









## 18th. Asian Shipowners Forum

**The Round Table Seminar** 

Tainan
26 May 2009







# The ROUND TABLE of international shipping associations

- BIMCO
- INTERCARGO
- International Chamber of Shipping/
   International Shipping Federation (ICS / ISF)
  - INTERTANKO







# The ROUND TABLE of international shipping associations

#### **MISSION**

To work together to serve, represent and advance the international shipping industry

#### **VISION**

 A responsible and respected international shipping industry meeting the expectations of its stakeholders

#### STRATEGIC OBJECTIVE

 By acting in concert to avoid duplication on issues of consensus, where the combined effort of the Round Table can exceed the sum of the individual efforts







# The ROUND TABLE of international shipping associations

#### **AGENDA**

- Climate Change / Green House Gas Emissions
   Philippe Embiricos / Niels Bjorn Mortensen BIMCO
- Ship Recycling Tony Mason - ICS / ISF
- Piracy
   Rob Lomas Intercargo
- Environmental Overview
   Peter Swift / Tim Wilkins INTERTANKO









### BIMCO

- The world's largest shipping
- organisation founded in 1905 in Copenhagen.
- IMO observer since 1969
- 2,550 members in 123 countries
- 950 Shipowners, Managers and
- Operators with a fleet of 620 mill.
   DWT equalling about:
- 65% of the world merchant fleet



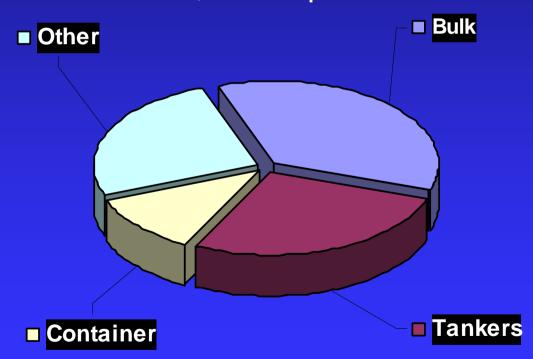






## **BIMCO**

15,500 ships











## Global Warming

Scientists have agreed to the necessity to limit Global Warming to 2 deg. C.

A temperature increase of 2-4 deg. C will lead to increased droughts in certain areas, increased precipitation in other areas and more frequent and violent hurricanes.

A temperature increase of more than 4 deg. C would most likely change the planet as we know it today.







## GHG & Global Warming

Kyoto Annex I countries have agreed to reduce GHG by 5.2% by 2012 compared to 1990.

Scientists suggest a 50% reduction in GHG emissions by 2050 in order to limit Global Warming to 2 deg.C.

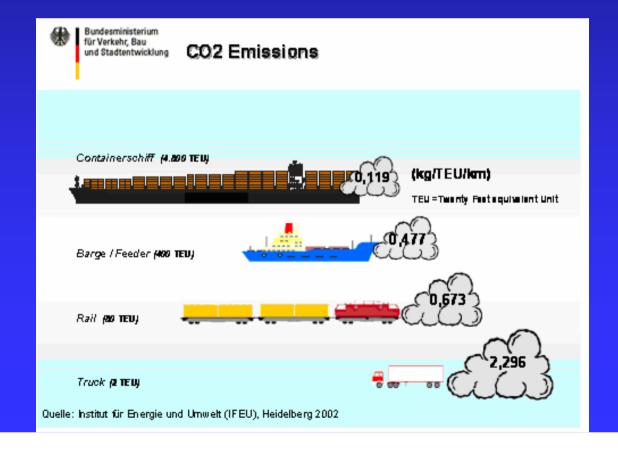
At a recent meeting, 80% reduction by 2050 was suggested as being required to stay within the 2 deg. C. target.







Eventhough Shipping is by far the most fuel efficient mode of transport, it is expected to be incorporated in the Copenhagen conference targets as it contributes 2.5% of CO2 emissions and shipping emissions are expected to increase by 27% in 2020 if nothing is done









## IMO's Principles Summary

- Be cost effective in reducing global GHG emissions
- Be binding on and applicable to all Flag States and all ships
- Not distort competition
- Assist sustainable environmental development without penalising trade growth
- Promote technical innovation and leading technologies
- Be practical, transparent, easy to administer
   & fraud-free







### **TOOLS**

What are the options for shipping to reduce CO<sub>2</sub> emissions?

