INTERNATIONAL WIND PROPULSION FOR SHIPPING FORUM, 10 MARCH 2020 -

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

Registration & Coffee

09:00 - 09:30

Chair's welcome and overview: state of the market and future trends, policies and regulations

09:30 - 09:50

Participants

Gavin Allwright - Secretary, International Windship Association (IWSA)

Keynote Address

09:50 - 10:10

Participants

Christian Bækmark Schiolborg - Manager, Maritime Technology and Regulation, BIMCO

Session 1: Financing and development of the technology

10:10 - 10:50

- · What are the pathways to market?
- Leasing and rental options
- Financing issues and getting your technology seen
- Case studies
- EU projects

Participants

Moderator: Orestis Schinas - Professor of Shipping and Ship Finance, Hamburg School of Business Administration (HSBA)

Panellist: Charlie Bogue - Director of Market Development & Strategy, Wind+Wing Technologies, Inc

Panellist: Olga Liebkind - Director, Key Accounts, Norsepower Ov

Panellist: Frank Nieuwenhuis - Co-owner, eConowind

Coffee and networking break

10:50 - 11:15

Session 2: Technical challenges and solutions for operations onboard

11:15 - 12:00

- · Realities of the technology now
- Retrofitting wind propulsion into a ship's existing propulsion system
- Understanding the technical issues involved in using wind propulsion on large cargo vessels

Participants

Panellist: Guus van der Bles - Managing Director Design & Technology, Conoship International BV

Panellist: Joe Plunkett - Senior Engineer, Anemoi Marine Technologies

Panellist: Luc Reinhard - Business Development, Airseas

Class society guidelines for wind propulsion systems

12:00 - 12:25

Participants

Marcus Ihms - Ship Type Expert Container, DNV GL

Audience feedback

12:25 - 12:40

Networking lunch

12:40 - 14:00

Session 3: shipowners' experiences and expectations

14:00 - 14:40

Participants

Panellist: Peter Lystrup Christensen - Senior Project Manager, Maersk Tankers A/S

Panellist: Jan van Dam - Captain, Van Dam Shipping

Shipowners' roundtable discussion

14:40 - 15:10

- What are the barriers to take-up and how can these be overcome?
- Do shipowners see this as a solution to aiding decarbonisation?
- · If not, why not?

Participants

Peter Lystrup Christensen - Senior Project Manager, Maersk Tankers A/S

Jan van Dam - Captain, Van Dam Shipping

Tea and networking break

15:10 - 15:30

Using wind for shortsea shipping and smaller vessels

15:30 - 16:00

Participants

Geoff Boerne - Managing Director, Celtic Cruises Ltd

Marcus Schormann - Owner, Schomanns Maritima

Danielle Doggett - Director, SAIL CARGO INC

Session 4: the WASP and WiSP projects

16:00 - 16:35

Reports from two projects on initial progress

Participants

Panellist: Sofia Werner - Manager Strategic Research Hydrodynamics, SSPA

Panellist: Vasileios Kosmas - Researcher, Kühne Logistics University – KLU

Panellist: Johan de Jong - International Cooperation, MARIN

Session 5: Open forum

16:35 - 17:05

Submit your question for consideration by the panel, before the event or during the day

Session 6: blue sky/wind thinking

17:05 - 17:35

- New technologies on the horizon technology is changing rapidly so what are the forecasters seeing?
- Wind propulsion hub development: creating a pipeline for new projects, regional support for wind propulsion

Participants

Brian Boserup - Founder and CEO, Blue Technology

Ms Lise Detrimont - Manager, APTMD-IWSA (Association de Préfiguration Transport Maritime Décarboné - IWSA)

Close of forum

17:35 - 17:40



Green Ship Technology Europe

INTERNATIONAL WIND PROPULSION FOR SHIPPING FORUM, 10 MARCH 2020 -

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13:00	
14:00	14:00 - Session 3: shipowners' experiences and expectations 14:40 - Shipowners' roundtable discussion
15:00	15:10 - Tea and networking break 15:30 - Using wind for shortsea shipping and smaller vessels
16:00	16:00 - Session 4: the WASP and WiSP projects 16:35 - Session 5: Open forum
17:00	17:05 - Session 6: blue sky/wind thinking 17:35 - Close of forum

