

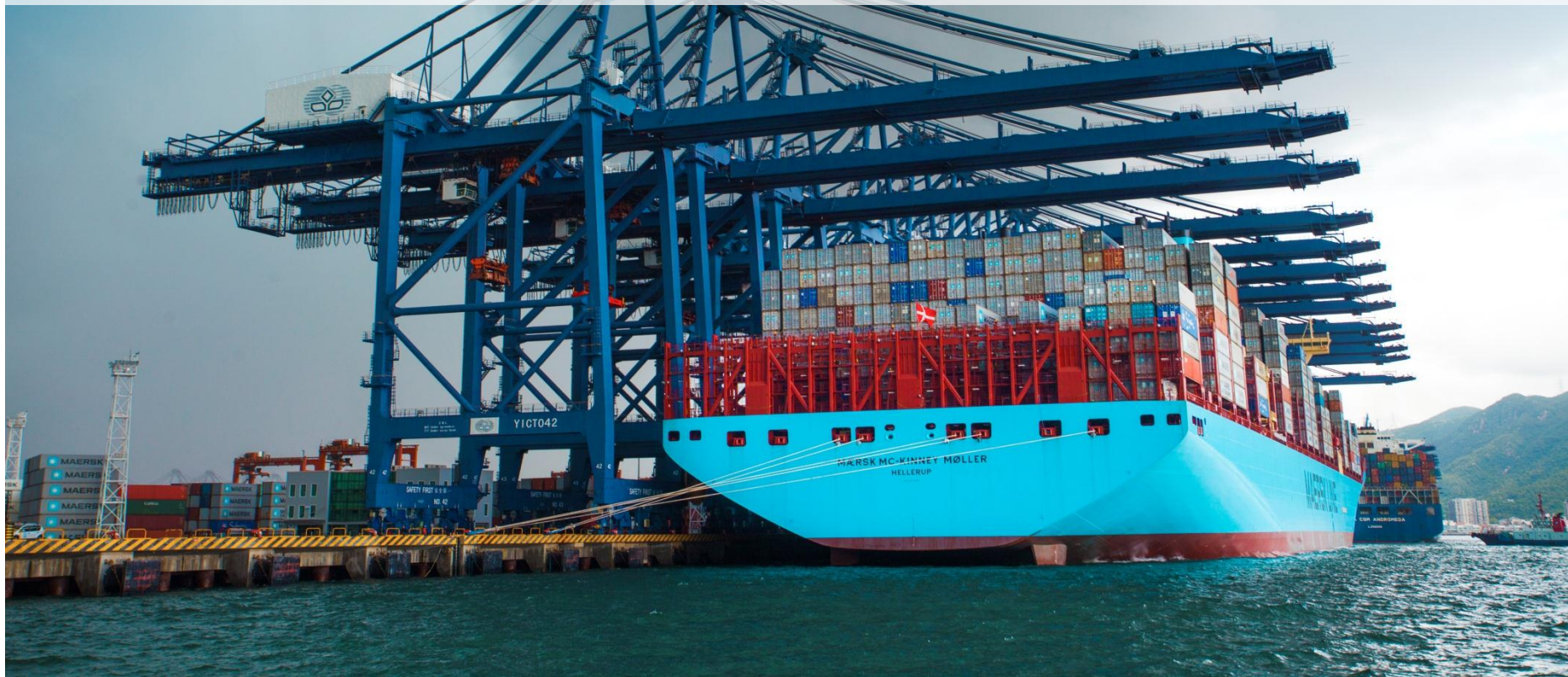
World's Biggest Box Ship – Enter the Triple - E

*Nicolaj Noes – Managing Director Maersk Line
IAPH Sydney Mid-Term Conference
9 April 2014*



Agenda

- ▲ **Setting the scene – Design & construction of Triple-E**
- ▲ **Efficiency, Economy of Scale & Environmentally improved**
- ▲ **Delivering expectations – Tackling our challenges**



The construction of the Triple-E in 70 seconds*



Building the Triple-E

Maersk and the Discovery Channel have joined forces to bring every phase of building the 400-meter long Triple-E vessel to people around the globe.

