

BMFW



2023 KOBC Maritime Conference

한국해양진흥공사 마리타임 컨퍼런스

1st November 2023
2023. 11. 1.(수)

Paradise Hotel Busan
파라다이스호텔 부산

Program Book

kobc KOREA OCEAN BUSINESS CORPORATION

2023 KOBC Maritime Conference Program Book

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As the paradoxical prosperity in the shipping market brought about by the pandemic wanes, the Korean shipping industry is once again facing a challenging period. Uncertainty of the shipping industry is heightened in the midst of global changes such as strengthening greenhouse gas regulations, a transformation of the international order, and the sustained high-interest rate for inflation control. Now, taking wise measures through collective intelligence has become more important than ever.

Korea Ocean Business Corporation (KOBC) has invited experts in maritime finance and global shipping market to analyze recent trends and gain insights into the future of the market. We sincerely hope that the perspectives of experts from various fields and your diverse ideas will come together to turn the challenges in our shipping industry into opportunities.

For this conference, we have improved the financial session by incorporating port facility & logistics finance into ship finance, creating a framework that encompasses shipping, ports, and finance. KOBC is also expanding the financing from ships to port facility logistics and will continue to contribute to the growth and development of the shipping and port facility logistics industry with more advanced business support.

We cordially invite you to the **6th KOBC Maritime Conference**, hoping that you will join us in the journey of our shipping and port facility logistics industry to achieve sustainable development through innovation.

President of KOBC **Kim Yang-Soo**

팬데믹이 불러왔던 해운시장의 역설적인 호황기가 저물고, 우리 해운산업은 다시 도전의 시기를 맞이하고 있습니다. 온실가스규제 강화와 미·중 관계 재편 등 세계질서의 변화, 인플레이션 억제를 위한 고금리 기조 지속 등 해운산업을 둘러싼 환경에 불확실성이 고조되고 있는 지금, 집단 지성을 통한 슬기로운 대처가 그 어느 때보다도 중요해졌습니다.

한국해양진흥공사는 해양금융과 해운시황 글로벌 전문가들을 초청하여 최근 동향을 분석하고 앞으로의 시장을 조망해보는 자리를 마련하였습니다. 분야별 전문가의 해안과 참석자 여러분의 다양한 아이디어가 어우러져 우리 해운 산업이 위기를 기회로 바꾸는 전화위복의 계기가 되기를 진심으로 바랍니다.

이번 컨퍼런스는 선박금융에 항만물류금융을 더한 금융세션을 강화하여 해운과 항만 그리고 금융을 아우르는 구성으로 준비하였습니다. 저희 공사도 금융영역을 선박에서 항만물류까지 확대하는 한편, 한층 고도화된 사업지원을 통해 해운항만물류산업의 성장과 발전에 기여해 나가겠습니다.

여러분들께서도 우리 해운항만물류산업이 혁신을 통해 지속 가능한 발전을 이루도록 그 여정에 함께 해 주시기를 기원하며, **제6회 KOBC 마리티타임 컨퍼런스**에 초대합니다.

2023 KOBC Maritime Conference

Date November 1st

Venue Paradise Hotel Busan

Host  KOREA OCEAN BUSINESS CORPORATION

한국해양진흥공사 사장 **김양수**



PROGRAM

Time	Schedule	
10:30~11:00	Registration	
11:00~11:05	Opening Speech	
11:05~11:20	Celebration Speech	
11:20~11:40	Keynote Speech	Sohn Byungdoo Chairman & CEO Korea Exchange
11:40~13:00	Lunch	
13:00~14:00	Finance Session	Global Ship Finance Trend & Prospect Mr. Abhishek Pandey SC Bank
		Global Port Facility Logistics Financing Trend Kim Duckwon Korea Superfreeze Inc.
14:00~14:30	Panel Discussion	
14:30~14:45	Coffee Break	
14:45~15:45	Shipping Session I	Drybulker Market Trend & Prospect Ms. Louisa Follis Clarksons
		Tanker Market Trend & Prospect Mr. Oliver Ge McQuilling
15:45~16:00	Coffee Break	
16:00~17:00	Shipping Session II	Container Market Trend & Prospect Mr. Jan Tiedemann Alphaliner
		Sales & Purchase Market Trend & Prospect Mr. Tom Evans VesselsValue (A Veson Company)
17:00~18:00	Q&A · Closing	

프로그램

시간	내용	
10:30~11:00	등록 · 티타임	
11:00~11:05	개회사	
11:05~11:20	축사	
11:20~11:40	기조연설	손병두 이사장 한국거래소
11:40~13:00	오찬 및 네트워킹	
13:00~14:00	금융세션	글로벌 선박금융 시장 동향 Mr. Abhishek Pandey SC Bank
		글로벌 항만물류금융 시장 동향 김덕원 대표이사 한국초저운
14:00~14:30	패널토론	
14:30~14:45	휴식 및 네트워킹	
14:45~15:45	시황세션 I	건화물선 시장 동향 및 전망 Ms. Louisa Follis Clarksons
		유조선 시장 동향 및 전망 Mr. Oliver Ge McQuilling
15:45~16:00	휴식 및 네트워킹	
16:00~17:00	시황세션 II	컨테이너선 시장 동향 및 전망 Mr. Jan Tiedemann Alphaliner
		선박매매 시장 동향 및 전망 Mr. Tom Evans VesselsValue (A Veson Company)
17:00~18:00	질의응답 및 폐회	



Keynote Speech

Sohn Byungdo

Chairman & CEO | Korea Exchange

Keynote Speech

November 1st 11:20~11:40



Sohn Byungdo

Chairman & CEO | Korea Exchange

CV

학력

- 1983년 서울 인창고
- 1987년 서울대학교 국제경제학과
- 1993년 서울대학교 행정대학원 석사
- 2000년 美, 브라운대학교 경제학 박사

경력

- 2020.12. 한국거래소 이사장
- 2019. 5. 금융위원회 부위원장
- 2017. 9. 금융위원회 사무처장
- 2016. 7. 금융위원회 상임위원
- 2015. 3. 금융위원회 금융정책국장
- 2014. 3. 금융위원회 금융서비스국장
- 2013. 5. 금융위원회 공적자금관리위원회 사무국장
- 2011. 2. 기획재정부 G20 기획조정단장
- 2010. 1. 기획재정부 국제금융국 국제금융과장
- 2008. 3. 기획재정부 국제금융국 외화자금과장
- 2006. 7. 재정경제부 국제금융국 국제기구과장
- 2005. 2. 대통령비서실 경제정책수석비서관실 행정관
- 2003. 4. 국제부흥개발은행(IBRD) 선임 이코노미스트
- 2001. 6. 재정경제부 경제정책국 종합정책과 서기관
- 1989. 행정고시 합격(33회)

Education

- 1983: Graduated from Seoul Inchang High School
- 1987: Bachelor's degree in International Economics, Seoul National University
- 1993: Master's degree from the Graduate School of Public Administration, Seoul National University
- 2000: Ph.D. in Economics, Brown University, USA

Career

- December 2020: Chairman and CEO, Korea Exchange
- May 2019: Vice Chairman, Financial Services Commission
- September 2017: Head of Secretariat, Financial Services Commission
- July 2016: Standing Commissioner, Financial Services Commission
- March 2015: Director General, Financial Policy Bureau, Financial Services Commission
- March 2014: Director General, Financial Services Bureau, Financial Services Commission
- May 2013: Head of Secretariat, Public Funds Management Committee, Financial Services Commission
- February 2011: Director, G20 Coordination Division, Ministry of Strategy and Finance
- January 2010: Director, International Finance Division, Ministry of Strategy and Finance
- March 2008: Chief, Foreign Exchange & Foreign Capital Division, International Finance Division, Ministry of Strategy and Finance
- July 2006: Chief, International Organizations Division, International Finance Bureau, Ministry of Economy and Finance
- February 2005: Administrative Secretary, Office of the Presidential Secretary for Economic Affairs, Blue House
- April 2003: Senior Economist, International Bank for Reconstruction and Development (IBRD)
- June 2001: Secretary, Comprehensive Policy Division, Economic Policy Bureau, Ministry of Economy and Finance
- 1989: Passed the Public Administrative Examination (33rd Examination)



Finance Session

Global Ship Finance Trend & Prospect

Mr. Abhishek Pandey

Global Head | Standard Chartered Bank

Global Port Facility Logistics Financing Trend

Kim Duckwon

CEO | Korea Superfreeze Inc.

Finance Session

November 1st 13:00~13:30



Mr. Abhishek Pandey

Global Head | Standard Chartered Bank

CV

Abhishek is the Global Head of Shipping Finance for Standard Chartered Bank. He joined the Bank in 2007 and since then has been involved in originating, structuring, and executing transactions globally, a lot of which have won industry awards. He sits on the Board of various Standard Chartered subsidiaries like Standard Chartered Leasing Group Ltd.

Abhishek started his career as a Ship Navigating Officer and spent about 6 years at high seas post which he did his management degree. He had been a first officer at sea, a general manager in an IT company, part of the core strategy team of a global shipping line in Hong Kong before he moved to Singapore to help start the Shipping Finance business in the Bank.

Abhishek serves as Council Member of SSA ("Singapore Shipping Association") and also chairs its Ship Finance Services committee. Abhishek was also a part of the 10 member committee established by Govt of India's IFSCA (International Financial Services Authority, a financial regulator) to develop ship financing and leasing activities in India. He is also a member of the prestigious YPO ("Young President's Organization").

Abhishek has a wellcultivated industry network. His first hand experience in operations, marketing, business strategy and finance has helped him build the shipping finance business ground up. Abhishek also made it to the 'Lloyd's List Next Generation 2012 Most Influential People in the Shipping Industry'

Abhishek holds a Bachelor's Degree in Nautical Sciences from the University of Mumbai and a MBA from the Indian School of Business in India.

Finance Session

November 1st 13:30~14:00



Kim Duckwon
CEO | Korea Superfreeze Inc.

CV

LNG 냉열에너지를 상업용 물류센터 운영에 활용하는 전략적 아이디어를 창안한 핵심 멤버 중 한명인 김덕원 대표이사는 물류센터 운영에 대한 전문성과 인프라 투자에 대한 다년간의 경험을 보유하고 있습니다. 김덕원 대표이사는 글로벌 사모펀드 EMP 벨스타 서울사무소의 파트너이기도 하며, 한국초저온 합류 이전 Lazard Asia 에서 재직하며 수많은 다국적 기업의 M&A 를 진행하였으며, Lazard Asia 이전에는 한국의 대표적인 1 세대 사모펀드인 Eugene PE 와 Macquarie PE 에서 근무하였습니다. 김덕원 대표이사는 펜실베이니아 대학교 와튼스쿨에서 경영학 학사 학위를 취득하였습니다.

경력사항

- (現) 한국초저온 - 대표이사
- (現) EMP Belstar - Partner
- Lazard Asia - VP
- Eugene PE - Manager
- Macquarie PE - Associate

학력사항

The University of Pennsylvania, Wharton School of Business 졸업

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Kim Duckwon, one of the key members who created the strategic idea of using LNG cold thermal energy for operating commercial logistics center, has expertise in logistics center operations and years of experience in infrastructure investment. Kim is also a partner of EMP Bellstar Seoul office, a global private equity fund. He worked at Lazard Asia and supported numerous M&As of multinational companies. Before Lazard Asia, he worked at Eugene PE and Macquarie PE, Korea's renowned first-generation private equity funds. Kim Duckwon received a BS in Economics from the Wharton School of the University of Pennsylvania.

Career

- (Current) Korea Superfreeze Inc. - CEO
- (Current) EMP Belstar - Partner
- Lazard Asia - VP
- Eugene PE - Manager
- Macquarie PE - Associate

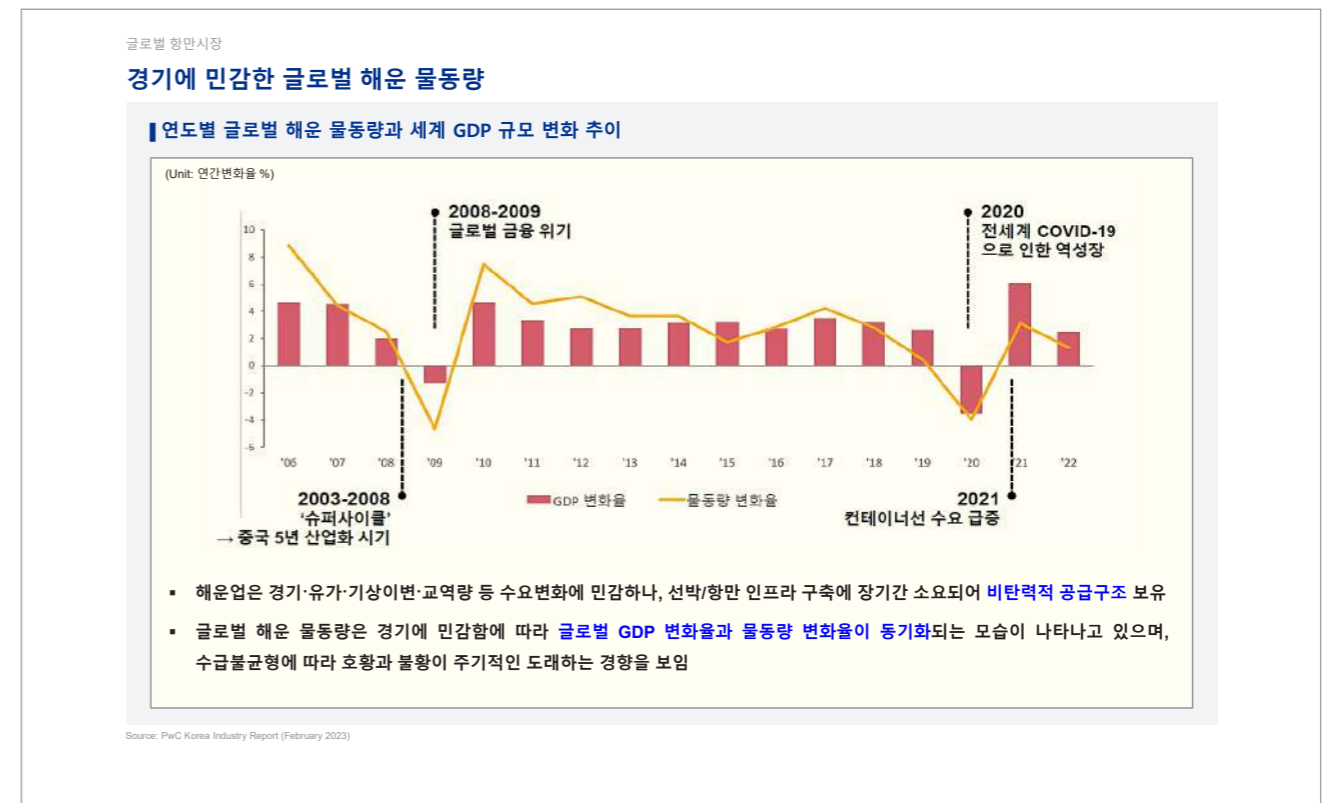
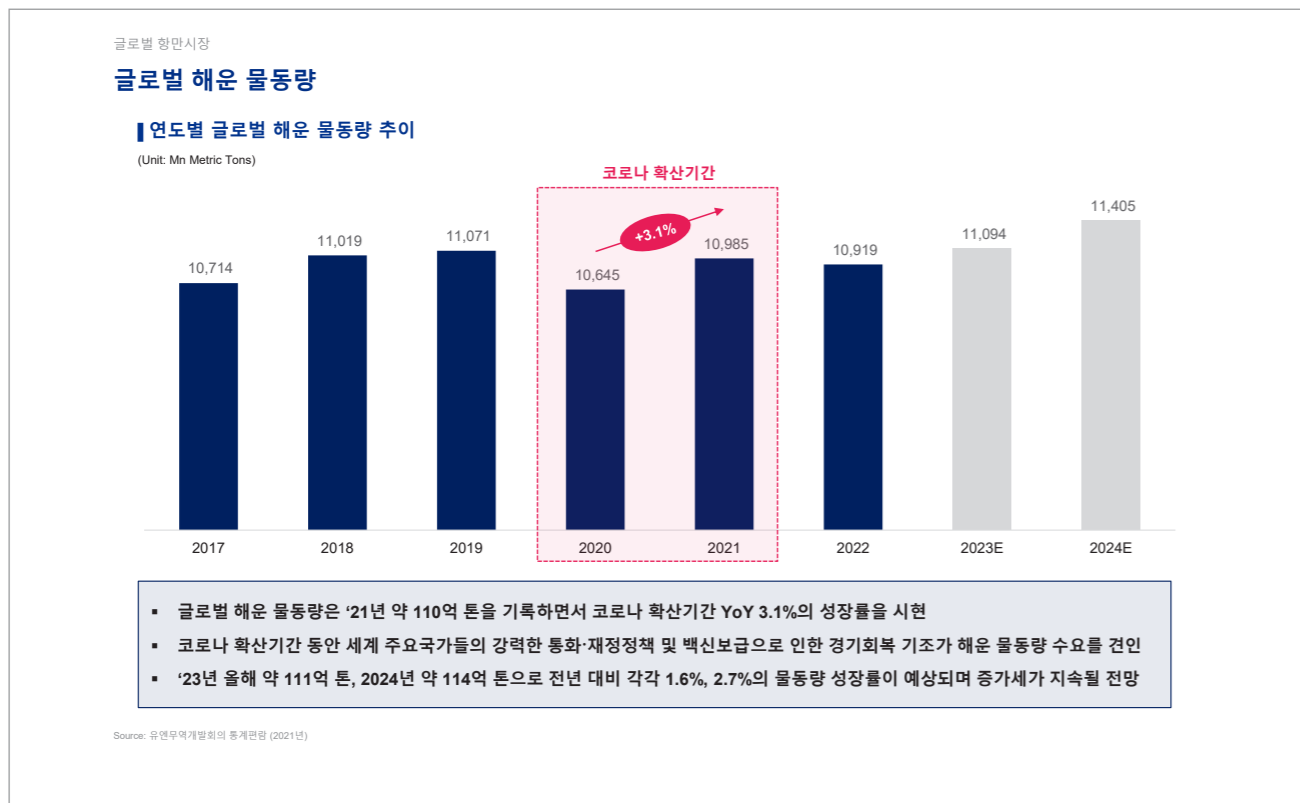
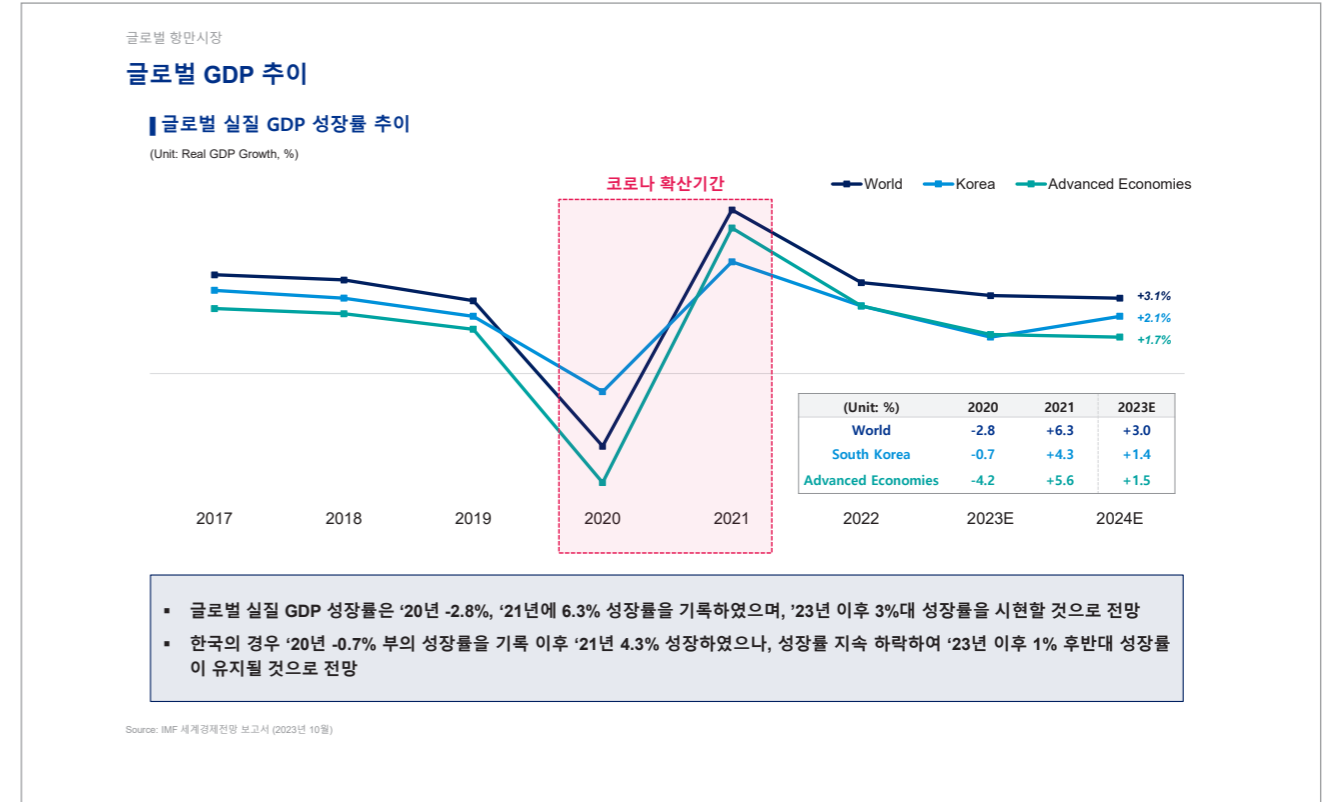
Education

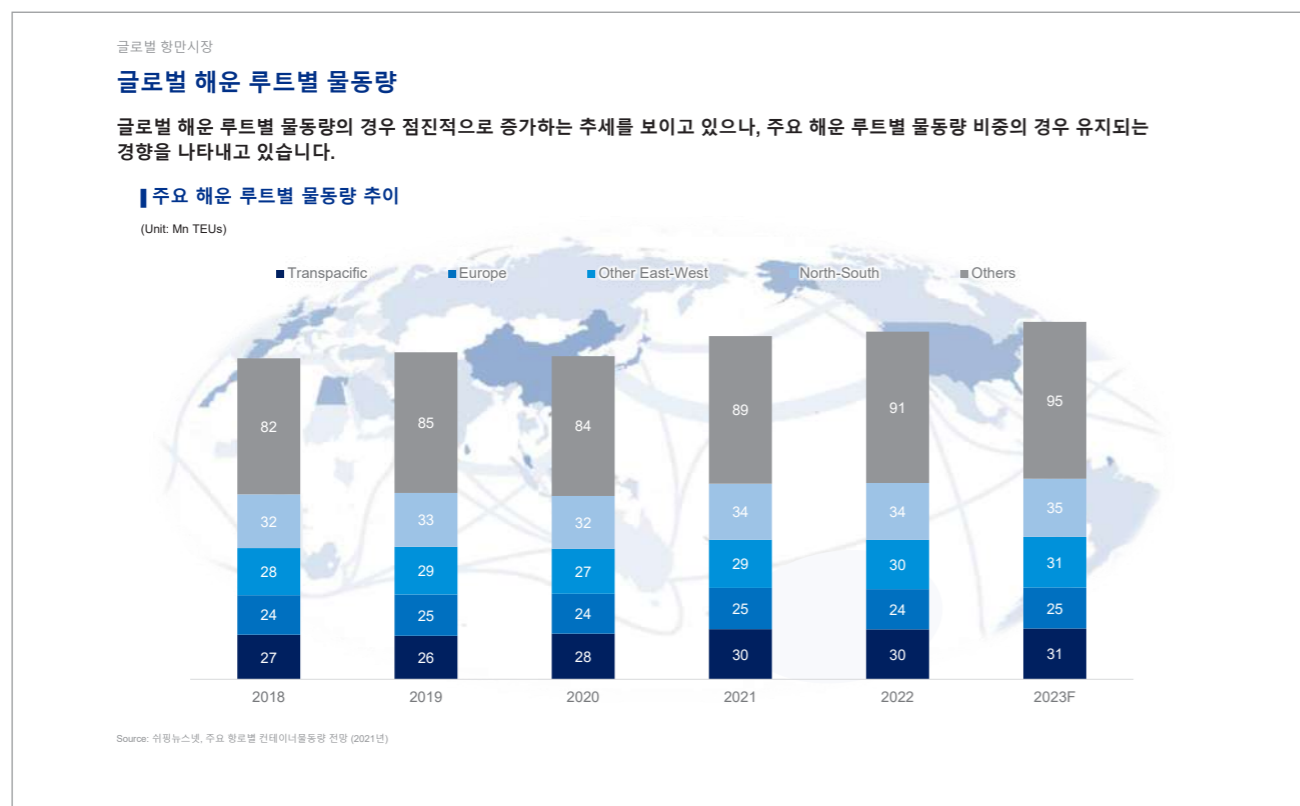
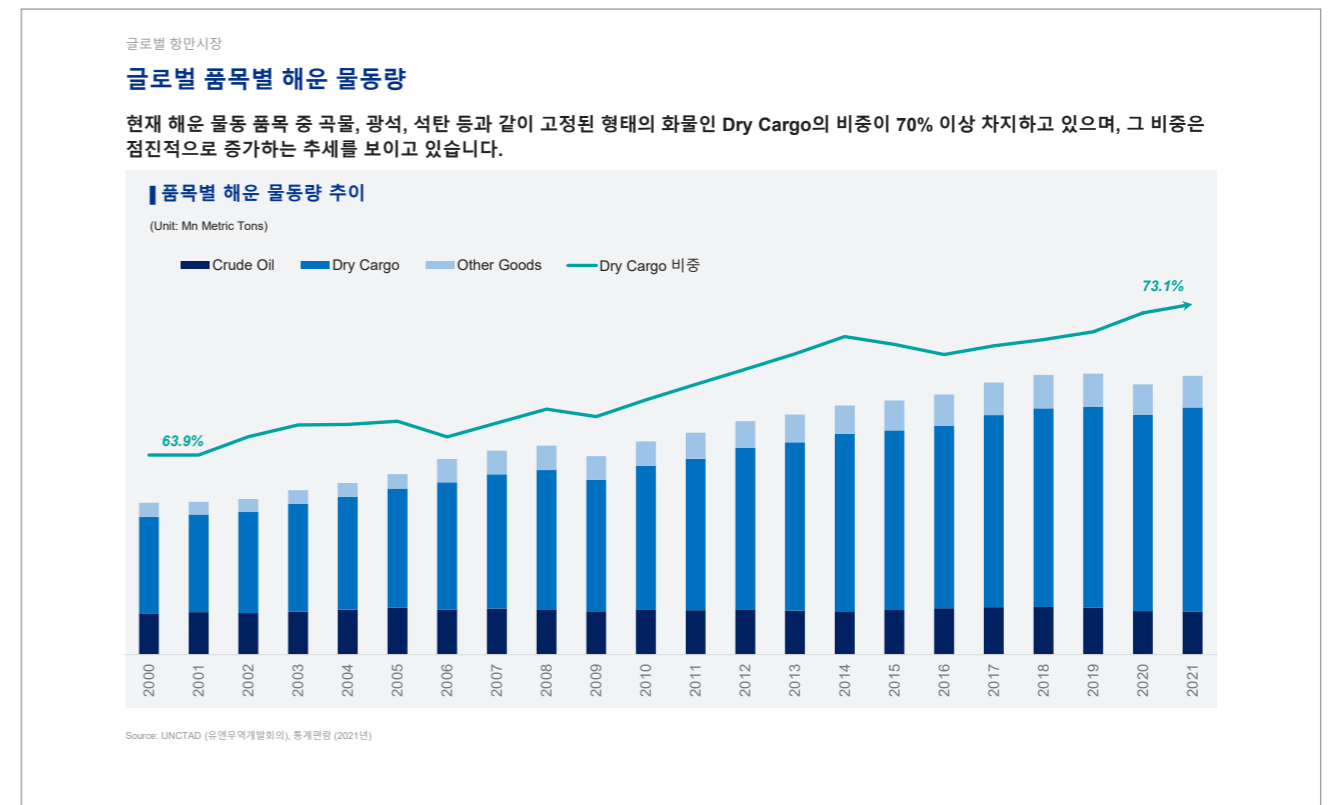
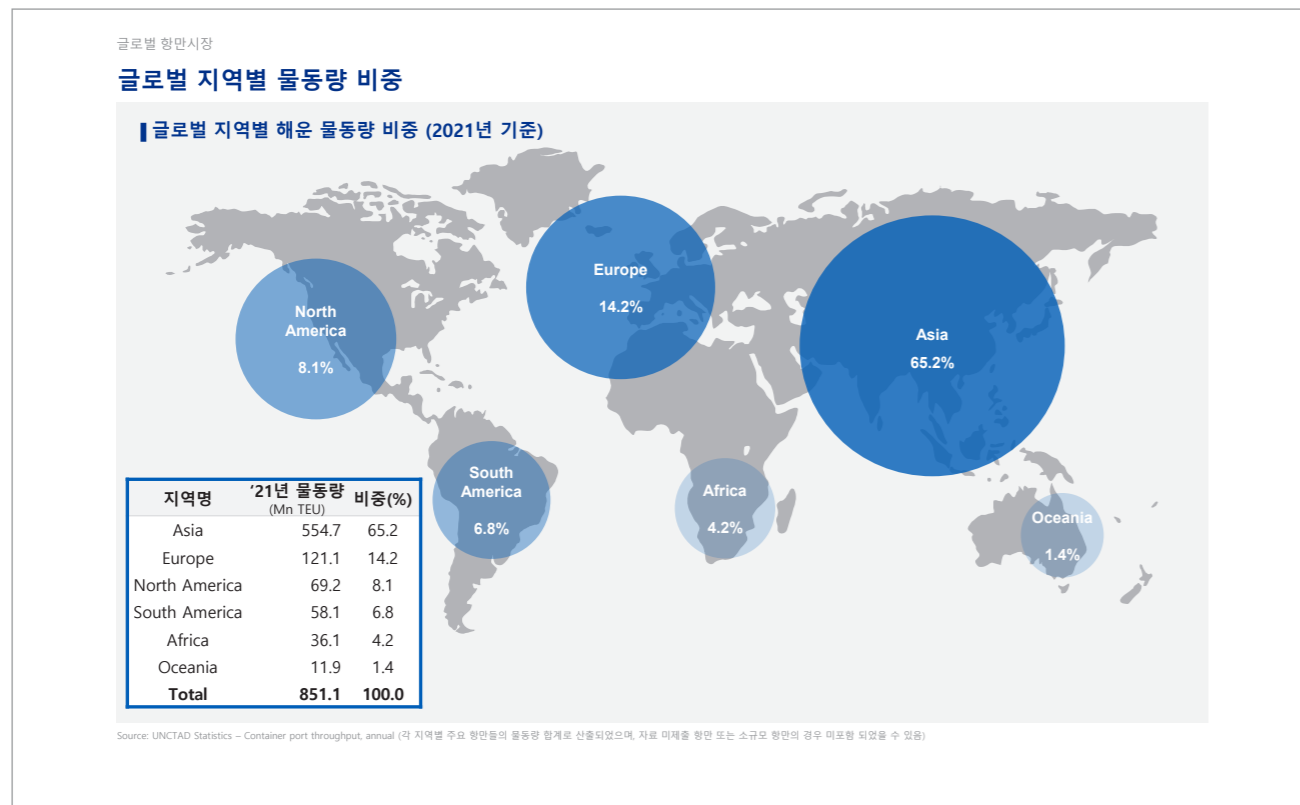
Bachelor's degree from the Wharton School of Business of the University of Pennsylvania

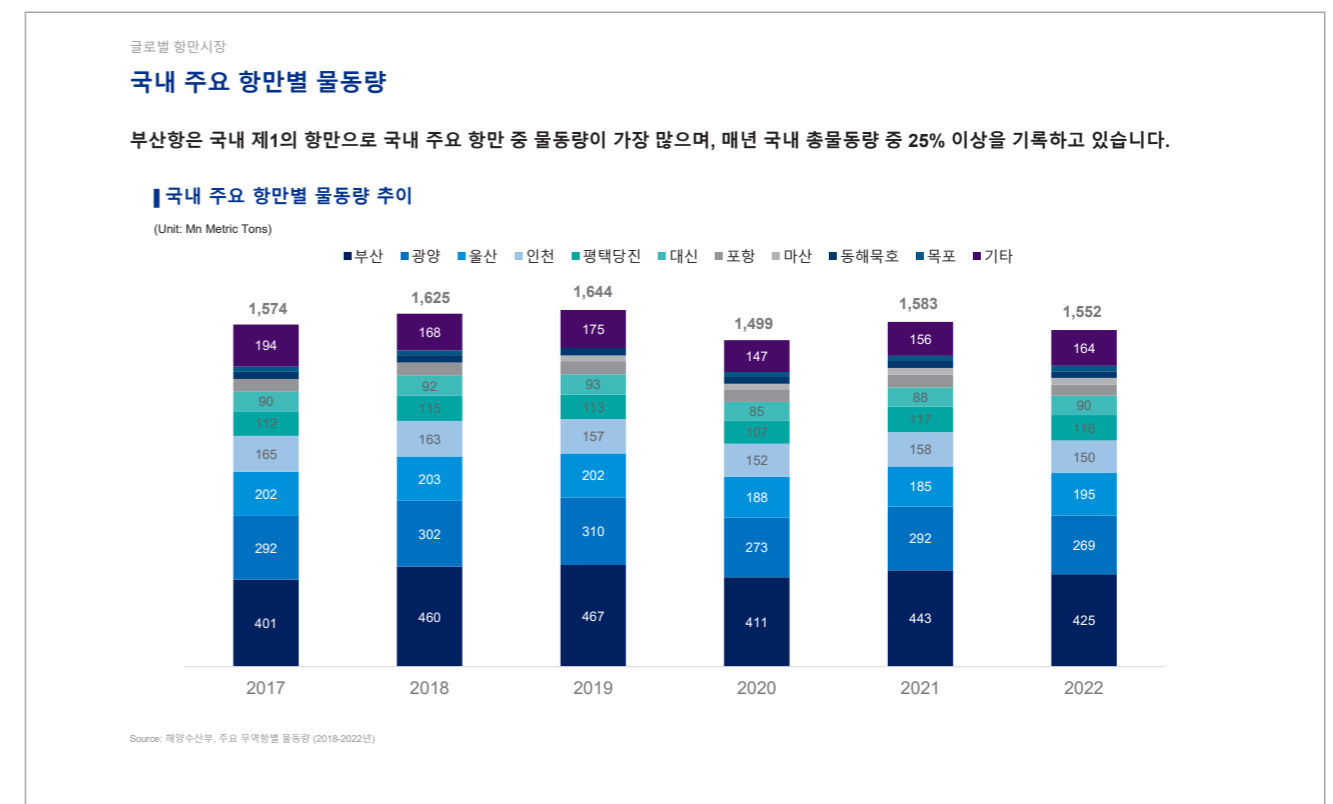
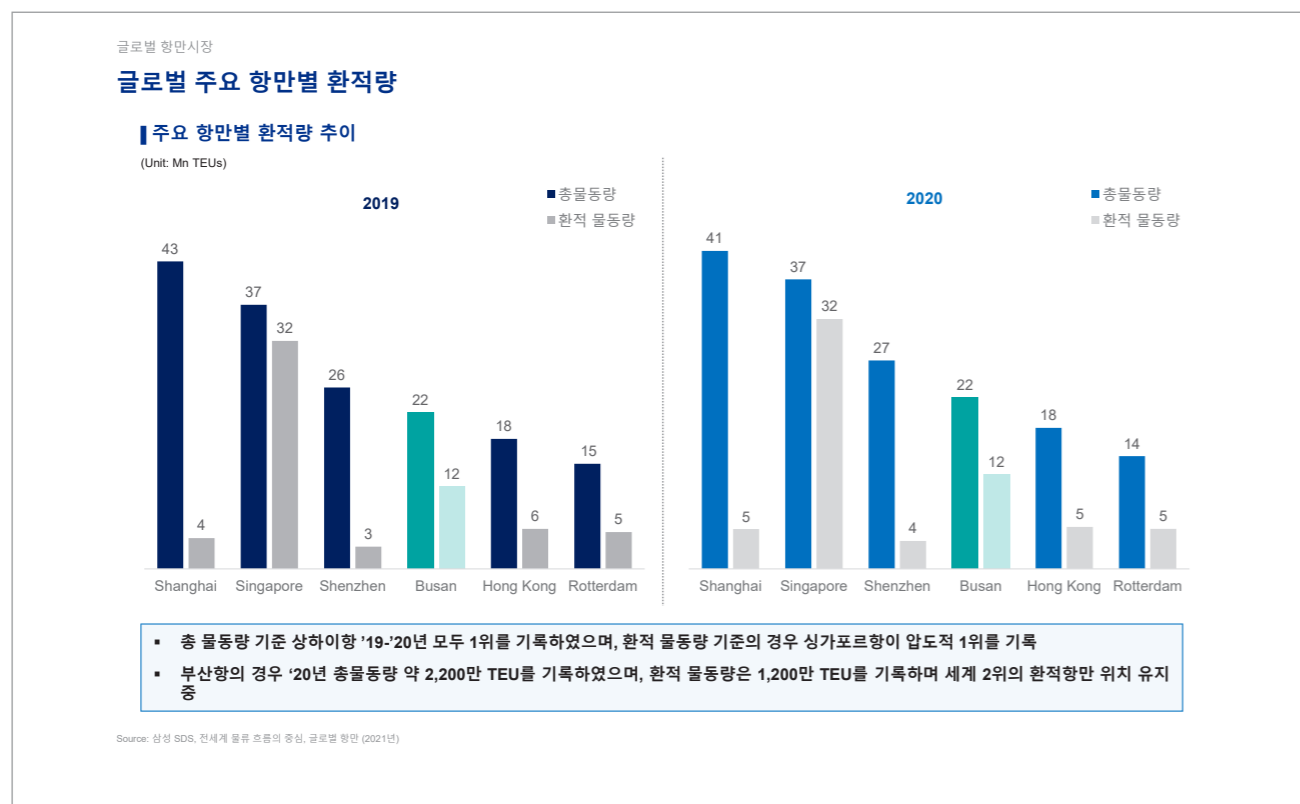
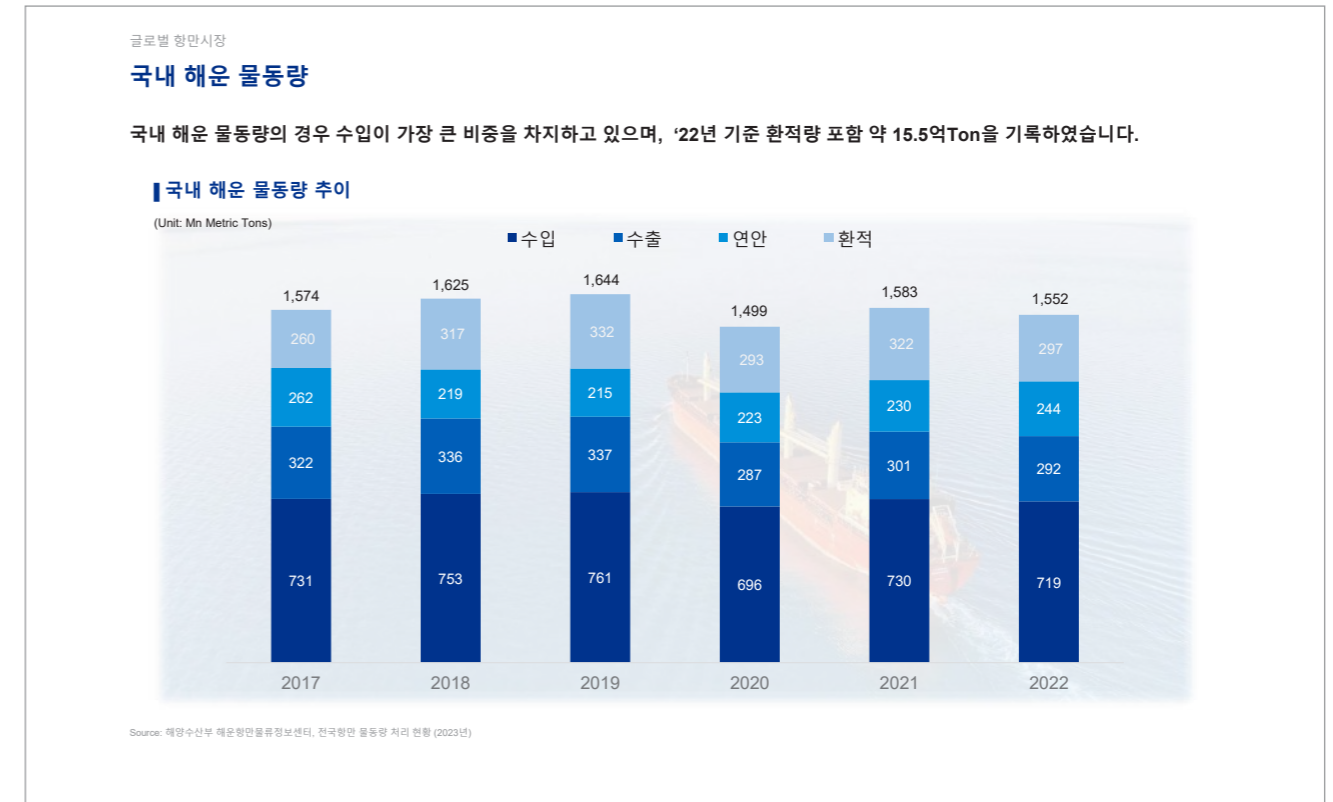
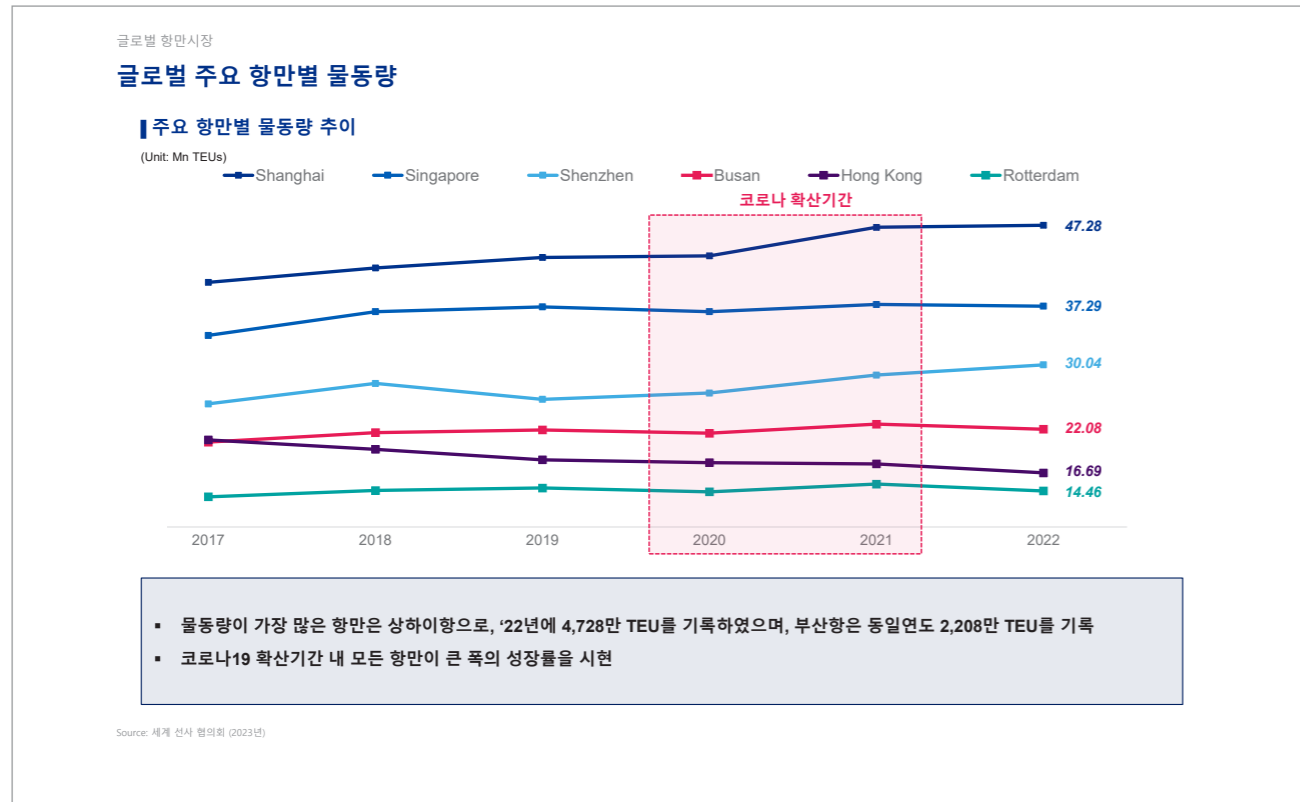


1.

2. 항만물류







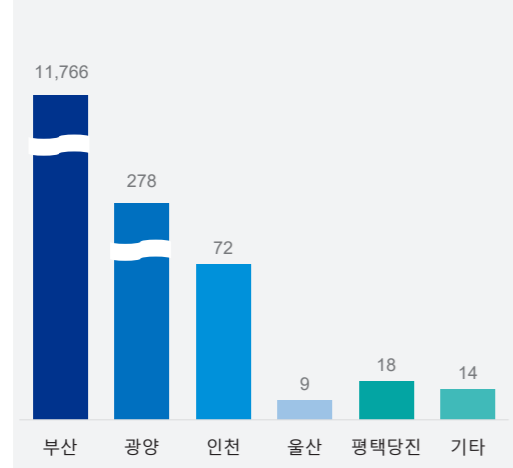
글로벌 항만시장

국내 주요 항만별 환적량

국내 총 환적량은 2022년 기준 1,200만 TEU를 상회하고 있으며, 부산, 광양, 인천, 울산 등 순으로 높은 환적량을 기록했습니다.

2022년 국내 주요 항만별 환적량 추이

(Unit: '000 TEUs)



항만명	2017	2018	2019	2020	2021	2022
부산	10,225	11,429	11,638	12,020	12,273	11,766
광양	442	585	580	371	331	278
인천	24	26	33	69	54	72
울산	2	5	6	4	5	9
평택·당진	5	6	12	12	11	18
기타	12	12	14	11	16	14
총계	10,710	12,063	12,283	12,487	12,690	12,157

Source: 해양수산부 해운항만물류정보시스템, 항만별 컨테이너 화물 처리 실적 (2023년)

항만물류 금융·투자 시장

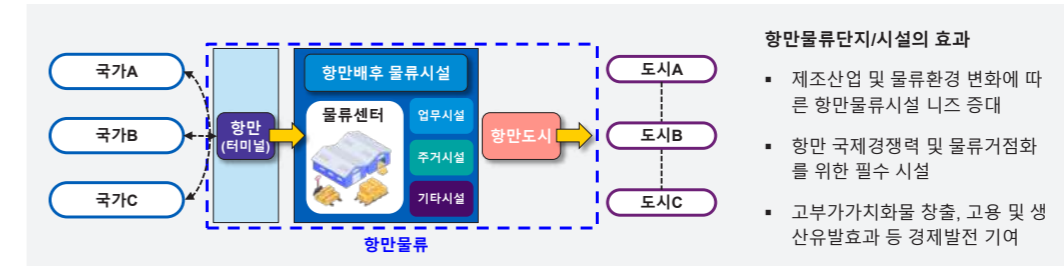
항만물류 개요

항만물류

- 항만에서 화물이 공급자로부터 수요자에게 전달될 때까지 이루어지는 하역·보관·가공·운송 등 일련의 처리 과정 전반을 항만 물류라 함

항만배후 물류단지/물류센터의 필요성

- 항만 배후 물류단지/물류센터는 항만과 연계하여 기본적인 환적, 집배송 보관 뿐만 아니라 추가적인 부가가치서비스 및 물류서비스를 수행하는 종합 물류기지
- 항만물류는 항만터미널을 통하여 전달된 화물이 항만 배후 단지 내 물류센터로 운송되어 보관, 가공 및 유통되는 일련의 과정이며, 이에 따라 **항만과 항만 배후 물류단지가 유기적으로 연결되어 있는 것이 항만물류 경쟁력을 갖추는데 필수적**



항만물류단지/시설의 효과

- 제조산업 및 물류환경 변화에 따른 항만물류시설 니즈 증대
- 항만 국제경쟁력 및 물류거점화를 위한 필수 시설
- 고부가가치화물 창출, 고용 및 생산유발효과 등 경제발전 기여

Source: PwC Korea Industry Report (February 2023)

1.

2. 항만물류

항만물류 금융·투자 시장

글로벌 항만물류 트렌드

글로벌 항만물류는 대형화/복합화를 통한 항만물류 기반시설 확충, 스마트 항만물류 구축을 통한 물류 효율화 및 친환경 시설로의 전환 트렌드를 맞이하고 있습니다.