BATTERY TECHNOLOGY FOR SHIPPING WORKSHOP, 10 MARCH 2020 -

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

Registration and coffee

09:00 - 09:30

Chair's introduction and welcome

09:30 - 09:40

Participants

Brent Perry - CEO, SPBES

Meet your fellow attendees and discuss your learning objectives for the day

09:40 - 09:55

Performance safety and reliability of battery systems

09:55 - 10:30

Participants

Adrian Heuer - Head of Group TestLab Batteries, Fraunhofer Institute for Solar Energy Systems ISE

Lloyd's Register's approach to the assurance of hybrid power systems

10:30 - 11:00

- LR's approach to Rules that address the risks inherent in producing, storing, distributing and consuming energy on hybrid ships
- Optional notations that will be introduced for systems including those with enhanced dependability

Participants

Jacob Munk Plum - Surveyor, Electrical and Control Engineering, Lloyd's Register

Audience feedback and discussion

11:00 - 11:15

Networking coffee break

11:15 - 11:35

Case study on battery safety

11:35 - 12:05

Participants

Brent Perry - CEO, SPBES

Integration of battery systems into the ship's operational and energy management systems

12:05 - 12:30

Participants

Johannes Wüllner - Head of Group Applied Storage Systems, Electrical Energy Storage Division - ELS, Fraunhofer Institute for Solar Energy Systems ISE

Audience feedback and discussion

12:30 - 12:45

Networking lunch

12:45 - 13:45

Group discussion: addressing the safety challenges, innovations and future options

13:45 - 14:15

Participants will discuss the main challenges to maintaining safety of batteries onboard, plus technical innovations and future prospects for battery powered vessels

Case study: the E-ferry project and the 'Ellen'

14:15 - 14:40

Participants

Trine Heinemann - Project Coordinator, E-ferry Project

Networking tea break

14:40 - 15:00

Case Study: The Corvus Blue Whale Battery

15:00 - 15:25

Participants

Kim Strate Kiegstad - VP Sales, Corvus Energy

Port recharging facilities vs. onboard recharging for batteries

15:25 - 15:55

- What are the best methods for recharging batteries?
- Advantages and disadvantages for both options
- How long does recharging take in either scenario?
- · Case study: 'Color Hybrid'

Participants

Jan Helge Pile - SVP Marine & Technical, Color Line

Audience feedback and discussion

15:55 - 16:10

Chair's summing up and close of workshop

16:10 - 16:20

SCHEDULE

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

BATTERY TECHNOLOGY FOR SHIPPING WORKSHOP, 10 MARCH 2020 -

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09:00	09:00 - Registration and coffee 09:30 - Chair's introduction and welcome 09:40 - Meet your fellow attendees and discuss your learning objectives for the day
10:00	09:55 - Performance safety and reliability of battery systems 10:30 - Lloyd's Register's approach to the assurance of hybrid power systems
11:00	11:00 - Audience feedback and discussion 11:15 - Networking coffee break 11:35 - Case study on battery safety
12:00	12:05 - Integration of battery systems into the ship's operational and energy management systems 12:30 - Audience feedback and discussion 12:45 - Networking lunch
13:00	13:45 - Group discussion: addressing the safety challenges, innovations and future options
14:00	14:15 - Case study: the E-ferry project and the 'Ellen' 14:40 - Networking tea break
15:00	15:00 - Case Study: The Corvus Blue Whale Battery 15:25 - Port recharging facilities vs. onboard recharging for batteries 15:55 - Audience feedback and discussion
16:00	16:10 - Chair's summing up and close of workshop

