

İTÜ



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FOREWORD

The Global Maritime Congress (GMC'24), which is organized for the fifth time with the partnership of Istanbul Technical University Faculty of Maritime, UCTEA The Chamber of Marine Engineers, Batumi State Maritime Academy, Constanta Maritime University, Strathclyde University, represents a significant milestone in the ongoing dialogue and collaboration across the global maritime sector. This gathering brings together leading academics, researchers, industry professionals, and key stakeholders to explore the latest innovations, developments, and emerging trends in maritime technology and transport.

This year's Congress aims to highlight critical topics that are reshaping the future of maritime transport, including advancements in Maritime Transportation Management and Technologies, Port Operations, Risk Assessment, Maritime Policy, Law & Governance, and Maritime Safety & Security. In addition, discussions will delve into sustainability challenges, climate change impacts, and the role of emerging technologies in enhancing operational efficiency and environmental stewardship across the maritime sector.

With over 140 presentations covering a wide range of topics such as alternative fuels & renewable energy, best practices & new concepts in MET, cyber security at sea, energy efficiency & energy management, human factor, marine environment and technologies, marine risk assessment, maritime policy, law & governance, maritime economy, maritime safety & security, maritime transportation & management, naval architecture & offshore technologies, and seafarers' wellbeing, the Congress provides a unique platform for exchanging knowledge, sharing research, and fostering collaboration among international experts.

We extend our heartfelt thanks to our sponsors, partners, and all participants, whose contributions have been instrumental in bringing this event to life. Special recognition is also due to the organizing committee, whose tireless efforts have ensured the success of this congress.

We are confident that the proceedings of this Congress will serve as a valuable resource for shaping the future of maritime transport, fostering innovation, and driving sustainable solutions for the challenges ahead.

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Greenport Alliances – One Step Further for a Greener Maritime Transport

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Abstract

The sustainability of maritime transport is an essential area of concern not only for the future of shipping but also for the future of humankind. Yet this future must be shaped with a ceaseless endeavour to reduce all the environmental harm humanity has created so far. One of such endeavours is the “Greenport Alliances” project, which is awarded under the Erasmus+ Programme Partnerships for Innovation-Alliances (ERASMUS-EDU-2023-PI-ALL-INNO) and co-funded by the European Commission. Abbreviated as GREENPORT, the project focuses on a neglected segment within the European Union’s (EU) Green Deal’s strategy for the decarbonization of the maritime industry, namely in-port services. Green Deal’s ‘Sustainable and Smart Mobility Strategy’ intends to reduce transport emissions by 90% until 2050. Nevertheless, the EU’s emission reduction targets do not include in-port operations due to their small size, considering that larger vessels pollute much more. To protect port assets and vessels while in port, tug boats and pilot boats, as well as their personnel, play an important role, and their actions contribute to the problem both directly and indirectly. Yet, the absence of mandated targets does not necessarily mean that the sector does not pollute at all or that does not have a room for further improvement. On the other hand, the actors of in-port operations are in fact eager to lower emissions. It is possible to modify day-to-day operations, together with the usage of existing digital technologies, that would result in a significant reduction in emissions. At this point, GREENPORT project is being developed to encourage a change in human behaviour and conventional routines to reduce the environmental impact of in-port services. Bringing together 10 organisations in education, research, and industry from 8 countries, GREENPORT started officially on February 1, 2024, and it will be finalized within 36 months. This study aims to delineate the goals that GREENPORT will achieve, the mechanisms of this endeavour, and the impact that will be created after the implementation of the deliverables of the project. Managerial, financial, and marketing-based implications of the project will also be discussed.

Keywords: Sustainability, Maritime Transport, Decarbonization, In-port Services