

# Decarbonizing Shipping: the way forward

5-6 April 2022

10.00 - 13.00 EEST

## WEBINAR

Addressed to crew officers (deck & engine) and office personnel of HELMEPA Member companies

### Day 1

- 10.00 – 10.50 GHG emissions of the shipping sector: getting familiar with current (EEDI, EEXI, CII, Revised SEEMP, Data Collection Systems) and potential future mid- & long-term measures — RINA
- 10.50 – 11.00 Break
- 11.00 – 11.50 GHG emissions of the shipping sector: getting familiar with current (EEDI, EEXI, CII, Revised SEEMP, Data Collection Systems) and potential future mid- & long-term measures (cont.)
- 11.50 – 12.00 Break
- 12.00 – 12.50 The “contractual” aspect of carbon intensity: slow steaming and charter parties — UK P&I Club
- 12.50 – 13.00 Q&As / Wrap-up / Closure

### Day 2

- 10.00 – 10.50 Ship design, technologies, and operational practices to optimize energy efficiency — RINA
- 10.50 – 11.00 Break
- 11.00 – 11.50 Alternative fuels: a comparative analysis of potential pathways to carbon neutrality — ABS
- 11.50 – 12.00 Break
- 12.00 – 12.50 Alternative fuels: a comparative analysis of potential pathways to carbon neutrality (cont.)
- 12.50 – 13.00 Q&As / Wrap-up / Closure

**2022**  
REFRESHER TRAINING PROGRAM  
**From our members for our members**



# WEBINAR LECTURERS



**Stela SPIRAJ**

Environmental Expert, Marine  
RINA

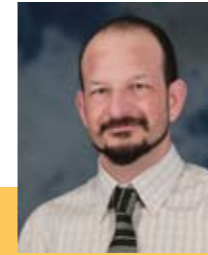
Stela serves as Environmental Expert for RINA Marine, based in Piraeus, Greece. In her current position, Stela is responsible for helping owners and operators develop emission, fuel, and operational strategies to meet the goals arising from the marine environmental regulatory framework. Stela joined RINA as a plan approval engineer of machinery and propulsion items. Before joining RINA, she worked at the corporate fleet performance centre of Bernhard Schulte Shipmanagement and the technical department of the tanker arm of Angelicoussis Shipping Group, Maran Tankers Management Inc. Her experience includes the verification ship emission reports, performance analysis of vessels, evaluation of energy efficiency improvements measures, newbuilding / retrofitting plan approval, and drydock supervision. She holds a Master of Engineering in Naval Architecture and Marine Engineering from the National Technical University of Athens (NTUA) and was a co-founder of the research group Oceanos, which represents NTUA to international competitions dedicated to naval energy efficiency.



**Alexandra COUVADELLI, LLB, LLM**

Greek Lawyer, Piraeus Bar,  
Solicitor, England & Whales  
UK P&I Club

Alexandra is a Senior Claims Director for Thomas Miller for P&I and FD&D with extensive experience in claims handling. Before joining Thomas Miller Alexandra worked for Athens and London based Law Firms specializing in Maritime Law, as well as a ship-owning firm, and has also had sea faring experience on a bulk carrier. She is a qualified Greek and English solicitor and holds an LLM from Southampton University and a diploma from North Kent College in Oil, Gas and Petrochemicals. Her fields of expertise include Green Shipping issues, Marine pollution, Maritime Casualties, Sanctions, Bill of Lading Issues, Piracy/Maritime Security, Charterparty and Newbuilding Disputes. Alexandra conducts presentations to the Maritime community, covering an extensive repertoire on the above mentioned fields of expertise. She has been a frequent contributor to UK P&I and Defence publications and has lent her broad perspective and knowledge on P&I matters and legal issues to the UK P&I Club's and UK Defence Club's publications.



**Antony VOURDACHAS**

Principal Engineer  
Global Sustainability  
American Bureau of Shipping

Antony joined ABS in April 2014 and is employed as Principal Engineer for the ABS Global Sustainability Center in Athens, Greece, working on environmental and performance issues. He is experienced in multiple aspects of vessel performance and emissions, such as performance analysis and technical and economic evaluations of systems related to GHG emissions, studies related to EEXI and CII Regulatory Framework.