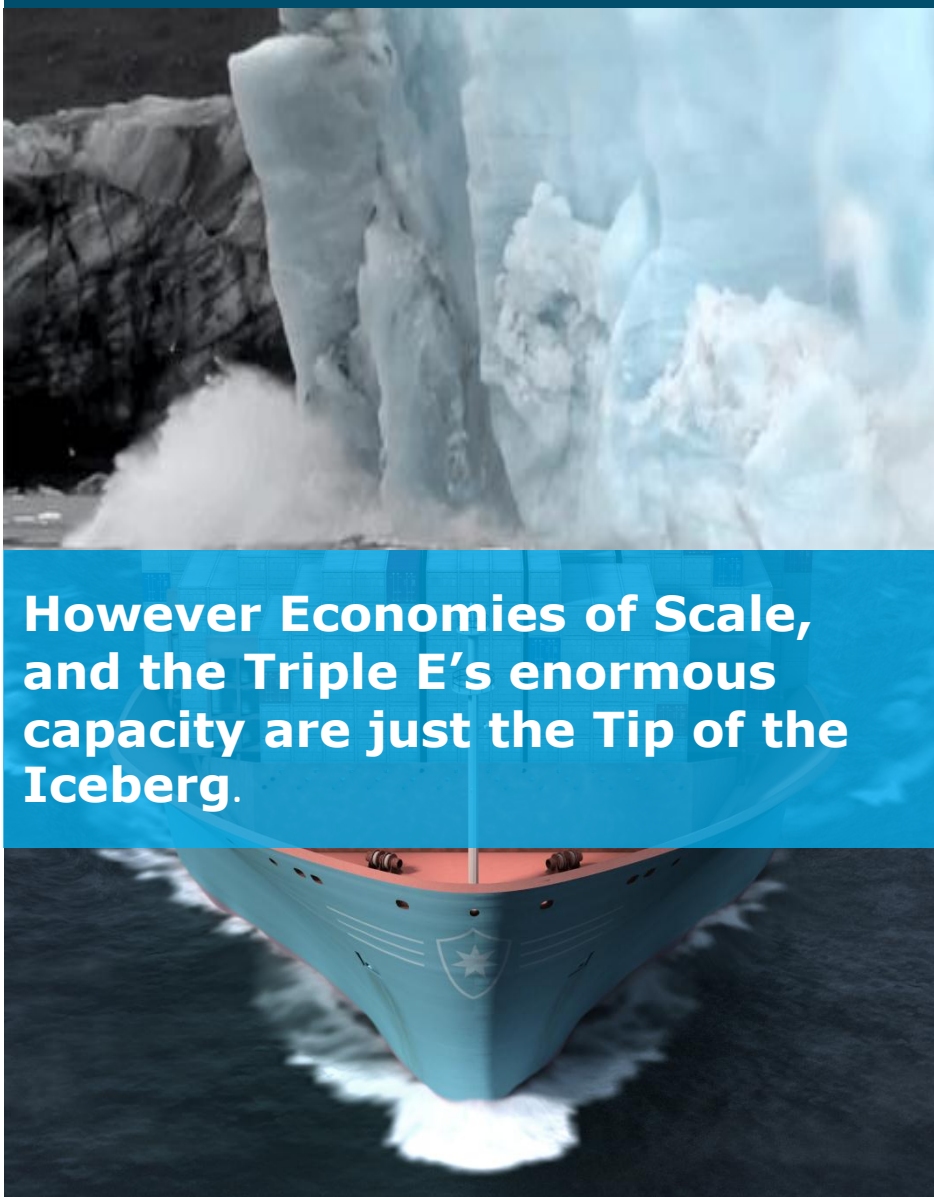
[Go to section](#)



Timelapse

Get a quick view of how we're building the worlds largest ships.

**Internet connection required*



**However Economies of Scale,
and the Triple E's enormous
capacity are just the Tip of the
Iceberg.**

EEE stands for...

- ▲ Economy of scale
- ▲ Environmentally improved
- ▲ Energy efficiency



EEE for...

