台灣航業股份有限公司

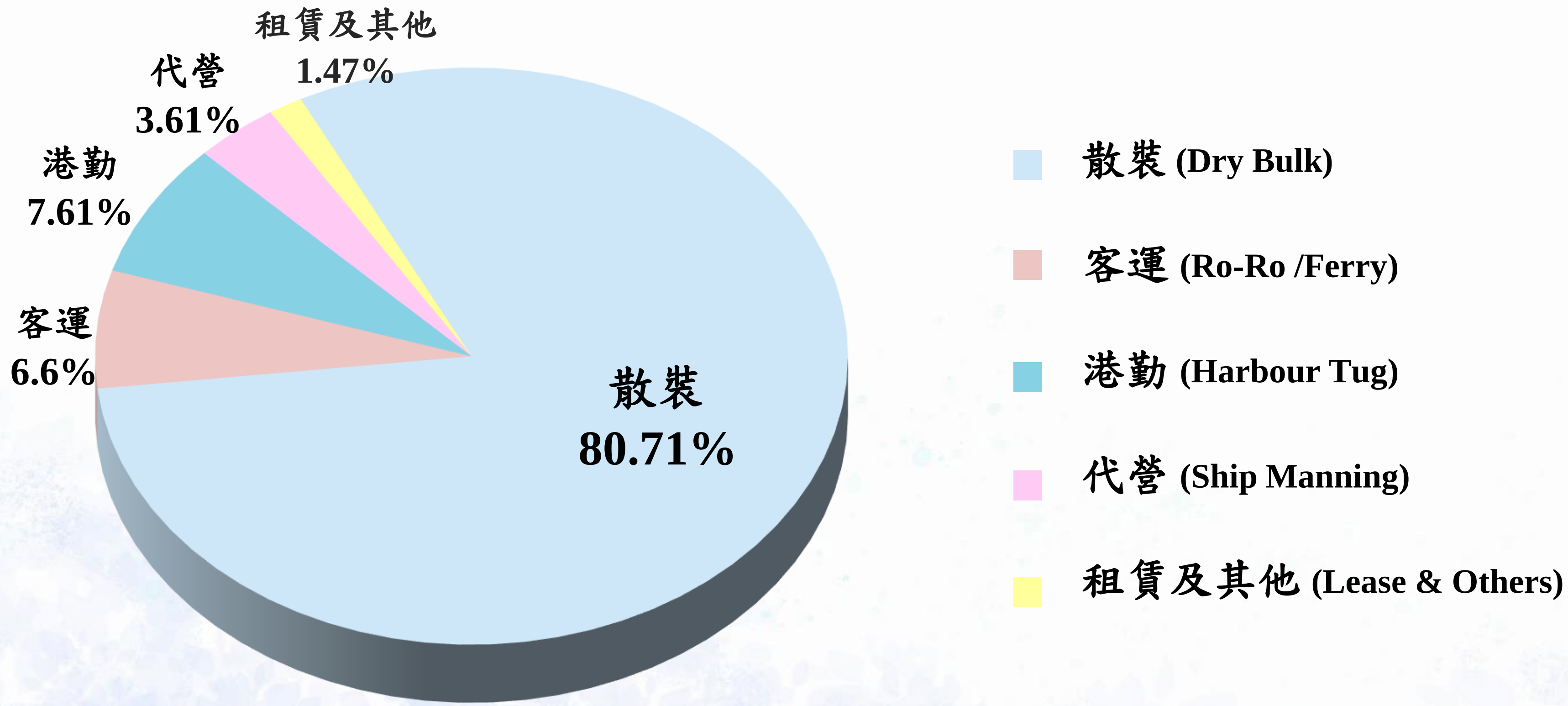
Taiwan Navigation Co., Ltd

業務說明會

2024.11.11

股票代號 2617

業務範疇 Business Scope
(~ 30 June. 2024)



NAVIGATION

現有船隊 Fleet

- **乾散貨船 Dry Bulker**
  - 82K ~ 84K x 9 (Avg. 4.6 yrs)
  - 60K~64K x 10 (Avg. 5.2 yrs)
  - 40K x 2 (del. Jul-Aug 2024)
  - NB (40K) x 2 (Q2, 2026)

- **港勤拖輪 Harbour Tugs & Lauches**
  - 台中LNG Termina—Harbour Tug x 4 (Avg. 17 yrs)
  - 觀塘LNG Terminal—Harbour Tug & Launch x 7 (Avg. 2 yrs)

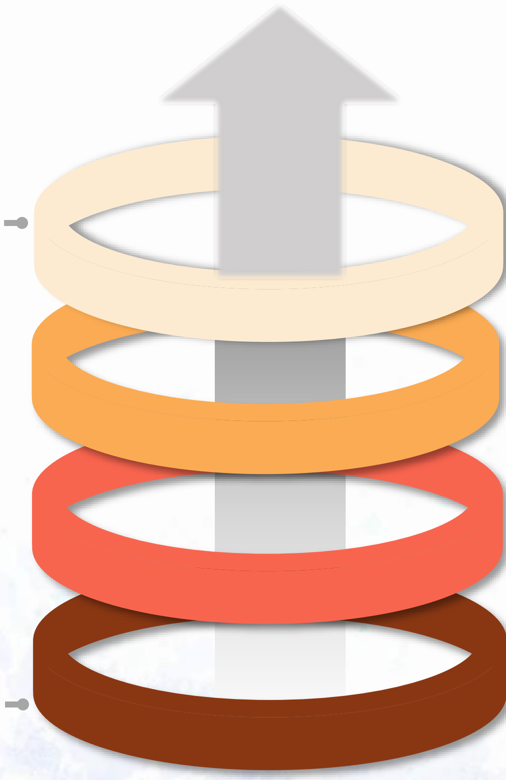
- **客貨輪 Ro-Ro/Ferry**
  - 澎湖輪 (Penghu）x 1 (Delivered in Aug 2023)

- **油輪 MR Tanker x 3 (Manning management for CPC Taiwan)**

資產 Assets (~ 30 June. 2024)

總資產 Total Assets 27,010

新台幣百萬元 mn-NT$



船舶(含預付款)
Fleet (including prepayments)

20,060

投資性不動產*
Investment Property

1,137

* 土地	Lands	17,841㎡
建物	Buildings	14,130㎡

自用房地 Property

248

其他資產 ** ***Other Assets**

5,565

* * 陽明股數 YM's Stocks

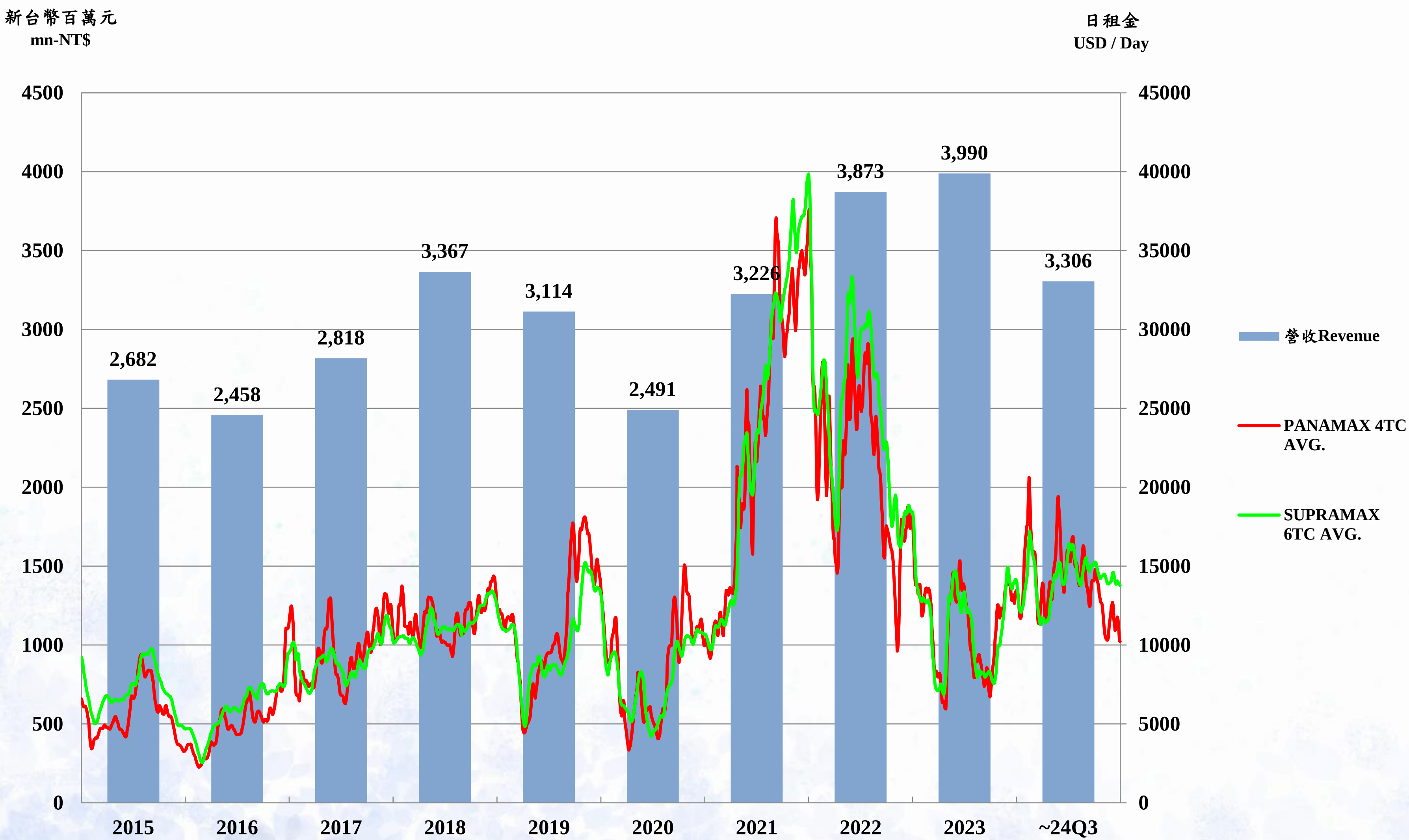
37,291 仟股 Shares (In Thousands)