대형화·복합화

- 항만물류 혼잡도 해소를 위한 보관/처리가능 Capa. 및 물류시설 규모 확대 도모
- 단순 운송·보관이 아닌 제조, 가공, 유통 및 부가서비스 제공이 가능한 복합물류시설 조성을 통한 물류 효율화 제고

스마트·디지털화 (Digital Transformation)

- 자동화·지능화 시스템 기반 화물 물류흐름 최적화 (스마트항만, 자동화시스템, 통합관제)
- IT 첨단기술 적용에 따른 물류 최적화, 효율성 향상 등이 나타나고 있으며, 디지털 전환은 더욱 가속화될 전망

친환경(ESG)

- EU의 2050년 탄소중립 목표에 따라 글로벌 기업들의 탄소배출 저감 니즈 ↑
- 친환경/스마트 장비 도입, 신재생에너지 사용 등을 통한 친환경 항만물류 인프라 확충

대형화/복합화, 디지털화, 친환경 트렌드에 따라
글로벌 항만들은 현대식 항만물류시설 확충에 총력을 기울이고 있는 상황

Source: Marine Environment Protection Committee

항만물류 금융·투자 시장

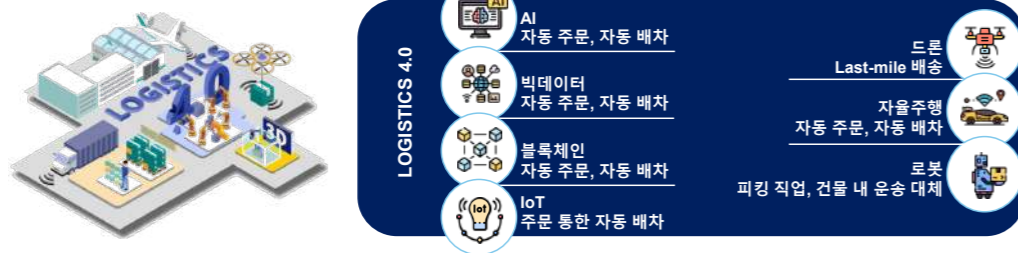
물류 패러다임의 변화

IT 기술 발전에 따라 물류산업이 첨단화 및 고도화되고 있으며, 현재 물류로봇, 자동운전 등에 따른 인력 절감 및 공급망 전체에 대한 물류기능이 연결됨에 따라 물류 효율성이 증대되고 있습니다.

물류 패러다임의 변화

물류 1.0 수송의 기계화	물류 2.0 설비의 기계화 및 자동화	물류 3.0 물류관리의 시스템화	물류 4.0 IoT를 통한 물류 자동화
<ul style="list-style-type: none"> 화물차, 철도에 의한 육상 수송의 고속화 및 대용량화 중기선, 기선 보급에 의한 해상 수송의 확대 	<ul style="list-style-type: none"> 자동화 창고, 자동 분류기 등의 실용화 해상 수송의 컨테이너화에 의한 육상 일관수송의 실현 	<ul style="list-style-type: none"> WMS, TMS에 의한 물류관리의 시스템화 수출입·항만 관련 정보처리 시스템 도입에 따른 전자화 	<ul style="list-style-type: none"> 물류로봇, 자동운전 등의 보급에 의한 인력 절감화 공급망 전체에서 물류 기능이 연결되어 평준화

Logistics 4.0



Source: Deloitte Consulting

항만물류 금융·투자 시장

물류센터의 자동화/첨단화

온라인 거래량의 증가, 국가간 무역량의 성장 등에 대응하기 위하여 물류센터를 중심으로 한 물류 자동화/첨단화 트렌드가 나타나고 있습니다.

프로세스별 자동화 기능

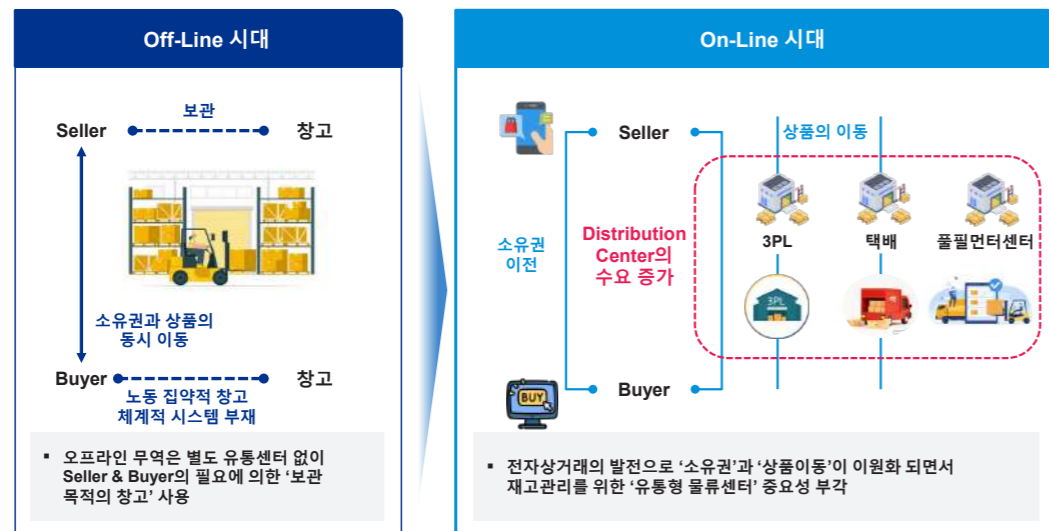


Source: Deloitte Consulting
¹DAS (Digital Assorting System, 물류 피킹 솔루션 시스템): 거래처별로 제품 순서에 따라 판매작업을 진행하는 방식.
²DPS (Digital Picking System): 물류센터 내 해당 상품 수령하는 디지털로 표시하는 방식.
³DPC (Digital Picking Cart): 카트에 부착된 연 표시장치로 확인 가능 제품을 피킹하는 방식.

항만물류 금융·투자 시장

유통형 물류센터(DC) 수요 증가

온라인 시대 이커머스의 발전으로 효율적인 물류 보관 및 유통의 중요성이 부각되면서 유통형 물류센터(Distribution Center)의 수요가 높아지고 있습니다.



Source: Deloitte Consulting

항만물류 금융·투자 시장

글로벌 항만물류 인프라 고도화

IoT 기반 스마트 기술의 발전, 친환경 기술 적용, 물류 효율성 제고를 위한 통합관제 등에 따라 항만과 연계한 항만물류의 기능은 더욱 고도화되고 있습니다.

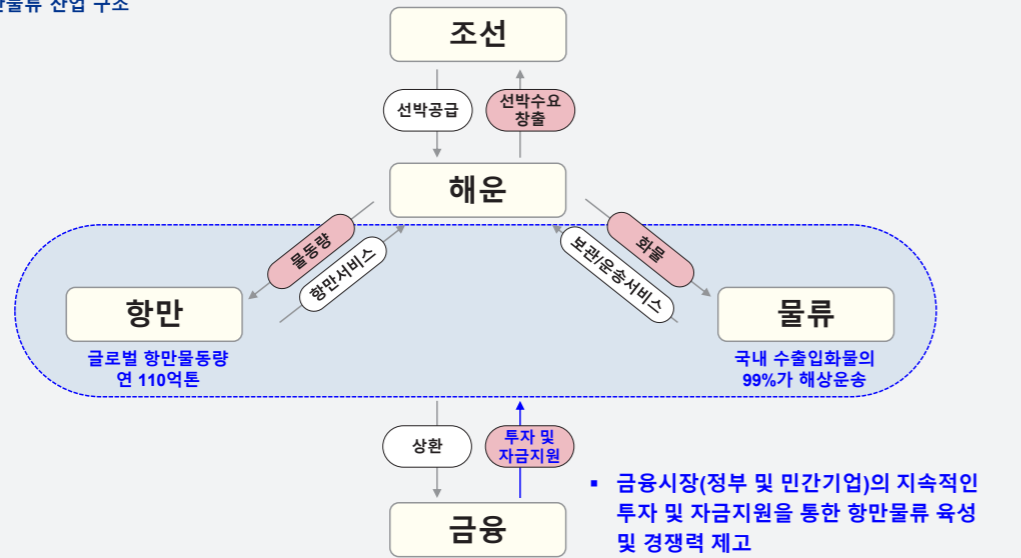


Source: Smart Logistics

항만물류 금융·투자 시장

항만물류 금융을 통한 산업 경쟁력 제고

항만물류 산업 구조



Source: PaC Korea Industry Report (February 2023)

항만물류 금융·투자 시장

국가별 항만물류 투자 및 지원 사례 - 중국 난사 국제 항만배후 물류센터 프로젝트

중국: 난사 국제 항만배후 물류센터 프로젝트



- | | |
|-------|--|
| 투자 계획 | 광저우 항만 그룹, 2023년부터 광저우 난사 항구에 향후 5년 동안 350억 위안(약 51억USD)을 투자할 계획 |
| 누적 투자 | 과거 총 500억 위안(약 73억USD)을 투자하여 항구 물류 인프라 확장과 항상에 초점을 두고 있음 |
| 투자 목표 | 난사 지구는 냉장 물류 산업을 1,000억 위안(약 146억USD)규모로 확장, '일대일로' 투자를 통한 지역 발전 도모 |
| 주요 시설 | 난사 국제 냉장 할당 센터: 총 비용 19.6억 위안(약 3억USD), 면적 약 21만㎡, 약 46만 톤의 저장 용량 제공 |

Source: Global Times, Port of Guangzhou strives the BRI by putting investment in infrastructure carving out new business (April 2023)

항만물류 금융·투자 시장

국가별 항만물류 투자 및 지원 사례 - 미국 해사청 항만 인프라 개발 프로그램

미국: 해사청 항만 인프라 개발 프로그램



- 미국 해사청, 2021년부터 항만인프라 개발프로그램(PIDP)을 통해 항만시설 개선, 국가 공급망을 강화하기 위해 US\$ 7.3억의 보조금을 추진함
- 화물 물량의 급증과 늘어난 재고분량뿐 아니라 미국 인프라 투자를 보충하려는 노력의 일환
- 미국 항만당국협회(AAPA), 연방 회계 연도를 통해 PIDP 노력을 계속 확대할 것이라 강조함
- 가장 큰 보조금 중 하나는 메사추세츠의 Salem Wind Port 개발의 일환으로 US\$ 3,000만 사용하여 마살링 지역으로 재개발할 전망임

Source: Marine News, 미국 항만인프라 7억3000만불 보조 (2022년 10월)

항만물류 금융·투자 시장

국가별 항만물류 투자 및 지원 사례 - 중국 청도항 5G 기반 스마트항만 추진

중 청도항: 세계 최초 5G 기반 스마트항만으로 탈바꿈



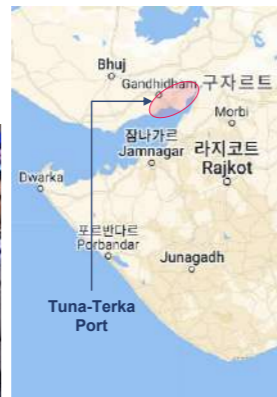
- 칭다오항은 첨단 기술과 높은 자동화 수준을 갖춰 2017년부터 아시아 최초로 완전 자동화 터미널로 운영 시작
- 2.4만 TEU 규모의 선박을 수용하며, 연간 5.2 백만 TEU의 적재량을 처리할 수 있는 세계에서 가장 큰 자동화 터미널임
- 지능형 오버헤드 컨테이너 배송 시스템이 자동화 터미널에서 운영을 개시되어 효율적인 컨테이너 운송을 개선 중임
- 중국 정부의 정책지원 및 금융지원아래 "수소 + 5G" 스마트 생태 터미널 구축, 수소 크레인 기술을 도입하고 수소 에너지 솔루션을 적용하여 탄소 및 이산화황 배출량을 크게 줄이는 친환경 스마트 항만으로 변모 중

Source: Port Technology International, Qingdao Port becomes the world's first hydrogen-powered and 5G intelligent port (June 2022)

항만물류 금융·투자 시장

국가별 항만물류 투자 및 지원 사례 - 인도 구자라트 항만 터미널 및 물류 인프라 개발

두바이: DP World 인도 구자라트항 항만 터미널 개발



- 두바이 DP World, Deendayal 항만 당국과 협력하여 2023년부터 Kandla의 Tuna-Tekra에 컨테이너 터미널 개발/투자 예정
- 이 프로젝트의 총 투자금액은 USD\$ 5.1억으로 예상되며, 공공 개인 파트너십(PPP)을 통해 가치를 창출할 것으로 전망
- 이 협약은 30년간의 Build-Operate-Transfer(BOT) 모델 기반으로 체결되며, 20년간 추가 연장 가능한 조항이 포함
- 2027년에 완공 시, 연간 약 220만 TEU를 처리할 수 있는 최신 기술로 구축되며, 1.8만 TEU 이상 규모의 최신 선박 수용 가능할 예정

Source: DP World 홈페이지, DP World to Invest \$510 MILLION to Develop Tuna-Tekra Mega-Container Terminal in India (August 2023)

항만물류 금융·투자 시장

국가별 항만물류 투자 및 지원 사례 - 네덜란드 로테르담항 물류단지

로테르담항 배후 물류단지

구분	Maasvlakte	Botlek	Waal/Eemhaven
총면적	34,000m ²	1,040,300m ²	650,000m ²
창고면적	20,000m ²	300,000m ²	200,000m ²
특징	제조 및 물류 업체의 유럽지역 물류센터 역할 수행	석유화학 제품 특화	기술집약적 전자산업 물류기지로 특화

- 네덜란드 로테르담항은 Maasvlakte, Botlek, Waal/Eemhaven 등 3개 항만 배후 물류단지/센터를 운영중
- Maasvlakte를 중심으로 보관 및 유통 등 물류 기능 이외에 조립, 포장, 라벨 링, 품질검사 등 다양한 물류 관련 부가가치서비스를 제공함으로써 로테르담항의 경쟁력 확보 및 제고
- Maasvlakte 물류단지를 비롯한 로테르담항의 개발 및 운영은 로테르담시의 공공사업국, 도시개발 및 주택서비스 등 다수의 서비스 부문들이 참여하는 하나의 별도 공기업이 투자 및 개발을 주도

Source: Port of Rotterdam

항만물류 금융·투자 시장

국가별 항만물류 투자 및 지원 사례 - 독일 함부르크항만 smartPORT 프로그램

독일: 함부르크항만 민관협조체제 통한 smartPORT 프로그램 주도



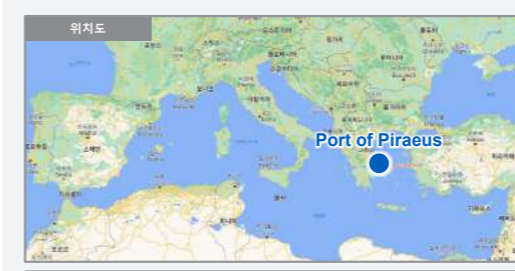
- 유럽에서 두 번째로 큰 항구로, 유럽 전체 수출 물량의 20%를 처리하고 있는 유럽 경제의 관문
- 함부르크 항만공사(HPA 주도로 개발된 'smartPORT' 프로그램을 통해 2015년부터 물류부문(smartPORT logistics) 12개 프로젝트, 에너지부문(smartPORT energy) 5개 프로젝트 수행 중
- 민관협조체제(Public-Private-Partnership)를 통해 시 정부와 200여 개의 회사들이 참여하는 독특한 체제를 갖춘
- 글로벌 IT 기업 Cisco와 함께 사물인터넷(IoT) 기술을 적용하여 스마트화 추진 중

Source: 물류신문, Part 3. 해외 스마트항만, 어디까지 와 있다? (2020년 10월)

항만물류 금융·투자 시장

수출신용기관/정책금융기관의 항만물류 금융 지원 사례 - EIB의 그리스 Port Piraeus 투자

항만물류 금융 지원 사례: 유럽투자은행(EIB)



유럽투자은행(EIB)의 그리스 Port of Piraeus 투자

- 그리스 Port of Piraeus는 그리스 남부 지중해에 위치한 항구로 흑해 및 발칸반도로의 접근성 보유
- 그리스 최대의 항만으로 2021년도 기준 컨테이너 물동량 531만TEU로 세계 28위를 기록
- 2019년 4분기 유럽투자은행(EIB)은 Port of Piraeus 항만 확대 및 현대화를 위하여 대출투자를 결정
- 20년 장기대출 구조로 140백만EUR을 지원(CEXIM 중국수출입은행의 지급보증) (Port of Piraeus 지분 51%를 中國 해운사인 COSCO가 보유)
- EIB의 지원금은 신항 물류센터 개발, 컨테이너 터미널 개선을 포함한 전반적인 Port of Piraeus 시설 개선에 사용

EUR 140만규모 20년 장기대출

Source: European Investment Bank News Release 11 November 2019 - https://www.eib.org/en/press/all/2019-303-eur-140-million-eib-backing-for-port-of-piraeus-transformation

항만물류 금융·투자 시장

수출신용기관/정책금융기관의 항만물류 금융 지원 사례 – Afreximbank의 지부티항만 투자 지원

항만물류 금융 지원 사례: 아프리카 국제수출신용기관



Afreximbank의 지부티항만 개발자금지원



- 지부티항은 지정학적으로 홍해와 아덴만에 위치하여 동부아프리카 지역의 허브 항만으로, 지부티의 유일한 국제항만이자, 아프리카의 주요 환적항
- 아프리카 수출입은행(Afreximbank)은 '23.7월 지부티항만 배후산업단지인 Damerjong 산업개발구역지구(DFTZ) 개발 프로젝트 위해 총 USD 1.5bn 자금지원 단행 (Afreximbank USD 1.2bn, 지부티 현지 은행 USD 0.35bn 참여)
- 이번 투자는 지부티의 지역 환적 및 물류 허브로의 도약 달성을 위한 인프라 개발이 주요 목적임
- 인근 국가 에티오피아 및 소말리아에 대한 해운(해양) 서비스 기반인 지부티의 경제 활성화를 위한 해운 관문을 제공하여 아프리카 내 해상 무역 촉진할 전망이다

Source: Afreximbank Press Release 17 July 2023 - https://www.afreximbank.com/afreximbank-leads-us155-million-strategic-facility-to-djibouti-ports-and-free-zone-authority/

항만물류 금융·투자 시장

민간기업의 항만물류 투자사례 (해운(항만) → 물류진출)

글로벌 해운 리더기업인 Maersk는 친환경, 스마트, 자동화 시스템을 갖춘 항만 배후 물류센터를 개발하여 항만 주요 화주들과의 접근성을 높이는 전략을 추진하고 있습니다.

해운회사의 항만물류 투자 사례: 머스크(Maersk)

회사명	MAERSK
유형	Public Company (Nasdaq Copenhagen)
본사	Copenhagen, Denmark
컨테이너 선박수	730+개 선박, 67개 터미널
“(항만)물류센터에 투자 확대와 풀필먼트 역량 강화는 우리의 전략적 성장에 필수적” - Dominic Gates, CEO of Omnichannel Fulfillment, Maersk Asia Pacific	

중국 상하이 린강자유무역지구 스마트 물류시설 개발사업

- '22.12월 Maersk는 중국 상하이항 배후 린강자유무역지구내 물류시설 개발을 위한 토지를 매입
- 사업지는 Maersk의 중국 내 첫번째 친환경 스마트 플러그인 물류시설이 될 예정으로 총 174백만USD를 투자하여 2024년 3분기 개소한다는 계획



싱가포르 Jurong West 항만배후 물류센터(World Gateway 2)

- Maersk는 '23.7월 Tuas Mega Port Jurong West 내 10만m² 물류센터 개발 개시
- 사업지는 싱가포르에서 가장 큰 자동화 보세 창고인 World Gateway 1과 연계 가능 입지로, 3만 Pallet 보관가능 자동화시스템(AS/RS)을 구축하여 항만물류 수요에 대응한다는 계획



파키스탄 Port Qasim 복합물류시설 투자

- Maersk가 투자한 파키스탄 Port Qasim 배후 Integrated Logistics Park '22.11월 개소
- 해당 물류시설은 Port Qasim의 핵심 물류시설로, 리테일부터 첨단 기기까지 다양한 품목의 수출입 화물이 최첨단 WMS 하에 관리되고 있음



Source: Maersk Press Release, Maersk Annual Report 2022

항만물류 금융·투자 시장

수출신용기관/정책금융기관의 항만물류 금융 지원 사례 – IFC의 라오스 Dry Port 금융지원

항만물류 금융 지원 사례: 국제금융공사(IFC)



IFC의 Thanaleng Dry Port/Vientiane Logistics Park 지원



- Thanaleng Dry Port는 라오스의 수도 Vientiane에 위치한 드라이포트(라오스는 바다를 접하고 있지 않으며, 내륙에 위치한 터미널이나 해상화물이 철도나 트럭으로 환적되어 내륙의 목적지까지 수송될 수 있도록 환적 관련 시설을 갖춘 내륙항이 드라이포트)
- 국제금융공사(IFC)는 '22년 라오스 Vientiane Logistics Park (VLP)의 개발 및 시설 건설, 설비 구매를 목적으로 USD 67mm를 주선
- 이중 IFC는 자체자금으로 USD 27mm, IFC가 보유한 개발도상국 투자촉진 파이낸싱 패키지로 USD 21mm 참여
- 금번 지원금은 라오스의 대중 무역 활성화 및 중국, 태국, 말레이시아, 싱가포르와의 환적량 증대 기여를 기대

Source: IFC Project Information & Data Portal

항만물류 금융·투자 시장

민간기업의 항만물류 투자사례 (물류 → 항만진출)

미국의 글로벌 물류투자사 ProLogis는 미국 및 해외의 항만 배후 물류센터에 대한 지속적인 투자를 진행하고 있습니다.

물류회사의 항만물류 투자 사례: 프로로지스(ProLogis)

회사명	PROLOGIS
유형	Public Company (NYSE:PLD)
본사	San Francisco, CA
물류시설 면적	전세계 1억 m ²
고객수	6,700여개 화주
운전자산규모	USD 209 bn
진출 국가	4개 대륙(북미, 남미, 유럽, 아시아) 19개 국가
Services	물류센터 투자, 개발, 운영

미국 LA항 배후 물류센터 부지 투자

- LA/LB항은 물동량 기준 19백만TEU 항만으로 미국 해운 컨테이너 수입물동량의 38%, 해운 수출 컨테이너 물동량의 26%를 처리
- 2019년 Prologis가 41백만USD에 취득한 산단 내 물류센터 부지는 LA항 배후에 위치하고 있으며, LA항 및 LB(Long Beach)항 모두에 접근성이 뛰어나



중국 선전 Yantian Port 배후 물류센터 개발

- 2007년 ProLogis는 중국의 Yantian Port Group과 함께 중국 선전시의 Yantian Port 배후단지에 ProLogis Park를 개발
- 총 48백만USD를 투자하여 약 7만평 규모의 대규모 수출입 보세창고로 사용



Source: ProLogis Website

항만물류 금융·투자 시장

민간기업의 항만물류 투자사례 (물류 → 항만진출)

미국의 글로벌 콜드체인 물류운영사 Americold는 항만배후단지 콜드체인 물류시설 개발, 글로벌 항만 운영사와의 전략적 파트너십 체결을 통하여 증가하는 항만 콜드체인 물류 수요에 대응하고 있습니다.

물류회사의 항만물류 투자 사례: 아메리콜드(Americold)

회사명	
유형	Public Company (NYSE:COLD)
본사	Atlanta, GA
물류시설 수	전세계 242개 물류센터
고객수	4,400여개 화주
Pallet 수	5.4억개
온도조절 물류시설 시장 내 M/S	5.8%(세계 2위)
Services	냉동/냉장/정온 보관서비스 급속냉동(Blast freezing) 포장, 가공 등 부가서비스

Americold 사, 美 사바나항 배후 콜드체인 물류시설 투자

- 조지아주 사바나항은 미국에서 가장 빠르게 성장중인 항만 중 하나로, 남부의 지리적 이점을 기반으로, 유럽·남미 진출이 용이
- Americold는 사바나항의 물류업체 PortFresh 홀딩스를 인수함과 동시에 사바나항 항만물류 수요 증진을 위하여 '20년 항만 배후 단지에 140만㎡ 규모의 콜드체인 물류시설을 건립

글로벌 항만 운영사인 DP World와의 전략적 파트너십 체결

- '22년 4분기 Americold는 글로벌 항만운영사 DP World와 전략적 파트너십 체결
- Americold는 DP World가 운영하는 항만에 최신식으로 설계된 콜드체인 물류시설을 구축하여, 증가하는 항만 콜드체인 물류 수요에 충족시킨다는 계획

Source: Americold Investor Presentation Fall 2023

항만물류 금융·투자 시장

한국초저온 인천신항 콜드체인 물류시설 개요

한국초저온은 인천시 연수구 송도동에 위치한 인천신항 배후단지 콜드체인 특화구역 내 연면적 규모 약 10만평 규모의 신축 LNG냉열활용 콜드체인 항만 인프라 시설을 구축하는 프로젝트를 진행하고 있습니다.

인천신항 개발사업 소개

Under development

인천신항

프로젝트	인천신항 배후단지 LNG냉열활용 콜드체인 시설
도입시설	초저온·냉동·냉장·정온 시설 및 그 부속 시설
연면적	328,304.13㎡ (99,312평)
건폐율/용적률	62.5% / 211.4%
규모/높이	창고동 B1~7F, 지원동 B1~4F / 최대높이 56.1m
특징	LNG냉열 활용 친환경·고효율 / 초저온 온도대 구현 전 층 램프형 상하차 접안 / 자동화 창고시설(ASRS)

자산특징

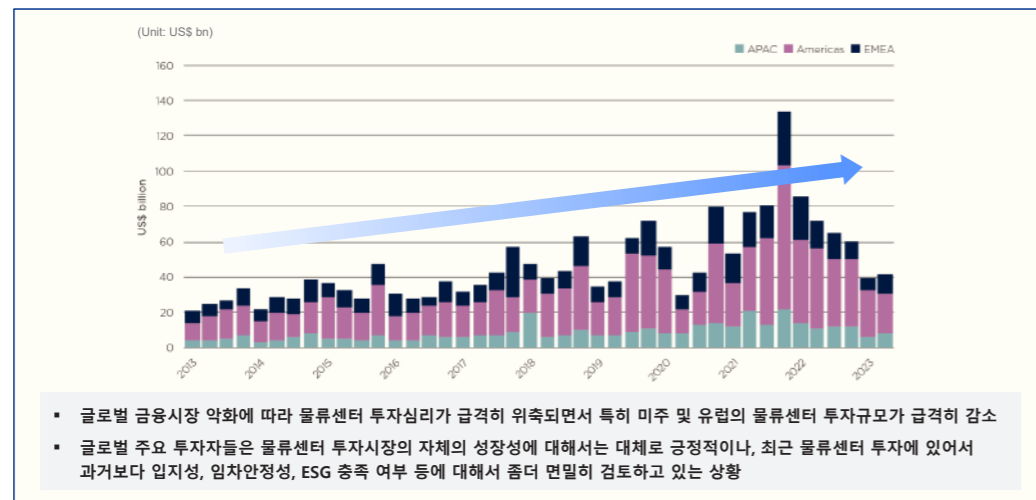
- LNG 냉열 직배관: LNG 인수기지 인접하여 에너지 공급에 유리
- 입지적 우수성: 중국 및 동남아와 연결되는 아시아권 수출입교역의 전초기지로 활용 가능하며, 송도 바이오클러스터와 인접하여 바이오의약품 물류 연계 용이
- 편리한 교통입지: 수도권 최단거리 국제항인 인천신항 배후단지소재로 제1, 제2, 제3경인고속도로를 통하여 서울 및 수도권과 연결 30분 내에 외곽순환고속도로, 영동고속도로, 인천국제공항 및 김포공항 접근 가능한 편리한 교통 입지 보유

항만물류 금융·투자 시장

글로벌 물류센터 투자 규모

글로벌 물류센터 투자 시장 규모는 2023년 2분기 기준 USD 416억 수준으로 전년 대비 약 50% 감소하였으나, 2019년 동기 대비 여전히 10% 높은 수준이며, 투자자들은 장기적인 관점에서 물류센터 및 물류산업에 대하여 긍정적인 태도를 유지하고 있습니다.

글로벌 물류센터 투자시장 추이



Source: Savills Research (MSCI Real Capital Analytics)

항만물류 금융·투자 시장

한국초저온 인천신항 콜드체인 물류시설 특징

인천신항 콜드체인 물류시설은 LNG 냉열을 활용하여 운영되는 친환경 항만배후 물류인프라 시설이며, 4온도대 보관 서비스 및 급속 냉동 서비스, 자동화 시스템 및 IoT 기반 통합 물류 관제시스템을 통하여 항만 활성화에 기여할 계획입니다.

인천신항 콜드체인 물류시설의 특징

친환경 에너지원인 LNG냉열을 활용하여 ESG 가치 제고

- 연료사용 목적으로 영하 162도의 LNG를 기화시키는 과정에서 발생하는 차가운 냉기(LNG 냉열)를 사용하여 콜드체인 시설 운영
- 냉동/냉장을 위한 압축기가 불필요해, 기존 전기식 대비 80% 전력비 절감가능, 탄소배출 절감에 따른 글로벌 ESG 스탠다드 충족

항만 배후 글로벌 수출입 허브로의 활용성

- 인천신항 국제 컨테이너 전용부두를 통한 글로벌 수출입 기업들의 콜드체인 물류 허브를 제공하여 수출입 생산성 극대화

4차 산업 융복합 시설

자동화시스템

통합물류시스템

에너지관리시스템

시설관리시스템

- 최신식 자동화 시스템(AS/RS) 및 통합 물류 관제시스템을 통하여 동량 처리의 신속성, 정확성 향상 및 재고·운영비용 절감 가능

항만 인프라 활성화를 위한 프리미엄 콜드체인 시설

바이오의약품/백신

고급식자재/생동식품

특수장비, 화학약품

- LNG 냉열 활용 4온도대 보관 서비스 및 급속 냉동 서비스를 지원하여 항만 인프라 화주들의 다양한 물류 서비스 니즈를 충족

항만물류 금융·투자 시장

한국초저온 부산신항 콜드체인 물류시설 개요

본건 개발사업은 부산시 강서구 구랑동에 위치한 부산신항 배후 국제산업물류도시 내 연면적 규모 44,000평 규모의 최신식 LNG냉열활용 콜드체인 항만 인프라 시설을 구축하는 사업입니다.

부산신항 개발사업 소개



프로젝트	부산신항 배후단지 LNG냉열활용 콜드체인 시설
도입시설	초저온·냉동·냉장·정온 시설 및 그 부속 시설
연면적	145,659.4 m ² (44,062평)
건폐율/용적률	63.7% / 225.9%
규모/높이	창고동 B3~5F / 최대높이 58.5m
특징	LNG냉열 활용 친환경·고효율 / 초저온 온도대 구현 전 층 램프형 상하차 집안

자산특징

- 최신식 현대화 콜드체인 물류센터: 부산시의 노후화 냉동냉장 창고를 보완할 수 있는 현대화 물류센터로 초저온 및 급속동결 설비를 갖춘 동남권 허브 기능 가능
- 풍부한 배후 물류 수요: 부산신항 뿐만이 아니라 명지녹산단지, 부산-진해 경제자유구역이 4km 이내 위치하여 부산신항 배후단지 연계 물동량이 풍부한 입지
- 교통편의성: 반경 25km 이내 서부산IC, 동김해IC, 진해IC, 장유IC, 냉정JC, 진례JC, 대저JC 위치하여 경부고속도로 등 접근성 확보

감사합니다.

항만물류 금융·투자 시장

한국초저온 부산신항 콜드체인 물류시설 특징

본건은 부산신항 배후 국제산업물류도시에 개발되는 LNG 냉열활용 친환경 항만배후 물류인프라 시설로, 초저온 온도대가 구현된 현대적인 항만 콜드체인을 공급하여 동북아 국제물류중심 항만으로서의 부산신항 활성화에 전초기지 역할을 수행할 예정입니다.

부산신항 콜드체인 물류시설의 특징

친환경 에너지원인 LNG냉열을 활용하여 ESG 가치 제고



- 통영 LNG 인수기지에서 수송트럭을 통해 LNG를 수취, 기화 증 열 교환기를 통해 LNG냉열을 활용하는 에너지 효율적 친환경 시설
- 기존의 전기식 냉동기 대비 낮은 전력비가 소요되며 보다 안정적인 냉동이 가능하며, 높은 수준의 초저온 물류 서비스 제공 가능

물류 통합 플랫폼을 기반으로한 차별화된 물류 서비스



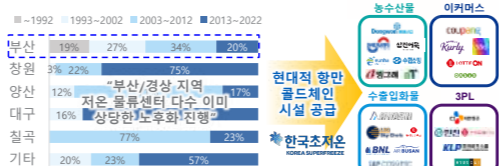
- 기업들의 핵심사업 강화 목적으로 초산업에 걸친 물류 아웃소싱 추세가 가속화되고 있으며, 이에 부산신항 콜드체인 물류시설을 중심으로 국내외 기업들에게 차별화된 물류서비스 제공 예정

부산신항을 중심으로한 항만 콜드체인 물류 허브 육성



- 2040년 최종 완공되는 부산신항 배후 글로벌 콜드체인 물류 허브의 전초기지 역할 수행

현대적 항만 콜드체인 시설 공급을 통한 화주 니즈 충족



- 부산 지역 내 3PL/e-commerce, 바이오, 백신, 특수장비, 화학 제품, 고급 식자재 등 고부가가치 제품 보관 수요를 충족하기 위한 현대적인 대형 항만배후 콜드체인 시설 제공



Shipping Session I

Drybulker Market Trend & Prospect

Ms. Louisa Follis

Head of Dry Bulk Market Analysis | Clarksons

Tanker Market Trend & Prospect

Mr. Oliver Ge

Head of Research | McQuilling

Shipping Session I

November 1st 14:45~15:15



Ms. Louisa Follis

Head of Dry Bulk Market Analysis | Clarksons

TOPIC

Dry Bulk Market Overview and Outlook

SUMMARY

CURRENT MARKET

Louisa's presentation will look at current average freight rates and examine the key factors driving the dry bulk markets today. This includes what has changed since the start of the decade / Covid period when much international business faced disruption and congestion. Louisa will look at major dry bulk trade flows – their volumes and tonne mile impact, origins and destinations and the major themes giving support to the market and adding downside pressure in the current environment. This is basis the demand for tonnage and the supply of ships into the market. Louisa will also look at asset prices – newbuilding and second hand for the various sectors.

MEDIUM to LONGER-TERM VIEW

Louisa will give an outlook of the dry bulk markets with some insight into future demand side factors and vessel supply including shipyard limitations and competition from other sectors. She will examine the key drivers and risk factors ahead that could influence market earnings. Louisa will also introduce some of the key carbon-related regulations that are impacting the dry bulk market and will continue to do so over the next few years and what this means for asset values, trading patterns and investment opportunities.

CV

Louisa Follis heads up the dry cargo analysis team for shipbroker, Clarksons and has been based in the company's office in Geneva for about two years. She joined Clarksons in early 2019 in their Singapore office. This was after 8 years at grain trader, Bunge, in Geneva where she first managed the freight analysis team and then European agriculture analysis group. Prior to this, Louisa worked as a tanker market analyst for a large shipbroker in London and Singapore. Louisa has also extensive experience as a maritime journalist working in Asia, the Middle East and Americas which followed her Master's degree in Shipping Trade & Finance from City University in London. She also has a BA Hons in South East Asian Studies and a Graduate Diploma in Law.



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Presentation

Macro Overview & Outlook

Current Market

- Freight Rates & Drivers.
- Congestion & Disruption.
- Fleet Supply
- Demand vs Supply
- Asset Values

Medium to longer-term view

- Demand Drivers
- Regulations & Prospects for Newbuildings

Conclusions

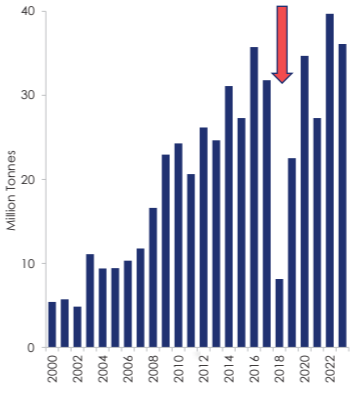


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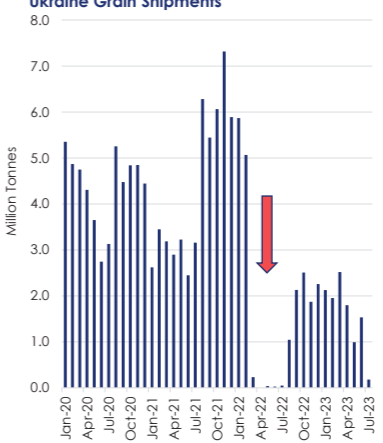
Recent Geo-Political & Economic Shocks

Huge influence on commodity & shipping markets & knock on effect into other commodities/trades/vessel types

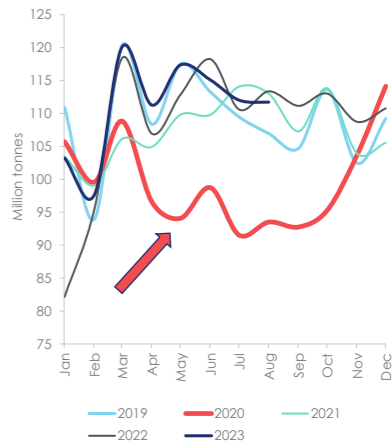
Trump Trade wars:
US Soybean exports to China



Russian Invasion of Ukraine:
Ukraine Grain Shipments



Covid Pandemic:
Global Coal Shipments



CLARKSONS KOBIC | Market Outlook | Clarkson

5

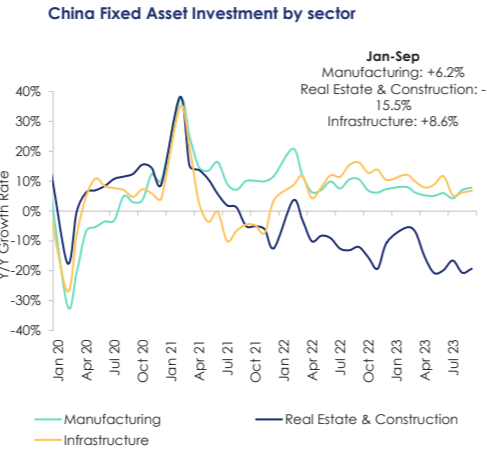
Macro Overview & Outlook

2023 recovery for Chinese growth (but property sector remains weak). Plenty of geo-political pressures.

Macro Picture – Current

- Global growth in 2023 under pressure from weaker economies and higher interest rates (to combat inflation).
- Extended Chinese Covid-restrictions 2022 led to annual GDP growth falling to just 3% but growth of 5% in 2023.
- Chinese property sector remains very weak.
- Geo-political events of 2022 & 2023 influencing commodity prices & energy markets, (and bunker prices).

China Fixed Asset Investment by sector



Source: IMF, Trading Economics

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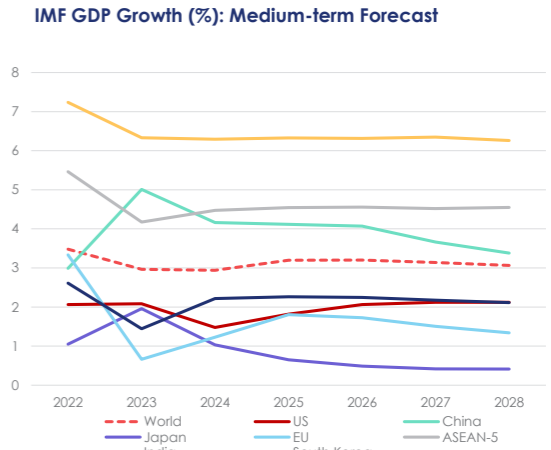
Macro Overview & Outlook

Longer-term economic growth and market support from India and ASEAN

Macro Picture – Medium to Longer term 2024-2030

- Emerging Asia to drive GDP growth through to end-decade.
- Except for Indonesian coal & some SE Asian ores, much of Asian market is dry bulk resource limited vs regional demand = generating dry bulk trade.
- Growth in agricultural trades: mis-match in supply & demand
- Peak-seaborne coal by 2026/7? (depends on overall energy).
- Little incentive for China to change steel production methods.
- Potential for post-war rise in cargoes for Ukraine.
- Increased focus on Environmental and Social Governance (ESG) including pressure on shipping to lower CO2.

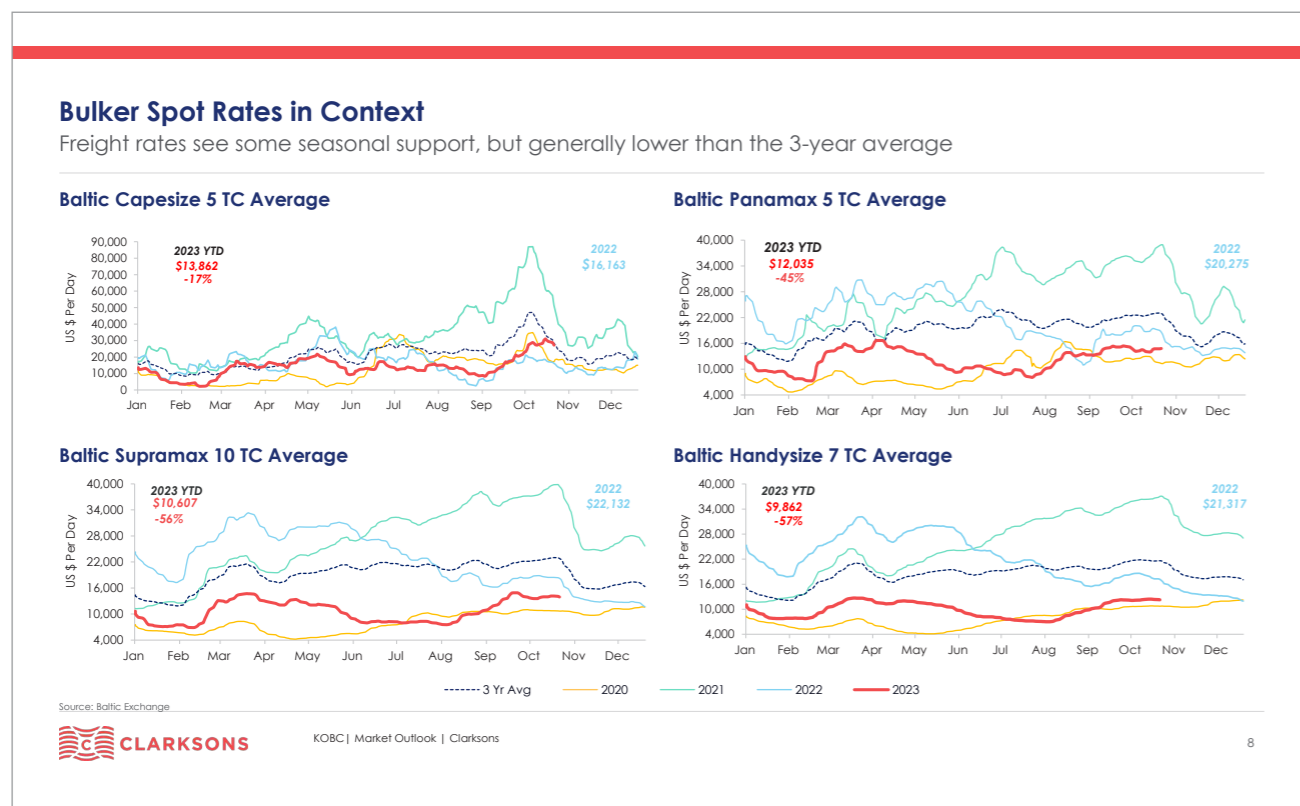
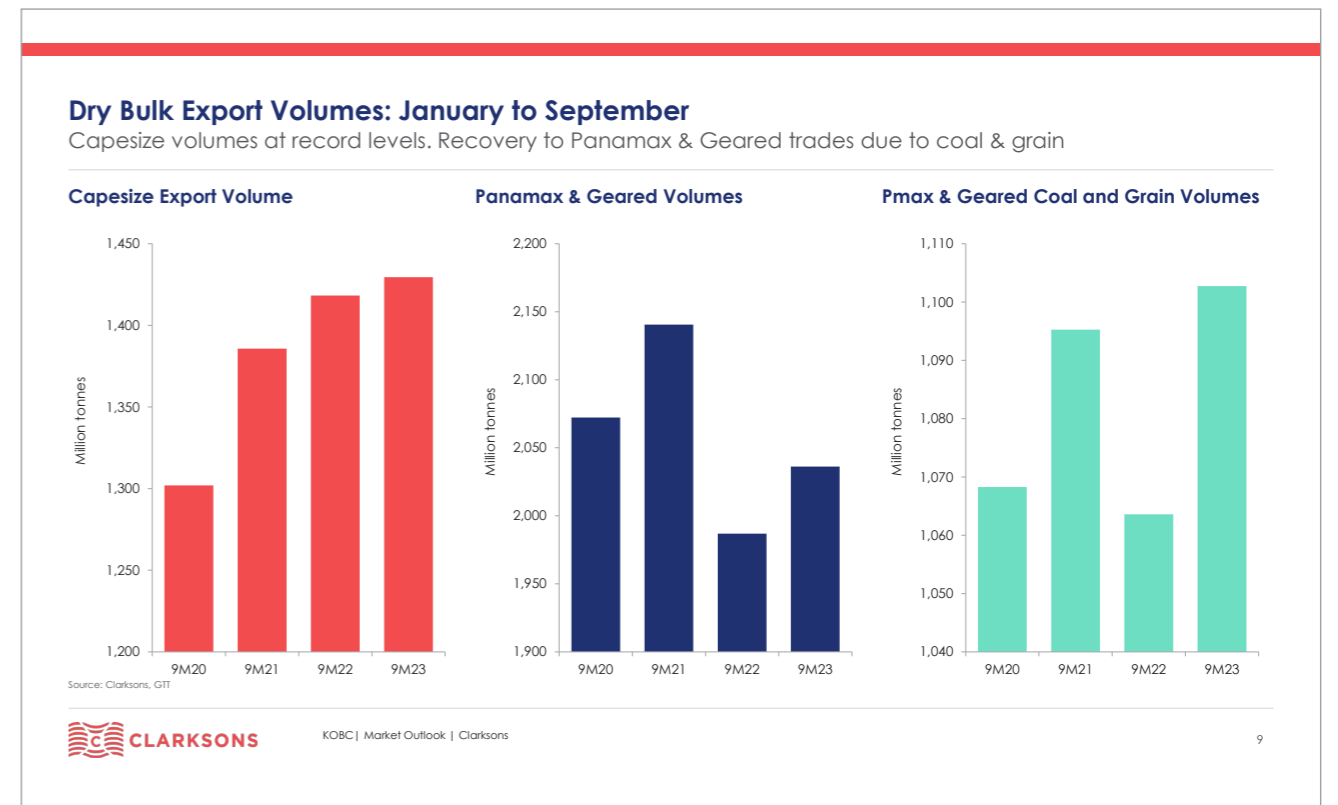
IMF GDP Growth (%): Medium-term Forecast



Source: IMF, Trading Economics

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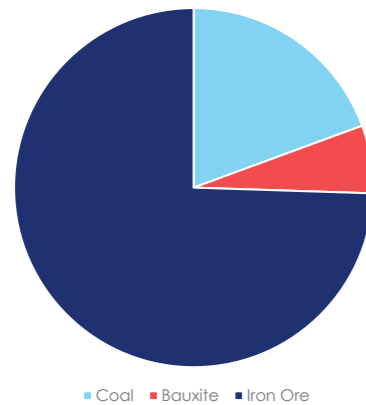
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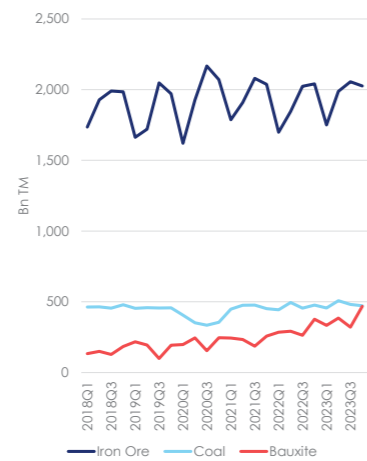
Capesize commodities – Iron Ore, Coal and Bauxite

Iron Ore accounts for 75% of Capesize market but in terms of tonne mile, Bauxite is becoming more important.