- ▲ **Energy efficiency:** will consume approximately 35 percent less fuel*
- ▲ **Environmentally improved:** will reduce CO₂ emissions by more than 50% per container moved**. Cradle-to-cradle passport (database listing all components) will help recycle most of the material used for the construction
- ▲ **Economy of scale:** 18,000 TEU, 16% more capacity than Maersk E-class (Emma Maersk)

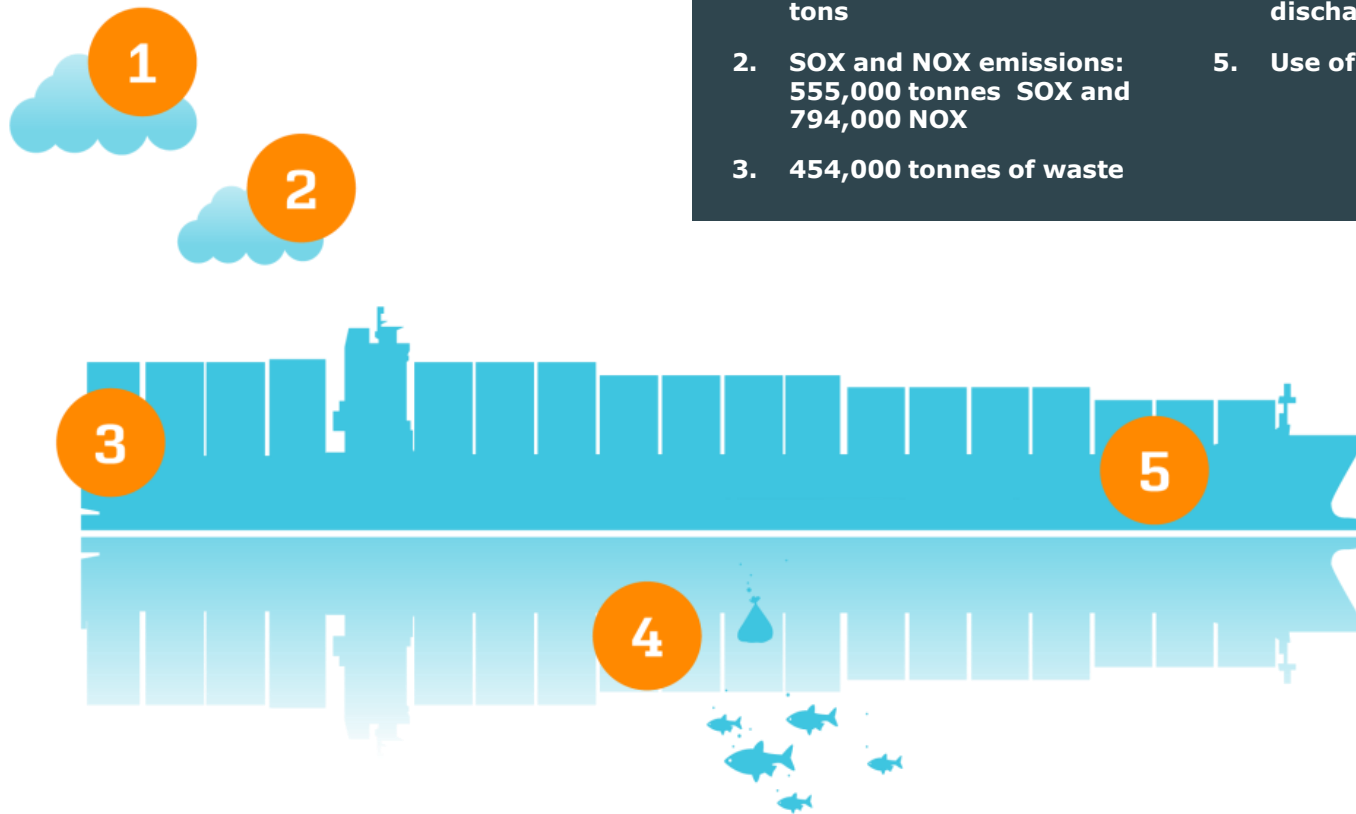
* Than the 13,100 TEU vessels being delivered to other container shipping lines in these years.

