







Cleaner and more energy efficient shipping

Increased focus on adverse effects on health, environment and climate caused by emissions from shipping stresses the need for a cleaner and more energy efficient shipping industry. Existing technical solutions, improved energy efficiency and alternative fuels are ways to minimize air pollution and CO₂-emissions from shipping. But how can we meet the environmental as well as regulatory challenges in the most cost effective way and create benefits for the environment, climate and the industry?"

These issues will be discussed at a conference at Hilton Copenhagen Airport Hotel on October 6th as part of the *Danish Maritime Days*: www.danishmaritimedays.com

The conference language is English and the main focus areas are:

- Global warming and harmful air pollution from shipping.
- Existing and coming regulation of emissions from shipping.
- Technical solutions reducing air pollution from shipping.
- Energy efficiency and alternative fuels reducing emissions.



Maritime

Place: **Hilton Copenhagen Airport Hotel** in Copenhagen Airport (entrance from Terminal 3).

Registration: www.skibstekniskselskab.dk/program/arrangementeri2014/65611/

Conference fee incl. lunch, coffee, cake etc. is 250 EUR (1.875 DKK) + VAT.

Conference fee incl. networking dinner is 350 EUR (2.625 DKK) + VAT.

Significant discount at Hilton Hotel all week for the participants.

Main session, chair: Morten Bæk, Director General, Danish Energy Agency

8.30-9.20: Registration, coffee and networking

9.20-9.30 Welcome

Morten Bæk, Director General, Danish Energy Agency

9.30-9.50: Opening the conference: Cleaner shipping & Energy Efficiency

Kirsten Brosbøl, Danish minister for the environment

9.50-10.15: IMO's role in reducing emissions and improving energy efficiency

Arsenio Dominguez, chairman of MEPC, International Maritime Organization

10.15-10.40: Cleaner shipping will benefit society

Kaare Press-Kristensen, senior advisor, The Danish Ecological Council

10.40-11.10: Coffee and cake









11.10-11.35: Sulphur regulation - compliance and enforcement

Poul Woodall, Director, Environment & Sustainability, DFDS

11.35-12.00: Reporting as a tool leading to energy efficiency

Asger Lauritsen, Senior Vice President, D/S NORDEN

12.00-13.00: Lunch, coffee and networking



Afternoon session I: Cleaner shipping

13.00-13.20: Regulation of air pollution from shipping

Michel Schilling, Deputy Director General, Danish Environmental Protection Agency

13.20-13.40: Removing SO_2 by scrubbers – closed loop

Johanna Snickars, Project Sales Manager, Wartsila

13.40-14.00: Removing SO₂ by scrubbers – open loop

Jens Peter Hansen, R&D Manager, Exhaust Gas Cleaning at Alfa Laval Aalborg

14.00-14.20: Surveillance of SO₂ emission by drones

Jon Knudsen, Manager, Explicit

Karsten Fuglsang, R&D Coordinator, FORCE Technology/TINV

14.20-14.50: Coffee and cake

14.50-15.10: Urgent need for stricter enforcement of the sulphur regulation

Niels Bjørn Mortensen, Director Regulatory Affairs, A. P. Moller Maersk

15.10-15.30: Removing NOx by SCR and EGR

Morten Vejlgaard-Laursen, Head of Control Technology, MAN Diesel and Turbo

15.30-15.50: Removing particulate matter by filters

Henrik Christensen, project manager, Dinex

15.50-16.30: Panel debate: Enforcement, regulation and technical solutions

Afternoon session II: Fuel efficiency

13.00-13.20: Setting the scene - regulation of energy efficiency and CO₂reductions

Anne Skov Strüver, Director, Danish Maritime Authority

13.20-13.50: Dialogue between policymakers and stakeholders on Energy optimization and

CO₂ reductions - barriers and opportunities

Maria Bruun Skipper, Senior Adviser, the Danish Shipowners' Association Lars Hasselager Olsen, Special Adviser, the Danish Energy Agency

13.50-14.10: Energy optimization in an international perspective

Jan Otto De Kat, Director of Energy Efficiency, American Bureau of Shipping (ABS)



14.10-14.30: New fuels - moving away from fossils,

Claus Felby, professor, Copenhagen University

14.30-15.00: Coffee and cake

15.00-15.20: Recent developments for alternative fuels for two stroke engines

Thomas S. Knudsen, senior vice president, CEO, MAN Diesel and Turbo

15.20-15.40: Fuel Line development in Alfa Laval for alternative fuels

Lars Skytte Jørgensen, vice president, Product Centre Boilers Alfa Laval Aalborg

15.40-16.30: Panel debate: What is the most probable fuel of the future?

16.30-18.30: Networking and stand session incl. drinks.

18.30-22.00: Networking dinner at Hotel Hilton.







Organized by

Danish Ecological Council together with the Danish Shipowners' Association, the Danish Society for Naval Architecture and Marine Engineering, Danish Maritime, Danish Ports, the Danish Environmental Protection Agency, the Danish Energy Agency, the Danish Maritime Authority, the Maritime Climate Forum, IDA Green Technology, the Transport Innovation Network, University of Aalborg, Green Ships of the Future and Maritimt Selskab (IDA Maritime).

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www.energifonden.net





