

1. Record Nr.	UNINA9910674017903321
Titolo	Economic, Environmental, and Social Assessments of Raw Materials for a Green and Resilient Economy // Andrea Thorenz, Armin Reller
Pubbl/distr/stampa	Basel : , : MDPI - Multidisciplinary Digital Publishing, , 2022
Descrizione fisica	1 online resource (230 pages)
Disciplina	609.43
Soggetti	Technology and state - Germany Insecticides
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book addresses pre-conditions for developing a sustainable and resilient economy and society, emphasizing resources used in future-oriented technologies. With the in-depth analysis of assessments for primary and secondary raw materials, the different contributions meet the need of researchers in the fields of Industrial Ecology, Life Science, and Materials Engineering. Thought-out resource strategies are crucial, establishing a well-designed Circular Economy with sophisticated cascading use stages and reducing emissions to air, water and soil. So, sustainable mining, smelting, and refining processes for metals and minerals have to be improved and new material processes--coming from waste--in the field of the bioeconomy have to be implemented. This book discusses criticality assessments and other classification schemes to quantify supply risks and environmental and social burdens. With tools such as Life Cycle Assessments, the authors identify critical resources and processes in several case studies.