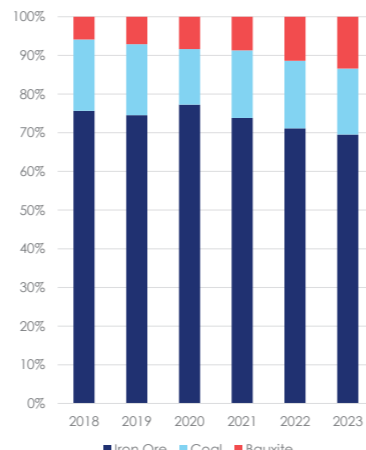
Capesize Market by Commodity Sector



Influence of Tonne Mile (Capesize)



Annual share of Tonne Mile (Capesize)



Source: Clarksons Analysts 2021 seaborne data

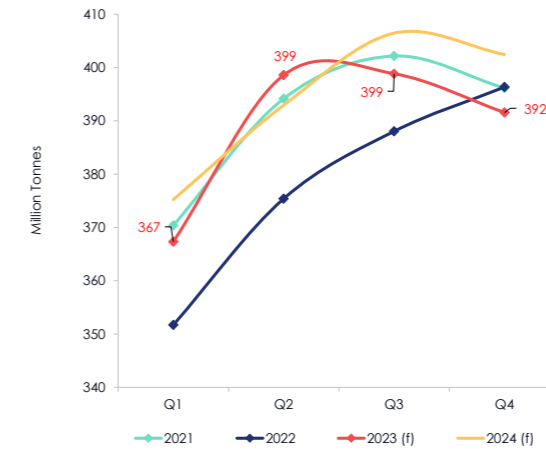


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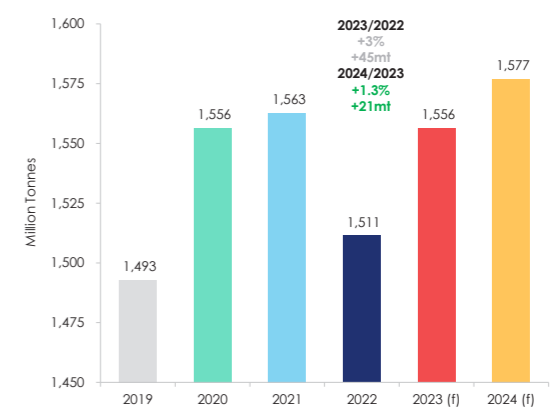
IRON ORE: Exports and Tonne-Mile Changes

Some growth in North Asia & European IO demand in 2024 while Chinese imports expected to remain strong.

Iron Ore Quarterly Exports



Iron Ore Global Annual Trade



Source: Clarksons

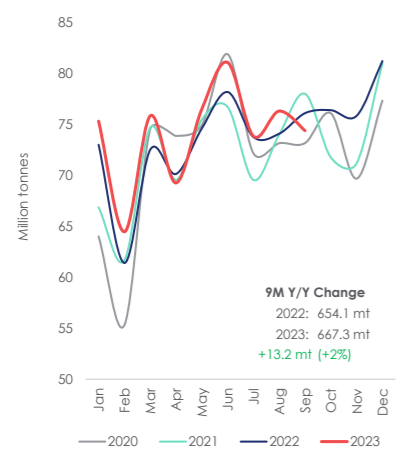


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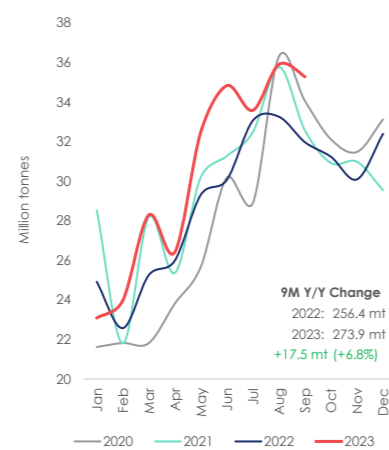
IRON ORE: Monthly Shipments

Iron ore shipments are about 3% stronger in 2023 vs 2022

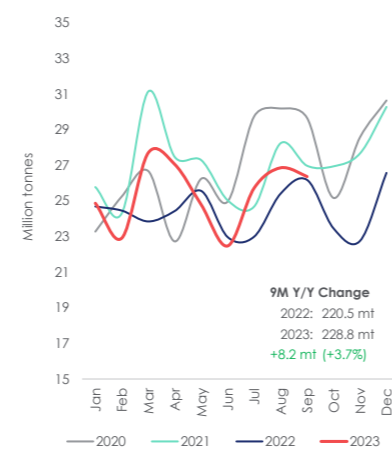
Australia Iron Ore Shipments Monthly



Brazil Iron Ore Shipments Monthly



ROW Iron Ore Shipments Monthly



Source: Clarksons Sea/net



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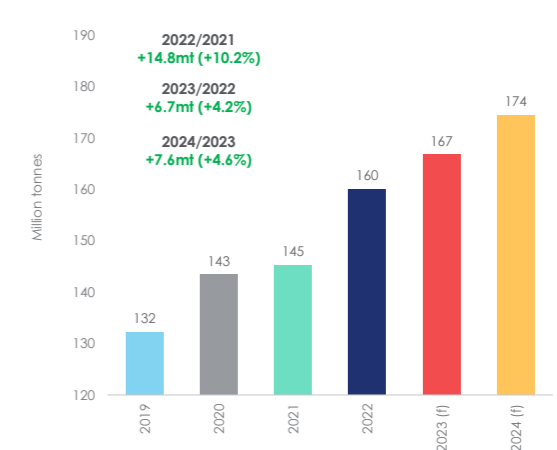
BAUXITE: Exports and Tonne-Miles Changes

Firm growth in volumes and tonne-mile as Guinea replaces Indonesian volumes

Bauxite Quarterly Exports (all sizes)



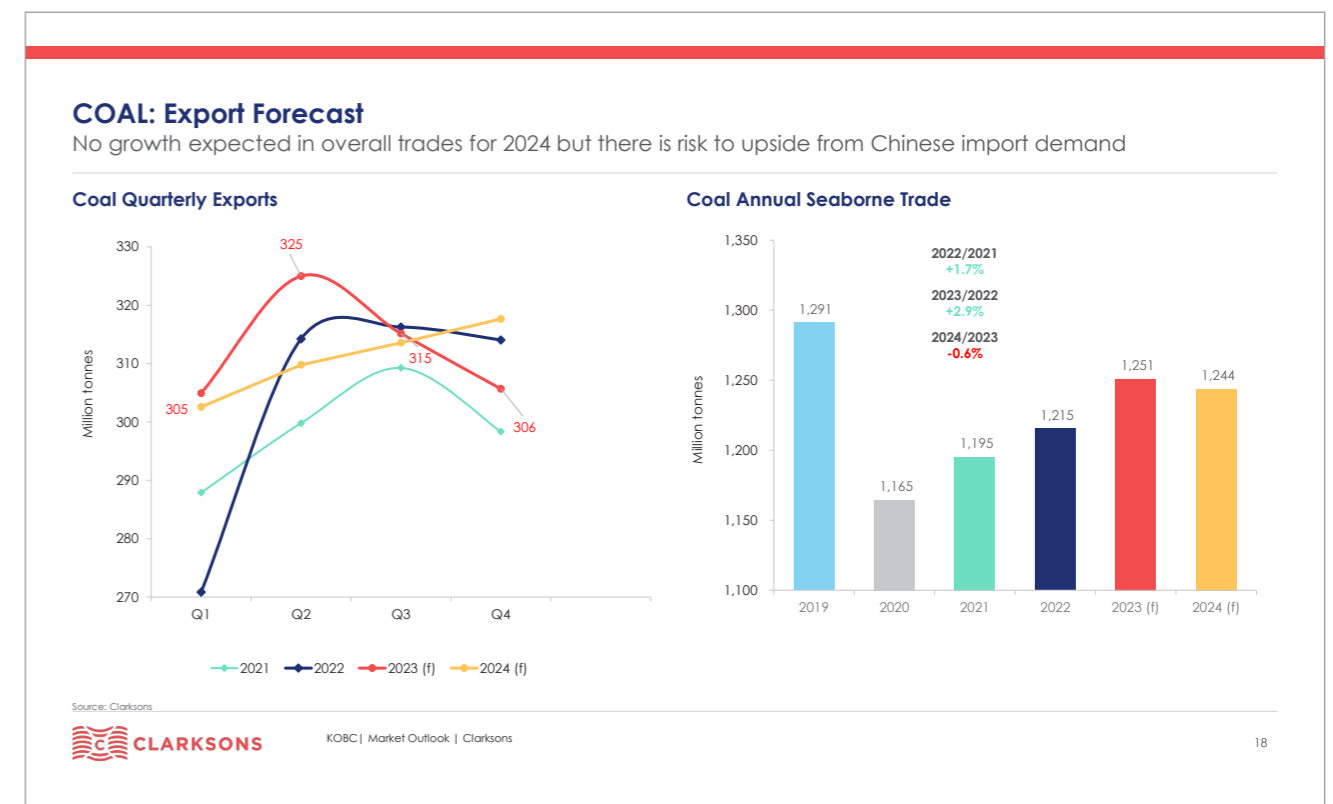
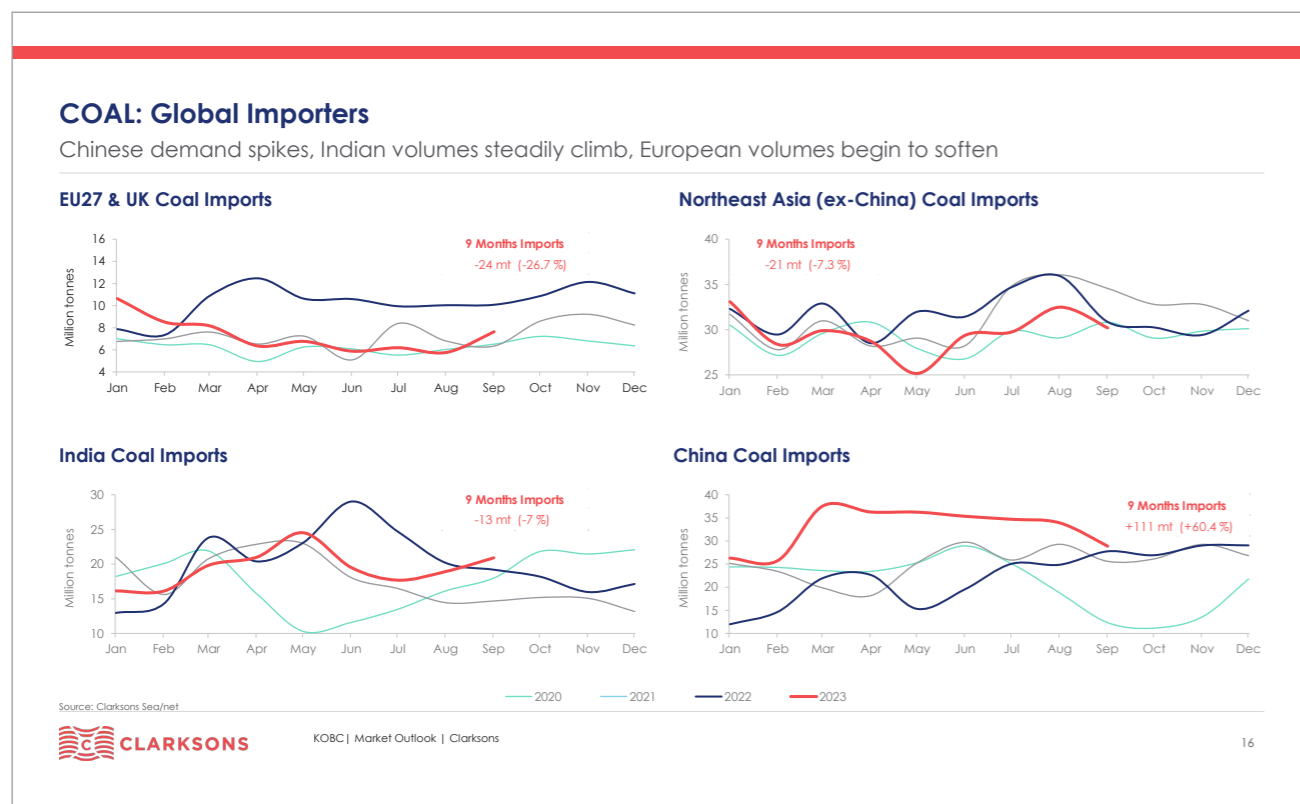
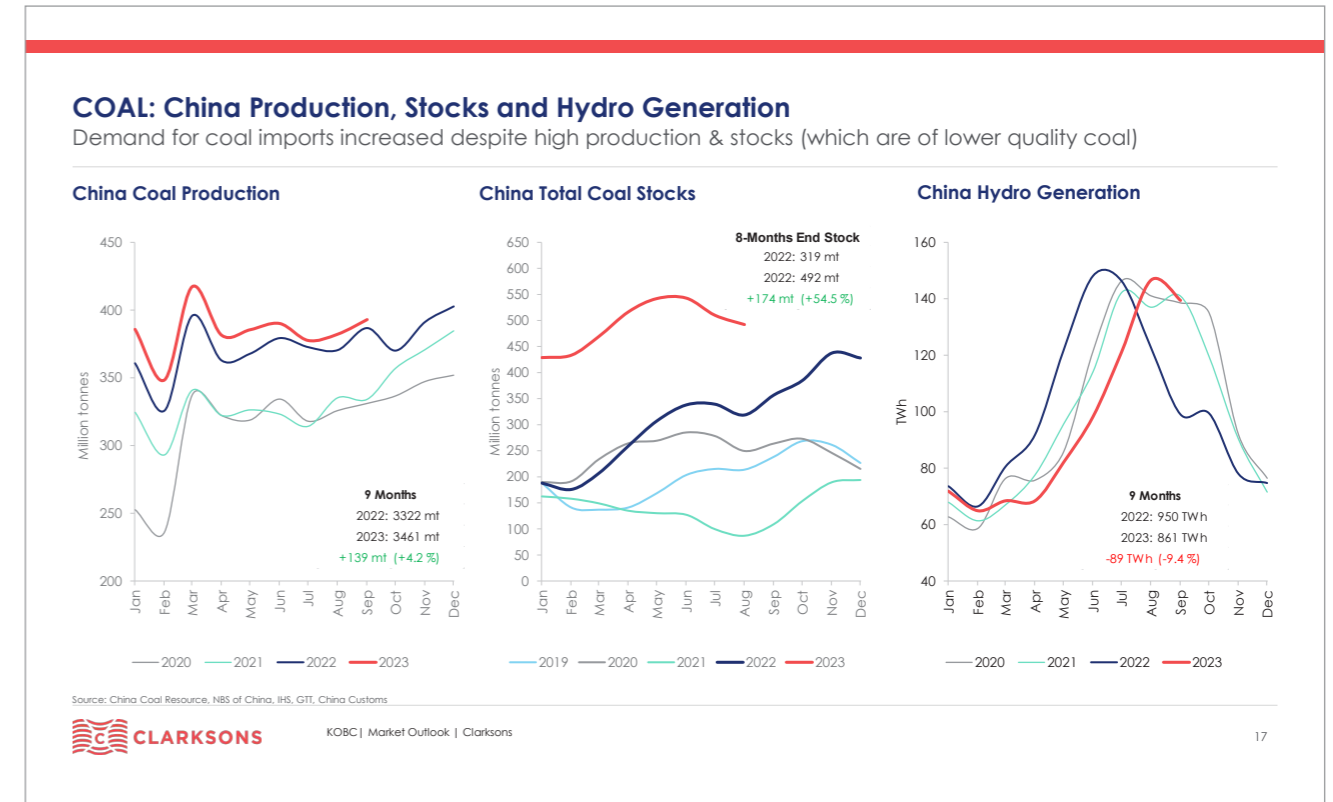
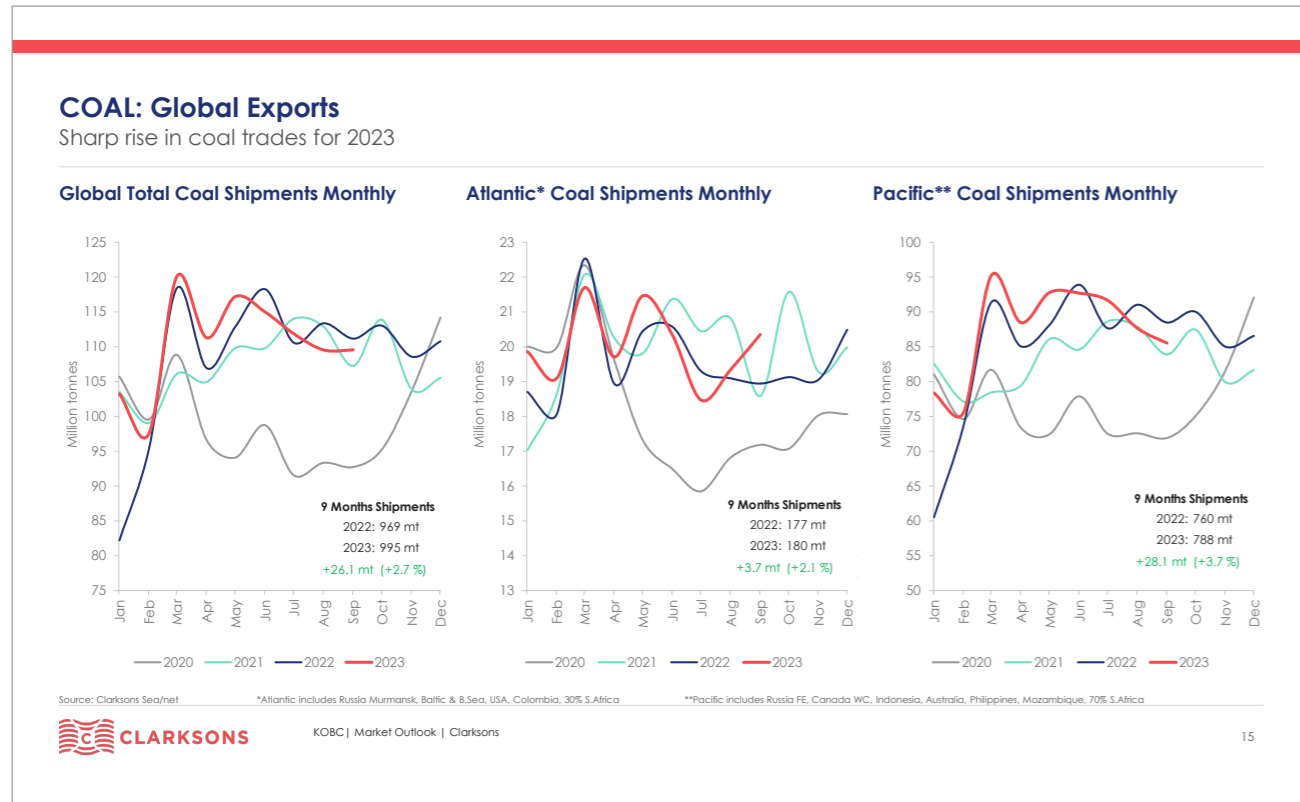
Bauxite Annual Seaborne Trade (all sizes)



Source: Clarksons



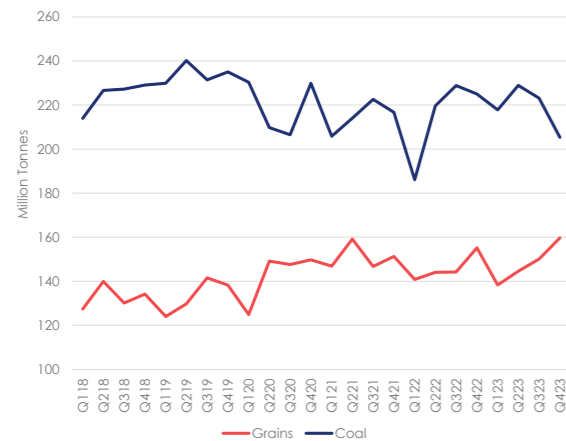
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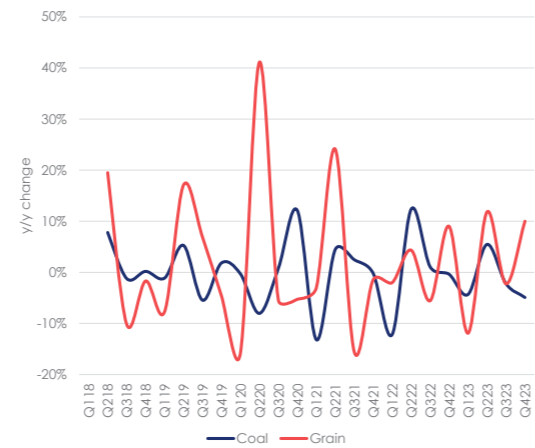
Grains vs Coal (sub-Cape)

Coal volumes dominate but highly seasonal grain means huge quarter-to-quarter swings in tonne mile and rates

Quarterly sub-Cape grain & coal seaborne volumes



Quarter to Quarter Change in TM: Grains vs sub-Cape Coal

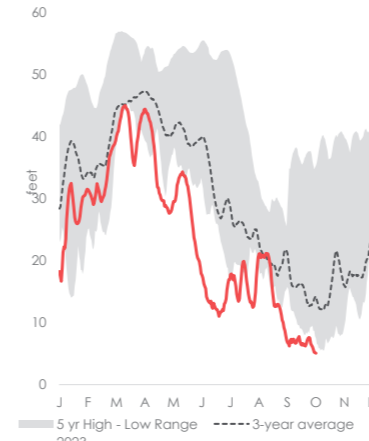


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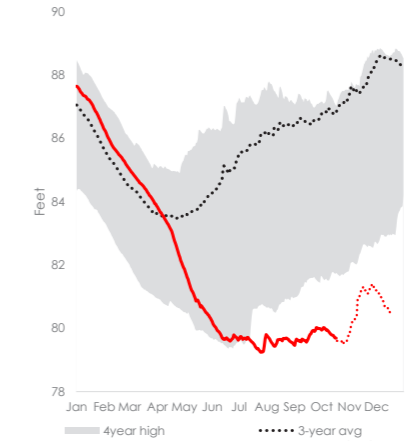
Waterways – Mississippi, Panama Canal & Rhine

Low water levels disrupt grain trades

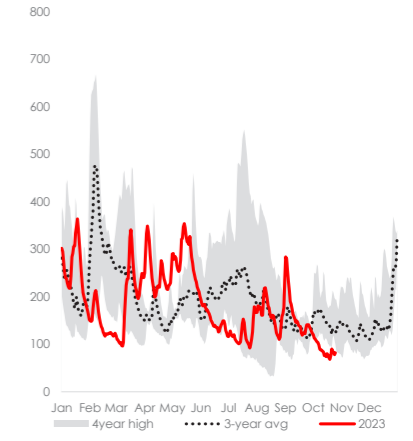
Mississippi Water Levels (Greenville MS)



Gutan Lake Water Level (Panama Canal)



Rhine River Water Levels



Source: USDA, USACE

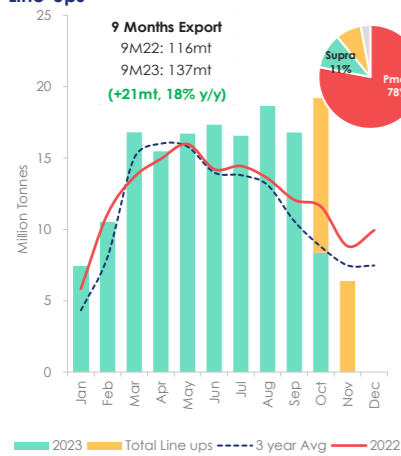


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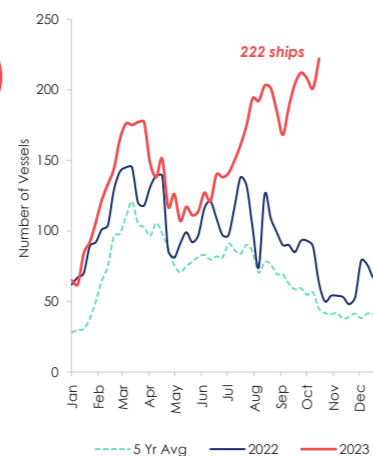
GRAIN: Disruption

'Loss' of Ukraine flows, more from Brazil – especially corn to China

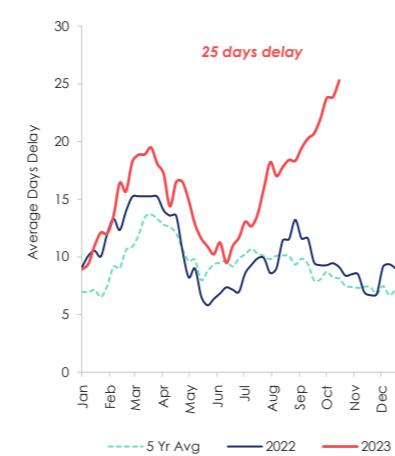
Total Brazil Grain/Oilseeds Shipments & Line-ups



Vessels Waiting at Brazilian Ports



Average Vessel Waiting Time

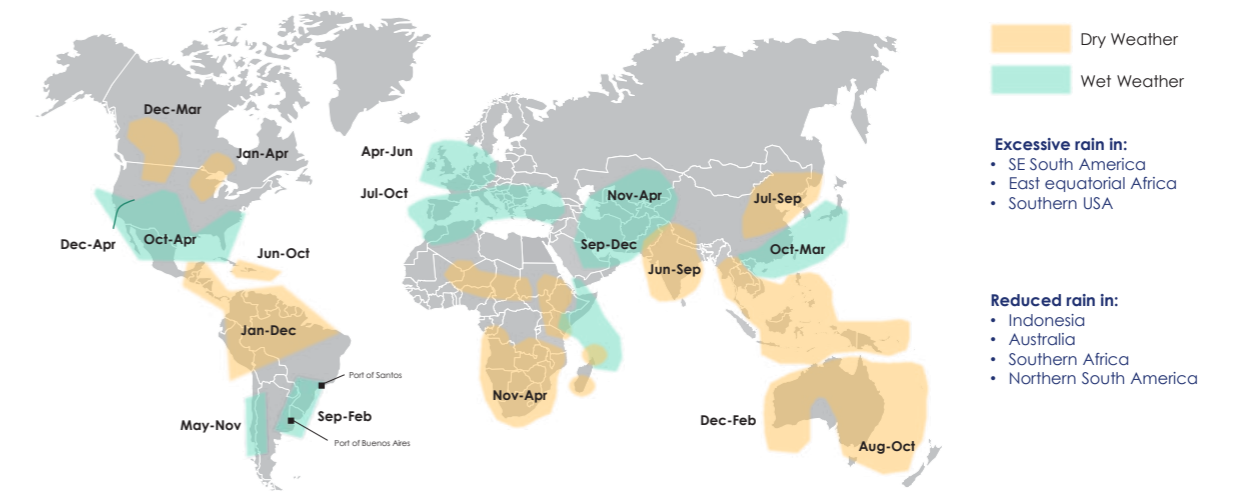


Source: Port Agent Lineups, Clarksons



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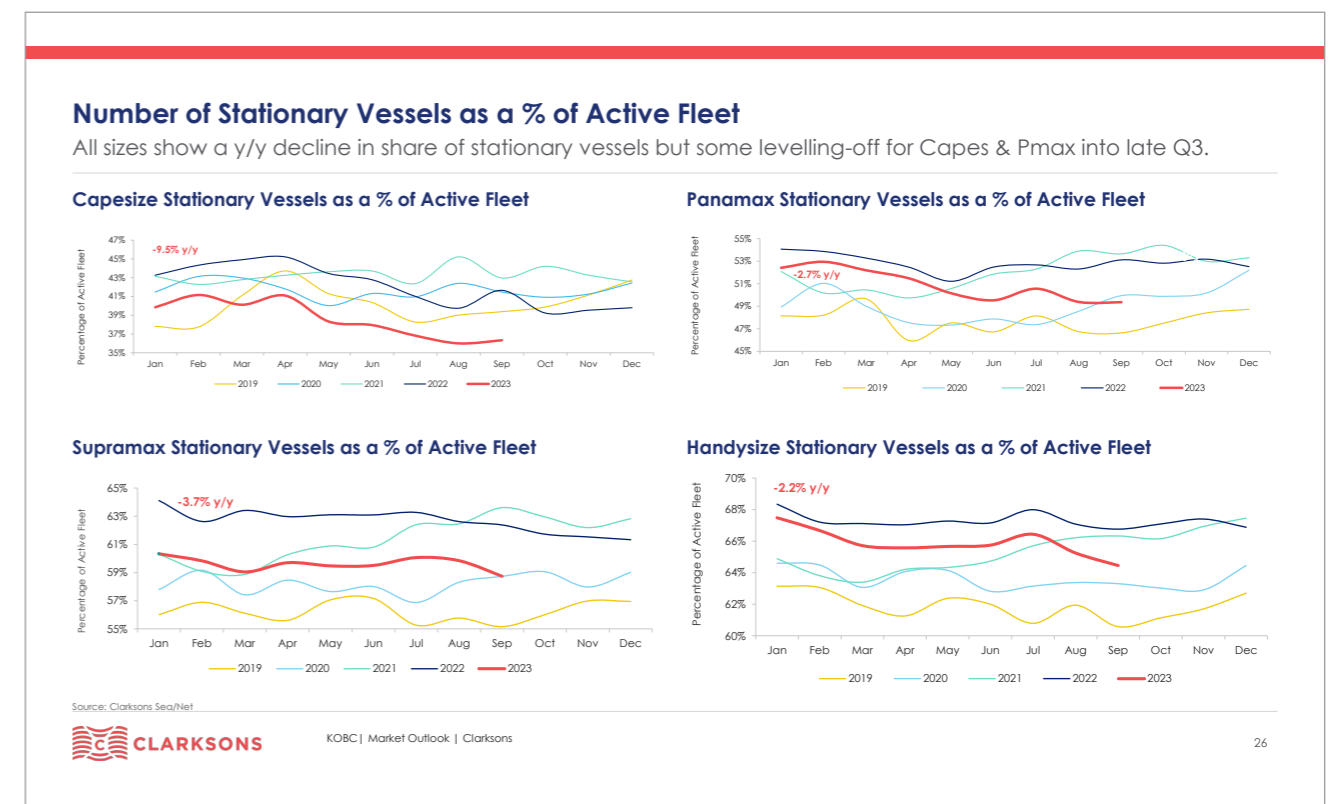
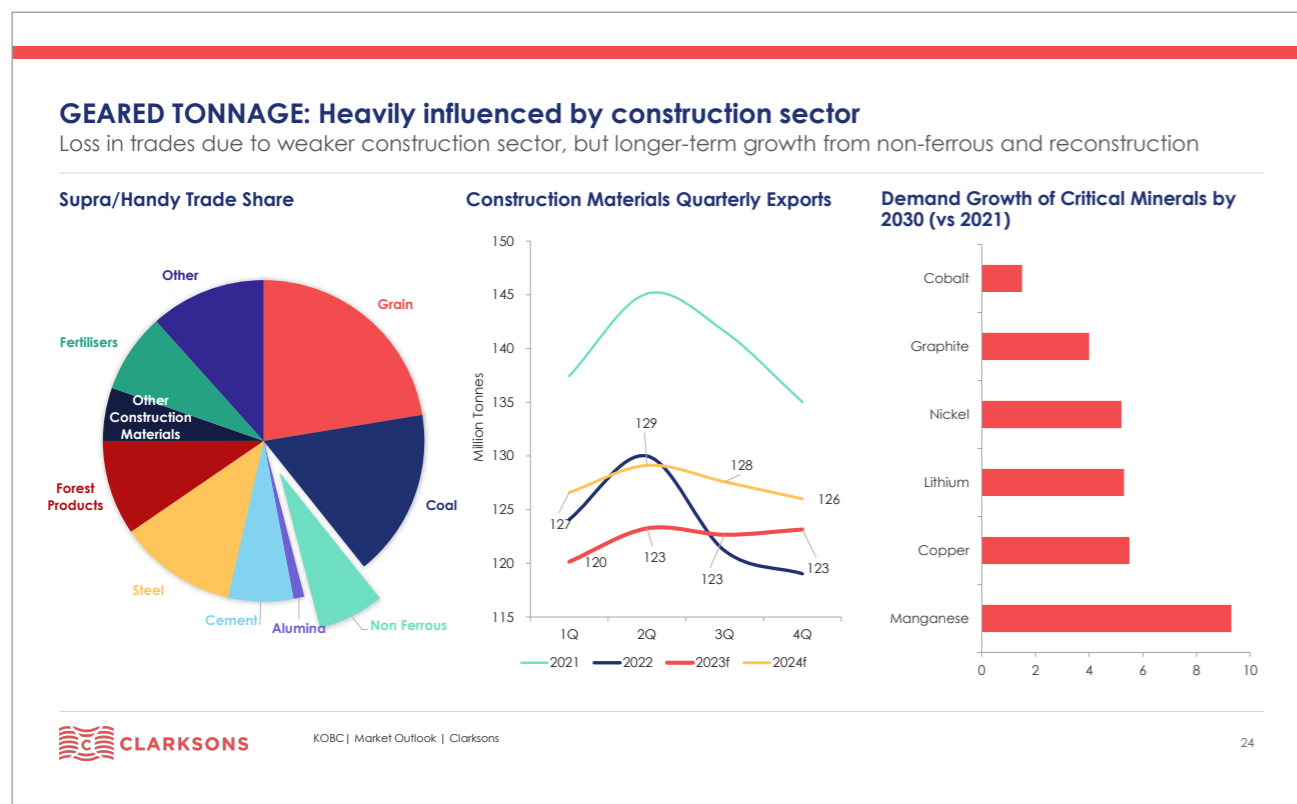
Map of El Nino Weather Patterns

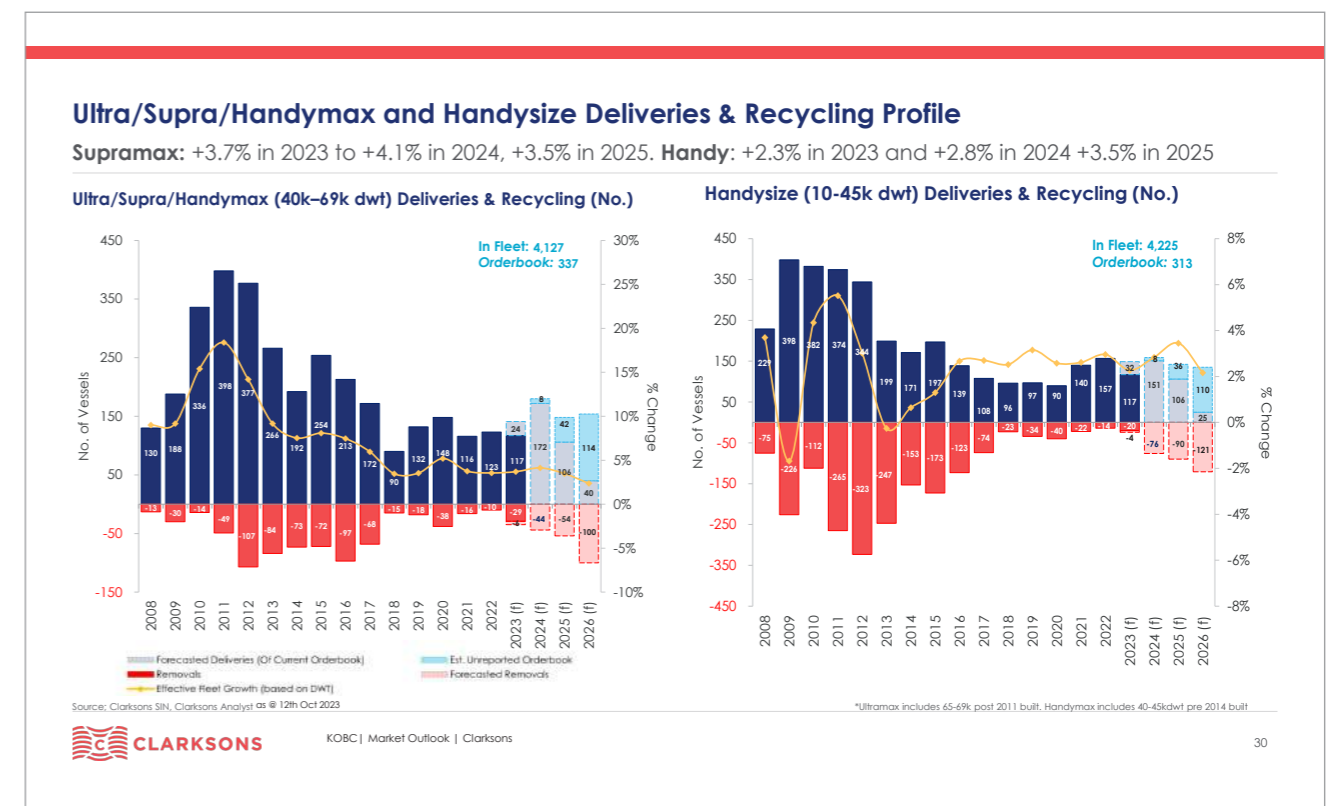
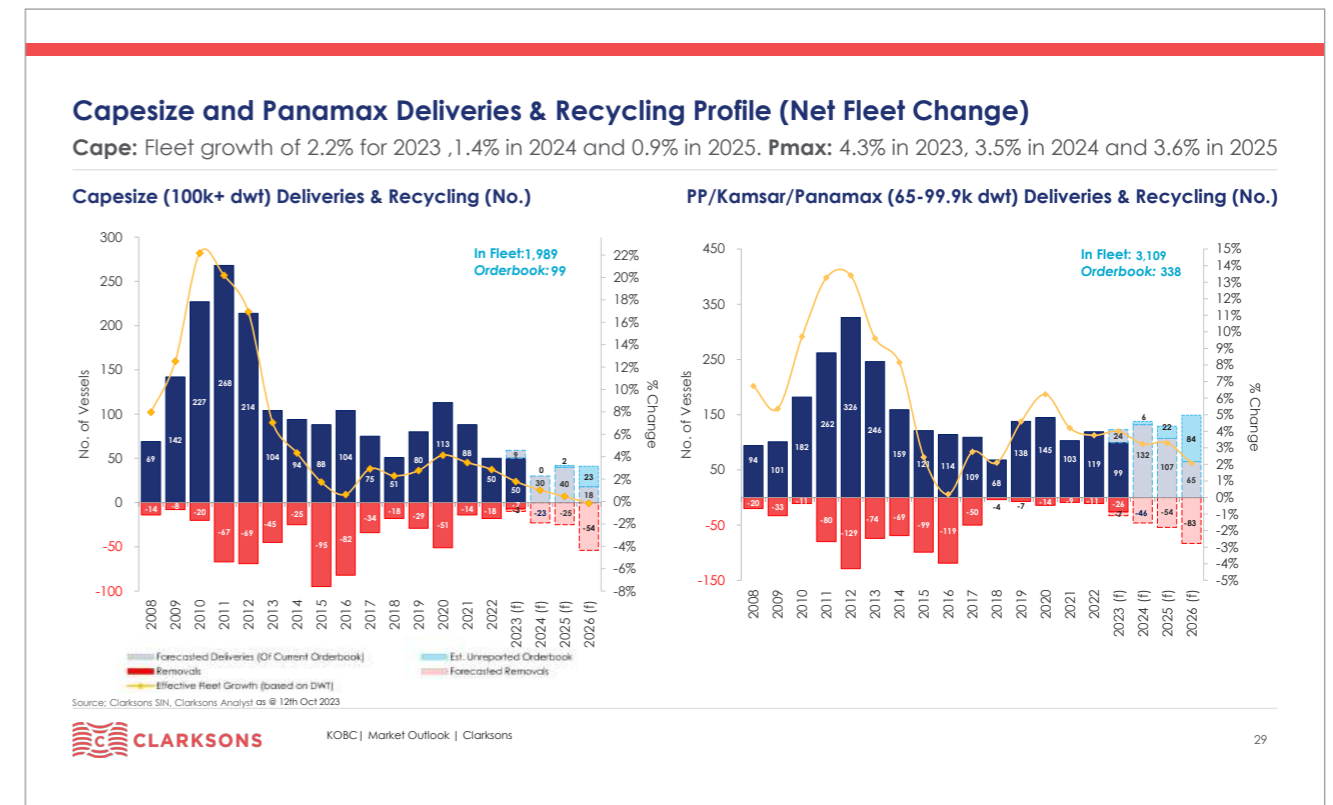
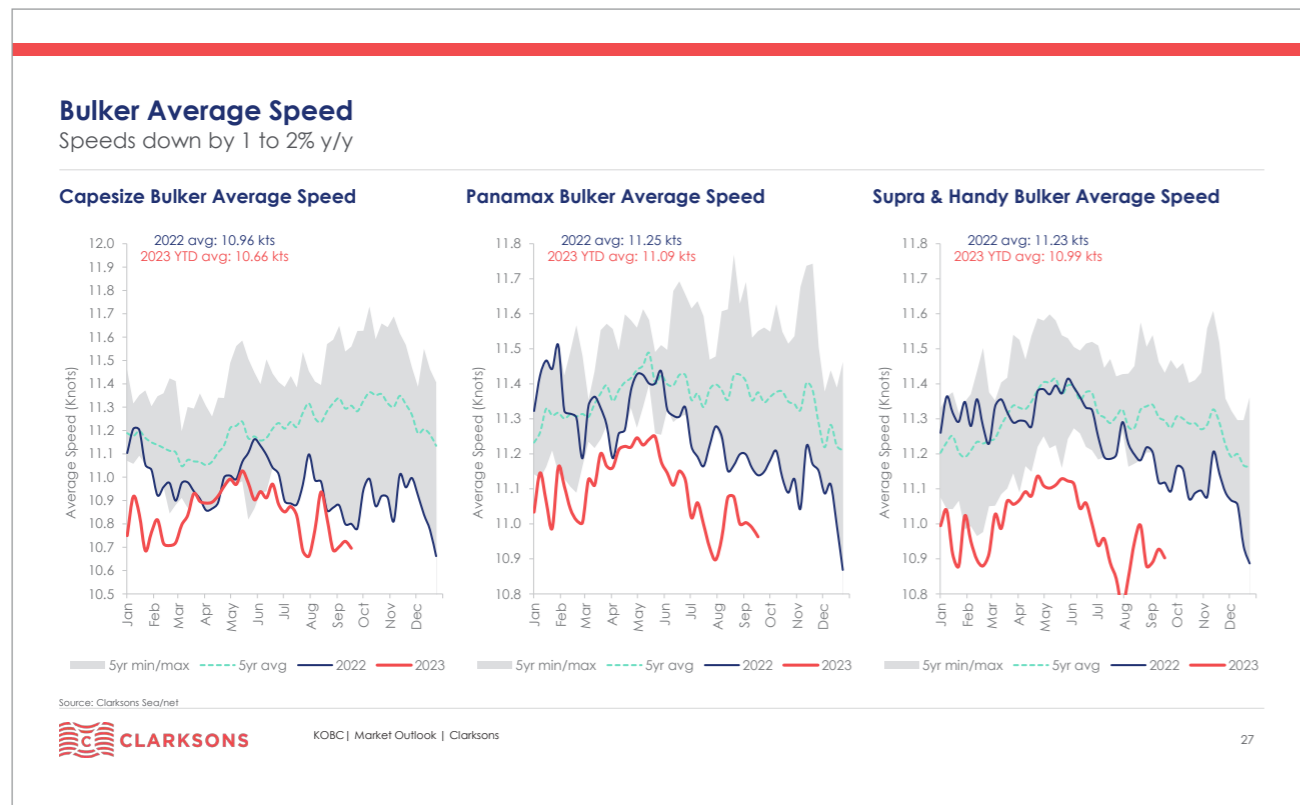


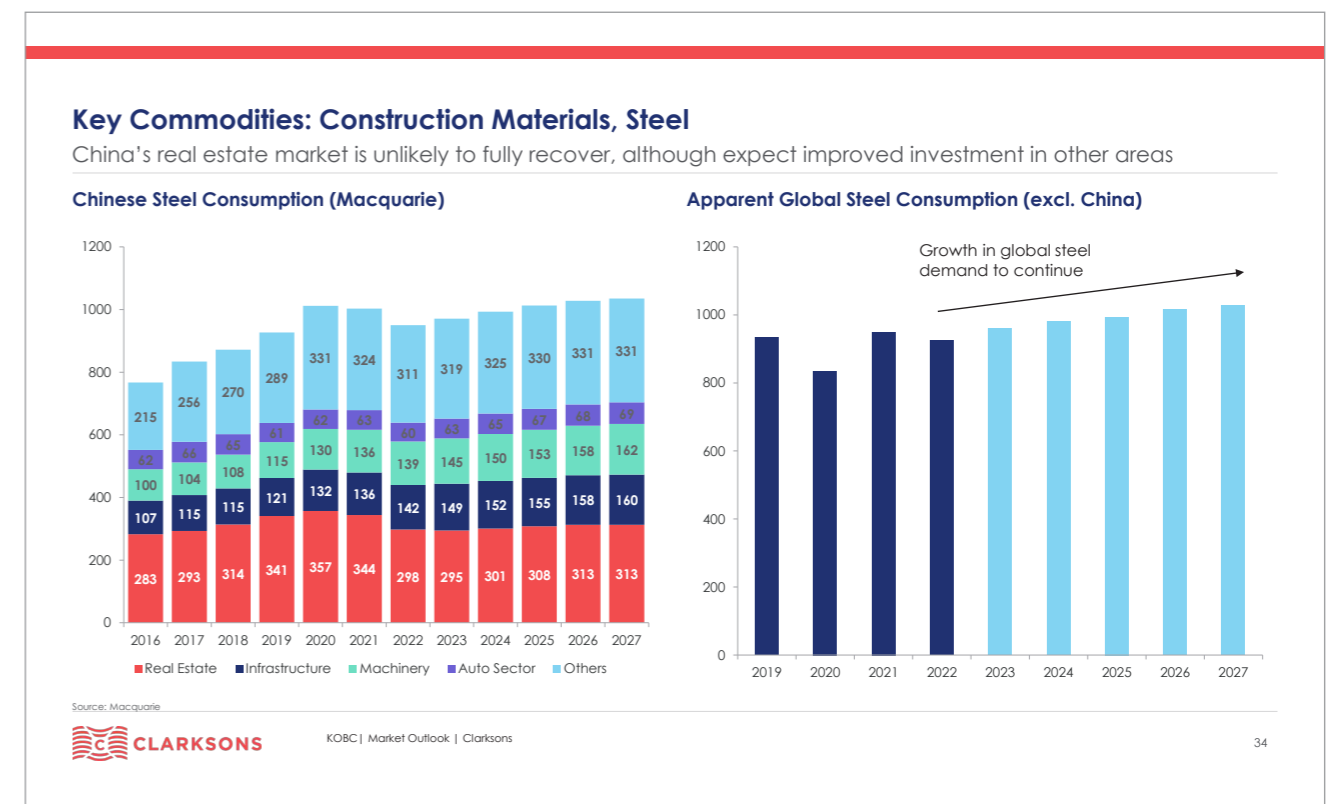
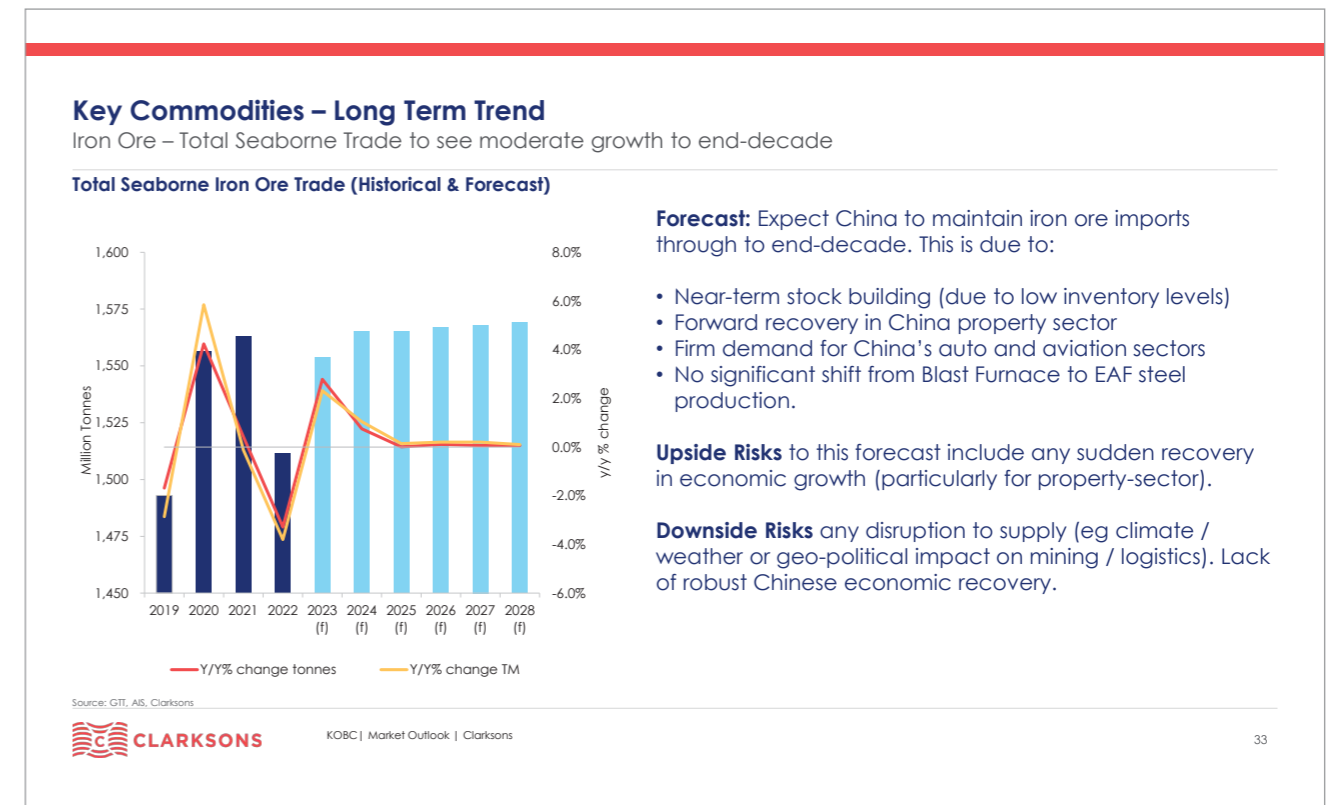
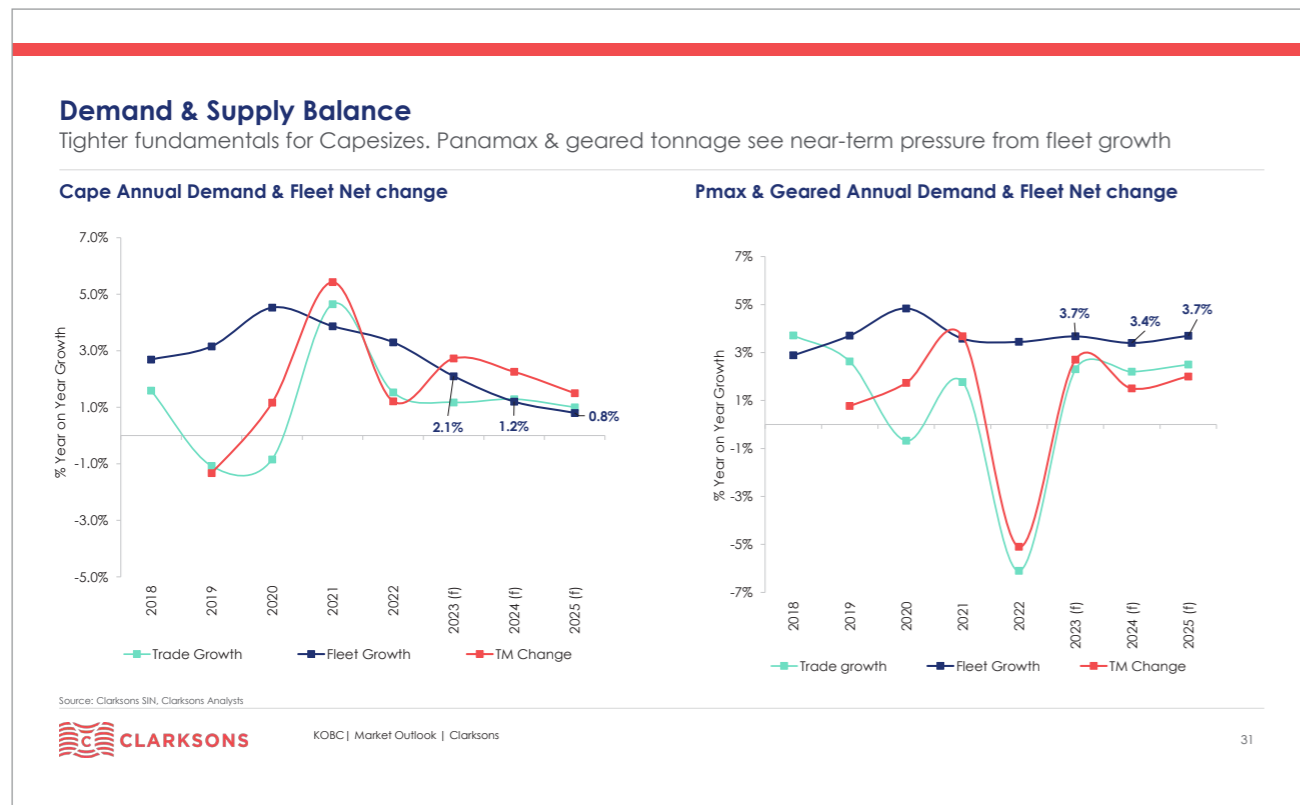
Source: Climate Hazards Center



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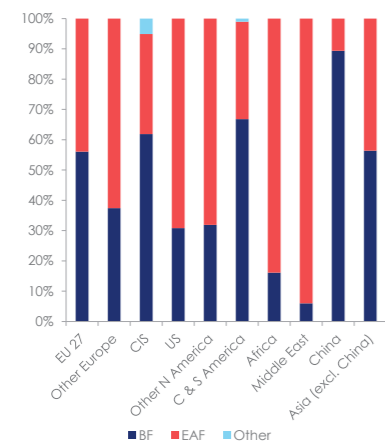




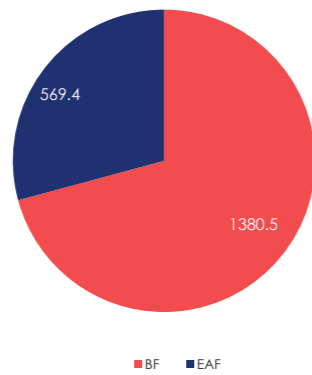
Global Steel Production by Process (2022)

Blast furnace production dominates – particularly China.

