



## **January 2022 – Volume 14, Number 29**

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**ISSN: 2211-8691**

**<http://www.centerforenergyandvalue.org/publications.html>**



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The Energy and Value Letter brings together academics and practitioners worldwide to discuss timely valuation issues in the energy sector. It publishes news from the Centre for Energy and Value Issues (CEVI), its linked organizations and others (including calls for papers), columns on topical issues, practitioners' papers: short articles from institutions, firms, consultants, etcetera, as well as peer-reviewed academic papers: short articles on theoretical, qualitative or modeling issues, empirical results and the like. Specific topics will refer to energy economics and finance in a broad sense. The journal welcomes unsolicited contributions. Please e-mail to [w.westerman@rug.nl](mailto:w.westerman@rug.nl) (Wim Westerman), a copy of a news item, column or a completed paper. Include the affiliation, address, phone, and e-mail of each author with your contribution. A column or news item should not have more than 600 words and a paper should not exceed 5,000 words, albeit that occasionally larger pieces can be accepted.



## A new CEVI year

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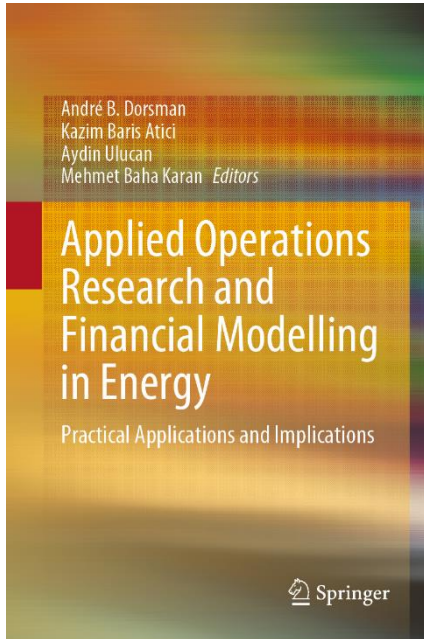
At the start of a new year we look back at a productive CEVI year. Although Corona forced us to have an on-line conference, we had a well-organized conference in Louvain (Belgium), organized by James Thewissen. In the fall of 2021, our eighth CEVI book, titled: Applied Operations Research and Financial Modelling in Energy, was published. In that book we link Energy and Finance with Operations Research.

We thank Johannes Glaeser of Springer Verlag and his team for the cooperation on this new CEVI book. I am happy that he himself and the contact chapter authors gave their permission to reproduce the book overview and the chapter abstracts in this EVL issue. I hope that this will encourage you to take a look. With a rich variation in terms of topics (albeit within the book scope of course) as well as authors (both CEVI “members” and “non-members”), I hope that also this book will reach a large audience.

I am happy to announce that the Call for Papers for the ninth CEVI book with Springer, titled: The ESG Framework and the Energy Industry: Embracing change, is included in this issue of the Energy and Value Letter. I thank James Thewissen for taking the initiative, as well as Özgür Arslan-Ayadin and Wim Westerman for helping James and myself with completing the book proposal. While we are already targeting prospective authors, we welcome spontaneous chapter proposals and we are happy to have already received some of these. Your deadline for sending proposals is March 1, 2022. Please send your proposals to James Thewissen, [james.thewissen@uclouvain.be](mailto:james.thewissen@uclouvain.be).

The deadline for the abstract of May 1 also nicely coincides with the deadline for sending in your paper (presentation proposal) for the 15<sup>th</sup> ISINI conference to be held in Wroclaw (Poland) on September 1-3, 2022. Joost Platje of WSB University in Wroclaw and chairman of ISINI will host the conference. We as CEVI look forward to participate in this conference again and therefore the board hopes that many of us can join. Please inform Wim Westerman: [w.westerman@rug.nl](mailto:w.westerman@rug.nl). Note that the presumed format of the conference is hybrid (so both physical and online), but of course ISINI cannot give guarantees in this respect.

