Executive Summary

Competitive Neutrality in the Malaysian Power Sector: Removing Barriers for a Greener and More Innovative Energy Industry

The energy system is the biggest contributor to man-made greenhouse gas emissions (GHG) and decarbonizing it is critical to reduce climate change. Accordingly, many countries have committed or expressed support to reach net zero emissions by mid-century, including Malaysia. Accomplishing this goal will require massive investments in clean energy sources and distribution, supported by a regulatory framework that promotes low-carbon investments and new business models.

This report explores the historical evolution and current challenges of Malaysia's power sector, emphasizing the need for regulatory adaptation in response to changing global energy dynamics and environmental considerations. Traditionally dominated by state-owned enterprises and a vertically integrated model, the power sector, globally, is now facing transformative shifts driven by environmental concerns and the rise of renewable energy sources. While existing players in Malaysia have mostly succeeded in delivering reliable and affordable energy to the country, the existing regulatory regime is not fit to meet the challenges of an energy system which is increasingly based on clean, intermittent and decentralized sources of energy. This report advocates for the introduction of competitive pressures to accelerate decarbonization and attract new investments.

First, this study characterizes the transformative impact of renewable energy sources on the energy system and the challenges they pose to established energy companies. The increasing penetration of zero marginal cost generation disrupts traditional market economics, impacting the dispatch of power stations based on their short-run marginal costs. This phenomenon poses challenges for traditional utilities, which can be slow to embrace decarbonization efforts due to the potential devaluation of legacy assets. The report suggests strategies such as grid integration, energy trade between regions, and utility-scale energy storage to mitigate intermittency issues. It also explores innovative business models and policy frameworks that have facilitated successful decarbonization efforts in advanced power markets.

It then delves into Malaysia's power sector, characterized by centralized control through vertically integrated government-linked companies (GLCs). The report outlines historical reforms, such as the introduction of independent power producers (IPPs) and the role of regulatory bodies like the Energy Commission. It highlights ongoing discussions on potential policy changes and recent policy and roadmaps, like the National Energy Transition Roadmap (NETR).

The study focuses on the concept of competitive neutrality, as defined by the OECD, to address policy challenges and gaps in Malaysia's power market. An analysis of power plant data shows a high level of concentration of the generation sector in the hands of a handful of players and in carbon-heavy assets. One exception is the emerging solar energy industry, which has lower barriers of entry and a regulatory framework which supported the entry of new players.

The report underscores the complexity of fostering competition in the electricity sector, given the formidable barriers to entry and the prominent role of the state. The risks associated with inadequate

competition, particularly in sectors characterized by these challenges, necessitate a focused effort to enhance the regulatory framework in Malaysia's electricity sector. The study proposes policy recommendations in two key areas. Firstly, it advocates for a comprehensive reform of the electricity supply industry to augment the share of renewable energy and cultivate a more competitive market, aligning with the key principles of the NETR. Secondly, the report emphasizes the importance of improving competitive neutrality, both broadly across government-linked companies (GLCs) and specifically within the electricity supply industry, to unlock new investment opportunities and advance green growth.