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Review

Energy transition policies in Germany and the United Kingdom

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ABSTRACT

In recent years, the international community has raised concerns about global warming and climate change, which established commitments to reducing greenhouse gas emissions (GHG) and policies to foster energy transition and the decarbonization of their economies. The literature review points out that policies encouraging or subsidizing a cleaner energy mix and lowering carbon footprint have effectively reduced GHG emissions. However, such measures can challenge national energy security. The United Kingdom (UK) and Germany are important promoters of these policies. Thus, this work investigates whether these decarbonization policies impact energy security in both countries, how they affect them, and which are more vulnerable. The Vulnerability Scoping Diagram framework is a qualitative methodology we used to analyze how these measures have influenced energy security issues in the UK and Germany at the national level. Both countries are great fossil fuel importers: the UK imports from Norway, the United States, and Qatar, while Germany imports mainly from Russia. The results suggest that external events strongly impact vulnerability, which varies to a lesser or greater extent depending on the dependency on energy imports and the diversification of their energy mix and exporters. Germany is more vulnerable than the UK regarding external energy dependency. Besides the lower supplier diversity, Germany depends much more on the Russian oil and gas supply than the UK, which puts the Germans in a more delicate situation given the ongoing war between Russia and Ukraine.