** Compared to the industry average CO₂ performance on the Asia-Europe trade.

In absolute terms, the environmental impact of shipping is significant

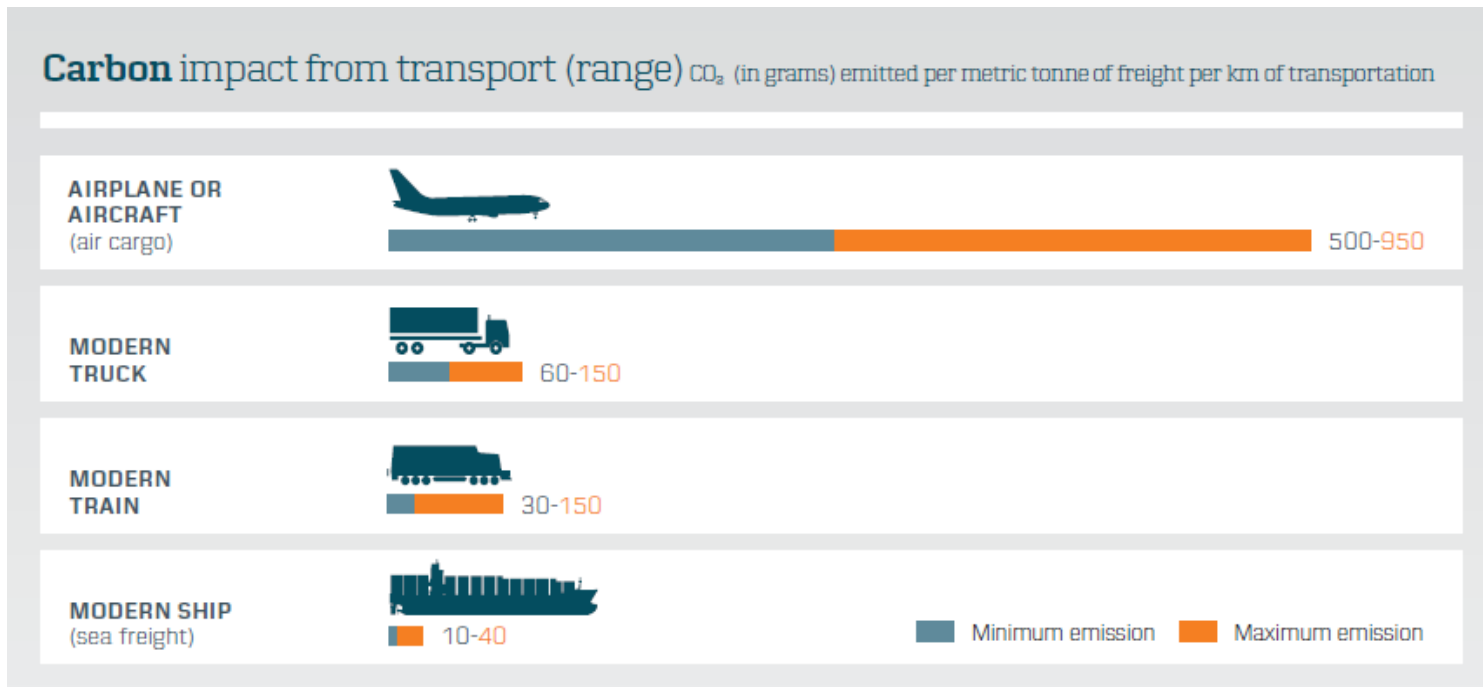
Our environmental impact in 2012:

1. CO₂ emissions: 31.7 million tons
2. SOX and NOX emissions: 555,000 tonnes SOX and 794,000 NOX
3. 454,000 tonnes of waste
4. Ballast water, risk of discharges and spills to water
5. Use of paint and chemicals



As a starting point, container shipping is already quite energy efficient...

A Maersk Line vessel does not require much energy compared to flying an airplane, for example



... compare it to going for a short drive to your local store

Example: One pair of shoes



18 times the emissions for 0,1% of the distance made by a small and efficient car

We're a small step ahead of the industry...