Steel Production Methods



Global Steel Production by Process (Million Tonnes)



Transition to Green Steel:

- 2bnt of steel produced each year and is about 7% of global carbon emissions.
- Emerging markets account for about 75% of global steel production.
- Pressure to decarbonise steel production - to be concentrated in Europe, North America, Japan and South Korea.
- Growing consumer preference for greener steel – particularly for auto sector.

90% of China's steel is produced by Blast Furnace. Switch to EAF production for China unlikely due to:

- Chinese steel industry employs >3m workers. A change to EAF would put jobs under threat.
- Many steel plants are recently built & yet to generate good ROI.
- Intensive and expensive energy requirements for EAF production.
- Change to EAF needs more scrap steel – difficult for a 'young' economy such as China.
- Less of a 'consumer push' for green steel.

Source: WorldSteel

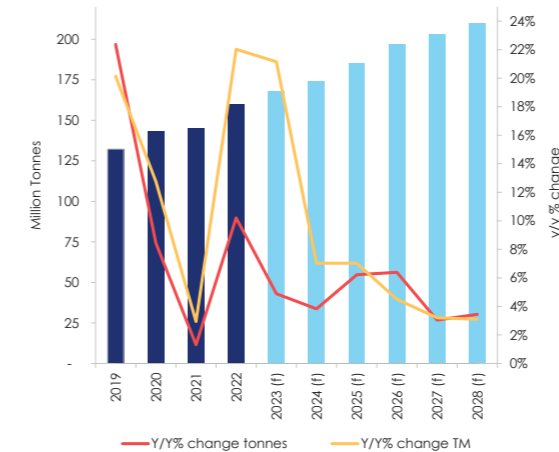


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Key Commodities: Bauxite Long Term Trend

Capesize sector begins to dominate bauxite trade in 2023, with further growth expected

Total Bauxite Trade (Historical & Forecast)



Source: GTI, AIS, Clarksons



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Forecast: Expect rise in Bauxite trades through to end-decade. This is due to:

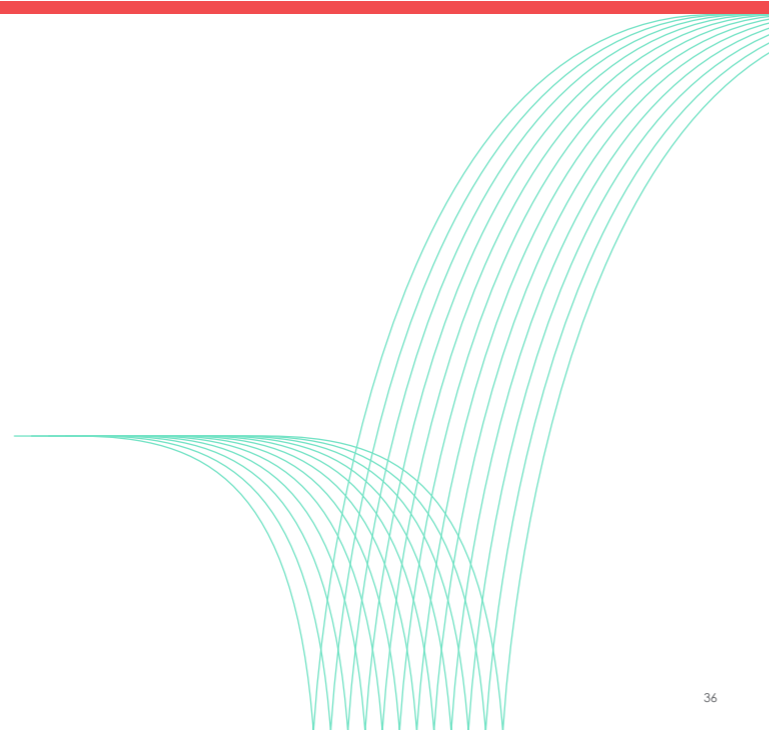
- More aluminium demand for batteries, electric vehicles, renewable energy & aviation sectors.
- Investments made in Guinea with destinations concentrated in China and the Middle East.

Upside Risks include sooner than expected economic recovery in Europe and Northeast Asia and sharp rise in demand for non-ferrous ores.

Downside Risks include energy prices – given the high cost of production for processing bauxite. China's resourcing of bauxite from shorter-haul sources (such as Indonesia) would impact tonne mile.



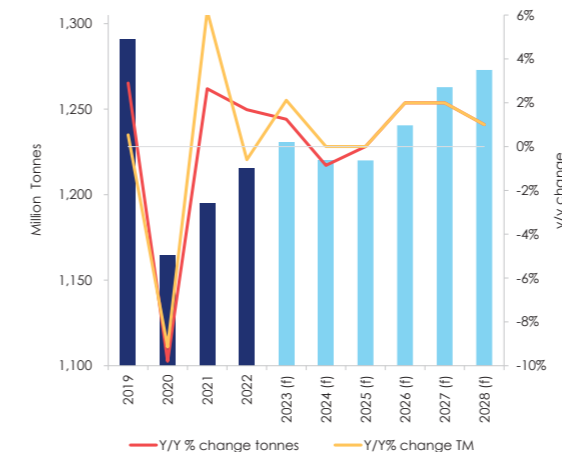
Bauxite



Key Commodities: Coal Long Term Trend

Coal – Total Seaborne Trade

Total Seaborne Coal Trade (Historical & Forecast)



Source: GTI, AIS, Clarksons



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Forecast: Sustained longer-term growth due to:

- Energy demand rises in emerging markets.
- Preference from some Chinese utilities for imported coal over domestic.

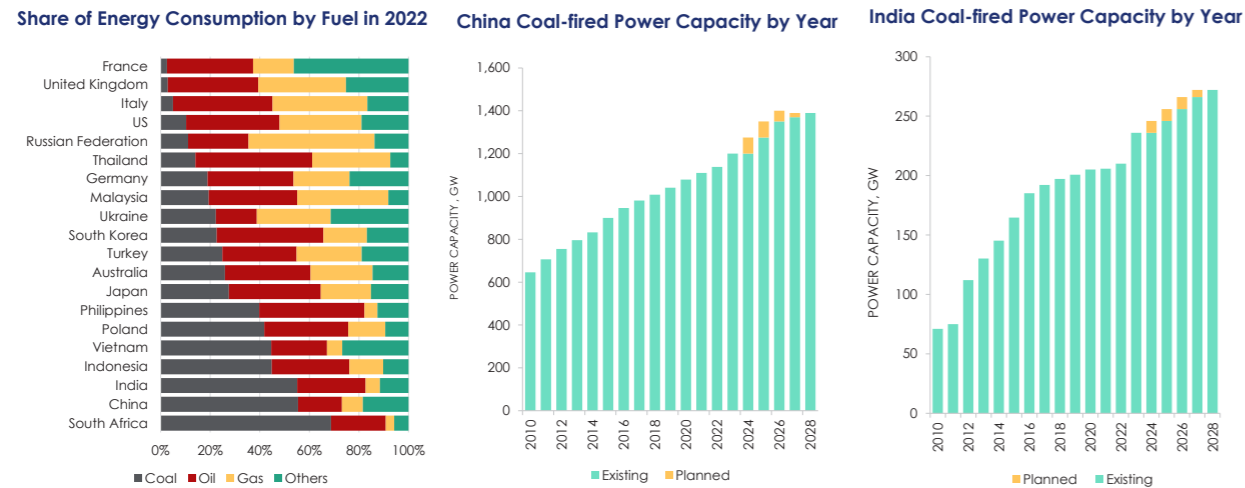
But longer-term decarbonisation (particularly OECD countries) for steam and coking coal suggest a peak in seaborne trades before 2030.

Upside Risks include delays to adoption of renewable/ alternative fuels, any sudden recovery in economic growth (e.g. emerging markets) and any Chinese swap of cheaper international coal over domestic output.

Downside Risks include a more rapid shift towards renewable energy / green steel than currently envisaged and/or the availability of more natural gas for power generation. Also, any halt in Chinese stockbuilding or a Beijing-led preference for domestic coal.

Key Commodities: Coal

New Capacity coming on-line in China – but much of this will be 'replacement' of older units (which will be kept as 'back-up plants')



Source: Statistical Review of World Energy 2023, National Energy Administration of China and local provinces, Global Energy Monitor, China CEC, Clarksons

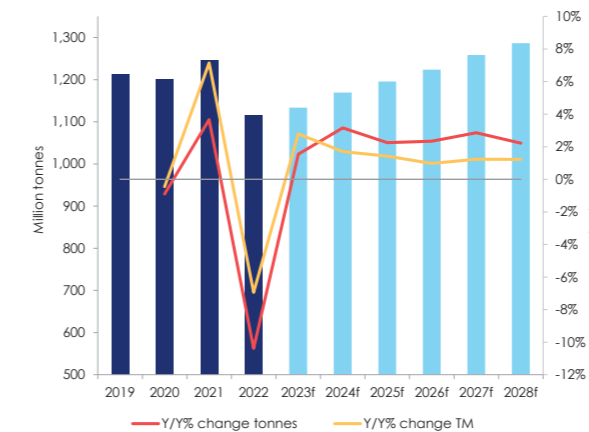


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Key Commodities: Minor Bulks, Long Term Trend

Underlying population and economic growth will likely underpin minor bulk trade in the next half decade

Seaborne Minor Bulk Trades (Historical & Forecast)



Source: GTI, AIS, Clarksons



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Forecast: Longer-term recovery in minor bulk trade growth due to:

- EU & US see an improvement in economic performance and unwinding inflationary pressures
- Construction material trade growth expected to rise with more investment / development in emerging markets.
- Growth in the trade of non-ferrous ores and concentrates as demand for 'battery metals' grows.

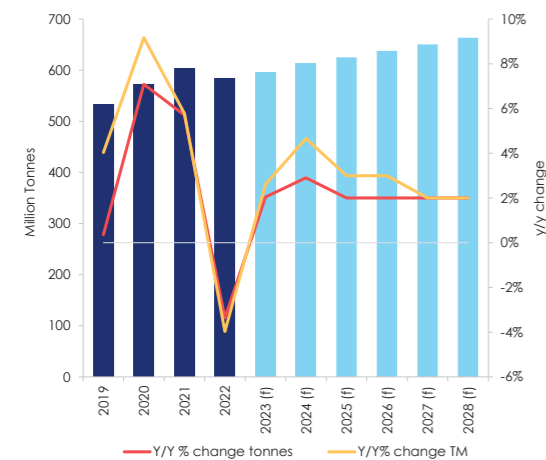
Upside Risks include a stronger-than-expected recovery to Chinese real estate market = rise in imports of cement and forest products. End of war in Ukraine will mean reconstruction demand.

Downside Risks largely associated with the economic and financial health of key economies (and interest rates). Any escalation in the war in Ukraine could further stifle construction and fertiliser trade.

Key Commodities: Grains Long Term Trend

More volatile weather conditions in the medium-term remain a downside risk for grain outlook

Total Seaborne Grain Trade (Historical & Forecast)



Source: GTI, AIS, Clarksons



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Forecast: Solid longer-term growth story

- Yield forecasts are generally positive, especially South America.
- Growing import demand for food and animal feed from SE Asia, the Indian Sub-Continent, East Africa and the Middle-East (all of which are short of widespread agricultural lands).

Upside Risks include more favourable yields and lower prices than currently forecast plus recovery for Ukraine.

Downside Risks include any sharp change to China's soybean import volumes due to population or dietary changes. General supply side risks from weather, climate or geo-political interruption.



Regulations & Prospects for Newbuildings

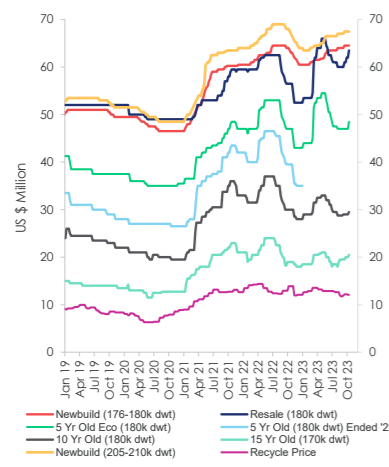
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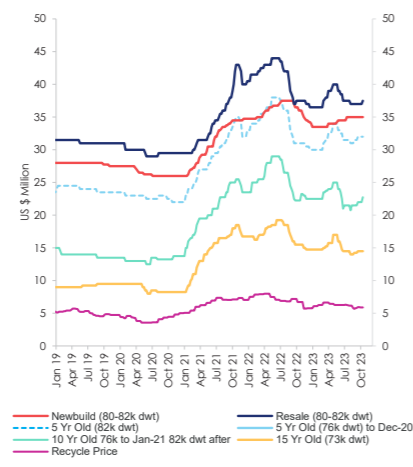
Asset Values

Firm expectations ahead contributing to high newbuilding and second hand prices

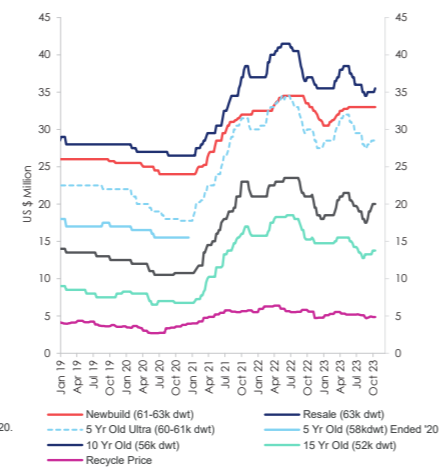
Capesize Asset Values



Pmax/Kmax Asset Values



Smax/Ultra Asset Values



Source: Clarksons SIN



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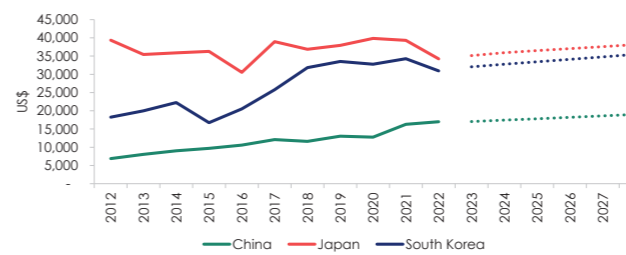
Newbuildings

Historically low orderbook at about 10% of fleet

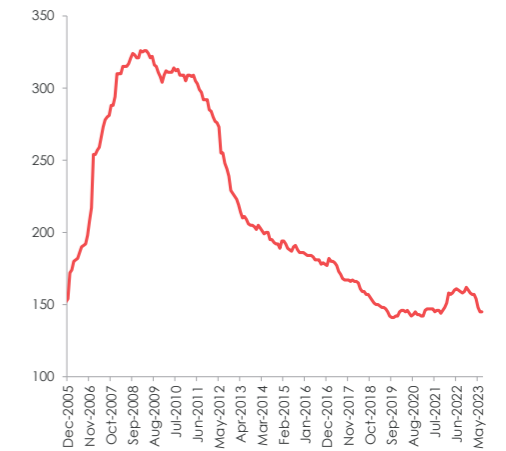
Lower dry bulk ordering due to:

- Freight rate volatility (with lower earnings for much of this year)
- Fewer yards & competition for slots (from other sectors)
- Change to energy complex and rise in renewables.
- High cost of newbuildings versus forward rates.
- Expensive cost inputs: inflation, labour, interest rates, steel.
- Uncertainty over regulations & future fuels.

Estimated Labour Costs (US\$)



Number of Active Shipyards (+20kdw)

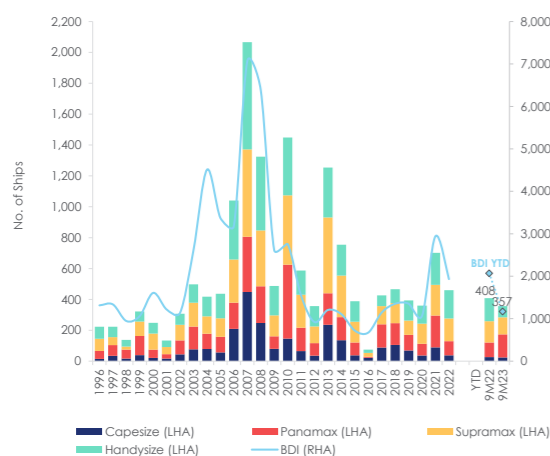


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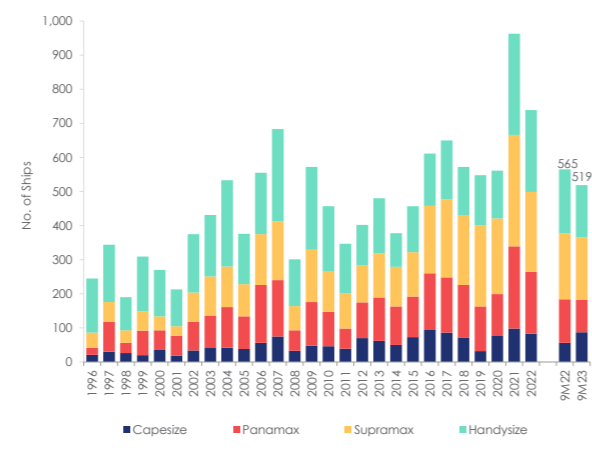
Dry Bulk Contracting & SNP Activity

New build orders remain subdued, S&P activity behind year ago levels

BDI vs bulker contracting (# of ships)



Bulker Sale & Purchase Activity by Vessel Sector



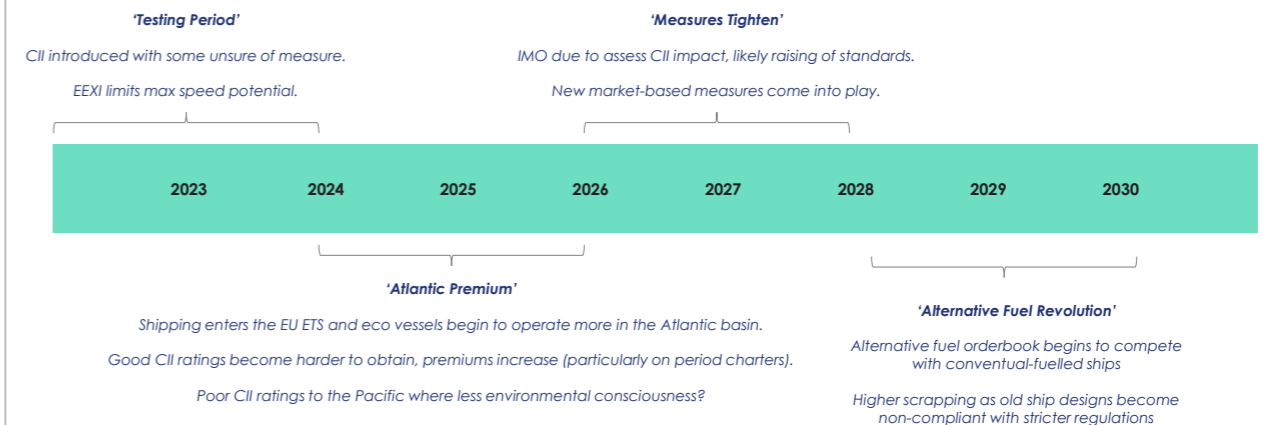
Source: Clarksons SIN as at 2nd Aug 2023



KOBC | Market Outlook | Clarksons

Potential Future Landscape of Carbon-regulated Shipping

Regulatory environment set to tighten by the end of this decade



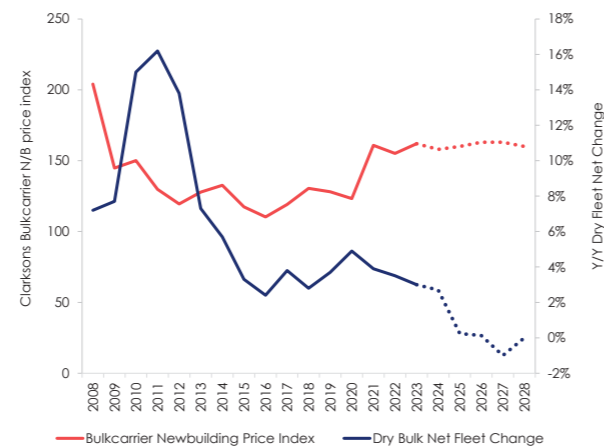
KOBC | Market Outlook | Clarksons

Outlook on Overall Newbuilding Environment: Capacity, Competition, Costs, Currency

Generally tighter yard space and fleet renewal expectations to keep upside pressure on prices

- Capacity:** Yard numbers down by about 35% from 2010 (in CGT). Yards fallen from 300 in 2009 to around 130 today, 50 to 60% of these 'top-tier' & able to produce higher-spec ships with modern eco tech.
- Competition:** Upside pressure on dry bulk n/b prices driven by firm ordering across all asset classes over last few years. But rising yard productivity to meet overall shipping demand from all sectors.
- Costs:** Upside price pressure from cost of capital, labour, steel & energy. Higher demand for eco-tonnage and & alternative fuels means upside price pressures, and time taken to build generally extended.
- Currency:** Higher interest rates on the US\$, but healthy credit availability from some Asian lenders.

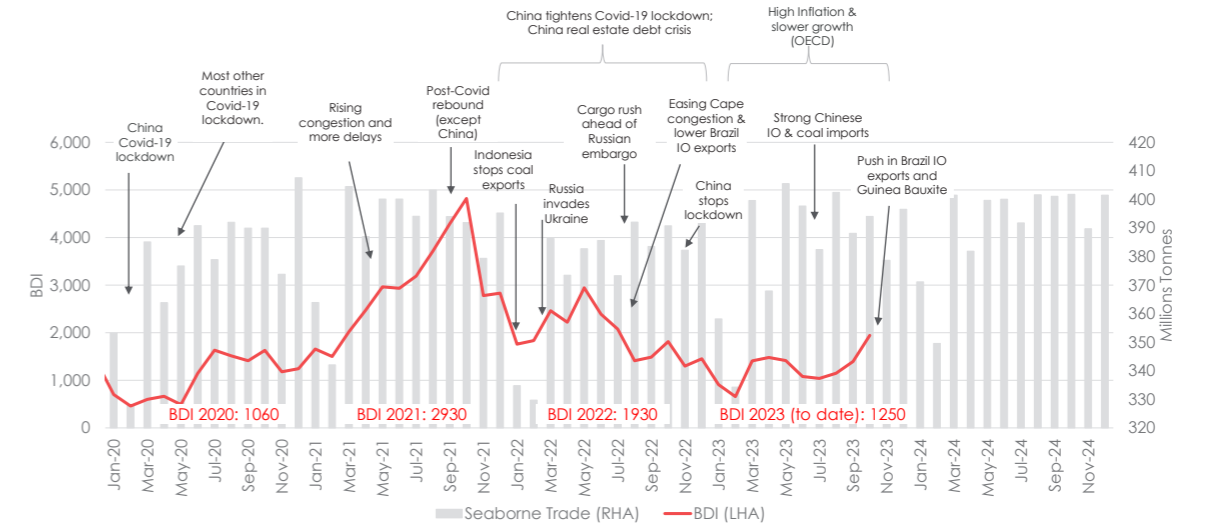
Bulk Carrier n/b Index & Dry Bulk Net Fleet Change (with forecast)



KOBC | Market Outlook | Clarksons

Baltic Dry Market

Baltic Dry Bulk Index (BDI) vs Dry Bulk Seaborne Trade



Source: Baltic Exchange



KOBC | Market Outlook | Clarksons

Outlook & Conclusions

Short term volatility but longer-term squeeze on vessel supply is possible given trade growth expectations

Shorter Term (2024/25):

- Volatility in freight rates with some downside pressure on earnings for Panamax and geared tonnage due to fleet growth.
- Capesize market to follow seasonal trend of weaker first half of year and stronger second half.

Longer Term (2026-end decade):

- Strong prospects for trade in grains, minor bulks, iron ore & bauxite. Limited growth for coal trades and possible decline by end-decade.
- Limited fleet growth post-2025. Very few alternatively-fuelled ships for dry bulk sector.
- Potential for more scrapping of older tonnage.
- Dry bulk could see two tier market emerge (eg Atlantic vs Pacific) due to lack of modern eco-tonnage and stricter regulations including EU ETS)

Vessel values

- Possible discounts in the second-hand market with weak spots in earnings but upside support for newbuilding prices at elevated levels through 2028 given trade expansion.
- Limited chance of significant n/b price given constraints and competition and 'green' ships taking longer to build.

Key Risks: Economic, Geo-Political, Climate & regulation

- Economic** concerns (higher labour and commodity costs) & potential for higher interest rates remains.
- China** - any further deterioration in the economy could further undermine dry bulk commodity trades through mid-decade.
- Geo-political:** Deterioration of the situation in Ukraine / Mid East could lead to further economic downside to the OECD economies and higher energy costs.
- Commodity Supply & Prices:** Any disruption to cargo supply at origin or a sharp increase in prices would directly impact dry bulk trade flows.
- Climate & weather:** Any impact of El Nino on dry bulk trade operations or trading volumes (such as lower grain yields & low water levels).
- Vessel recycling** – potential for more scrapping than currently forecast given longer-levels of weaker earnings.
- Regulations** – any failure in the current regulatory plans to be implemented might push back owners' recycling plans and lead to increases in average vessel speeds.



KOBC | Market Outlook | Clarksons



Clarksons Shipbroking
Dry Bulk Analysis
dryanalysts@clarksons.com
www.clarksons.com

London
Commodity Quay
St. Katharine Docks
London
United Kingdom
E1W 1BF

Singapore
29-01 Asia Square Tower 2
12 Marina View
Singapore
018961

Shanghai
2203-04, Shanghai Huadian Tower
839 Guozhan Road, Pudong New Area
Shanghai
China
200126

Oslo
Munkedamsveien 62c
Oslo
Norway
0270

Geneva
Rue du Prince 9
1204 Geneva
Switzerland

Thank You

Shipping Session I

November 1st 15:15~15:45



Mr. Oliver Ge
Head of Research | McQuilling

TOPIC

Tanker Market Outlook: Navigating the Volatility

SUMMARY

The oil tanker market has entered a period with phenomenal uncertainties, which could shift shipowners' earning levels in a rapid manner. In this session, we will assess the impact of these volatility factors, including but not limited to:

- OPEC+ Policy & New Commers (US & Guyana)
- Sanctioned Barrels: Russia, Iran and Venezuela
- The Grey Rhino: Trans-Mountain Pipeline Expansion (TMX)
- New/Exited Refining Capacity
- Global Diesel Shortage
- A Rush in Tanker Ordering
- What is the "Shadow Fleet"
- Environmental Regulations: EEXI, CII & EU ETS

CV

Oliver Ge brings 10 years of maritime and business analysis experience to McQuilling Services. He graduated from Shanghai University of International Business and Economics with a Bachelor of Science in Finance and Economy and from Hofstra University with a Master of Science in Finance, specialized in risk management and quantitative finance.

With an understanding of quantitative finance and international business coupled with analytics techniques, Mr. Ge developed a unique skill set in his academic career, which he carried through to his employment with McQuilling. Joining McQuilling Services in 2014, he has utilized his strong skill set in data management and analysis to lead and/or participate in over 60 independent consulting projects during the past 10 years.

In his current role as the Head of Research, Mr. Ge leads McQuilling Services' market research for clients including oil majors, state-owned oil companies, shipping entities, shipyards, and investment funds. Through industry seminars and market presentations, Mr. Ge has contributed to the company's goal to expand its global footprint in Southeast Asia, Far East and N & S America countries. In the meanwhile, he leads the company effort to design, maintain, and enhance McQuilling's proprietary data offerings, including but not limited to fixtures, freight, earnings, asset values, benchmarking, AIS ship tracking and global tanker voyage tracking systems.

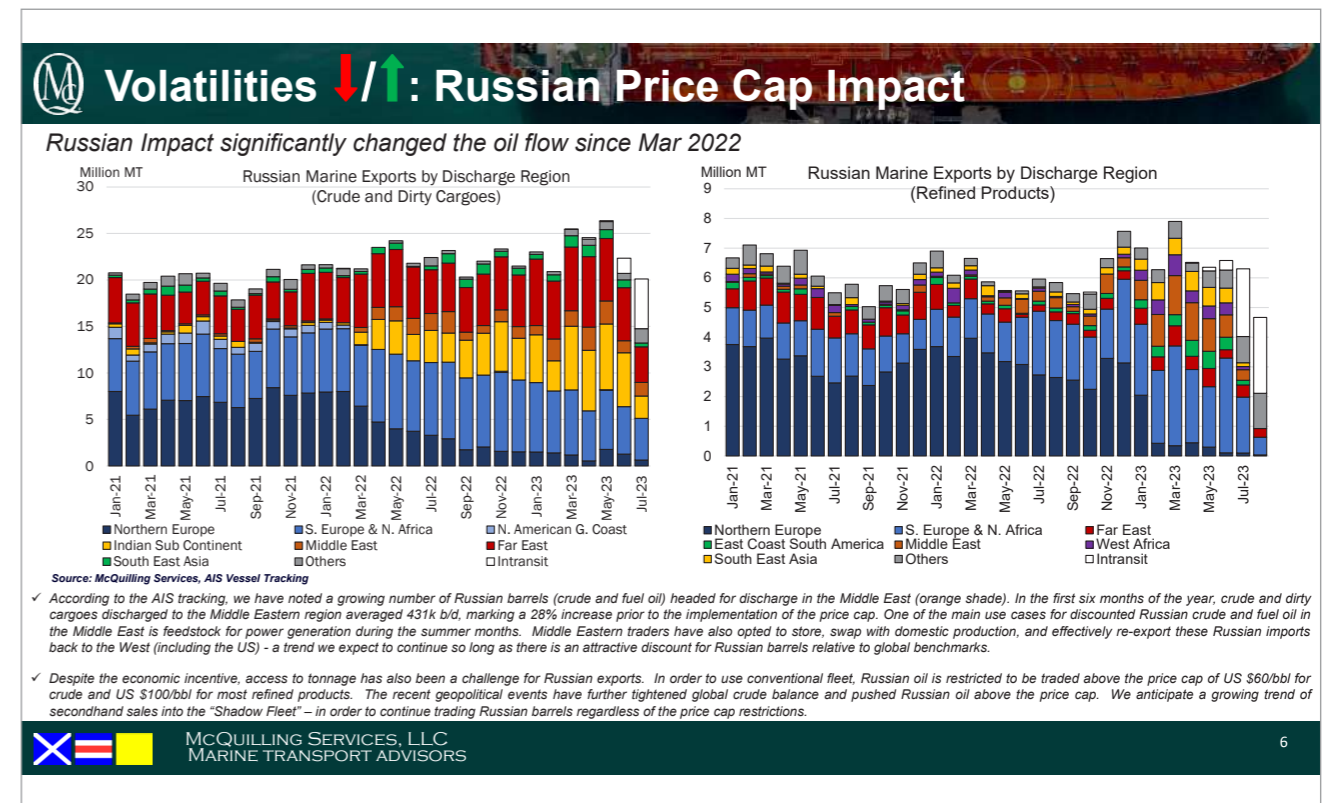
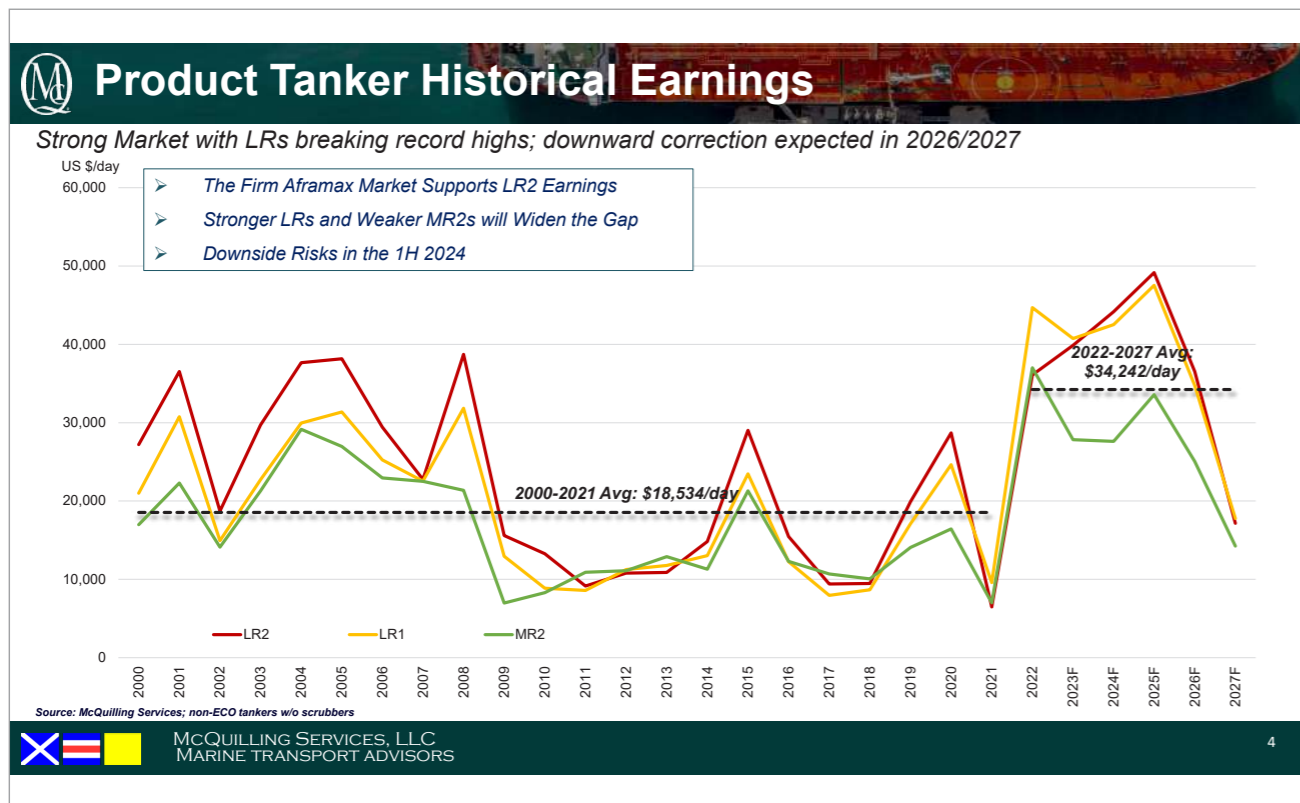
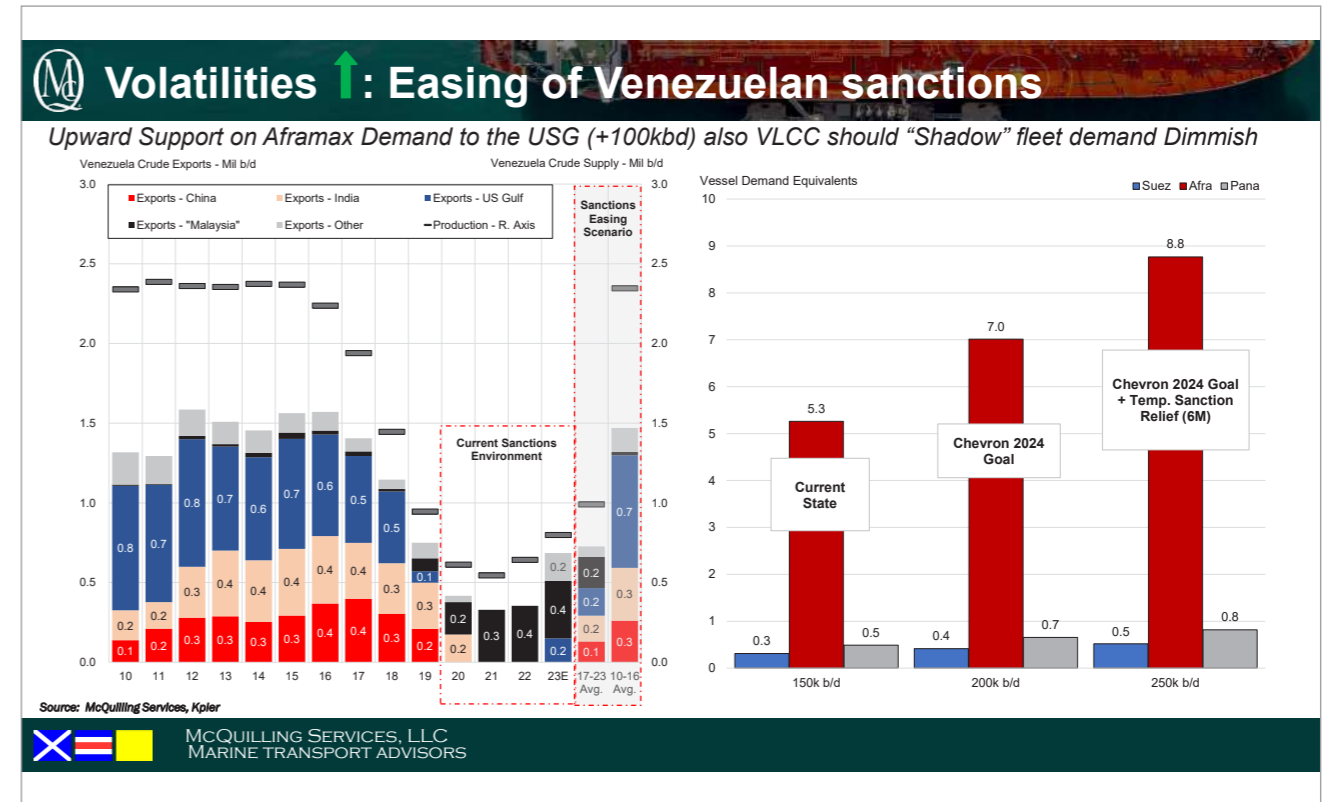
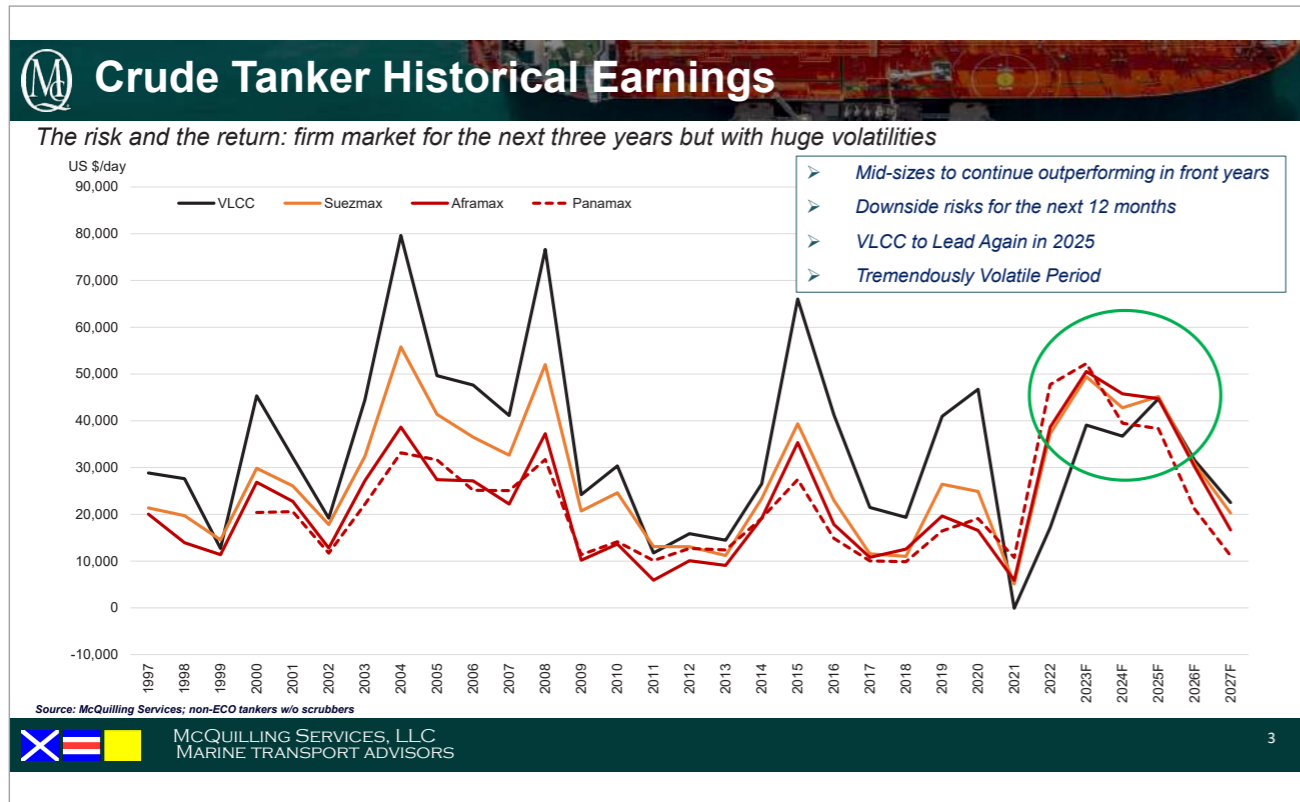
Navigating the Volatility
2023-2027 Tanker Market Brief
2023 KOBC Maritime Conference - Nov 2023
Presented by Oliver Ge, McQuilling Partners
Strictly Private & Confidential

