



## **March 2013 – Volume 5, Number 1**

- **The CEVI board explains its “takeover” of the EVL**
- **CEVI president André Dorsman: “CEVI reinvents itself”**
- **Call for Papers 4<sup>th</sup> CEVI conference, Northern Illinois University (NIU), Chicago, May 15-17, 2013**
- **Paul Prabhaker invites CEVI warmly to NIU and Chicago**
- **Mehmet Baha Karan sheds light on value creation with energy and the Silk Road connection**
- **Machiel Mulder comments on renewable energy generation and energy pricing**

**ISSN: 2211-8691**

**<http://www.rug.nl/feb/energyandvalue>**



## **CEVI/ Energy and Value Issues Board**

### **Board members**

**Özgür Arslan-Ayaydin**, University of Illinois, Chicago, USA

**André Dorsman**, LMG Emerge and VU University Amsterdam, The Netherlands

**Mehmet Baha Karan**, Hacettepe University, Ankara, Turkey

**John Simpson**, Curtin University of Technology, Perth, Australia

**Wim Westerman**, University of Groningen, The Netherlands

### **Advisory board member**

**Ephraim Cark**, SKEMA Business School, Lille, France

## **Editorial Policy**

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. All of the papers are peer reviewed. The journal welcomes unsolicited contributions. Please e-mail to [energyandvalue@gmail.com](mailto:energyandvalue@gmail.com), c/o Özgür Arslan, 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 400 words and a paper should not exceed 3.000 words.



## **ABOUT THE ENERGY AND VALUE LETTER**

by the CEVI board

The Energy and Value Letter is now going into its 5<sup>th</sup> year. Whilst being once set up as rather an academic and practitioner journal with profound articles than as a communication devise in the sense of a newsletter, the CEVI board has decided in his last meeting in Krakow (Poland) to focus with the EVL on the latter from now onwards. We have to admit that this decision was fuelled by the notification by John Simpson that he intended to step down as the Editor-in-Chief of our journal. But there is more.

CEVI is a platform for academics and practitioners who want to share their views on energy and value issues. Such a platform definitely needs a communication devise, but does it also need a publication outlet? The answer to this question is affirmative. In the relatively young energy and value field it is not enough for authors to have the opportunity to publish in regular journals that are not acquainted with the topic. In their “own” journal, they can profile themselves amongst peers. Next to this, CEVI wants to be visible to the public. This means not only that we organise public meetings, but also that we show our products to the world.

Having said this, we are very happy to have established a link with Springer-Verlag in Heidelberg, Germany. CEVI members and others are welcome to publish in the regular book series that we have set up with this renowned publisher. The books typically consist of about a dozen chapters that give a platform to a multiple number of authors. All of the contributions are carefully reviewed and Springer produces the books in a professional way. With this firm link, it is less necessary for authors to have an outlet in the form of a specialised journal. That is the main reason why, while still accepting articles offered for publication, the EVL focusses on its function as a newsletter from now onwards.

This adapted strategic vision has also led to an adaptation of the editorial board of the e-journal. The CEVI board has broadened his responsibilities towards the governance of the EVL. With five board members from four continents and the publicly unheard but well-voiced advices of “an American in Paris”, we continue on the path of being a linking pin between not just the CEVI members, but also to the outer world. In addition to that, the reader will find interesting comments, e.g. on what energy and value has to do with the Silk Road, in this very issue and on cross-country energy pricing effects in Europe. Also, this EVL issue of course contains the regular contribution by the CEVI president, the Call for Papers for the current Chicago conference and an introduction by the conference’s chairman.

And last but not least: how do you like our new logo? Isn’t it great?! We think the logo is “fresh” and sort of pointing in a direction (call it: future”) with energy and value issues that looks both exciting and unknown. The logo was adapted by Mustafa Kaya, computer expert at Hacettepe University (Ankara), from the official CEVI logo that he designed earlier. We express our sincere thanks to Mustafa for his great help with underlining the future view of the Energy and Value Letter.



**A SHORT NOTE BY THE CEVI PRESIDENT**

André Dorsman  
President of CEVI

*LMG Emerge and VU University Amsterdam, The Netherlands*  
*e-mail: [a.b.dorsman@vu.nl](mailto:a.b.dorsman@vu.nl)*

Much has already been said about it: CEVI crosses the ocean. As I write this address, CEVI's Chicago conference is just one month ahead of us. I not only look forward to meet old friends and to make new ones, but I am also excited about our link with the Silk Road conference. In this way, the conference is kind of innovating itself. This is important for an organisation such as CEVI, in order to remain both timely and relevant. Paul Prabhaker and his NIU team, as well as Özgür Arslan-Ayaydin, Mehmet Baha Karan and Harry Lepinske, have been working hard on the conference's success and I expect that this fine work will pay off with nice contributions and discussions.