25%

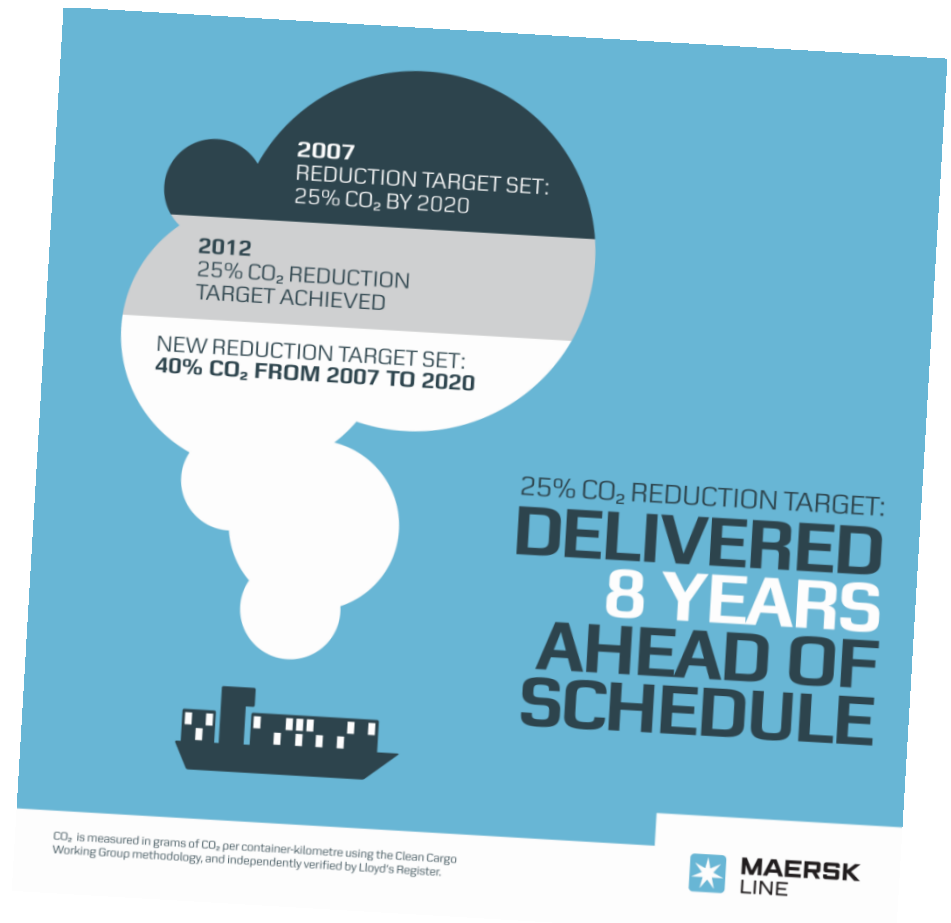
CO₂ per container-kilometre reduced since 2007

40%

CO₂ per container-kilometre to be reduced before 2020

50%

20 Triple-E vessels will produce 50% less CO₂ per container-kilometre



In the past, hulls of scrapped ships were left to decay and disintegrate, earning the industry the reputation of being environmentally irresponsible.



Currently, the industry looks at scrapping or recycling responsibly.

For the Triple-E: The Cradle to Cradle passport will be a database describing the material composition of the main components of the ship. The passport will be kept updated throughout the lifetime of the ship, and it will enable better recycling of the materials used to build the ship.

