

The European Green Deal 2020 and IMO MRV of the GHG Mitigation Strategy – a Managerial and Economic Impact on Maritime Transport and Ship Owners*

Akram Al Mouhamad AKOEL

PhD Ing., Master Mariner, Marine Superintendent, Briese Shipping,
Hafenstrasse 12, 26789 Leer, Germany

Ryszard K. MILER

Associate Professor, University WSB Merito in Gdańsk, Faculty of Informatics and New Technologies,
Head of the Baltic Sea Centre of Applied Logistics,
Al. Grunwaldzka 238 A, 80-266 Gdańsk, Poland

Correspondence should be addressed to: Akram Al Mouhamad AKOEL; aakoel@wsb.gda.pl

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Abstract

The shipping industry, accounting for approximately 3 % of the total global anthropogenic CO₂ emissions, has been put under international pressure to cut emissions by at least 40 % by 2030 and 70 % by 2050. By analysing already undertaken activities, this research aims to investigate whether adopting the EU GHG deals and the IMO strategy in shipping has resulted in emissions reduction and deployment of green fuels in the sector since 2018. By comparison with other fuel options, the Authors investigate whether LNG is the best fuel choice for GHG reduction in shipping. Finally, they examine how the shipping industry performs against decarbonisation and CO₂ emissions; hence, the methodology on quantification of gas emissions in EU ports while at berth, including all activities, has been developed. The possible operational consequences and financial costs for shipping owners related to Carbon pricing under the European Emissions Trading Scheme ETS are identified and presented. In light of the main findings in this research, stating that the shipping industry today predominantly uses lower sulphur content heavy fuels LSHFO and marine gas oil LSMGO considered as the primary air pollutants, there are some practical recommendations presented in conclusions wherein to accelerate the process of achieving low and zero emission within given timeframes.

Keywords: The European Green Deal, greenhouse gases emissions from shipping, IMO Greenhouse gas emissions, MARPOL Annex VI framework, the shipping industry performance against climate decarbonisation