

Global intermodal logistics

Session 2

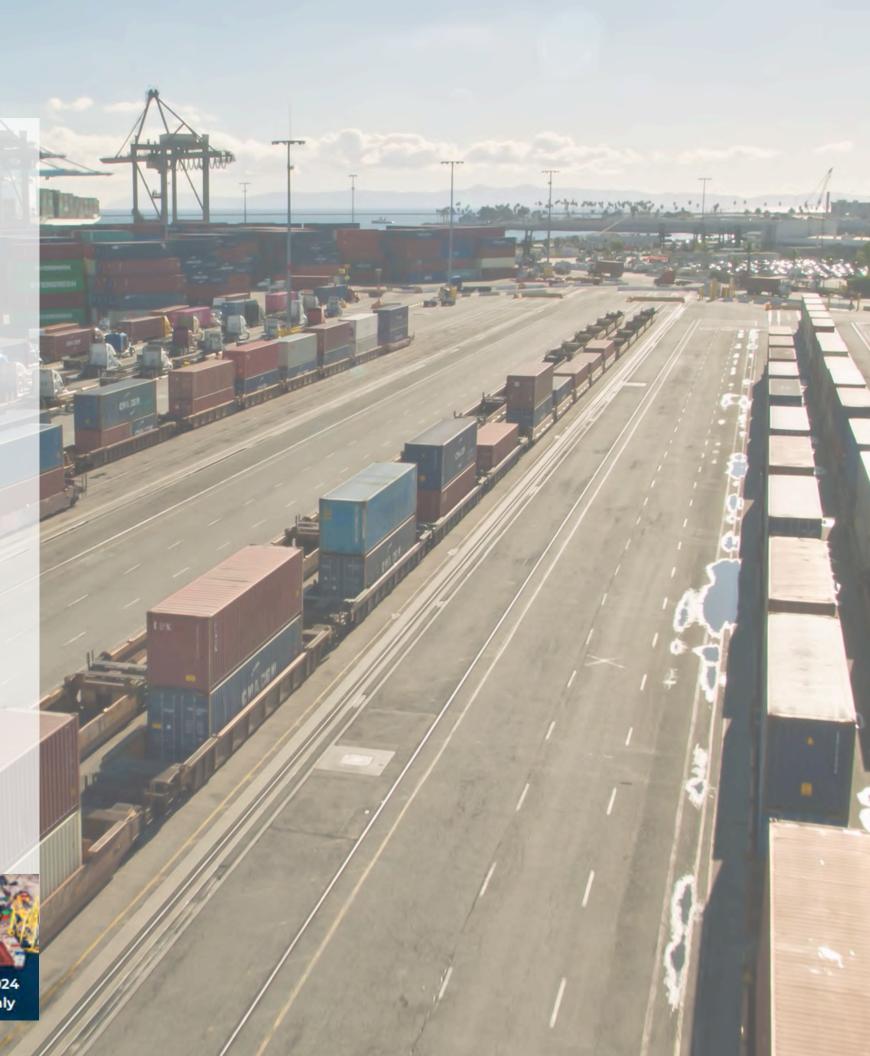
INTERMODAL TRANSPORT

There's no single answer to logistics security, affordability and decarbonisation.