Whereas the second CEVI book on energy and value with Springer was just recently published, we are already working hard on the third book: *Perspectives on Energy Risk*. This book has three parts. Part 1 is on global risks, part 2 deals with geopolitical risks, and part 3 addresses local risks. All authors have sent us their chapter drafts and some of these are already accepted for publication. Others will follow suit and we expect to finish the book in the autumn of this year, so that it can be published in early 2014. Our thoughts about a fourth book are already taking shape, but let us first aim at finishing the current book.

As president of CEVI, I take the opportunity to thank John Simpson here for his promotion of CEVI, in his capacity of the founding Editor-in-Chief of the *Energy and Value Letter*. Just five years ago, it was not so evident that there would be room for academics to specialise on energy and value issues that would also be of an interest to a broad public. John Simpson was one of the very few who denied a fatal view at the time and he energetically took off with making the EVL a platform for academics and practitioners who shared this view. Now that he steps down, I gratefully recognise his contribution. I like to borrow some words that he often himself praises people with: "well done, chap!".

Lastly, I have to say farewell to Hasan Kazdağlı, who has changed jobs. Hasan has been a great promoter of academic research and practical interest in energy and value issues. His presentations and articles have attracted much attention with a broad audience. His co-authored paper with Mehmet Karan on the development of energy markets in Europe, in the first CEVI book, still serves as an excellent example of ample information and fine wording. CEVI has benefitted much from Hasan's contacts and insights. His advice related to organisational issues often acted as final words. And finally, I will remember Hasan as a fine person, whose activities have been of much value to CEVI.



NORTHERN ILLINOIS UNIVERSITY

College of Business

*Where the Classroom Meets the Business World*

## 4th Multinational Energy and Value Conference

NORTHERN ILLINOIS UNIVERSITY COLLEGE OF BUSINESS

<http://www.cob.niu.edu/energyconference2013/>

MAY 15-17, 2013

CHICAGO, USA

### CALL FOR PAPERS

The objective of the conference is to bring together leading academic researchers, government energy policy-makers, and leaders in energy-related businesses from all over the world to share advances in energy knowledge and best practices in national energy policies.

- ✓ Empirical Papers
- ✓ Conceptual papers
- ✓ Op-ed pieces

are welcome. *Specific topics* must refer to Energy issues and include, but are not limited to:

- ❖ Energy Economics;
- ❖ Oil Industry; Gas Industry; Electricity Industry;
- ❖ Energy Industry Regulation;
- ❖ National energy Policies;
- ❖ Alternative Energy;
- ❖ Scientific Advances in Energy;
- ❖ Financial Markets; Financial Risks;
- ❖ Energy security;
- ❖ Other topics as appropriate.

---

**Please submit your paper online**

<http://www.cob.niu.edu/energyconference2013/submitpaper.asp>

or e-mail to [prabhaker@niu.edu](mailto:prabhaker@niu.edu) and to [orslan@uic.edu](mailto:orslan@uic.edu)

**a completed or work-in-progress paper before April 30, 2013.**

**\*Please include (a) affiliation, (b) contact telephone and e-mails of each author. Each participant agrees to serve as a discussant of a paper of his/her own area of interest, if needed.**

---

Selected papers may be submitted for publication in

- The journal *Frontiers in Finance and Economics*
- A CEVI book to be published by Springer-Verlag

The third day of the conference includes practitioner presentations on Silk-Road country-related topics such as energy logistics, energy security, etc. Senior government leaders from different countries and diplomats from multiple consulates will be participating by sharing energy-related business opportunities in their markets. Updated conference information will be e-mailed to the conference participants regularly and is available to others upon request.

**PROGRAMME CHAIR**

Paul Prabhaker - Northern Illinois University, USA

**PROGRAMME CO-CHAIRS (in alphabetical order)**

Özgür Arslan-Ayaydin – University of Illinois, USA  
Mehmet Baha Karan – Hacettepe University, Ankara, Turkey  
Harry Lepinske – Northern Illinois University, USA

**PROGRAMME COMMITTEE (in alphabetical order)**

Ephraim Clark – SKEMA Business School, Lille, France  
Erik van Dijk – LMG Emerge, Zeist, The Netherlands  
André Dorsman – VU University Amsterdam, The Netherlands  
Timur Gok – PRMIA, Chicago, USA  
Paul Pottuijt – Gen, Utrecht, The Netherlands  
John Simpson – Curtin University, Perth, Australia  
Jennifer Westaway – Curtin University, Perth, Australia  
Wim Westerman – University of Groningen, The Netherlands

