Record Nr. UNINA9910484262703321 Autore Guo Meiyu Titolo Environmental Impacts of Shale Gas Development in China: Assessment and Regulation / / by Meiyu Guo, Jianliang Wang Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2021 Pubbl/distr/stampa **ISBN** 981-16-0490-8 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (110 pages) Collana SpringerBriefs in Geography, , 2211-4173 Disciplina 622.3381 Soggetti Environmental policy Human ecology - Study and teaching **Environmental Policy Environmental Studies** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- A review of environmental risks in shale gas development -- Assessment of water resource constraints on shale gas development in China -- Assessment of carbon emissions from shale gas development in China -- Environmental regulatory systems of shale gas development in China -- Conclusion and discussion. Sommario/riassunto This book features a comprehensive analysis of the development of shale gas resources in China, with a focus on the potential environmental impacts that may result. China has the world's largest shale gas resources, which it is keen to develop to alleviate air pollution and successfully transition to a low-carbon energy future. However, one significant obstacle standing between the ambition and reality is the potentially serious environmental impacts of shale gas production. This book offers a systematic assessment of these potential impacts, including the risk of water contamination, ecological disruption due to the huge consumption of water and methane leakage. It presents valuable first-hand data collected from the authors' fieldwork in Sichuan and Chongqing and the latest information on China's current

> shale gas operations and also includes a set of models and methods developed to quantify the impacts. It allows readers to gain a deeper understanding of environmental regulatory management systems

regarding shale gas production in China by examining whether the existing monitoring, reporting and verification (MRV) systems and environmental regulations can effectively prevent adverse impacts from shale gas production. Providing a detailed study of shale gas development in China based on an unprecedented primary dataset, the book is a valuable resource for scholars, engineers and students who are interested in the energy development and environmental risks.