1. Record Nr. UNINA9910373882803321 Autore Ringrose Philip Titolo How to Store CO2 Underground: Insights from early-mover CCS Projects / / by Philip Ringrose Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-33113-X Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (141 pages) Collana SpringerBriefs in Earth Sciences, , 2191-5369 Disciplina 628.532 Soggetti Environmental sciences Fossil fuels Geology—Statistical methods Geophysics Hydrogeology **Environmental Science and Engineering** Fossil Fuels (incl. Carbon Capture) Quantitative Geology Geophysics/Geodesy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1. Why we need engineered geological storage of CO2 -- 2. Geological Nota di contenuto Storage of CO2: Processes, Capacity and Constraints -- 3. CO2 Storage Project Design -- 4. Monitoring Project Performance and Site Integrity -- 5. Emerging themes and technologies -- References. This book introduces the scientific basis and engineering practice for Sommario/riassunto CO2 storage, covering topics such as storage capacity, trapping mechanisms, CO2 phase behaviour and flow dynamics, engineering and geomechanics of geological storage, injection well design, and geophysical and geochemical monitoring. It also provides numerous examples from the early mover CCS projects, notably Sleipner and Snøhvit offshore Norway, as well as other pioneering CO2 storage projects.