---

**REGISTER ONLINE NOW !!!**

[http://registeruo.niu.edu/iebms/wbe/wbe\\_p1\\_main.aspx?oc=40&cc=WBE4012731](http://registeruo.niu.edu/iebms/wbe/wbe_p1_main.aspx?oc=40&cc=WBE4012731)

---



# Center for Energy and Value Issues CEVI



## A WARM WELCOME TO NIU AND CHICAGO

Paul Prabhaker  
4th CEVI Conference Programme Chair

*NIU University Chicago, USA  
e-mail: prabhaker@niu.edu*

Northern Illinois University is pleased to welcome you to Chicago. Northern Illinois University is a well-known research university in the United States with a rich history of more than a hundred years. **NIU** is ranked in the top four per cent of all U.S. colleges and universities listed in The Carnegie Foundation's most productive category: "doctoral/research university-extensive." It is also a full member of the Universities Research Association, an elite group of top public and private research universities that includes Harvard, MIT, Princeton, and Yale. **NIU** is home to one of the top AACSB accredited business schools and is also known for a new scientific center dedicated to research with Fermi National Accelerator Laboratory, one of the world's premier high-energy physics research laboratories. As the official host of the 4<sup>th</sup> Biennial Energy & Value Conference, we have chosen a prime location in downtown Chicago with a variety of speakers for the conference.

**Chicago** is a vibrant city with one of the most interesting downtowns. It is one of the world's great cities for theater, shopping, and fine dining. It is the home of the blues and the jazz, the heart of comedy and the first builder of the skyscraper. Chicago has miles of sandy beaches, huge parks and perhaps the finest downtown collection of architecture in the world. Here, metropolitan luxuries, such as world-class museums of art and science, combine with a uniquely real Midwestern friendliness. Chicago's signature is its picturesque skyline (see [http://wikitravel.org/en/Chicago\\_skyline\\_guide](http://wikitravel.org/en/Chicago_skyline_guide)) across the inviting waters of Lake Michigan, with an amazing variety of sights to explore, prepare to cover a lot of ground. Choose to walk down the Magnificent Mile; visit the Bean; go to the top of the world in the Hancock Tower or the Willis Tower; take a break to taste the world famous Chicago pizza!

Enjoy!!



## ON ENERGY, VALUE AND THE SILK ROAD

Mehmet Baha Karan

*Hacettepe University, Ankara, Turkey*  
*e-mail: [mbkaran@hacettepe.edu.tr](mailto:mbkaran@hacettepe.edu.tr)*

### 1. Cross-continent energy and value issues

It is not so easy to provide investors, governments and academics with timely guidance on energy and value issues, in particular regarding the scope of a speedily changing environment. Energy markets have become increasingly integrated and competitive. The security, logistical and financial structures at the (inter-) country and (inter-) industry levels are following suit. Buyers and suppliers can exploit unprecedented value creation potential as regulatory bodies discover mechanisms for aligning market players with societal aims.

Notwithstanding the above, deficiencies of energy market structures occur. These include, for example, the safety of energy supply, the handling of sovereignty issues, the coherence of energy programs, the stimulation of sustainable energy sources, the holes in the regulatory frameworks, the tackling of natural supply monopolies, the incomplete interconnectedness of networks, the interlinking of prices at the diverse markets, the riskiness of primary and derivatives products, the generation and transport of energy sources, as well as the gaps in the scientific advances in energy.

Although several observers point at solutions for closing the gaps, they must also admit that the issues to be handled are without precedents and very complex. Furthermore, whilst at a country (e.g. US) and even continental (e.g. EU) level considerable achievements have been made, a large part of the challenges are occurring at a higher level. Consequently, there is a need for feasible cross-continent and even global energy policies, directives and measures.

The energy relationships between developed and developing areas of the globe are especially under transition. An example of this refers to the historical network of interlinking trade routes that connect South, East and Western Asia with the Mediterranean and European world: the Silk Road. Investors, governments and academics from the countries along this route share perspectives on energy-related business opportunities, which may fuel the developments of the local markets of the various countries involved.





## 2. Creating value with energy along the Silk Road

The Silk Road region covers approximately 5.9 million square kilometres and nearly 145 million people are living in the area. The total size of the region's economy is around \$312.3 billion, with an average gross domestic product (GDP) per capita of \$2,151. The region has a significant development potential and creating important investment opportunities for investors. China is the most important country in the area and the world's largest or second largest consumer of numerous minerals and the world's second largest oil consumer, offering significant potential markets to suppliers in Central Asia.