ANGELO AULICINGENERAL MANAGER



Tuesday 28 to Thursday 30 May 2024 Generali Convention Center Trieste, Italy







Trieste port as strategic logistics hub



Railway in the DNA



The extended intermodal network



Alpe Adria ad booster of intermodality

TRAINS OPERATED

8.979

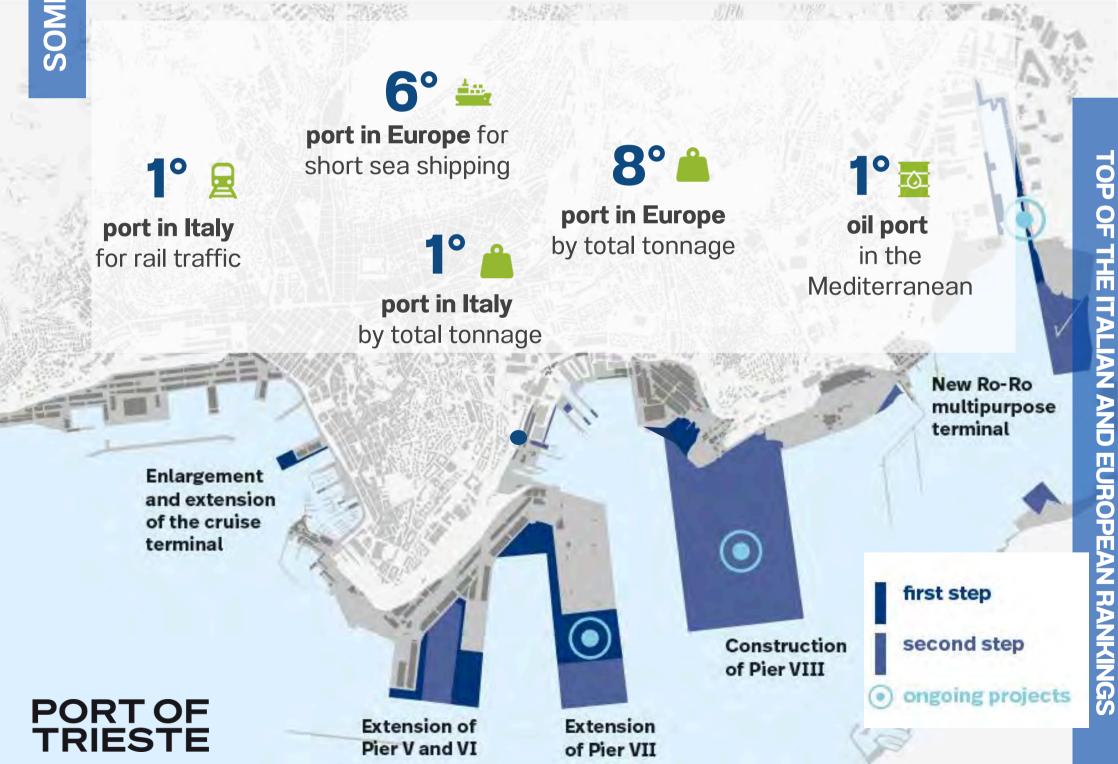
N° TEUS

852.193

N° OF RO-RO UNITS

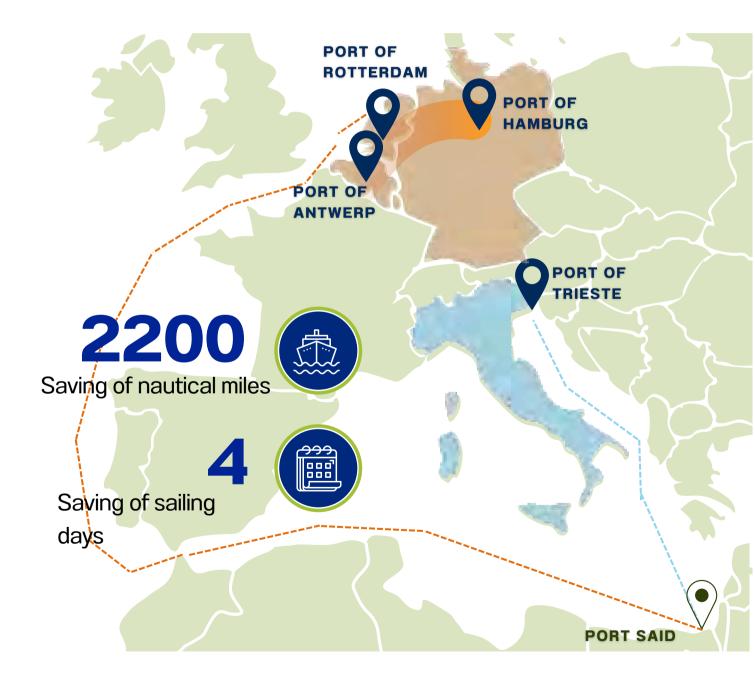
298.570

TRIESTE PORT AS STRATEGIC LOGISTICS HUB



TONS HANDLED

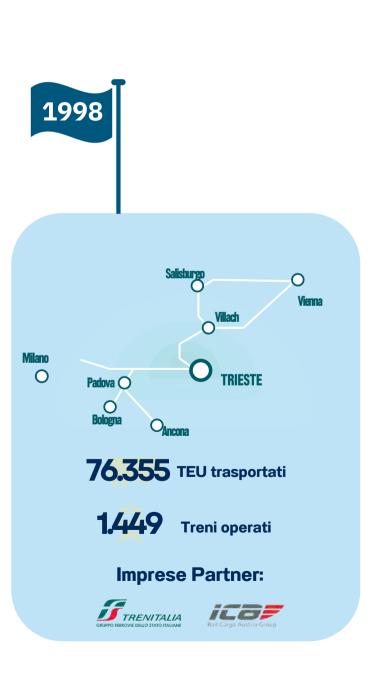
55,6 MLN

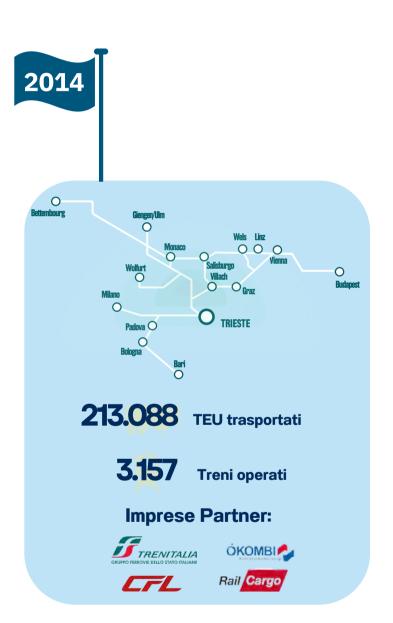


MARITIME ROUTING VIA TRIESTE WITH RESPECT TO NORTHERN EUROPEAN PORTS

THE STRONG RAILWAY VOCATION OF TRIESTE PORT SYSTEM **EVOLUTION OF RAIL TRAFFIC FROM/TO THE PORT OF TRIESTE** TOT. TRAINS MOVED PER YEAR

