

**COUNCIL  
WORKING PARTY ON SHIPBUILDING**

**Cancels & replaces the same document of 15 December 2006**

**INTERTANKO'S SUBMISSION ON MARPOL ANNEX VI AND POSSIBLE IMPACTS ON THE  
INDUSTRY**

**(Presentation by INTERTANKO)**

*This document by Mr. Erik Ranheim, Manager Research and Projects, INTERTANKO, was presented at the third session of the Workshop with non-member economies on shipbuilding policies held on 18-19 December 2006.*

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INTERTANKO's submission on  
MARPOL Annex VI  
and possible impacts on the industry


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Paris 19 December 2006  
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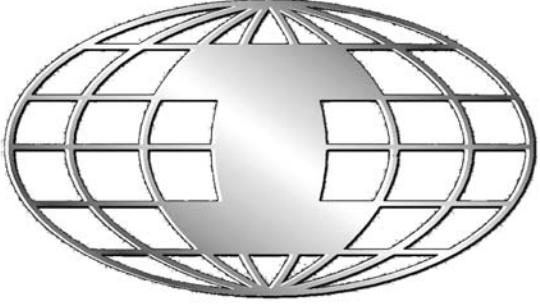
INTERTANKO

## INTERTANKO


- Trade Association for tanker owners
- 260 members, 40 countries, 2500 tankers,
- 300 Associate Members
- INTERTANKO office 25 persons
- Representation – IMO, Brussels Washington
- Information advisory service
- Meeting place
- Oslo – London - Washington - Singapore

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## Use of distillate fuel as bunkers




MARPOL Annex VI  
Air emissions from Ships

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## MARPOL Annex VI Air emissions from Ships

- Date of implementation: 19 May 2005, Sulphur cap: 4.5%+
- Sulphur Emission Control Areas – SECAs:
  - Baltic 19 May 2006
  - North Sea November 2007, +
- Possible new SECAs: Adriatic, US Gulf, Hong Kong area, others
- Initial review of proposals and *documents* (+30): BLG 10 (April 2006)




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## MARPOL Annex VI Air emissions from Ships

Revision:

- **MEPC 53** (July 2005):  
*decided to revise Annex VI*
- **Inter-sessional Meeting** (November 2006):  
*discussed key issues and draft proposals*
- **BLG 11** (April 2007):  
*finalized draft proposals for revised Annex VI*
- **MEPC 56** (July 2007) + **MEPC 57** (March 2008):  
*to consider and approve(?) the revised texts*

**Target date for entry in to force of revision:  
2010**



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## Owners' Concerns


- **Multitude of differing requirements**
- **Additional requirements for multi-fuel usage**
- Availability of appropriate fuels
- Availability & reliability of fuel processing/emission equipment
- Additional costs/possible cost recovery mechanisms
- Onus of responsibility for verification and compliance



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### Alternative approaches include:

- Do nothing
- Extend SECAs/local SECAs
- Global SECA
- Establish NECAs (N nitrogen)
- Use technological solutions (catalytic converters, scrubbers and/or filters)
- Burn distillates close to shore
- Emissions trading
- **Switch to global use of distillates**




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### Principles for an INTERTANKO position:


- Ensure a solid platform of requirements
- Be realistic and feasible
- Seek a long term and positive reduction of air emissions from ships
- Contribute to a long term and a predictable regulatory regime
- provide engine manufacturers with the ability to design new engines that could sensibly meet stricter regulations

100+ refineries to adapt or 50,000 ships?




**The unknowns INTERTANKO position:**

- **Costs of switchover**
- **Implementation timeframe**
- **Net environmental impacts**
- **Availability of MDO**
- **other ?**




**Annex VI Working Group (IMO/BLG)  
Options for further discussion:**

1. **Status quo – with possible additional SECAs**
2. **Status quo – with global 4.5% cap lowered in future, and SECAs at 1.0% then lowered further**
3. **Consideration of a switchover to distillates from 2012 with S cap levels to be discussed**
4. **Introduction of a global SECA, initially at 1.0% and a later date at 0.5% (- includes options for use of scrubbers)**



## Use of distillate fuel as bunkers

- Higher fuel costs, but:
- Less fuel consumption, i.e.
- Less emissions
- Cleaner emissions
- Less engineroom waste/sludge
- No wastes from scrubbers




