

The 'Eco' Influence on Shipbuilding



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This series of slides is based on information
from IHS-Fairplay
Updated with information from other sources
and own calculations.

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Green Drivers of Shipbuilding



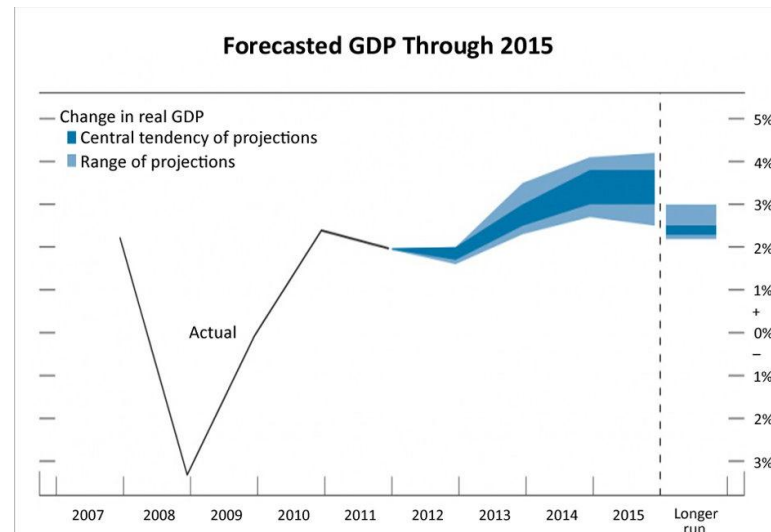
- Legislation
- Fuel Prices
- Consumer Pressure



Other Drivers of Shipbuilding

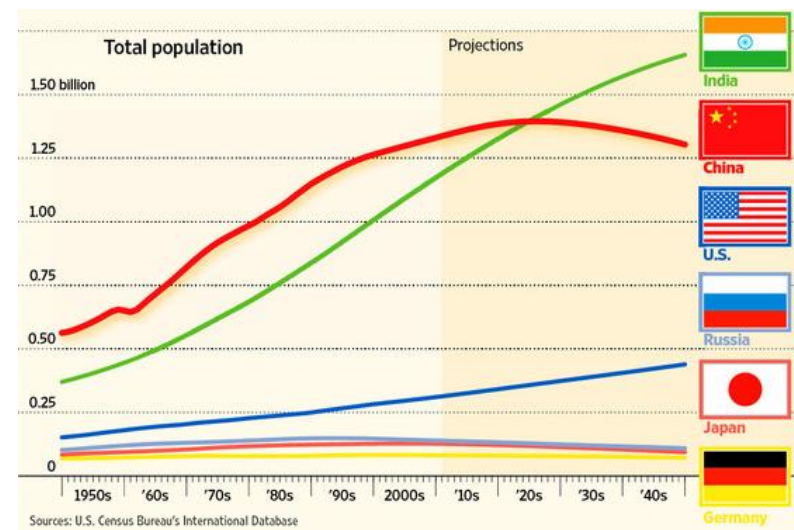
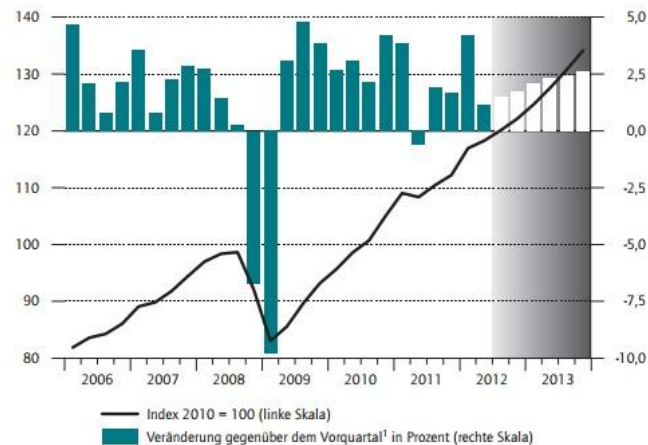


