



## **Agenda**

- Route 2
- Triple E
- The Reefer Market
- Seafood Solutions





## Route 2

#### The course to a more profitable and sustainable future

- Climate change, population growth and need for food security demand important change of how we and our customers act
- A relentless turbulence in the global economy creates very high market volatility
- Overcapacity and the downward trend in freight rates equals low industry profitability
- Low shipping scheduled reliability results in significant supply chain waste
- Shipping is still perceived to a large extent – to be very commodity based

## **CHALLENGES**

- Business as usual is no longer an option;
- Launch of Daily Maersk a conveyer belt from Asia to Europe of more than 70 container vessels with +95% scheduled reliability – was an important 2011 milestone
- We reduced supply chain waste for our customers by providing a lower environmental footprint compared to the industry and our own 2010 performance
- We reduced sulphur emissions by up to 95% in 11 ports as a result of our fuel switch program

## SOLUTIONS



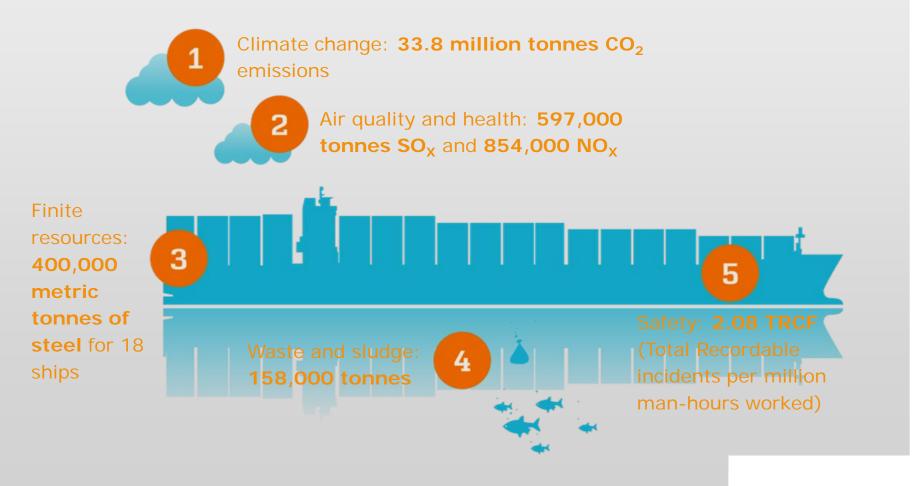
## As a starting point, container shipping is already quite energy efficient...

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





# We had a considerable environmental impact in 2011 – a responsibility we did not take lightly ...



## Maersk Line offers an eco-advantage on (all most) all trade lanes



Source: Clean Cargo Working Group (2011)

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# Designed for sailing between Asia and Europe, which is one of the world's largest trades





#### **Economy of scale:**

By breaking the world record in container ship size by more than 20%, these vessels take economy of scale to a new level, because the additional capacity is not matched by additional engine power.



#### Because ...

- The Triple-E represents the next generation of large container vessels
- With a capacity of 18,000 TEU, the Triple-E can accommodate 2,500 containers more than Emma Maersk which reduces the impact each transported container has on the environment



#### **Energy efficiency:**

These vessels are designed and optimised for lower speeds, and the energyefficient engine-type is combined with a waste-heat recovery system producing extra power. The result is unmatched energy efficiency



#### Which means that it...

- Will by far be the most energy efficient vessels in the world, emitting 50% less CO2 per container moved than the industry average on the Asia-Europe trade
- Will consume approximately 35% less fuel per container than vessels being delivered to competitors in the next 2 years on the Asia-Europe trade



#### **Environmentally improved:**

It will be the most environmentally efficient ship ever to hit the world's oceans.



The Triple-E vessels will, with their unique "cradle to cradle passport" which details out the materials and components used to build the ship, can be recycled once the vessel's service lifecycle has expired

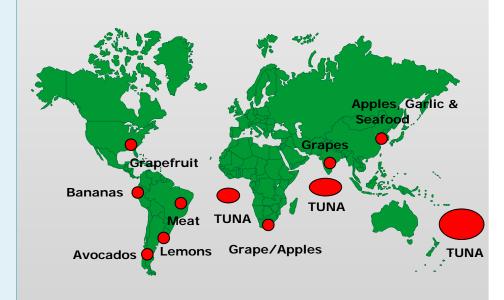
With these vessels, Maersk Line estimates to be able to reach a recycle ratio of 90%, an industry first



## The Reefer business: "a challenge and opportunity for service providers"

#### **Reefer Characteristics**

- Un-predictable as subject to mother nature, trade embargoes, demand fluctuations, oil price, rate of exchange etc!
- Service intensive
- Requirements differs based on size/commodity/brand/business model
- Dynamic Sourcing & Buying patterns





## Commodity or service industry?

#### Focus areas of improvement

- 1. Proactive Exception Handling
- 2. Claims Handling
- 3. Transparency
- 4. Invoice and documentation



#### **ML Customer Satisfaction**





## 'The Supply / Demand Outlook'

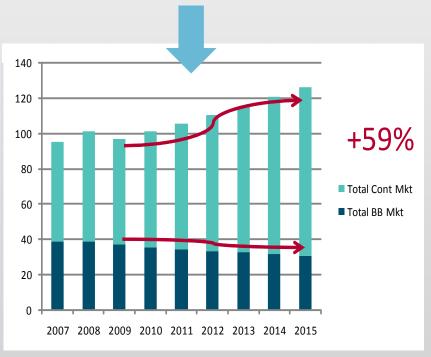


- 1 Challenging Trading Conditions
- S. Hemisphere fruit is supply driven and difficult to predict
- 3 Accelerated containerization of bananas, fruits & Seafood
- 4 Asset allocation more crucial than ever. Containers, Plugs and vessels
- Bunker price, dry volumes/utilization & T/C hire affect cost of service



