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**THE CHALLENGES IN THE IMPLEMENTATION OF GREEN HIGHWAYS IN
MALAYSIA FROM CONTRACTORS PERSPECTIVE**

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ABSTRACT

In recent years, green development has been actively discussed in the construction industry. The creation of green highways in third-world nations such as Malaysia is something new to be studied. The distinctions in idea, core qualities and technologies of the green highways are different from the typical highway. Highway development stakeholders have several hurdles to successfully carry out the green highways project. Aim of this paper is to identify the main factor of the challenges in the implementation of green highway concept in Malaysia. The objective of this paper to assess the perception and the challenges of the implementation of green highways by contractors in Malaysia. This objective can be achieved by using data collection such as a literature review and questionnaire survey are distributed to the contractor in Selangor with 70 questionnaire are distributed. These findings will be analyzed using SPSS. The result of the research is highlighting the challenges face by the developer in implementing the green highways concept which is the cost of implementation. The strategies to overcome the barriers are include the public in the decision making, recognition and awards, mandatory implementation, government incentives, and awareness workshop. The outcome of this research could help to open up the green highways issued in the development by seeking the solution for arising issues faced by the developers.

Keywords: Green highways, Challenges, Strategies

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CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

A green highway is a highway that has been planned and built with the goal of combining transportation functionality with environmental considerations (Nusa, 2015). An environmentally friendly highway takes into account how the transportation system is developing, the ecosystem's health, urban expansion, public health, and the needs of the surrounding communities when considering the approach to the environment. The green highways approach transforms stormwater runoff, which has traditionally been considered a "waste product" of development, into a resource that can be used to achieve desirable end results such as aesthetic improvement, habitat connectivity, improved air quality, and cooler micro-environments (Weinstein, 2009). When determining the rating of a green highway, it is becoming increasingly customary to refer to a standard method such as the Green Highways Rating System. The purpose of this study was to examine the difficulties associated with the deployment of green highways. Energy is believed to be strongly linked to the development of highways since most highways entail large construction activities from the time of their conception through the period of operation and maintenance that they need to function properly. Energy criteria for green highways design have been established based on their applicability. The Maintenance Energy Plan, the Rest and Service Area (RSA), the Green Performance Strategy Energy Plan, the Grey and Green Compound and Parking, the Toll Plaza, and the Interchange are among the criteria to be considered. Green highways, on the other hand, are highways designed with an eye toward the future, and they integrate mobility with environmental usefulness, which is a relatively new idea in highway design.