RAILWAY IN THE DNA







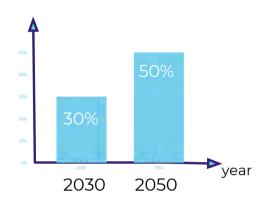
THE EXTENDED INTERMODAL NETWORK



MODAL SHIFT

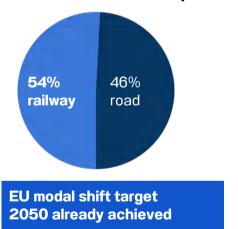


Modal shift of rail traffic to be achieved by 2030 and 2050

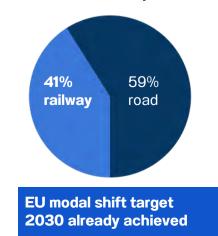


Porto of Trieste (data 2023)

Container sector (TEU)

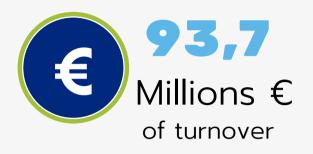


Intermodal Transport Unit (ITU)



ALPEADRIA AS BOOSTER OF INTERMODALITY

2023 FIGURES





5.221

Trains operated



89K

Reductions Tons of CO2



579K

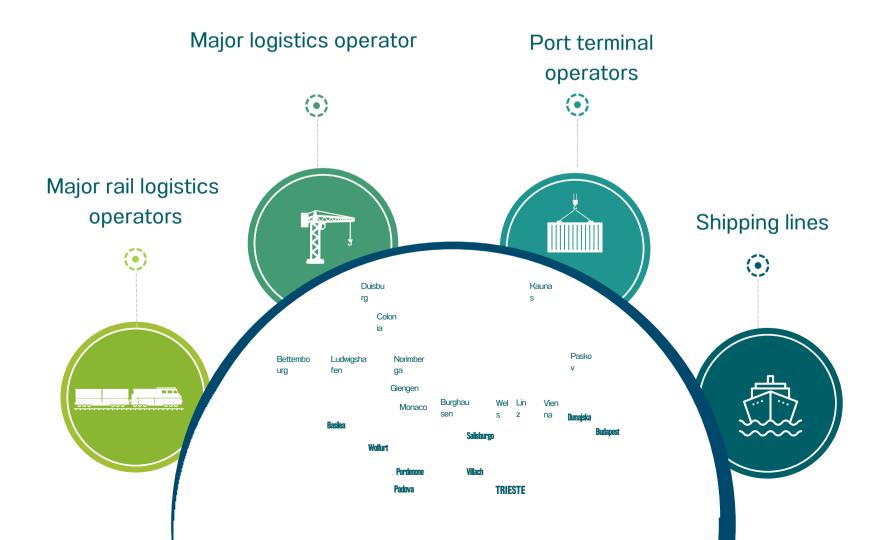
Teus handled



86%

Load factor

Aggregator and facilitator



55,5 Mln €

esterni nel 2023

2022

RIDUZIONE EMISSIONI DI CO2 NEL 2022



CAMION TRASFERITI DA GOMMA A FERROVIA 2022

2023

Risparmio in termini di costi

RIDUZIONE EMISSIONI DI CO2 NEL 2023



