1. Record Nr. UNINA9910807458403321 Autore Banerjee Sudeshna Ghosh <1973-> **Titolo** The power of the mine: a transformative opportunity for Sub-Saharan Africa / / Sudeshna Ghosh Banerjee, Zayra Romo, Gary McMahon, Perrine Toledano, Peter Robinson and Ines Perez Arroyo Washington, DC:,: World Bank,, [2014] Pubbl/distr/stampa **ISBN** 1-4648-0293-9 Edizione [1st ed.] Descrizione fisica 1 online resource (pages cm) Collana Directions in development Disciplina 333.793/20967 Soggetti Energy development - Africa, Sub-Saharan Mineral industries - Africa, Sub-Saharan Energy industries - Africa, Sub-Saharan Economic development - Africa, Sub-Saharan Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. ""Front Cover""; ""Contents""; ""Foreword""; ""Acknowledgments""; Nota di contenuto ""About the Authors"": ""Abbreviations"": ""Overview"": ""Mining Demand for Power Is Expected to Triple by 2020 from 2000""; ""Mining Demand for Power in 2020 Can Dominate Other Sectors in a Few Countries"; ""The Future Is Frontier Action in the Dynamic Space between Self-Supply and Grid Supply""; ""Complex Factors Determine Minesa€? Power-Sourcing Arrangements""; ""Self-Supply Is a Loss to Economy, Utilities, and Mines"" ""Powera€?Mining Integration Can Reduce Costs, Benefit Communities, and Encourage Private-Sector Participation"""Powera€?Mining Integration Can Add Momentum to Regional Power Integration""; ""Technical and Financial Constraints Must Be Addressed to Facilitate Powera€?Mining Integration""; ""Lessons of Experience and Risks of Engagement Must Be Carefully Considered": ""The Government and Policymakers Must Seize This Opportunity and Adopt Appropriate Risk-Mitigation Mechanisms to Create a Win-Win Situation for All Parties" ""The World Bank Group Must Support Governmentsa€? Efforts to Harness the Synergies Offered by Mining Power Demand""""

References""; ""Chapter 1 A High-Riska€?High-Return Opportunity""; ""The Anchor Consumera€?s Role in Developing the Power Sector"";

""Mininga€?s Contribution to Socioeconomic Development""; ""Risks in Powera€?Mining Integration""; ""Scope of This Report""; ""Notes""; ""References""; ""Chapter 2 Mining Demand for Power""; ""Mines Require Enormous Amounts of Power""; ""Mining Demand for Power Could Triple to 23 GW by 2020""

""Power Demand from Mines Is Concentrated in a Group of Metals"""

Mining Demand for Power Will Overwhelm Nonmining Demand for a

Handful of Countries""; ""Note""; ""Reference""; ""Chapter 3 Mine Power-Sourcing Arrangements""; ""A Typology of Arrangements""; ""The Share of Grid Supply in Projects Has Declined""; ""Intermediate Options Report the Largest Rise in Annual Consumption""; ""Power-Sourcing Arrangements Have Evolved in SSA Regions""; ""Self-Supply Imposes a Heavy Burden""; ""Three Main Factors Determine Power-Sourcing Arrangements""; ""References""

""Chapter 4 Opportunities and Lessons for Powera€?Mining Integration"""Powera€?Mining Overview""; ""The Eight Countries Report a Range of Power-Sourcing Relationships""; ""Group 1: Minimal Synergies (Guinea, Mauritania, and Tanzania): Opportunity to Use Mining as Anchor Load for Electrification""; ""Group 2: Medium Synergies (Mozambique, the Democratic Republic of Congo, and Cameroon): Mines as Anchor Load for Regional Power System Integration""; ""Group 3: High Synergies (Ghana and Zambia): Lessons of Experience"; ""Note""; ""References""

""Chapter 5 Challenges to Powera€?Mining Integration""

Sommario/riassunto

Africa needs power - to grow its economies and enhance the welfare of its people. Power for all is still a long distance away - two thirds of the population remains without electricity and enterprises rank electricity as a top constraint to doing business. This sub-optimal situation coexists while vast energy resources remain untapped. One solution to harness these resources could be to tap into the concept of anchor load. Mining industry lends itself to the concept of anchor load as it needs power in large quantity and reliable quality to run its processes. Underpinned by a comprehensive data