

UNIVERSITI TEKNOLOGI MARA

**SUSTAINABILITY PRACTICES OF
GREEN PORT INITIATIVES AMONG
PORT COMMUNITY: A CASE
STUDY AT NORTHPORT
(MALAYSIA) BHD**

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ABSTRACT

Ports play a crucial role in creating economic activities to a country via trading globally, but their activities are undeniably have contributed pollution surrounding them. Therefore, Green Port Initiatives (GPIs) have been introduced to address these pollutions issues to ensure a sustainable future in their operations. This study examines the implementation of GPIs at Northport (Malaysia) Berhad to understand the impact of such initiatives towards port community and operations sustainability. The objectives of the research aim to analyse the level of awareness and interest in practicing the GPIs among port community at Northport and to benchmark the GPIs at Northport with those established local and international well-known green ports. A survey was conducted regarding the port's community demographic, their level of awareness and the area of GPIs which are analysed using SPSS (Statistical Package for the Social Sciences) to determine the significant variable that contributing to the sustainability of GPIs. 360 respondents were selected randomly among port community at Northport and the results found that the level of awareness and interest in practicing GPIs are highly significant which may have effect on the sustainability practices of the GPIs. The findings indicated effective promotion strategies and behaviour of port community would directly contribute to practicing the GPIs. To strengthen the findings, a structured interview with selected high management Northport officials was carried out to understand the importance of implementing GPIs. The findings have detected five themes which are benchmarking on the focus area of Northport's GPIs, Northport eagerness in implementing GPIs, impact of GPIs and sustainability of GPIs. The SWOT (Strength, Weakness, Opportunity, Threat) and PESTEL (Political, Environment, Social, Technology, Economic, Legal) analysis were utilized for benchmarking of the GPIs at Northport. The factors that influence the GPIs at Northport can be identified in SWOT analysis and classified within the PESTEL in six categories. The Northport has successfully benchmarked their GPIs on the part of its recognition winning the Green Port Award and its strong engagement with port community. Several recommendations are suggested to the port industry on how to improve the GPIs among port community in the future for example identify new opportunities to improve energy efficiency, collaboration with its sisterhood port for future planning of GPIs guidelines or policy. An important engagement not to ignore is to work with higher institution to promote and conduct more research regarding sustainability in the port industry. This recommendation could assist the port to become more sustainable, profitable, and efficient in the long term.

Keywords: GPIs, Sustainability, Northport, Awareness, Port community.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Trading and port industry started before a long time ago mainly via sea and ocean for economic factor. Globalization and changing of world economy have generated a new era of trading pattern and ports serve as transportation hubs with their multimodal network including sea, road, rail, and inland cargo, and are essential connections in the supply chain and logistic process (Pascali L,2017). According to Review of Maritime Transport 2021, the total number of commercial vessels in the world at 2020 is 2134640 vessels. It's shown that seaport industry is the main key for economic contribution.

Therefore, the success of seaport around the world no longer stands on their exclusive performance. The achievement of the successful are not only measured on their own performance but must look their strategies to protect environment surrounding the port (Serra, Patrizia, & Fancello,2020). Environmental issues mostly highlight in each community of shipping industry and become worst if no action plan to prevent it. For example, highly efficient mode of freight transport for global trade especially shipping industry is contributing the pollution for air emission (Xing, Spence, & Chen, 2020). Therefore, port and shipping industry also the most factor contribute the environment pollution.

Due to the port's basic resources, particularly the lack of land, limited area and water surfaces have become a valuable asset. All of these issues gave an impact to the social and environmental, so it's become a challenge to the port for their economic activities. As a result, ports competitiveness is impacted not only by business growth but also by non-business conditions, which are influenced by good human interrelationships and surroundings.

Almost every port in the world is starting with new development by expanding their shore or coastal region. These changes have made it more difficult for all parties involved in port operations to manage and maintain high standards for safety, health, and the environment. Regarding on Iris (2019), the environmental effect of port operations and growth has received more attention in recent years due to global