







# SUSTAINABLE BLUE ECONOMY IN CONTEXT OF CLIMATE CHANGE AND BIODIVERSITY DEGRADATION POWERED BY MARINE TECHNOLOGIES

## **Business and science collaboration**

Idea of this conference is to engage quadruple-helix stakeholders in discussion on challenges and opportunities for more sustainable blue economy in EU and World taking into consideration climate change and biodiversity degradation.

How digital and green transformation with innovative marine technologies can be a tool for better monitoring and protection of marine ecosystem.

Conference will be opportunity to hear decision makers from Croatia and other countries on how they are supporting this process of digital and green transformation and on the other hand listen to representatives of private sector on challenges they are facing and needs for faster implementation.

Scientific-research sector should present their findings in challenges that we are facing in context of climate change and biodiversity.

Place: Ceremonial Hall University of Zadar, Mihovila Pavlinovića 1, 23000 Zadar

Date: 10th of April 2024

**Duration:** 6 h and 15 min, 10:00 – 16:15

## Programme

10.00-10.45 (45 min)	Ministry of regional development and EU Fundy
Introductory speech – 5' p.p.	<ul><li>– Mr. Šime Erlić, minister (tbc)</li></ul>
	Ministry of Sea, Transport and Infrastructure
	<ul> <li>Mr. Josip Bilaver, state secretary (tbc)</li> </ul>
	<b>University of Zadar</b> – prof.dr.sc. Josip Faričić, rector
	City of Zadar – dr.med. Branko Dukić, mayor
	Zadar county - g. Božidar Longin, county prefect
	(tbc)
	Royal Norwegian Embassy in Republic of Croatia -
	Mr. Helge Klouman Marstrande, depudy
	Ambassador
	Embassy of Egypt in Republic of Croatia – H.E.
	Ayman Tharwat Amin Abdel Aziz (tbc)
	Maritime Research Center – Mr. Arnab Das, CEO













10.45-11.00 Promo video DIH Innovamare 5' Presentation of DIH Innovamare 10'	DIH Innovamare team
11.00-12.00 Panel discussion – How to respond to challenges coming from climate change and blue economy activities on biodiversity degradation for sustainable blue economy	Scientific-research sector: University of Zadar – izv. prof.dr.sc. Lav Bavčević Public sector: Ministry of the Sea, Transport and Infrastructure – Maritime Safety Directorate - cap. Siniša Orlić, director (tbc) Ministry of Economy and Sustainable Development – Institute for Environmental and Nature protection – dr. sc. Aljoša Duplić, director (tbc) Private sector: Jadrolinija d.d. – Mr. Riano Bukša, board member (tbc) Croatian Chamber of Economy - Mr. Tomislav Radoš, vice-president WWF Adria – Mrs. Dunja Mazzocco Drvar, director of Protected Area Programme  Public sector: Krka National Park – Mrs. Nella Slavica, director
12.00-13.00 Networking break	Moderator: DIH Innovamare, Mr. Mateo Ivanac, CEO     Signing framework collaboration agreement with Ocean Autonomy Cluster, Norway as a step of establishment of maritime innovation network between Croatia and Norway     B2B meetings with Norwegian companies













13.00-14.15	Scientific-research sector:
Round table 1 – Marine technologies for	<b>University of Zadar</b> - izv.prof.dr.sc. Marko Valčić
digital and green transformation of blue economy sectors	Faculty of Maritime studies Split - Institute for Marine Electrical Engineering and Informatics - izv.prof.dr.sc. Maja Krčum
	Private sector:  AITAC d.o.o Mr. Marijan Lorencin, CEO
	Business supporting organisations:  DIH Innovamare - Mr. Ljubomir Pozder, research and development engineer  Public sector:  Public Institution "Nature Park Telašćica" (tbc)  Zadar County Port Authority (tbc)
	Moderator: Faculty for electronic and computing Zagreb - Department of Control and Computer Engineering – doc.dr.sc. Đula Nađ, Assistant professor (tbc)
13.00-14.15	Scientific-research sector:
Round table 2 – How to expand and	University of Zadar – izv.prof.dr.sc. Tomislav Šarić
improve production in Aquaculture and	Private sector:
fishery and lower impact on marine	Bedalov d.o.o dr.sc. Ana Bedalov, CEO
ecosystem	Jadran tuna d.o.o (tbc),
	Cromaris d.d. – Mr. Ivan Leko, President of the
	Management Board  Kali tuna d.o.o. (tbc)
	WWF Adria (tbc)
	Business supporting organisations:
	DIH Agrifood, Mr. Matija Bumbak, CEO Public sector:
	Zadar county - Directory for Maritime Affairs, Sea
	and Transport – Mr. Krešimir Laštro, director
	Moderator: Platforma 22 - Mr. Krešimir Kovač,
	Project leader
14.15-14.45	
Networking break and B2B meetings	B2B meetings with Norwegian companies
14.45-16.00	Scientific-research sector:
Round table 3 – What is the future of	University of Zadar – Department for Maritime
Shipbuilding and maritime transportation	Studies – izv.prof.dr.sc. Josip Orović













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16.00-16.15 Closing speech Unive	ersity of Zadar - prof. dr.sc. Faričić, rector













#### **KEY SECTORS OF BLUE ECONOMY**

- 1. Fisheries and Aquaculture: This sector involves the farming, harvesting, processing, and marketing of aquatic plants and animals, such as fish, shrimp, and shellfish.
- 2. Maritime Transportation: This sector includes shipping, ports, and related services, such as logistics, freight forwarding, and cargo handling.
- 3. Renewable Energy: This sector involves the generation of energy from sources such as wind, waves, tides, and currents.
- 4. Tourism and Recreation: This sector includes activities such as coastal tourism, recreation, and marine wildlife watching.
- 5. Coastal Infrastructure: This sector involves the construction and maintenance of infrastructure, such as coastal protection and erosion control, as well as the development of marine-based renewable energy infrastructure.
- 6. Biotechnology: This sector involves the development of new products and processes based on marine organisms, such as pharmaceuticals, cosmetics, and nutritional supplements.

## **MARINE TECHNOLOGIES**

- 1. Autonomous Surface Vehicles (ASVs) and Unmanned Surface Vehicles (USVs): These are robotic boats that can be used for a variety of tasks, such as surveying, monitoring, and mapping the ocean.
- 2. Underwater Gliders: These are autonomous underwater vehicles that use changes in buoyancy to move up and down through the water column, allowing them to cover large areas while collecting data on temperature, salinity, and other oceanographic parameters.
- Ocean Energy: Technologies that harness energy from ocean currents, tides, and waves are becoming more advanced and efficient, making it possible to generate electricity from these sources.
- 4. Marine Robotics: Advancement in the design and construction of robot for deep sea exploration, monitoring, and maintenance of marine facilities.
- 5. Blue carbon: methods to sequester carbon dioxide from the atmosphere in coastal ecosystems such as mangroves, salt marshes, and seagrasses.
- 6. Advanced imaging and sensing technologies: technologies such as LiDAR, imaging spectroscopy and synthetic aperture sonar are being used to create high-resolution maps of the seafloor and detect objects under the water with great accuracy.