- GDP Growth
- Trade Growth
- Population Growth



Welthandel

Güter- und Dienstleistungen



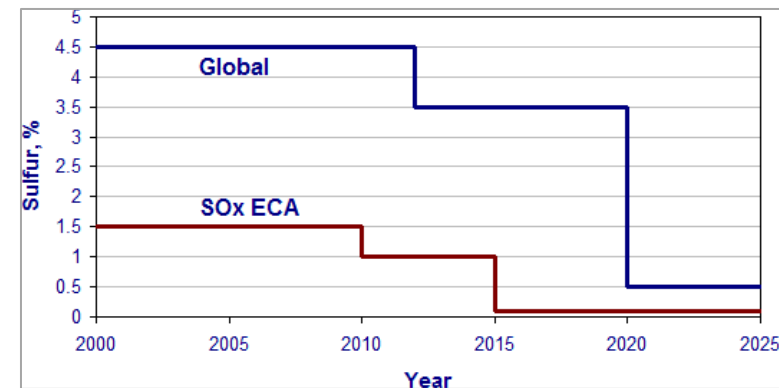
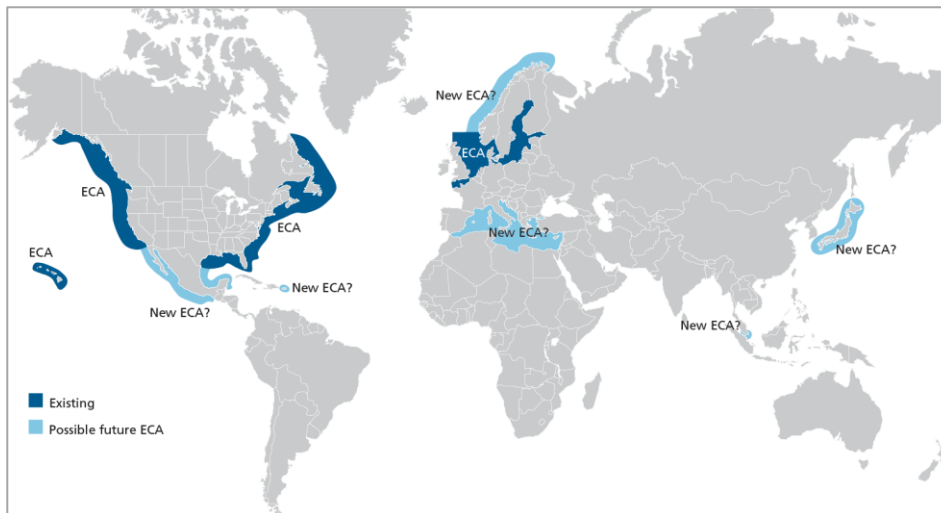
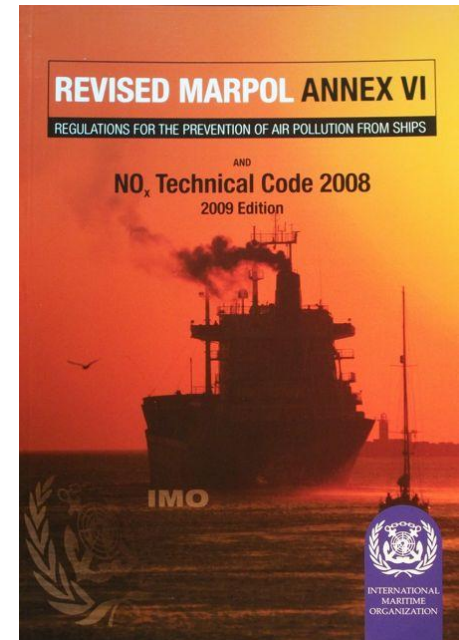
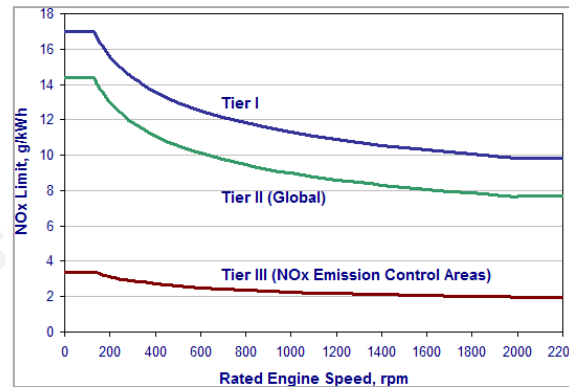
Green Drivers of Shipbuilding



- Legislation

- Fuel Prices

- Consumer Pressure



Key dates: 2015 & 2020/2025

2015 Local to ECA Areas →
Few Ships Affected Seriously

Impact on scrap levels?
Insignificant

North America and European ECA



Ships propelled by MAN B&W Brand Engines

Ship Calling ECA Port 2011	Ships	%
Baltic	1.604	10%
Other North Europe	4.130	25%
ALL North Europe	4.502	27%
North America	4.157	25%
ALL North Europe or North America	6.874	42%
Not Calling ECA Ports	9.682	58%
Both N. America and ALL N. Europe	1.656	10%
ALL	16.556	100%