CAMION TRASFERITI DA GOMMA A FERROVIA 2023

252.000





Key trends in maritime trade



The Disruptive events in logistics domain



Short term change course

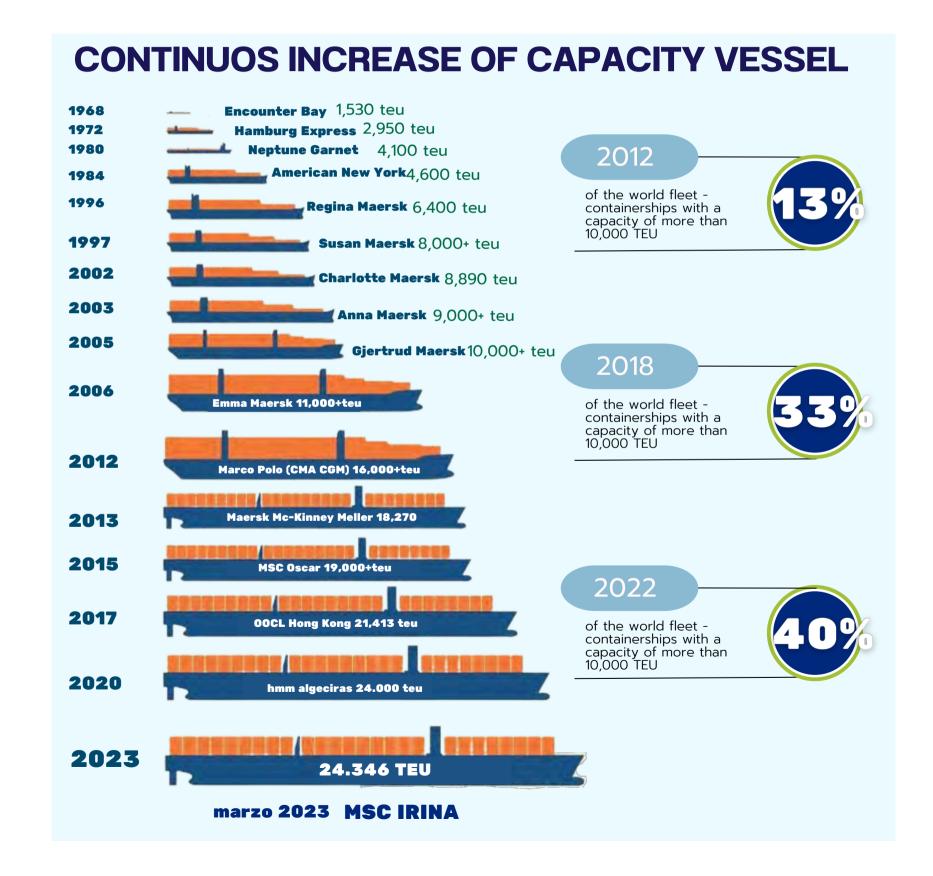


Major supply chain trends to watch

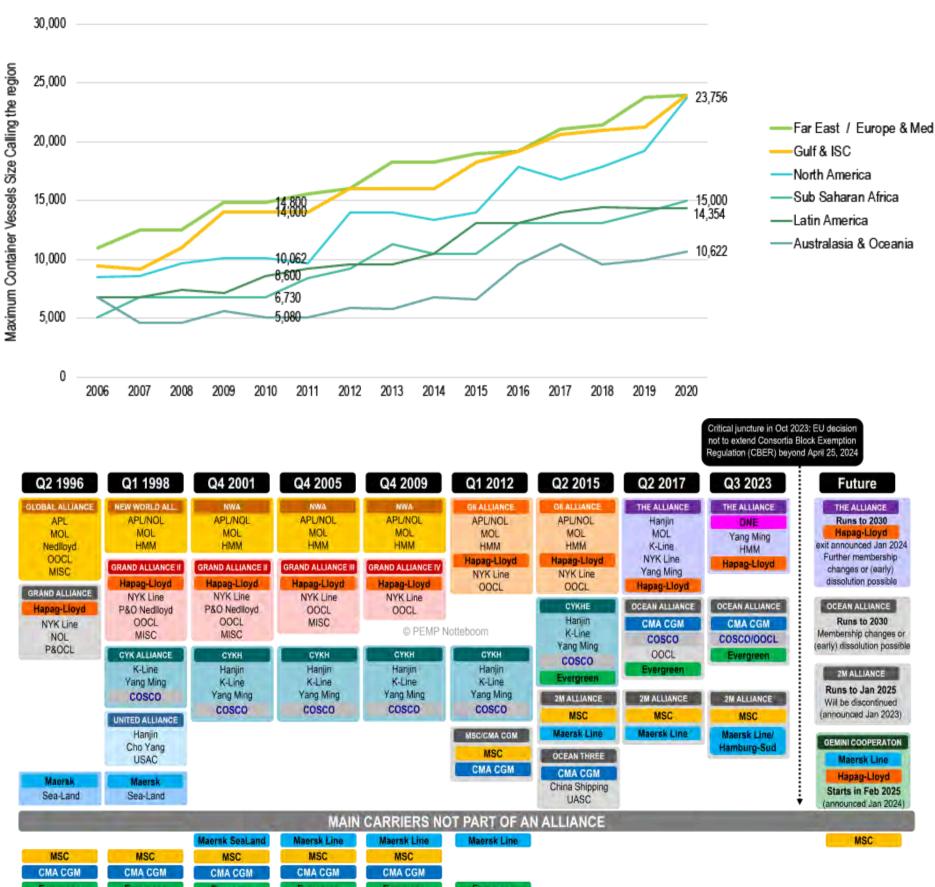


Key Takeaways for the Intermodality

KEY TRENDS IN MARITIME TRADE

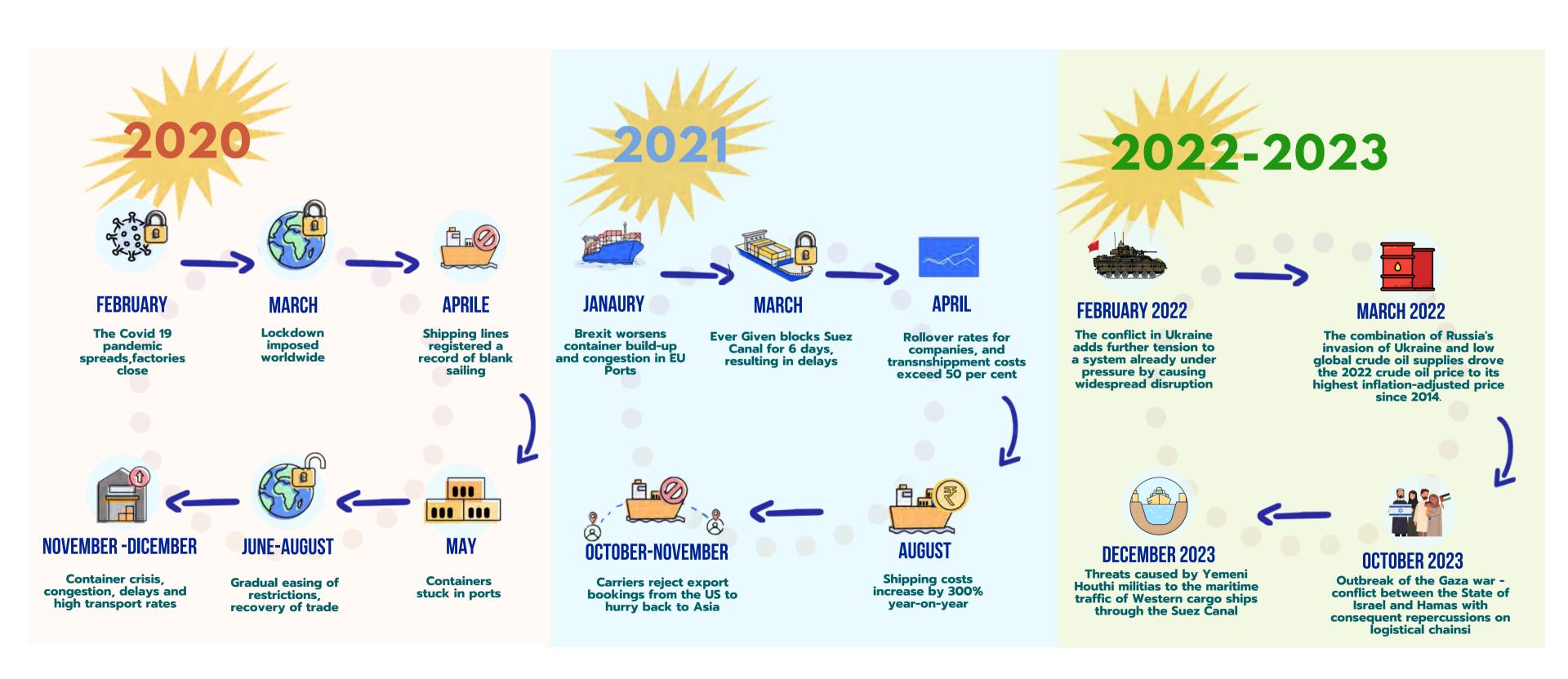


Maximum Container Vessel Size Call per Region (2006-2020)



Theo Notteboom, Athanasios Pallis and Jean-Paul Rodrigue (2022) Port Economics, Management and Policy,

THE DISRUPTIVE EVENTS IN LOGISTICS DOMAIN



SHORT TERM CHANGE COURSE

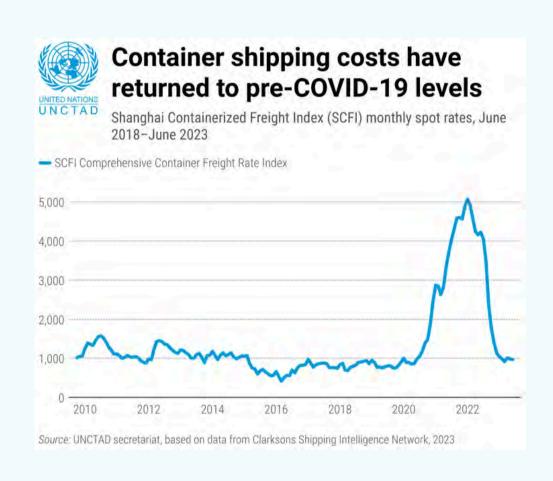
To prepare ourselves for the future, we need transport and supply chains to be more efficient, more resilient and much more environmentally friendly.

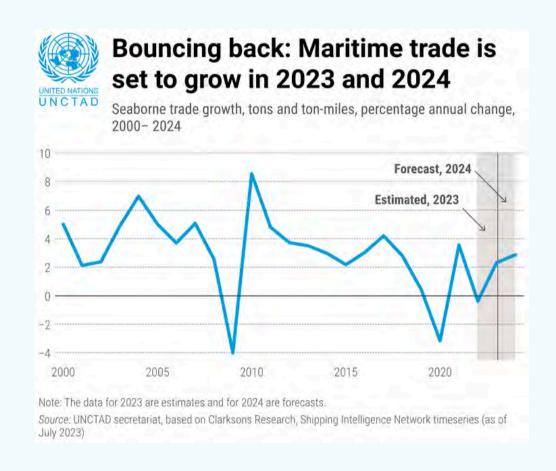
