1. Record Nr. UNINA9910826173603321

Autore	Breeze Paul
Titolo	Coal-fired generation / / Paul Breeze
Pubbl/distr/stampa	Amsterdam, Netherlands : , : Academic Press, , 2015 ©2015
ISBN	0-12-804056-4 0-12-804006-8
Edizione	[1st edition]
Descrizione fisica	1 online resource (99 p.)
Collana	Power Generation Series
Disciplina	333.793209049
Soggetti	Coal-fired power plants Coal - Combustion Electric power production
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.
Nota di contenuto	Front Cover; Coal-Fired Generation; Copyright Page; Contents; 1 An Introduction to Coal-Fired Power Generation; The History of Coal-fired Power Generation; Global Electricity Production from Coal; 2 Coal Types and the Production and Trade in Coal; Coal Resources and the Coal Trade; Coal Processing and Cleaning; 3 Coal-Burning Technology; Coal Handling; The Development of the Power Plant Boiler; Modern Boiler Design; Sub-critical and Supercritical Boilers; 4 Steam Turbines and Generators; Generators; 5 Fluidized Bed Combustion and Coal Gasification; The BFB Reactor The Circulating Fluidized BedPressurized Fluidized Bed Combustion; Coal Gasification; 6 Coal Combustion and the Environment; Pre-Combustion Coal Cleaning; Combustion Strategies to Reduce Nitrogen Oxide Production; Sulfur Dioxide Capture; Nitrogen Oxide Capture; Combined Sulfur and Nitrogen Oxide Removal; Particulate (Dust) Removal; Mercury Removal; 7 Carbon Capture and Storage; Biomass Cofiring; Post-Combustion Capture of Carbon Dioxide; Pre-Combustion Capture of Carbon Dioxide; Carbon Capture and Oxyfuel Combustion; Chemical Looping; Carbon Dioxide Compression and Transportation Carbon Dioxide Sequestration8 The Cost of Electricity Generation from

	Coal-Fired Power Stations; Capital Cost; Fuel Costs; The LCOE from a Coal-Fired Power Station
Sommario/riassunto	Coal-Fired Generation is a concise, up-to-date and readable guide providing an introduction to this traditional power generation technology. It includes detailed descriptions of coal fired generation systems, demystifies the coal fired technology functions in practice as well as exploring the economic and environmental risk factors. Engineers, managers, policymakers and those involved in planning and delivering energy resources will find this reference a valuable guide, to help establish a reliable power supply address social and economic objectives. Focuses on the evolution of the traditio