GST 2020: DAY 1 - 11/03/2020

Green Ship Technology Europe

11 - 12 March 2020

Radisson Blu Scandinavia Hotel Copenhagen, Denmark

Morning Coffee & Networking

08:15 - 09:00

Chair's Introduction

09:00 - 09:05

Welcome Plenary: Analysing IMO 2020 implementation and the road to 2050

Participants

Niels Bjørn Mortensen - Owner, niels bjorn consult

Welcome Address

09:05 - 09:20

Welcome Plenary: Analysing IMO 2020 implementation and the road to 2050

Participants

Peter Andersen - CEO, GTT Analytics Ltd

Opening Address: The IMO 2020 cap in play: feedback from the front line

09:20 - 09:45

Welcome Plenary: Analysing IMO 2020 implementation and the road to 2050

- How is the IMO 2020 cap enforcement going so far?
- What loopholes have been found and how are they being addressed?
- What are the main fuel issues (compatibility/ quality/supply)?
- · FONARs not a get out of jail free card!

Aims and objectives of the Getting to Zero Coalition

09:45 - 10:25

Welcome Plenary: Analysing IMO 2020 implementation and the road to 2050

- · What are the solutions to decarbonisation?
- · Incremental improvements to existing fleets
- · Fuel transitions for existing fleet to carbon neutral
- Zero emission vessels

Participants

Kasper Søgaard - Head of Research, Global Maritime Forum

Keynote Address: MSC's progress towards a decarbonised future

10:25 - 10:45

Welcome Plenary: Analysing IMO 2020 implementation and the road to 2050

· The decision-making process

Participants

Michele Francioni - Senior Vice President, Cost Optimization & Process Improvement, MSC Cruises

Audience feedback

10:45 - 10:55

Welcome Plenary: Analysing IMO 2020 implementation and the road to 2050

Coffee and networking break

10:55 - 11:25

Chair's Welcome: Working towards a zero emission fleet

11:25 - 11:35

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

Participants

Madadh MacLaine - CEO, Zero Emissions Shipping Technology Association (ZESTAS)

Chair's Introduction

11:25 - 11:30

Track 2: Green finance: discover the options for shipowners and technology providers to fund green projects

Participants

Jon Stewart - President, International Maritime Technology Consultants

Green finance for shipowners: what is available?

11:30 - 12:05

Track 2: Green finance: discover the options for shipowners and technology providers to fund green projects

- Financing choices for shipowners: bonds, equity, grants, leasing
- What do the Poseidon Principles mean for shipping?
- How do these Principles encourage environmental, social and corporate governance (ESG) for sustainability?
- Is ESG a key factor now for business success/ survival?

Participants

Ulf Kanne - Managing Partner, TT Financial

Debate: The decarbonisation challenge: what does the ideal solution look like for the shipowner and how do shipowners prepare for these new fuels?

11:35 - 12:20

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

- Carbon neutral decarbonisation zero emissions the similarities, the differences and which to aim for?
- What does an ideal solution look like? Critical success factors (must make sense technically, operationally, financially, commercially and politically)
- Alternative low carbon fuels: methanol, ammonia, hydrogen, biofuels?
- Batteries and fuel cells, wind, solar, hybrid?
- Availability?
- Infrastructure onshore and onboard?
- · Costs?
- · What technologies will cluster together?
- · What skills and training will crews need?

Participants

Panellist: Klaas van Dijk - Engineer, Van Oord

Panellist: Henrik Jensen - Founder and Managing Director, Danica Maritime

Panellist: Gavin Allwright - Secretary, International Windship Association (IWSA)

Moderator: Madadh MacLaine - CEO, Zero Emissions Shipping Technology Association (ZESTAS)

Panellist: Tue Johannessen - Senior Innovation Portfolio Manager, Future Solutions, Zero Carbon Shipping, Maersk

GST 2020: DAY 1 - 11/03/2020

Green Ship Technology Europe

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Green Finance: What is available for GreenTech providers?

12:05 - 12:40

Track 2: Green finance: discover the options for shipowners and technology providers to fund green projects

What options are available for technology providers?

Participants

Panellist: Ulf Kanne - Managing Partner, TT Financial

Audience feedback

12:20 - 12:35

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

Proposal for a goal-based short-term reduction measure to reduce GHG emissions submitted to IMO by Denmark et.al.