## Use of distillate fuel as bunkers

Reduced investments in:

- additional bunker tanks and piping systems
- scrubbers
- fuel treatment plans
- equipment to reduce *Particulate Matters\** and SO<sub>x</sub>
- incinerators
- Predictability for engines manufacturers
- Reduced engine maintenance
- Improved safety

\* a mixture of particles in exhausts consists of differing sizes including sulphates, nitrates, uncombusted hydrocarbons and heavy metals




## Marine bunkers


- 215 m ts marine bunker per year
- 10% to 15% are MDO or MGO, rest
- 85-90% blends: between 40/60 or 50/50 distillates/resides, i.e.
- total increase in demand of distillate fuels will be not more than some 50% of the total amount of marine fuels used which means:
- some 7% \* in crease in distillate demand if ships change to 100% MDO (or actually less as bunker consumption will be reduced with the use of MDO)\*

\*Preliminary estimate

World Petroleum Product	mbd year 2005 (BP)	m ts/ year
Light distillates	25.3	1,090
Middle distillates	29.6	1,436
Fuel oil	10.2	552
Others	17.4	758
<b>Total world</b>	<b>82.6</b>	<b>3,837</b>



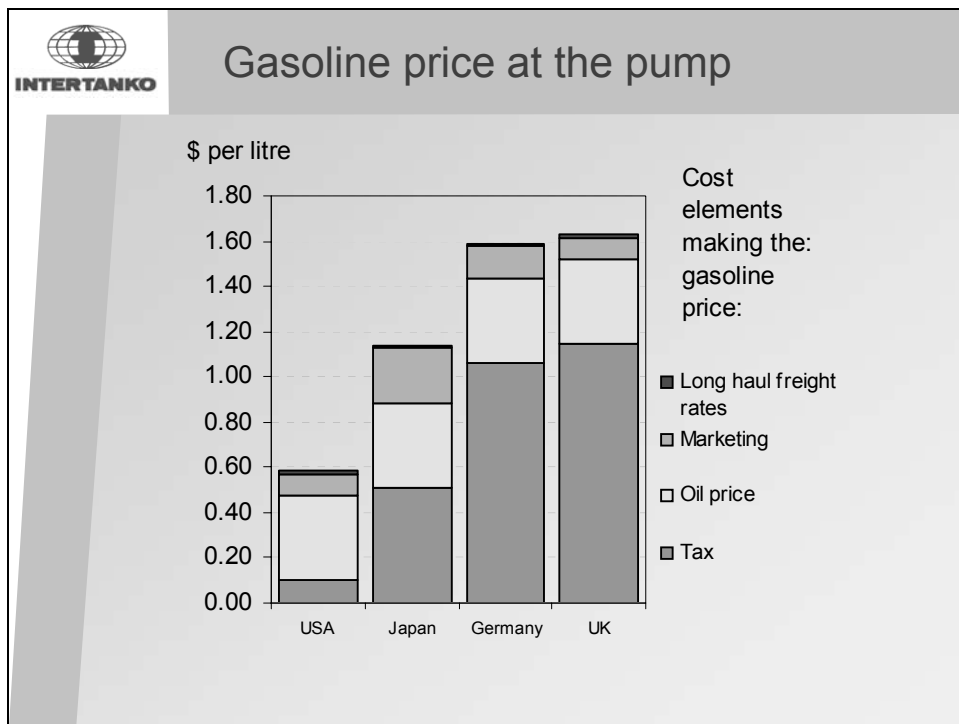
## MARPOL ANNEX VI



**The positive comments to INTERTANKO initiative:**

- Shipping NOT incinerator for refiners
- Most important move since ships changed from coal to oil
- 1.5% sulphur content is obtainable
- Engine manufacturers; technically workable
- Reduce human error and safety problems
- INTERTANKO showed corporate responsibility and has taken a precautionary approach to challenges





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## Conclusion

- INTERTANKO has asked IMO to consider distillate fuel an alternative to HFO
- Distillate fuel is currently about double price of HFO, but several other cost items will be reduced
- The use of distillate fuels as bunkers also have several other benefits over HFO
- There is a need for further analysis of pros and cons

Speech available on: <http://www.intertanko.com>