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Nota di contenuto	Combustion Residues; Contents; Preface; List of Contributors; 1 The Current and Future Nature of Combustion Ashes; 1.1 Introduction; 1.2 Coal: the Principal Source of Combustion Residues; 1.3 Coal Ash: the Principal Combustion Residue; 1.4 Other Forms of Combustion; 1.5 Co-combustion Ashes; 1.6 Biomass and Waste; 1.7 Other Fuel Ashes; 1.8 Gasification; 1.9 Summary; 2 Established Uses of Combustion Residues; 2.1 Introduction; 2.2 Disposal Approaches for Three Prominent Combustion Residues; 2.3 PFA and its Agricultural Applications; 2.4 Uses of Fly Ash in Concrete 2.5 Application of Fly Ash in Grouts 2.6 Use of Fly Ash in Fill and Pavement Construction; 2.7 PFA as an Ameliorator of Liquid and Solid Toxic Wastes; 2.8 Commercial Building Products Incorporating PFA; 2.9 The Use of PFA in Ceramic Products; 3 Limitations of Combustion Ashes: 'From Threat to Profit'; 3.1 Introduction; 3.2 Technical Quality; 3.3 Environmental Quality; 3.4 Health and Safety; 4 Novel Products and Applications with Combustion Residues; 4.1 Introduction; 4.2 New Developments in Cement and Concrete Applications; 4.3 Combustion

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4.4 Zeolites; 4.5 Reinforcing Materials: Fibres Containing Fly Ash; 4.6 Glass Polyalkenoate Cements; 4.7 Fire-resistant Materials; 4.8 Fly Ash as a Replacement for Mineral Fillers in the Polymer Industry; 4.9 Geopolymers; 4.10 Carbon Products; 4.11 Recovery of Values from Combustion Ashes; 5 Novel Products - from Concept to Market; 5.1 Introduction; 5.2 Novel Products - Basic Economic Considerations; 5.3 Specifications and Standards; 5.4 Legislation and Taxes; 5.5 Customer Acceptance; 5.6 Environmental Acceptance Schemes; 5.7 Concluding Remarks; Index

Sommario/riassunto

The first book on novel products derived from the new generation of combustion ashes, *Combustion Residues - Sustainable Applications* discusses the nature of ashes derived from coal co-combustion, biomass, and other fuels in traditional and stand-alone power plants and municipal waste incinerators. In addition, the book examines the development of novel commercial products incorporating such ashes, including the importance of technical and environmental standards, marketing strategies, and promotion.