12:35 - 12:55

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

- · Scope of the proposal
- · Assessment of the pros and cons of the proposal

Participants

Lau Øfjord Blaxekjær - PhD, Danish Maritime Authority

Audience feedback

12:40 - 13:00

Track 2: Green finance: discover the options for shipowners and technology providers to fund green projects

Audience feedback

12:55 - 13:00

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

Networking lunch

13:00 - 14:05

Maritime battery innovations

14:05 - 14:25

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

- · How to increase lifespan, safety and sustainability?
- · How to reduce total system size and footprint
- Case study

Participants

Brent Perry - CEO, SPBES

Chair's introduction

14:05 - 14:15

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

Participants

Jon Stewart - President, International Maritime Technology Consultants

Shipowner/cargo interests: meeting the climate challenge by collaboration across the value chain

14:15 - 14:45

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

- Shipping companies are facing pressure from all sides to accelerate the reduction of carbon dioxide emissions from the industry. On the one side, the IMO has set its groundbreaking target of halving CO2 emissions from shipping by 2050. On the other side, a growing number of shippers are launching highly ambitious environmental programs aiming to reduce the climate impact of their supply chains, where maritime transport plays a significant role. Individual action from companies is simply inadequate to meet these loud calls for decarbonization: collaboration across the entire value chain is crucial to develop the system-changing solutions that are required.
- A panel of major shippers and carriers will discuss how this is possible.

Participants

Victor Gancel - Manager, Clean Cargo

LH2 for marine shipping: borrowing technology from space

14:25 - 14:45

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

- · The need for liquid
- LH2 supply chain
- Analysis of LH2 driven ships
- · Conclusions

Participants

Daniel Janzen - Energy Economist, Greensight

Zero emission vessels: technology corner

14:45 - 15:45

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

 Four providers of zero emission technologies will present their concepts and discuss the possibilities

Participants

Guus van der Bles - Managing Director Design & Technology, Conoship International BV

Tomas Tronstad - Managing Director, HYON

Luc Reinhard - Business Development, Airseas

Amnon Asscher - Founder and CEO, Nayam Wings

Debate: The pluses and minuses of using onshore power

14:45 - 15:15

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

- Use of shore power in port: how far is shore power being rolled out globally?
- Integration into the port electrical grid
- Is onshore power a 'quick fix' for reducing emissions or a permanent solution?

Participants

Panellist: Sotiris Raptis - Senior Advisor on Environment and Safety, European Sea Ports Organisation - ESPO

Panellist: Wolfram Guntermann - Director, Environmental Fleet Management, Hapag-Lloyd AG

Audience feedback

15:15 - 15:25

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

Tea and networking break

15:25 - 15:45

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

Tea and networking break

15:45 - 16:05

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

GST 2020: DAY 1 - 11/03/2020

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

Can virtual arrival abate greenhouse emissions from ships?

15:45 - 16:05

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

- Difficulties associated with implementation of virtual arrival and achieving emissions abatement potential
- The imapet of charterers' commercial priorities on virtual arrival
- Unintended consequences and implications for GHG emissions reduction targets

Participants

René Taudal Poulsen - Associate professor, Copenhagen Business School

Debate: Does LNG have a future as a ship's fuel?

16:05 - 16:35

Track 1: Engines and Fuels: understanding the realities of decarbonisation, future fuels and zero emissions

Participants

Panellist: Hans Björkestam - Safety & Environment Manager, DPA, ESL Shipping

Moderator: Amie Pascoe - Director, BLUE Communications

Panellist: Petra Doubkova - Policy Officer, Maritime Safety Unit, Directorate-General for Mobility and Transport of the European Commission

Panellist: Carlo Raucci - Principal Consultant, UMAS

Panellist: Steve Esau - General Manager, SEA\LNG

Port/ship communications and potential efficiency savings

16:05 - 16:35

Track 2: Focus on how green ports, smarter logistics and the sustainable supply chain can boost more sustainable shipping

- How do we increase efficiency and reduce emissions by smarter logistics?
- · Port call optimisation
- Experience with PortXchange and Pronto