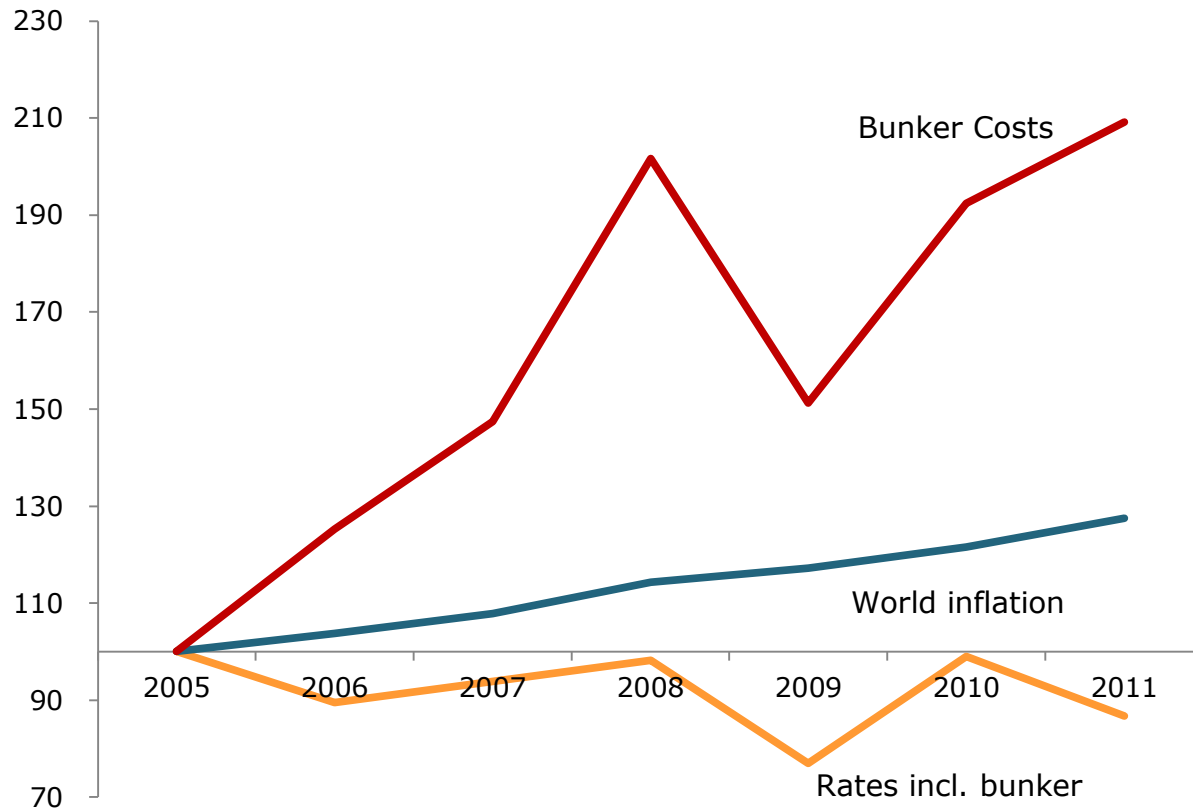
On Cradle to cradle we do not have specifics about recycling options since we are looking at a 25-30 year horizon.



Financial sustainability in an ever changing industry

In 2011 Maersk Line began to introduce GRI's to ensure financial sustainability.

Development of rates vs. inflation
January 2005 – December 2011



Source: CCFI freight rates, Bunkerword Index and World Bank

"Fuel price increase dents rate gains..." a closer examination of the underlying base freight rates, adjusted for bunker price increases, have not risen as much as the CCFI indicates."

AXS Alphaliner – Vol. 2012 Issue 16



Big thinking

The capacity of a Triple-E vessel, 18,000 TEU, will set a new world record. Maersk Line continues to break its own records and sets new standards for the shipping industry. From Regina Mærsk to the Triple-E class, Maersk has designed the largest container vessels in the world since 1996.



2013
Triple-E Maersk Class
18.000 TEU



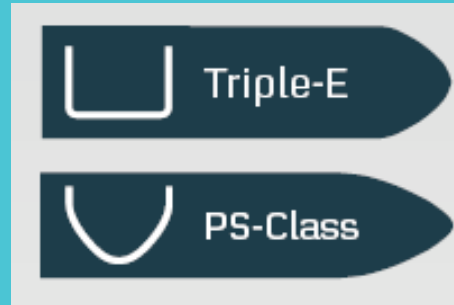
2006
Emma Mærsk Class
15.500 TEU



1997
Sovereign Mærsk class
8.100 TEU



1996
Regina Mærsk class
7.100 TEU



+16%
BREAKING THE
RECORD (AGAIN)

18.000
20-foot containers



111 million
Pairs of sneakers



A single 20-foot container can hold about 6 thousand pairs of sneakers in one container. A Triple-E class vessel can transport approximately 111 million pairs of sneakers – enough to make everyone a jogger in Mexico.