- 1. Improve efficiency (better designs for new ships and retofitting of energy saving devices on existing ships.
- 2. Slow steaming (increased crew requirements due to additional shipps needed to serve the trade.
- 3. Market Based Instruments (MBI) if 1&2 are not deemed sufficient contribution from Shipping.









## Improve Efficiency

 The Energy Efficiency Design Index (EEDI) will ensure that new ships are at least as efficient as the newest ships at the time of ordering.

The target may be lowered over time.

- Ship Efficiency Management Plan (SEMP)

   – a shipping Industry initiative:Lists 20+ various ship efficiency initiatives that can be implemented.
- Voluntary Energy Efficiency Operational Indicator (EEOI) management tool for owners and charterers to measure energy efficiency on a voyage. Uniform application across all sectors difficult to implement.

Up for final agreement by IMO at MEPC 59 in July 2009.







## Ship Efficiency

- It was estimated by the IMO Expert Group that fuel efficiency of new ships can be increased in the order of 30-40%while retrofitting of energy saving equipment might reduce consumption by 10%.
- Slow steaming is efficient, but will require more ships therefore more crews.
- Given the predicted growth in shipping, fuel consumption is estimated to increase with 24% between 2007 and 2020. This may be revised downwards because of the slow down in trade.
- If shipping is required to reduce its emissions by 50% or more, it cannot be done by technical and operational measures only.
- Market Based Instruments (MBI) will need to be applied in the form of Emission Trading or Fuel Levy.









## Slow Steaming

- 8000 TEU Containership
- Reduce speed by 20%: 25-20 knots
- Fuel consumption reduced by 51%
- However, since 20% more ships will be needed to carry the same volume the saving will be 42.5 %, a serious reduction.







### Market Based Instruments

- Emission Trading Schemes ETS are part of the Kyoto Protocol and are utilized in several land-based industries.
- Aviation and Shipping were exempted from regulation by the Kyoto Protocol.
- In July 2008 the EU Parliament decided to include Aviation in the EU ETS (an ETS scheme developed for Europe).
- Several EU MEPs have expressed a need of also including Shipping in the EU ETS
- IMO will discuss ETS and fixed carbon charges on unit fuel consumed at MEPC 59 in July 2009 as ETS may not be suitable for shipping.







## MBIs relative merits

	ETS	FUND
Price of carbon	Auction market price	Fixed price
Political implication	Permit allocation Setting of cap	Fixing price
Administrative cost	Complex system No global system Large cost	Modelled on IOPC Fund. Under aegis of IMO
Enforcement	Complex setup of data exchange between states	Bunker delivery note
Use of funds	Unknown	CDM board









### INTERTANKO's Position

- Support the Energy Efficiency Design Index (EEDI) for new ships. Encourage early setting of targets by IMO, which should strengthen over time.
- Support the Energy Efficiency Operational Indicator (EEOI).
   For tankers, working with charterers and other stakeholders to use this to optimise voyages and ship usage. (These could form basis of future targets)
- Support the Ship Efficiency Management Plan (SEMP).
   Ready to launch model for tankers.
- If there is a requirement for a MBI, INTERTANKO has expanded list of principles which should be met.









#### **IMO'S 9 FRAMEWORK PRINCIPLES**

- 1. Effective in contributing to the reduction of total global greenhouse gas emissions;
- Binding and equally applicable to all flag States in order to avoid evasion;
- 3. Cost-effective;
- 4. Able to limit, or at least, effectively minimise competitive distortion;
- Based on sustainable environmental development without penalising global trade and growth;







### IMO'S 9 PRINCIPLES

- 6. Based on a goal-based approach and not prescribe specific methods;
- 7. Supportive of promoting and facilitating technical innovation and R&D in the entire shipping sector;
- 8. Accommodating to leading technologies in the field of energy efficiency; and
- 9. Practical, transparent, fraud free and easy to administer.







