

The Impact of Corporate Social Responsibility on Total Factor Productivity in the Solid Waste Treatment Industry-Analysis Based on the Mediating Effect of R&D Inputs

Zhang Nian ^a, Logaiswari Indiran ^b, Zuraidah Sulaiman ^c, Maria Anityasari ^d

^{abc} Universiti Teknologi Malaysia Johor Bahru, Johor, 81310, Malaysia

^d Institut Teknologi Sepuluh Nopember (ITS) Surabaya, 60111, Indonesia

[https://doi.org/10.35609/gcbssproceeding.2024.1\(24\)](https://doi.org/10.35609/gcbssproceeding.2024.1(24))

ABSTRACT

In 2018, the State Council of China issued the Pilot Work Programme for the Construction of Zero Waste Cities, hoping to minimize the impact of solid waste on the environment by promoting the formation of a green mode of development and lifestyle, advancing the reduction of solid waste and resource utilization, and minimizing the amount of solid waste landfilled. On this basis, the Ministry of Ecology and Environment and 18 other departments jointly issued the "Working Programme for the Construction of Zero Waste Cities in the 14th Five-Year Plan Period" in 2021 to further promote the construction of zero waste cities in China. In the process of building zero waste cities, the waste treatment industry's commitment to social responsibility plays an important role in the resourceful utilisation of solid waste. Since the improvement of solid waste resource utilisation is the core of waste reduction, companies must seek advances in resource utilisation technology and harmless treatment technology in order to better assume their social responsibility. From the current research literature, CSR plays an important role in motivating firms' stakeholders and reshaping firms' strategies (Wang et al., 2016), and in particular, CSR promotes firms' R&D and innovation (Gallego-Alvarez et al., 2011), which leads to corresponding competitive advantages. Then, the R&D of firms can only truly improve the resource utilisation of solid waste and at the same time enhance the performance of firms after promoting their technological advancement. Existing literature also supports the positive relationship between CSR and financial performance (Yousefan et al., 2023) and between R&D activities and firms' technological progress (Roszko-Wójtowicz et al., 2019). However, from the current literature, there is a lack of research on the relationship between CSR, firms' R&D investment and technological progress in China's solid waste treatment industry.

Keywords: Corporate Social Responsibility ; Research and development; Solid Waste Treatment Industry.