The Silk Road region may be one of the world's most potentially lucrative, untapped investment locations. It has an abundance of natural resources such as petroleum, natural gas, hydropower and minerals. It also excels at producing agricultural goods such as cotton, fruits and vegetables, meat and animal hides, and seed oils. The famed cities and attractions along the Silk Road make for an intriguing tourism destination. In addition, the Silk Road countries have an educated workforce<sup>1</sup>.

Currently the development in the area has been driven mostly by natural gas trade. According a natural gas scenario of International Gas Agency<sup>2</sup>, the ultimate resources of natural gas worldwide are estimated to be around 400 tcm, based on the current technology and economic conditions. This is equal to more than 120 years of current annual production. Global natural gas resources are vast and widely dispersed geographically, but half of the world's proven reserves are concentrated in Russia, Iran and Qatar. Azerbaijan, Turkmenistan, Kazakhstan, Uzbekistan and some other Middle East countries have also considerable proven gas reserves. On the other hand, the European Union (EU), which has only 2% of the proven natural gas reserves of the world, consumes 17% of global gas consumption. This pattern is not expected to change significantly in the next decades. Inevitably, all these factors are bringing development of transportation facilities and pipelines which require considerable international coordination and investment to develop trade between countries.

Turkey is a connection point in Silk Road energy trade. Its importance does not only depend on its location, but also on its role in international trade through its straits, the ties with the EU and strong historical relations with Central Asia and the Islamic countries in the Middle East. In addition to the potential to become the fourth European energy corridor for Europe, and increasing the bargaining power of Europe by allowing it to by-pass Russia, these assets can enable Turkey to become an important regional gas hub in the competitive worldwide gas market.

It seems that the next 30 years will be very unusual and promising in every aspect for the Silk Road area in the international economy. The new era of energy trade with unconventional energy sources, rising power of China and India, developing central Asia and Arab spring issues will not only open opportunities for global investors, but also bring new responsibilities for governments and research chances for academics.

---

<sup>1</sup> UNCTAD (2009). "Investment Guide to the Silk Road", UN New York and Geneva.

<sup>2</sup> IEA(2012). "World Energy Outlook: Are We Entering a Golden Age of Gas?", Paris.



## GROWTH IN RENEWABLE ENERGY HARDLY AFFECTS ENERGY PRICES

Machiel Mulder<sup>3</sup>

*Netherlands Competition Authority (NMa) and University of Groningen (RUG)*

e-mail: [machiel.mulder@nma.nl](mailto:machiel.mulder@nma.nl).

Renewable electricity generation has grown strongly in recent years. A striking example is Germany, where the joint capacity of wind and solar spiked to the current level of about 50 GW, which is e.g. more than twice as much as the total Dutch generation capacity. Since the marginal costs of wind generators are low, more wind production may lead to lower market prices. This is the merit-order effect of wind power: if the wind blows, the merit order shifts to the right, resulting in a lower electricity price. This effect also exists for solar energy.

As markets in Europe are increasingly interconnected, these price effects of renewable energy likely spread to the neighbouring countries. A market which is closely linked to the German market is the Dutch. Therefore, one may expect that the Dutch electricity prices are affected by the recent surge in the German renewable energy production.

In a recent article in *Renewable Energy*, this hypothesis is tested<sup>4</sup>. It indeed appears that the Dutch electricity price is negatively related to the supply of wind electricity in Germany: a 1% increase in German wind supply reduces the Dutch electricity price by 0.03%. Remarkably, the impact of wind on the electricity price is fairly constant over the period 2006 – 2011, while the supply of wind grew strongly. Apparently, the enormous increase in German wind capacity is still insufficient to replace all fossil-fired plants. In particular gas-fired plants are still the marginal, price-setting plants in the Dutch market. Another conclusion from this study is that, until recently, the intensity of daylight hardly affected the electricity price, but over 2011, a negative effect was found. This reflects the fact that the surge in solar capacity started only recently.

Given the continuing growth in renewable energy capacity, not only in Germany but also in other countries, a stronger effect on electricity prices can be expected, in particular during off peak hours when renewable energy is sufficiently large to deliver all the power which is needed. In such cases the electricity price likely approaches the marginal costs of wind and solar which is zero, resulting in investment-coverage problems for both fossil-fired plants and renewable capacity. It can be expected, however, that the market itself will generate a solution for this problem by reducing the incentives for firms to expand capacity. In the long-term, therefore, electricity prices remain strongly related to the prices of fossil fuels.

---

<sup>3</sup> P.O. Box 16326, 2500 BH The Hague. The author is deputy chief economist of the NMa and visiting researcher at the RUG, Department of Economics, Econometrics and Finance.

<sup>4</sup> Machiel Mulder and Bert Scholtens (2013). The impact of renewable energy on electricity prices in the Netherlands”, *Renewable Energy* 57 (September), 94-100.