

INNOVATION AND SUSTAINABILITY IN MARITIME TRANSPORT: GREEN SHIPPING

George Malindretos

Harokopion University of Athens, Greece
gmal@hua.gr

John Sklavakis

PhD candidate, Harokopion University, Athens, Greece
isklavakis@gmail.com

ABSTRACT

The sustainability issue has been acknowledged as a universal contemporary challenge within the entirely new, unprecedented, irreversible and ever changing global economic, social, cultural and physical today environment. Motivated by the economic slowdown, increasing fuel prices and global warming, it has been maintained that the "green economy" investments can be the key to business sustainability. Taking into account that freight maritime transport represents by far the most popular sector in international commerce and transport, an important research topic is the possible contribution of green shipping solutions in the targets and prospects of sustainability.

In such a context, this paper is engaged with the potential strengthening of modern shipping, in terms of differentiation through design and introduction of an innovative alternative of renewable types of energy. Innovative green ships from all over the world are presented and a two-fold survey is conducted. The first concerns shipping companies and the second the users of shipping services, towards identifying the progress that has been made and the consequent enhancement of the competitive position and sustainability of the shipping companies that will show the required vision and discipline to value creation and SSCM.

In retrospect, this paper aims at the provision of useful insights for modern sustainable shipping technology at global market level. In view of the undergoing dynamic changes in this field, this work is to be considered as a progress report of continuing research, so that constructive discussion and exchange of views can contribute to improve sustainability performance in the maritime transport sector.

Key words: Maritime transport (MT); Shipping Logistics (SL); Sustainable Supply Chain Management (SSCM); Transport and Logistics (TL); Green ships; Innovation.