#### ETS CONFLICTS WITH SEVERAL IMO'S PRINCIPLES

- Not transparent, difficult to administer, economically wasteful (several intermediaries take a cut) (Principle 9)
- Income not funding technology improvements to reduce CO2 emissions from ships (Principle 7)
- Creates distortions in the market disadvantaging the smaller shipping companies (Principle 4)
- Cost of ETS difficult to know at time of fixing therefore difficult to pass to charterer /consumer. Since the cost will not be passed to the consumer it is unlikely that there will be a reduction in transport and thus a reduction in emissions (Principle 1)







## MBIs (Compensation Fund)

- The establishment of a Compensation Fund has been proposed to IMO MEPC 59 by Denmark.
- The Fund should be administrated by IMO similar to the IOPC Fund.
- The Fund could then either purchase carbon permits on the international emission trading market from Annex 1 Countries CDM or finance other Green projects. Pr 7
- The cost of a levy can be passed on to the charterer and to the consumer, reducing demand for transportation and thus CO2. Pr 1.
- A levy is transparent and easy to administer Pr 9.
- A levy will not distort competition, thus fulfilling Pr 4.
- A levy is able to deal with the different situations prevailing in the shipping industry
  where bunkers are sometimes purchased by the charterer and other times by the
  shipowner.
- The amount of the levy will be predictable and steady and thus will not be detrimental to trade

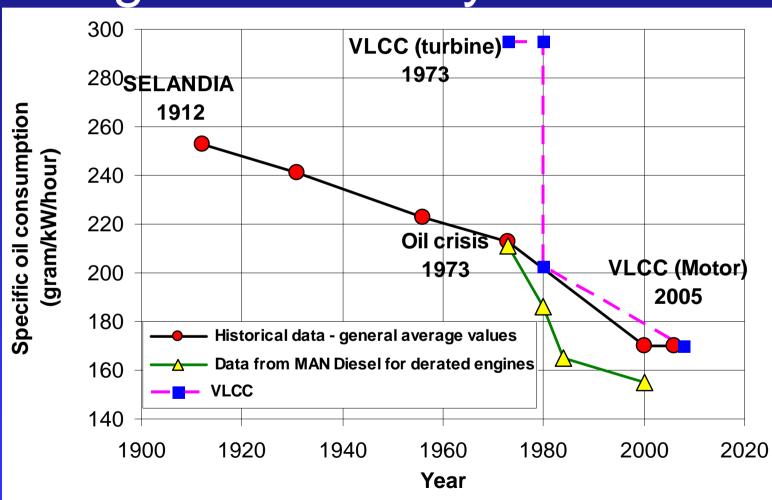






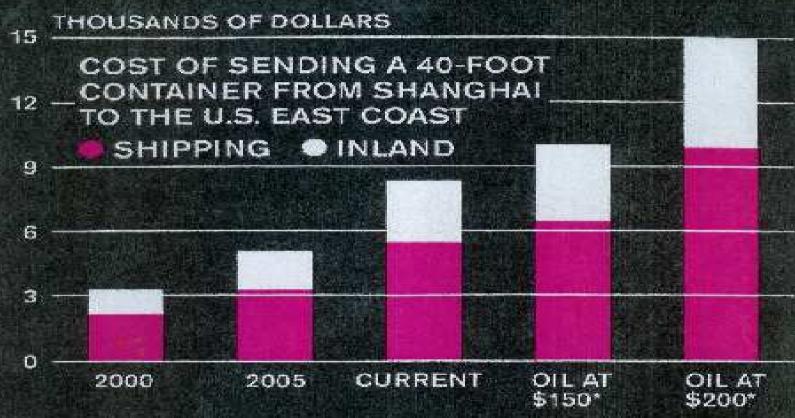


## **Engine Efficiency Gains**



## REVERSAL OF FORTUNE

Shipping costs are up...