歷年損益 Financial Performance

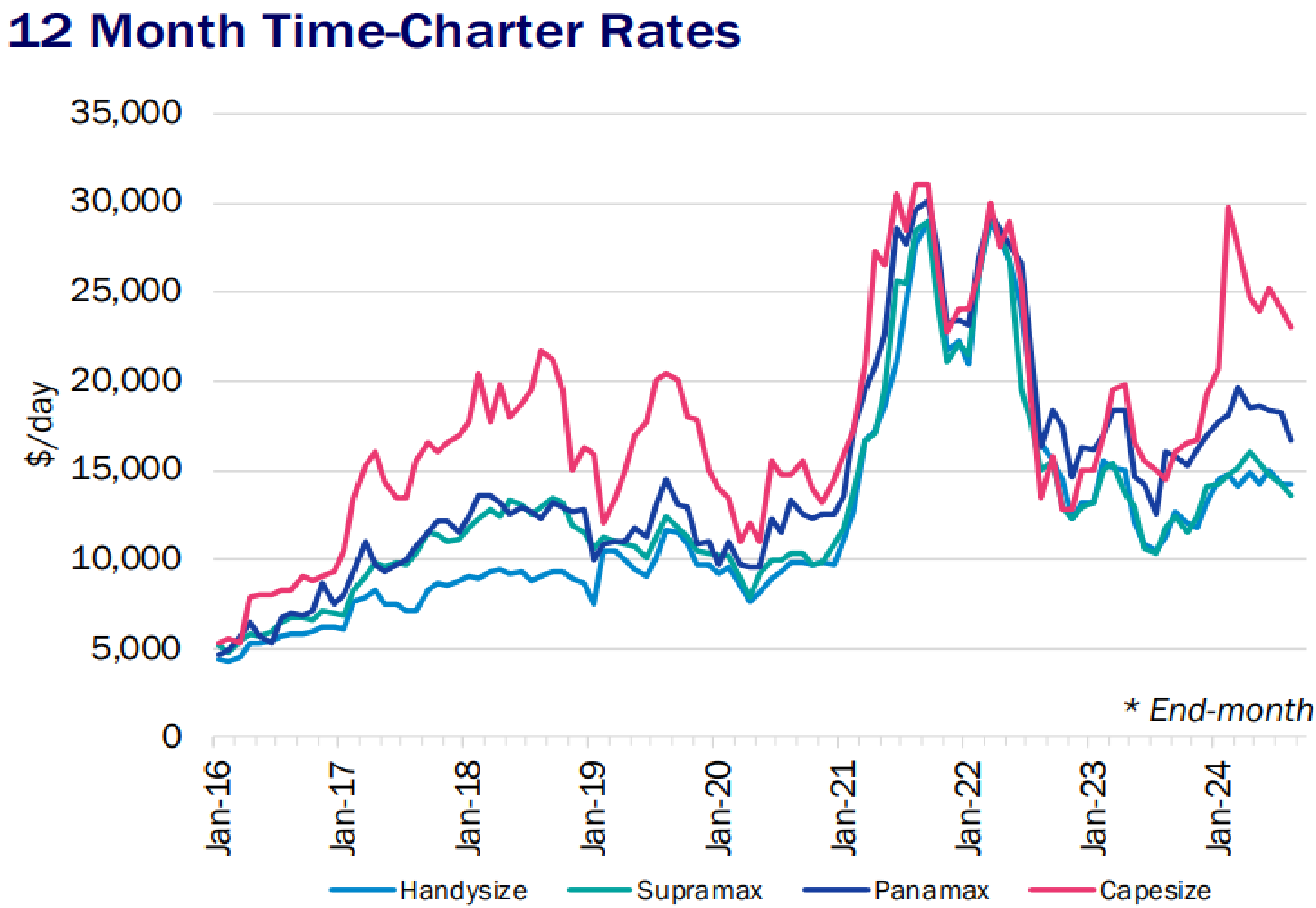
單位：新台幣佰萬元，
惟每股盈餘為元

	2019	2020	2021	2022	2023	~24Q2
營收 Revenue (mn-NT$)	3,114	2,491	3,226	3,873	3,990	2,153
稅後淨利 Net Profit (mn-NT$)	601	518	1,320	2,015	1,663	580
每股盈餘 EPS (NT$)	1.44	1.24	3.16	4.83	3.98	1.39
負債比率 Debt Ratio (%)	32	36	33	36	35	36