Participants

Panellist: René Taudal Poulsen - Associate professor, Copenhagen Business School

Panellist: Jeppe Skovbakke Juhl - Manager, Maritime Technology & Regulation, BIMCO

Panellist: Sjoerd de Jager - Managing Director, PortXchange BREAKOUT ROUNDTABLES: A choice of 4 Deep Dive Discussion Groups: 1: Ballast Water Management Enforcement; 2: Developing a standard for hull inwater cleaning: 3: Management of ships' waste: Annexes I, IV and V

16:35 - 17:30

- Ballast water management enforcement and US VIDA: what issues are you facing? How do you test and will it stand up in court? Led by Jon Stewart, International Maritime Technology Consultants
- Inwater cleaning: developing a standard for hull inwater cleaning: led by Ashok Srinivasan, BIMCO
- Management of ships' waste: Annexes I, IV and Vcompliance and future proofing: led by Dr Wei Chen, Wartsila Water Systems and Alex Myers, Sea Education Association

Participants

Group 2 leader: Ashok Srinivasan - Manager, Maritime Technology and Regulation, BIMCO

Group 4 leader: Wei Chen - Future Program Development Manager , Wartsila Water Systems

Group 4 co-leader: Alex Myers - SEA Senior Engineer, Sea Education Association

Group 1 leader: Jon Stewart - President, International Maritime Technology Consultants

Close of Day 1 and networking drinks

17:30 - 18:30



TIME	TRACK 1: ENGINES AND FUELS: UNDERSTANDING THE REALITIES OF DECARBONISATION, FUTURE FUELS AND ZERO EMISSIONS	TRACK 2: FOCUS ON HOW GREEN PORTS, SMARTER LOGISTICS AND THE SUSTAINABLE SUPPLY CHAIN CAN BOOST MORE SUSTAINABLE SHIPPING	TRACK 2: GREEN FINANCE: DISCOVER THE OP- TIONS FOR SHIPOWNERS AND TECHNOLOGY PROVIDERS TO FUND GREEN PROJECTS	WELCOME PLENARY: ANALYSING IMO 2020 IM- PLEMENTATION AND THE ROAD TO 2050
08:00	08:15 - Morning Coffee & Networking	08:15 - Morning Coffee & Networking	08:15 - Morning Coffee & Networking	08:15 - Morning Coffee & Networking
09:00				09:00 - Chair's Introduction 09:05 - Welcome Address 09:20 - Opening Address: The IMO 2020 cap in play: feedback from the front line 09:45 - Aims and objectives of the Getting to Zero Coalition
10:00	10:55 - Coffee and networking break	10:55 - Coffee and networking break	10:55 - Coffee and networking break	 10:25 - Keynote Address: MSC's progress towards a decarbonised future 10:45 - Audience feedback 10:55 - Coffee and networking break
11:00	 11:25 - Chair's Welcome: Working towards a zero emission fleet 11:35 - Debate: The decarbonisation challenge: what does the ideal solution look like for the shipowner and how do shipowners prepare for these new fuels? 		11:25 - Chair's Introduction 11:30 - Green finance for shipowners: what is available?	
12:00	12:20 - Audience feedback 12:35 - Proposal for a goal-based short-term reduction measure to reduce GHG emissions submitted to IMO by Denmark et.al. 12:55 - Audience feedback		12:05 - Green Finance: What is available for GreenTech providers? 12:40 - Audience feedback	

