Journal of Civil Engineering, Science and Technology

Volume 14, Issue 1, April 2023, 1 – 5

EDITORIAL SCOPE – WASTE MANAGEMENT AND RECYCLING

Nor Azalina Rosli[1,2*], Ahmad Beng Hong Kueh[1,2]

[1]Department of Civil Engineering, Faculty of Engineering, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

[2]UNIMAS Water Centre (UWC), Faculty of Engineering, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

Date received: 11/04/2023 Date accepted: 17/04/2023

*Corresponding author's email: rnazalina@unimas.my

DOI: 10.33736/jcest.5641.2023

Abstract — The present editorial scope of the Journal of Civil Engineering, Science, and Technology (JCEST) emphasizes one of the main disciplines of civil engineering: waste management and recycling. Waste management studies provide insights into new waste management techniques, such as recycling, composting, and waste-to-energy technologies, all of which are essential in reducing the volume of waste in landfills. In this brief editorial paper, information is gathered from the freely-accessible Scopus database to identify common keywords found in published papers related to waste management and recycling in the past decade. Based on the analysis, "waste" is found to be the top keyword in articles published on this topic in JCEST. The primary aim of this exercise is to provide researchers with a brief guide to explore the latest knowledge and advancements in waste management and recycling, in safeguarding the cleanliness and safety of our environment.

***Keywords*:** Waste management, recycling, JCEST, civil engineering, Scopus

1.0 INTRODUCTION

The increase in solid waste generation can be attributed to the growth in population and the rise in living standards, which has led to a boost in the economy and industrial activities. However, due to a lack of financial investment and inadequate waste treatment and disposal facilities, landfills have become the commonly adopted approach for both municipal and industrial wastes [1, 2]. Consequently, landfills are saturated with waste and are among the chief contributors to greenhouse gas (GHG) emissions, which have led to the climate crisis and global warming [3]. Therefore, proper waste management is critical to providing clear direction for the handling and disposal of waste in our community, to minimize adverse environmental impacts. In recent years, there has been a growing trend towards more sustainable waste management and recycling practices, driven by increasing awareness of the negative environmental impact of waste. Sustainable waste management refers to practices and strategies such as waste reduction, reuse and recycling, composting, waste-to-energy, and landfill management [4]. Numerous journals are dedicated to environmental engineering and management, such as Journal of Environmental Engineering, Journal of Environmental Management, Journal of Cleaner Production, Journal of Waste Management, and Journal of Environmental Science and Technology. This paper focuses on the prevalent topics and trends in environmental engineering and management over the last decade, as indicated by statistical data.

2.0 GLOBAL PUBLICATION STATISTICS

Environmental engineering presents a broad range of challenges that require resolution, including air pollution, water pollution, waste management, and sustainable energy. According to the data presented by Google Trends in Figure 1, waste management is the most searched-for keyword worldwide over the past five years, followed by air pollution, water pollution, and sustainable energy [5]. For this reason, waste management will be the focus of this paper. Within waste management, there are several strategies to achieve effective waste management, including recycling, composting, waste-to-energy, and landfill. Once again, Google Trends is used to measure the popularity of these terms. Figure 2 illustrates that recycling has gained more interest in searches compared to the other methods [5]. Looking at the breakdown by region, five countries have a high interest in recycling, with the highest percentage coming from Germany. Germany is also well known as a global leader in recycling, with a recycling rate of more than 60% [6].