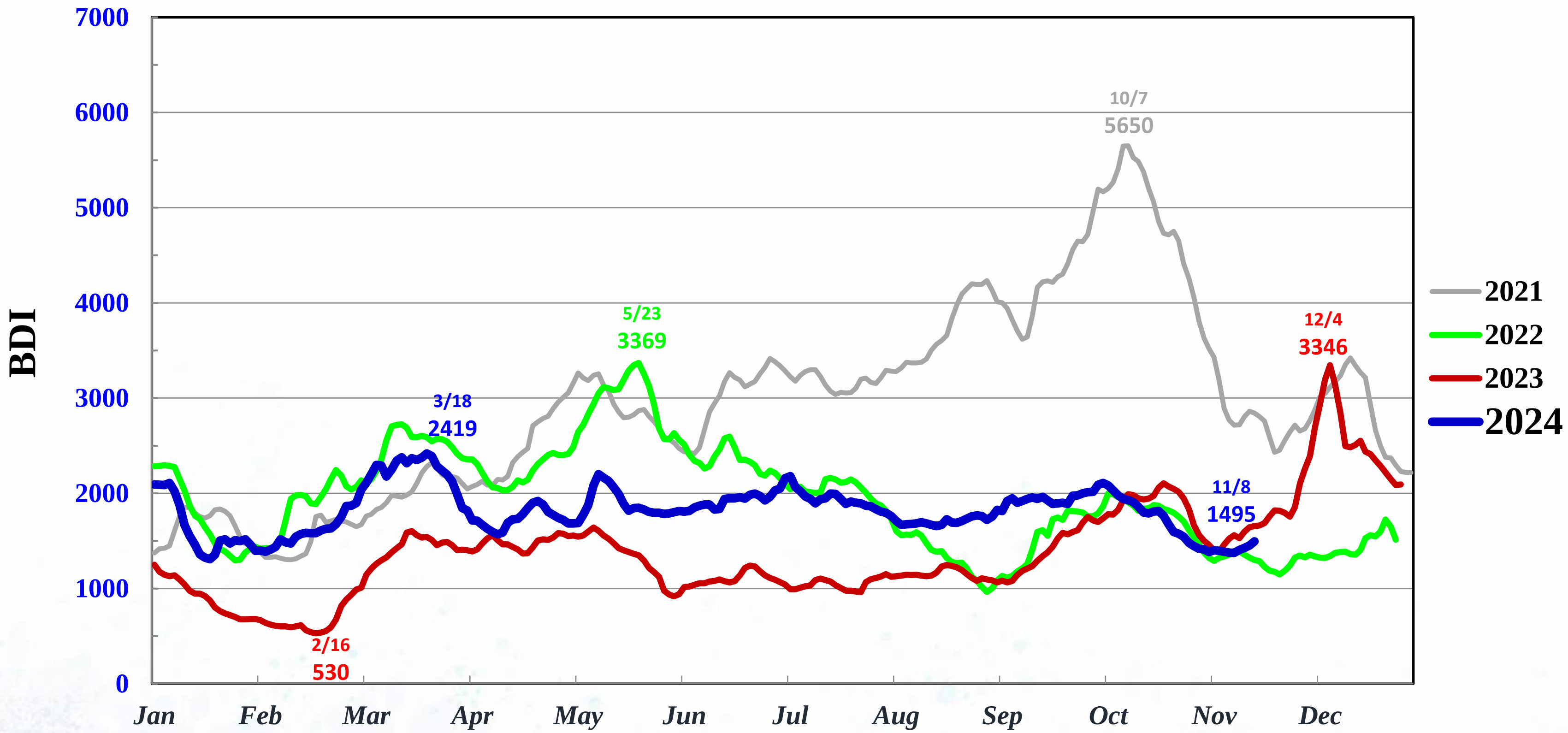
營業收入 Revenue vs. Dry Market



近七年一年期傭船費走勢



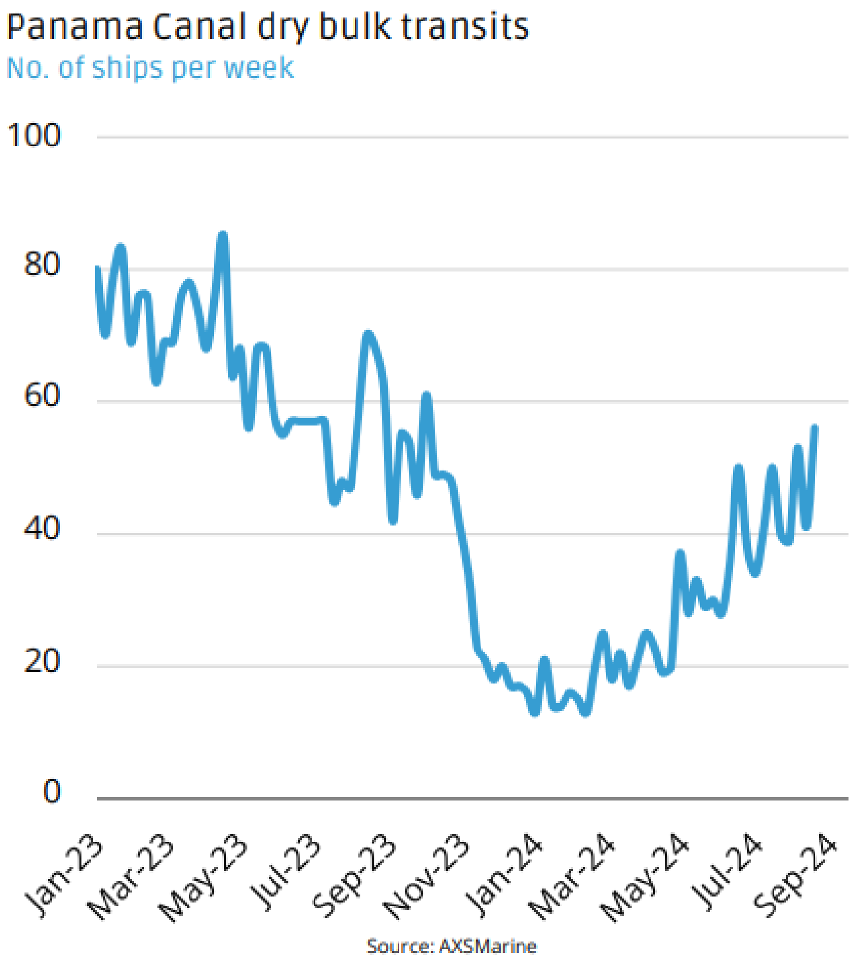
乾散貨船市場 Dry Bulk Market Review

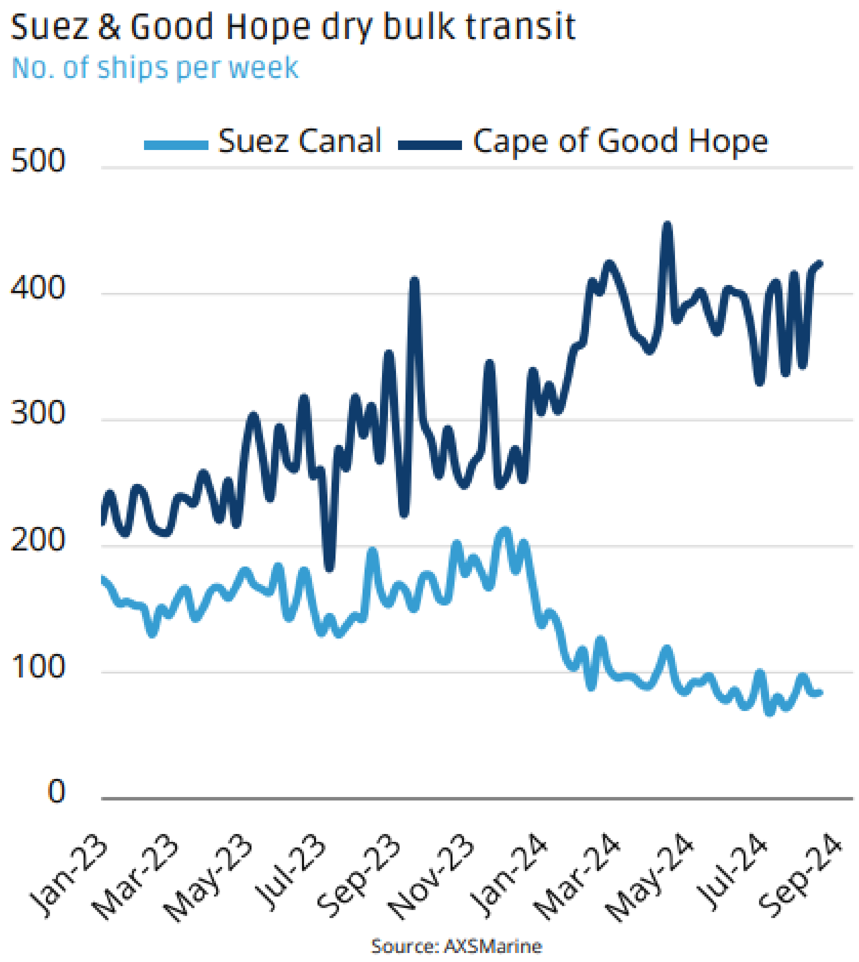


Average	2021	2022	2023	2024 (~Nov 8)
BDI	2943	1938	1380	**1817**
BCI	4015	1959	1980	**2828**
BPI	2989	2308	1429	**1640**
BSI	2433	2017	1023	**1279**

巴拿馬運河及蘇伊士運河通行狀況

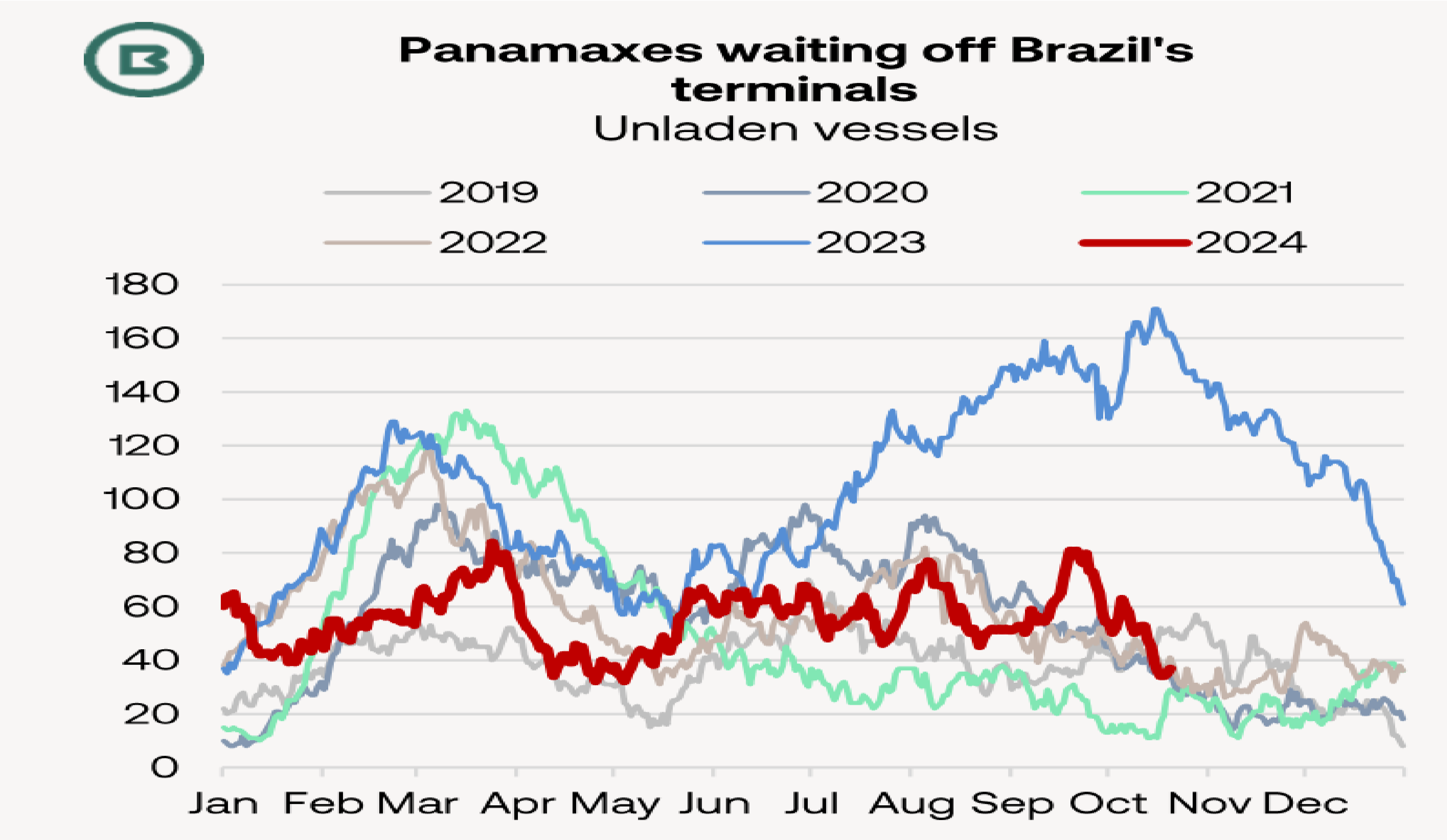
The disruption to two canals - Panama & Suez