On behalf of the CEVI board I wish you a happy and productive 2022.



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A.B. Dorsman, K.B. Atici, A. Ulucan, M.B. Karan (ed.)

Applied Operations Research and Financial Modelling in Energy Practical Applications and Implications

- Presents a collection of the latest work on operations research and financial modelling in energy
- Sheds new light on the energy shift toward renewable energy
- Presents case studies from several countries

This book on Applied Operations Research and Financial Modelling in Energy (AORFME) presents several applications of operations research (OR) and financial modelling. The contributions by a group of OR and Finance researchers focus on a variety of energy decisions, presenting a quantitative perspective, and providing policy implications of the proposed or applied methodologies.

The content is divided into three main parts: Applied OR I: Optimization Approaches, Applied OR II: Forecasting Approaches and Financial Modelling: Impacts of Energy Policies and Developments in Energy Markets. The book appeals to scholars in economics, finance and operations research, and to practitioners working in the energy sector.

This is the eighth volume in a series of books on energy organized by the Centre for Energy and Value Issues (CEVI). For this volume, CEVI collaborated with Hacettepe University's Energy Markets Research and Application Center. The previous volumes in the series are: Financial Aspects in Energy (2011), Energy Economics and Financial Markets (2012), Perspectives on Energy Risk (2014), Energy Technology and Valuation Issues (2015), Energy and Finance (2016), Energy Economy, Finance and Geostrategy (2018), and Financial Implications of Regulations in the Energy Industry (2020).





## **Ch. 1 Introduction: Applied Operations Research and Financial Modeling in Energy**

André Dorsman, Kazim Baris Atici, Aydin Ulucan, Mehmet Baha Karan

### **Abstract**

The decisions in the energy sector usually involve many sources of uncertainty and risk, varying time frames, and a large number of stakeholders, which makes the application of Operations Research (OR) methods very suitable. Financial aspects of those decisions are one of the main problems to be handled since energy investments are usually capital intensive. Based on the complex and dynamic nature of the energy sector, this volume aims to contribute to the both academic and practitioner sides of it by presenting a quantitative perspective on a variety of energy decisions with a variety of OR methods as well as providing policy implications of the proposed or applied methodologies.

**Keywords:** Operations Research, Financial Modeling, Energy Decisions, Energy Finance

## **Ch. 2 Optimization Methods on Electricity Generation and Transmission Expansion Planning Problem**

Mahdi Noorizadegan, Alireza Shokri

### **Abstract**

As a powerful analytical method, optimisation has been used for energy planning problems for a long time. Recent developments in computational capabilities have made it possible to include complex assumptions such as integration of natural gas and power networks, and uncertainty of various parameters with reasonable details in one energy planning problem. It is important to study the integrated natural gas and power networks to reduce the impact of variation in power generation of renewable sources. Moreover, advantages of renewable energy resources have been encouraging many countries to assign a large share of their energy portfolio to these resources. Due to uncertainty, finding a reliable and secure combination of technologies including thermal and renewable sources is significantly complicated. Approaches such as chance constrained programming and robust optimisation have been used to handle reliability and uncertainty of renewable resources and demand. Non-linearity of natural gas network leads to complex energy planning problems. In order to provide a practical pathway to carry out an energy planning problem, we categorise and discuss important topics in energy planning under three main subjects: problem settings and model, uncertainty and solution methods. We suggest a relatively comprehensive optimisation model, which includes key features of an integrated power generation and transmission expansion plan and natural gas network. Then, to deal with uncertainty of net load and equipment failure, we suggest robust optimisation and a cutting plane-based method. Finally, we review solution methods used to solve similar problems.

