Record Nr. UNINA9910401933903321 China's Energy Revolution in the Context of the Global Energy **Titolo** Transition Pubbl/distr/stampa Springer Nature, 2020 Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-40154-5 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XL, 700 p. 384 illus., 380 illus. in color.) Collana Advances in Oil and Gas Exploration & Production, , 2509-372X 628 Disciplina 333,790951 Soggetti Environmental sciences Energy policy Energy and state Fossil fuels Economic geology **Environmental Science and Engineering** Energy Policy, Economics and Management Fossil Fuels (incl. Carbon Capture) Economic Geology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Overview: High-quality energy for high-quality growth: China's energy Nota di contenuto revolution in the new era -- Special Report 1: A study of China's energy supply revolution -- Special Report 2: Research on China's energy demand revolution -- Special Report 3: A study of China's technology revolution -- Special Report 4: China's energy system revolution --Special Report 5: International energy cooperation and governance. Sommario/riassunto This open access book is an encyclopaedic analysis of the current and future energy system of the world's most populous country and second biggest economy. What happens in China impacts the planet. In the past 40 years China has achieved one of the most remarkable economic growth rates in history. Its GDP has risen by a factor of 65, enabling

850,000 people to rise out of poverty. Growth on this scale comes with consequences. China is the world's biggest consumer of primary energy and the world's biggest emitter of CO2 emissions. Creating a prosperous and harmonious society that delivers economic growth and a high quality of life for all will require radical change in the energy sector, and a rewiring of the economy more widely. In China's Energy Revolution in the Context of the Global Energy Transition, a team of researchers from the Development Research Center of the State Council of China and Shell International examine how China can revolutionise its supply and use of energy. They examine the entire energy system: coal, oil, gas, nuclear, renewables and new energies in production. conversion, distribution and consumption. They compare China with case studies and lessons learned in other countries. They ask which technology, policy and market mechanisms are required to support the change and they explore how international cooperation can smooth the way to an energy revolution in China and across the world. And, they create and compare scenarios on possible pathways to a future energy system that is low-carbon, affordable, secure and reliable. .