巴西港口船舶等待情况

Congestion of Panamax in Brazil for the past 5 years



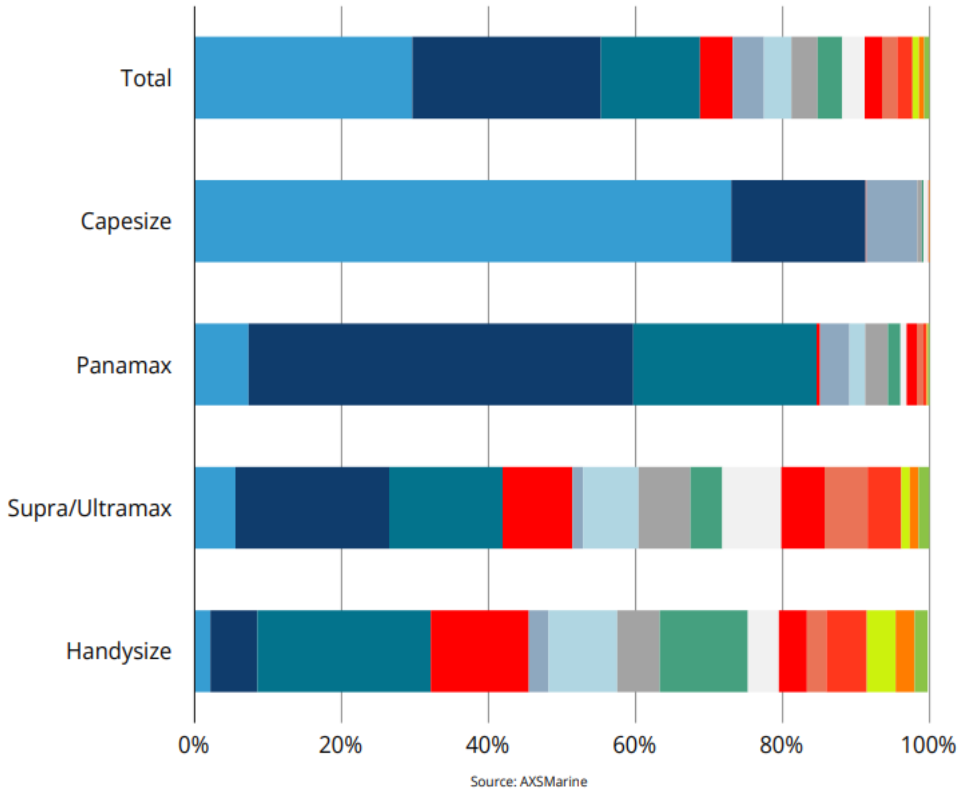
乾散貨船主力貨載 Commodity Dry Bulker Carries

Vessels Share of Commodities

Dependence of specific commodities varies significantly between segments

Commodity mix first half 2024

Deadweight share of completed voyages

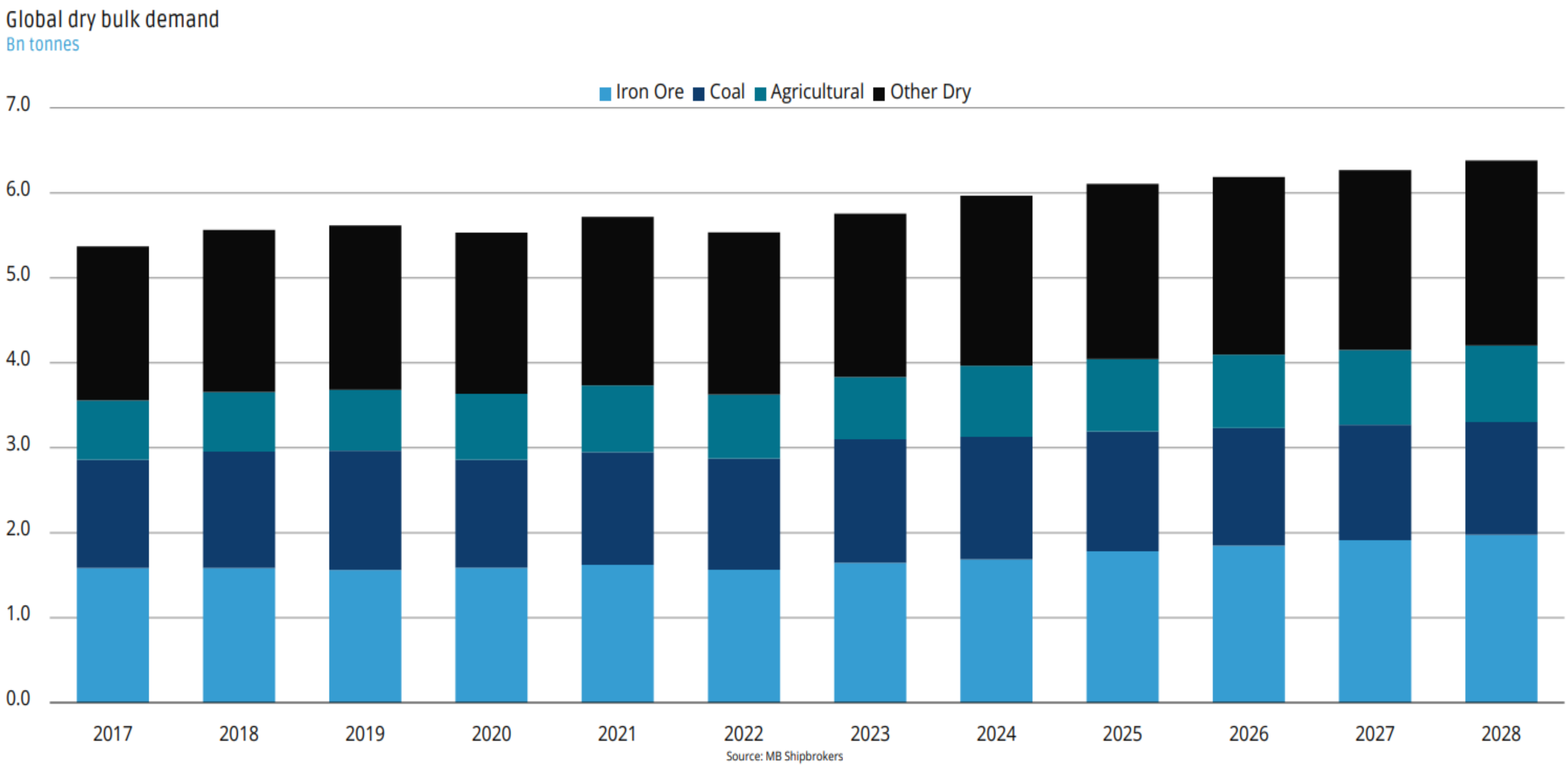


	Hs	Sx/Ux	Px	Cs	Total
Iron Ore	2%	6%	7%	73%	30%
Coal	6%	21%	52%	18%	26%
Agriculturral goods	24%	15%	25%	0%	13%
Steel Products	13%	9%	0%	0%	4%
Alumina/Bauxite	3%	1%	4%	7%	4%
Fertilizers	9%	8%	2%	0%	4%
Minerals	6%	7%	3%	1%	4%
Unknown & Parcels	12%	4%	2%	0%	3%
Minor Ores	4%	8%	1%	1%	3%
Construction	4%	6%	1%	0%	2%
Biomass	3%	6%	1%	0%	2%
Semi-Processed	5%	5%	0%	0%	2%
Wood Products	4%	1%	0%	0%	1%
Other	3%	1%	0%	0%	1%
Other Ferrous	2%	1%	0%	0%	1%