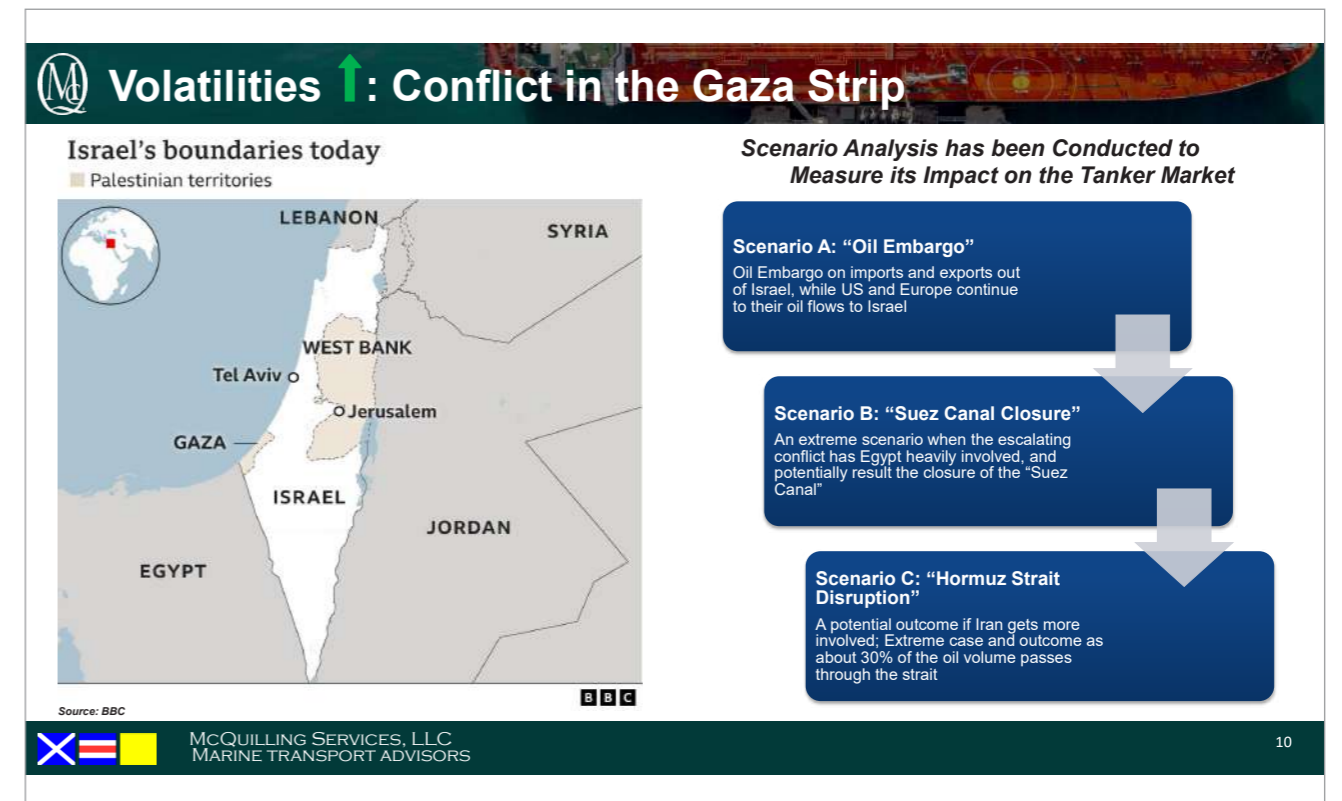
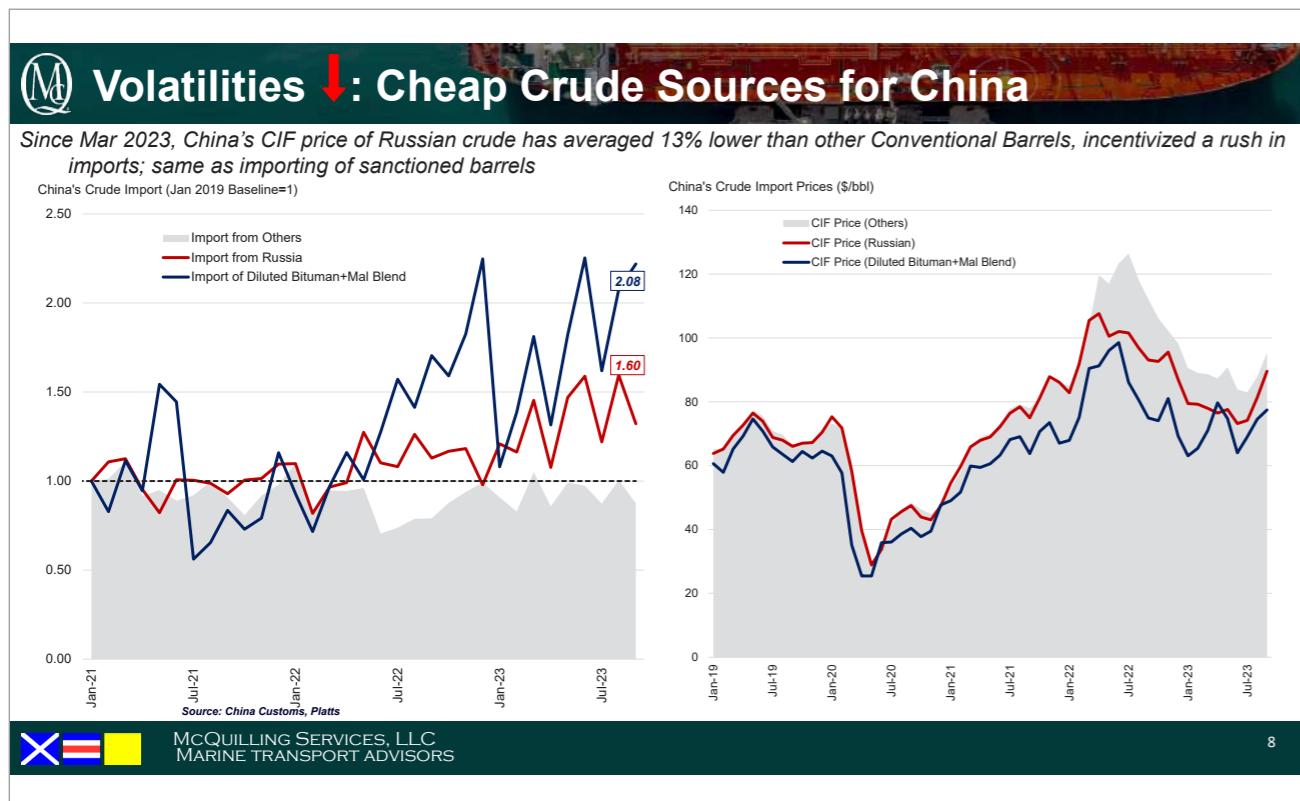
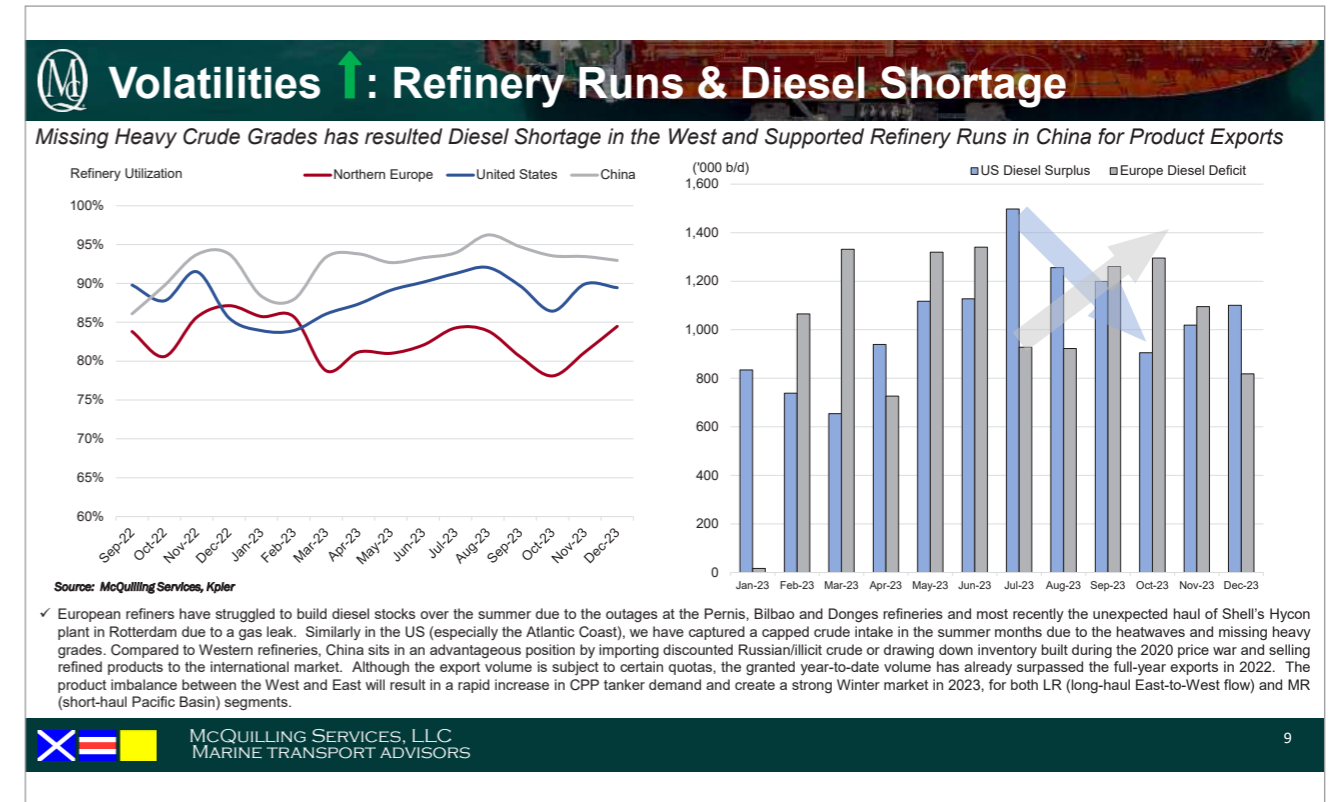
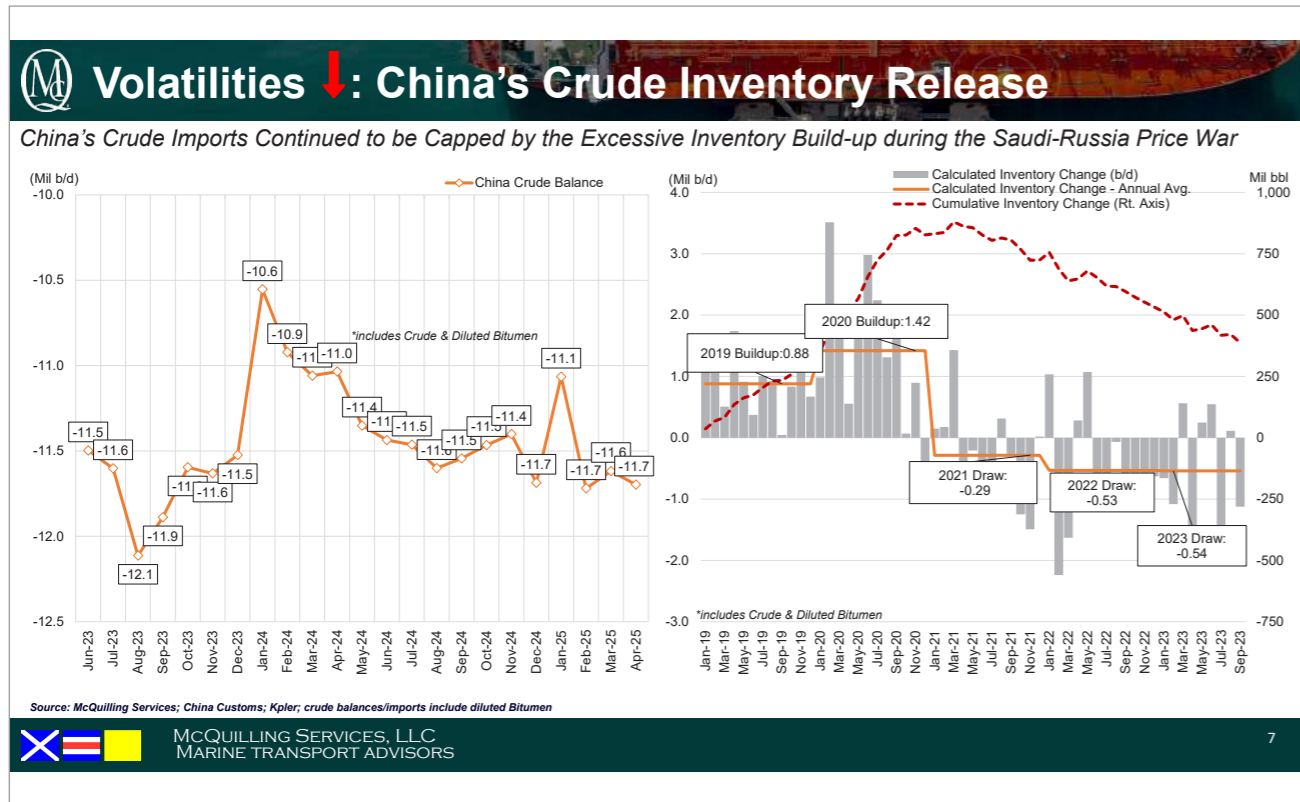
About McQuilling

McQuilling
Celebrating 50 years, 1972-2022

Experience	• Over 50 years in the maritime industry
Global Presence	• US-based transportation services firm with regional offices and international relationships
Innovation	• Foster a collaborative business model with global industry partners to bring a more focused experience to clients
Flexibility	• Reconfigurable organization to best meet clients' needs
Skills Inventory	• Analytical acumen and practical applications
Reliable Results	• Data driven analysis and decisions based on quantitative methods

MCQUILLING SERVICES, LLC
MARINE TRANSPORT ADVISORS





Volatilities ↑: Scenario A - "Oil Embargo"

Oil Embargo on Israel could provide Upward Support on Aframax demand in the Atlantic

Israel's recent crude imports by source ('000 b/d)

Source	Jan-23	Mar-23	May-23	Jul-23	Sep-23
Kazakhstan	~100	~100	~100	~100	~100
Azerbaijan	~100	~100	~100	~100	~100
Iraq	~100	~100	~100	~100	~100
Others/Unknown	~100	~100	~100	~100	~100

Source: S&P Global Commodities at Sea

- According to Platts, Israel currently imports around 300,000 b/d of crude, with 60% of the volume from Kazakhstan and Azerbaijan (Iraq volume ceased amid the closure of Kirkuk-Ceyhan oil pipeline). In an "Oil Embargo" scenario, we assume US to fill the gap of 180,000 b/d of crude demand in Israel. Using our base case vessel assumptions, this switch of crude sources will increase the Aframax tanker demand from 4 vessel equivalent to 17, which is expected to significantly boost the Aframax freight and earnings in the US Gulf market.
- Due to the escalating Gaza conflict, Israel is reported to potentially divert its oil imports from the main Mediterranean port, Ashkelon, to Eilat port on the Red Sea (Israeli Paz Oil Refinery). Taking this potential rerouting into consideration, tanker demand could further gain to 31 equivalent Aframaxes, nearly eight times higher than the current oil flows.

Category	Value	Unit
Crude Imports since Jan 2023	300,000	b/d
of which from Kazakhstan and Azerbaijan	60%	
Total Crude Volume likely to be disrupted	180,000	b/d
# of Aframax Liftings per year	113	
Current Crude Flow from Kazakhstan and Azerbaijan to Israel	360	Nautical Miles
Sailing Distance from Ceyhan to Ashkelon	4	
Current Aframax Demand Equivalent	4	
Oil Embargo by Kazakhstan and Azerbaijan on Israel	6,862	Nautical Miles
Sailing Distance from Houston to Eilat	13,353	Nautical Miles
New Aframax Demand Equivalent	17	
Israel Divert Oil Imports to Red Sea Port through Cape	31	
Sailing Distance from Houston to Eilat	13,353	Nautical Miles
New Aframax Demand Equivalent	31	

Aframax Demand Equivalent

Scenario	Demand Equivalent
Current Crude Flow from Kazakhstan and Azerbaijan to Israel	4
Oil Embargo by Kazakhstan and Azerbaijan on Israel	17
Israel Divert Oil Imports to Red Sea Port through Cape	31

Source: McQuilling Services

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Volatilities ↑: Scenario C - "Hormuz Strait Disruption"

1/3 of the Global Maritime Oil Flows through the Hormuz Strait; only 2 Oil Pipelines bypass the Strait

Crude oil, condensate, and petroleum products transported through the Strait of Hormuz (million barrels per day)

Year	2014	2015	2016	2017	2018
Total oil flows through Strait of Hormuz	17.2	18.4	20.6	20.3	20.7
Crude and condensate	14.4	15.2	17.3	17.2	17.3
Petroleum products	2.8	3.2	3.3	3.1	3.3
World maritime oil trade	56.4	58.9	61.2	62.5	64.0
World total petroleum and other liquids consumption	93.9	95.9	98.8	99.5	99.8
LNG flows through Strait of Hormuz (tcf per year)	4.0	4.2	4.2	4.1	4.1

Operating pipelines that bypass the Strait of Hormuz, 2018 (million barrels per day)

Pipeline name	Country	Capacity	Throughput	Unused capacity
Petrolina (East-West Pipeline)	Saudi Arabia	5.0	2.1	2.9
Abu Dhabi Crude Oil Pipeline	United Arab Emirates	1.5	0.9	0.6
Abu Dhabi Natural Gas Liquids Pipeline	Saudi Arabia	0.3	0.3	0.0
TOTAL		6.8	3.0	3.8

Crude & DPP Outbound through the Strait

Crude & DPP Outbound through the Strait

- In an extreme scenario when wider conflict were to impact transit activity in the Strait of Hormuz, we estimate potentially for disruption in a region for up to 30% of global oil supply according to US EIA. There's limited bypass through the strait; the two major oil pipelines that could increase additional 3.8 million b/d of throughput, but only representing 22% of the overall crude exports from the Arabian Gulf. There's no refined oil product pipeline to leverage in this scenario.
- To account for the impact on tanker demand, we anticipate countries that have been relying on crude supply from the AG will switch to over crude grades, i.e., US Gulf, North Sea, Med, LATAM and Southeast Asia. The enlarged global crude deficit should also incentivize inventory drawdowns – something usually result negative impact on tanker demand.

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Volatilities ↑: Scenario B - "Suez Canal Closure"

The Closure of the Suez Canal will Force Tankers to Reroute through Cape; Higher Ton-Mile Demand

Net Impact on Vessel Demand:

- +4 VLCC Demand
- +72 Suezmax Demand
- +66 Aframax Demand

Net Impact on Vessel Demand:

- +45 LR2 Demand
- +17 LR1 Demand
- +30 MR2 Demand

Source: McQuilling Services

- Major DPP tanker routes will be disrupted by the closure of the Suez Canal include Middle East>Westbound and Europe>Eastbound trades (Russian barrels to Asian destinations since 2022). In this scenario, we assume oil flows to remain at current levels while sailing distances notably increase through the Cape of Good Hope. In order to measure the impact from a longer sailing distance, we converted tanker demand into vessel equivalent for each DPP segments. Suezmax and Aframax, will find the greatly support by additional 72 and 66 demand equivalent respectively, compared to only 4 additional VLCC demand. Similar Support on the CPP Tanker Demand; In total +111 Demand Equivalent for the Aframax/LR2 sector

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Volatilities ↑: Scenario C - "Hormuz Strait Disruption"

Despite lower transited volume, tanker demand is expected to grow by 29 VLCC Equivalent and 46 MR2 Equivalent

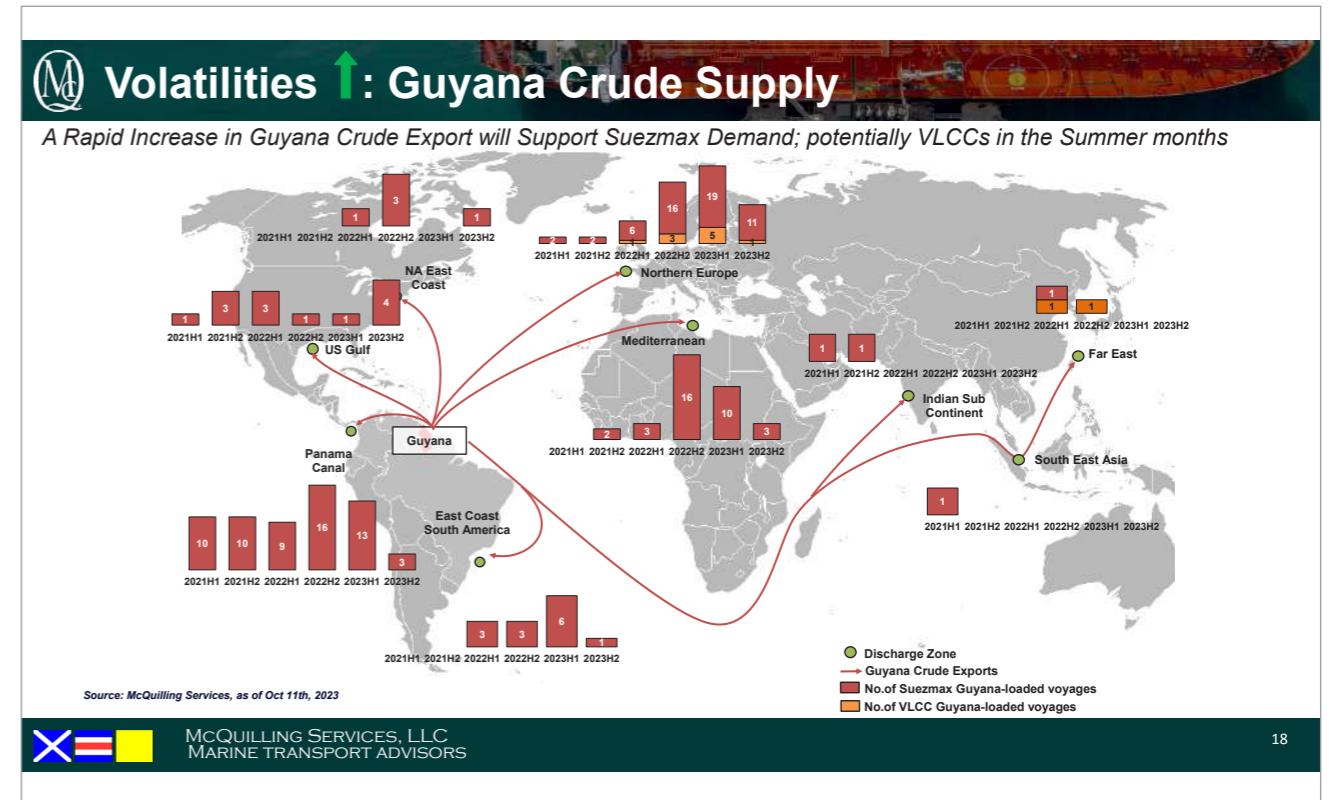
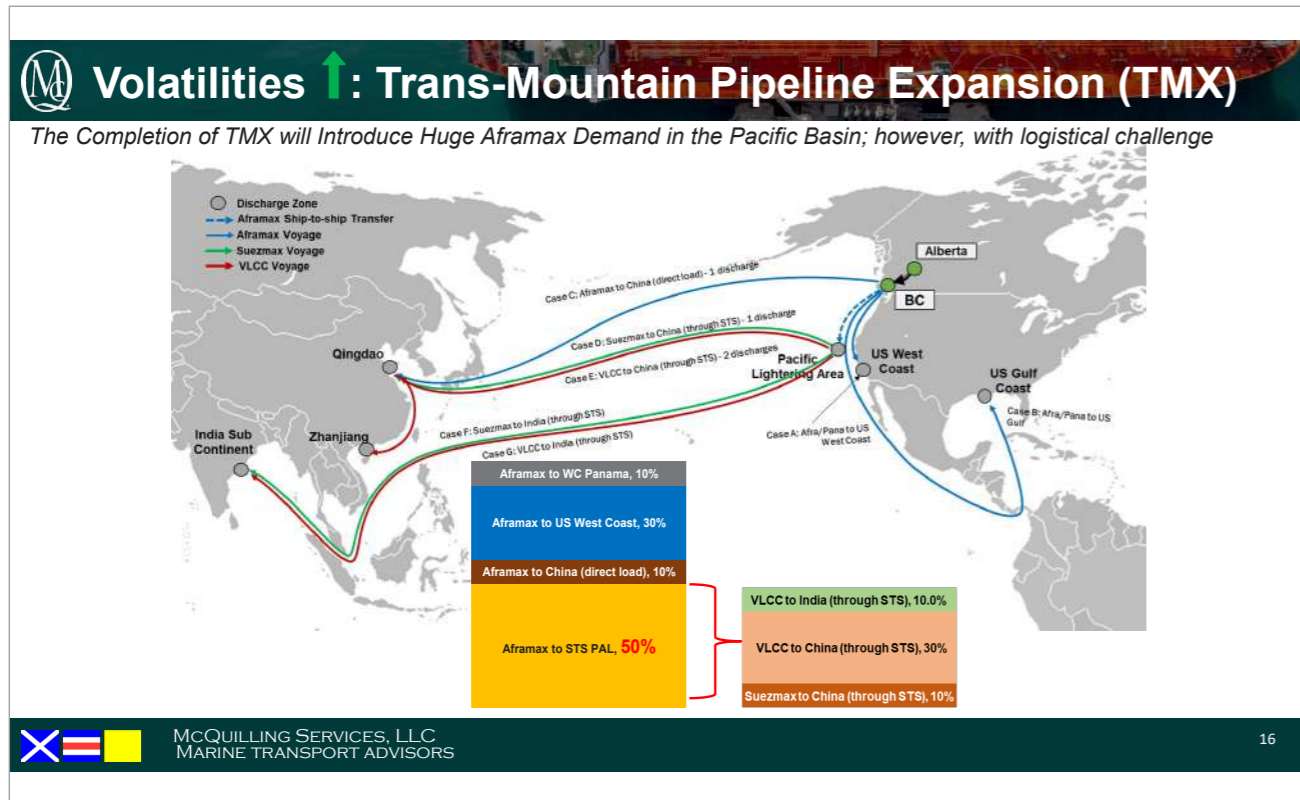
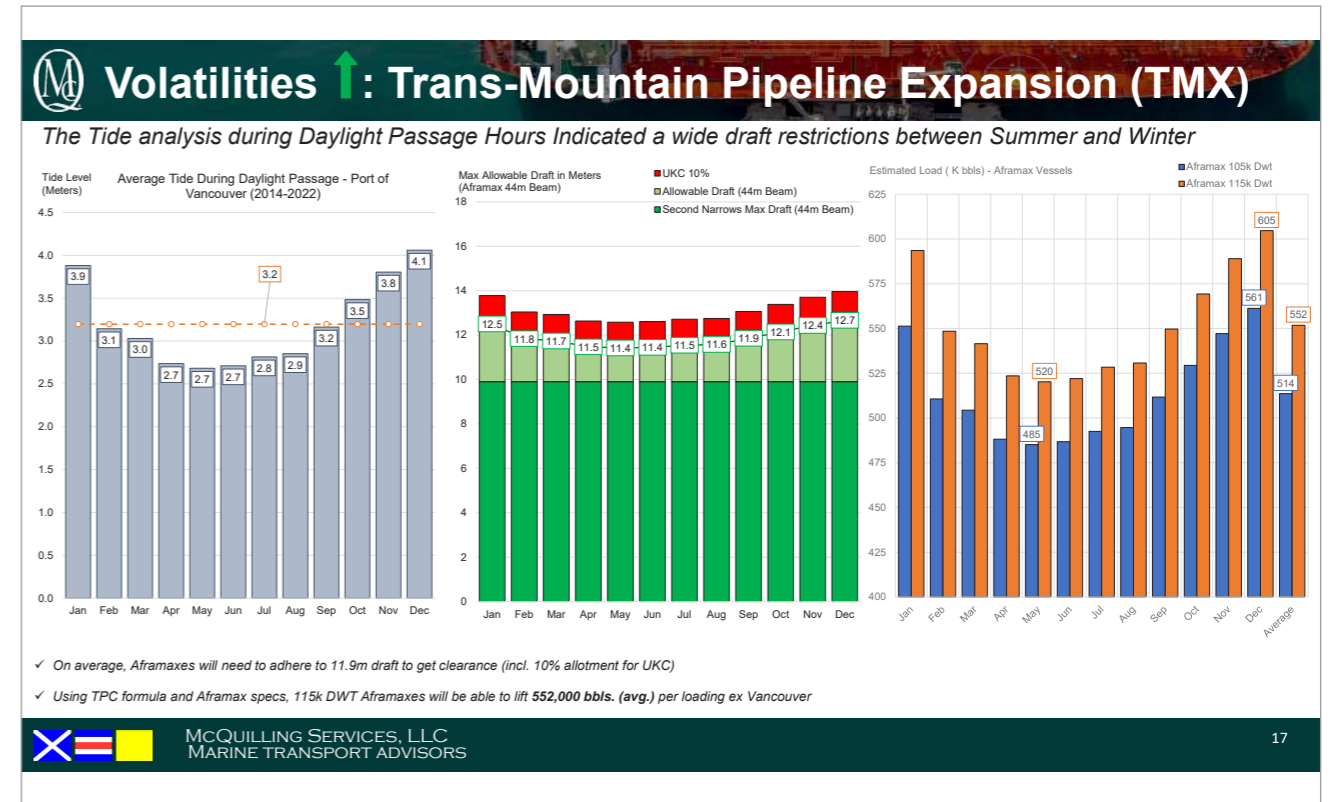
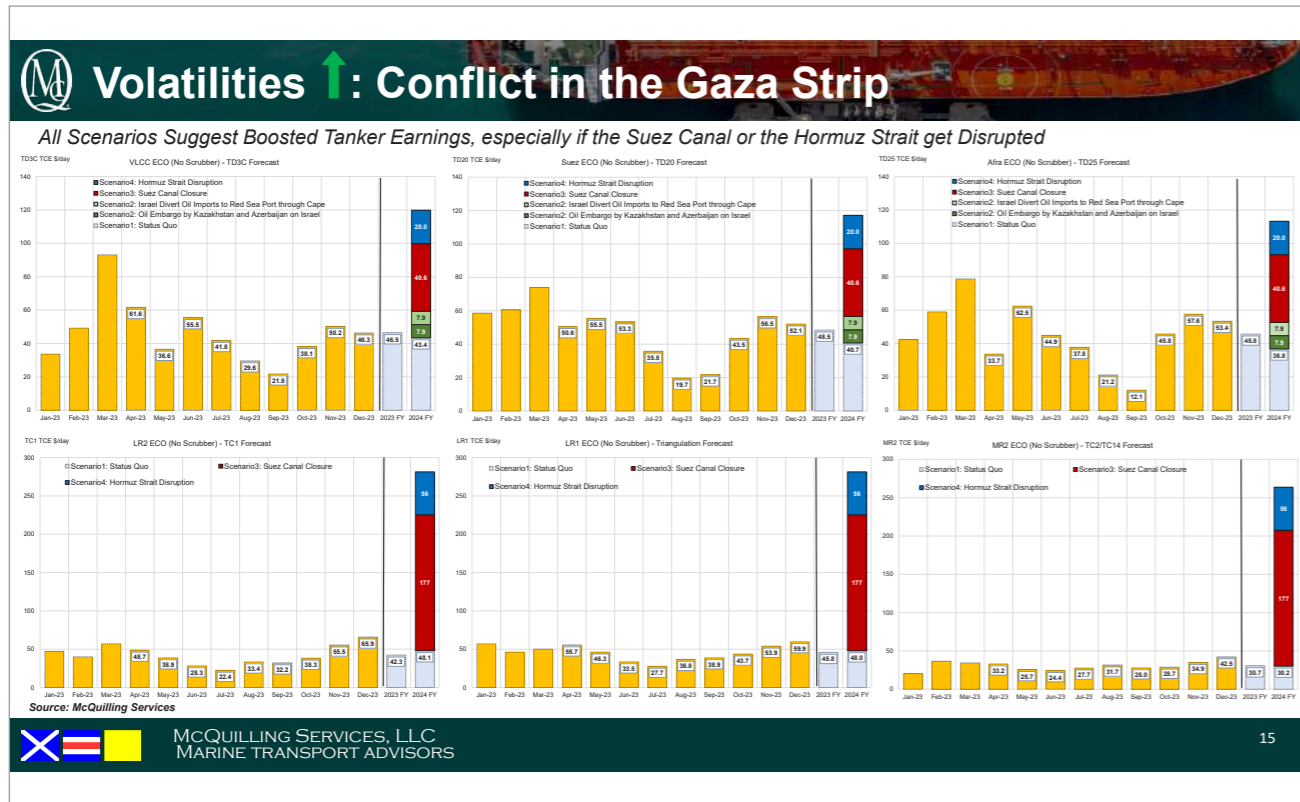
Net Impact on Vessel Demand:

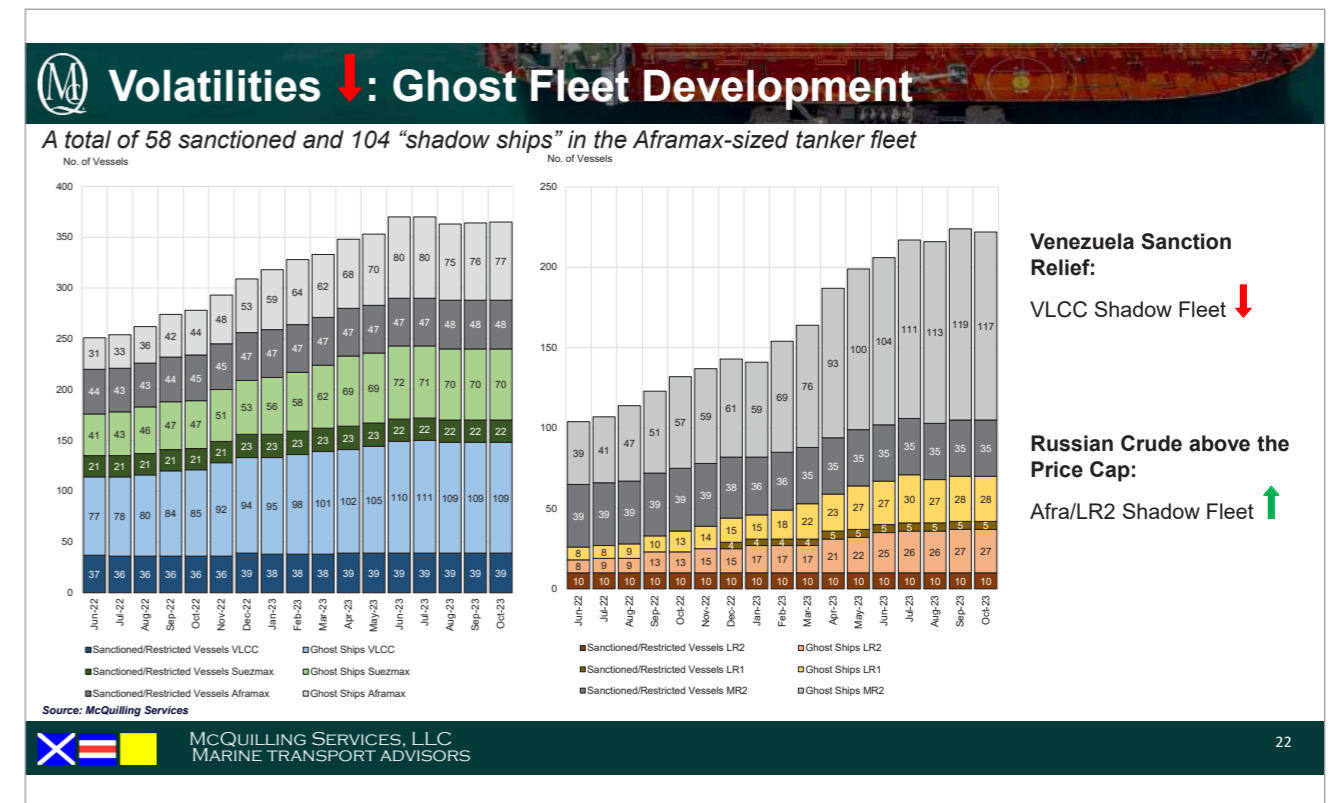
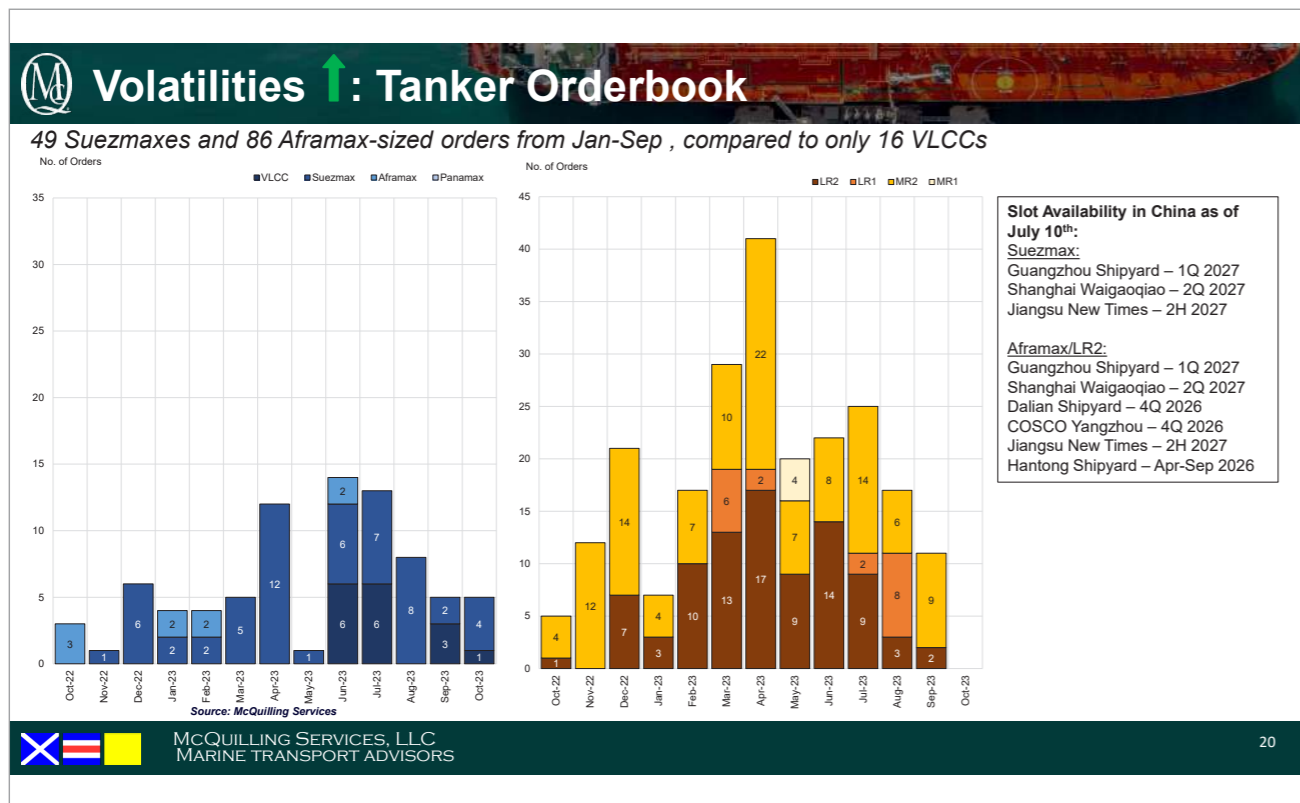
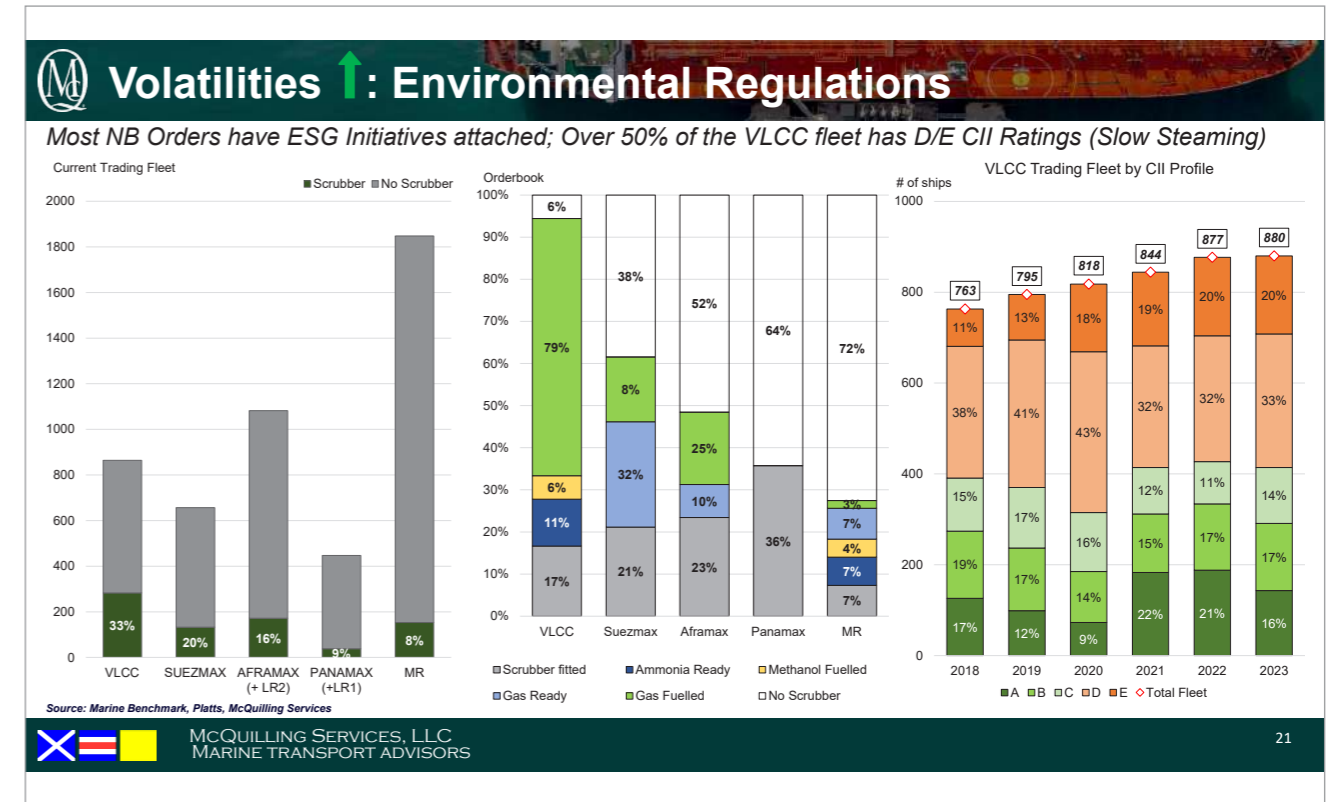
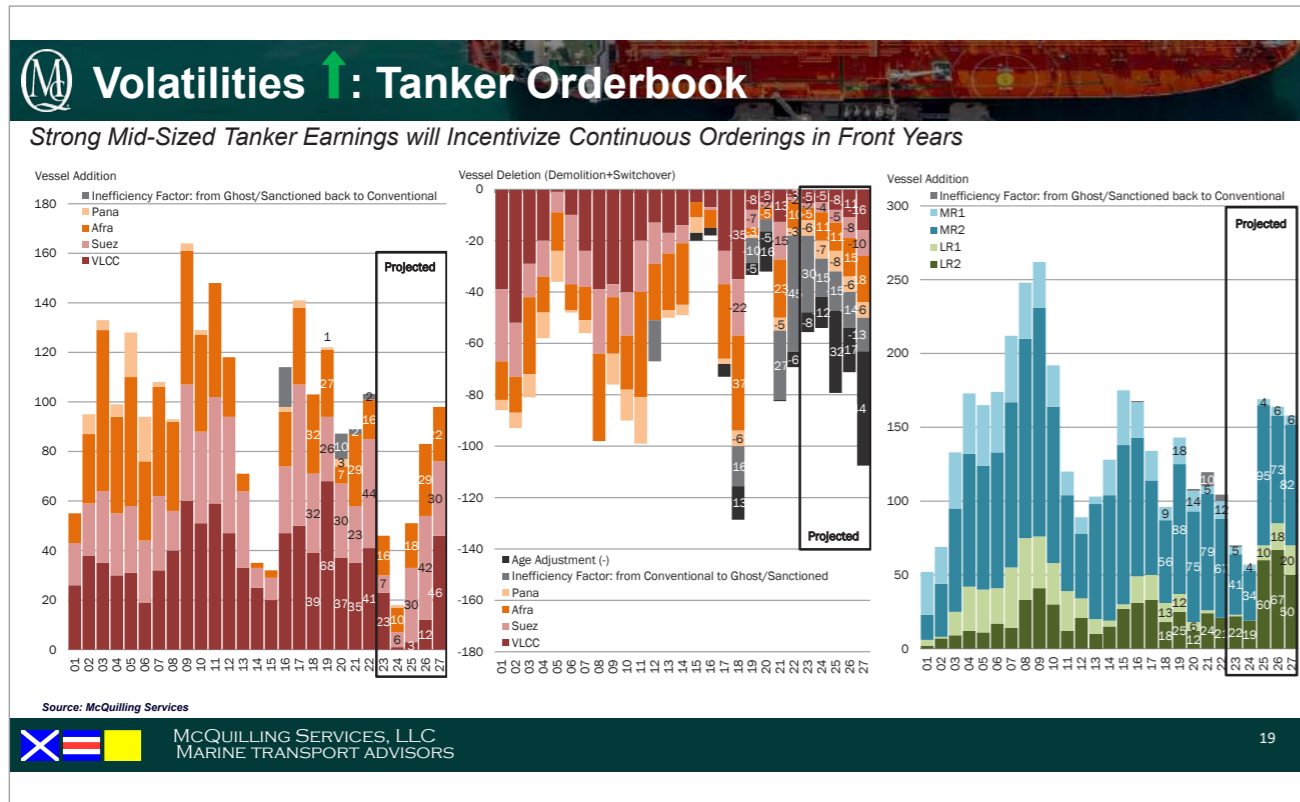
- +29 VLCC Equivalent
- +46 MR2 Demand Equivalent

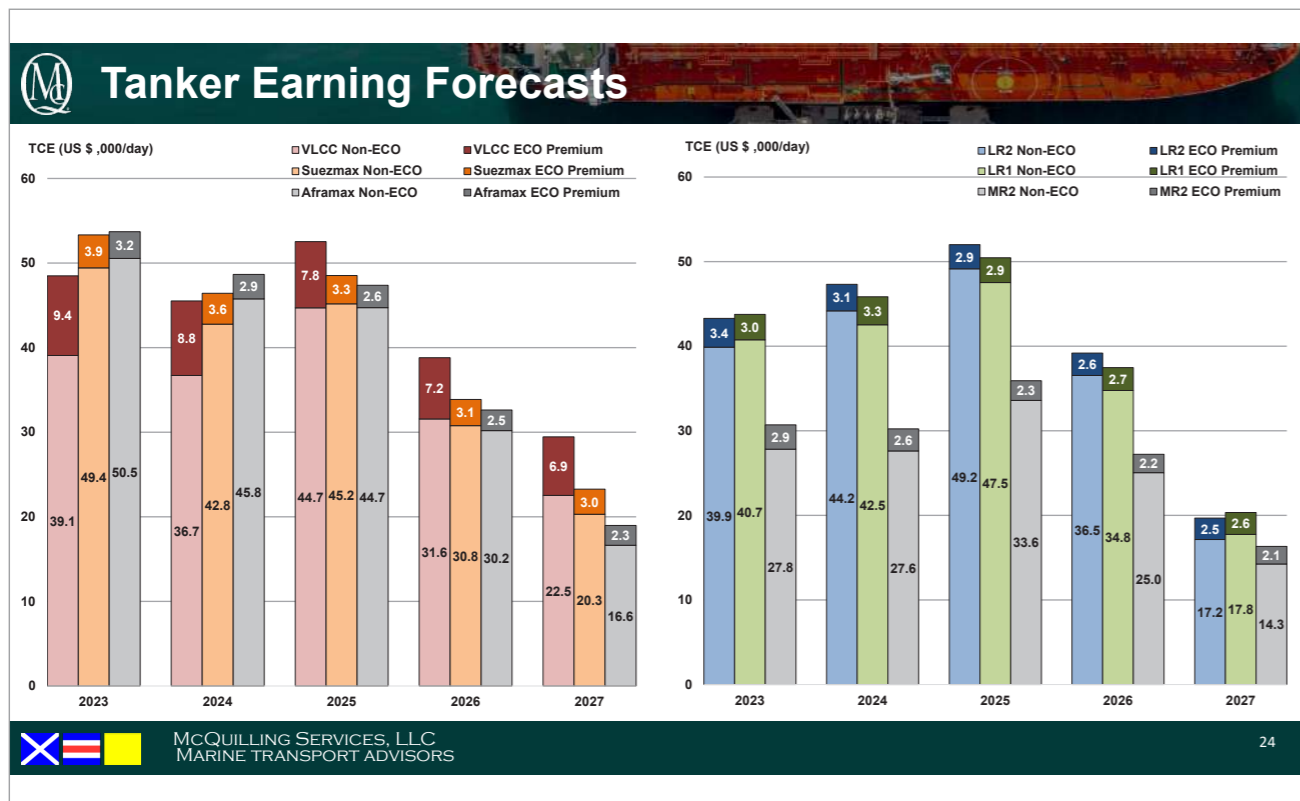
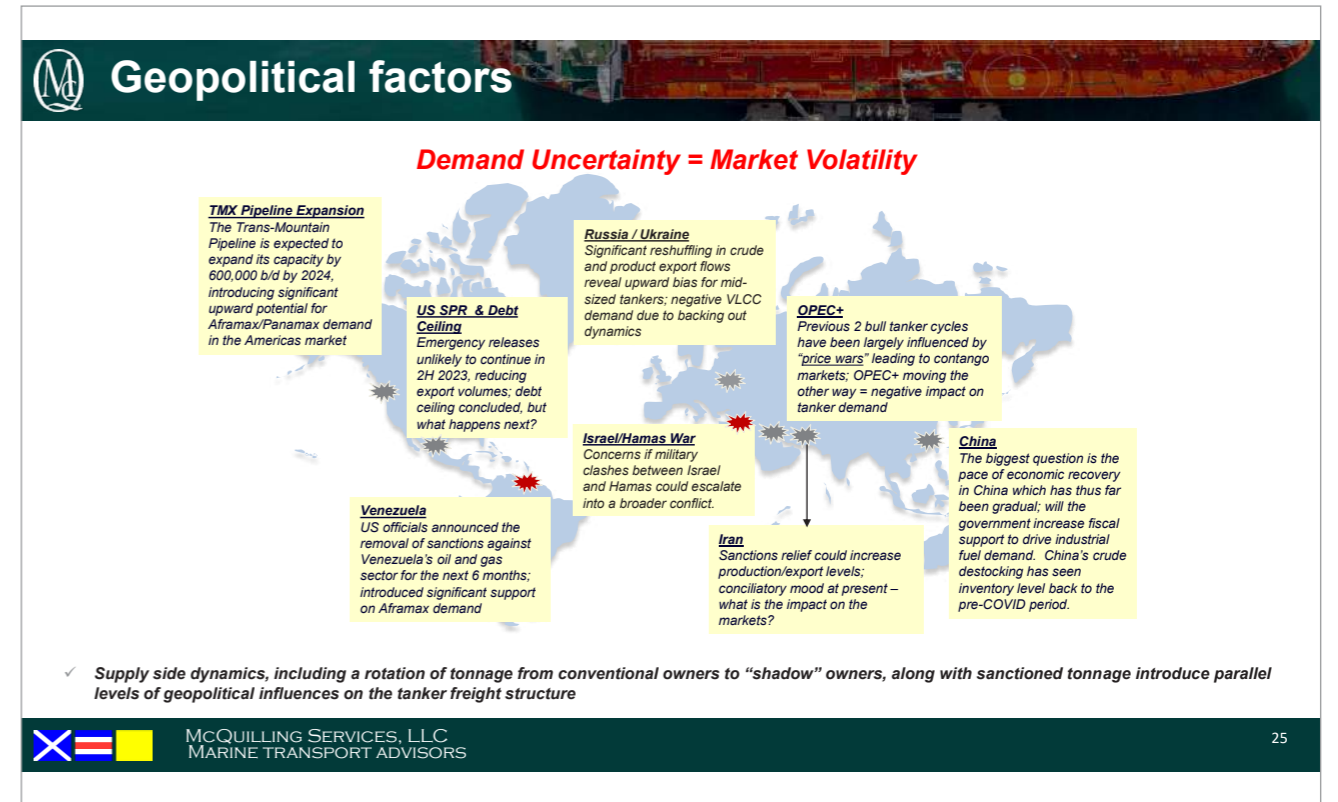
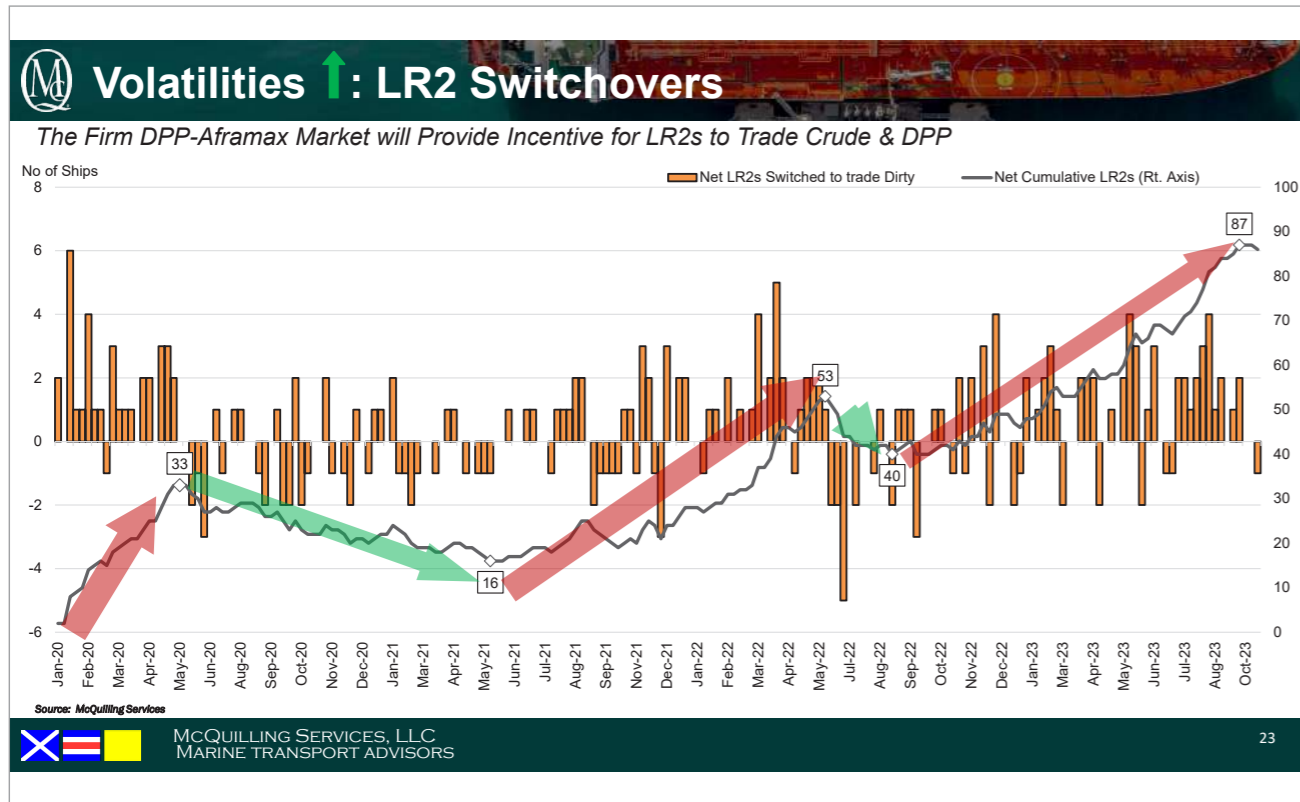
Source: McQuilling Services

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- Similar to the DPP side, we foresee bearish demand impact on the larger tanker sector (i.e., naphtha flows to Asia) while MR2s are expected to find the largest support providing the flexibility on their deployment. To measure the overall demand side impact on the CPP tanker fleet, we have converted LR2 and LR1 demand impact into MR2 vessel equivalent. Based on our calculation, the disruption on Hormuz Strait is expected to add 46 MR2 demand equivalent.