We must change course and we must do it now

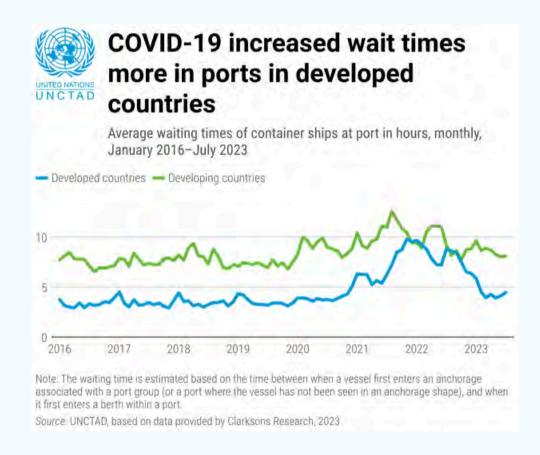
THE WORLD MUST PREPARE FOR AN UNPREDICTABLE FUTURE WITH VOLATILE SHIPPING COSTS

URGENT NEED TO MINIMISE RISKSAND UNCERTAINTIES FOR GROWTH

COUNTRIES SHOULD IMPROVE PORT PERFORMANCE AND CONNECTIVITY









Decrease in freight rates on the main routes, -77% comparing June 2022-June 2023. Return to prepandemic levels



Maritime trade volumes dipped 0,4% in 2022 but are on track for a 2,4% rebound in 2023 and above 2% growth through 2028



4vs8 hrs

Developed countries record an average of 4 hrs of waiting time of container ships in port, while developing countries an average og 8 hrs

MAJOR SUPPLY CHAIN TRENDS TO WATCH

SUSTAINABILITY

Supply chains and operations are not as sustainable as stakeholders would like.

