"Creating sustainable value with accountability standards for technological innovation in shipping and offshore operations"

Pavlopoulou, Y. 1*Aravossis, Konstantinos2*

National Technical University of Athens, Greece, School of Mechanical Engineering, Sector of Industrial Management and Operations Research, Environmental Economics and Sustainability Unit.

Abstract

Accountability and innovation technology in maritime and offshore operations could enhance marine and global sustainability. Corporate social responsibility is a vehicle to sustainability that could assist the shipping sector in tackling operational issues. Due to the global financial crisis, academics call for creation of shared value shifting from "values" to "value" (from a morals-driven to a business-driven approach). The challenge is how to link eco-efficiency (from the economic and ecologic aspect) of green technology innovation to the shared benefit of the shipping and offshore business and their global stakeholders. In times of serious downturn, these industries endorse innovative solutions, aligned to economic and environmental objectives, if the scientific research and development of effective technological systems are standardized, verified and therefore trustworthy.

The issue at stake is how to maximize the creation of sustainable value in the maritime business for owners/shareholders, stakeholders and society at large. This study is based on an interview survey of Greek shipowners and views from latest industry's conferences in Greece over the alleged pressure to shipowners to invest in non tested innovation systems, with costly, burdening and demanding onboard monitoring, reporting and verification methodology. Informed pioneers need to trust new technological standards, aware and updated on accountability risks, on fallacy of short-term decisions and legitimacy trade-offs. The international policy makers should encourage innovative stewardship that enhances dialogue and synergy among business and their stakeholders, beyond minimum marine environmental compliance values. Some responsible leaders already build effective partnerships and undertake holistic and collective action, considering social expectations and diversified development opportunities.

The outcome is that forward thinkers in shipping trade and offshore engineering, could responsibly self-regulate and lead social progress. In parallel, regulatory efforts should divert funds and resources in research over spatial planning ashore, re-conceiving the concept of eco-innovation awareness. The maritime community advocates against strict legislative technology measures on their industry, for the sake of their own sustainability and urge regulators to reconsider societal needs i.e. unemployment, water and waste management. Certain shipping associations propose synergistic worldwide offset investments in efficient port reception infrastructure to foster local communities' prosperity and the development of clusters.

Keywords: maritime, sustainability, accountability

*Biography

[1] Yanna Pavlopoulou is a Doctoral candidate at the National Technical University of Athens, Greece, School of Mechanical Engineering, Sector of Industrial Management and Operations Research, Environmental Economics and Sustainability Unit. She is the founder and Managing Director of CommonLawgic http://www.commonlawgic.org/yanna-pavlopoulou.html, a think-tank and research institute, that offers legal, strategic and project management assistance, on corporate responsibility, maritime, waste management and resource efficiency concerns. Mrs. Pavlopoulou is a lawyer (Athens Bar), litigator before the Greek courts since 1990 and was part-time General Counsel of Hellenic Star Shipping Company from 1990-2007. She is trained Sustainability Report Verifier on behalf of Lloyd's Register and accredited Sustainability (CSR) Practitioner as well as Assessor of companies on major excellence management models. Yanna also holds a Master of Science (MSc in Maritime Operations) from Liverpool John Moores University (UK), a Master of Laws (LL.M.) from the Law School of GEORGETOWN University (Washington D.C) – being awarded a full scholarship- and a LL.B. from Law School of ATHENS University, Greece, with highest distinction. She has attended many Green Shipping Conferences as invited speaker on Sustainability (in Athens, Oslo, Singapore, Hamburg). Yanna speaks Greek, fluent English, French and basic German. Mother of three adult children.

[2] Dr. Konstantin Aravossis http://arvis.simor.ntua.gr/ is a Mechanical Engineer (Technical University of Aachen -Germany) with an M.Sc. in Management Science from Imperial College of London and a doctorate degree from the National Technical University of Athens [NTUA], focusing on Operations Research. He is a Professor at the ATHENS MBA (of NTUA with Athens University of Economics) since 1997, Assistant Professor of "Investment Analysis" at NTUA and Coordinator of the "Environmental Economics and Sustainable Development Research Unit" of the Sector of Industrial Management and Operations Research of the Mechanical Engineering School NTUA. He has been an adjunct Professor at the University of Thessaly (1997-2004), member of the NTUA Senate and current General Secretary of the NTUA Employers' Support Fund (since 2009). He has been an advisor of the deputy Minister of Culture in issues concerning the Olympic Games Constructions and their Post-Olympic utilization, President (2002-2006) of the Greek Association of Environmental Protection Companies and member of Evaluation Committees of Investment and Energy Projects of the Ministry of Development. Furthermore, he has been member of the Board of the Organisation of Labour Residencies (OEK). He is the past President of the Hellenic Solid Waste Management Association (HSWMA) (2008-2013). He is the Chairman of the Ordinary Environmental Committee of the Technical Chamber of Greece, of the Greek Industrialists Union and Vice-President of Hellenic Management Association (Industrial Planning Institute). He has an extensive experience in research studies on issues concerning Environmental Management, Operations Research and Investment Analysis, with many relevant publications.