

The Development of a Comprehensive Sustainable Supply Chain Performance Measurement Theoretical Framework in the Oil Refining Sector

Authors : Dina Tamazin, Nicoleta Tipi, Sahar Validi

Abstract : The oil refining industry plays vital role in the world economy. Oil refining companies operate in a more complex and dynamic environment than ever before. In addition, oil refining companies and the public are becoming more conscious of crude oil scarcity and climate changes. Hence, sustainability in the oil refining industry is becoming increasingly critical to the industry's long-term viability and to the environmental sustainability. Mainly, it is relevant to the measurement and evaluation of the company's sustainable performance to support the company in understanding their performance and its implication more objectively and establishing sustainability development plans. Consequently, the oil refining companies attempt to re-engineer their supply chain to meet the sustainable goals and standards. On the other hand, this research realized that previous research in oil refining sustainable supply chain performance measurements reveals that there is a lack of studies that consider the integration of sustainability in the supply chain performance measurement practices in the oil refining industry. Therefore, there is a need for research that provides performance guidance, which can be used to measure sustainability and assist in setting sustainable goals for oil refining supply chains. Accordingly, this paper aims to present a comprehensive oil refining sustainable supply chain performance measurement theoretical framework. In development of this theoretical framework, the main characteristics of oil refining industry have been identified. For this purpose, a thorough review of relevant literature on performance measurement models and sustainable supply chain performance measurement models has been conducted. The comprehensive oil refining sustainable supply chain performance measurement theoretical framework introduced in this paper aims to assist oil refining companies in measuring and evaluating their performance from a sustainability aspect to achieve sustainable operational excellence.

Keywords : oil refining industry, oil refining sustainable supply chain, performance measurement, sustainability

Conference Title : ICASCM 2020 : International Conference on Advances in Supply Chain Management

Conference Location : Dubai, United Arab Emirates

Conference Dates : November 09-10, 2020