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McQUILLING SERVICES, LLC.
 Ocean House | 1035 Stewart Avenue | Garden City, New York 11530
 Tel: +1.516.227.5700 | Fax: +1.516.745.6198 | Email: services.us@mcquilling.com

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Shipping Session II

Container Market Trend & Prospect

Mr. Jan Tiedemann

Vice President of Liner Strategy | AXSMarine

Sales & Purchase Market Trend & Prospect

Mr. Tom Evans

VP, Data Intelligence | VesselsValue (A Veson Company)

Shipping Session II

November 1st 16:00~16:30



Mr. Jan Tiedemann

Vice President of Liner Strategy | AXSMarine

TOPIC

The 2023 Container Shipping Market : key facts and outlook

CV

Jan Tiedemann holds a master degree in Economic Geography from the University of Hamburg. He also studied urban planning with a focus on infrastructure at the Technical University of Hamburg-Harburg (TUHH). He worked as a business consultant and analyst with multinational consultancy firms, the Senate of the City State of Hamburg, the Hamburg Chamber of Commerce and as a freelance consultant until joining BRS Group and Alphaliner in Paris, France, in 2007. In 2014, Jan Tiedemann moved back to Germany to launch the joint BRS-Group / Alphaliner office in Hamburg as Team Lead for the international Analyst team.

Since the 2021 merger of Alphaliner and AXSMarine, he moved on to become Vice President of Liner Strategy at AXSMarine, a multinational service and data provider for the maritime Industry. As such, he continues to develop AXSMarine's suite of products and is primarily responsible for Alphaliner.com, the world's leading provider of data and market intelligence for the liner shipping industry.


The slide features the AXS MARINE logo at the top with the tagline 'CONNECTING THE SHIPPING COMMUNITY'. Below it is the KOBC logo and the Korean text '한국해양진흥공사 KOREA OCEAN BUSINESS CORPORATION'. The main title is 'The 2023 Container Shipping Market key facts and outlook', followed by 'prepared for the KOBC MARITIME CONFERENCE 2023 Busan'. At the bottom, it lists 'November 2023' and 'Jan Tiedemann, VP Liner', along with the AXS MARINE website 'www.axsmarine.com'.

agenda for today

1. a short introduction : who we are and what we do
2. some basic market numbers
3. after three 'crazy' years – back to normal?
4. supply and demand in the liner market
5. the vessel orderbook and the future 'green' fleet
6. outlook: Where is the market headed from here?

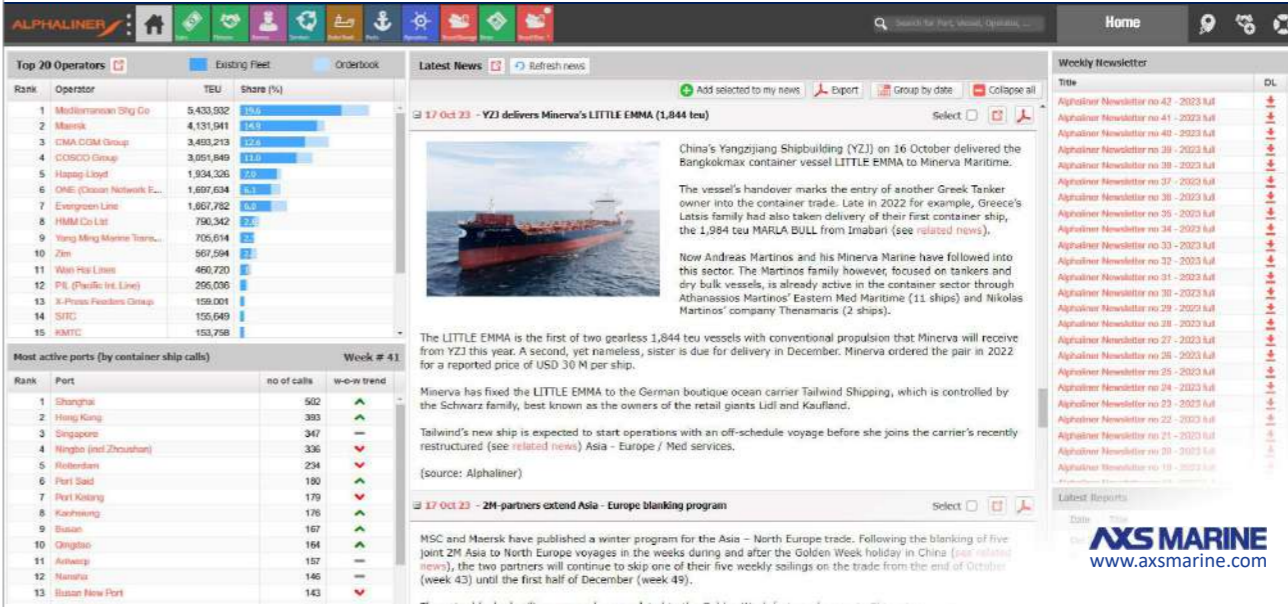
[1] Who we are and what we do

You might know us better as 'Alphaliner' we are part of 'AXSMarine'



AXS MARINE
www.axsmarine.com

our online platform: alphaliner.com



Rank	Operator	TEU	Share (%)
1	Mediteranian Shg Co	5,433,532	23.0
2	Maersk	4,131,941	18.3
3	CMA CGM Group	3,492,213	15.5
4	COSCO Group	3,051,849	13.6
5	Hapag-Lloyd	1,934,206	8.7
6	ONE (Ocean Network E...)	1,867,634	8.4
7	Evergreen Line	1,667,732	7.5
8	HMM Co Ltd	790,342	3.5
9	Yang Ming Marine Trans...	705,614	3.1
10	Zim	567,594	2.5
11	Wan Hai Lines	460,720	2.0
12	PSL (Pacific Int Line)	266,036	1.2
13	X-Press Feeder Group	159,001	0.7
14	SITC	156,049	0.7
15	KMTC	153,756	0.7

Latest News

17 Oct 23 - YZJ delivers Minerva's LITTLE EMMA (1,844 teu)

China's Yangzijiang Shipbuilding (YZJ) on 16 October delivered the Bangkokmax container vessel LITTLE EMMA to Minerva Maritime.

The vessel's handover marks the entry of another Greek Tanker owner into the container trade. Late in 2022 for example, Greece's Latsis family had also taken delivery of their first container ship, the 1,984 teu MARLA BULL from Imabari (see related news).

Now Andreas Martinos and his Minerva Marine have followed into this sector. The Martinos family however, focused on tankers and dry bulk vessels, is already active in the container sector through Athanasios Martinos' Eastern Med Maritime (11 ships) and Nikolas Martinos' company Themaric (2 ships).

The LITTLE EMMA is the first of two gearless 1,844 teu vessels with conventional propulsion that Minerva will receive from YZJ this year. A second, yet nameless, sister is due for delivery in December. Minerva ordered the pair in 2022 for a reported price of USD 30 M per ship.

Minerva has fixed the LITTLE EMMA to the German boutique ocean carrier Tailwind Shipping, which is controlled by the Schwarz family, best known as the owners of the retail giants Lidl and Kaufland.

Tailwind's new ship is expected to start operations with an off-schedule voyage before she joins the carrier's recently restructured (see related news) Asia - Europe / Med services.

(source: Alphaliner)

17 Oct 23 - 2M partners extend Asia - Europe blanking program

MSC and Maersk have published a winter program for the Asia - North Europe trade. Following the blanking of five joint 2M Asia to North Europe voyages in the weeks during and after the Golden Week holiday in China (see related news), the two partners will continue to skip one of their five weekly sailings on the trade from the end of October (week 43) until the first half of December (week 49).

AXS MARINE
www.axsmarine.com


about us

[1]

1. AXSMarine is provider of **data, market intelligence**, digital platforms and software-as-a-service tools for the maritime industry.
2. We cover the dry bulk, tanker, commodities and **container** markets.
3. Around the world, some **220 dedicated professionals** work for AXSMarine.
4. We are present in Paris, London, Hamburg, Singapore, Houston, Dubai and Sofia.

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[2] some basic market numbers



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the global liner fleet – key numbers

	Sep 2023	Sep 2021	Sep 2019
number of liner ships worldwide:	6,692 ships	6,253 ships	6,129 ships
liner fleet capacity:	27.70 Mteu	24.61 Mteu	23.29 Mteu
year-on-year fleet growth:	6.81%	4.32%	3.5%
Inactive fleet (capacity share):	0.90%	0.70%	2.5%
confirmed newbuilding orders (capacity):	7.77 Mteu	5.35 Mteu	2.29 Mteu
vessel orderbook as % of fleet capacity:	28.5%	21.7%	10%
container ship fleet average age:	13.7 years	13.0 years	11.9 years
container ship fleet weighted age:	10.9 years	10.4 years	9.2 years

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the Alphaliner 'Top 100'

Global figures: **6,717** active ships including 5,888 fully cellular

27,968,907 TEU (27,558,668 TEU fully cellular)

333,399,322 DWT

Regional Trades weekly capacities: Trans-Atlantic: **157,443** TEU, Trans-Pacific: **523,296** TEU, East-Europe: **447,433** TEU

* the top-5 and top-10 of 2013 are not the same as today
[Top carriers history 1996-2019](#)

Figures are consolidated

Rank	Operator	Teu	Share	Existing fleet	Orderbook
1	Mediterranean Shg Co	5,419,455	19.5%		
2	Maersk	4,129,095	14.9%		
3	CMA CGM Group	3,483,821	12.6%		
4	COSCO Group	3,027,661	10.9%		
5	Hapag-Lloyd	1,934,326	7.0%		
6	ONE (Ocean Network Express)	1,696,567	6.1%		
7	Evergreen Line	1,667,782	6.0%		
8	HMM Co Ltd	790,342	2.8%		
9	Yang Ming Marine Transport Corp.	705,614	2.5%		
10	Zim	507,594	1.8%		
11	Wan Hai Lines	460,720	1.7%		
12	PIL (Pacific Int. Line)	295,036	1.1%		

top-3 market share: 46.6% (ten years ago: 37.2%)

top-5 market share: 64.3% (*ten years ago: 46.1%)

top-10 market share: 83.7% (*ten years ago: 64%)

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container fleet growth of the last 20 years



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mainline mergers and acquisitions since 2000



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summary

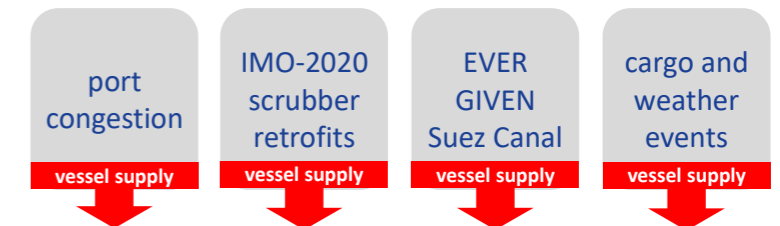
[2]

1. Global fleet capacity is on track to hit 30 Mteu in 2025. This is **six** times as much as in the year 2000 and will mark a growth of **25.0 Mteu in 25 years**.
2. The market is highly consolidated. Only **ten 'global players'** are left – the others are 'niche' or 'regional'.
3. **MSC** is on its way towards a '**league of its own**' with a fleet of ca. 6.0 Mteu in 2025. The shipping line could end up at almost 150% the size of Maersk (#2).
4. The largest container fleet (**27.7 Mteu**) in history meets the largest vessel orderbook (**7.8 Mteu**) in history.

During and after the Coronavirus pandemic, the market saw a quick cargo volume increase since consumers shifted spending from services to goods. This increased containerized ocean transport.



At the same time, various supply chain problems tied up 10% to 15% of the global container ship capacity.

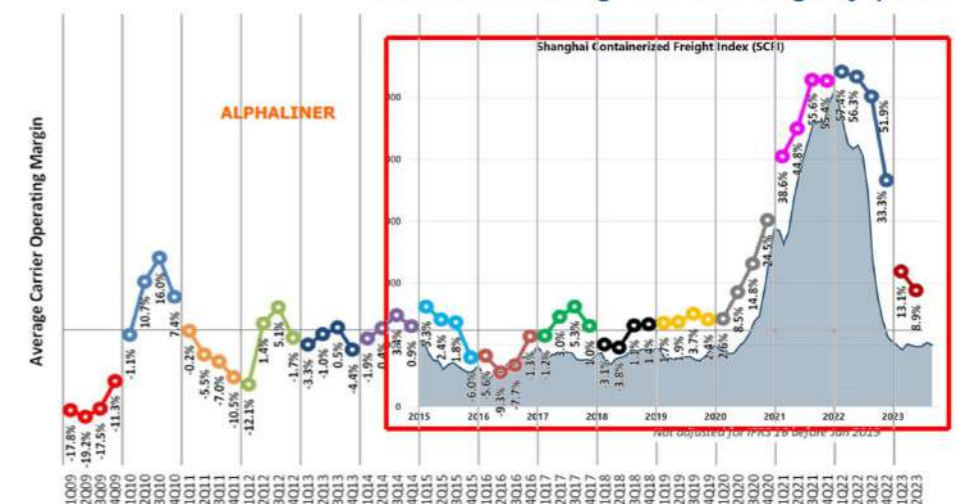


[3] after three 'crazy' years – back to normal?



carrier core EBIT margins 2009 - 2023

Main carriers: Average core EBIT margin by quarter



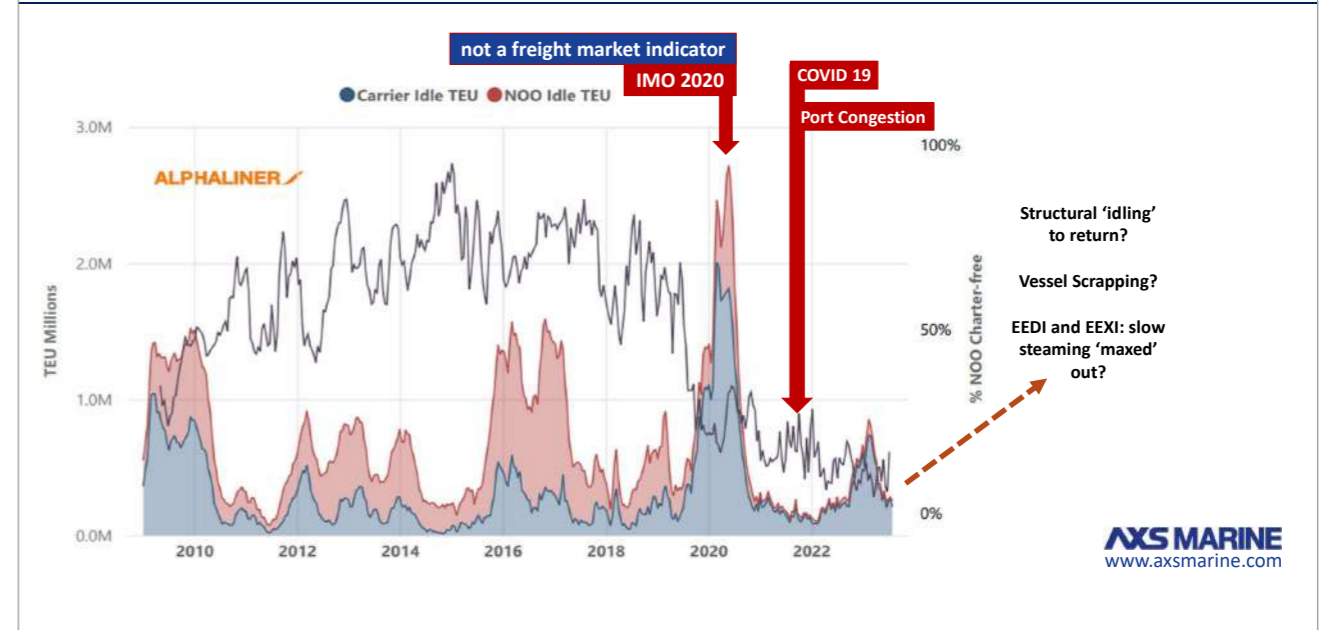
Average of CMA CGM until 2022 (incl APL to 2Q16), COSCO Shg (since 1Q 2019), CSCL (to 1Q 2016), EMC, Hanjin (to 3Q 2016), Hapag-Lloyd (incl CSAV to 2014), HMM, Maersk (Ocean from Q120), ONE (from 2Q 2018, formerly KL/MOL/NYK), WHL, YM, ZIM

summary

[3]

1. Carriers have made hundreds of **billions in profits** from 2020 – 2022, but the party is coming to an end.
2. Carriers use their massive profits to buy into **'everything'**: ship owners, lessors, ports, container terminals, airlines, logistics, warehousing, etc.
3. Many industry stakeholders are **'unhappy'** about the inflated asset prices (newbuildings, terminals, etc.) caused by the carriers' deep pockets are their willingness to pay more than anyone else can.
4. Carriers have a big problem: Rates are (almost) back to pre-COVID levels, but their **cost structure is much higher** than before.

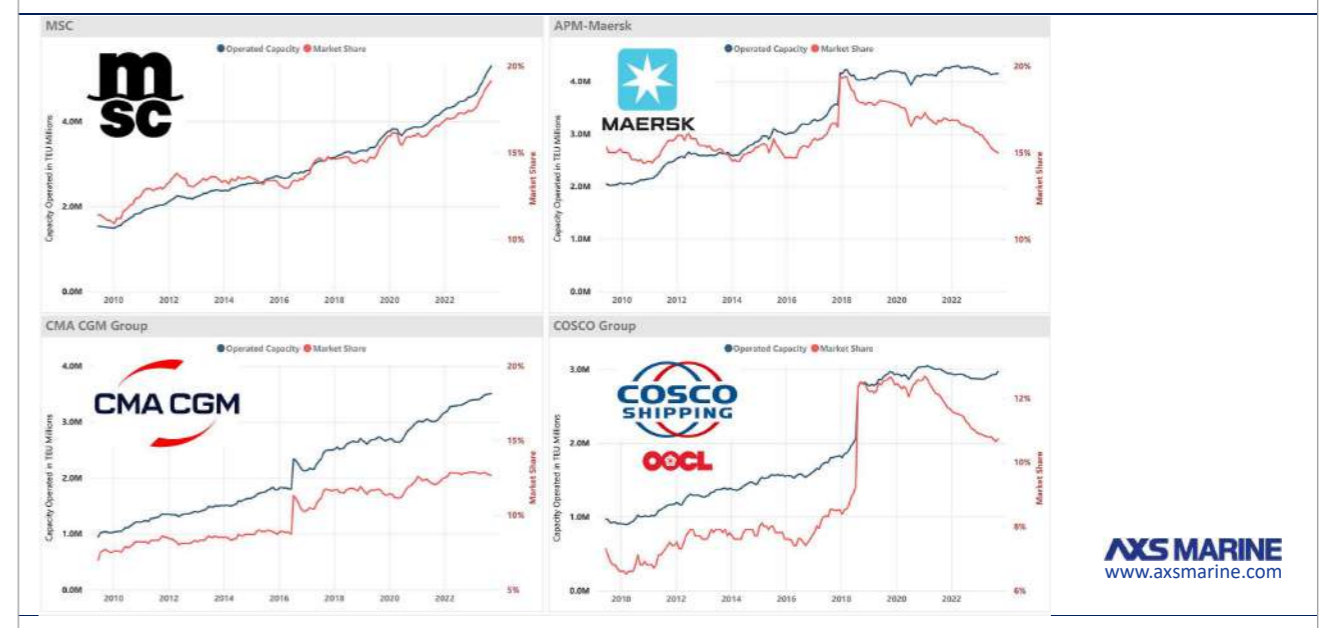
the inactive container ship fleet



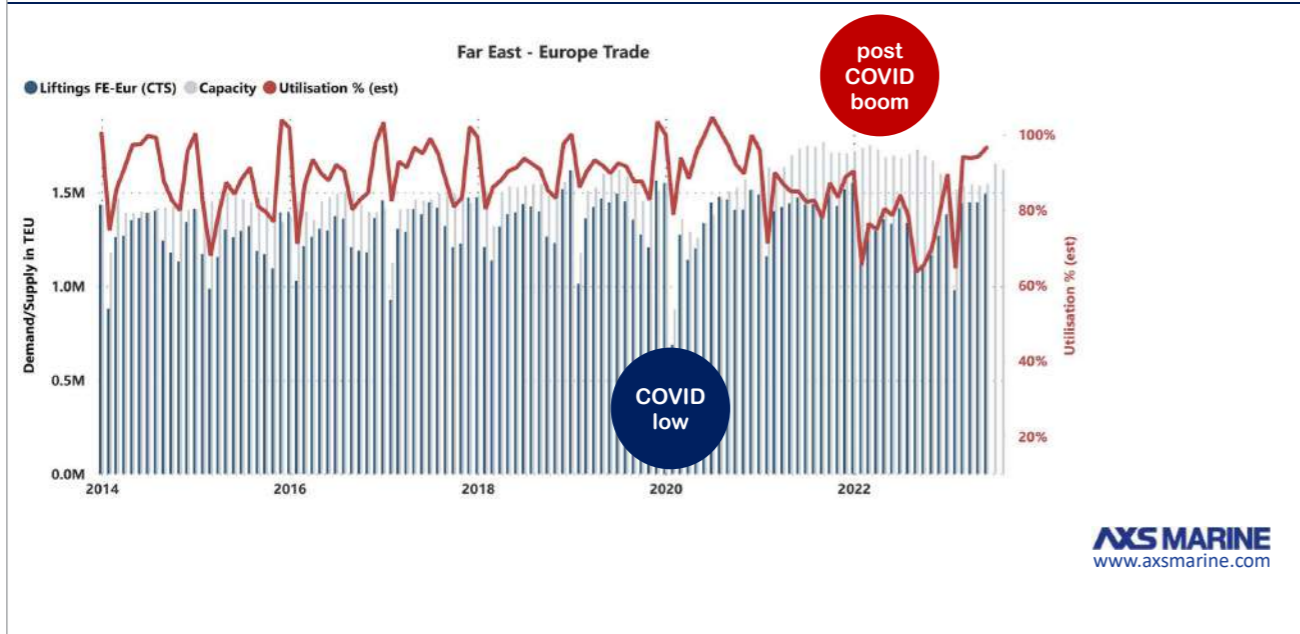
[4] supply and demand in the liner market



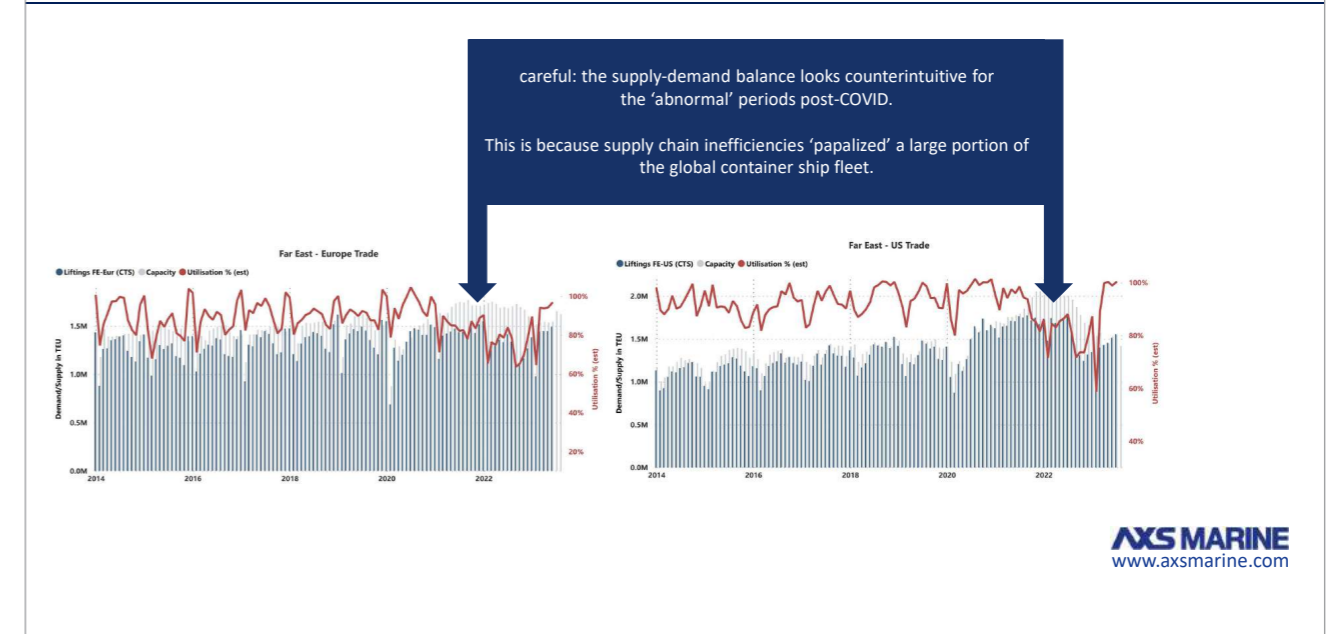
top-4 carriers: market share since 2010



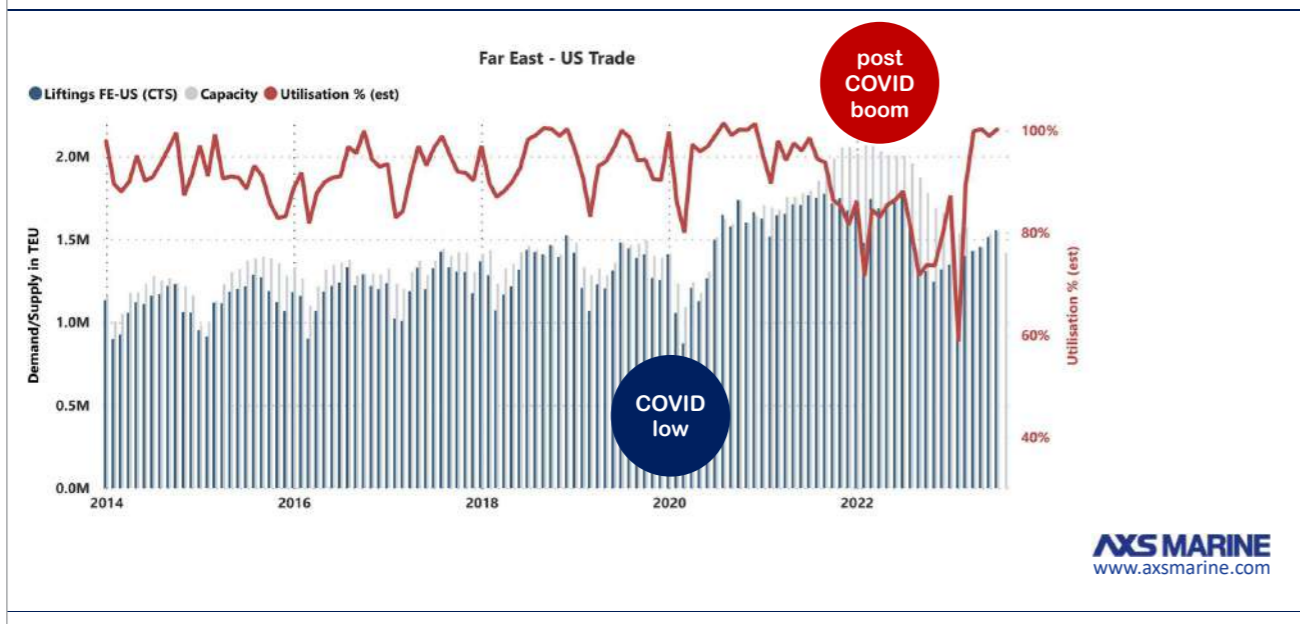
slot capacity, liftings and utilization: Asia - Europe



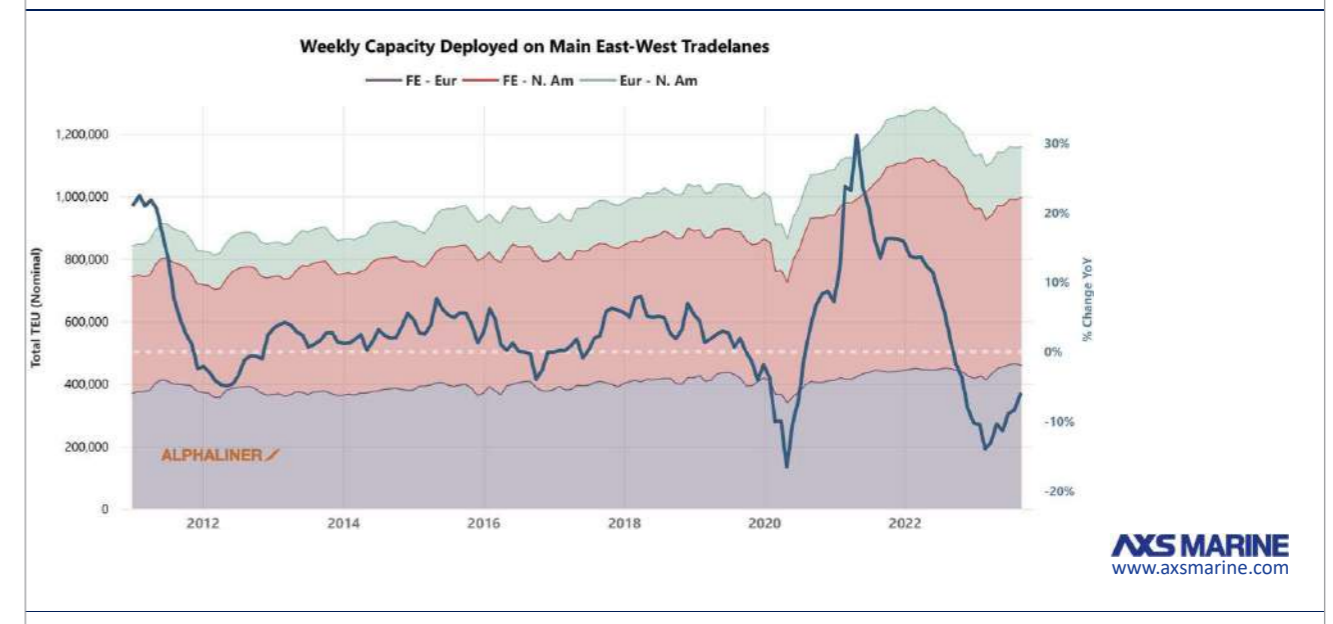
slot capacity, liftings and utilization



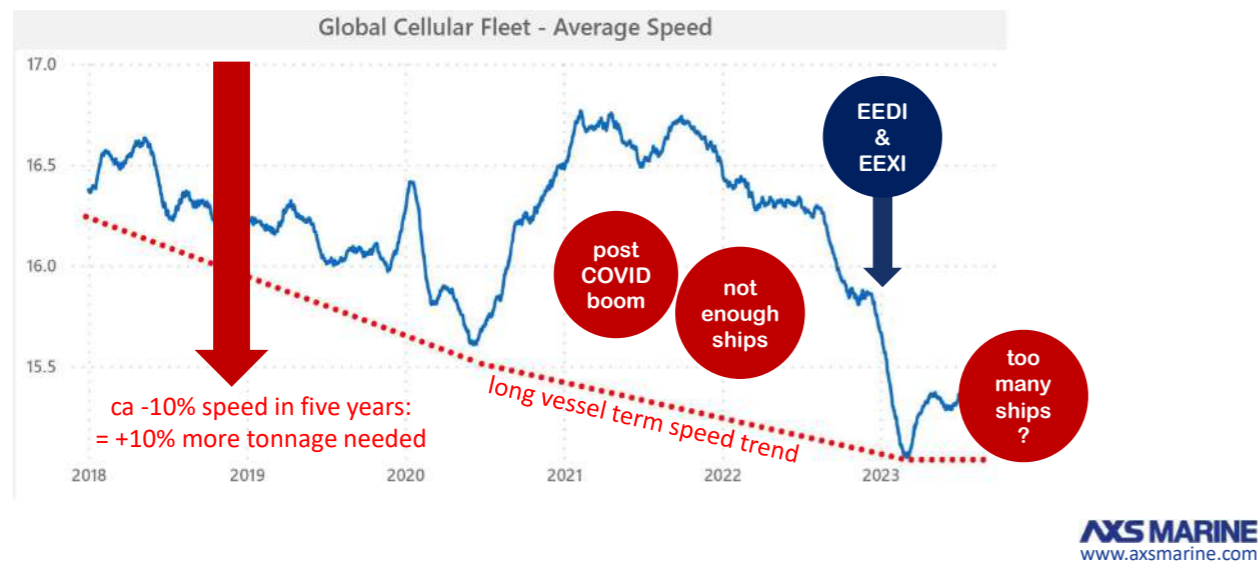
slot capacity, liftings and utilization: Asia - USA



deployed vessel capacity on east-west trades



vessel speed - a capacity management tool?



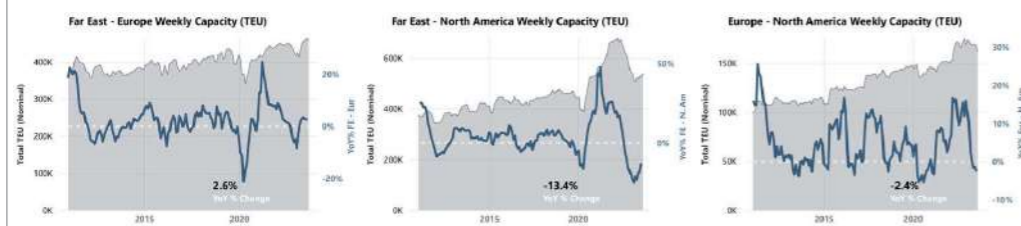
summary

[4]

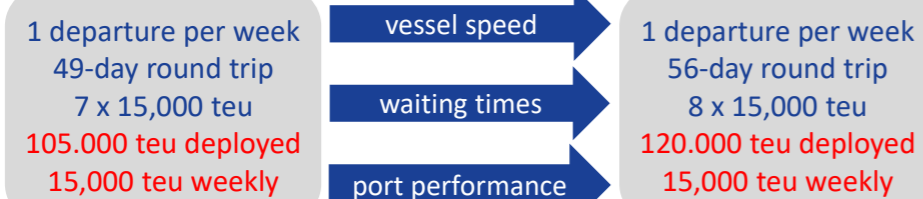
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1. Carriers have learned their lessons from the past, and they are much **more adept at managing capacity**. Market slowdowns will be met by service closures and/or void sailings programs.
2. However: Capacity management has its limits and **capacity is expected to outgrow demand**, no matter what the carriers will try.
3. Some carriers have actively built market share, whereas others (including big names) have let market share go.
4. In the past years, **vessel (un-)employment was not a good supply-demand indicator** but driven by other factors (IMO 2020, congestion, etc.).

weekly one-way capacity on east-west trades



Note the difference between 'deployed capacity' and 'weekly capacity'.

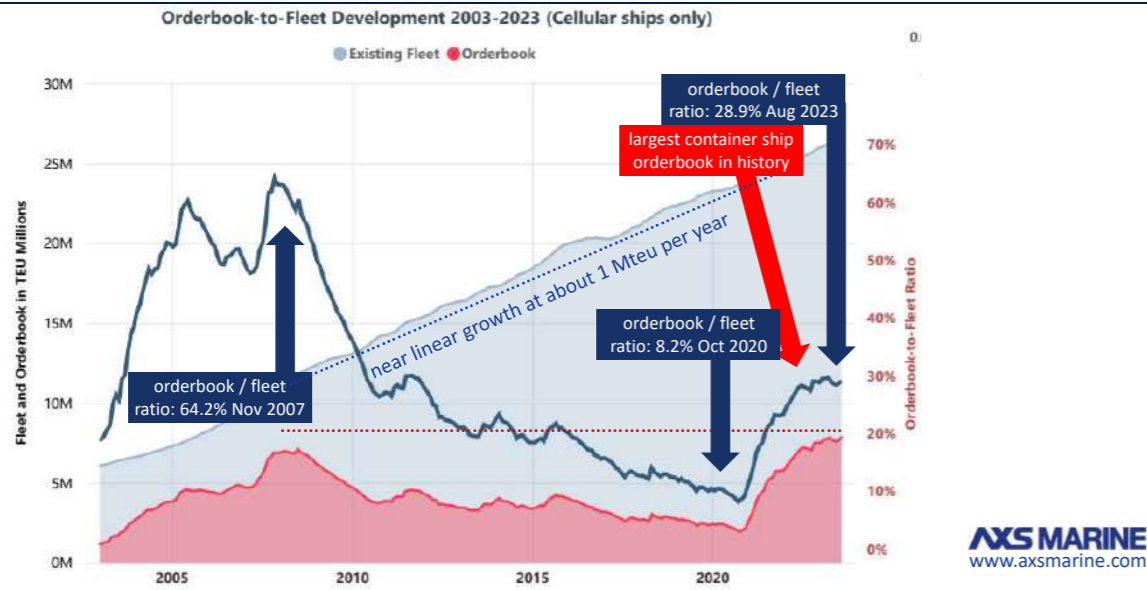


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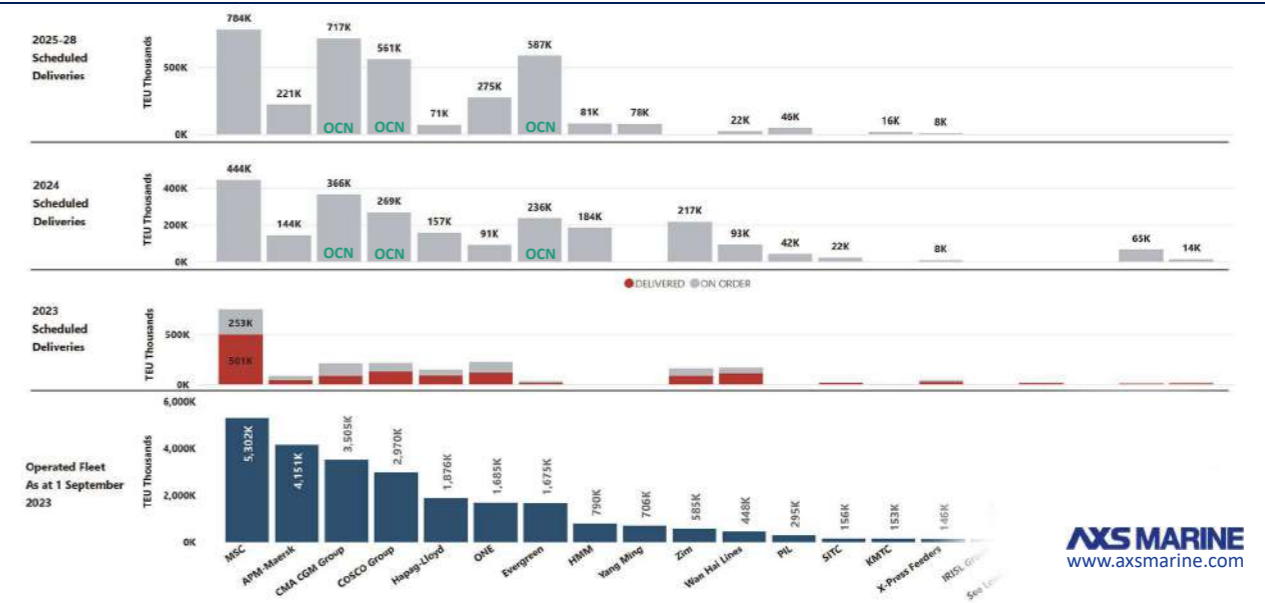
[5] the vessel orderbook and the future 'green' fleet



orderbook and orderbook-to-fleet ratio timeline



newbuilding deliveries by carrier: 2023 and 2024

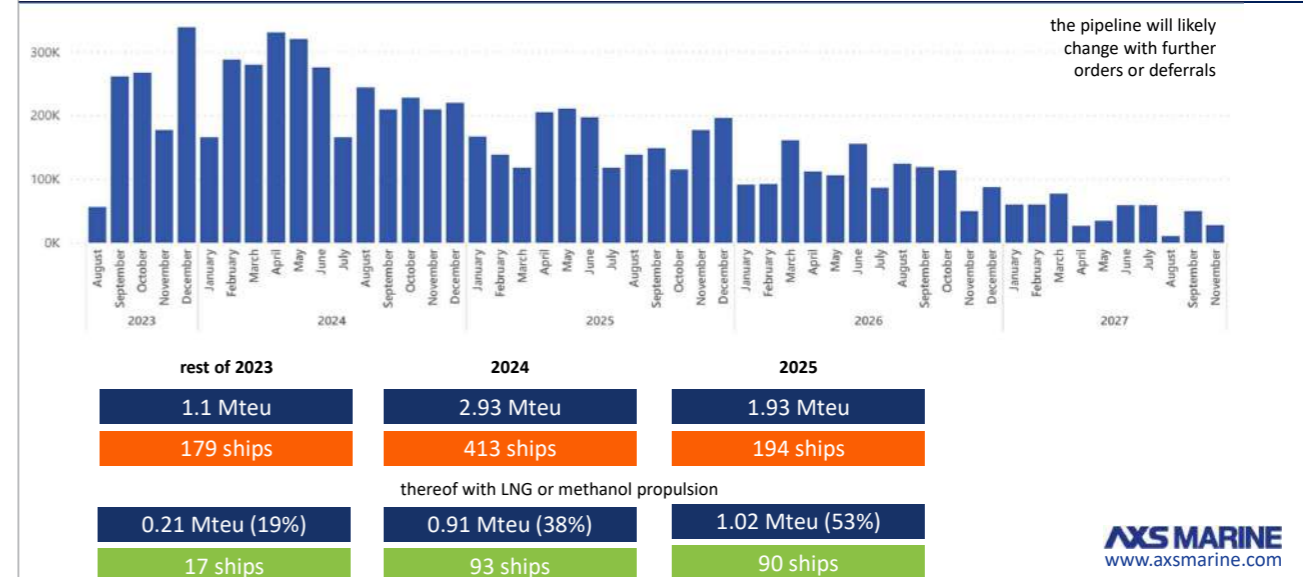


the top-10 carriers' share of the container ship orderbook

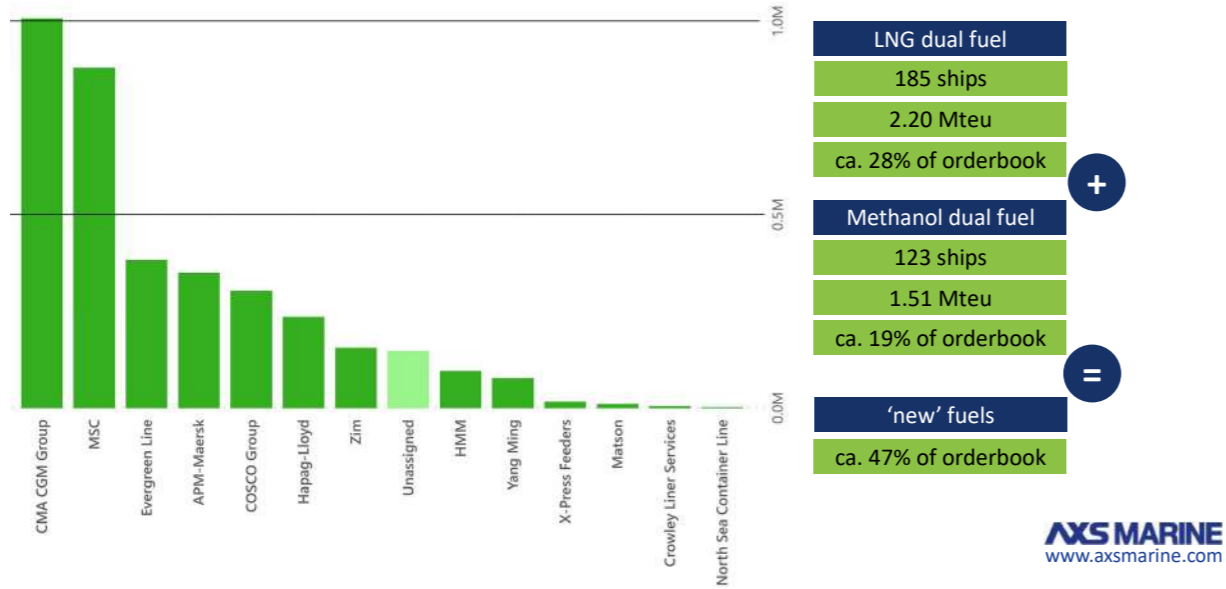
as per October 2023	top-3	top-5	top-10
carrier / orderbook in teu	3,188,559	4,319,549	6,289,760
MSC	1,512,821	1,512,821	1,512,821
Maersk	397,000	397,000	397,000
CMA CGM Group	1,278,738	1,278,738	1,278,738
COSCO Group (including OOCL)		879,014	879,014
Hapag-Lloyd		251,976	251,976
Ocean Network Express (ONE)			515,542
Evergreen			825,218
HMM			265,027
Yang Ming			77,500
ZIM			286,924
% of total assigned orderbook:	44.9%	60.9%	88.8%

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container ship delivery pipeline (teu per month)



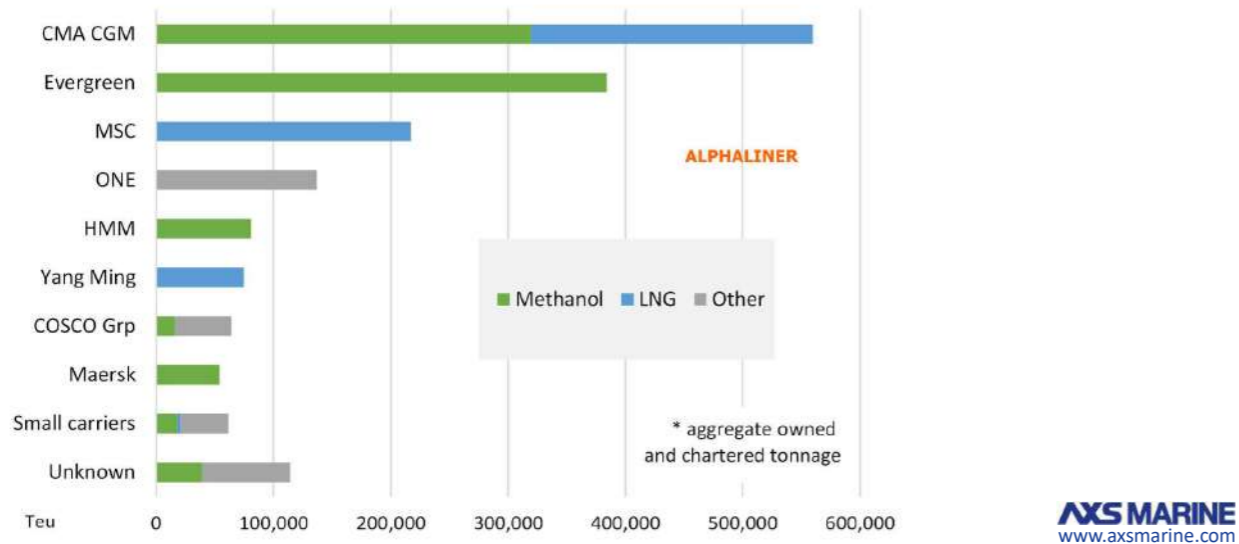
'green' orderbook by carrier: LNG and methanol



the good news: the 'green transition' is gaining traction



orders placed in 2023 so far: 83% for 'green' ships



after LNG and methanol: ammonia is joining the race



summary

[5]

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1. MSC absolutely dominates this year's vessel deliveries at ca. **0.75 Mteu** of capacity.
2. The members of OCEAN Alliance will 'strike back' in 2024 with a massive **0.87 Mteu** combined between CMA CGM, and COSCO/OOCL.
3. The 'green' orderbook of LNG (18%) and Methanol (19%) combined now accounts for **almost half of the total orderbook (47%)**.
4. The decarbonization challenge has moved from the vessel to the **strategic procurement of sustainable fuels**.
5. **Decarbonization will cost billions**. Cargo owners and consumers will ultimately have to foot the bill.

market outlook

[6]

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short term challenges

1. slow winter season demand, tonnage overcapacity, collapsing freight rates
2. increasing costs for labor, bunker fuel, vessels, carbon pricing
3. general labor shortage (trucking, terminals, crewing, etc.)

long term challenges

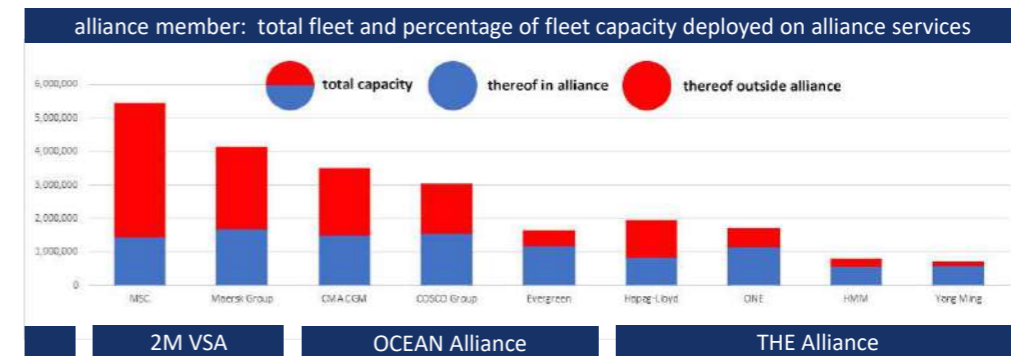
1. transition to new fuels (methanol, LNG, ammonia) and procurement of these 'green' fuels at scale.
2. tougher regulation of the liner shipping market, cooperation, consortia and alliances.

