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Nota di contenuto	Introduction -- Production Functions with Electricity: The Enterprise Level -- Production Functions with Electricity: The Sectoral Level -- The Supply and Demand Models Based on Electricity Consumption -- Production Functions with Electricity: The Industrial Level -- E-GDP Functions for a National Economy -- The Characteristics of Gene in an Economy -- Energy Intensity and Electrification -- Features of Electricity Consumption During the Economic Development Stages -- Up-industrialization -- E-GDP Functions for the World and Particular Countries -- Macroeconomic and Policy Models -- Updates of the Input-output Table and the Electricity Input-output Table -- Impact Factors of Industrial Electricity Demand -- Models of Electricity with Capital and Labor.
Sommario/riassunto	Electricity Economics: Production Functions with Electricity studies the production output from analyzing patterns of electricity consumption. Since electricity data can be used to measure scenarios of economic performance due to its accuracy and reliability, it could therefore also be used to help scholars explore new research frontiers that directly and indirectly benefits human society. Our research initially explores a similar pattern to substitute the Cobb–Douglas function with the production function with electricity to track and forecast economic activities. The book systematically introduces the theoretical frameworks and mathematical models of economics from the perspective of electricity consumption. The E-GDP functions are

presented for case studies of more than 20 developed and developing countries. These functions also demonstrate substantial similarities between human DNA and production functions with electricity in terms of four major characteristics, namely replication, mutation, uniqueness, and evolution. Furthermore, the book includes extensive data and case studies on the U.S., China, Japan, etc. It is intended for scientists, engineers, financial professionals, policy makers, consultants, and anyone else with a desire to study electricity economics as well as related applications. Dr. Zhaoguang Hu is the vice president and chief energy specialist at the State Grid Energy Research Institute, China. Zheng Hu is a PhD candidate at the Center for Energy and Environmental Policy, University of Delaware, USA.
