## MEASURING SUPPLY CHAIN EFFICIENCY IN MENA COUNTRIES: A GREEN PERSPECTIVE

## Islam El-Nakib and Sara Elzarka

Logistics and Supply Chain Management Department
College of International Transport and Logistics,
Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt
Email: islam.elnakib@aast.edu; sara elzarka@aast.edu

## **Abstract**

**Purpose:** Environmental sustainability is a supply chain imperative rather than an organisational imperative. Development of environmentally friendly processes, products, and services became one of the top priorities of most companies in the Middle East and North Africa (MENA) region. Therefore, this research aims at studying the quality level of supply chains efficiency in MENA countries by using a hybrid index i.e. the Green Logistics Performance Index (GLPI) combining both the Logistics Performance Index (LPI) and the Environmental Performance Index (EPI).

**Research Approach:** This research follows an exploratory approach due to the lack of research and resources available on the topic of interest. Simple regression analyses is applied to define the deviations between the LPI, the EPI, the GLPI and the national income level. Moreover, the data collected from the World Bank and the World Economic Forum will serve in analysing the measurement of the green supply chain efficiency of each MENA country as a case study.

**Findings and Originality:** This research develops a GLPI indicator that combines the MENA countries' logistics and environmental performances. This research fills the gap in the literature related to Green Supply Chain Management (GSCM). The GLPI is suggested as a good indicator of each MENA country green logistics efficiency and competitiveness on its environment.

**Research Impact**: It is hoped that this study will draw the attention of the research community towards initiating more research projects that would examine the measurements of the green supply chain efficiency in MENA region by proposing the GLPI combining the LPI and the EPI. It is also the first literature in the supply chain management academia to utilise both the LPI and the EPI.

Keywords: Green supply chain management, Sustainable development, MENA Countries, GLPI.