**Keywords:** Power generation expansion Renewable sources Uncertainty Integrated networks



### **Ch. 3 Demand-Driven Electricity Supply Options of Electric Vehicles: Modelling, Simulation, and Management Strategy of Public Charging Stations**

Elvin Coban, Gokturk Poyrazoglu

#### **Abstract**

In this chapter, we discuss the challenges and research opportunities in the demand-driven electricity supply options of electric vehicles (EVs) at public charging stations (CSs). EVs have gained increased attention in recent years due to the need for clean energy sources and growing global warming discussions. Major automakers have already stated that R&D efforts for gasoline and diesel vehicles will be ceased by 2025. Even if, these may result in the rapid adoption of EVs in upcoming years, there are still open problems with the public CSs restricting the widespread use of EVs. In this study, we discuss some of the strategic, tactical, and operational level problems related to public CSs. We explain an existing mathematical model computing the location of public CSs and discuss possible extensions. Once the locations of public CSs are fixed, we explain how to model a public CS by simulation varying the number and type of chargers. We also report the energy consumption and utilization of chargers and introduce different charging policies (with/without valet service). We also discuss different pricing models and remaining open problems on how to best design public CSs.

**Keywords:** Charging Station, mathematical model, simulation, electric vehicles, charging unit

### **Ch. 4 A Review on Smart Energy Management Systems in Microgrids Based On Power Generating and Environmental Costs**

Özgür İcan, Taha Buğra Çelik

#### **Abstract**

Humanity is leaving an age behind which could be summarized as the industrialization of nations based on fossil fuels ie. conventional energy resources which have also brought an environmental burden along with themselves. While the world leadership has been arguing about the emission rights and seemingly reaching a non-consensus, economies have been hit by an unexpected pandemic and this global health crisis which has deep environmental roots has alerted decision-makers once more that the already dying fossil energy resources has to be quickly replaced by their environmentally sustainable counterparts: renewable energy systems. As a general term, renewable energy systems may refer to many systems of different compositions and scales, which can produce and dispatch power from renewable energy resources. In order to be in a state of full preparedness for a future without fossil fuels, human civilization needs a better understanding of how renewable systems work and how they can be operated and maintained more effectively and efficiently. In order to achieve this multi-paradigm and interdisciplinary challenge, more powerful and robust approaches are needed. In this paper, we have investigated the most obvious cases of renewable energy installations which are usually classified under the category of Microgrids, and the management systems they rely on called “smart energy management systems” (SEMS). The approach exploited here, can be summarized as finding a common ground for comparing computational frameworks employed within these systems and determining the advantages of SEMS, which can operate effectively and efficiently in the context of power generating cost and environmental cost.

**Keywords:** Renewable Energy, Microgrids, Smart Energy Management Systems, Computational Optimization, Power Generating Cost, Environmental Cost



## **Ch. 5 Measuring efficiency and productivity change in the Turkish electricity distribution sector**

Yetkin Cinar, Tekiner Kaya

### **Abstract**

This chapter measures the efficiency levels of electricity distribution companies (EDCs) in Turkey by utilising Data Envelopment Analysis (DEA) method and determines how productivities have changed via the Malmquist Productivity Indices (MPI) in recent years. The study additionally focuses on introducing the potential environmental factors' effect on efficiency based on a Tobit Analysis. Furthermore, the minimum optimal operating scale and resources that are key in efficiency have been analysed and evaluated. For all these analyses, panel data for the Turkish electricity distribution sector, consisting of 21 EDCs from 2015 to 2019, are utilised. The technical and scale efficiency scores for five years and the technological and efficiency changes every two years within this period have been calculated and presented. The results mainly demonstrate that the average efficiency scores of EDCs decreased slightly in the analysis period. While reaching their efficiency scores, the EDCs assigned the majority of weights to transformer capacity as input and number of employees as output. Additionally, our findings assert that the factors of energy loss and commercial and industrial electricity delivered affect efficiencies significantly, while the factors related to the development and urbanisation status of the regions do not.

