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Nota di contenuto	Biogas from Waste and Renewable Resources; Contents; Preface; Preface to the Second Edition; Symbols and Abbreviations; Acknowledgments; Part One: Potential and History; General Thoughts about Energy Supply; 1: Energy Supply-Today and in the Future; 1.1 Primary Energy Sources; 1.2 Secondary Energy Sources; 1.3 End-Point Energy Sources; 1.4 Effective Energy; 2: Energy Supply in the Future-Scenarios; 3: Potential for Transforming Biomass into End-Point Energy Sources; 3.1 Amount of Available Area; 3.2 Theoretical Potential; 3.2.1 C3 Plants (Energy Plants); 3.2.2 C4 Plants and CAM Plants 3.2.3 Micro-algae3.3 Technical Potential; 3.4 Economic Potential; 3.5 Realizable Potential; 4: History and Status to Date in Europe; 4.1 First Attempts at Using Biogas; 4.2 Second Attempts at Using Biogas; 4.3 Third Attempts at Applying Biogas; 4.4 Status to Date and Perspective in Europe; 5: History and Status to Date Worldwide; 5.1 History and

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5.2 History and Status to Date in India5.3 Status to Date in America; 5.4 Status to Date in the CIS States; 6: General Aspects of the Recovery of Biomass in the Future; Part Two: Substrates and Biogas; Introduction; 7: Substrate; 7.1 Agricultural Products; 7.1.1 Liquid Manure and Co-substrates; 7.1.2 Maize as the Only Main Crop; 7.1.3 Bioenergy of Forage Beets; 7.1.4 Grass; 7.1.5 Sorghum; 7.1.6 Crop Rotations; 7.1.6.1 Forage Rye + Maize; 7.1.6.2 Winter Barley + Maize; 7.1.6.3 Hybrid Rye + Sorghum; 7.1.6.4 Rye + Annual Ryegrass + Maize; 7.1.6.5 Perennial Ryegrass + Sorghum
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11.10 Parameter: Redox Potential

Sommario/riassunto

The leading book on the market just got better: With its unique approach covering all aspects of setting up and running a biogas plant, this new edition has been expanded to include recent advances in biomass processing.The author is a key player in the field, who has designed numerous small- and industrial-scale biogas plants, and who is also a long-time lecturer on biogas production, thus combining didactical skill with real-life expertise. As such, he covers both the biological and technical aspects of biogas generation. The full range of biogas substrates and processing modes is explai