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Nota di contenuto	Thermodynamics,conservation, and transformation: a conceptual model of sustainability in the mining industry -- A Case Study on the Application of the United Nations Framework Classification for Resources on the Piampaludo Titanium Deposits -- A Sustainability Approach to Optimize the Closure of Continuous Surface Lignite Mines -- Lifecycle of Mine Water -- The German Federal Constitutional Court’ s climate-decision and consequences for raw materials supply -- Climate change and the extraterritorial reach of the state duty to protect -- Corporate Climate Liability Clean Energy Transition in Africa's Mining Sector: A Rapid Reflection -- Ventilation on Demand in Brazilian underground mines: current situation and perspectives .- Sustainable activities assessment through Conceptual Sieving method: Case studies in Colombian mining -- The Mongolian Raw Materials Industry -- The importance of Sustainability Criteria for the

	Professional Education of Geo-engineers and the Role of Academic Institutions.
Sommario/riassunto	This book covers several aspects of the application of Sustainable Development Goals to mining related subjects. The included works range from methods to assess and implement sustainability to discussions of legal impacts and relations as well as technological developments and outlooks. First, the challenges and opportunities of clean energy transition in the African mining sector are described. With regard to the assessment of sustainable developments, this book includes the applications of the sieving method, the concept of thermodynamics and the United Nations Framework Classification to mining projects and case studies. The implementation of Sustainable Development Goals into academic project work and education of geo-engineers is covered as well. The legal topics contain discussions of corporate climate liabilities and extraterritorial legal responsibilities as well as an analysis of the impact of the German Federal Constitutional Court's climate decision. Important mining aspectsand technological developments like proactive water management, sustainable approaches to mine closure and implementation of ventilation on demand in underground mines are described. In addition, the state and potential of the Mongolian raw materials industry is covered. The Sustainable Smart Mining and Energy Yearbook is not only aimed at researchers and professionals, but at all who want to get an overview of current important technical and legal topics in this field.