1.	Record Nr.	UNINA9910437777503321
	Titolo	Fossil energy : selected entries from the Encyclopedia of sustainability science and technology / / Ripudaman Malhotra, editor
	Pubbl/distr/stampa	New York, : Springer, 2013
	ISBN	1-283-93429-9 1-4614-5722-X
	Edizione	[1st ed. 2013.]
	Descrizione fisica	1 online resource (627 p.)
	Altri autori (Persone)	MalhotraRipudaman
	Disciplina	665.5028 665.5028/6
	Soggetti	Fossil fuels
	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	<ol> <li>Fossil Energy, Introduction 2. Oil And Natural Gas: Global Resources 3. Petroleum and Oil Sands Exploration and Production  4. Petroleum Refining and Environmental Control and Environmental Effects 5. Oil Shale Processing, Chemistry and Technology 6. Developments in Internal Combustion Engines 7. Alaska Gas Hydrate Research and Field Studies 8. Gas to Liquids Technologies  9. Coal and Peat: Global Resources 10. Coal Preparation 11. Coal to Liquids 12. Mining Industries and their Sustainable Management 13. CO2 Reduction and Coal-Based Electricity Generation 14. Pulverized Coal-Fired Boilers and Pollution Control  15. Natural Gas Power 16. CO2 Capture and Sequestration Index.</li> </ol>
	Sommario/riassunto	The word sustainability shares its root with sustenance. In the context of modern society, sustenance is inextricably linked to the use of energy. Fossil Energy provides an authoritative reference on all aspects of this key resource, which currently contributes to nearly 85% of global energy consumption. Gathering 16 peer-reviewed entries from the Encyclopedia of Sustainability Science and Technology, this volume represents an essential resource for scientists and engineers working on the development of energy resources, fossil or alternative. Written by recognized authorities in the field, the chapters provide comprehensive, yet concise coverage of fundamentals, current areas of

research, and goals for the future to support real progress in sustainability science and technology. Presents up-to-date estimates of fossil reserves and resources for coal, gas, and petroleum Covers recovery technologies for unconventional resources such as shale gas and shale oil, coal-to-liquids, gas-to-liquids, and natural gas hydrates Describes current developments aimed at improving efficiency and minimizing environmental impact, such as new designs for internal combustion engines and technologies for scrubbing emissions Reviews global developments in carbon capture and sequestration Provides an excellent introduction for those entering the field, as well as new insights for advanced researchers and industry experts.