Decarbonisation: A Case Study of Malaysia

John CG Lee [a], Juniati Gunawan [b], Aghnia Nadhira Aliya Putri[c] , Se Tin [d]

[a]Renmin University, China
[b] Universitas Trisakti, Indonesia
[c]Institut Teknologi Bandung,Indonesia
[d]Universitas Kristen Maranatha, Indonesia

https://doi.org/10.35609/gcbssproceeding.2023.1(133)

ABSTRACT

Limiting global warming to well below 2°C demands an urgent acceleration of decarbonization efforts, posing challenges in multiple sectors like transportation, energy efficiency, and steel production. The feasibility of achieving these targets, akin to the transformation seen during the collapse of the Soviet Union, is being questioned. Yet, hope lies in leveraging tipping points within complex systems for rapid change. Internal carbon pricing (ICP) emerges as a pivotal tool in this endeavor, enabling companies to assess investments, manage risks, and align strategies towards a low-carbon future (Riedel et al., 2021; Trinks et al., 2022). ICP drives decarbonization across industries and influences capital investment decisions by estimating carbon costs. Companies like LG Electronics, Microsoft, and Royal Dutch Shell have adopted ICP, further reinforcing its value in transitioning to sustainability. Major economies have implemented carbon pricing policies, yielding significant emissions reductions. In China, aggressive carbon pricing strategies could drive notable energy consumption reductions (Fan et al., 2014). Meanwhile, Malaysia faces a challenge in reducing carbon emissions, with strategies like renewable energy integration, energy efficiency enhancement, and sustainable transportation promotion (Farabi et al., 2019). This study focuses on Malaysia's decarbonization efforts, aiming to illuminate factors influencing corporate decarbonization in alignment with national climate targets. Addressing gaps in sector-specific decarbonization studies and exploring strategies that make decarbonization a competitive advantage will provide critical insights for effective policymaking and sustainable practices, contributing to global climate action.

Keywords: Decarbonization, Malaysia, Net-zero emissions, corporate practices.