

Energy Transition in Malaysia: Pathways and Challenges

Norasikin Binti Ahmad Ludin

Deputy Director, Institute of Malaysian and International Studies (IKMAS), Malaysia

Malaysia has made an ambitious pledge to achieve "net-zero" carbon emissions by 2050, or 27 years from now. To achieve net-zero emissions, a country must absorb as much carbon as it produces. Thus, the strategy would be to increase efforts to transition from carbon-emitting energy sources like coal and natural gas to renewable green energy while also promoting carbon sequestration. As a result, the transition from "brown energy" (polluting sources) to "green energy" (renewable sources) must be accelerated. Ambitious and long-term planning must emphasise solutions to overcome the current grid integration challenges and create grid flexibility. Renewable energy investment, on the other hand, remains a major impediment to Malaysia's energy transition. There is a need to strengthen national financing institutions, overcome regulatory and market barriers, and reduce government spending on fossil-fuel subsidies. Malaysia urgently needs to create a more favourable investment environment for renewables. Malaysia can achieve its renewed ambition of reaching net zero emissions by 2050 by implementing a strategy and policies that prioritise clean energy investments and are consistent at all levels of government. Malaysia has a variety of renewable power systems, which gives it the chance to supply and be flexible for neighbouring countries by using energy storage and connecting more of the region. Achieving the energy transition in the most cost-effective manner will necessitate a greater integration of renewables within Malaysia's national power systems and with its neighbours.