并且这种合规池不限于单个公司内的船舶，可以多个公司共同形成这种合规池。因为并非所有船东都愿意或能够使用替代燃料发动机，这种机制促成不同船舶形成合规池的动机。

并非所有船东都能轻易改变他们使用替代燃料的运营模式，或者有能力在加油地点获取替代或生物燃料，但合规池机制的使用允许这些船东在不使用替代燃料的情况下也能通过该机制分享替代燃料或生物LNG带来的好处。从去年到今天，我们看到甲醇在航运新造船订单中迅速崛起，成为主流替代燃料。而当前，随着LNG更加广泛的可获得性和更优的价格，航运行业再次考虑选择LNG作为应对日益严格的温室气体法规的燃料，特别是生物LNG这种负碳燃料。尽管环保组织对LNG的甲烷泄漏造成温室气体的排放表示担忧，但船东仍然押注该燃料能够符合监管要求，因为行业人士指出，在应对这一问题已有进展，目前已经有显著降低甲烷泄漏的发动机，因此，在接下来的几年内，这确实可能不会成为问题。和甲醇和其他替代燃料一样，如果以更环保的方式生产，LNG也可以具有较好的温室气体排放足迹，无论是通过生物废料生产液化生物甲烷还是合成液化天然气。日本巨头NYK集团旗下的欧洲联合汽车运输公司与Titan Clean Fuels合作，用液化生物甲烷为其船只提供燃料。

当前每吨重油碳配额价格在89欧元上下水平并不足以促使决策发生重大改变。然而，FuelEU Maritime则有所不同，超出碳强度限制的罚款可能将高达每吨2400欧元。

标准普尔全球公司报道，哈帕克-劳德正在进行一项招标，可能涉及25万吨生物液化天然气（bio-LNG），以便为其天然气动力船舶加注燃料，并与零排放海洋买家联盟（Zero Emissions Maritime Buyers Alliance，简称Zemba）建立绿色航运服务。

任何形式的生物质能燃料是有限的，但像合成液化天然气（e-LNG）这样的合成燃料在规模化方面成本高昂，使得航运业难以接受。尽管生物液化天然气（bio-LNG）不能彻底解决航运业所有的脱碳需求，但其供应量将会对航运脱碳产生显著影响。目前全球每年约有3000万吨的生物燃气生产能力。全面看液化生物甲烷有可能满足航运业总能源需求的大约13%，这本身就意味着它有可能成为一个重要的替代燃料。随着国际海事组织致力于制定新政策以达到其脱碳目标，欧盟也在实施FuelEU Maritime，这一日益增长的资源可能成为实现碳排放监管目标的重要元素。此外，液化天然气（LNG）之前在全球燃料供应网络中的整合程度远高于其他替代燃料，具有先天优势。

The direction of alternative fuel main engines for new vessels in 2024 is undergoing subtle changes, with liquefied natural gas (LNG) making a return as a primary alternative fuel for new ships, highlighting a more environmentally friendly market approach due to the negative carbon advantages of liquefied biomethane. Liquefied biomethane, also known as bio-LNG, has the potential to be regarded as a negative carbon fuel when considering its entire lifecycle emissions. As experts explain, the upcoming EU fuel regulation, FuelEU Maritime, which comes into effect next year, will gradually tighten carbon intensity limits for vessels, but will allow shipowners to pool their fleets to collectively achieve emission targets. This means that other ships can join compliant pools with those using negative carbon fuels, allowing them to benefit from the aggregated reduction in carbon intensity.

Ships using a fuel blend of 30% liquefied biomethane and 70% fossil LNG can achieve a carbon emission reduction that equates to the compliance of 30 vessels employing conventional ultra-low sulphur fuel oil, thus forming a carbon compliance pool. Furthermore, this compliance pool is not limited to vessels within a single company; multiple companies can collaborate to establish such pools. This mechanism incentivises different vessels to form compliance pools, especially since not all shipowners are willing or able to use alternative fuel engines.

Not every shipowner can easily change their operational model to incorporate alternative fuels, or have the capability to source alternative or bio fuels at refuelling points. However, the use of compliance pools enables these shipowners to share the benefits of alternative fuels or bio-LNG, even without direct usage of such fuels. From last year until now, we have observed a rapid rise in methanol as a mainstream alternative fuel in new shipping orders. Currently, as LNG becomes more widely available and competitively priced, the maritime industry is once again considering LNG as a fuel to comply with increasingly stringent greenhouse gas regulations, particularly the bio-LNG variant as a negative carbon fuel. Despite concerns from environmental organisations regarding methane leaks from LNG contributing to greenhouse gas emissions, shipowners still wager that this fuel can meet regulatory requirements. Industry professionals point out that progress has been made in addressing this issue, as engines with significantly reduced methane emissions are already available, suggesting this may not be a problem in the coming years. Like methanol and other alternative fuels, LNG can have a more favourable greenhouse gas emission footprint if produced in an environmentally sustainable manner, whether through producing liquefied biomethane from biological waste or synthesising LNG. The European division of NYK Group has partnered with Titan Clean Fuels to supply fuel sourced from liquefied biomethane for its vessels.

At present, the carbon quota price for heavy fuel oil stands around €89 per ton, which is insufficient to drive significant decision-making changes. However, FuelEU Maritime differs in that fines for exceeding carbon intensity limits could reach as high as €2,400 per ton. According to S&P Global, Hapag-Lloyd is pursuing a tender that may involve 250,000 tons of bio-LNG to fuel its gas-powered vessels, while also establishing green shipping services in collaboration with the Zero Emissions Maritime Buyers Alliance (Zemba).

Any form of biomass energy fuel is limited, yet synthetic fuels like synthetic LNG (e-LNG) are costly in terms of scaling, presenting challenges for acceptance in the shipping industry. Although bio-LNG may not entirely meet all decarbonisation needs within the shipping sector, its supply is expected to significantly impact maritime decarbonisation. Currently, there is approximately 30 million tons of biogas production capacity globally each year. Overall, liquefied biomethane could potentially satisfy around 13% of the shipping industry's total energy demand, indicating its potential as an important alternative fuel. As the International Maritime Organization strives to establish new policies to meet decarbonisation goals, and with the EU implementing FuelEU Maritime, this growing resource could play a crucial role in achieving carbon emission regulatory targets. Additionally, LNG has been more effectively integrated into the global fuel supply network than other alternative fuels, providing an inherent advantage.