SCHEDULE GST 2020: DAY 1 - 11/03/2020

TIME	TRACK 1: ENGINES AND FUELS: UNDERSTANDING THE REALITIES OF DECARBONISATION, FUTURE FUELS AND ZERO EMISSIONS	TRACK 2: FOCUS ON HOW GREEN PORTS, SMARTER LOGISTICS AND THE SUSTAINABLE SUPPLY CHAIN CAN BOOST MORE SUSTAINABLE SHIPPING	TRACK 2: GREEN FINANCE: DISCOVER THE OP- TIONS FOR SHIPOWNERS AND TECHNOLOGY PROVIDERS TO FUND GREEN PROJECTS	WELCOME PLENARY: ANALYSING IMO 2020 IM- PLEMENTATION AND THE ROAD TO 2050
13:00	13:00 - Networking lunch	13:00 - Networking lunch	13:00 - Networking lunch	13:00 - Networking lunch
14:00	14:05 - Maritime battery innovations 14:25 - LH2 for marine shipping: borrowing technology from space 14:45 - Zero emission vessels: technology corner	 14:05 - Chair's introduction 14:15 - Shipowner/cargo interests: meeting the climate challenge by collaboration across the value chain 14:45 - Debate: The pluses and minuses of using onshore power 		
15:00	15:45 - Tea and networking break	15:15 - Audience feedback 15:25 - Tea and networking break 15:45 - Can virtual arrival abate greenhouse emissions from ships?		
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17:00	17:30 - Close of Day 1 and networking drinks	17:30 - Close of Day 1 and networking drinks	17:30 - Close of Day 1 and networking drinks	17:30 - Close of Day 1 and networking drinks

GST 2020: DAY 2 - 12/03/2020

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

Invitation only: breakfast briefing for shipowners: meet the regulators

08:00 - 09:00

Participants

Moderator: Jon Stewart - President, International Maritime Technology Consultants

Panellist: Peter Mikael Ostenfeld - Director, Danish Maritime Authority

Registration & Coffee

09:00 - 09:30

Chair's Welcome

09:30 - 09:35

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Participants

Niels Bjørn Mortensen - Owner, niels bjorn consult

Chair's Welcome

09:30 - 09:35

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Participants

Jon Stewart - President, International Maritime Technology Consultants

Regulatory update: IMO's environmental developments

09:35 - 10:35

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

- · Emissions reduction roadmap
- Short term and long term measures
- Reducing speed or reducing power?
- What to expect from MEPC 75?

Participants

Lau Øfjord Blaxekjær - PhD, Danish Maritime Authority

Comment: Wolfram Guntermann - Director, Environmental Fleet Management, Hapag-Lloyd AG

Comment: Petra Doubkova - Policy Officer, Maritime Safety Unit, Directorate-General for Mobility and Transport of the European Commission

Available technologies, combination of technologies and how other rules such as EEDI and minimum power requirements connect with GHG requirements

09:35 - 10:00

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Participants

Michael Prehn - Deputy Director, Danish Maritime

What could fuel shipping by 2030 and 2050 and what might the ship look like?

10:00 - 10:35

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

- What could fuel shipping by 2030 and 2050 what are the options and what are the challenges and opportunities of the different options?
- · What is the current focus of the yards?
- · Will vessels become more complex?

Participants

Panellist: Benoît Loicq - Environmental and Technical Director, SEA Europe

Panellist: Jacob Sterling - Head of Technical Innovation, A. P. Moller – Maersk A/S

Audience feedback

10:35 - 10:45

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Audience feedback

10:35 - 10:45

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Coffee and networking break

10:45 - 11:15

The European Green Deal and the latest update on the European MRV regulation

11:15 - 11:40

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Participants

Mr Timothée Noel - Policy Officer, DG CLIMA, European Commission

Holiship H2020 European research project

11:15 - 11:35

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Participants

Jochen Marzi - Director CFD and Research, Hamburg Ship Model Basin (HSVA)

From 'Well to Wake': strategy for reducing emissions in shipping

11:35 - 11:55

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Participants

Oskar Levander - SVP, Business Concepts, Kongsberg Maritime

The Journey of Operational Ship Propulsion Performance Improvements

11:40 - 12:00

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Participants

Mr Erik van Ballegooijen - Director R&D, VAF Instruments

Engine-makers panel discussion: What are you doing for 2050?

11:55 - 12:35

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

- · What are you working on?
- What can owners get now?
- · What can they expect in 5, 10, 15 years?

Participants

Panellist: Thomas Hansen - Director, Head of Promotion & Customer Support, MAN Energy Solutions

Panellist: Oskar Levander - SVP, Business Concepts, Kongsberg Maritime

Panellist: Ulf Åstrand - Director Engines Platform, Wärtsilä R&D & Engineering

GST 2020: DAY 2 - 12/03/2020

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

How much fuel saving could your vessel get through operational excellence?