**Keywords:** Electricity distribution companies Efficiency Turkey Data Envelopment Analysis Tobit

## **Ch. 6 Price and Volatility Forecasting in Electricity with Support Vector Regression and Random Forest**

Mahmut Kara, Kazim Baris Atici, Aydin Ulucan

### **Abstract**

Liberalized electricity market players all over the world face a significant challenge due to the volatile and uncertain nature of these markets. Therefore, price and volatility forecasting in those markets are as remarkably of interest as other commodity markets. There exists a recent and increasing tendency in the literature to apply machine-learning methodologies to those markets' data and various methods have been proven effective to produce highly accurate forecasts. The Turkish electricity market is one of the recently liberalized and emerging markets. In this research, we aim to carry out price and volatility forecasting for the Turkish day-ahead electricity market with Support Vector Regression (SVR) and Random Forest (RF) to observe the effectiveness of the methods. A rolling forecasting scheme is proposed and experimented with using hourly prices between 2013 and 2019. The performance metrics of the SVR model are compared with those of naive and RF estimations. Furthermore, the sensitivity of the proposed model to feature reduction is also discussed. Overall, the results reveal SVR as an effective tool for electricity price forecasting in the Turkish electricity market, whereas RF modeling is found to be slightly better in volatility forecasting.

**Keywords:** Electricity Markets; Price Forecasting; Volatility Forecasting; Support Vector Regression; Random Forest



## Ch. 7 Forecasting the Hydro Inflow and Optimization of Virtual Power Plant Pricing

Sezer Cabuk, Ozenc Murat Mert, A. Sevtap Selcuk-Kestel, Erkan Kalayci

### Abstract

Hydro inflow forecasting is crucial for effective hydro optimization, virtual power plant pricing, volume risk management, and weather derivatives pricing in the electricity markets. Predicting hydro inflow allows the decision-makers to economically use water for optimal periods, quantify volume risk and determine effective portfolio management strategies. This study aims pricing a hydroelectricity power plant as a Virtual Power Plant based on Turkish energy markets. For pricing of such a non-standard option, inflow and price scenarios and optimization model with constraints are performed. For the hydro inflow forecasting utilized for the optimization model, SARIMAX with precipitation as an exogenous variable is applied. In addition to the point forecasts, we generate various inflow scenarios based on the residuals as a stochastic process for defined VPP. Moreover, a hydro optimization problem where the objective function maximizes the expected value of generation by tracing generated inflow and price scenarios is made. Price scenarios are simulated using the hourly behavior of historical Day-Ahead Market. The optimization outputs are evaluated according to different prices and inflow levels. For a defined VPP, Volume at Risk measure is defined to measure the risky volume for the valuation of VPP.

**Keywords:** Hydro inflow forecast Virtual power plant Optimization Sarimax Volume at risk

## Ch. 8 Comparing the Renewable Energy Technologies via Forecasting Approaches

Fazıl Gökgöz, Fahrettin Filiz

### Abstract

Renewable energy continues to gain importance in energy systems. Renewable energy generation is mainly affected by environmental impacts. As a result of this, more complex energy forecasting models are needed in comparison to fossil sources. Renewable energy forecasting models are developed with different techniques. Since the renewable energies have different characteristics, the success of the forecasting techniques varies depending on the type of renewable energy. The chaotic nature of renewable energy defects the success of the forecasting results. Renewable energy generation data with wind energy and hydro energy were collected from Turkey's renewable energy system. We have developed forecasting models with renewable energy generation with long short-term memory (LSTM) and gated recurrent unit (GRU) which are special kinds of deep learning techniques, multiple linear regressions, and polynomial regression. This study evaluates deep learning models and statistical models. It is quite important to compare and evaluate renewable energy prediction models. We evaluate the forecasting models using evaluation metrics. The models are compared with Mean Absolute Error (MAE) and Mean Square Error (MSE). This paper provides a renewable energy forecasting method based on forecasting models to explore its effect on wind energy and hydro energy.

