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INITIATIVE IN CONSTRUCTION WASTE MANAGEMENT TOWARDS SUSTAINABLE CONSTRUCTION IN MALAYSIA

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ABSTRACT

Construction Waste (CW) is defined as waste material arising from construction, renovation, and demolition activities such as concrete, timber, steel, and plastic. The poor construction waste management practice has led to failure to ensure sustainability in construction, reducing environmental impacts and illegal dumping. Construction Waste Management (CWM) refers to reducing waste production during the design and construction phases. By using the proper construction waste management method, it achieves sustainable construction in the construction industry. This research aims to determine the construction waste management practice industry towards sustainable construction. The objectives of this research are to identify the type of waste management, identify the initiative in construction waste management that must be taken to have sustainable construction, and identify the best waste management method to be applied towards sustainable construction. In order to achieve these objectives, a quantitative research method is chosen, and there was a form of questionnaire act as the data collection tool, and the sampling method for this research is simple random sampling. In this research, 168 G7 Construction Company located in Pahang was used as the sample frame, and the questionnaire was distributed to all of them. All of the data obtained by the questionnaire has been analysed using Statistical Package for Social Science (SPSS) software. As a result, it clearly stated that the type of construction waste management influences the effectiveness in managing the construction waste by referring to the initiative that must be implemented to achieve sustainable construction.

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CHAPTER 1

INTRODUCTION TO RESEARCH

1.1 BACKGROUND OF STUDY

In any developing country, the construction sector is very important because it is an economic investment, and its association with economic growth is well known (Olanrewaju & Abdul-Aziz, 2015). Nagapan et al. (2013) stated that the construction industry is essential for economic growth because it raises the standard of living and provides employment opportunities. Unfortunately, the rise in developments in Malaysia has caused environmental damage and affected the ecosystem. This damage has become a major problem in recent years. Urbanization has developed globally at an extraordinary rate over the last few years. Angle (2012) and Roser (2019) stated that in 2016, the overall global expansion of urbanisation reached 54.3 percent, and today the rate of urbanisation at the global level has reached 55 percent. The rise in the management of urban solid waste has become one of Malaysia's biggest environmental problems. According to Badgie et al. (2012), population growth has led to an increase in solid waste generation in Malaysia and has become a critical problem to be solved. The waste from sources such as domestic, industrial and commercial sources has become increasingly trendy worldwide. Because of all of these problems, solid waste management plays an important role in preserving a sustainable environment, and each country has different ways of managing its solid waste caused by construction. According to Johari et al. (2014) the municipal solid waste management is a conversation between all people worldwide. This martial threatens at next time to the environment and life. In dealing with the waste produced, this problem needs a better solution.