COST CONTROL DOMINATES

Supply chains and operations are becoming increasingly expensive

An intensified focus on cost control is the trend that I predict will dominate the domains of supply chain and logistics.

g e e cost e s.

*\(\frac{1}{2}\)



NEARSHORING

Many manufacturers are looking to mitigate risks from macroeconomic factors. Nearshoring is not only a trend but also a long-term strategy that represents a strategic recalibration.

AI WAVE

Recent research notes Al and automation have already been particularly reliable

For the supply chain, Al will focus on crunching numbers and identifying patterns faster and at a much higher volume than we've seen before.

GEOPOLITICAL RISK MANAGEMENT

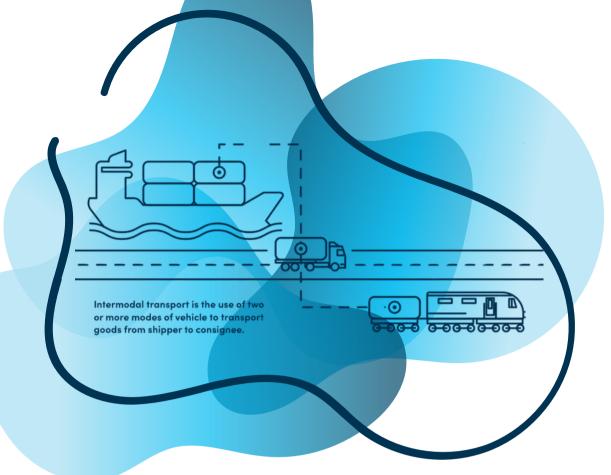
Geopolitics remains a pivotal force in shaping supply chains. Protectionist industrial policy. It is one thing when businesses make a risk management decision to nearshore, friendshore, etc.



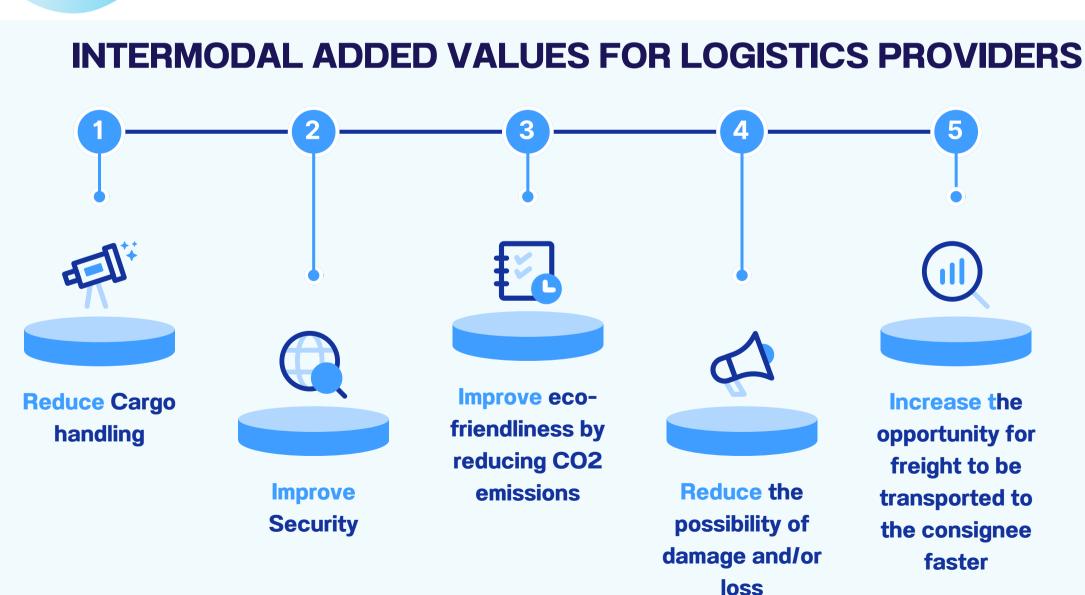
SUPPLY CHAIN DIGITIZATION ACCELERATES

Supply chain digitization will continue to advance rapidly, particularly with the emergence of generative artificial intelligence (GenAl). GenAl will drive the next era of productivity with an estimated \$1-trillion and growing adoption of digital technologies to improve efficiency, visibility, and traceability.

Drivers to innovate

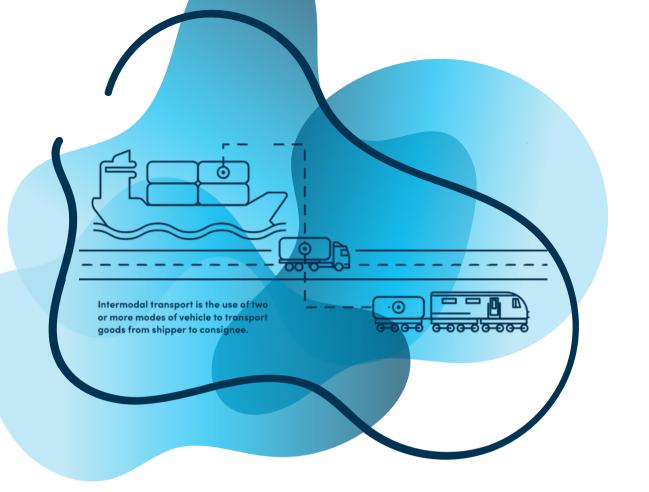


KEY TAKEAWAYS FOR THE INTERMODALITY







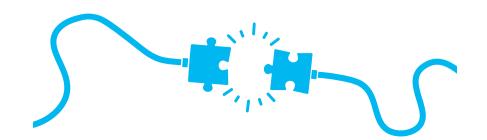




BUILD PARTNERSHIPS

Maintain strong relationships with providers in your network who can connect you to spot capacity in a pinch.