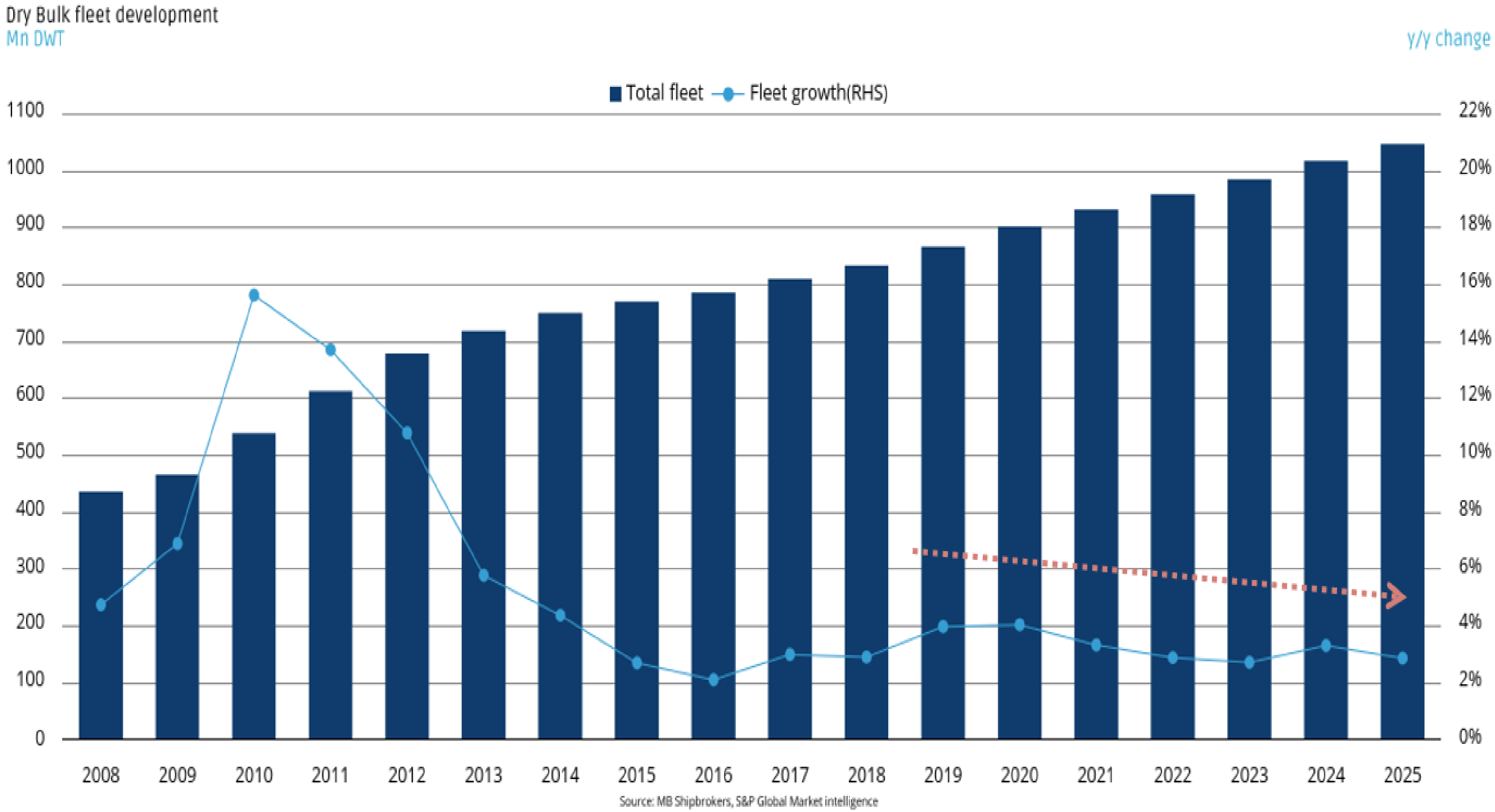
Source: AXSMarine

全球乾散貨需求預測
The forecast for global dry bulk demand

Demand growth is expected to grow with a CAGR of 2.1% from 2023 to 2028

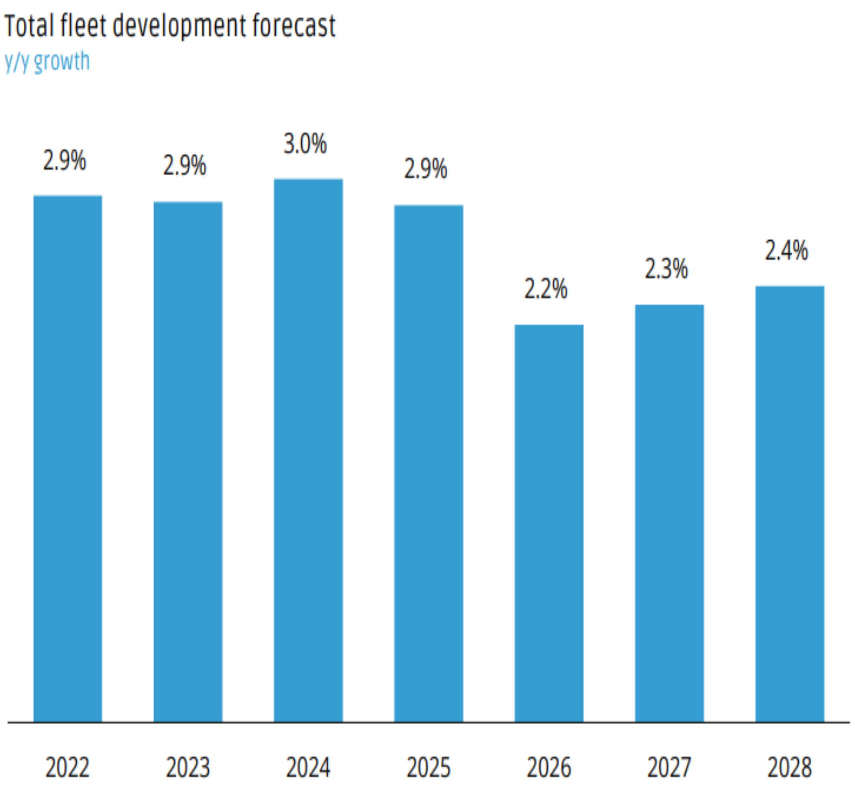


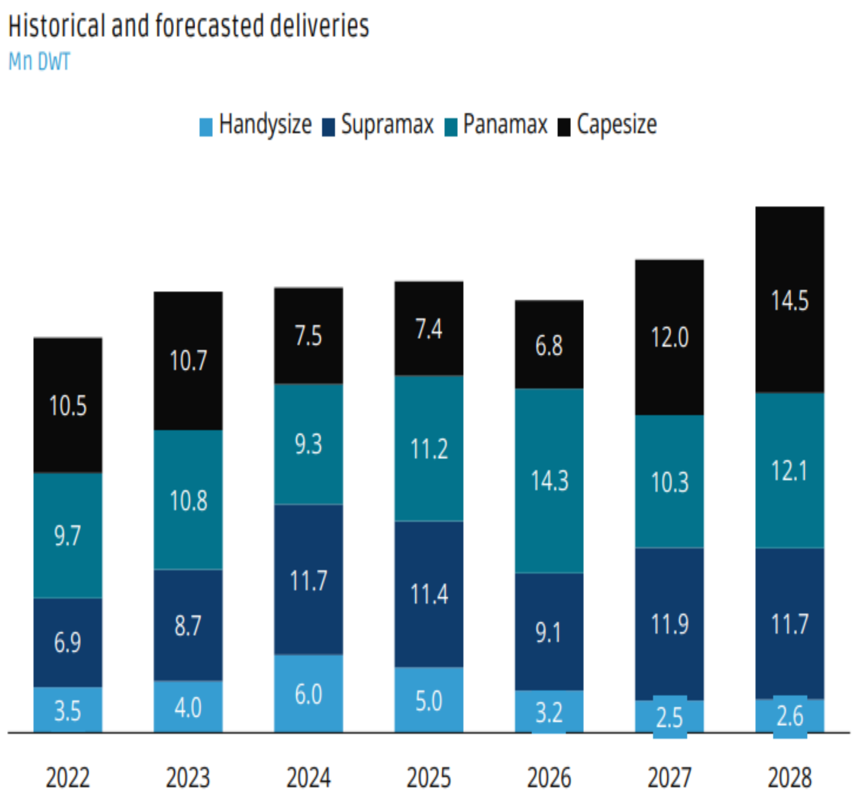
乾散貨輪船噸變化
Dry bulk fleet development



乾散貨輪船噸變化

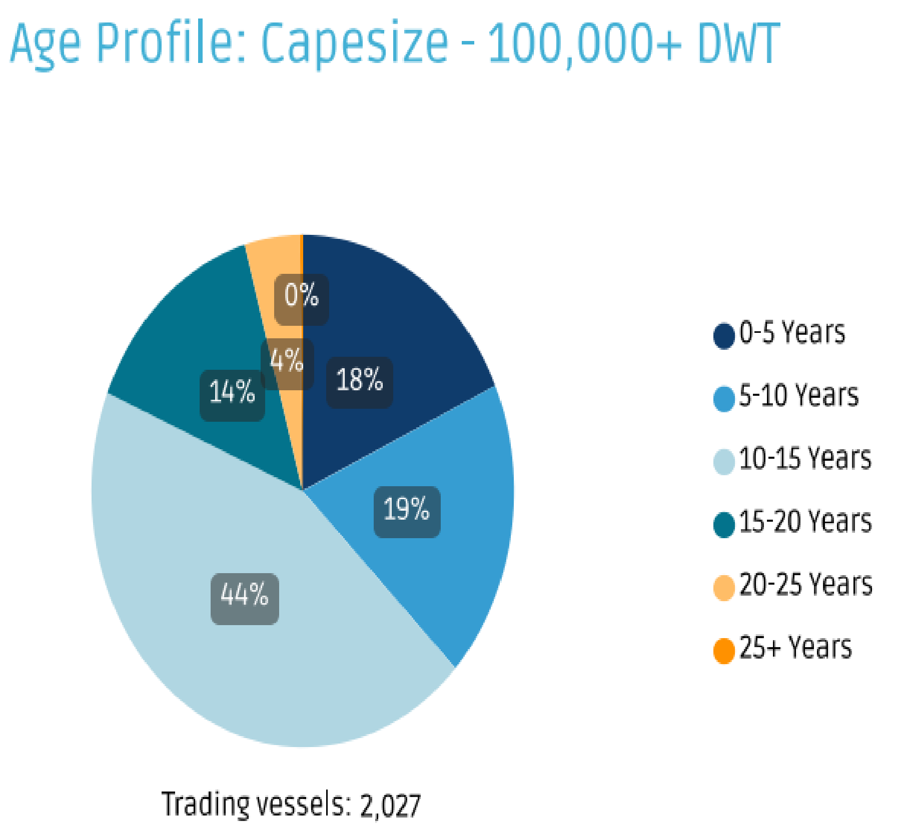
Dry bulker fleet forecast in next 3 years -limited delivery