[6] outlook – Where is the market headed from here?



the true size of the carrier alliances

	2M VSA	OCEAN	THEA
fleet capacity of alliance members:	9.55 Mteu	8.18 Mteu	5.13 Mteu
fleet capacity deployed on alliance services:	3.10 Mteu	4.22 Mteu	3.08 Mteu



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the true size of the carrier alliances

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alliance member: total fleet and percentage of fleet capacity deployed on alliance services

carrier	in alliance	non-alliance	% alliance	total fleet	alliance fleet
MSC	1,431,377	4,012,482	26.3	5,443,859	2M VSA
Maersk Group	1,677,593	2,468,156	40.5	4,145,749	3,108,970
CMA CGM	1,500,027	1,994,186	42.9	3,494,213	
COSCO Group	1,545,884	1,496,850	50.8	3,042,734	OCEAN Alliance
Evergreen	1,173,690	476,073	71.1	1,649,763	4,219,601
Hapag-Lloyd	808,008	1,126,318	41.8	1,934,326	
ONE	1,149,060	548,574	67.7	1,697,634	
HMM	546,018	244,324	69.1	790,342	THE Alliance
Yang Ming	573,049	132,565	81.2	705,614	3,076,135

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Jan Tiedemann

VP Liner - AXSMarine („Alphaliner“)

AXSMarine GmbH

Neuer Wall 52,

20354 Hamburg, Germany

jan.tiedemann@axsmarine.com

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summary

[6]

1. Winter 2023/2024 will need substantial 'void sailing' programs since demand is expected to remain weak.
2. Carriers will implement even more slow-steaming and voyage diversions (from Panama to Suez, from Suez to Cape of Good Hope) in winter.
3. USEC Labor Contract expired September 2024 – strike action possible in H1 (USWC has been extended to 2028)
4. The 2M VSA (MSC and Maersk) will expire in little over a year. THEA and OCEAN will continue but could face some headwinds (especially OCEAN).
5. The end of the EU Consortia Block Exemption Regulation is a 'non-event', but it may set the tone.

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Shipping Session II

November 1st 16:30~17:00



Mr. Tom Evans

VP, Data Intelligence | VesselsValue (A Veson Company)

TOPIC

Outlook of Sales and Purchase Market

SUMMARY

The presentation to cover:

1. Sales and Purchase trend in 2023 in line with ship value changes
2. Asset value cycle relating to supply and demand of vessels
3. Asset value forecast with sector summary

CV

Tom Evans joined Veson Nautical following the VesselsValue acquisition in May 2023. He is the VP of Data Intelligence which includes the VesselsValue, Q88 and Oceanbolt brands. Before joining Veson Nautical, Tom ran the Data and Commercial functions of VesselsValue as the Chief Operating Officer. He remains an active Sale and Purchase shipbroker continuing to work with a number of Greek and Japanese shipowners and operators.

OUTLOOK OF SALES AND PURCHASE MARKET

KOBC International Maritime Conference

Tom Evans VP, Data Intelligence

tevens@veson.com



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VESON NAUTICAL The global market leader in developing, implementing, and supporting the solutions that propel maritime commerce.

38,000+ Global users at 2400+ organizations in 75+ countries	400+ Team members with maritime and technology backgrounds
6 Global centers of excellence	Singular focus on maritime since 2003
	4 leading brands under one roof

ABOUT VESSELSVALUE

VesselsValue | VESON NAUTICAL

VesselsValue
A Veson Company

As the leading provider of vessel valuations and market perspective, VesselsValue delivers:

- High-quality information, updated daily
- Objective and reliable live, historical, and forecasted values
- Trends and opportunities for individual fleets, vessels, companies, and sectors
- Flexible APIs to input VesselsValue data into your critical systems and models

- Founded in 2011
- 140+ team of researchers, analysts, and maritime professionals
- Acquired by Veson Nautical in 2023

ABOUT VESON NAUTICAL

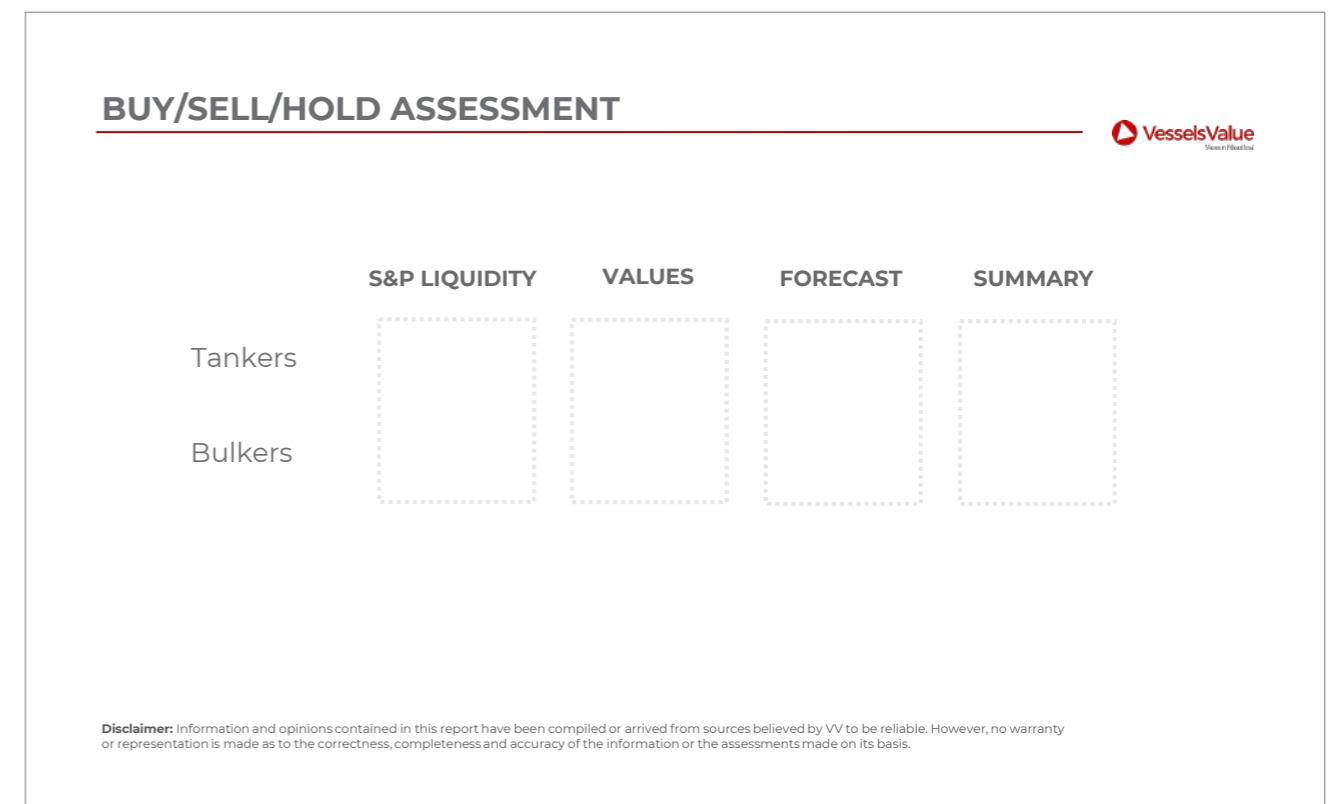
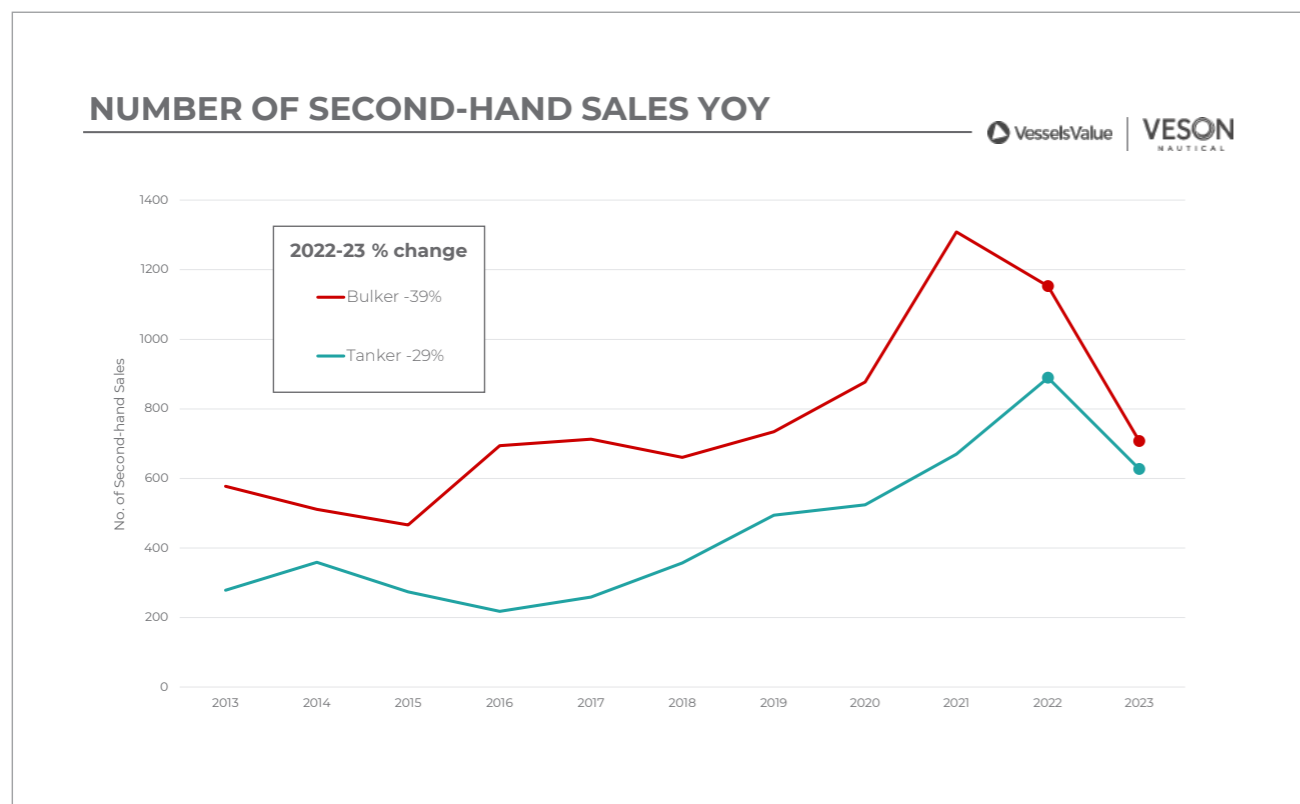
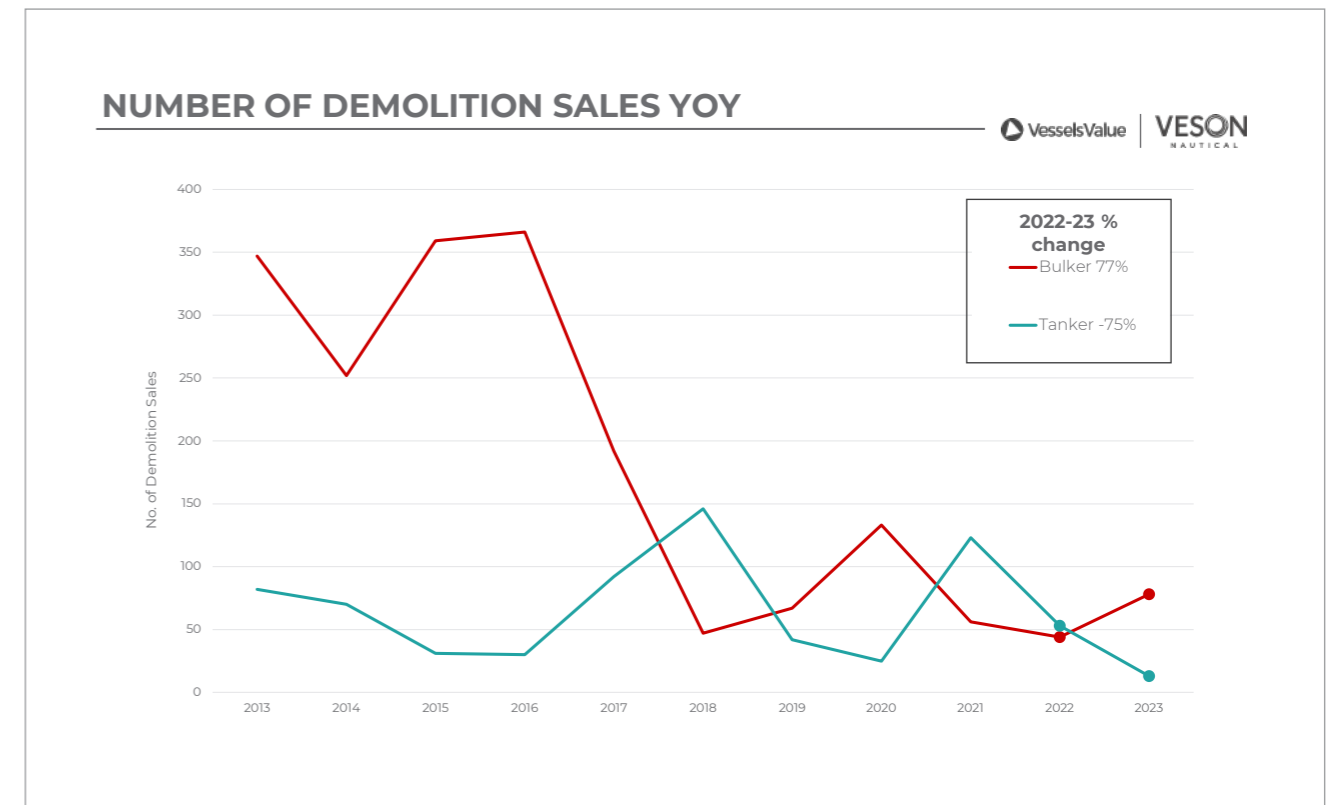
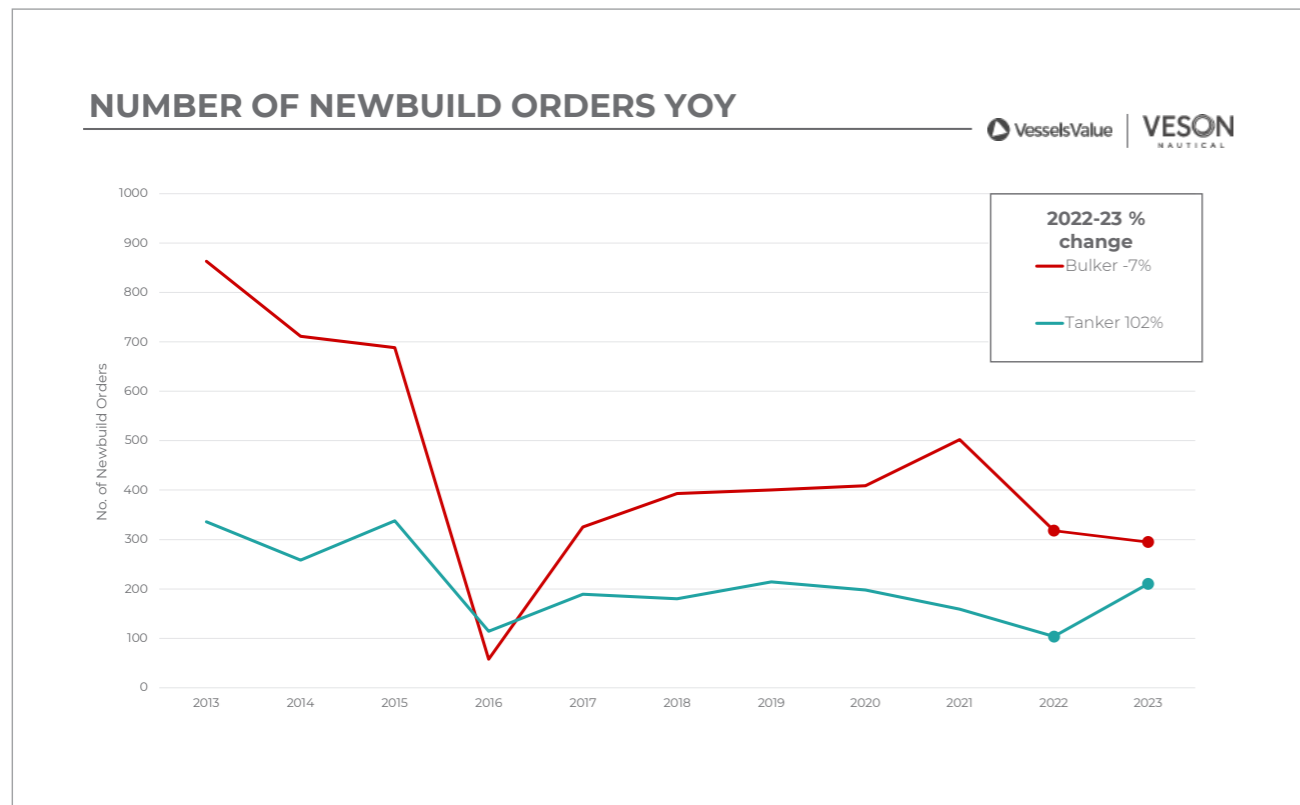
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The standard platform that propels maritime commerce

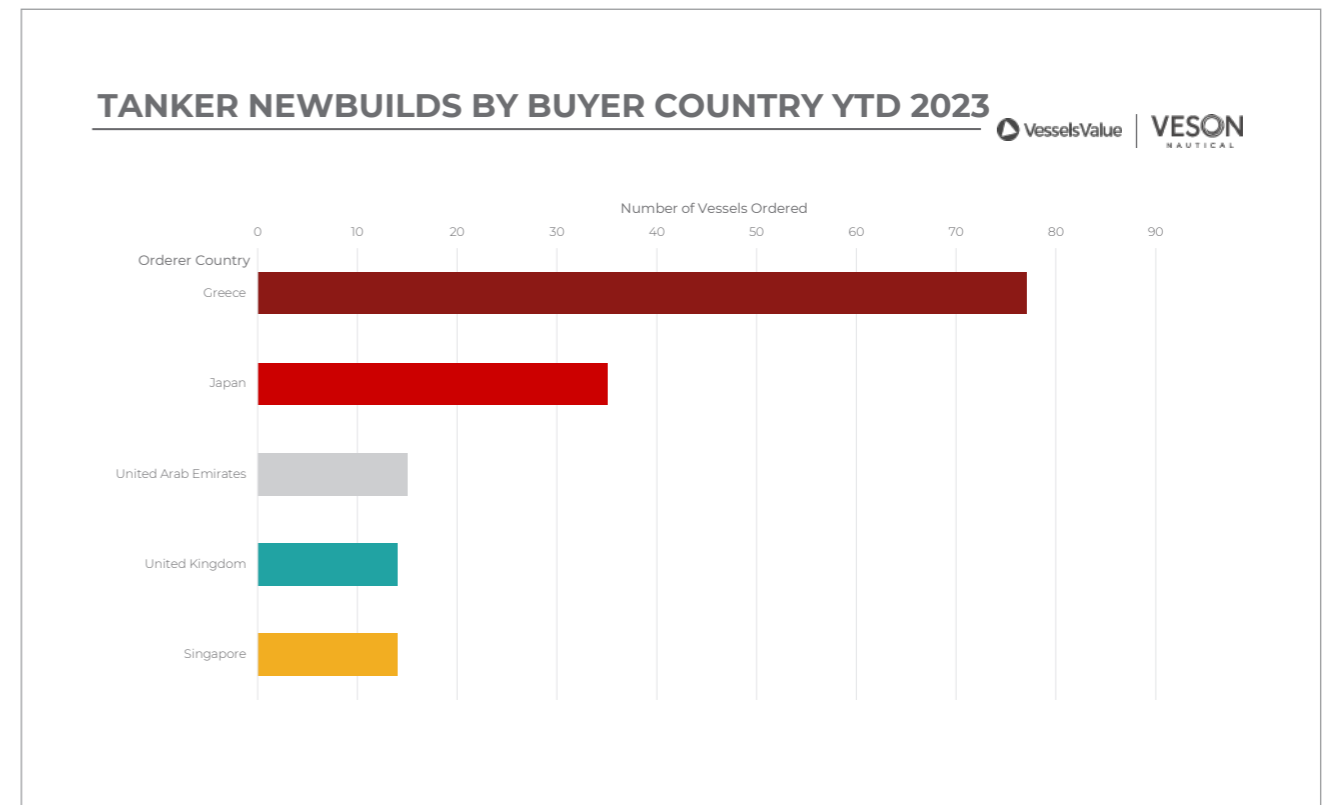
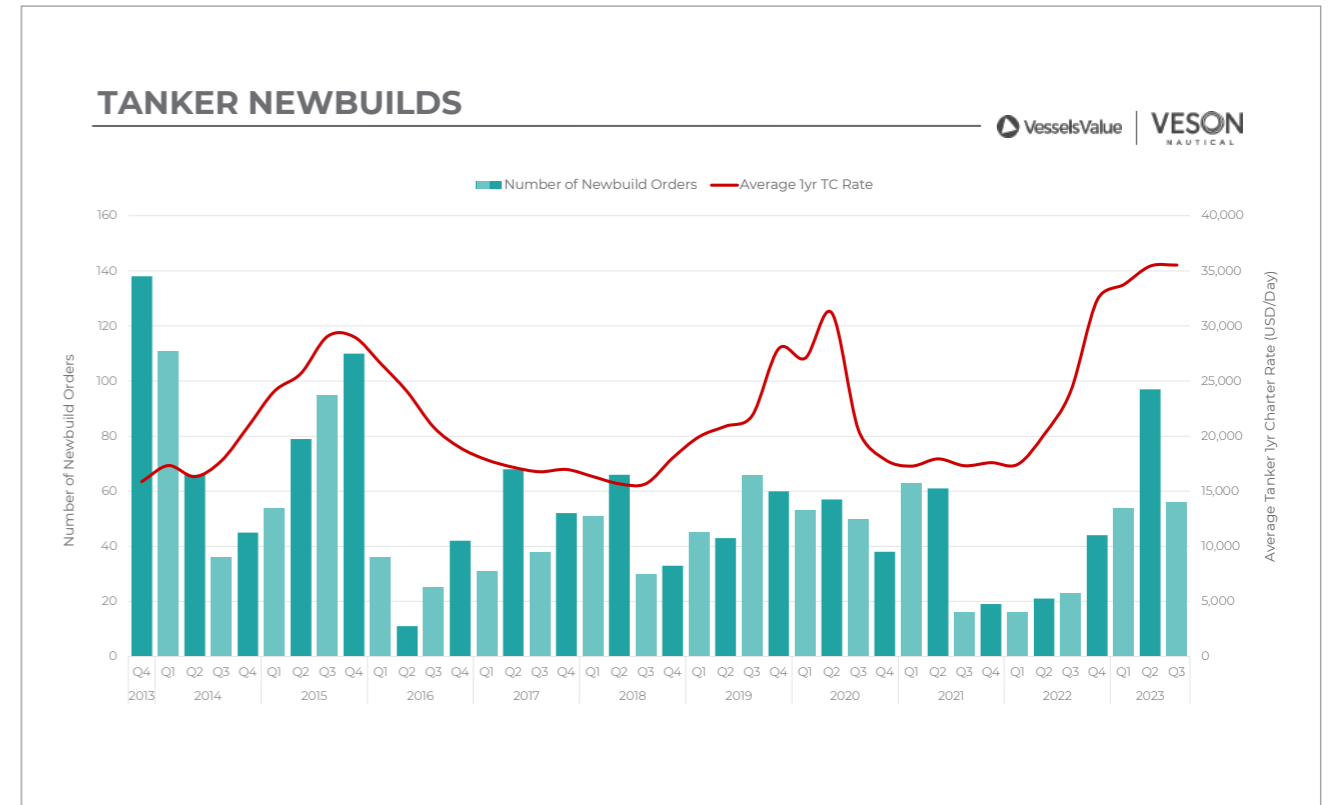
	Marine contract management and execution Enabling efficiency, connectivity, and performance on both sides of the marine freight contract
	Data analytics and insights Delivering actionable, high-integrity information about the bulk commodity markets
	Vessel and voyage document management Facilitating standardization in the exchange of information for vessels, voyages, and freight
	Vessel valuation and market perspective Bringing transparency to maritime shipping with timely market data

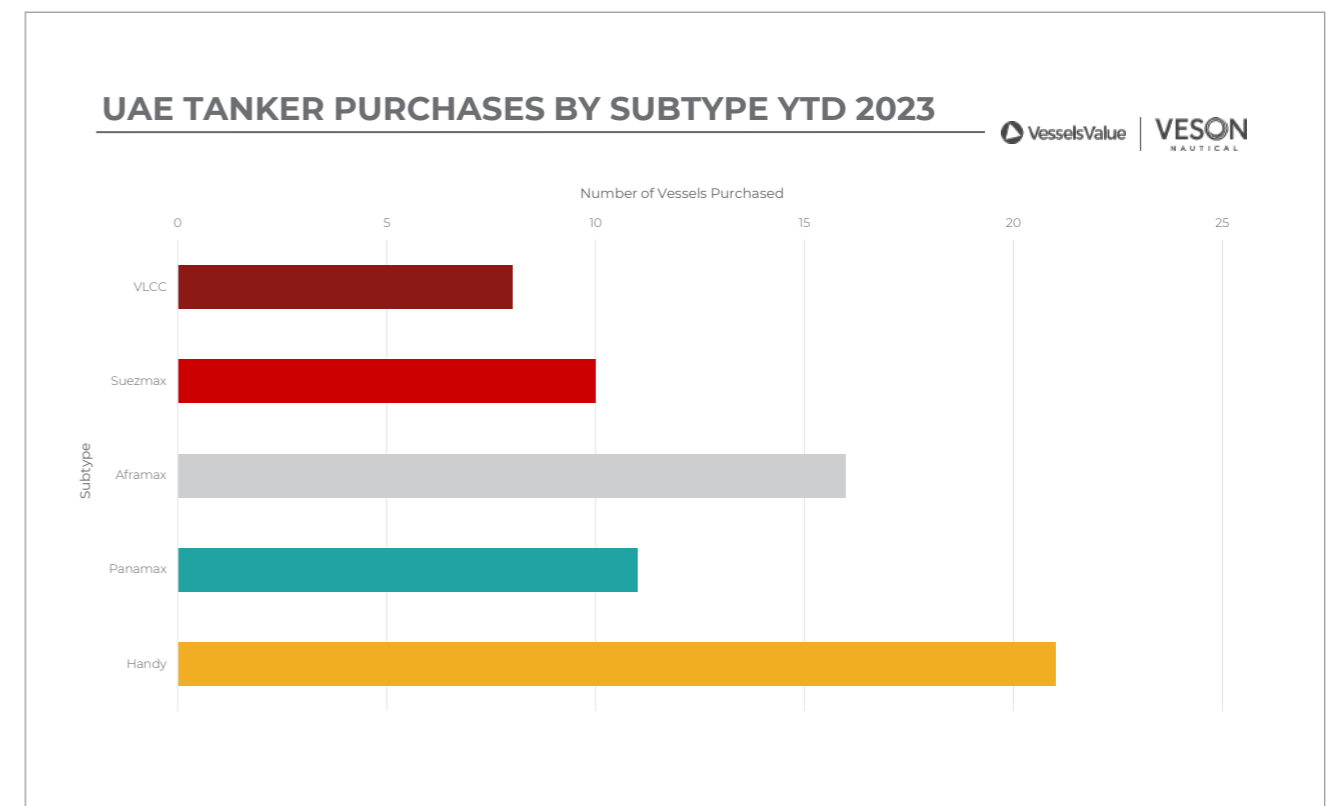
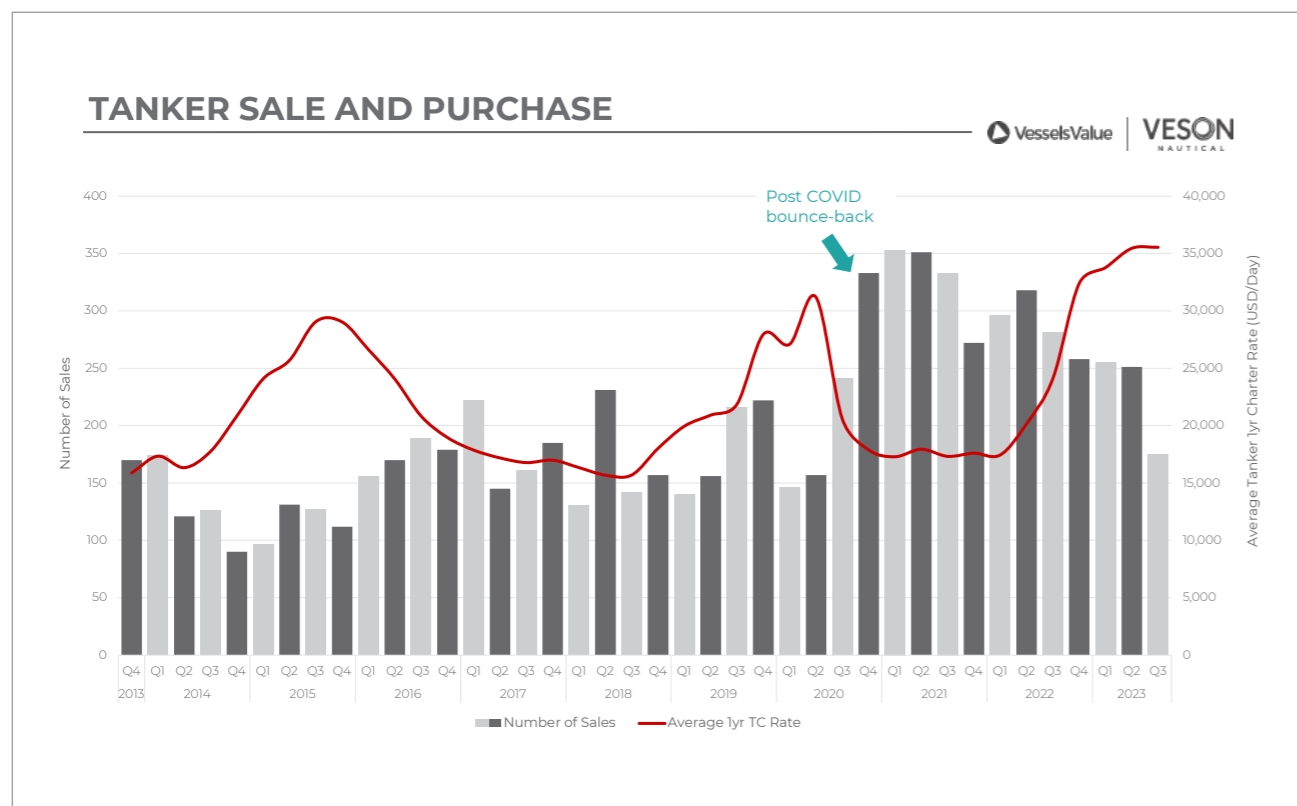
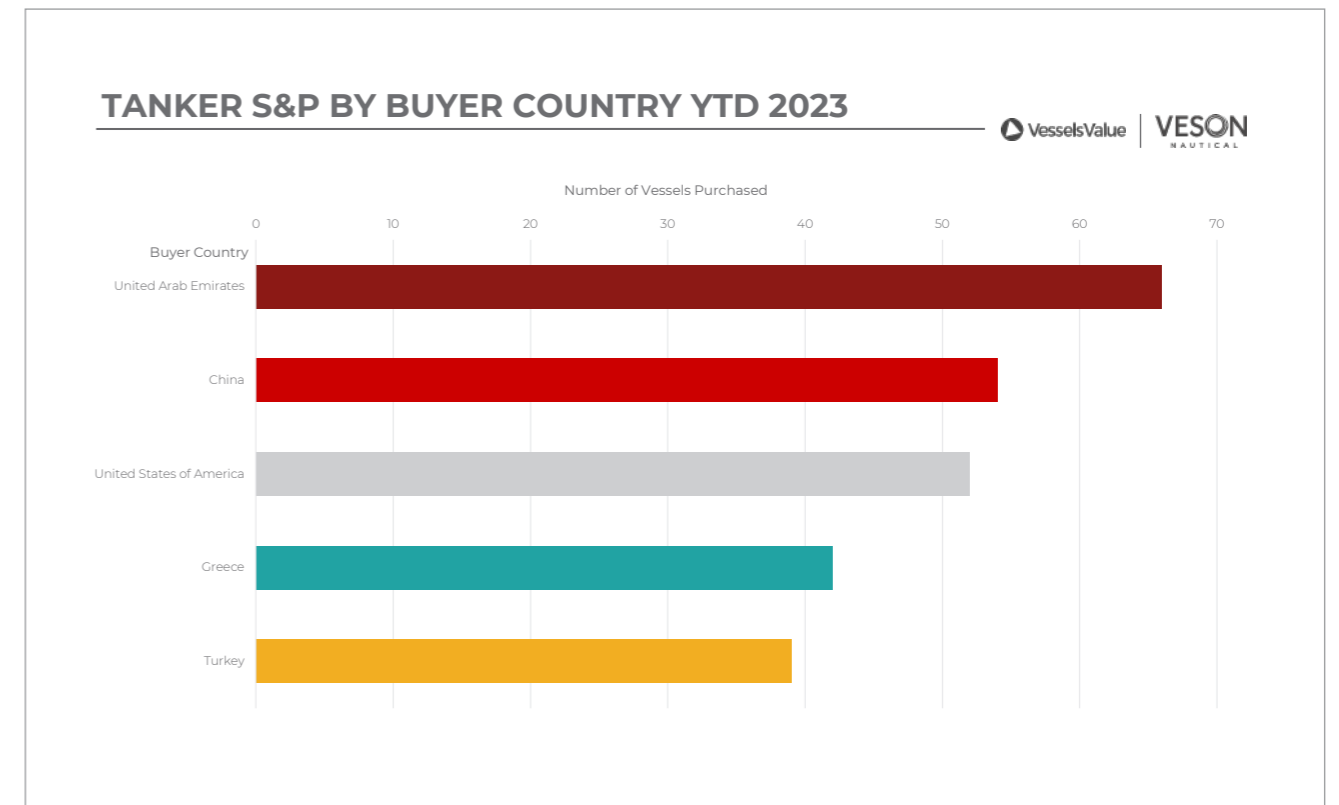
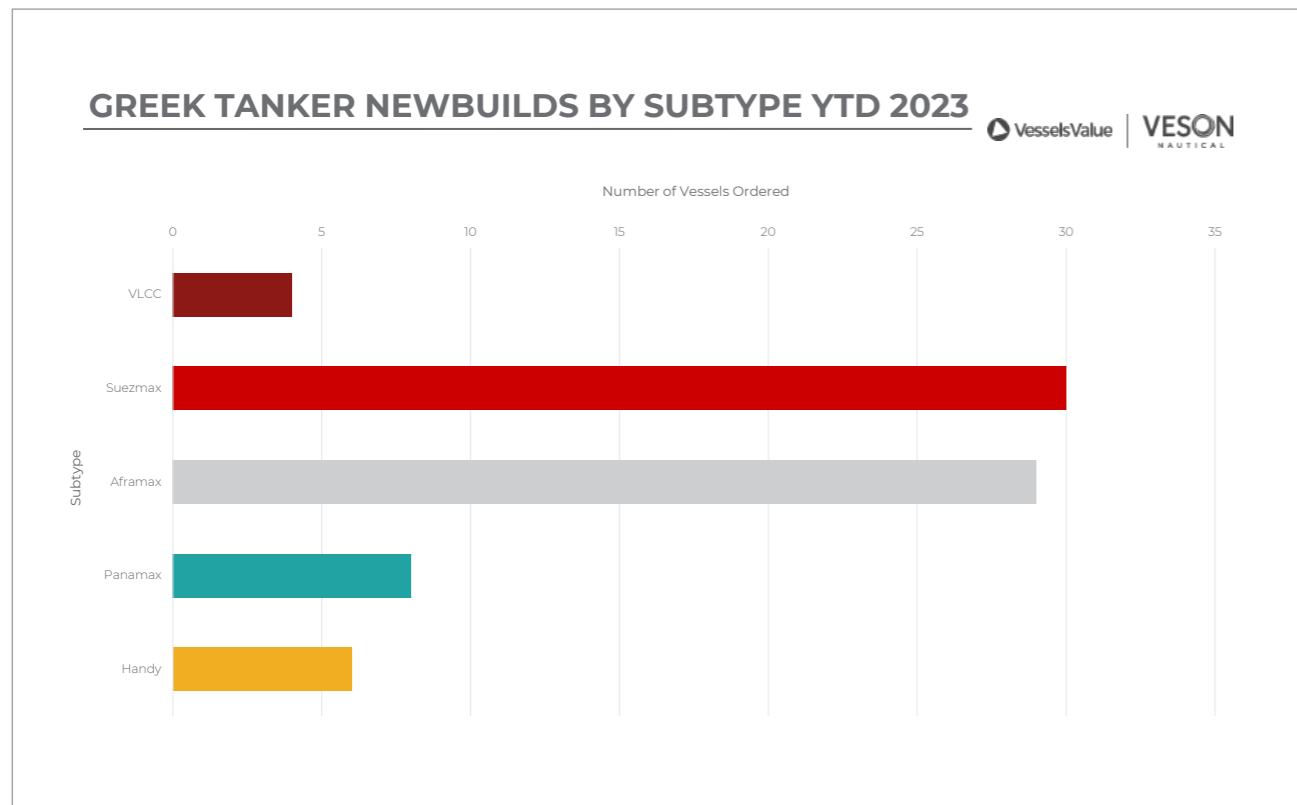
SALE AND PURCHASE TRENDS

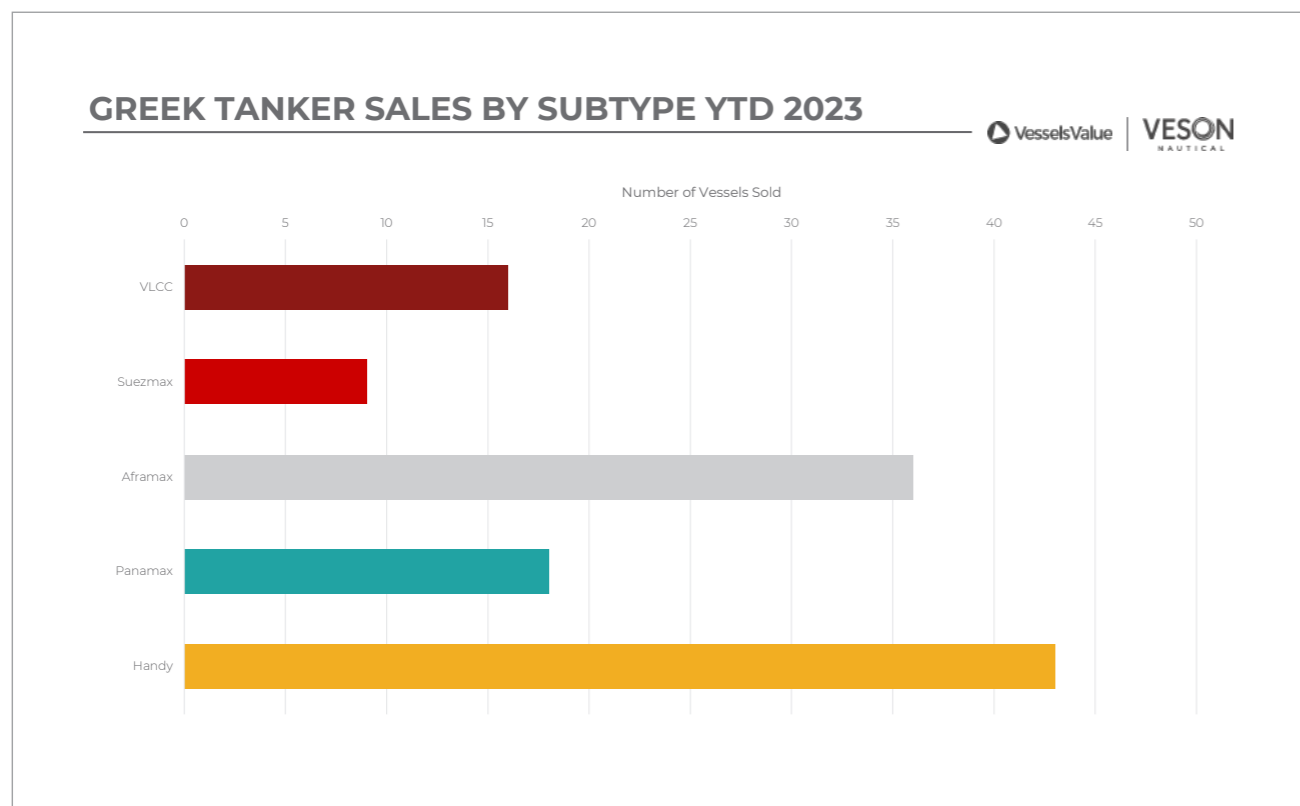
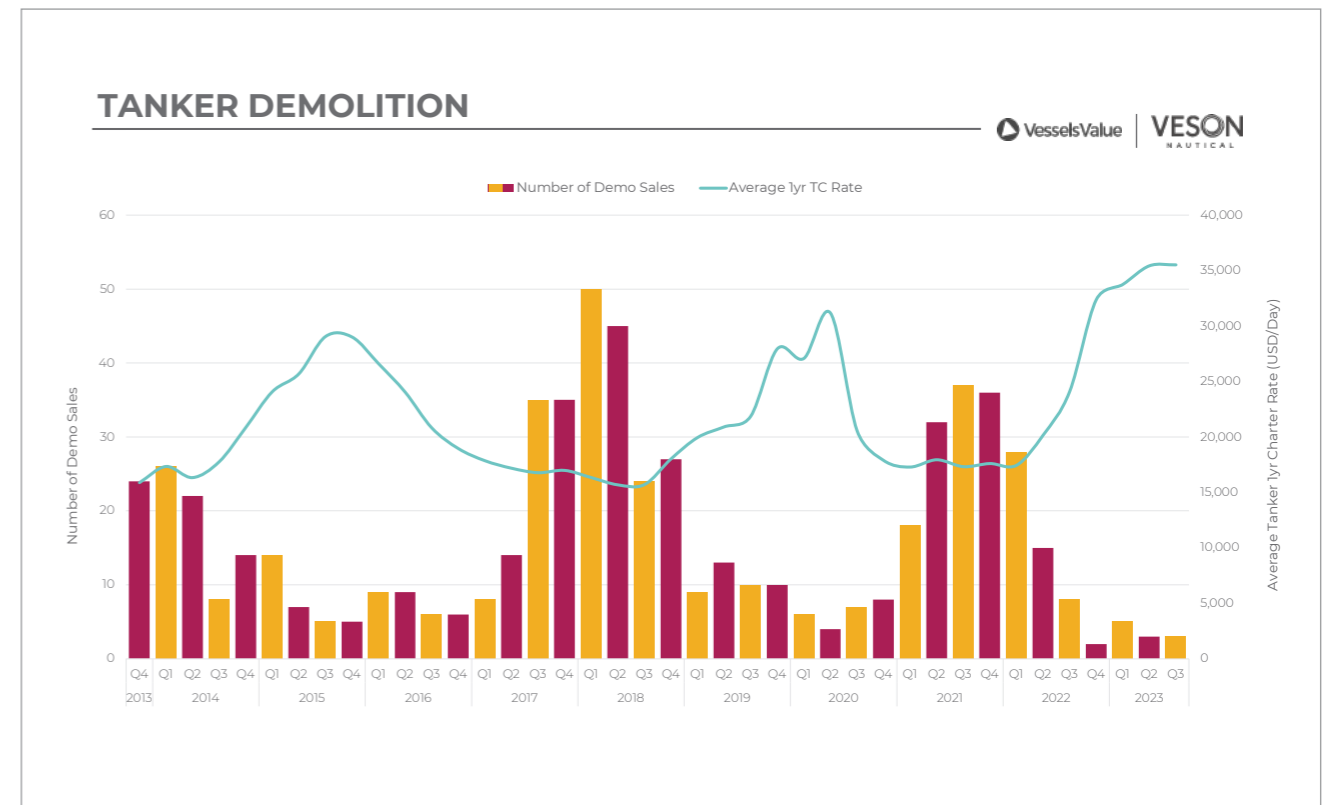
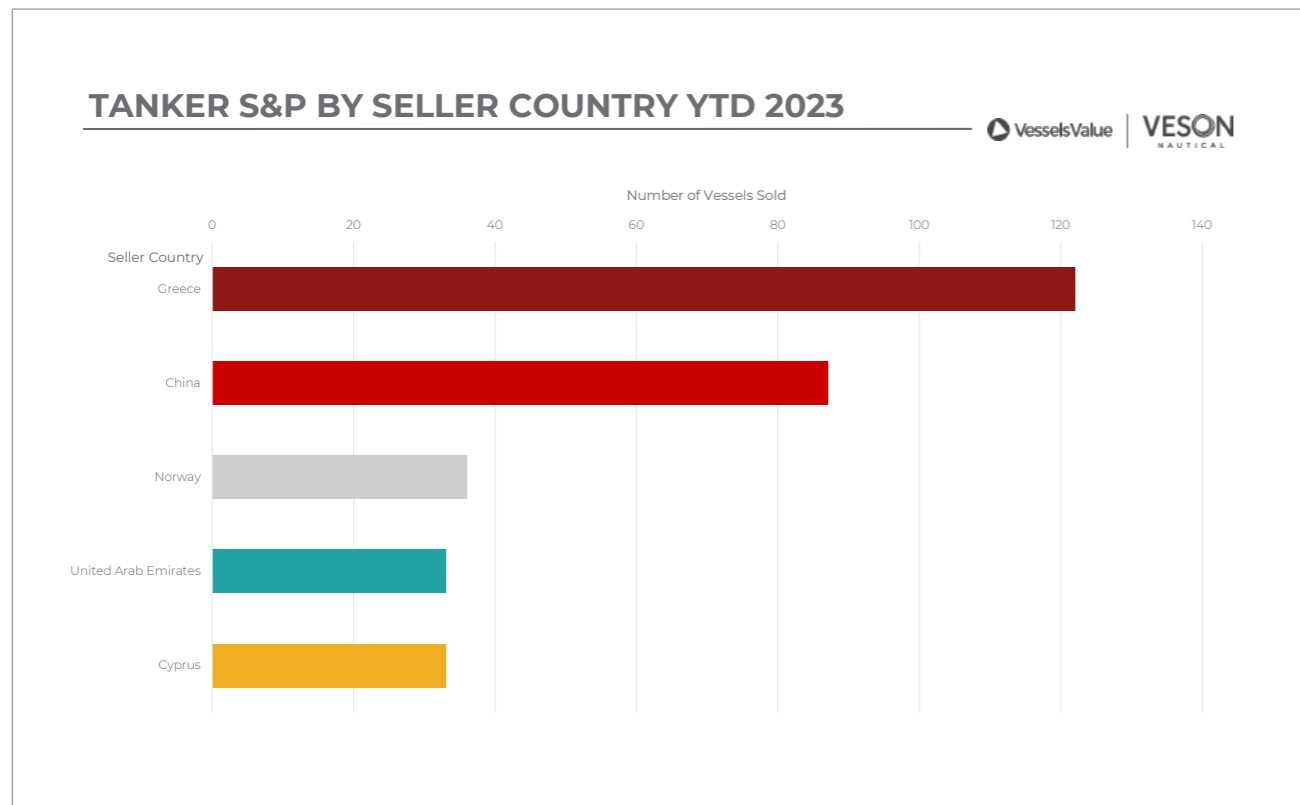


