



2nd ESN Webinar

“Digitalization and environmental sustainability as drivers in the change of Short Sea Shipping”

25 July 2022

Supporting maritime sector to address “twin transition” challenges

Prof. Elias Yfantis, Senior Scientist, CMMI



European Shortsea Network

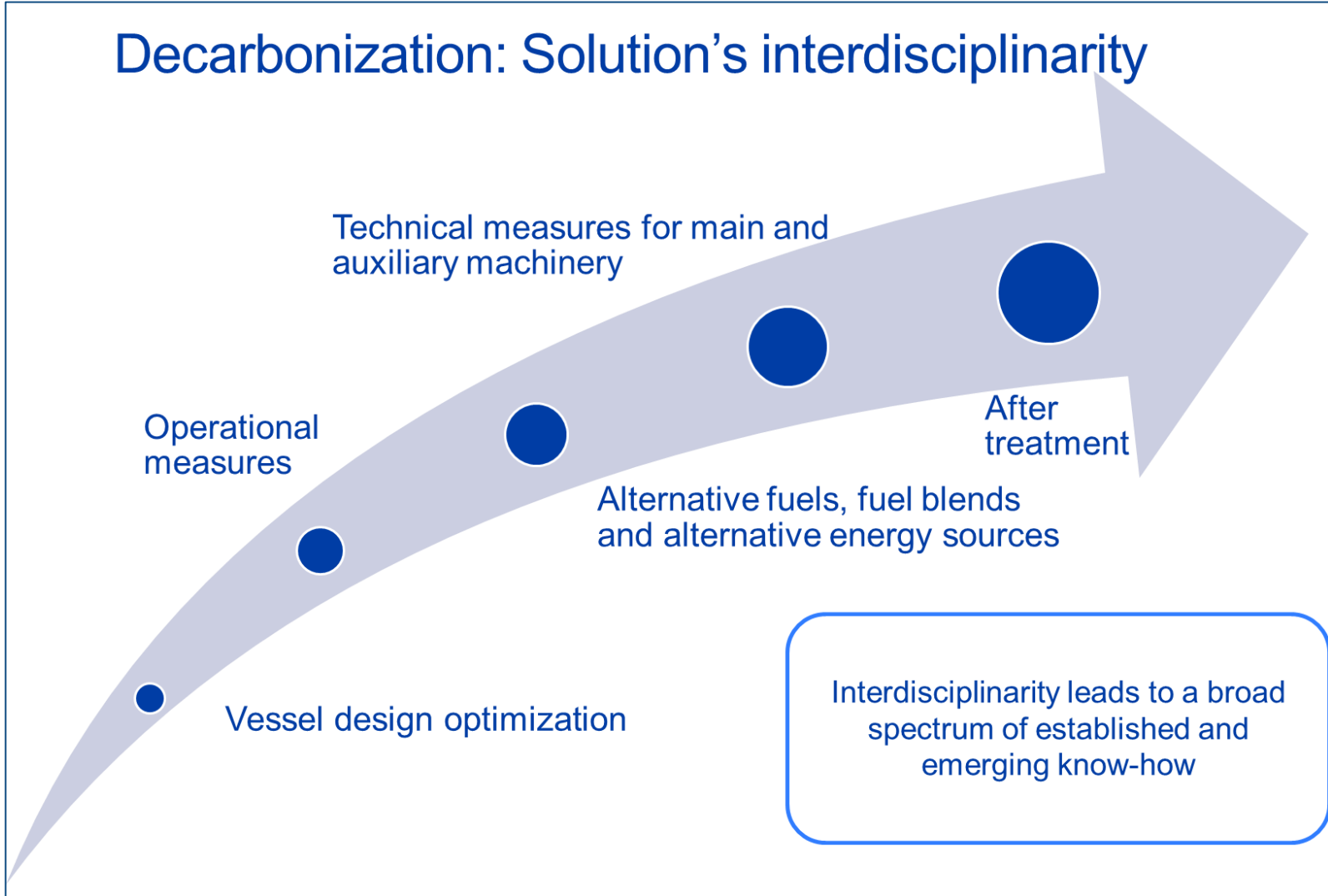


SHORT SEA SHIPPING
Ufficio di promozione - Italia





Decarbonization: Solution's interdisciplinarity

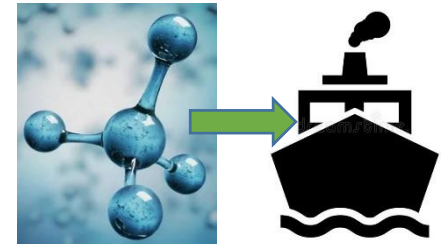




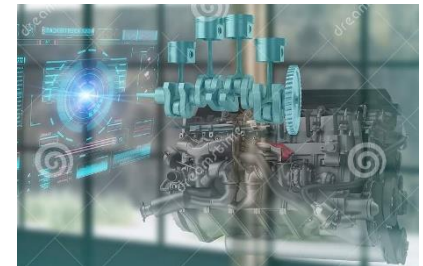
A-ZEST (Autonomous Zero-Emission Sea Transporter):
An autonomous, fully electric, research platform and a testing bed



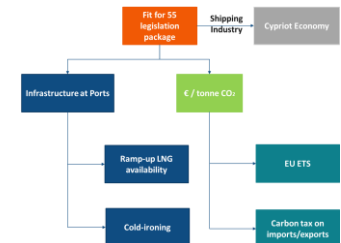
BioCH4-to-Market: Development of a virtual Gas-Grid solution and experimental investigation of the marine diesel engines performance and environmental behavior



ISEF model (Integrated Ship Energy Flowchart model):
A hybrid (deterministic and AI) approach to develop the ship energy systems digital twin and support vessel's performance optimization



MSF455: A software tool for the techno-economic assessment of the EU Fit for 55 legislation package impact on EU economies





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Sea Vessel Optimization

Remote Observation and Monitoring

Training and mentoring in the blue sector

Blue Economy Digital Transformation

Intelligent Marine Spatial Planning



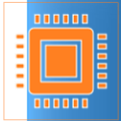
Marine Environment
Data-Driven Modelling



Maritime IoT Platform



Maritime IoT Laboratory



Intelligent Marine
Systems



Cognitive Systems
Initiative



Ship Optimization &
Maritime Informatics



Field Tests & Operations



Energy Harvesting for
Marine Applications



Intelligent Marine
Spatial Planning



Technical Consulting
Teams Development