\*PRICE PER BARREL, WEST TEXAS INTERMEDIATE

Data: CIBC World Markets; the Conference Board (based

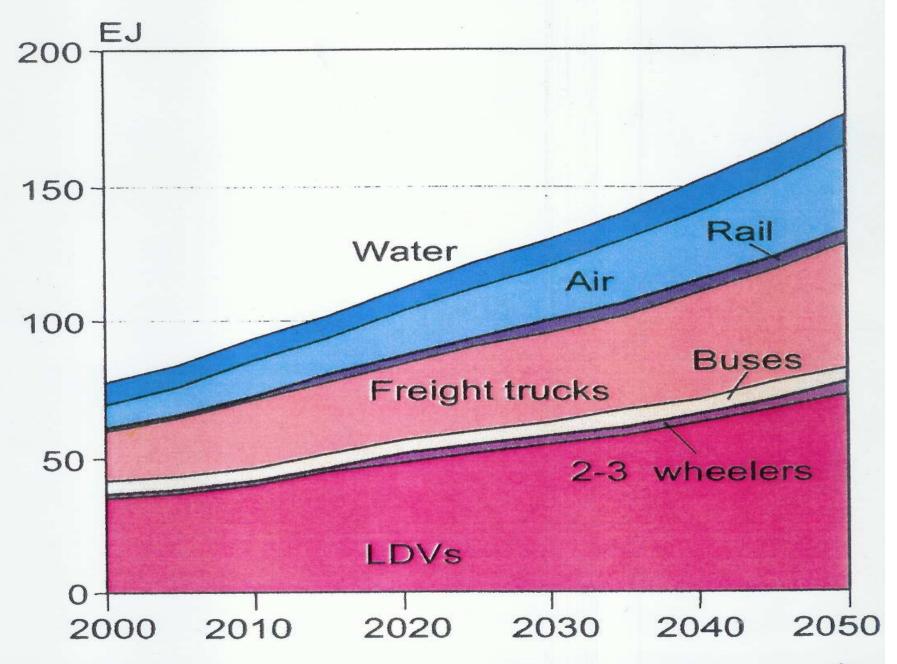


Figure 5.3: Projection of transport energy consumption by mode









# Convey to the attendees of Copenhagen some of Joseph Stiglitz thoughts

- Global warming is a long-run global problem, and needs to be addressed globally.
- ETS are easy to implement for major sources of emissions, but harder to implement for multitude of small sources.
- Carbon credit pricing is inequitable and biased. Bio fuels benefits are overpriced and ignore rising cost of food and cost of water.
- The costs of reducing emissions will be much lower if all emissions in all countries & ways to reduce emissions are taken into account (in our case all transport modes)

CONCLUSION: Any carbon compensation charge should be also applied to other forms of transport so as not to cause a shift cargo from the Sea to the road and increase overall CO2 levels.







#### RT's Position

- Supports the Energy Efficiency Design Index (EEDI) for new ships.
- Supports the Ship Efficiency Management Plan (SEMP).
- Concerned with application of the Energy Efficiency Operational Indicator (EEOI).
- Any MBI applied to shipping must follow the IMO principles, be established and administrated through the IMO...
- ...provided it does not shift traffic from sea to road thus increasing overall CO2 from transport.







### SHIP RECYCLING

Tony Mason
Secretary General
International Chamber of
Shipping







## INTERNATIONAL CHAMBER OF SHIPPING/INTERNATIONAL SHIPPING FEDERATION

- ICS International Trade Association
- ISF Maritime Employers' Association
- Members are National Shipowners Associations (40 members)
- Principal Areas of Activity
  - ➤ International Regulatory Issues IMO/ILO
  - ➤ Legal Matters (IMO, UNCLOS, UNCITRAL, etc.)
  - Shipping Policy Issues (OECD, CSG, etc)
  - Best Practice/Technical Publications









## **Industry's Engagement**

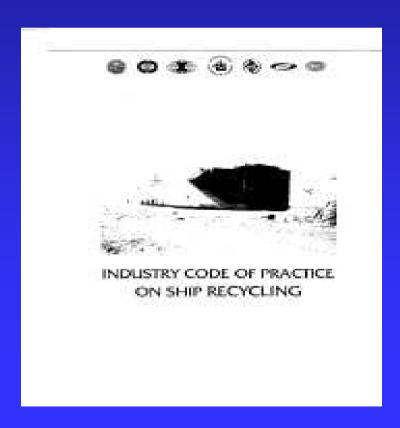
- Industry Working Group On Ship Recycling (1998)
  - Shipowners
  - Class Societies
  - Trade Unions
  - P&I Clubs