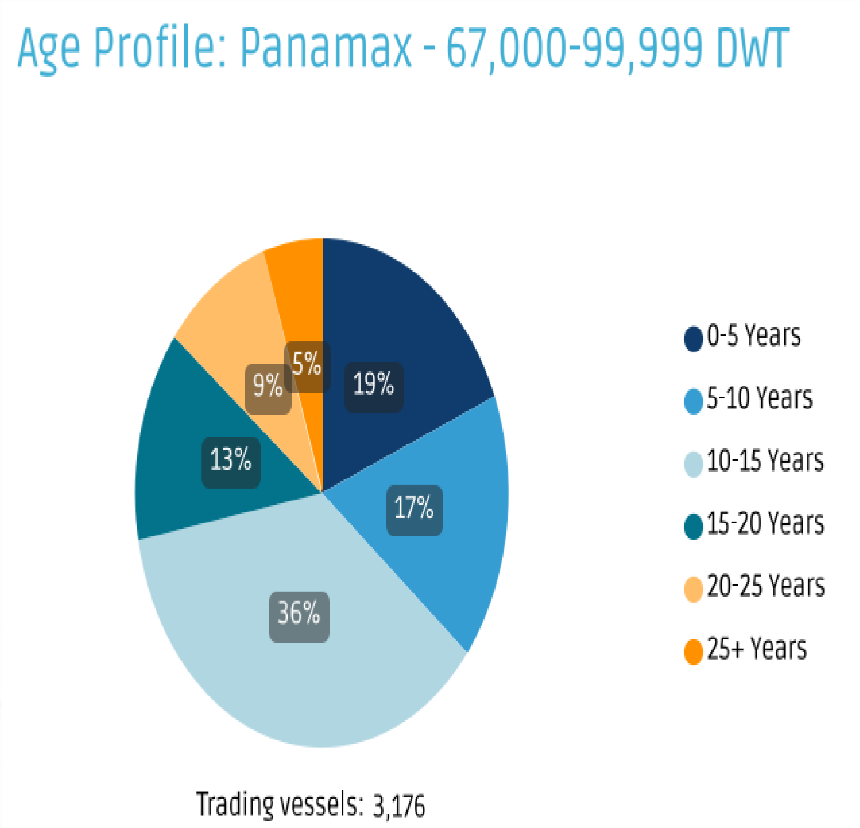




乾散貨輪船齡相關分布

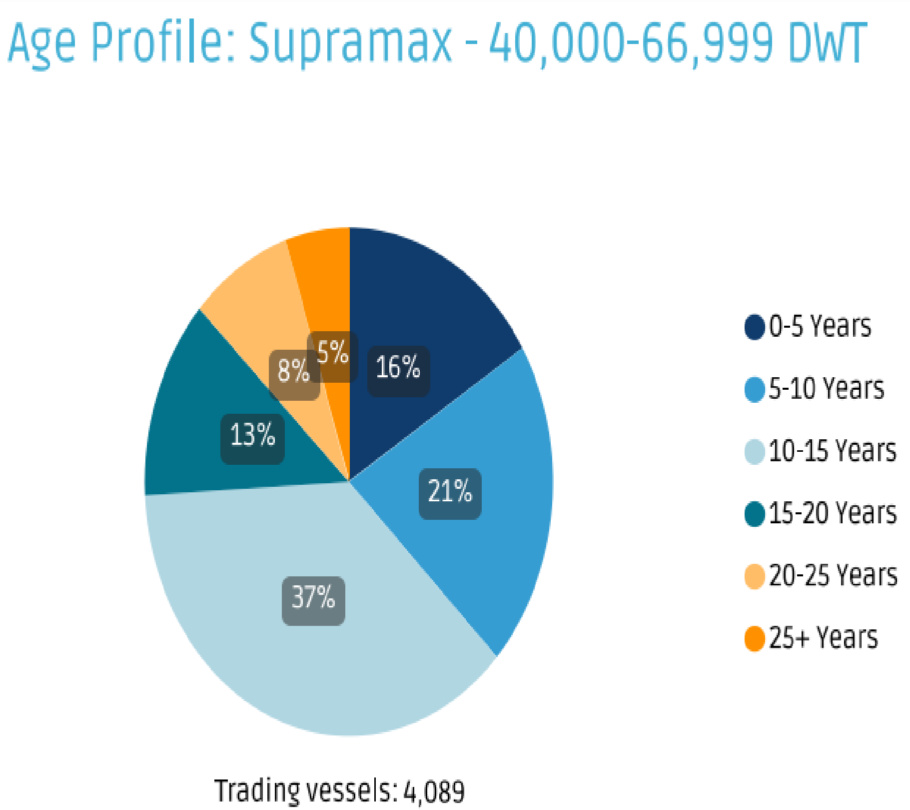
The Age Portfolio of Dry Bulk Carriers

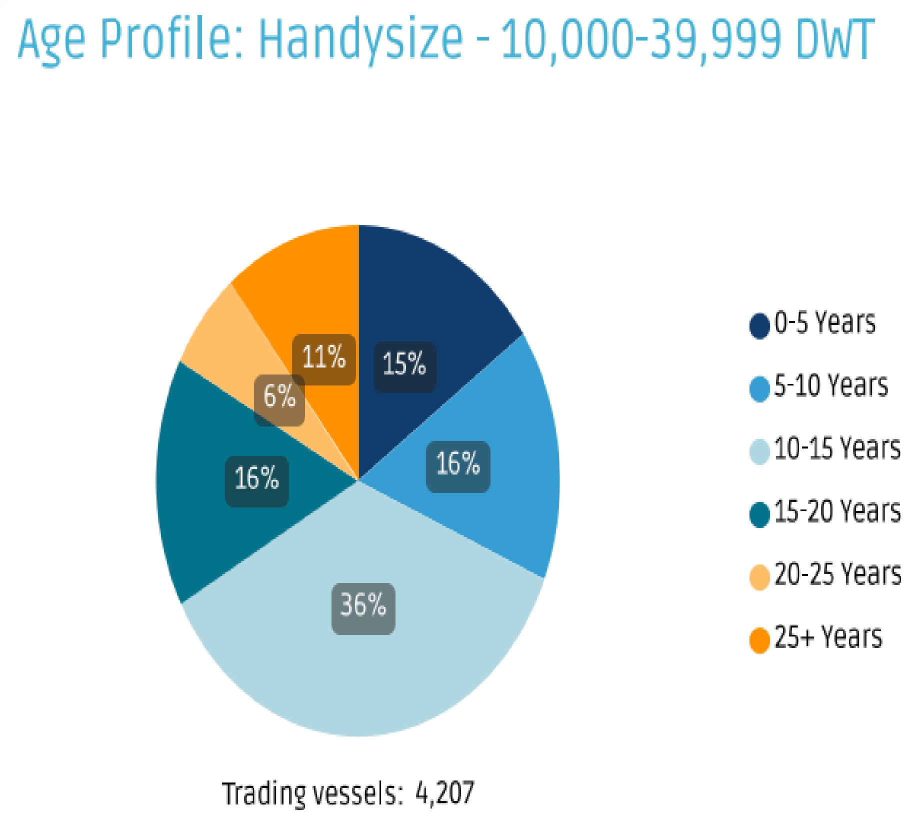




乾散貨輪船齡相關分布

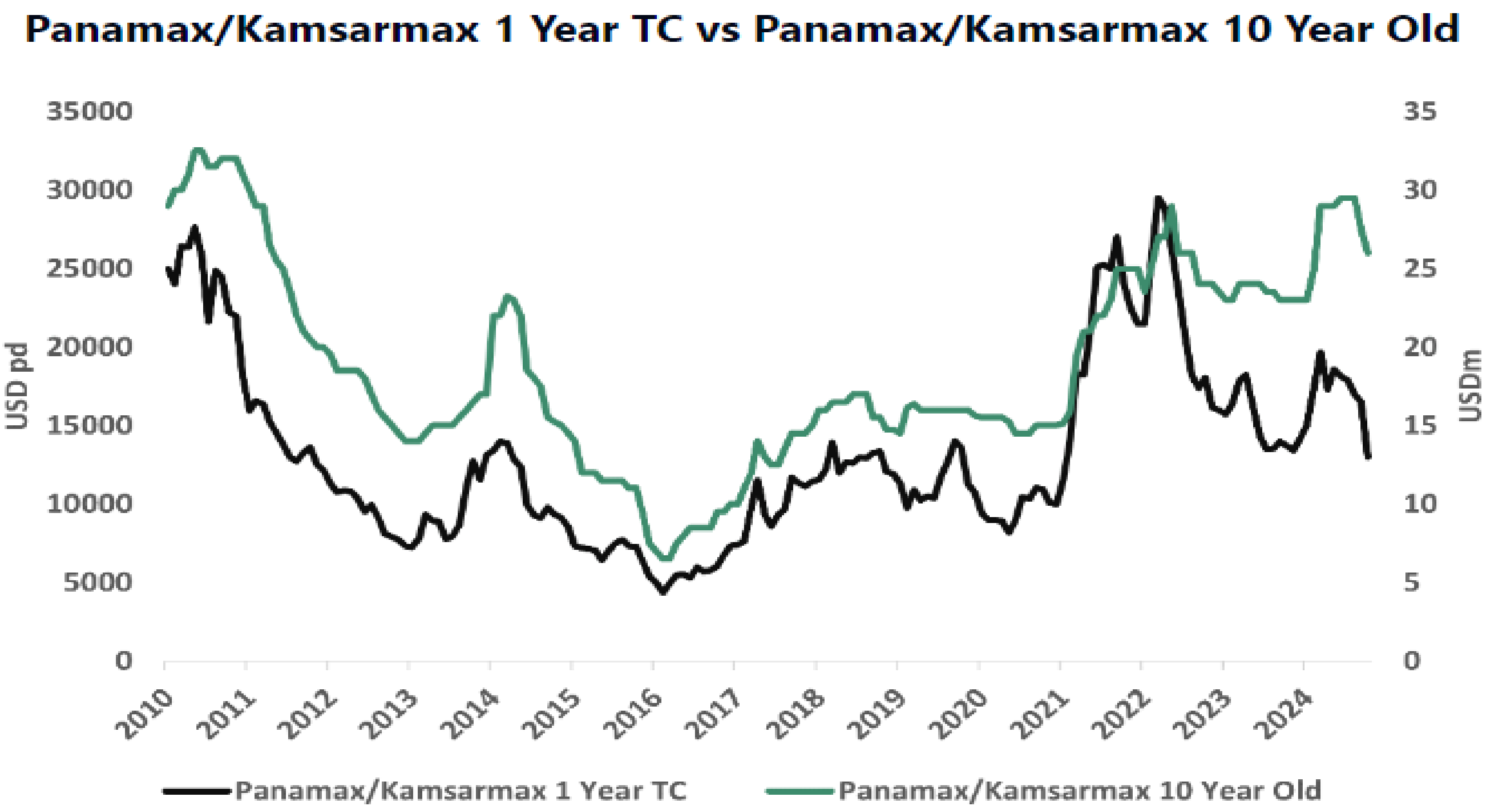
The Age Portfolio of Dry Bulk Carriers





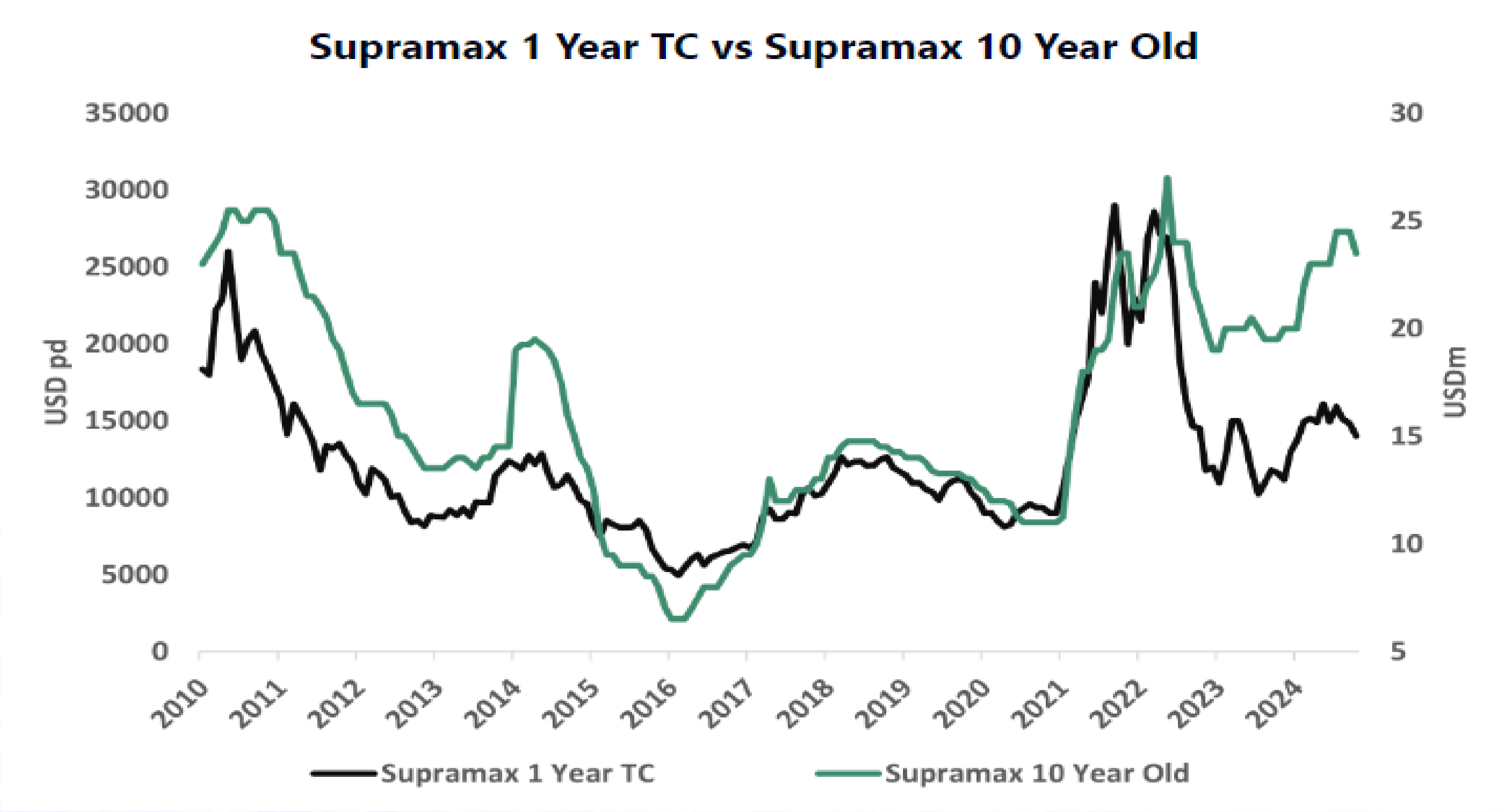
二手船價及一年期租金(a)

The Price of Second Hand Ship and The One Year Hire Rate (a)



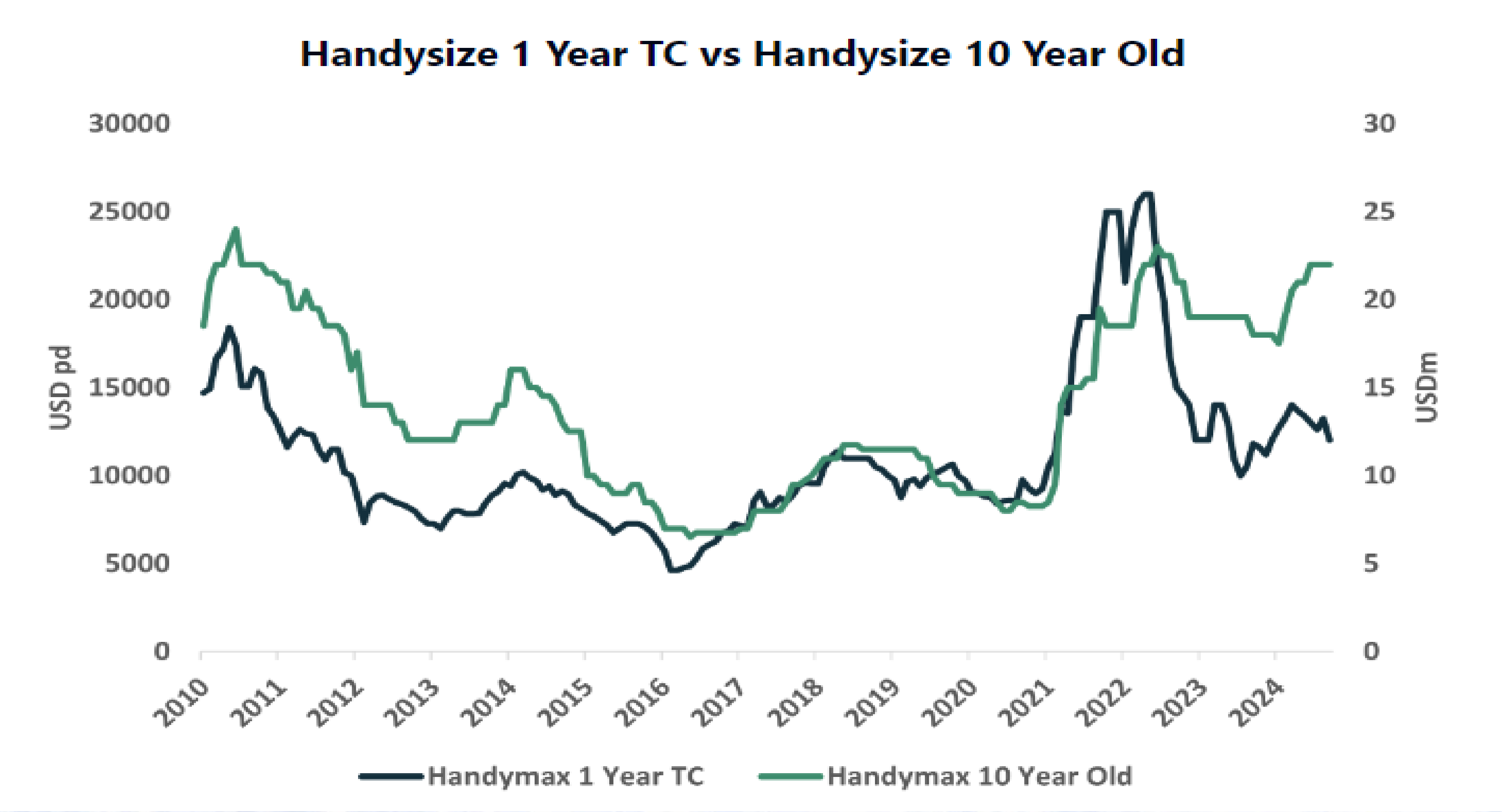
二手船價及一年期租金(b)