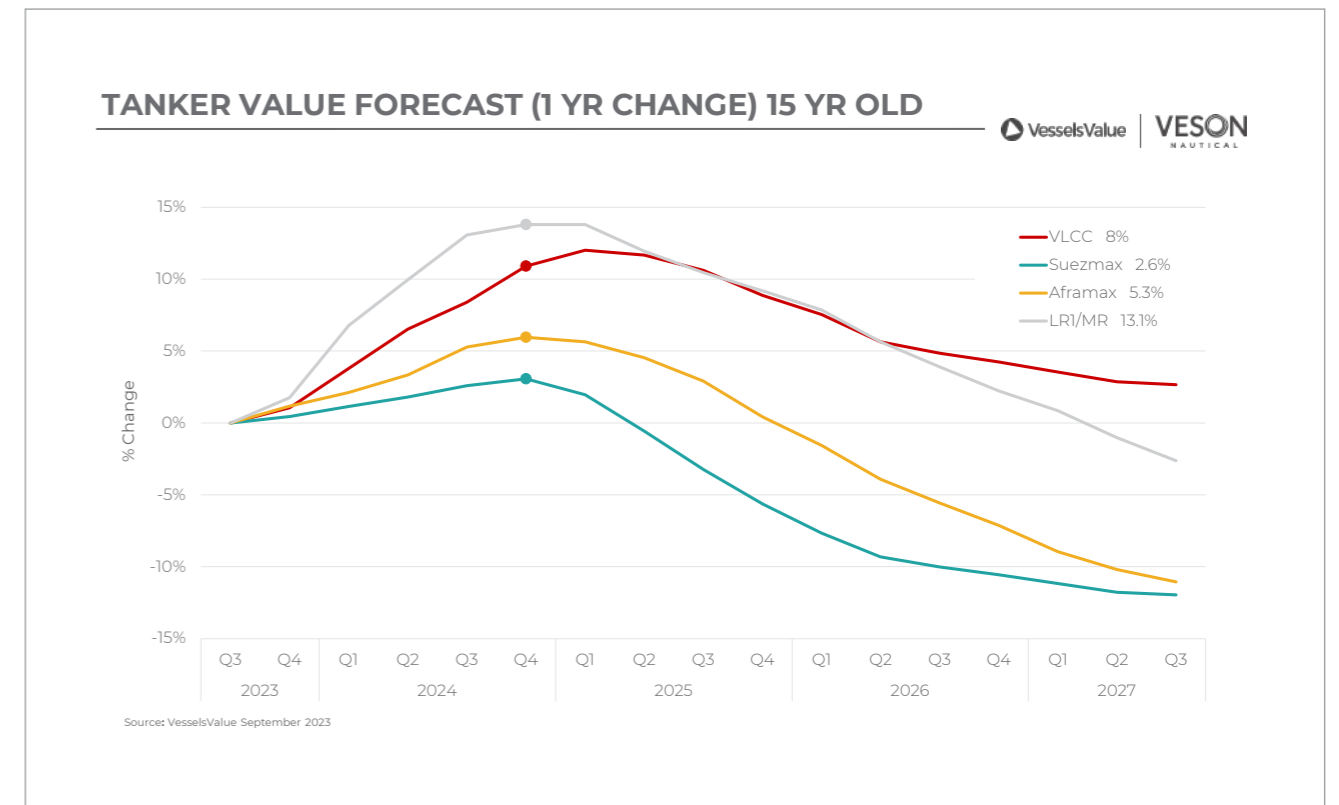
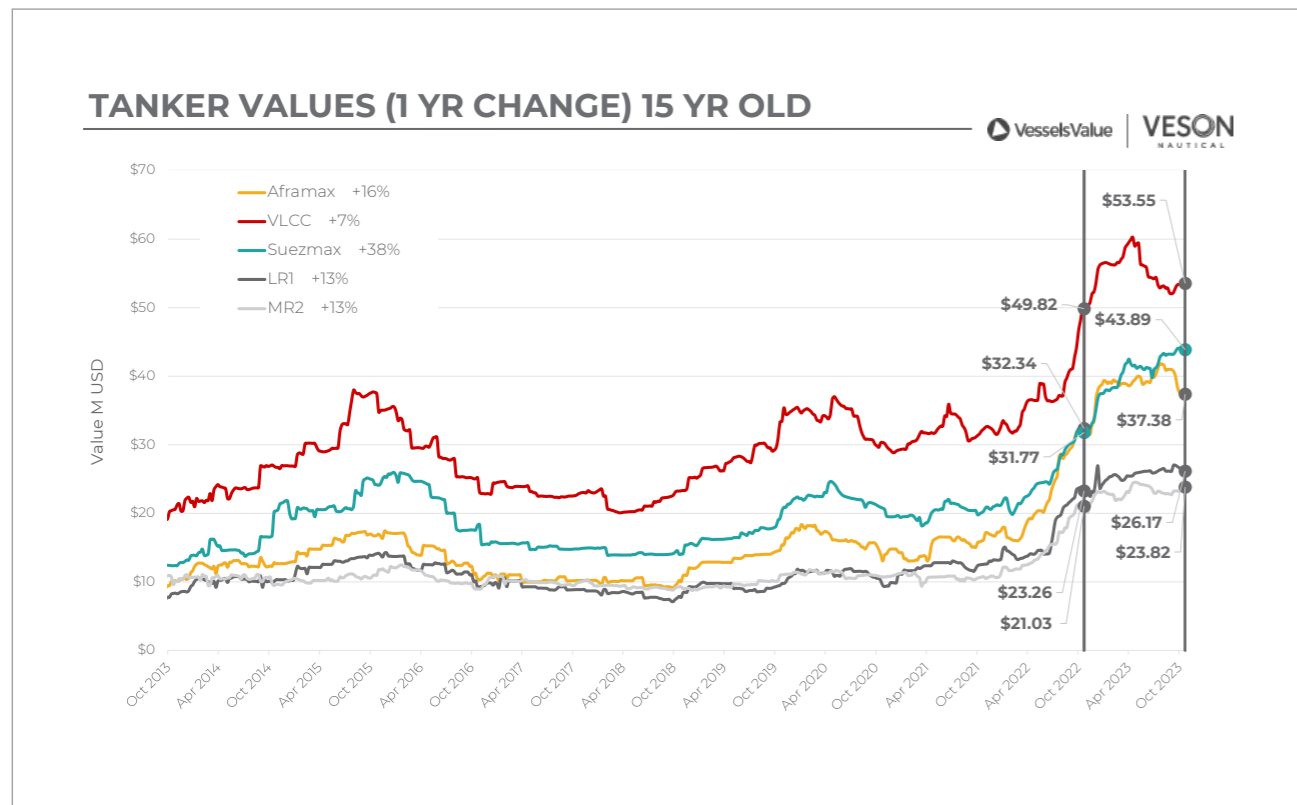
TANKERS

S&P LIQUIDITY









TANKER FUNDAMENTALS FORECAST

- Russian exports for both crude oil and products will decline but sourcing supplies to Europe from other suppliers such as MEG, US, Latin America, should increase tonne-mile demand and support Tanker rates going forward.
- Tanker newbuilding activity the orderbook remains low at 5% of the total fleet, having increased slightly during Q3.
- The IMO's greenhouse gas (GHG) emission targets that were enforced in 2023 should have an impact on fleet efficiency, boosting prospects from 2023/2024 onwards.
- Tonne-mile demand expectations for 2023 and beyond remain strong in our current base case, assuming that oil demand is not severely impacted by high oil prices and inflation in the Western economies.

Source: VesselsValue | VESON NAUTICAL

ASSESSMENT

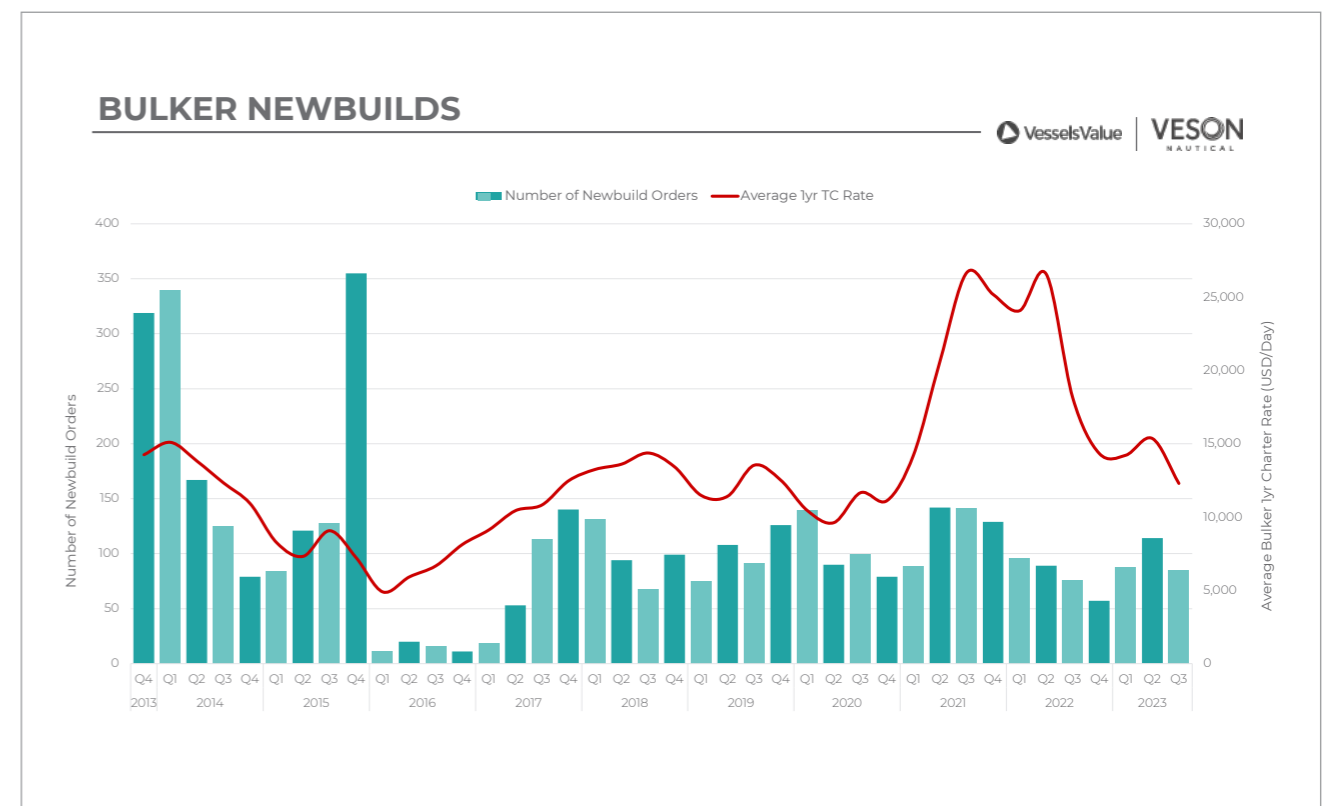
BULKERS

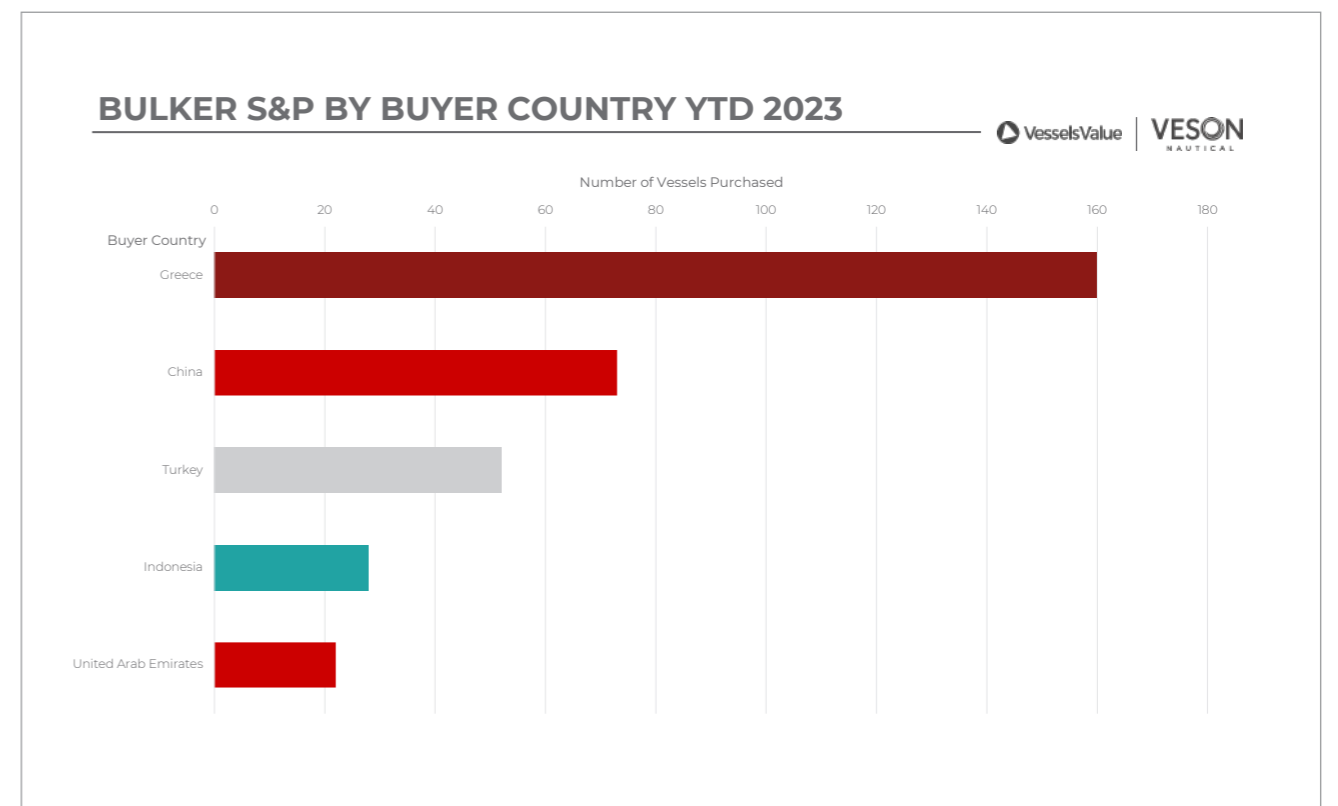
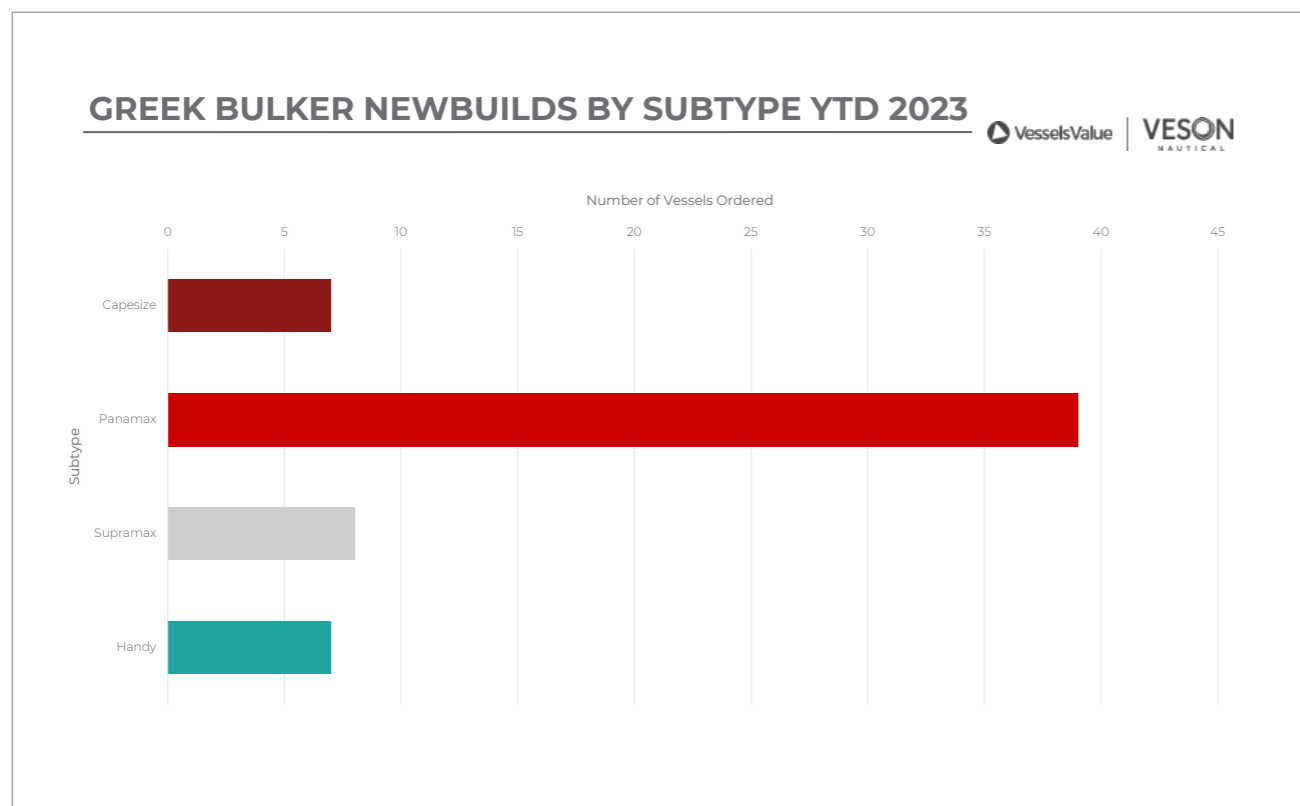
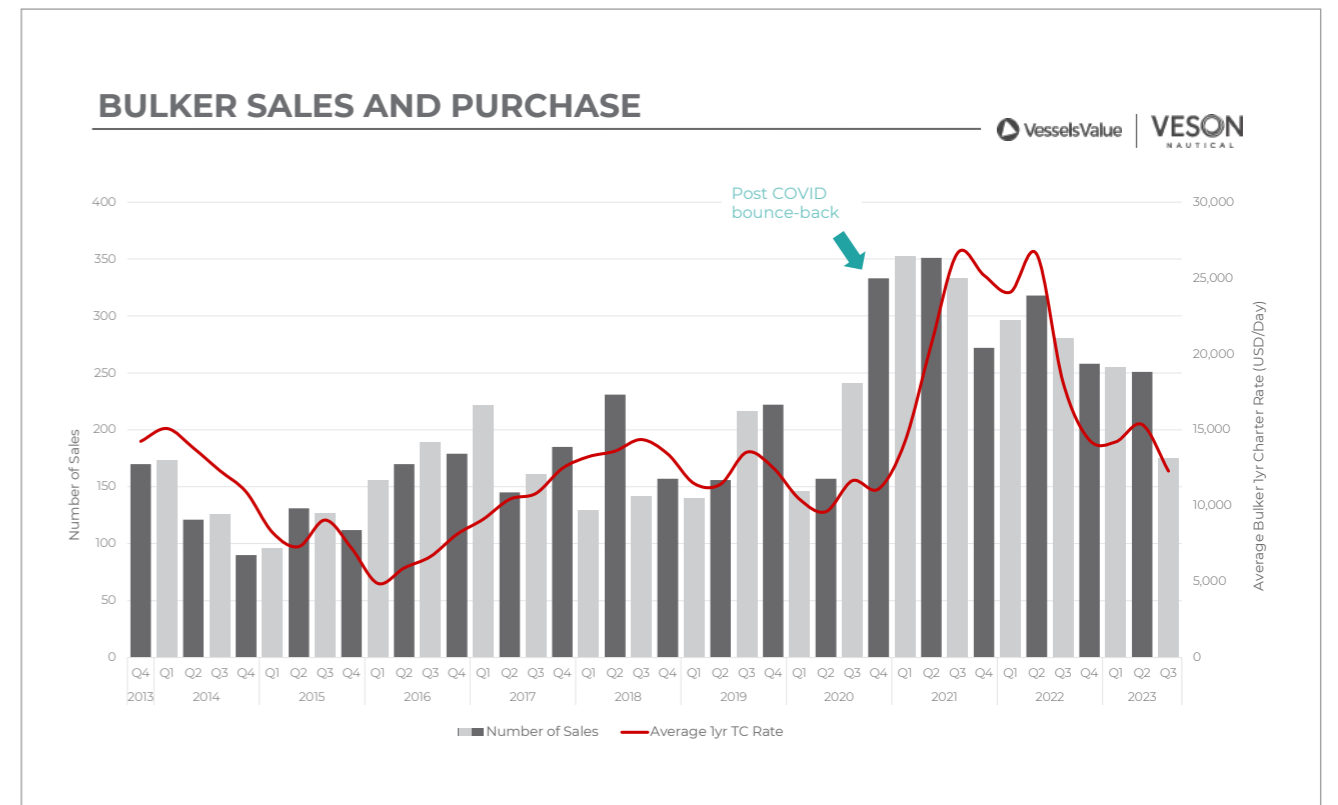
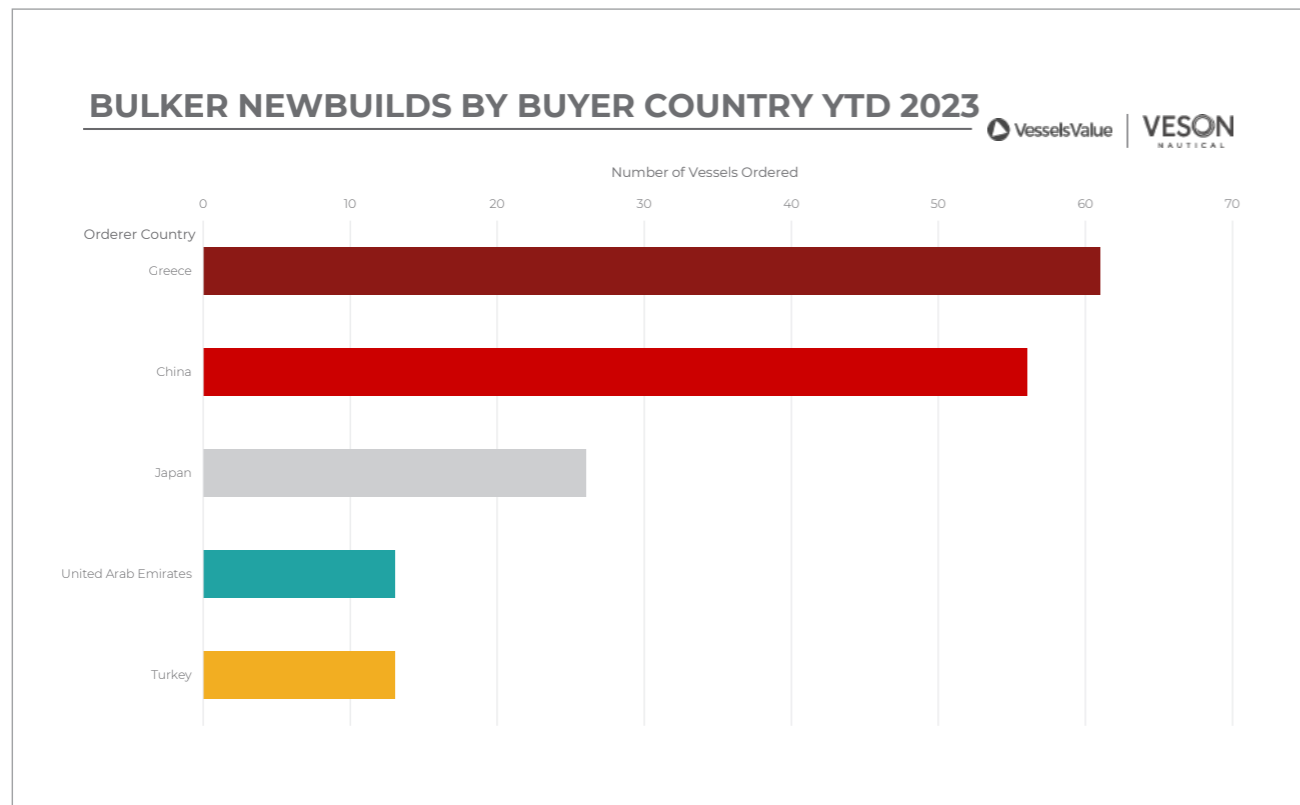
BUY/SELL/HOLD ASSESSMENT

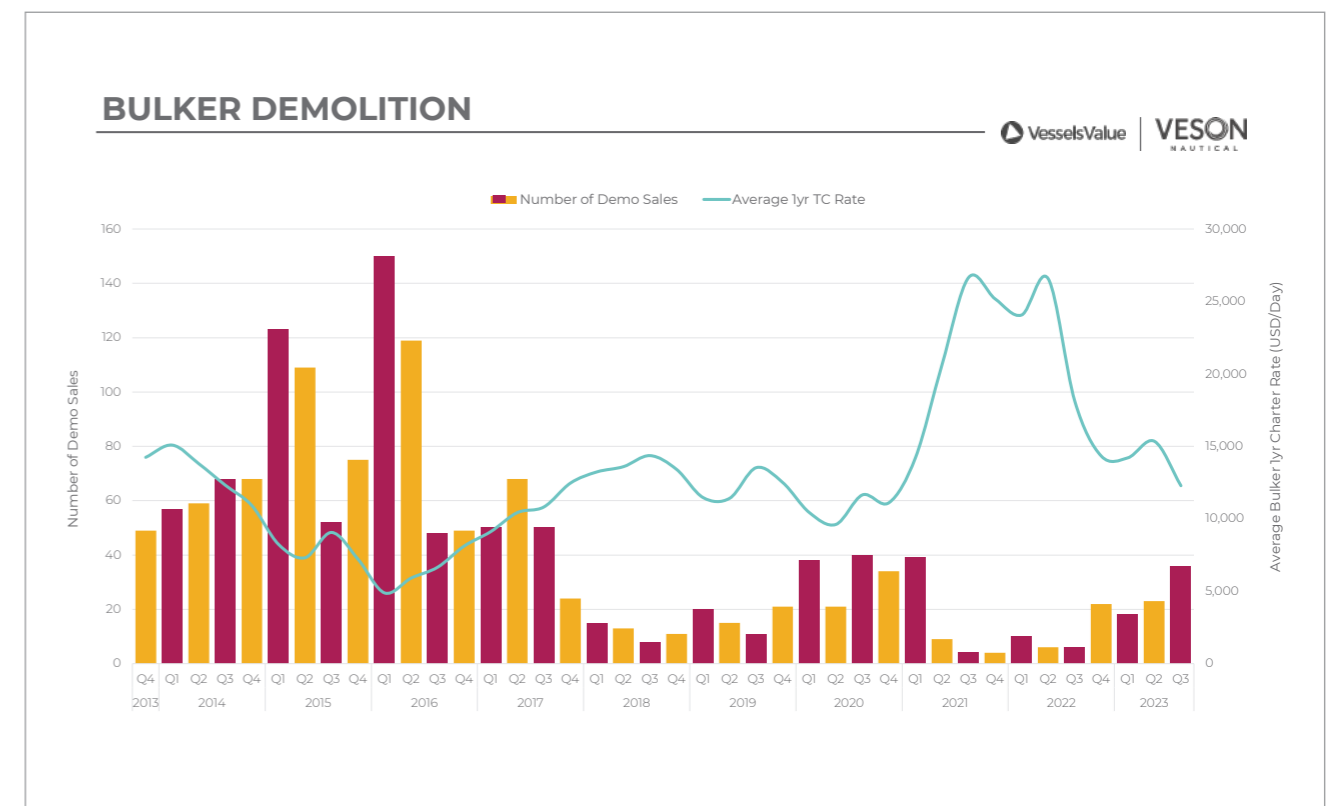
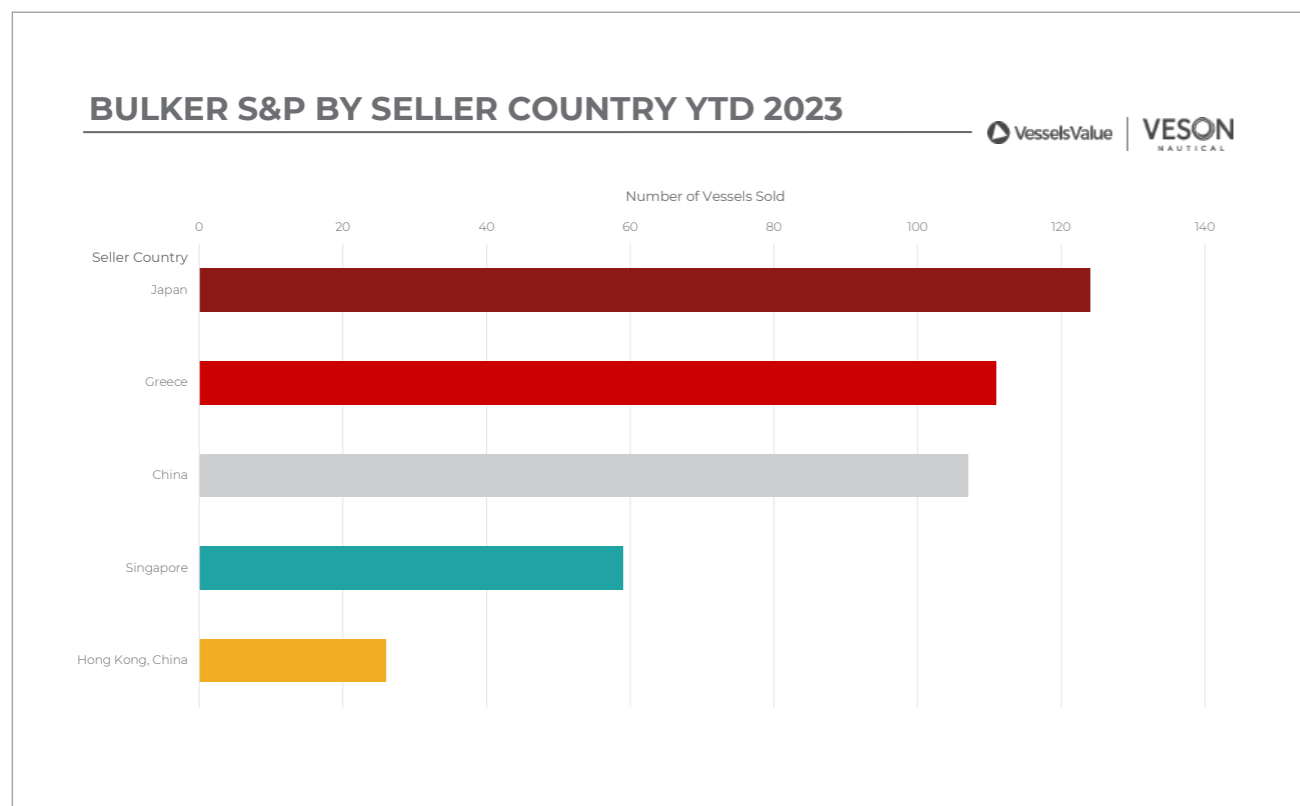
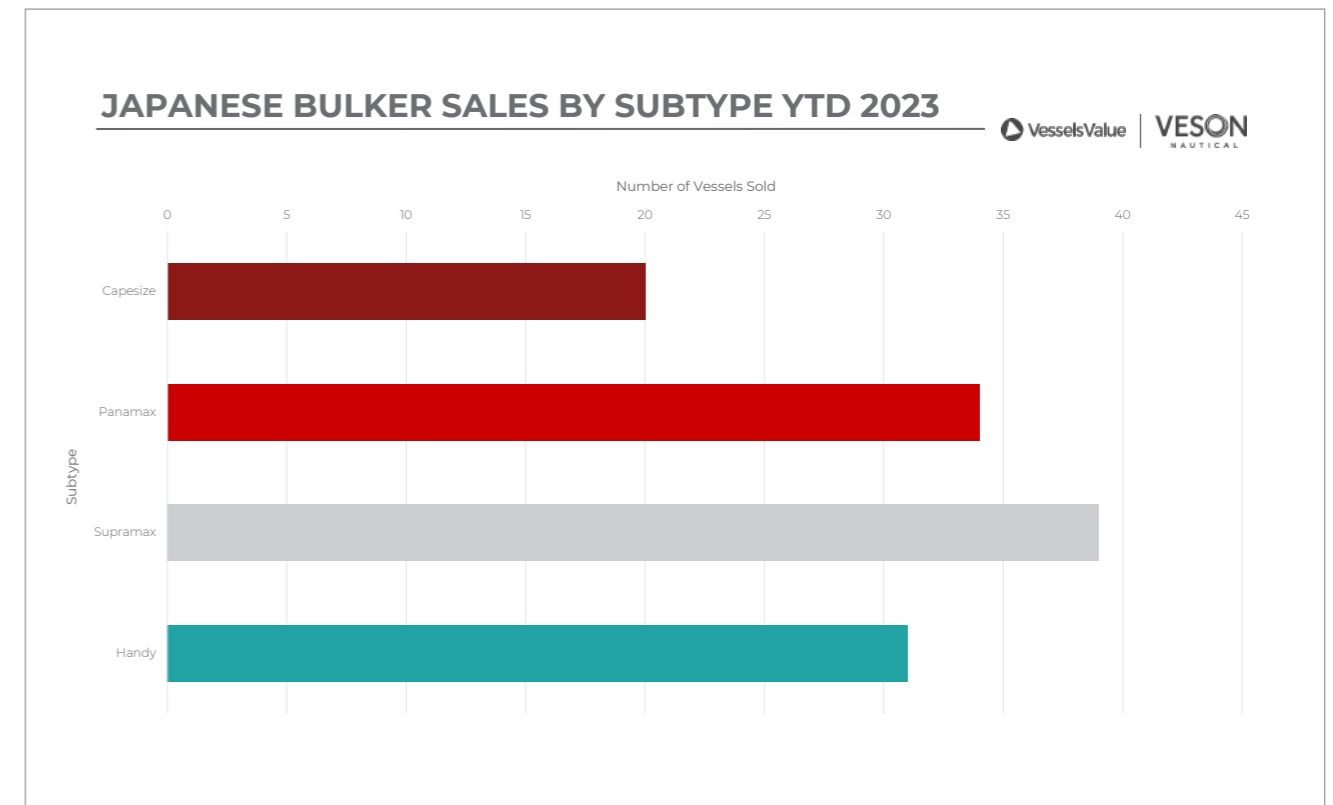
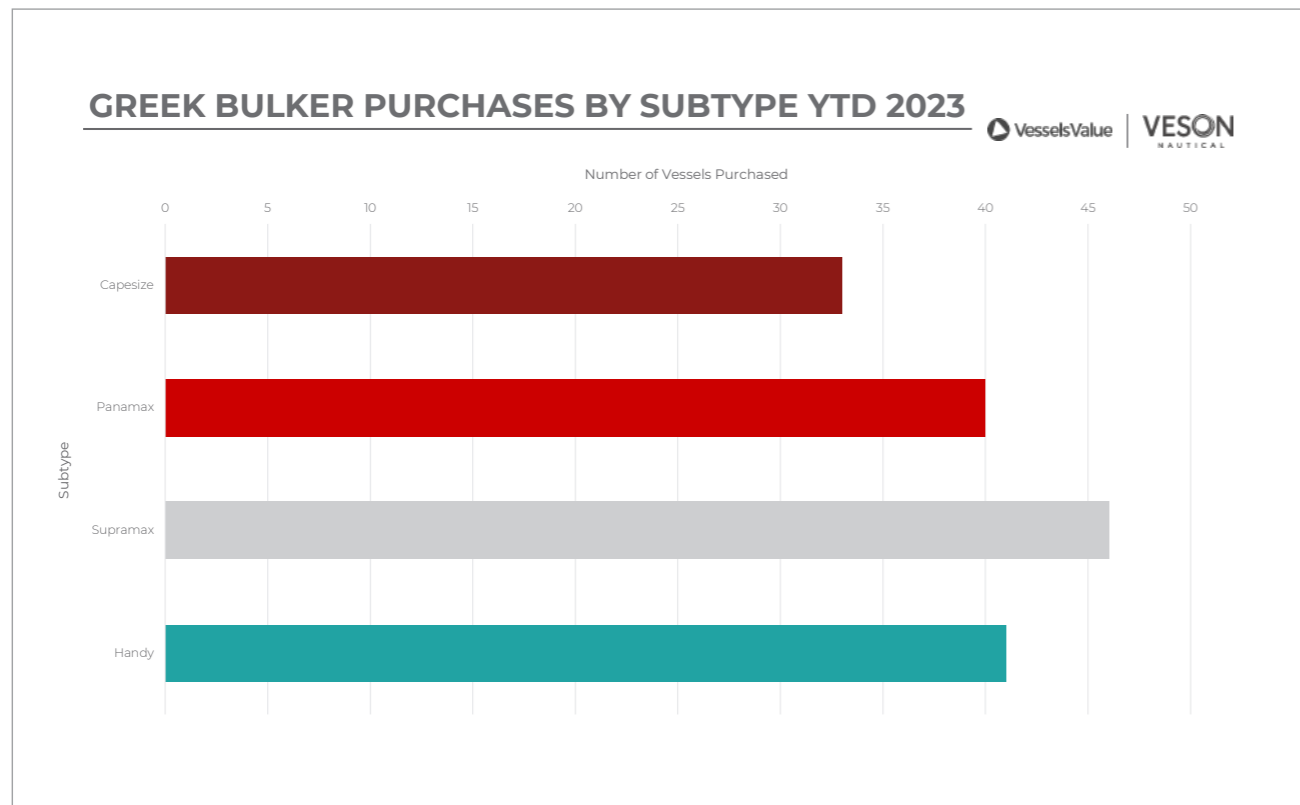
VesselsValue

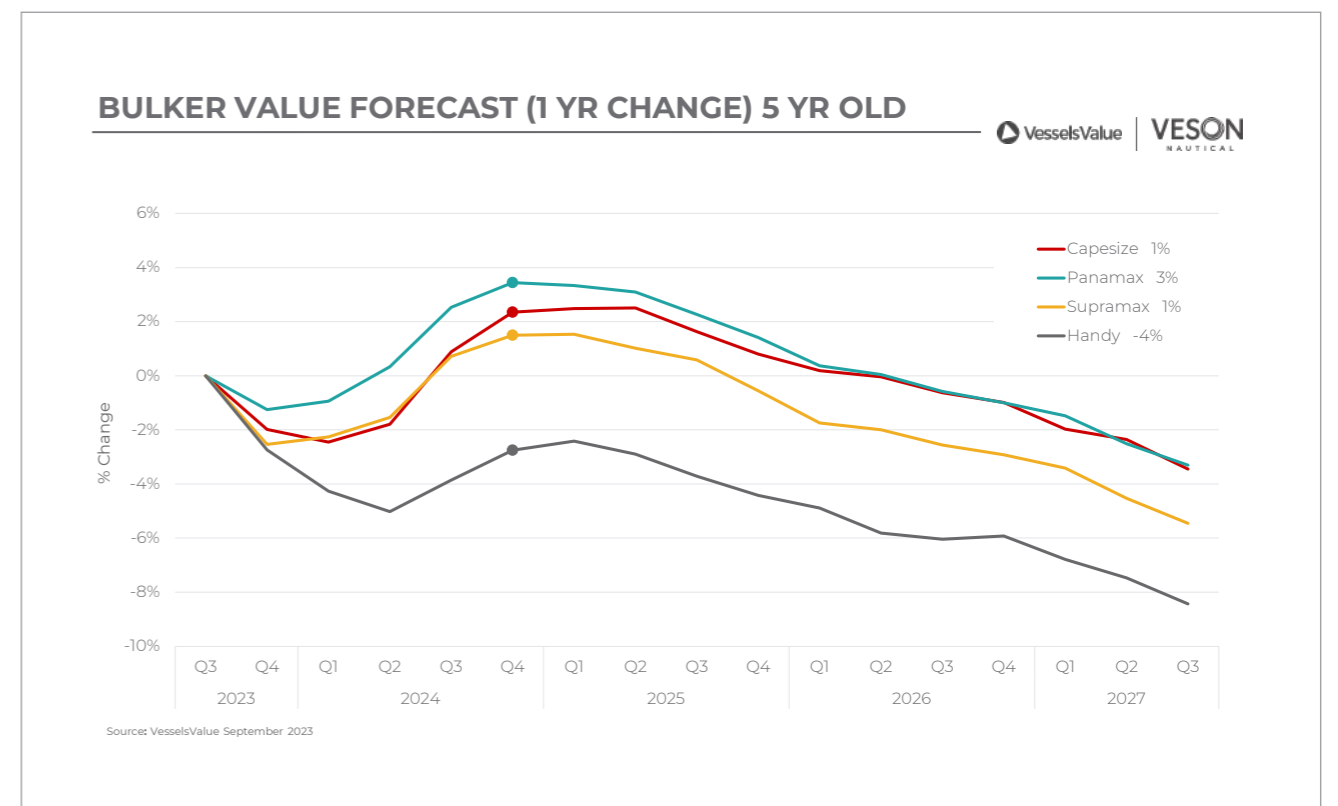
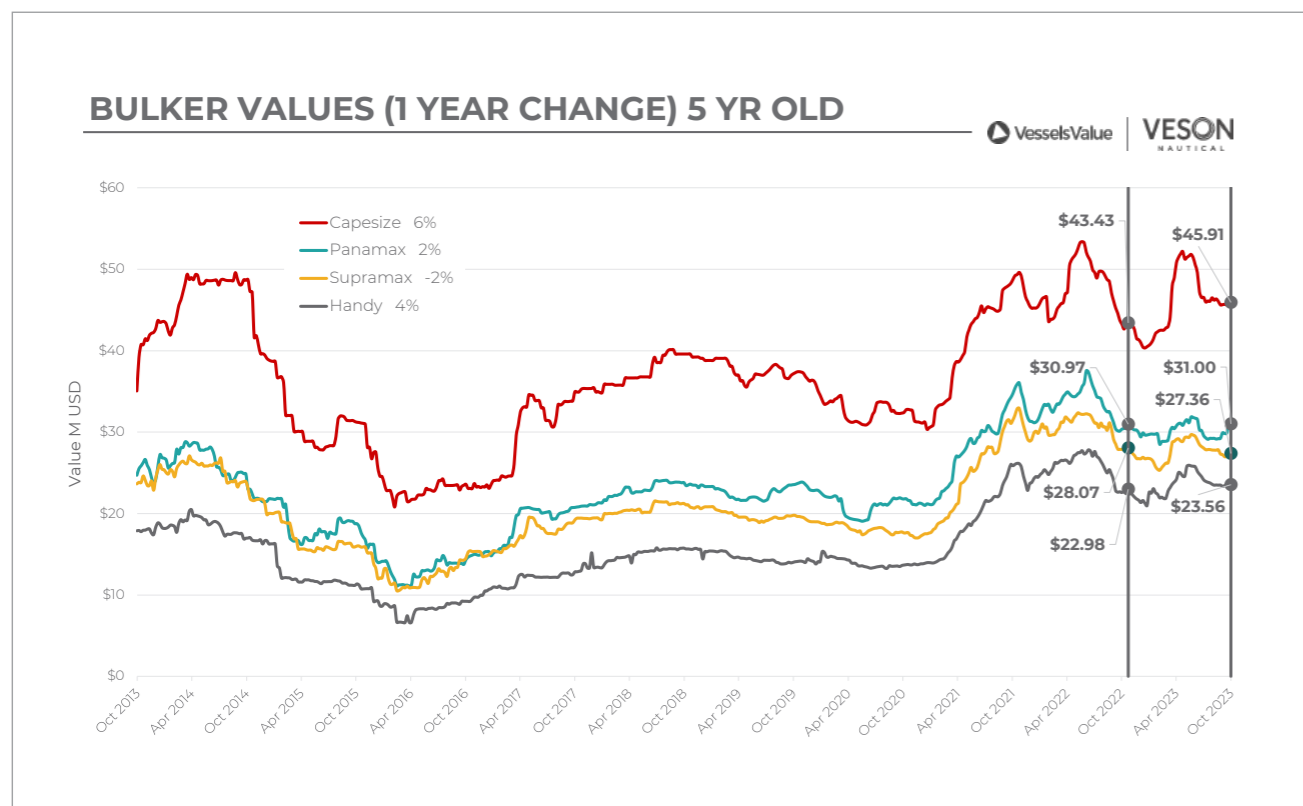
	S&P LIQUIDITY	VALUES	FORECAST	SUMMARY
Tankers	↑	↑	↑	
Bulkers				

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BULKER FUNDAMENTALS FORECAST



- Overall positive outlook for Bulklers. Fleet growth is expected to be outpaced by demand which will tighten the market balance.
- India is a country in a period of rapid growth with an expected average GDP growth of 6.5% per year during 2023-2026, and it will be a key driver for growth in seaborne trade.
- Indonesia's bauxite export ban led to China increasing imports from Guinea, increasing tonne mile demand.
- Although high inflation and interest rates in the West have hampered economic growth in the short term. Looking further ahead, a recovery in western economies and investment into green energy infrastructure could be positive for Bulker demand.
- Uncertainty about the future of fuels and high newbuilding prices have made owners reluctant to order new vessels, which has led to a low order book to fleet ratio of 8%, keeping Bulker supply low.

BUY/SELL/HOLD ASSESSMENT



	S&P LIQUIDITY	VALUES	FORECAST	SUMMARY
Tankers	↑	↑	↑	
Bulkers	↓	→	→	

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ASSESSMENT

THANK YOU