



January 2018 – Volume 10, Number 20

- **From the CEVI board: we are on the move!**
- **Underpinning our future: the CEVI strategy document 2017**
- **Call for Papers: 13th ISINI conference, Wroclaw (Poland), 29-30 August 2018 (with CEVI session!)**
- **Boris Cherny discusses the allocation of risks in the financial clearing of natural gas trades**

ISSN: 2211-8691

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



CEVI/ Energy and Value Issues Board

Board members

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

André Dorsman, VU University Amsterdam, The Netherlands

Mehmet Baha Karan, Hacettepe University, Ankara, Turkey

Wietze Lise, AF-Mercados EMI, Ankara, Turkey

John Simpson, J. Simpson & Associates, Perth, Australia

James Thewissen, University of Leuven, Antwerp, Belgium

Wim Westerman, University of Groningen, The Netherlands

Advisory board member

Ephraim Clark, Middlesex University Business School, London, England

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. The journal welcomes unsolicited contributions. Please e-mail to 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.



CEVI is on the move!

André Dorsman
President of CEVI

VU University Amsterdam, The Netherlands
e-mail: a.b.dorsman@vu.nl

From time to time, one needs to sit down and think of the future. Are things going fine? Am I on the right track? The year-end is typically such a period and I assume that you have at least casually had these kinds of questions pass your mind. Also, I hope that you feel that you have grip on your work and private life and foremost I hope that you are as healthy as can be. As an organization that has become mature already for some time, CEVI has been overthinking things more than usual recently.

First of all, CEVI is happy to count its blessings. We have a small but active “member base”. While Europe is the home-base of most us, CEVI participants’ locations span the globe. Quite some of us are pure scholars or practitioners, but also many are somewhere in between. This is reflected in what we do and how we do it. Of course, the book series and the conferences do stand out, but we also have e.g. our small journal and occasional trainings. And we are busy with adding specific projects.

All of this is reflected in the strategy document that the CEVI board decided upon last year and that you will find in this issue of the EVL. Although much of what is stated in here can be described in terms of streamlining, we also show here our ambition to be an interesting player in the current energy transition. The CEVI organization has been adapted to shoulder all of this by adding two board members and we may continue to change our structure as we move ahead. But a good strategy and a nice organization are just nothing without fine members. So, I welcome your thoughts and initiatives!

One such an initiative is the CEVI workshop at the ISINI conference in Wroclaw (Poland), on August 29-30, 2018. ISINI is a friendly organization with a global reach that welcomes “new ideas”. The city of Wroclaw would be beautiful and within easy reach from its airport. See also the Call for Papers in this issue and mark the submission deadline of March 1, 2018. Contact: w.westerman@rug.nl.

Another kind of move that I like to draw your attention to is the CEVI book series. We are about to finish book 6 and prepare for book 7, which has as editors Özgür Arslan-Ayaydin, André Dorsman and James Thewissen. Spontaneous submissions are welcome. Contact: a.b.dorsman@vu.nl.

Lastly, do read the opinion written by Boris Cherny, also in this issue. Watching the liberalization of the European gas market from Russia, he finds that the clearing of gas trade has changed and that the settlement of physical gas has moved away from financial clearing. For example, in Austria where special agents perform clearing functions nowadays. All of this of course relates to risk allocation issues, as the author points out. The energy transition makes such moves even more relevant, I feel.



CENTER FOR ENERGY AND VALUE ISSUES (CEVI) STRATEGY, MAY 2017

General description of CEVI

CEVI is the centre for issues and challenges related to the use and value of energy. It is a small charitable foundation, registered in Amsterdam (The Netherlands, EU), under Dutch law.

CEVI aims to accumulate knowledge on energy issues through establishing seminars for scholars, experts and suppliers, in cooperation with different institutions on national and international levels.

CEVI cultivates the interconnected fields of energy and value, including their relations to the disciplines of economics, finance, management, technology and law, through providing relevant conditions for intensive dialogues.

CEVI especially develops knowledge on energy policy issues, from a European and global perspective, without compromising on academic rigour.

Consequently the mission of CEVI is stated as;

“Having the role of an important expert institution in the field of energy and value”

In accord with this mission, the vision of CEVI is stated as;

“Basing on its academic activities becoming an appreciated partner of the industry, governmental and non-governmental organizations dealing with energy policy issues”

The Center for Energy and Value Issues (CEVI) is officially registered as a foundation (Stichting) in the Netherlands in February 2010, under number 34381087 of the Dutch Chamber of Commerce.



Energy and Value Issues

Hardly any other industrial sector is currently as much on the move as the energy sector. Growth and developments in the European and global energy market give rise to major shifts in interests and business dynamics. Security of supply, price volatilities and international relation restructurings are major examples of such developments.

The move from fossil fuel to renewables means a switch from centralised to decentralised power generation and distribution. In this course, energy companies review their portfolio with regard to the expected market developments and future demand patterns.

