Record Nr. UNINA9910725091703321 Autore Saraji Soheil Titolo Sustainable Oil and Gas Using Blockchain [[electronic resource] /] / by Soheil Saraji, Si Chen Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2023 **ISBN** 9783031306976 9783031306969 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (352 pages) Collana Lecture Notes in Energy, , 2195-1292 ; ; 98 Disciplina 005.74 Soggetti Cogeneration of electric power and heat Fossil fuels Blockchains (Databases) Power resources Sustainability Fossil Fuel Blockchain Natural Resource and Energy Economics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Chapter 1: Global Energy Transition: Challenges and Opportunities for the Oil & Gas Industry -- Chapter 2: Sustainable Carbon Economy: Climate & Financial Markets -- Chapter 3: Advances in Blockchain Technology -- Chapter 4: Blockchain Technology: Legal and Regulatory Issues -- Chapter 5: Blockchain and Sustainability -- Chapter 6: Carbon Credits and Offset Markets -- Chapter 7: Carbon Geo-sequestration --Chapter 8: Sustainable Aviation Fuels -- Chapter 9: Sustainable Plastics.

This monograph explores the potential of blockchain technology to facilitate the transition in the oil and gas (O&G) industry. As the world shifts towards a sustainable energy future, the oil and gas industry faces significant challenges and opportunities. Focusing on the development of a sustainable O&G industry, the book delves into the role of climate and financial markets in the energy sector, applications

Sommario/riassunto

of blockchain in sustainable energy development, and the challenges of legal and regulatory issues in applying blockchain technology. It provides insight into how the energy industry is already working on reducing carbon emissions and paving the way to a sustainable future with detailed examples of reducing methane emissions, carbon credit markets, sustainable aviation fuels, and plastics. The book also examines how O&G companies could further their sustainability initiatives using blockchain technology for emission data monitoring, carbon capture, utilization, storage, and supply-chain management to develop clean products.