


#	<p>Elias Yfantis PhD Mechanical Engineering</p>	
Title:	<p>Head of the Naval Architecture & Marine Engineering Section Hellenic Naval Academy</p>	
Presentation title:	<p>CO₂ Emissions from Ships: Reduction Methods and Technologies</p>	
<p>CO₂ is the most important green-house gas (GHG) among others such as methane. Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2014) stated that global GHG emissions expected to continue grow due to population and economic growth if, on top of current efforts, no extra efforts are made to reduce GHG Emissions. Until 2100, Global Mean Surface (GMS) Temperature could Increase by 3.7 to 4.8° C compared to Pre-Industrial. Extensive research has shown that available efficiency approaches can reduce CO₂ from vessels by 20–40% by 2020 and 30-55% by 2030. IMO has set international energy efficiency (i.e. CO₂ emissions abatement) standards for new-builds (EEDI) and/or existing vessels (SEEMP). These regulations will contribute significantly to future CO₂ emissions reductions from international shipping. Minimization of a specific vessel CO₂ emissions can be attained only through a mixture of market available technological and operational measures under certain capital and operational cost restrictions.</p>		
CV:	<p>Dr. Elias Ar. Yfantis is the Professor for Marine Engines at the Hellenic Naval Academy. He obtained his PhD degree in 1992 and his Engineering Diploma in 1987 both from School of Mechanical Engineering of the National Technical University of Athens, Greece. Prof. Yfantis has administrative experience at the Hellenic Naval Academy as the Academic Dean (2004-2009), as a member of the Academy Council (1999-today) and as the Head of the Section of Naval Architecture & Marine Engineering since 2007. In addition, he has research and teaching experience in the fields of Thermodynamics and Heat Transfer, Diesel Engines, Gas Turbines and Marine Energy Systems and cooperates constantly since 1993 with the Laboratories of Internal Combustion Engines and Thermal Turbomachines of the National Technical University of Athens in research projects related to the evaluation of the operational and environmental behavior of diesel engines, the development and application of diagnostic techniques for marine diesel engines and the development of gas turbines virtual laboratories. Prof. Yfantis also collaborates with Cranfield University as visiting staff and as a member of the International Advisory Board of the Center for Gas Turbine Diagnostics and Life Cycle Cost (2003-today) and he is the national representative in the NATO Science and Technology Organization/ Applied Vehicle Technology Panel (1997-today). In addition, he has been active member of international scientific organizations (ASME, SAE, New York Academy of Science, and The Combustion Institute/Greek Section). Prof. Yfantis has published more than 50 papers in international journals, international conference proceedings and national journals and participated in the organization of international conferences and reviewed research articles for numerous international journals and conferences. He is also the author or co-author of university textbooks in the area of his expertise and he contributed in writing chapters in international scientific books. Finally, Prof. Yfantis is the editor-in-chief of the “Nausivios Chora”, the International Journal in Naval Sciences and Technology (2006-today). Prof. Yfantis has been the Vice Mayor for Strategic Planning and Development at the Municipality of Dionyssos/Attica Region (2014-2016).</p>	