

*Regulatory Pathways of Renewable Energy Integration in the Guangdong-Hong Kong-Macao Greater Bay Area**

Hao Zhang

Abstract

To meet the policy agenda of establishing an environmentally and climate-friendly energy system, several supporting mechanisms have been introduced under China's Renewable Energy Law. Within the context of China's power sector reform toward a more liberalized model, a key feature of these mechanisms is increased regulation and enforcement to ensure priority access to the grid for renewable energy in pursuit of the climate goals of peak carbon emissions by 2030 and carbon neutrality by 2060. Owing to its increasing population and energy demand, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) presents both opportunities for and challenges to boosting renewable energy in the primary energy mix. The Outline Development Plan for the GBA emphasizes the need to improve energy-related infrastructure and vigorously foster renewable energy integration. Looking at both the legal and governance challenges of ensuring priority access for renewable energy in mainland China and the latest electricity market reform in Guangdong province, this article examines the regulatory pathways to greater renewable energy integration within the GBA.

Hao Zhang is Associate Professor at the Faculty of Law, The Chinese University of Hong Kong. Correspondence should be sent to haozhang@cuhk.edu.hk.

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