12:00 - 12:20

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Participants

Mikael Laurin - CEO, Lean Marine Sweden AB

Case study: quantifying the scale of the global barnacle fouling problem

12:20 - 12:45

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Insight into research findings that quantify the scale of barnacle fouling across the global fleet; both on the hull and in niche areas

Participants

Markus Hoffmann - Technical Director, i-Tech AB

Audience feedback

12:35 - 12:40

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Model based design of a decentralized ship energy system with fuel cell and hybrid energy storage units

12:40 - 13:00

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

- Decentralized approach for the electrical power supply
- Real life case study

Participants

Lukas Kistner - Research Assistant, Institute for Electrical Energy Systems, Leibniz Universität Hannover

Audience feedback

12:45 - 13:05

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Audience feedback

13:00 - 13:05

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Networking lunch

13:05 - 14:15

A deep dive into the pros and cons of scrubbers and how they are operating in practice

14:15 - 14:45

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

- Are local/national bans on open loop scrubbers iustified?
- · What does the scientific evident say?
- Are scrubbers a long term solution?
- What are the experiences of using scrubbers so far: compliance, failures, contingency measures

Participants

Panellist: Niels Bjørn Mortensen - Representing, Clean Shipping Alliance 2020

Moderator: Alisdair Pettigrew - Managing Director, BLUE Communications

Panellist: Alexis Rodriguez - Environmental Specialist, Panama

Panellist: Gregoire Napoly - Head of Projects and Fleet Optimisation, DS Norden

Waste management: focussing on general pollution prevention

14:15 - 14:35

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Participants

Lars Robert Pedersen - Deputy Secretary General, BIMCO

The zero emission vessel - below the waterline

14:35 - 14:55

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Can the 'zero-emission' ship ever exist as long as vessels pollute the seas with oil from propeller shafts or pods? Operational oil discharges from a ship's stern tube is a common occurrence for ship owners. Propeller shaft seals must leak oil in order to work correctly and over time, the seal lips wear, increasing the amount of oil leakage into the environment. Accidental discharges can also occur as seals are damaged from rope and fishing net.

Less than 5% of the world merchant fleet uses an open seawater lubricated propeller shaft bearing system. An open seawater lubricated propeller shaft system uses seawater as the lubrication medium in place of oil. Proven materials and new designs of non-metallic bearings now offer performance similar to oil lubricated metal shaft bearings with open seawater installations of more than 600 merchant vessels, ranging from cruise ships to tankers and containerships to workboats.

Participants

Michael Haraldsson - Marine Business Development Manager, Thordon Bearings Inc

Audience feedback

14:45 - 15:00

Track 3: Here and now: discuss what you can do today for vessel efficiency, energy management and hybrid solutions

Audience feedback

14:55 - 15:00

Track 4: Green ship design and technology: debate cutting edge research and available technologies to meet environmental requirements

Tea and networking break

15:00 - 15:20

Chair's welcome

15:20 - 15:25

Closing Plenary: facing the future with sustainable solutions

Participants

Alisdair Pettigrew - Managing Director, BLUE Communications

GST 2020: DAY 2 - 12/03/2020

Green Ship Technology Europe

11 - 12 March 2020 Radisson Blu Scandinavia Hotel Copenhagen, Denmark

Fitting the business model to the decarbonisation challenge

15:25 - 15:50

Closing Plenary: facing the future with sustainable solutions

- Increasing the role of sustainability within the shipping company
- · Developing sustainable business models
- · Meeting the expectations of all stakeholders
- Successes and challenges so far

Participants

Øistein Jensen - Chief of Staff, Odfjell

Audience feedback

15:50 - 16:00

Closing Plenary: facing the future with sustainable solutions

Looking to the future: carbon pricing and market-based measures: how will this impact shipping and port infrastructure??