In addition comes the handling of energy procurement risks (creation of independence) with reference to fast-changing international political (tensions) and amended legislation, also in terms of alternative methods of energy generation, production and distribution.

The changes referred to create an urgent challenge to create new knowledge, which is to be succeeded by skilful and innovative practical implementations on various levels in the European and global energy sector.

Interest and target groups of CEVI

The following are interest and target groups of CEVI:

- Governmental authorities and political platforms in Europe
- Investors and traders in the energy business
- Accountancy and consultancy firms with an interest in energy companies
- Management, engineers and controllers of energy companies
- Legal and fiscal consultants with an interest in the energy business
- Academia in the fields of economics, finance, management, technology and law



Goals of CEVI

To practice its mission and vision, CEVI has set as goals for the upcoming years:

- 1) to be recognised as an important knowledge centre (consultant) on the use and value of energy and the concomitant issues and challenges
- 2) to promote innovation by assembling and disseminating knowledge on the energy sector and its value issues
- 3) to cooperate internationally on research and development in the energy sector by developing and using knowledge
- 4) to inform and stimulate the exchange of experiences between its participants
- 5) to perform thorough academic analyses of European and global energy markets

Activities of CEVI

In order to achieve the stated objectives CEVI will publish articles, reports, a free journal (“Energy and Value Letter”) and a peer-reviewed book series (with Springer Verlag, Heidelberg, Germany). In addition, CEVI will offer consultancy activities with interested governmental and private organisations. Moreover, CEVI will:

- organise multidisciplinary trainings and energy schools throughout Europe:
 - i. with actors from the energy sector and/or participating organisations,
 - ii. to bring participants from various countries at a similar knowledge level,
 - iii. financed by participant and partner contributions, as well as EU subsidies.
- organise a bi-annual conference on energy and value issues:
 - i. with presentations by scholars, experts and suppliers,
 - ii. to create new knowledge and exchange practical implementations,
 - iii. financed by participant and partner contributions, as well as EU subsidies.



Energy Trainings

CEVI has organized several Energy Schools for employees working in the energy area, in cooperation with Amsterdam Power Exchange, TenneT and the Turkish Electricity Transmission Company in Istanbul and Ankara. Energy Schools aim to provide a practical understanding of the behaviour of energy markets and the risk management implications of physical and financial markets. Four Energy Schools have been held in 2010 and 2011. In total, 81 attendants of the Energy Schools received a certificate.

Next to the Energy Schools in Turkey, several lectures, discussions and other trainings have been held by CEVI members in the Netherlands over time. Also, cases on European corporate energy issues have been developed in cooperation with a number of organisations.

Energy Conferences

The 1st Multinational Energy and Value Issues conference was organized by the VU University Amsterdam, the University of Groningen and the Energy Delta Institute in Amsterdam, on June 27–29, 2007. The 2nd conference was held by the Hacettepe University Ankara in Istanbul on July 2-5, 2009. The 3rd conference was organised by the University of Groningen on July 7-10, 2011 in Groningen and the 4th by the Northern Illinois University in Chicago on May 17-19, 2013. The 5th conference was held with the Kadir Has University in Istanbul on May 7-9, 2015. The 6th conference was a joint production with the Middle Eastern Technical University (Northern Cyprus Campus) and the Energy Markets and Application Centre of the Hacettepe University (Ankara, Turkey), on May 18-20, 2017. The conferences aim to bring together academics and practitioners from all over the world with a focus on timely value issues in the energy sector.



CEVI Journal

Since 2009, CEVI has a semi-annual e-journal, called Energy Value Letter (EVL). It serves as a communication channel within CEVI and publishes announcements, opinions, and articles dealing with energy and value issues. Subscriptions are free.

CEVI Books

In cooperation with Springer Verlag CEVI publishes a series of books on Energy. The papers published are peer-reviewed. The editorial board of the book series consists of various constellations of board members of CEVI and other CEVI members. The following books have been published:

- Financial Aspects in Energy (2011), edited by André Dorsman, Wim Westerman, Mehmet Karan and Özgür Arslan; ISBN 978-3-642-19708-6
- Energy Economics and Financial Markets (2012), edited by André Dorsman, John Simpson and Wim Westerman; ISBN 978-3-642-30600-6
- Perspectives on Energy Risk (2014); edited by André Dorsman, Mehmet Karan and Timur Gök; ISBN: 978-3-642-41595-1
- Energy Technology and Valuation Issues (2015); edited by André Dorsman, John L. Simpson and Wim Westerman; ISBN 978-3-319-13745-2
- Energy and Finance: Sustainability in the Energy Industry (2016); edited by André Dorsman, Özgür Arslan-Ayadin and Mehmet Baha Karan; ISBN 978-3-319-32266-7
- Geostrategy, Energy and Finance (planned); edited by André Dorsman, Volkan Ediger and Mehmet Baha Karan



Cooperations of CEVI

CEVI teams up with NewWave Engineering (Echt, The Netherlands) and Walas Europe (Heerlen, The Netherlands). CEVI also works with the Multinational Finance Society and the International Society for Intercommunication of New Ideas (ISINI). CEVI also cooperates with the Centre for Energy Economics Research of the University of Groningen, The Netherlands.