# Industry Code of Practice (2001)



- Developed 1999-2001
- •Objective "Deal with issues which shipowners themselves can reasonably be expected to address"
- Content
  - Policy
  - Practical Guidance
  - Hazardous Materials









## IMO Guidelines (1998 – 2003) SHIP RECYCLING

Available to order now

SHIP RECYCLING

- Res A.962(23)
- Contents:
  - Green Passport
  - Procedures for New and Existing Ships
  - Preparations for Recycling
  - Roles of Stakeholders
  - Technical Cooperation











## **IMO Convention (2004 – 2009)**

- Proposed by Norway (MEPC 53)
- International Cooperation
  - IMO/ILO/Basel Convention Joint Working Groups
    - London and Geneva
  - IMO Seminars
    - Turkey, China, India, Bangladesh









## **INTERIM MEASURES (2007)**

- Yard Selection
- Inventory of Hazardous Materials
- Gas Freeing
- Ship Recycling Plan
- Reporting to Flag State









## **Diplomatic Conference**

- Hong Kong, China, 11-15 May 2009
  - Entry Into Force Criteria
  - Survey and Certification Requirements
  - Tonnage Limitations









## **Diplomatic Conference**

- Hong Kong International Convention on the Safe and Environmentally Sound Recycling of Ships, 2009
  - Entry into Force Criteria: 15 States; 40%
     tonnage; 3% recycling capacity; 24 Months
     after the criteria are met









## **Diplomatic Conference**

- Key Provisions
  - Inventory of Hazardous Materials
  - Approved Recycling Facilities
  - Approved Ship Recycling Plans
  - Final Survey
  - Cleaning for Gas Freeing for Tankers on Delivery
  - Reporting Requirements







# **Problems with Transition**

- No universal legal regime amongst flag or recycling States
- Fulfilling responsibilities without increasing liability
- Changing nature of the global recycling environment







# **Commercial Mechanism**

- Making certain provisions a condition of sale
- Due diligence for shipowners
- Pressure to move towards best practice and pre-empt entry into force
- Develop a picture of global compliance







- Lifetime requirements for ships
- Selling a ship
- Facility competence
- Certification and reporting
- Feedback









- Lifetime requirements for ships
  - Inventory of Hazardous Materials
    - Convention Requirements
    - Commercial Options
  - Objective: Increase current use throughout industry
- Selling a ship
  - Methods of Sale
    - Cash Buyer vs. Direct to Yard
    - Implications for contract requirements









- Facility competence
  - Ship Recycling Plan
    - Provision of information
    - Checking against the IHM
  - Gas Freeing
    - Pre arrival cleaning
    - Contractual Guarantee
  - Facility Management Plan
    - Management Plan
    - Worker Health and Safety Programme
    - Waste Stream Management









- Certification and reporting
  - Class Society confirmation
  - Report to Flag State
- Feedback
  - Help develop guidance to fit the reality of the burgeoning regime









# **EC** Consultation

- Non Legislative Stakeholder Interim Measures
- Funding
- List of End of Life Ships
- Control and Enforcement of Existing Regimes
- "Green" Facilities List







# Intercargo

- Formed 1980
- Dry Bulk Owners Association
- Most of the largest Dry Bulk Owners as members
- c 850 entered vessels (out of global fleet of c6,565)
- Common Industry challenges addressed through 13
   Point Work Programme: Safety, Air Emissions,
   Excessive Loading Rates and <u>Piracy</u>







- Synopsis
- Somalia and elsewhere
- Background Trade and World Food Programme
- 2009 escalation
- Industry challenges
  - Political framework & UN
  - Industry Guidance & BMP
  - Legal
  - Other challenges : including Armed Guards











