

Bump in the Road of Global Energy Transition (Get): The Bottlenecks of Carbon Markets

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Abstract

This study develops a theoretical framework to assess the key drivers of carbon markets and approaches to carbon markets in the global energy transition (GET), unlike previous studies that quantify the role of markets or consider variables of global emissions. The developed framework Global low-carbon energy transition (GLCET) is applied to the six meta-review literatures apart from the group1 and 2 literature reviews (section2). Based on this meta-review, the study also considers the critical drivers of GLCET, namely DE carbonization of the electricity sector, Phase-out of fossil energy resources, and Geopolitical security as behind the global energy transition. Hence, the obtained drivers are robust and establish different approaches. Based on MoSCoW Prioritization technique, the author estimated six methods _the Nexus approach, Hydrogen approach, Impacts of the COVID-19 pandemic approach, Coal-dependent approach, Regional energy governance approach, Multilateral approach_ that contribute to the GET. The author assessed that DE carbonization of the electricity is very important and critical (MO), phase-out of fossil resources is challenging to leave out but needs some solutions(S), and in the third place (W), which impacts of geopolitical security on GLCET are not very important. The author's primary recommendation is to develop a more qualitative method and framework that helps understand the main significant challenges of the global energy transition.

Keywords: Carbon market, Global energy, Transition, low-carbon energy