Pricing and Forecasting Carbon Markets: Models and Empirical Analyses

Models and Empirical Analyses. Authors: Bangzhu, Zhu, Chevallier, Julien. Free Preview. Offers a step-by-step description of advanced forecasting techniques for the carbon price. With empirical emphasis for practical policy guidance. This book applies the multidisciplinary approaches of econometrics, statistics, finance and artificial intelligence for pricing and forecasting the carbon market in the context of managerial issues. It explores the related issues of pricing and forecasting the carbon market using theoretical models and empirical analyses, demonstrating how the carbon market, as a policy-based artificial market, is complex and influenced by both the market mechanisms and the external heterogeneous environments. This paper develops theoretical and empirical models to analyze the impacts of carbon pricing on electricity supply under two scenarios, namely, marketization and regulation. It is concluded that the electricity market reform is a prerequisite for the development of carbon pricing. Without market-oriented reforms of electricity pricing in China, carbon pricing might lead to a shortage in electricity supply. According to the electricity pricing model, we conclude that the generation cost and electricity price are positively correlated while the generation cost and generation hours of the generation unit are negatively correlated. Hence, the variable cost of every thermal power plant can be estimated as follows. 

Modeling Marketing Systems

Empirical Response Models
Marketing Management Tasks
Marketing Information Model-Based Planning and Forecasting
Plan of the Book

2. Markets, Data, and Sales Drivers

Finally, we present an approach to planning and forecasting based on market response models and show how ETS is instrumental to it. Modeling Marketing Systems. The principal focus of ETS analysis in marketing is on the relationship between marketing mix variables that are controlled and performance measures, such as sales or market share, that represent the outcomes of marketing plans. Consider a simple marketing system where there is little or no competition, so that the firm and industry are identical. This book applies the multidisciplinary approaches of econometrics, statistics, finance and artificial intelligence for pricing and forecasting the carbon market in the context of managerial issues. It explores the related issues of pricing and forecasting the carbon market using theoretical models and empirical analyses, demonstrating how the carbon market, as a policy-based artificial market, is complex and influenced by both the market mechanisms and the external heterogeneous environments. By integrating the features of analytical systems, it offers insights to further our scientific under