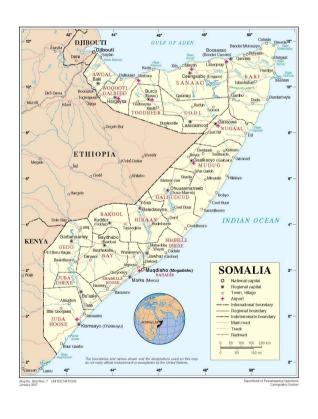
## Background

- Industry activity stresses that safety of the seafarer is paramount
- Other interventions based on effect on trade, global problem, regional stability and World Food Programme resupply
- Somalia #1 Failed State









... An international and enduring problem

### 2008

- 293 vessels attacked globally (11 killed)
- Somalia 42/49 = 86%
   vessel seizures
- Somalia 815/851 = 96% hostages

**ICC-IMB** 









2009 Update: SOMALIA

- Up to 15 May, ships hijacked: 29; hostages: 472 (IMB)
- Vessels attacked 1 April 22 May: 63
  - Gen Cargo (14); Bulk Carrier (14); Tanker (13); Other / n/r (13); Container (9)
- April attacks Gulf of Aden 45%; East of Somalia 45%, n/r 5%







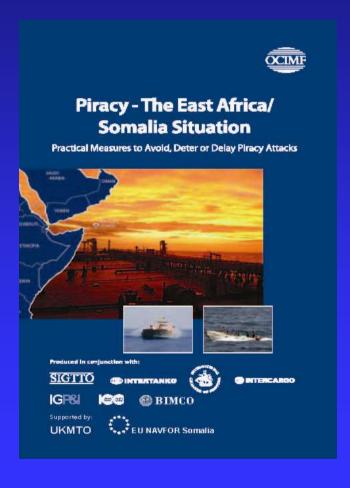
- 1. Political framework & UN
- Within the context of no functioning Somali Government...
- UN and IMO actions included
  - Emphasis on the roles of Warships to protect trade:
     23 nations represented within EUNAVFOR, NATO and Non-aligned
  - Appropriate UN Security Council Resolutions to interdict: 1846 – UNCLOS extension; 1851 – Governments formed International Cooperative Mechanism ("The Contact Group": meeting 29 May)











### 2. Industry Guidance

- "Blue Book": Freely available
- Message :-
  - Risk Assess
  - Register with MSCHOA
  - Report to UKMTO

www.mschoa.org / ukmto@eim.ae







- 2. <u>Industry Best Management</u> Practice (BMP) (2)
- IMO MSC 86 discussions: 1
   June on BMP covering transit off Somalia (86/18/2)
- Previously drafted in UN Contact Group 3
- Questions
  - Role of Regional Reporting Structures ?
  - Routing in SW Monsoon Season ?
  - Industry stresses consistent and simple BMPs













- 3. Other challenges: i)
  Legal
- Long term solution remains within
   Somalia
- Medium term –
   effective legal
   interdiction













- 3. Other challenges :ii) Commercial & Crew
- Routeing especially off Eastern Coast
- Development of appropriate C/P Clauses
- Round Table approach on Crew Welfare : morale significant











- Other challenges : iii)
   Longevity of Naval Support &
   Rules of Engagement
- Naval coordination working...
- 30% of all post 1 April attacked vessels received significant Naval Support
- But insufficient warships to cover vast area
- Armed Guards a question for Governments and Companies







### **CONCLUSIONS**

- Piracy here for some time
- BMP Guidance including: Risk Assessment / Registering / Reporting significantly reduces Risk
- Proven Evasive manoeuvring & Group Transit
- BMP needs promulgation to <u>all</u> ships
- IMO and Governmental pressure needed to maintain and enhance existing naval support for trade preservation
- Seafarers are #1 priority....









## **INTERTANKO**

**International Association of Independent Tanker Owners** 

## The Voice of the Tanker Industry

London, Oslo, Singapore, Washington, Brussels, Manila

## " Leading the way; Making a difference "





2009 Seatrade Award for INTERTANKO's TOTS initiative









## **Environmental Overview**

"Historically we were more concerned with the impact of the environment on shipping"









CO2/GHG emission

ODS = Ozone **Depleting Substances** (cooling medium)