- 4.500 (27%) of all ships propelled by MAN B&W Diesel Engines have visited European ECA Area in the period Jan. 2011- Jan. 2012.
Hereof 1.656 (10% of all) have also visited North American ECA Area
- 4.157 (25 %) of the ships have visited North American ECA Area
- 6.874 (42 %) of all ships propelled by MAN B&W Diesel engines have visited one or both ECA Areas

Ships propelled by MAN B&W Diesel visiting ECA area in 2011



- 58.3 % of the ships have NOT visited an ECA harbour
- 41.7 % of the ships have visited an ECA harbour (ECA Ships)
- **Out of these ECA Ships:**
 - 1.4% visited the ECA Harbours more than 50 times
 - 26.2% visited the ECA Harbours more than 10 times
 - 19,1% called the ECA Harbours only once in 2011

Ship Age Distribution

All Callings



No of Ships			
Build Year	Not called ECA	Called ECA	Grand Total
Before 1990	2.039	404	2.443
1990-1999	2.302	1.243	3.545
2000-	5.341	5.227	10.568
Grand Total	9.682	6.874	16.556

No of Ships (%)			
Build Year	Not called ECA	Called ECA	Grand Total
Before 1990	83%	17%	100%
1990-1999	65%	35%	100%
2000-	51%	49%	100%
Grand Total	58%	42%	100%

Ships propelled by MAN B&W Engines, Jan 2011-Jan 2012

Key dates: 2015 & 2020/2025

2020 Global Rules →
Large effect on total fleet

Impact on scrap levels?
Insignificant

Why Insignificant?



Fleet Development by Ship age

Ship Age	2013	Scrap	2015	Scrap	2020
0-5	15.431		12.888		8.986
6-10	6.915		10.570		12.888
11-15	5.400		5.607		10.570
16-20	4.420		5.352		5.607
21-25	3.173	547	3.355	603	4.749
26-30	3.896	1.323	1.882	1.457	1.898
+30	7.165	1.959	7.570	2.157	7.296
Total Fleet	46.400		47.224		51.994

75%

25%

Ships > 2000 DWT/GT

Source: IHS Fairplay

In 2020

→ Majority of fleet is too young to scrap and the rest is mainly of no interest of renewal by major shippers

3 Solutions to comply:

- Low Sulphur Fuel
- Exhaust Gas Cleansing
- LNG Fuel

All can be acquired by New-Building AND Retrofit

Green Drivers of Shipbuilding



- Legislation
- **Fuel Prices**
- Consumer Pressure



Fuel prices



High New-build prices, Large Op.Ex. and Low Earnings =

Trouble

Highest Newbuilding Prices

Fleet by Ship age

Contract Year	Delivered Ships
2004	1293
2005	1901
2006	3894
2007	3463
2008	1881
2009	756
2010	1430

9238 vessels



Ship Age	Scrap	2020
0-5		8.986
6-10		12.888
11-15		10.570
16-20		5.607
21-25	603	4.749
26-30	1.457	1.898
+30	2.157	7.296
Total Fleet		51.994

In 2020

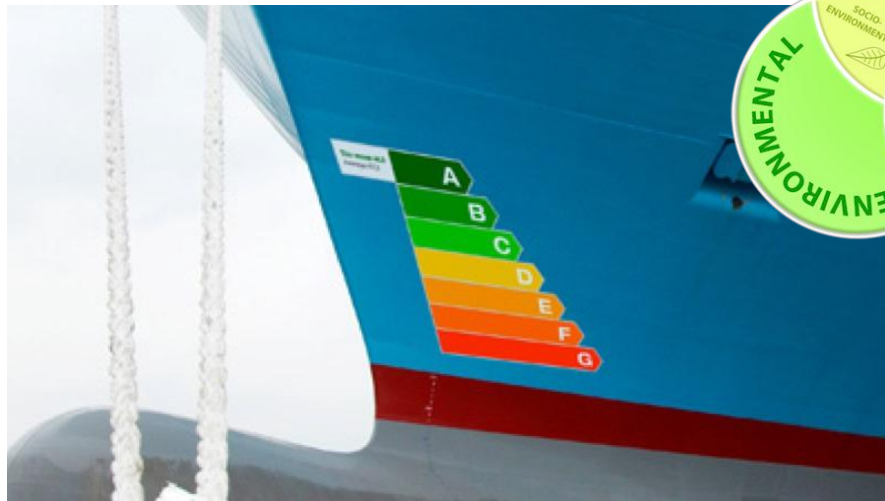
→ Could have an impact on additional shipbuilding

Ships > 2000 DWT/GT
Source: IHS Fairplay

Green Drivers of Shipbuilding



- Legislation
- Fuel Prices
- **Consumer Pressure**



Consumer Pressure



The Unknown (Human) Factor

- Size of Impact?
- Sort of Impact?
 - NGO Level?
 - Environmental labelling as standard?