16:00 - 16:30

Closing Plenary: facing the future with sustainable solutions

Participants

Moderator: Alisdair Pettigrew - Managing Director, BLUE Communications

Panellist: Carlo Raucci - Principal Consultant, UMAS

Panellist: Sotiris Raptis - Senior Advisor on Environment and Safety, European Sea Ports Organisation - ESPO

Audience feedback

16:30 - 16:40

Closing Plenary: facing the future with sustainable solutions

Close of conference

16:40 - 16:45

Closing Plenary: facing the future with sustainable solutions



SCHEDULEGST 2020: DAY 2 - 12/03/2020

TIME	CLOSING PLENARY: FACING THE FUTURE WITH SUSTAINABLE SOLUTIONS	TRACK 3: HERE AND NOW: DISCUSS WHAT YOU CAN DO TODAY FOR VESSEL EFFICIENCY, ENERGY MANAGEMENT AND HYBRID SOLUTIONS	TRACK 4: GREEN SHIP DESIGN AND TECH- NOLOGY: DEBATE CUTTING EDGE RE- SEARCH AND AVAILABLE TECHNOLOGIES TO MEET ENVIRONMENTAL REQUIRE- MENTS
08:00	08:00 - Invitation only: breakfast briefing for shipowners: meet the regulators	08:00 - Invitation only: breakfast briefing for shipowners: meet the regulators	08:00 - Invitation only: breakfast briefing for shipowners: meet the regulators
09:00	09:00 - Registration & Coffee	09:00 - Registration & Coffee 09:30 - Chair's Welcome 09:35 - Regulatory update: IMO's environmental developments	09:00 - Registration & Coffee 09:30 - Chair's Welcome 09:35 - Available technologies, combination of technologies and how other rules such as EEDI and minimum power requirements connect with GHG requirements
10:00	10:45 - Coffee and networking break	10:35 - Audience feedback 10:45 - Coffee and networking break	10:00 - What could fuel shipping by 2030 and 2050 and what might the ship look like? 10:35 - Audience feedback 10:45 - Coffee and networking break
11:00		11:15 - The European Green Deal and the latest update on the European MRV regulation 11:40 - The Journey of Operational Ship Propulsion Performance Improvements	11:15 - Holiship H2020 European research project 11:35 - From 'Well to Wake': strategy for reducing emissions in shipping 11:55 - Engine-makers panel discussion: What are you doing for 2050?
12:00		12:00 - How much fuel saving could your vessel get through operational excellence? 12:20 - Case study: quantifying the scale of the global barnacle fouling problem 12:45 - Audience feedback	12:35 - Audience feedback 12:40 - Model based design of a decentralized ship energy system with fuel cell and hybrid energy storage units
13:00	13:05 - Networking lunch	13:05 - Networking lunch	13:00 - Audience feedback 13:05 - Networking lunch
14:00		14:15 - A deep dive into the pros and cons of scrubbers and how they are operating in practice 14:45 - Audience feedback	14:15 - Waste management: focussing on general pollution prevention 14:35 - The zero emission vessel - below the waterline 14:55 - Audience feedback
15:00	 15:00 - Tea and networking break 15:20 - Chair's welcome 15:25 - Fitting the business model to the decarbonisation challenge 15:50 - Audience feedback 	15:00 - Tea and networking break	15:00 - Tea and networking break



Green Ship Technology Europe

TIME	CLOSING PLENARY: FACING THE FUTURE WITH SUSTAINABLE SOLUTIONS	TRACK 3: HERE AND NOW: DISCUSS WHAT YOU CAN DO TODAY FOR VESSEL EFFICIENCY, ENERGY MANAGEMENT AND HYBRID SOLUTIONS	TRACK 4: GREEN SHIP DESIGN AND TECH- NOLOGY: DEBATE CUTTING EDGE RE- SEARCH AND AVAILABLE TECHNOLOGIES TO MEET ENVIRONMENTAL REQUIRE- MENTS
16:00	16:00 - Looking to the future: carbon pricing and market-based measures: how will this impact shipping and port infrastructure??		
	16:30 - Audience feedback 16:40 - Close of conference		