**Keywords:** Renewable energy Forecasting Deep learning Turkey





## Ch. 9 Valuing Energy Real Options with Regime Shifts

Turalay Kenc, Mehmet Fatih Ekinici

### Abstract

This paper uses a real options approach to value energy projects whose cash flows follow a normal distribution and subject to macroeconomic risks. Large and irreversible energy investments are usually modelled in real options frameworks with lognormal distributions. This line of research omits two important factors for energy investments. They are the existence of negative cash flows and the impact of business cycles. We developed a unified framework to capture the implications of these omitted features. The framework is based on an arithmetic Brownian motion (ABM) process for the dynamics of cash flows with regime shifts. Our numerical analysis provide results on investment triggering cash flow critical values, probability of investing and optimal investment time. Comparing these results with those obtained under a conventional real option value framework with geometric Brownian motion (GBM) suggests that there are significant differences across these models. The results indicate that ABM investors are more likely to invest within a specified period. Numerical analysis also points that macroeconomic risks are important for investors.

**Keywords:** arithmetic Brownian motion, energy irreversible investments, real options, cash flows modelling

## Ch. 10 Understanding the Electricity Switching Behavior of Industrial Consumers: an Empirical Study on an Emerging Market

Murside Erdogan, Selin Metin Camgoz, Mehmet Baha Karan, M. Hakan Berument

### Abstract

Starting from the liberalization of the electricity market in Turkey, the annual switching rates have remained at low levels for both residential and industrial consumers. This study aims to investigate the supplier switching behavior of large scale industrial consumers in the Turkish Electricity market with an emphasis on behavioral factors. The data were collected from a total of 83 companies including Organized Industrial Zone (OIZ) and non-OIZ with the criterion of consuming more than 10,000,000 kWh. The survey includes the items for risk of switching, cost of switching, the attractiveness of switching, perceptions of the service quality, and market competition. The findings of binary logistic regression model revealed that the risk of switching and attractiveness of switching is significantly associated with the probability of switching behavior. That is, one-unit increases in the risk of switching and attractiveness of switching (higher scores denote for unattractiveness) are found to decrease the likelihood of switching the current electricity supplier. Robustness tests were conducted by utilizing binomial logistic estimations for OIZ and non-OIZ companies separately. The findings yielded that, for OIZ companies, the odds of electricity supplier switching behavior is negatively associated with risk of switching and attractiveness of switching; whereas for non-OIZ companies, the odds of switching behavior are found to be related with the risk of switching and perceptions of physical service qualities. The results of this study are particularly crucial for electricity suppliers, regulatory agencies, and policymakers.

**Keywords:** Energy markets, electricity supplier switching behavior, Electricity retail services, industrial consumers



## Ch. 11 Does the market value clean innovation? Evidence from US listed firms

Antoine Dechezleprêtre, Cal B. Muckley, Parvati Neelakantan

### Abstract

This study brings new insights to the corporate environmental – financial performance debates. We examine the value that capital markets accord to low-carbon (‘clean’) and fossil fuel (‘dirty’) innovation over time in the United States. To address this question, we employ a patent data set sourced from the US Patent office pertaining to 2526 US listed firms for the period 1995 to 2012. Informed by seminal literature that accords a market evaluation to firm-level eco-efficiency (e.g., Guenstar et al., 2011) and knowledge stock (e.g., Hirshleifer et al., 2013), we disaggregate innovation measurements (e.g., Deng et al., 1999 and Gu, 2005) of US firms’ knowledge stock into constituent parts: clean, dirty and other innovation. We, then, elicit their market evaluations over time. We find that the capital market accords a 1.20% higher valuation to the firms producing environment-friendly innovation and decreases the market value of firms producing fossil-based technologies to the tune of 0.45%, on an average. In the specifications including a range of firm-level controls, the negative association between fossil-based innovation and market value becomes statistically insignificant; however, the clean innovation premium remains unchanged.