Fleet by Ship age

Ship Age	Scrap	2020
0-5		8.986
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Ships > 2000 DWT/GT

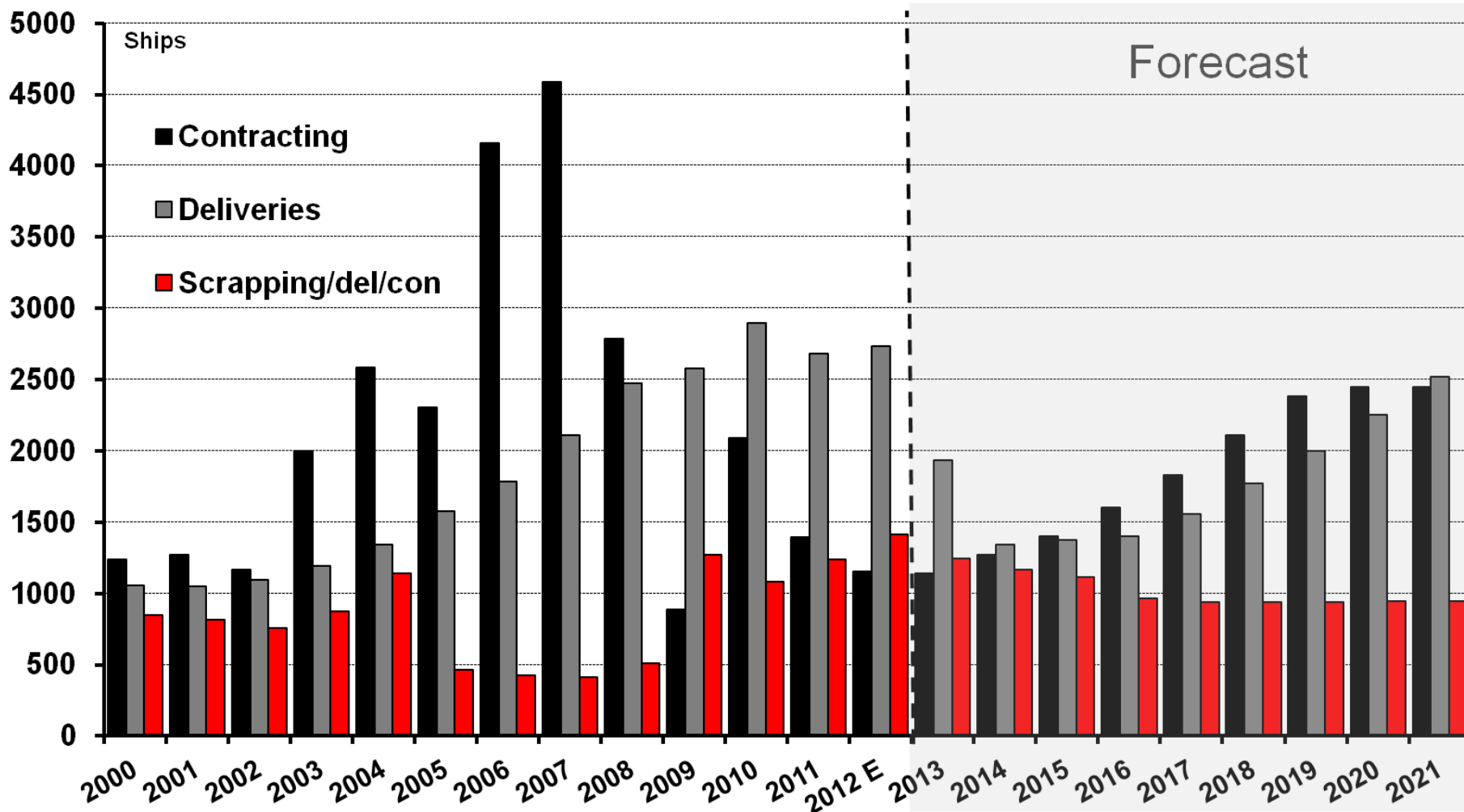
Shipping currently accounts for app. 3% of the global carbon emissions and the industry is continuously improving the fuel efficiency

In 2020

→ Could have an impact if the pressure is of a common nature, but the economic incentives have to be strong since the effect will be on more than half the fleet!

All in all

The Prognosis, No. of ships > 2000 DWT/GT



E: Estimated

Thank You



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