1. Record Nr. UNINA9910346800203321 Autore Rao Vikram Titolo Shale Gas: The Promise and the Peril Pubbl/distr/stampa Research Triangle Park, NC:,: RTI International / RTI Press,, 2012 ©2012 Descrizione fisica 1 online resource (182 pages) Collana **RTI Press Publication** 333.8233 Disciplina Soggetti Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Shale gas basics -- So, where did all this gas come from suddenly? --The oil plateau and the precipice beyond -- Gas will remain cheap and displace coal -- What a difference a hundred million years makes --Environmental issues -- Beyond gasland -- Preventing contamination of surface and groundwater -- Zero fresh water usage -- Is natural gas indeed worse for the environment than coal? -- Earthquakes: Should we be concerned? -- Economics of production and use -- Is shale gas production indeed a giant Ponzi scheme? -- Chemical industry prodigals can return -- The ethane dilemma -- The Alaska pipeline is dead; long live the Alaska pipeline -- Transport liquids from gas: Economical now -- Natural gas vehicles: A step in the right direction --Advantage methanol -- Informing on policy -- Turning the Pennsylvania two-(mis)step into a waltz -- Will cheap natural gas hurt renewables? -- Kicking shale into the eyes of the Russian bear -- Shale gas and U.S. national security -- Sustainable development: A double bottom line, plus afterthought -- Flex-fuel fairy tale -- Next steps --Research directions -- Policy directions. Shale gas has the potential to transform the U.S. energy-based Sommario/riassunto economy in the electricity, transportation, and chemical sectors. U.S. success can be expected to translate to Europe and other parts of the world. Shale gas production is uniquely enabled by hydraulic fracturing,

a technique that has come under heavy scrutiny for its potential to cause environmental damage. In this book, Vikram Rao addresses the

issues surrounding shale gas. The book is intended to inform both sides of the fracturing debate, where currently rhetoric is overtaking understanding. Tailored for a non-technical audience -- with technical chemistry and geology information in sidebars -- the book culminates in suggestions for research and guidance for policymaking.