He started his career as a Design and Production Engineer at the Devonport Dockyard in Plymouth and moved on to become a Research Associate at the School of Marine Science and Technology at Newcastle University involved in a European Ballast Water project (MARTOB). Prior to joining ABS, he worked for shipping company OSG in a number of technical positions in project engineering, planned maintenance and vessel performance.

Antony holds a B.Eng. in Small Craft Engineering and an M.Res. in Marine Engineering from the School of Marine Science and Technology at Newcastle University, England.



**Dr. Stefanos CHATZINIKOLAOU**

Assistant Professor  
University of Piraeus, Greece  
Consultant for RINA

Stefanos is Assistant Professor in the Department of Maritime Studies of the University of Piraeus, Greece. He is a graduate of the School of Naval Architecture and Marine Engineering of the National Technical University of Athens, Greece, where he also earned his PhD in sustainable maritime transport. He is an external scientific consultant for RINA Class Society in R&D and professional maritime training. His main fields of work and academic interest are ship energy efficiency and environmental performance, maritime safety, and human factors.



## Webinar Learning Objectives | Outline

### **GHG emissions of the shipping sector: getting familiar with current and potential future mid- & long-term measures**

In the last decade, a complex regulatory framework is being progressively developed in order to reduce the carbon footprint of the shipping sector and support the goals and aspirations of the Initial IMO Strategy on reduction of GHG emissions from ships. The aim of this presentation is to provide an overview of the regulations already in force for the improvement of the energy efficiency of ships and the reduction of GHG emissions, with a particular focus on the familiarization of participants with the most recently adopted measures (EEXI – CII/SEEMP Part III). Additional mid- and long-term measures under discussion will also be considered in an attempt to describe and understand the regulatory perspective of potential pragmatic pathways to the ultimate goal of shipping's decarbonization.

### **The contractual aspect of carbon intensity: slow steaming and charter parties**

The session will provide an overview of the IMO Regulatory framework which aims at reducing greenhouse gas (GHG) emissions while at the same time improving the energy efficiency of vessels. Specifically, the focus will be on the legal aspects in the context of contractual arrangements between owners and charterers which are likely to arise under charterparties. It will aim at identifying possible steps that each of the above stakeholders should consider when addressing the applicability and necessity of the incorporation of the EEXI and CII regimes into charterparties.

The session will provide the following to attendees inter alia the following:

- IMO Regulations at a glance
- Identify the commercial and legal challenges under charterparties
- Provide a brief analysis of BIMCO EEXI Transition Clause for Time Charterparties 2021

### **Alternative fuels: a comparative analysis of potential pathways to carbon neutrality**

With the IMO's target to reduce the Green House Gas (GHG) emissions substantially by 2050, which is mirrored by a multitude of regulations in other industries, the pressure on ship owners and operators to reduce their vessels GHG emissions is mounting. There are many technical options (propulsion improvement devices, wind-assisted power, etc.) and operational measures (slow steaming, weather routing, etc.) that can be selected to achieve this goal, but potentially the most effective is a change to a low-carbon (or zero-carbon) alternative fuel. Many different alternative fuels are available, with different levels of maturity, availability and associated pros and cons, and this presentation will address these and many other points of interest.

The lesson take-aways. Attendees will:

- Understand that the solution with the highest potential to reduce GHG emissions is Alternative Fuels
- Gain knowledge of the different types of Alternative Fuels available
- Appreciate the pros and cons of each Alternative Fuel

### **Ship design, technologies, and operational practices to optimize energy efficiency**

The session will present the GHG policy framework at IMO and EU level, and describe the specific obligations to shipping, deriving from it. In this aspect energy efficiency and GHG policy are directly correlated and thus the EEXI and CII energy efficiency indicators will be explained. As the ultimate goal is to raise the shipping sector energy efficiency, several technical and operational suggestions will be presented. Finally, the next steps of the industry which will be taken towards shipping decarbonization will be presented.

Learning objectives:

- GHG policy framework at IMO and EU level
- EEXI and CII explained
- Energy efficiency: technical and operational measures
- Shipping decarbonisation pathways

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