HORIZONTAL COLLABORATION



KEY TAKEAWAYS FOR THE INTERMODALITY

Promote suitable business and operational models to facilitate more high-performance and optimized management of existing infrastructure and logistics resources through the following drivers:





IMPLEMENT

a multi-segment and multi-modal transport structure between corridor nodes

INTEGRATE

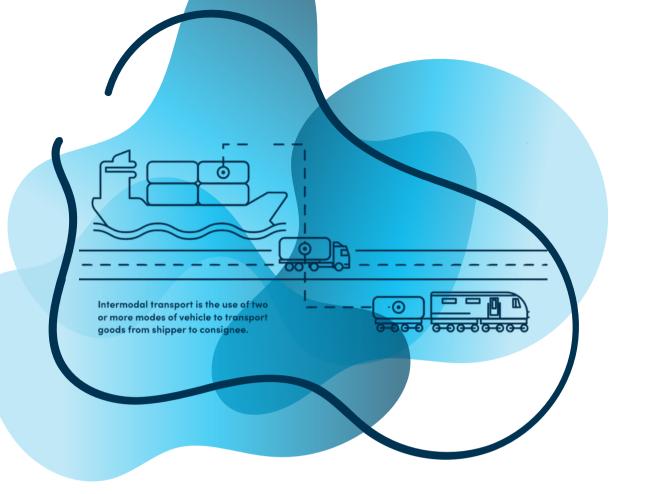
develop and optimise the existing transport networks along the corridors

ENHANCE

modal rebalancing
between road and rail
for existing and future
national and
international traffic

SUPPORT

quickly the improvements achieved with national and European investments

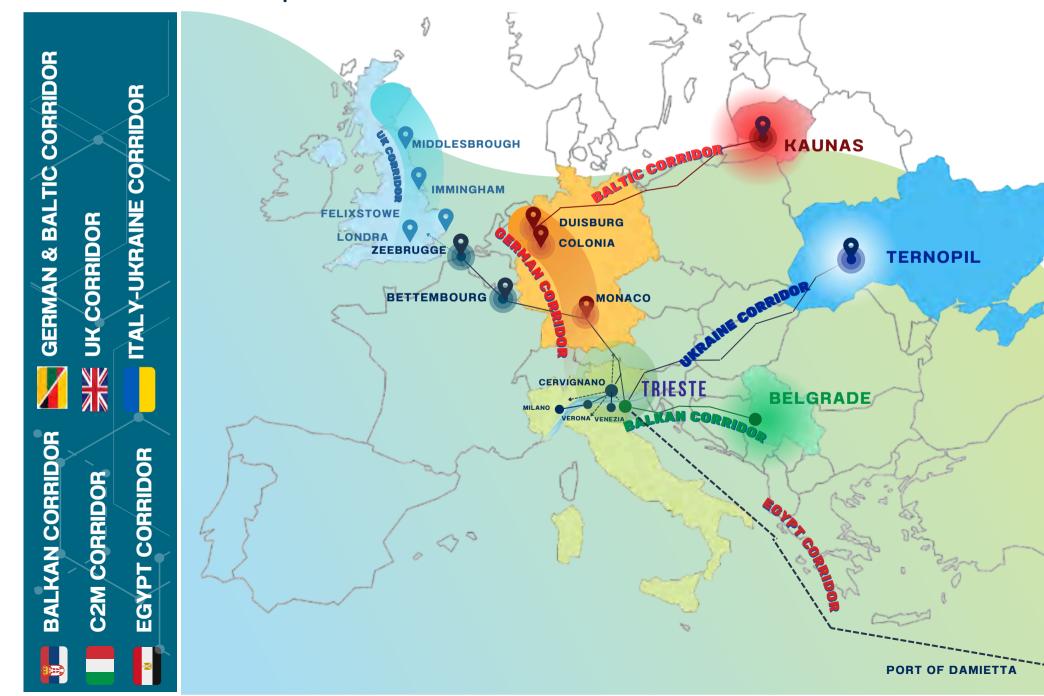


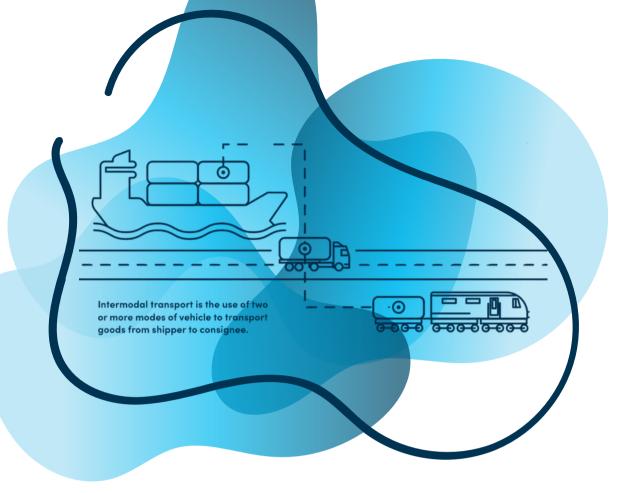


A confluence of macroeconomics, geopolitical turmoil, and climate change will require close collaboration with forwarding partners to understand how transit times and costs are impacted by these events. When it comes to supply chain, the status quo is no more.

