Record Nr. UNINA9910337585103321 Autore Max Michael D **Titolo** Exploration and Production of Oceanic Natural Gas Hydrate: Critical Factors for Commercialization / / by Michael D. Max, Arthur H. Johnson Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-00401-5 Edizione [2nd ed. 2019.] 1 online resource (501 pages) Descrizione fisica Disciplina 665.7 665.73 Soggetti Energy Climatic changes Management Industrial management Robotics Automation Mines and mineral resources Energy, general Climate Change Management and Policy Innovation/Technology Management Robotics and Automation Mineral Resources Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1. Energy Overview: Prospects for Natural Gas -- 2. Economic Nota di contenuto Characteristics of Deepwater Natural Gas Hydrate -- 3. Exploration for Deepwater Natural Gas Hydrate -- 4. Potential High-Quality Reservoir Sediments in the Gas Hydrate Stability Zone -- 5. Valuation of NGH Deposits -- 6. Deepwater Natural Gas Hydrate Innovation Opportunities -- 7. Leveraging Technology for NGH Development and Production --8. New Technology for NGH Development and Production -- 9. Offshore Operations and Logistics -- 10. Energy Resource Risk Factors -- 11. Elements of Commerciality.

Sommario/riassunto

This second edition provides extensive information on the attributes of the Natural Gas Hydrate (NGH) system, highlighting opportunities for the innovative use and modification of existing technologies, as well as new approaches and technologies that have the potential to dramatically lower the cost of NGH exploration and production. Above all, the book compares the physical, environmental, and commercial aspects of the NGH system with those of other gas resources. It subsequently argues and demonstrates that natural gas can provide the least expensive energy during the transition to, and possibly within, a renewable energy future, and that NGH poses the lowest environmental risk of all gas resources. Intended as a non-mathematical, descriptive text that should be understandable to non-specialists as well as to engineers concerned with the physical characteristics of NGH reservoirs and their production, the book is written for readers at the university graduate level. It offers a valuable reference guide for environmentalists and the energy community, and includes discussions that will be of great interest to energy industry professionals, legislators, administrators, regulators, and all those concerned with energy options and their respective advantages and disadvantages.