

1. Record Nr.	UNINA9910779148803321
Titolo	The future of helium as a natural resource // edited by William J. Nuttall, Richard H. Clarke and Bartek A. Glowacki
Pubbl/distr/stampa	London : , : Routledge, , 2012
ISBN	1-280-87629-8 9786613717603 1-136-32273-6 1-136-32272-8 0-203-12067-1
Descrizione fisica	1 online resource (370 p.)
Collana	Routledge explorations in environmental economics
Altri autori (Persone)	ClarkeRichard H GlowackiBartek Andrzej <1951-> NuttallWilliam J
Disciplina	333.8
Soggetti	Natural resources - Multiple use Helium
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 and indexes.
Nota di contenuto	Front Cover; The Future of Helium as a Natural Resource; Copyright Page; Contents; List of figures and tables; Notes on contributors; Acronyms and abbreviations; Preface; Editors' acknowledgements; Units conversion table; 1. Introduction: Richard H. Clarke, William J. Nuttall and Bartek A. Glowacki; 2. A history of the helium industry: Bo Sears; 3. The US federal helium reserve: Joseph B. Peterson; 4. Helium in Algeria: pioneering helium extraction from LNG: Benjamin Reinoehl; 5. LNG: the global liquefied natural gas market: Andrew Flower; 6. Helium in Russia: Benjamin Hooker 7. India: harnessing helium from the Earth's interior: Nisith K. Das, Rakesh K. Bhandari and C. Mallik8. Helium from the air : the backstop: Richard H. Clarke and Roger Clare; 9. Helium demand: applications, prices and substitution: Zhiming Cai, Richard H. Clarke, and William J. Nuttall; 10. The dynamics of the helium market: William J. Nuttall, Zhiming Cai, Bartek A. Glowacki, Nikolaos Kazantzis and Richard H. Clarke; 11. Closed-cycle refrigeration: minimizing helium demand in

cryogenic applications: Thomas W. Bradshaw and Trevor Miller
12. Medical imaging: why helium prevails?: Adrian Thomas
13. Rising to the challenges of constrained helium supply in cryogenic systems for the research market: John W. Burgoyne and Michael N. Cuthbert; 14. Helium and nuclear fission energy: Richard Stainsby; 15. Helium and fusion energy: Richard H. Clarke and Zhiming Cai; 16. Substituting hydrogen for helium in cryogenic applications: Bartek A. Glowacki; 17. Is there a helium problem?: Ways forward: Ralph Scurlock and Art Francis
18. The future of helium: policy, molecules and machines: William J. Nuttall, Richard H. Clarke and Bartek A. Glowacki
Author index; Subject index

Sommario/riassunto

The book reveals the changing dynamics of the helium industry on both the supply-side and the demand-side. The helium industry has a long-term future and this important gas will have a role to play for many decades to come. Major new users of helium are expected to enter the market, especially in nuclear energy (both fission and fusion). Prices and volumes supplied and expected to rise and this will prompt greater efforts towards the development of new helium sources and helium conservation and recycling.