**VOC = Volatile Organic** Compounds

NOx, SOx, PM **Annex VI** 

Ship Strikes with Cetaceans

Marine Noise Pollution

Garbage

Life cycle **Building to Decommissioning** - Recycling

Sewage

Accidental oil pollution

Ballast water

**Toxic Antifouling** and Biofouling











### **Emissions Trading Scheme for Aviation and Shipping?**

EU – ETS	Aviation	Shipping
(Emissions Trading System)		
Start	2012	From 2013?
Covers (To, From and Within)	EAA +	Same ?
Companies	3,000+	Ca. 12,000
	Non-EU assigned to 1 EU govt.	
Baseline	2006-2007	??
	Based on Eurocontrol data	??
Initial Allocation of Allowances	97% of Baseline	Same ?
	85% Free/15% Auction	
Trading System	Open: but not if exceeding own allowances	Same ?
Revenues (Net)	To respective EU government(s)	
Process	2009 on: Companies to submit monitoring	
	and then audit and verification plans	
Notes	ICAO had expressed qualified support.	
	Later is expected to extend to NOx emissions.	







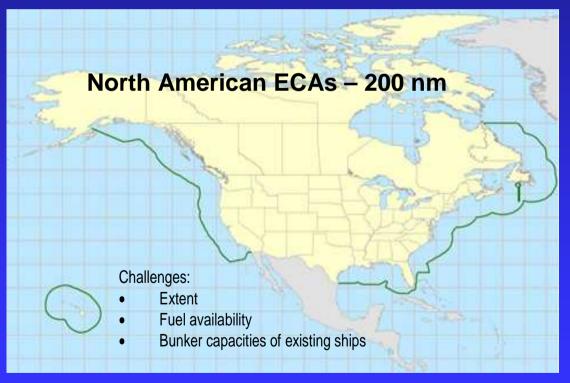


## Challenges for MARPOL Annex VI









#### **EU Sulphur Directive**

- Not yet aligned to MARPOL Annex VI
- 0.1% S at berth & at anchor from I Jan 2010



#### **CARB: Within 24 miles:**

- 1.5% S MGO or 0.5% S MDO from 1 July 2009
- 0.1% S from 1 Jan 2012

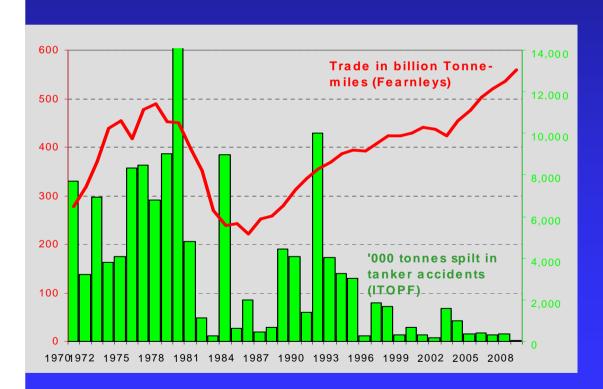
Will Mexico join ?







## Challenges for MARPOL, UNCLOS and IOPC



Accidental pollution:

– a record low in 2008

**But:** 



- ECJ Non-ruling on the EU Ship Source Pollution Directive
- ECJ Ruling giving effect to EU Waste Directive on oil+sand pollution







## **Anti-fouling**

- Chemical Pollution
  - Tin-based antifouling caused:
    - Shell fish sex-changes, male to female
    - Thinning of oyster shells, collapse of oyster fisheries
    - Hormone changes in higher sea mammals
- Anti-fouling Systems (AFS) Convention
  - Entered into force 17 September 2008
  - Tin-based systems banned
  - Mechanism to ban other biocides in the future
- Industry
  - Move towards biocide-free systems
  - Comparison of silicon systems













# Ballast Water Management

- Biological Pollution
  - Invasive species
- IMO Ballast Water Convention
  - Question over entry into force
  - Will the technologies work?
  - Regional requirements





- Industry
  - Share information on experience with new technology
  - Ballast Water Management plans as standard practice for over 5 years
  - Awareness and implementation contained in the IMO guidelines
  - Assist compliance by sharing information on regional and national regulations, .e.g.NPDES and the VGP...