The Price of Second Hand Ship and The One Year Hire Rate (b)



二手船價及一年期租金(c)

The Price of Second Hand Ship and The One Year Hire Rate (c)



經濟指標 Economic Indicators

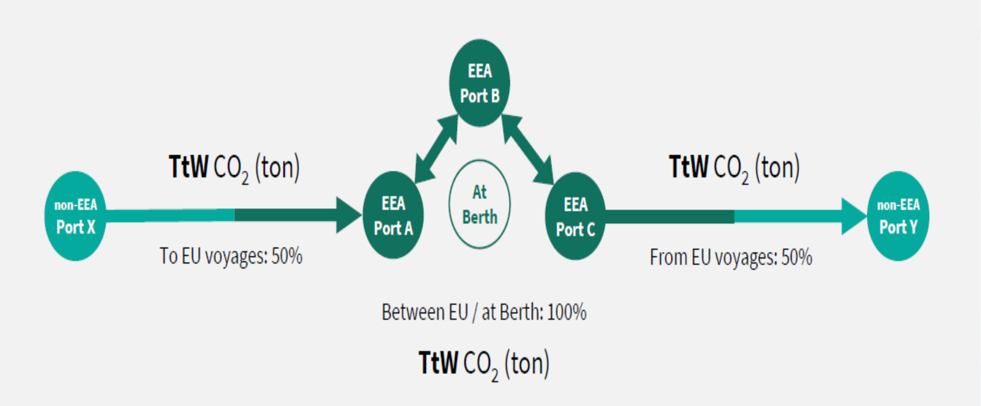
Growth Rate (%, y-o-y)	22’	23’	24’(e)	25’ (e)
World GDP	**3.5**	**3.3**	**3.2**	**3.2**
-US	**2.1**	**2.9**	**2.8**	**2.2**
-China	**3.0**	**5.2**	**4.8**	**4.5**
Coal seaborne trade	**0.3**	**7.1**	**1.3**	**NA**
Seaborne Trade - Dry	**-2.8**	**3.6**	**2.7**	**NA**
Dry Fleet	**2.9**	**3.1**	**3.0**	**2.9**

溫室氣體減排—國際法規要求
GHG Emissions Mitigation-Relevant Regulation Requirements

一、EU相關減少溫室氣體之要求

1. EU MRV (Monitoring, Recording, Verification), 2018.01.01 生效實施 Coming into Effect

2. EU ETS (Emissions Trading System), 2024.01.01生效實施 Coming into Effect



Start date

Requirement for shipping starts from 01.01.2024 and each year thereafter.

Phased-in

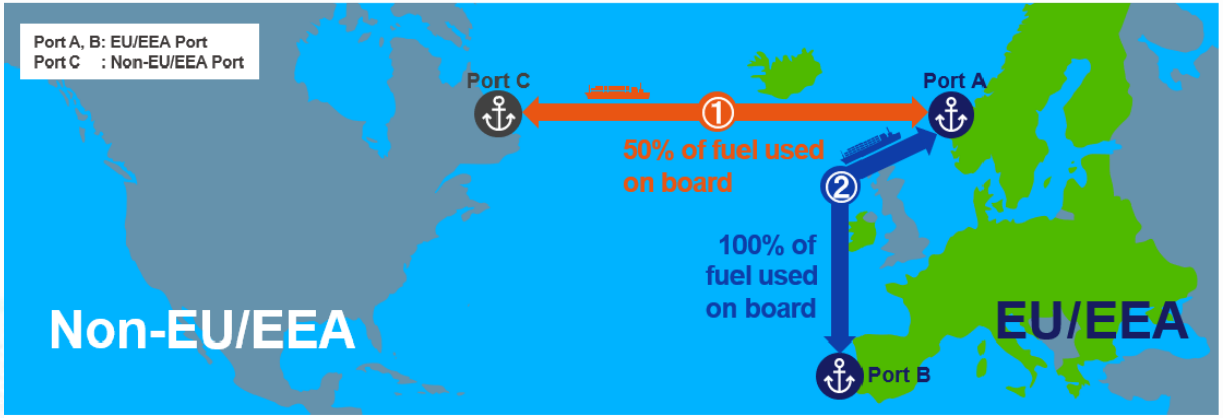
Phase-in period of:

2024 40%
2025 70%
2026 100%

Ex. 40% of emissions reported for year 2024, payable in 2025.

溫室氣體減排—國際法規要求
GHG Emissions Mitigation-Relevant Regulation Requirements

3. Fuel EU Maritime, 2025.01.01 生效實施 Coming into Effect

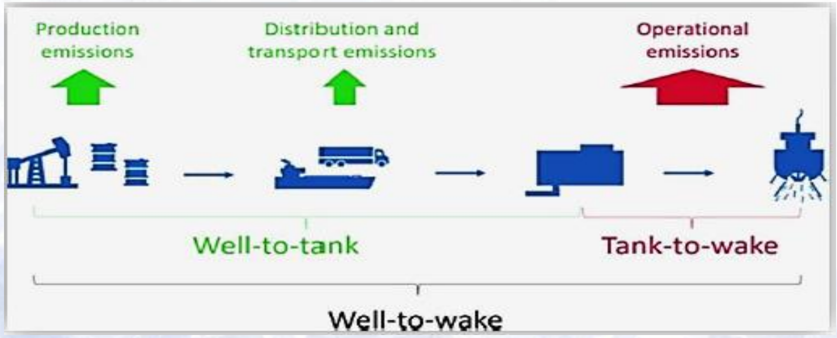


Energy used

WtT + TtW

GHG intensity

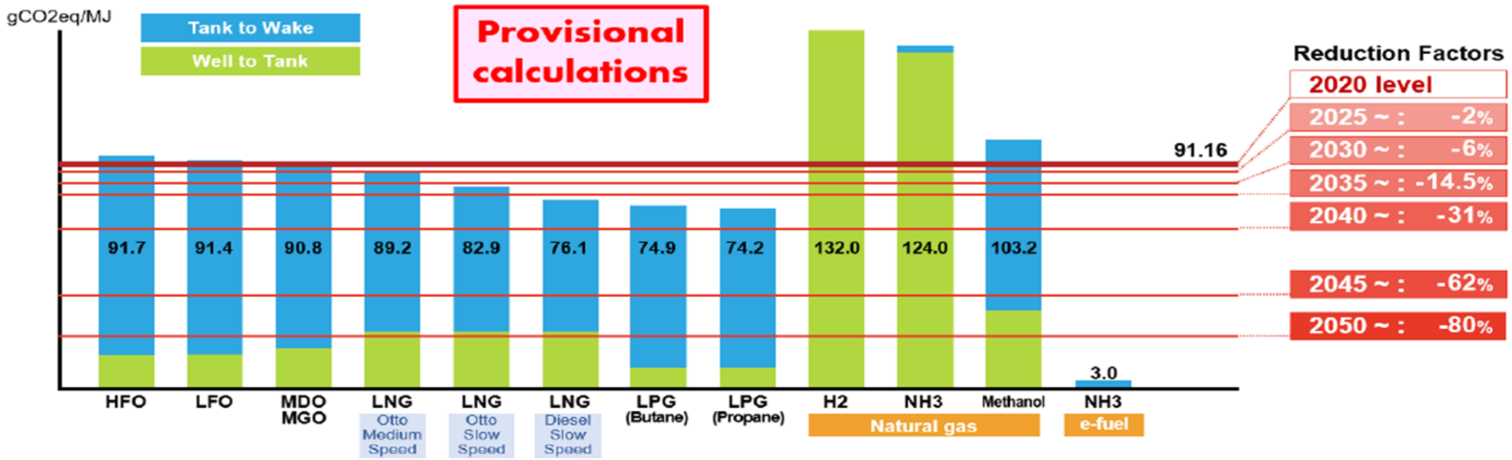
(gCO_{2eq}/MJ)