KEY TAKEAWAYS FOR THE INTERMODALITY

Future strategies aim at the realisation of multimodal corridors based on an overall management of the infrastructure-operational-trade system, identifying possible barriers, bottlenecks and operational risks.







DIVERSE TALENT WILL SOLVE OLD ISSUES

Intermodality is an industry that's had to adapt in the face of many black swan events in the past few years. This has not only changed the way the workforce experiences their jobs but how a new generation of employees is seeing the value of the industry.

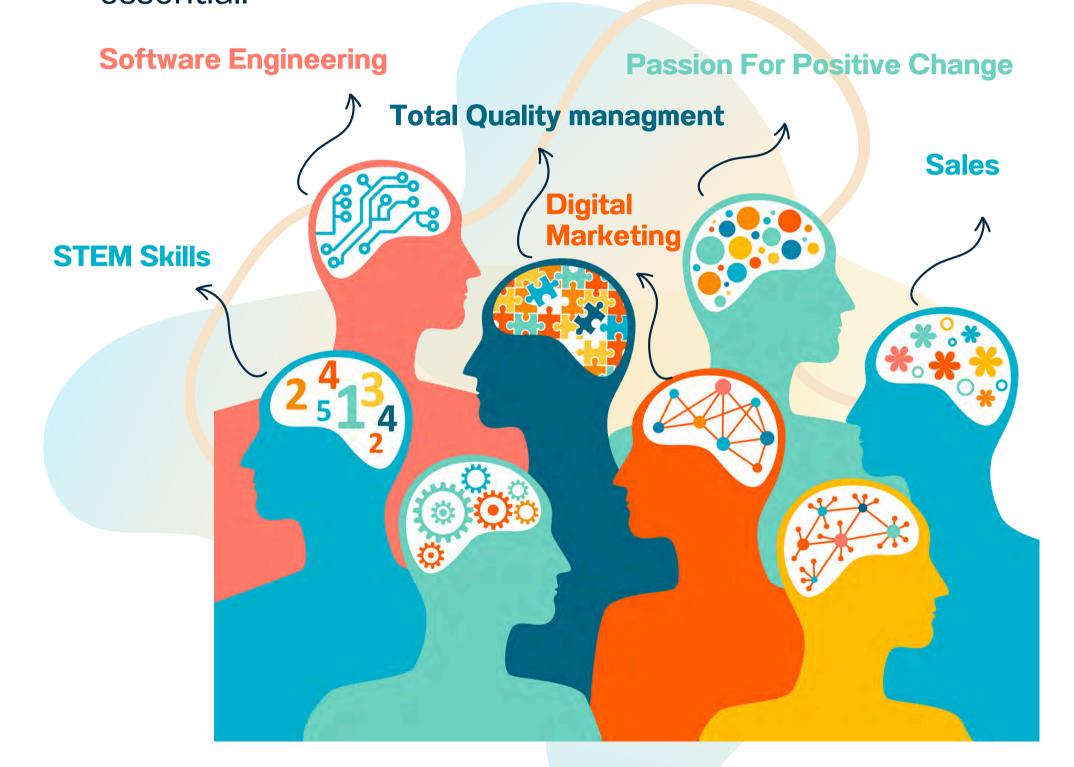
The advantages of diverse work teams can't be overlooked.

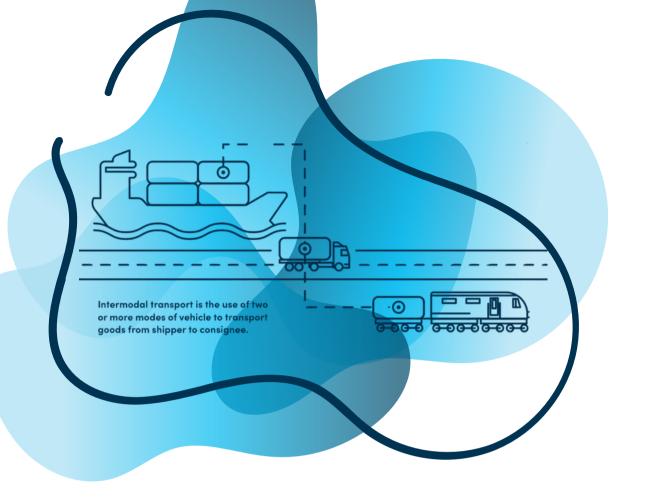
These are big flexes for attracting new talent.

A new generation seeks goal alignment and a greater sense of social and environmental responsibility.

KEY TAKEAWAYS FOR THE INTERMODALITY

A variety of background and skills to operate and grow is essential!







(DSS, real-time optimisation of resources on lines and nodes, simplification of how journeys are organised and booked)

Start with a responsible AI framework. Supply chain executives looking to integrate GenAI in an effective, ethical, and efficient manner should follow a responsible AI framework based on these six principles: Resilience – Guarantee the security of data used by AI system components and the algorithm to safeguard against attacks and breaches.

KEY TAKEAWAYS FOR THE INTERMODALITY