## **US EPA NPDES VGP**

\* National Pollutant Discharge Elimination System / Vessel General Permit



#### **APPLICABILITY**

- Applies to all commercial vessels 79 feet in length or greater
- Covers US inland waters and within 3 nautical mile territorial sea
- Applies to 28 discharges incidental to ship operations

#### **KEY PROVISIONS OF NPDES PROGRAM**

- Discharge limits
- Best Management Practices for 23 of the discharges
- Specific requirements for ballast water, gray water, bilge water, antifouling and underwater husbandry
- Additional requirements for tankers for inert gas scrubber, deck seals, scuppers, inspections and crew training

#### **COMPLIANCE**

- 1. Corrective Action, self-policing
- 2. Inspections and monitoring
- 3. Reporting
- 4. Record keeping









# Biofouling

- Biological Pollution
  - Invasive species issue
  - Organisms on 'niche' areas of the hull
  - Air emissions issue?
- Biofouling Management
  - IMO Voluntary Guidelines under development
- Industry
  - Good practice
    - Reduce invasive species
    - Improve vessel performance reduce air emissions
  - Support management guidelines
  - Ports must allow hull management operations













## Waste management - reception facilities

- Zero tolerance on pollution
- Reception facilities frequently an overlooked solution

### **Regional Cooperation**

HELCOM The Baltic Sea

REMPEC The Mediterranean Sea

European Commission EU Directive

Gulfs Area (ME) ROPME and MEMAC

North America USCG Feedback Forms

Asia-Pacific .....









## Waste management - reception facilities

#### Looking forward

- Reporting of "lack/inadequacy" to IMO/flag administration
  - New reporting Form (MEPC Circ.469 Rev1)
  - IMO momentum sustained: Action Plan and Correspondence Group
- IMO Guide to Good Practice
  - Industry input in CG Adoption at MEPC 59
  - What the industry should expect in terms of service at ports (and vice versa)
- Use of GISIS
  - A Tool for the Industry:
    - i. to report inadequate facilities
    - ii. to view inadequate facility follow up
    - iii. to gather facility information
- Waste recycling
  - Benchmarking waste minimization
  - Waste Delivery Receipt will become important









## Waste management – special areas

- Mediterranean Area received Special Area Status on 1 May
- Dry Bulk Cargo Residues AND Hold washing Water to be discharged ashore
- Lack of suitable tanks and pumping arrangements ashore
- Doubts remain about availability of Reception Facilities
- No consideration of Hold Washing Water facilities, so
   ... MEPC 59 paper asking for continuation of existing arrangements, i.e. delay implementing Annex V.









## Whale strikes

#### Predominantly a National and Regional issue

- Oman Whale and Dolphin reporting
- 2. Killer Whale Recovery Plan (NOAA)
- 3. North Atlantic Right Whale (NOAA)
  - Mandatory reporting (Whalesnorth & Whalesouth) also IMO
  - Routing proposals
  - Periodic slow steaming requirements



#### **Growing International Issue**

- IMO (NAV) Traffic Separation Scheme requirements, Bay of Fundy and Port of Boston
- IMO Correspondence Group MEPC Agenda Item
- IWC Proposals
  - Adopt national, regional and local legislation
  - Whale data on radar
  - Crew training









## **Noise Pollution**

#### **IMO MEPC Agenda item**

- Correspondence Group

identify and address ways to minimize the incidental introduction of noise from commercial shipping operations into the marine environment to reduce potential adverse impacts on marine life

- Technical Solutions
  - Hull/Propeller Design
  - 2. Underwater radiated noise from machinery
- CG Work will likely lead to:
  - IMO Non-binding Technical Guidelines
  - develop practical, effective guidance on solutions that can reduce the incidental introduction of underwater noise from commercial shipping in turn reducing potential adverse impacts to marine life







## **CAREERS IN INTERNATIONAL SHIPPING**

- produced by ISF
- supported by IMO
- 7 languages
- www.careers-at-sea.org











The Round Table of international shipping associations



## The Maritime Industry Knowledge Centre www.maritimeindustryfoundation.com



#### **OBJECTIVES**

To improve the image of shipping

To heighten awareness of international shipping

To attract young people both to the seafaring professions and to careers onshore











www.bimco.org www.intercargo.org www.marisec.org www.intertanko.com

www.shippingfacts.com