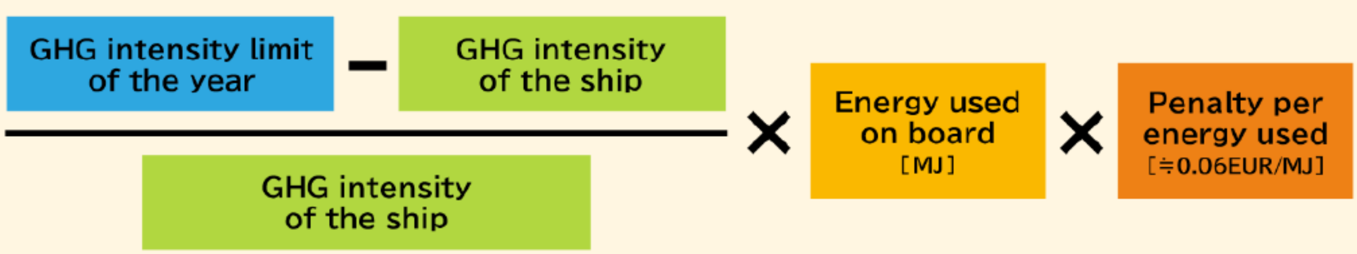
溫室氣體減排—國際法規要求

GHG Emissions Mitigation-Relevant Regulation Requirements

Overview of GHG intensity of each fuel and limits



Outline of the calculation of the penalty



溫室氣體減排—國際法規要求

GHG Emissions Mitigation-Relevant Regulation Requirements

二、IMO MEPC相關規定Relevant Regulations

1. EEDI (Energy Efficiency Design Index): 適用於新船設計
2. EEXI (Energy Efficiency Existing ship Index): 用於現成船

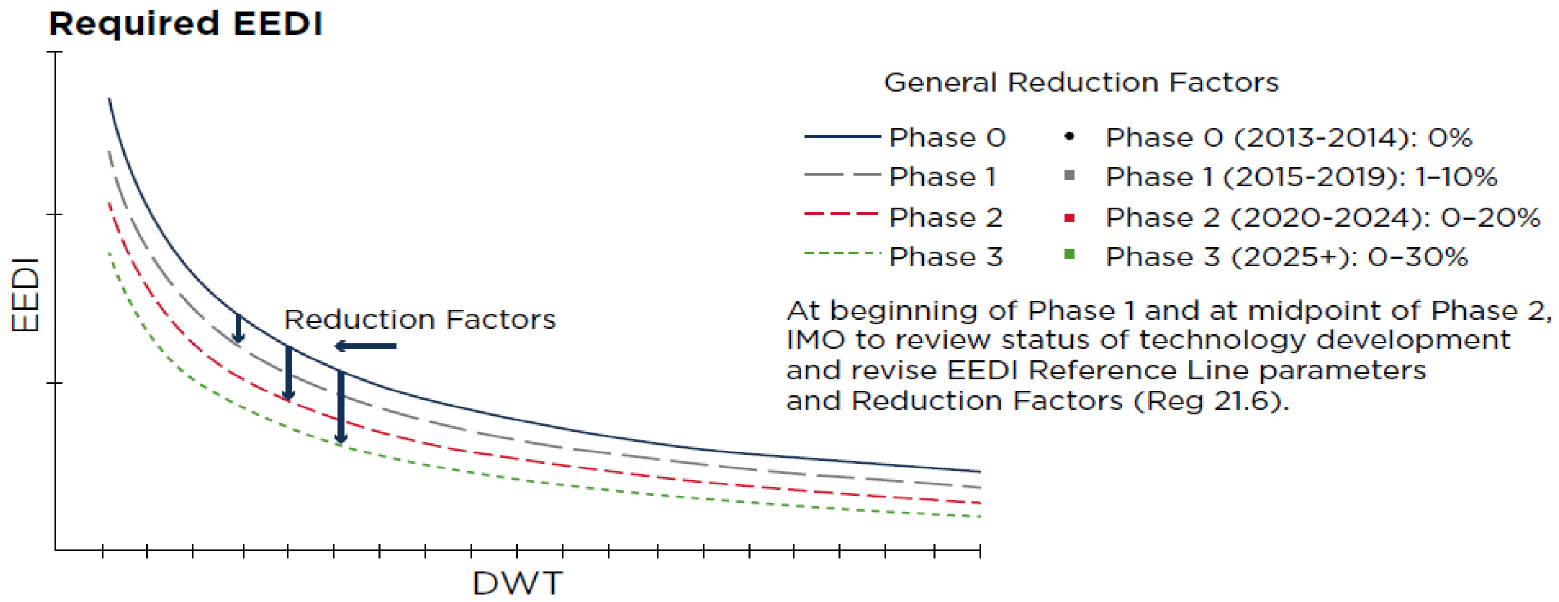


Figure 2: Energy Efficiency Design Index (EEDI).

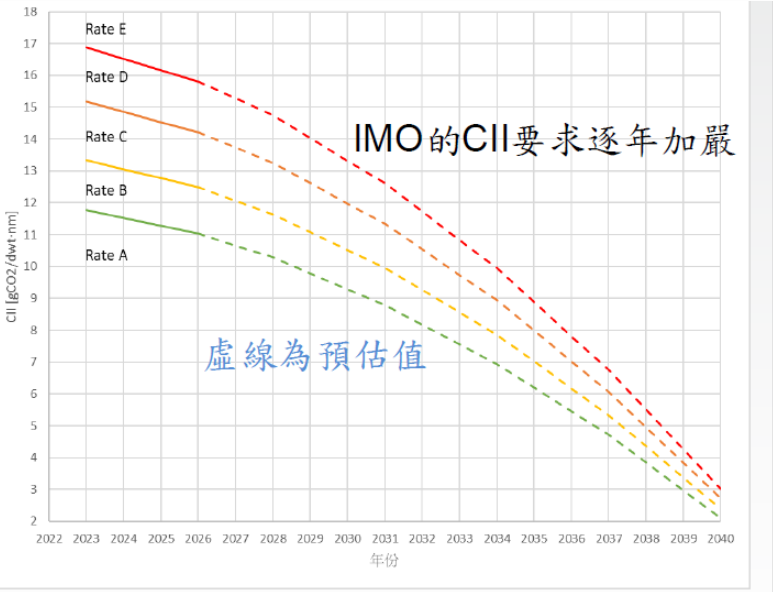
溫室氣體減排—國際法規要求
GHG Emissions Mitigation-Relevant Regulation Requirements

3. CII (Carbon Intensity Indicator): 短期措施

$$CII = \frac{\sum\left(\text{燃料消耗}_{\text{年度}} \times \text{燃料的}CO_2\text{排放係數(Cf)}\right)}{\text{航行距離}_{\text{年度}} \times \text{船舶載運能力(DWT)}}$$

年度	2023	2024-2026	2027-2028	2029-2031	2032-2034	2035-2037	2038-2040
折減因子	-5%	每年 -2%	每年 -3%	每年 -4%	每年 -5%	每年 -6%	每年 -7%

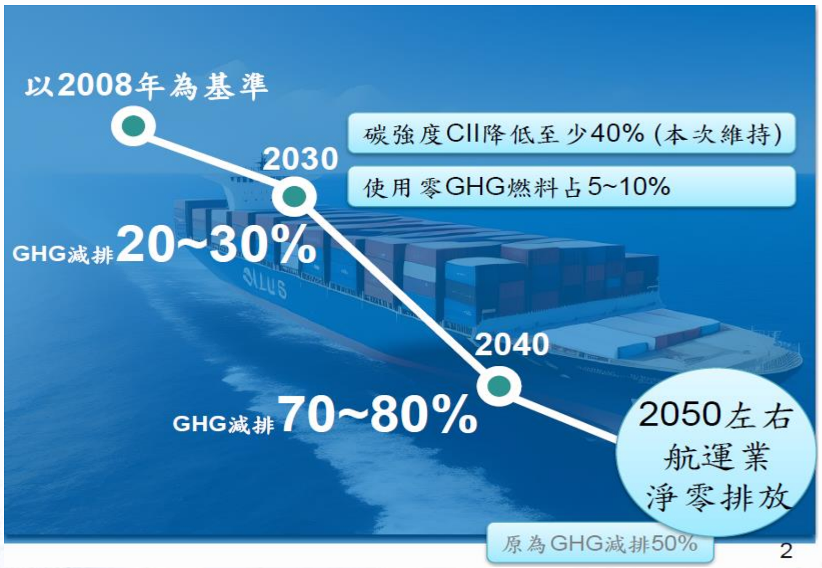
2027年以後的CII折減因子尚未公布，暫為估計值

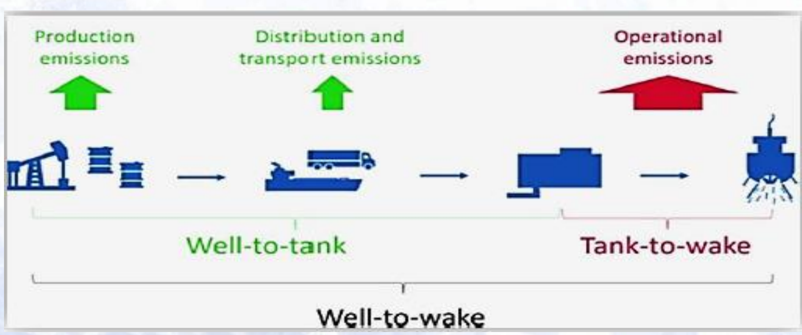


溫室氣體減排—國際法規要求

GHG Emissions Mitigation-Relevant Regulation Requirements

IMO MEPC 80 採納溫室氣體減少排放策略(考慮之中期措施)





短期措施
EEXI、CII：

$$\frac{gCO_2}{DWT \cdot nm}$$

中期技術性
措施GFS：

$$\frac{gCO_2e}{MJ}$$

原訂2024年做成決議，2027年生效實施。因意見分歧，將於明年MEPC 83會議前加開二次工作會議及一次糧食安全會議，以便彙集共識。

溫室氣體減排—對全球海運影響
GHG Emissions Mitigation-Impact on global shipping

一、加速船舶汰換 Speeding up ship replacement

二、船速下降 Slowing down ship speed

三、供給船噸減少 Reducing ship supply

四、使用傳統燃料之新型節能船舶，從Tank to Wake 溫室氣體排放量的角度，在船舶造價、運維費用、燃料添加等方面仍具有相當的市場競爭優勢

From the point of view of Tank to Wake GHG emissions, the new energy-saving ships using traditional fuel still have considerable market competitive advantages in ship building cost, operation and maintenance costs, bunkering and so on.

溫室氣體減排—公司將如何因應
GHG Emissions Mitigation-How to Cope With

一、持續船舶汰換 、建造節能船舶

Continuous ship replacement by building Eco ships

二、加強船舶操作、維護管理

Strengthen ship operation and maintenance management

三、偕同租家積極面對

Cooperative positively with the Charterers

展望與策略 Prospect & Actions

一、乾散貨船運市場 The Dry Bulk Market

有利因素 The advantage factors：

未來三年新船船噸供給有限、因CII及歐盟ETS、FuelEU Maritime 促使船速下降等因素將導致船噸供給成長減少。大宗乾散貨需求隨全球人口增長，需求仍穩定成長、烏俄戰爭可能提早結束，重建需求。

Due to the limited new tonnage in the nex 3 years along with CII and EU ETS, FuelEU Maritime resulting in reducing ship speed, the tonnage growth would be decreased. The demand of dry commodities is in line with the global population growth, so is the demand of bulker tonnage. The end of Ukraine war may come earlier than expected and the subsequent infrastructure demand of rebuilding.

展望與策略 Prospect & Actions

不利因素 The disadvantage factors：

中國房地產低迷、川普上任，中東紅海危機是否提前結束，及新關稅政策可能加大中、美貿易戰及世界貿易壁壘。
The weak property market in China persists, the new Trump Administration could end the Red Sea crisis sooner and the higher tariff policy could escalate the US- China trade war and even result in worldwide trade barrier.

南美百年乾旱造成穀物出口受阻，短期影響巴拿馬極限型運價
A historical drought across Amazon basin and Southern America has been harming grain export this year, in particular reducing the freight market of Panamax.

綜合有利及不利因素，未來中、小型乾散貨船型運價較穩健。
In view of the abovementioned, the freight market of small and mid-size bulker still looks solid in the near future.

展望與策略 Prospect & Actions

二、港勤及代營業務持續

The Continuation of Habour Service And Management Business

中油觀塘港LNG拖船25年合約（建造5艘拖 船，2艘交通船），已於2023年4月完成交船營運。將持續拓展相關代營業務。

The 25-year contract of harbor service for CPC Taiwan at Kuan Tung Industrial port (5 tugboats and 2 launch boats) has commenced operation after all new ships were delivered in April in 2023. We would keep expanding the management business.

展望與策略 Prospect & Actions

三、船舶持續汰舊、年輕化、效能至上

Ship Replacement And Efficiency Improvement

今年淘汰二艘散裝船，四條新船交船，二艘在建。

規劃今年再訂造二艘64K散裝船。

This year two old bulkers were disposed of. Four newbuildings were delivered.

2 handy is on order book. Assessing order of two 64K new bulkers in Japan.

四、新客輪澎湖輪 New Ferry, Penghu

澎湖輪於2023年9月開始營運，加強行銷擴展客源，增加營收。

The new ferry, Penghu, commenced operation in September 2023. We would strengthen marketing and expand the revenue.

Thank you for your attention

台灣航業股份有限公司

Taiwan Navigation Co., Ltd