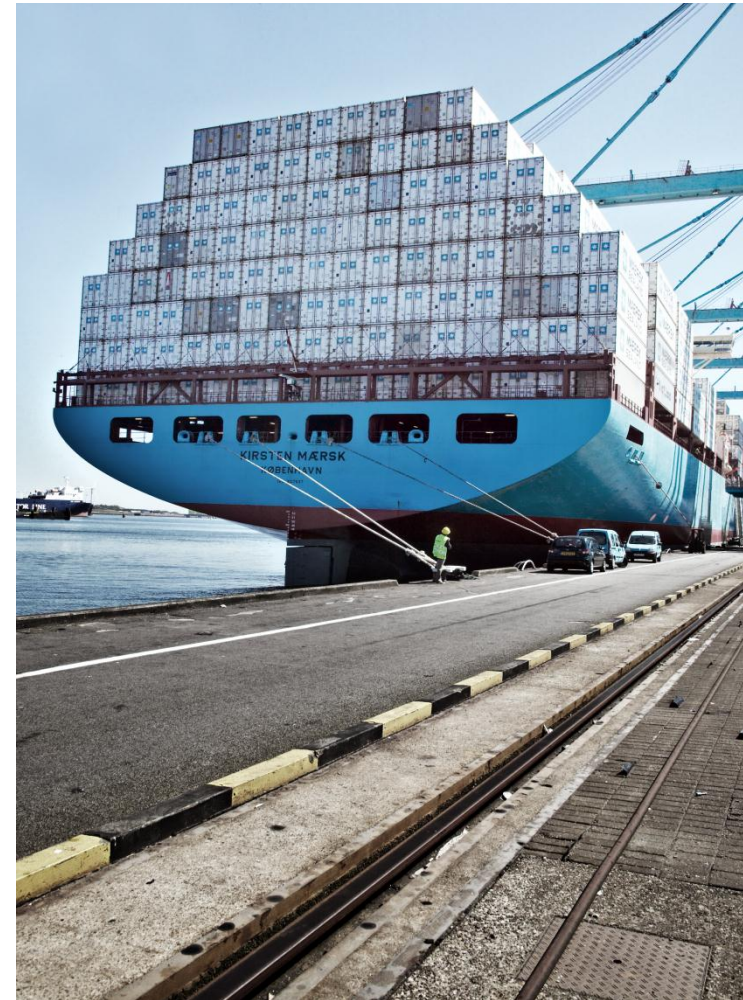
Triple-E Ports

Managing Triple-E in ports

- In 1970 a port crane would typically be capable of dealing with containers stacked 35 metres high (25 m above the level of the quay and 10m below),
- 1995 it has increased to 52 metres.
- The Triple-E, cranes will need to deal with stacks up to 69 metres.

Triple-E Deployment

- The AE10 service currently calls into 14 ports between Asia and Northern Europe.
 - 20 ports have been nautically prepared (discussions with pilots and ports about safety. These ports have used simulators with Triple-E data and based on that have approved that it is safe to arrive and depart from the ports) to handle the Triple-E vessels.
- Maersk Line are planning to increase this number by another 5 - 10 ports to be ready and flexible to handle all vessels (2 loops).



Delivering Expectations – Tackling challenges together

How has the Triple E impacted on the way terminals operate?

- To utilise Triple E to it's potential a minimum of 6-8 cranes should be made available
- To achieve an acceptable port stay cranes will need to reach mid to upper 30 moves per hour



For your chance to win a Maersk Line Triple-E Lego Ship

- Simply place your business card at the registration desk
- Winner will be drawn at 15:30 Wednesday 9th April in Ballroom 2

All the best!



**For stories, fun facts, videos and pictures, please visit
www.worldslargestship.com**

Thank you!



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