

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910831186203321 |
| Autore | Olah George A (George Andrew), <1927-2017, > |
| Titolo | Beyond oil and gas : the methanol economy / / George A. Olah, Alain Goeppert and G. K. Surya Prakash |
| Pubbl/distr/stampa | Weinheim, Germany : , : Wiley-VCH, , [2009] ©2009 |
| ISBN | 3-527-64463-6 1-282-30247-7 9786612302473 3-527-62780-4 3-527-62781-2 |
| Edizione | [2nd ed.] |
| Descrizione fisica | 1 online resource (352 p.) |
| Disciplina | 333.793 |
| Soggetti | Methanol industry - Economic aspects |
| 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 index. |
| Nota di contenuto | Beyond Oil and Gas: The Methanol Economy; Contents; Preface to the Second Updated Edition; Acronyms and Initialisms; Units and their Abbreviations; 1 Introduction; 2 History of Coal in the Industrial Revolution and Beyond; 3 History of Petroleum Oil and Natural Gas; 4 Fossil Fuel Resources and Their Use; 5 Diminishing Oil and Natural Gas Reserves; 6 The Continuing Need for Carbon Fuels, Hydrocarbons and their Products; 7 Fossil Fuels and Climate Change; 8 Renewable Energy Sources and Atomic Energy; 9 The Hydrogen Economy and its Limitations; 10 The ""Methanol Economy"": General Aspects 11 Methanol and Dimethyl Ether as Fuels and Energy Carriers 12 Production of Methanol: From Fossil Fuels and Bio-Sources to Chemical Carbon Dioxide Recycling; 13 Methanol-Based Chemicals, Synthetic Hydrocarbons and Materials; 14 Conclusions and Outlook; References; For Further Reading and Information; Index |
| Sommario/riassunto | The world is currently consuming about 85 million barrels of oil a day, and about two-thirds as much natural gas equivalent, both derived from non-renewable natural sources. In the foreseeable future, our energy needs will come from any available alternate source. Methanol is |

one such viable alternative, and also offers a convenient solution for efficient energy storage on a large scale. In this updated and enlarged edition, renowned chemists discuss in a clear and readily accessible manner the pros and cons of humankind's current main energy sources, while providing new ways to