1. Record Nr. UNINA9910688179503321 Autore Rao Vikram Titolo Carbon-Free Power: The role of small modular (nuclear) reactors // Vikram Rao, Chris Gould, Dave Dayton Research Triangle Park:,: RTI Press/RTI International,, 2022 Pubbl/distr/stampa Descrizione fisica 1 online resource (xiv, 118 pages): illustrations 621.4 Disciplina Soggetti Renewable energy sources Fast reactors Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Sommario/riassunto There is a new world order in electrical energy production. Solar and wind power are established as the low-cost leaders. However, these energy sources are highly variable and electrical power is needed 24/7. Alternative sources must fill the gaps, but only a few are both economical and carbon-free or -neutral. This book presents one alternative: small modular nuclear reactors (SMRs). The authors describe the technology, including its safety and economic aspects, and assess its fit with other carbon-free energy sources, storage solutions, and industrial opportunities. They also explain the challenges with SMRs, including public acceptance. The purpose of the book is to help readers consider these relatively new reactors as part of an appropriate energy mix for the future and, ultimately, to make their own judgments

on the merits of the arguments for SMRs.