**Keywords:** Innovation research and development Patents Citations Clean Technology Dirty technology Market value

## Ch. 12 The power grid: from a technical to a finance issue. Who bears the financial risk?

André B. Dorsman, Kees van Montfort

### Abstract

ESMA (European Securities and Markets Authority) published in December 2014 a document about the regulation norms. In that document the ESMA proposed to skip the exemption option for energy companies for the guidelines of the financial instruments. From Jan. 3 2018, MiFID II (Markets in Financial Instruments II) expanded the catalogue of financial instruments to energy companies. MiFID II requires that – among others – energy companies have the obligations to include the product in position limits, tests for fulfilment of conditions for exclusion, and inclusion in the supervisory regime under the EMIR (European Market Infrastructure Regulation). The MiFID II is obligatory for all EU members. Although there is a tendency for unbundling the several tasks in the energy sector, in some countries – like France – all tasks are concentrated in the hand of the state. At the other hand, in the Netherlands, Germany and the UK the tasks are divided among several parties. The financial relations between these parties are (partly) financial instruments. This study is important for the electricity market. In this study, we describe the financial relations between the several parties in the electricity market in the Netherlands. The focus will be on the question of who bears the financial risks on the future cash flows. We describe the working of the clearing and the margin requirements for a better understanding. This has never been done for any country. In the light of MiFID II, this analysis can also be interesting for other EU countries.

**Keywords:** MiFID II , Price Risk, Quantity Risk, Counterparty Risk and Clearing House.



## **Preliminary Call for Papers**

### **ISINI 2022 conference (Wroclaw Poland, 1-3 September 2022)**

The fifteenth international conference of the International Society for the Intercommunication of New Ideas (ISINI) will take place at the WSB University in Wroclaw, Poland on Thursday 1 – Saturday 3 September 2022. You are invited to submit full papers or summaries that are within the scope of ISINI.

The purpose of the Society is: to foster the discovery and dissemination of new ideas, in particular in economics and other social sciences, to test these ideas and to study the application to problems of the real world. The Society aspires to realize its purpose by creating and upholding an environment where economists meet, consult and cooperate with scholars from other disciplines.

A major instrument of ISINI is its lively conference. So next to the usual economists, we hope to welcome scholars in Wroclaw who are working in other social sciences (including law, legal science, history and political science), who are cooperating with economists in common research projects or who are doing research in areas where both sides could benefit from an exchange of ideas.

The organizers invite scholars, young and old, to submit papers around several thematic focal points:

**(to be announced)**

Specific information can be found on: <http://www.isini.info/>

Please feel free to spread the information in your network.

### **!!Special CEVI session on “Energy and Valuation Issues”!!**

The objective of the CEVI session is to bring together academics and practitioners from all over the world to focus on timely energy finance and investments, financial performance, energy markets and valuation issues in the energy sector worldwide. Specific topics refer to energy issues, and include:

Financial Regulation; Financial Markets; Financial Risks; Asset Pricing; Value at Risk; Capital Structure; Sourcing Capital; Corporate (Re-) Structuring; Corporate Governance; Behavioural Finance; Financial Performance; Cost Control; Financial Accounting; Fiscal and Legal Issues.

Please submit your papers (completed or nearly completed) or participation interest via e-mail to: Dr. Wim Westerman ([w.westerman@rug.nl](mailto:w.westerman@rug.nl)) and Dr. Johan van Ophem ([johan.vanophem@wur.nl](mailto:johan.vanophem@wur.nl)).

The submission deadline is May 1, 2022. Notification of acceptance will be made shortly hereafter.



## **THE ESG FRAMEWORK AND THE ENERGY INDUSTRY: EMBRACING CHANGE (Call for Papers 9<sup>th</sup> CEVI book with Springer)**

*James Thewissen et al.*

Environmental, social, and governance (ESG) concerns are now high on the agendas of policy-makers, firms, investors, and academics worldwide. Climate change, social inequality, biodiversity loss, and corporate governance scandals regularly attract global attention due to the widespread and growing recognition of their impact on business and economic activities. Particularly, in 2020, COVID-19 has highlighted the impact of environmental, social and employee standards on firms' performance. In fact, recent empirical evidence shows that the ESG paradigm is increasingly affecting the value of companies. For instance, leading institutional investors are progressively tracking the greenhouse gas emissions of listed firms and now demand compensation for their exposure to carbon emission risk<sup>1</sup>. The adherence to ESG principles cannot be ignored and it needs to be better understood how following ESG principles impacts firm value and, more importantly, what are the consequences if a company fails at adhering to such principles.