### The Reefer Market



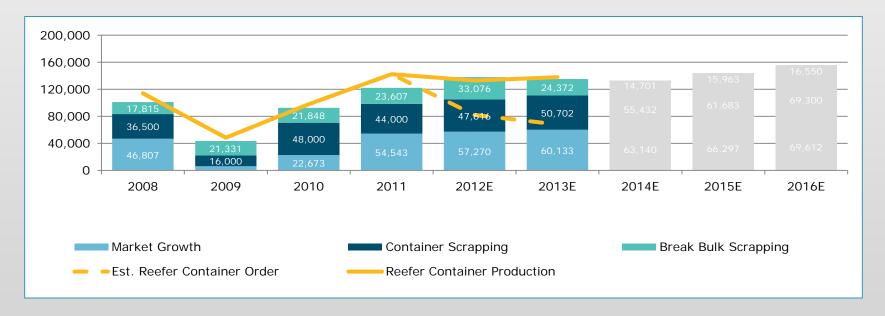


• Source FT 2011

• Source: Drewry



## Reefer Equipment – a Bottleneck



#### **Assumptions:**

- Market growth estimated at 5% annually from 2011 onwards
- Container scrapping based on a 13 year lifespan
- Breakbulk scrapping has been increased to 85 vessels for 2012
- Production for 2012 has been reduced to 82,000 FFE
- Decrease of 51,000 FFE split between carriers (29,000 FFE) and leasing companies (22,000 FFE)



## **Seafood Solutions**

- The Star-Loader
- The Magnum container
- The Super freezer container
- AquaLife







### The Star Loader

 Designed for efficient discharge of fish from vessel to reefer containers



- Productivity 350 500 tons/shift
- Improved temperature management
- Delivery from vessel to factory
- Multiple destination shipments
- Possibility to sort during discharge





### The Star Loader continued

Currently deployed in Port Victoria, Seychelles and Abidjan, Ivory Coast







### The Star Loader continued

About the Star Loader\* (continued)







## Magnum Container

#### What is it?

A reefer unit designed for the seafood industry to maintain a temperature of – 35 C which reduces the risk of crystallization and extends shell life of the products

#### **Geographical Focus**

- All regions

#### **Commodities**

- Prawns / Shrimps
- Salmon
- Shellfish
- Tuna





## **Super Freezer Container**

#### What is it?

A Specialized unit for the transport of cargo at ultra-low temperatures (ULT) to as low as - 60 C / - 76 F

#### **Geographical Focus**

- Middle East
- Oceania
- South East Asia
- West Central Asia

#### **Commodities**

Main market is Seafood.

Tuna to be used in Sashimi is a key commodity that benefits from the low transport temperatures offered. Other commodities that are shipped include lobsters, shrimp, certain fish species, high end Ice creams etc.







## Benefits of using the Super Freezer:

- Limited re-handling of the products to ensure optimal quality at destination
- Unbroken cold chain to the final place of delivery, including store door delivery
- Continuous cargo flow with weekly departures and arrivals creating best possible cash flow
- Products can be shipped in smaller quantities which effectively means extended season
- Reduced cold-storage costs



## AQUALIFE LIVE SEAFOOD TRANSPORT



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### **Executive Summary**



- Aqualife A/S provides global seafood logistics for <u>live</u> seafood
  - Transportation of live seafood by ocean containers from door to door.
- Strategic Partner AP Moeller Maersk Line
  - Proven history of improving the way food is shipped, eg. bananas, tuna
- Proven technology
  - A Patented technology owned 50/50 by Maersk Line and Aqualife developed over the last 5 years.
- Aquaculture is a growing market
  - Aquaculture is the fastest growing segment of the food market
  - Increasing need for efficient logistics between seafood farms and consumer markets
- Opens up new consumer markets
  - Aqualife makes it possible to ship any seafood almost anywhere on the planet.
  - Strong appeal to large aquaculture producers
- Provides "day-fresh" seafood to distant markets.
- Over 90% reduction in carbon footprint (versus air cargo)

## Aqualife Technology



- Globally-patented transportation solution
- Utilizes sophisticated water purification and refrigeration systems before, during, and after ocean transport
- Components include:
  - Aqualife Transport Containers & Tanks
  - Aqualife AQUAPORT
- Live products are shipped in water extending shelf life and adding value
- Meets international standards for Aquatic Animal Health and prevention of spread of disease and invasive species.
- Provides a safe transport solution with very low mortality rate compared to airfreight as one of the alternatives.



Containers & Tanks

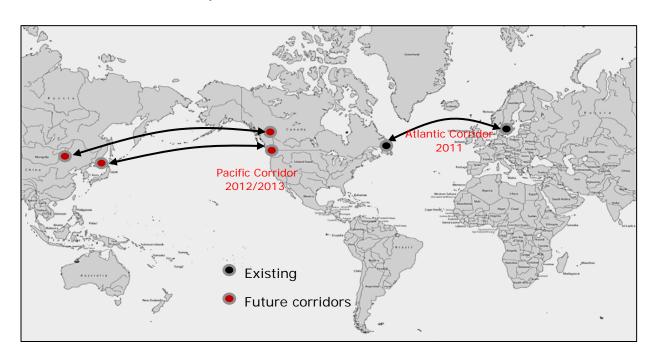


**AQUAPORT** 

## Capital expansion plans



- Current corridors
  - Lobsters from Halifax, NS to Urk, Holland
  - Sturgeon from Europe to Abu Dhabi
- Additional Aquaports to open 2012
- Pacific corridor
  - West coast (Seattle/Vancouver)
  - China & Japan







## Thank You

Questions