The energy sector, in particular, has raised concerns on the value-relevance of ESG principles.<sup>2</sup> Due to reliance on fossil fuels and the related carbon emissions, the energy industry is one of the leading actors in the climate change challenges.<sup>3</sup> While until recently ESG mainly referred to the impact of a firm's activities on the environment, the COVID-19 pandemic and other events have progressively shifted the ESG focus to the impact of the social and governance components on firm value. Against this backdrop, today's energy industry is not only exposed to considerations regarding its impact on the environment, but the sector now also has to reconsider its social and governance policies in order to meet ESG expectations. Yet, prior literature remains silent on such influences on the value of energy firms.

In this vein, energy firms need to be proactive and holistic in addressing ESG issues for creating financial value. The industry has been working to tackle this challenge. For example, there are several trade organizations providing resources for their industry members to help them implement and report on ESG initiatives. Meanwhile, the Sustainability Accounting Standards Board (SASB) has developed guidelines specific to the industry. While these initiatives are showing the energy's industry willingness to meet investors' demands, it may be that much more is expected from the sector by both the society at large.

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<sup>1</sup> Refer to: Bolton, P., Kacperczyk, M., Do investors care about carbon risk?, *Journal of Financial Economics*, 2021, in press, <https://doi.org/10.1016/j.jfineco.2021.05.008>.

<sup>2</sup> For more information, see: Flin, R., Mearns, K., O'Connor, P., & Bryden, R. (2000). Measuring safety climate: identifying the common features. *Safety science*, 34(1-3), 177-192 and Walsh, B. (2010). Oil Spill: A damning indictment of BP's safety culture. Retrieved from <http://science.time.com/2010/10/26/oil-spill-a-damning-indictment-of-bps-safety-culture>

<sup>3</sup> The International Energy Agency estimates that 39% of CO<sub>2</sub> emissions come from electricity and heat production, ([https://www.iea.org/media/statistics/Energy\\_and\\_CO2\\_Emissions\\_in\\_the\\_OECD.pdf](https://www.iea.org/media/statistics/Energy_and_CO2_Emissions_in_the_OECD.pdf))





In this book, we contribute to a better understanding of the importance of ESG principles for the value of firms in the energy industry. In particular, we highlight how the energy industry is embracing this change in the light of regulations and how it addresses each ESG issues, followed by Economic Incentives and Market-Based Policies for ESG Activities in Energy Sector and lastly the value creation process of energy firms through environmental, social and governance initiatives. These issues are elaborated within the frameworks of, but not limited to: financial markets, financial risks, asset pricing, value at risk, capital structure, capital budgeting, corporate (re)structuring, corporate governance, behavioral finance, financial performance, asset pricing, cost control, financial accounting, fiscal issues, institutions, governance and legal aspects.

## Planning schedule

Sept. 2021	Presentation proposal to the CEVI board
Sept. – Dec. 2021	Finalization proposal by CEVI board
Dec. 2021	Send proposal to Springer
Feb. – March 2022	Ask contact authors for title + abstract, deadline May 1
Sept. – Nov. 2022	Authors write first draft, deadline Nov. 1
Dec. 2022 – Jan. 2023	Two reviewers per chapter, deadline Feb. 1
Feb. – March 2023	Authors write second draft, deadline April 1
April 2023	Second review round, deadline May 1
May 2023	Authors can present their chapters as papers on CEVI conference
May – June 2023	Editors finalize chapter 1, editorial review of all chapters
July 2023	Finish preface/foreword by invited senior practitioner
August – Nov. 2023	Editorial process Springer, hard copy ready in Dec. 2023