Organization of CEVI

CEVI is rooted in Hacettepe University, Ankara (Turkey) and VU University Amsterdam, The Netherlands. It also partners with the University of Groningen. Sponsorship has been provided by the partnering universities, corporate firms and regulatory bodies. The membership CEVI is comprised of energy scholars, experts and suppliers throughout Europe and beyond. The board of CEVI is established by the following members:

President and treasurer:	André Dorsman, VU University Amsterdam, The Netherlands
Vice-president and secretary:	Mehmet Baha Karan, Hacettepe University, Ankara, Turkey
Vice-secretary:	Wim Westerman, University of Groningen, The Netherlands
Vice-treasurer:	Özgür Arslan-Ayaydin, University of Illinois, Chicago, USA
Member:	Wietze Lise, AF-Mercados EMI, Ankara, Turkey
Member:	John Simpson, J. Simpson & Associates, Perth, Australia
Member:	James Thewissen, University of Leuven, Antwerp, Belgium
Advisory board member:	Ephraim Clark, Middlesex University Business School, London

Website

For more information on CEVI, refer to the website:

<http://www.centerforenergyandvalue.org>



Call for Papers: ISINI-13 Wroclaw, 29-30 August 2018

The thirteenth international conference of the International Society for the Intercommunication of New Ideas (ISINI) will take place at the WSB University in Wroclaw, Poland, 29-30 August 2018. You are invited to submit papers 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 join forces with scholars from other disciplines.

The major instrument of ISINI has until now been its conference. So next to the usual economists, we hope to welcome scholars in Wroclaw who are working in other social sciences (including management, law, 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 six focal themes:

1. *Climate change regulation 2.0. Making the Paris agreement work*
2. *The university as an arena of sustainability transition*
3. *Global collapse. There is no alternative (TINA) and a “post-truth safe space?”*
4. *Markets, Money and Democracy*
5. *Transdisciplinarity (research that bridges the conventional dividing lines)*
6. *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) and Dr. Johan van Ophem (johan.vanophem@wur.nl).

The submission deadline is March 1, 2018. Notification of acceptance will be made shortly hereafter.

Selected papers may be submitted for possible publication in a CEVI book at Springer Verlag, the Energy and Value Letter (<http://centerforenergyandvalue.org/publications.html>), the Central European Review of Economics and Management (www.cerem-review.eu), or the Central and Eastern European Journal of Management and Economics (www.ceejme.eu).



A change in the allocation of risks in the financial clearing of natural gas trades during the process of liberalization of the gas market

Boris Cherny

Deputy executive director, Natural gas
St. Petersburg International Mercantile Exchange (SPIMEX)
Moscow, Russia

Contact: cherny@s-pimex.ru

Strong regulatory initiatives, which were deployed after the last financial crisis, and its consequences for the clearing of OTC financial derivative contracts, have been carefully studied by both academics and practitioners. In contrast, the picture is different for the clearing of commodity trades. If we analyse the clearing and settlement of commodity transactions under authorized clearing organizations, academic approaches¹ and practical methods (i.e. statistical models - Value at Risk (VAR) or Standard Portfolio Analysis of Risk (SPAN)) suggest that the major source of risk in the industry is concerned with guaranteeing the fulfilment of delivery obligations of commodities transactions².

This risk may be especially high in the clearing of natural gas trades because of intrinsic specifics of natural pipeline gas as a commodity. It is not like a shipment of a truck or a railway wagon of liquid oil, where the shipper, the volume actually delivered and the consignee are clearly determinable, and, as such, in case of default, the responsible party is easy to detect and penalize. So the appropriate cost, in the case of substitution of the defaulting party's obligation by another market participant or by a central counterparty (CCP) in the process of clearing, is evident.

There are two problems concerning the clearing of natural gas trades in this regard:

a) Determination of gas transportation costs, if we describe the situation before implementation of the "entry-exit" zonal approach. Traditionally, by the very nature of a gas pipeline industry, the contract for gas transportation was an indispensable part of gas trade. But a cost of transportation is different for different transportation routes to consumer locations. So if someone finds a substitution party, the cost of transportation might be arbitrary and unpredictably different, in particularly - higher than expected.

¹ See, for example, Mengle, D.L., Regulatory Solutions to payment systems risks: lessons from privately negotiated derivatives', Journal Services Research, 1995, v9(3), 381-391.

² Jorion P., Value at Risk, Mc Graw Hill, New York, 2001; Avellaneda M., Cont R., 2013, Close-Out risk evaluation: a new risk-management approach for central counterparties, available at SSRN: <http://dx.doi.org/10.2139/ssrn.2247493>.

b) Probable over-congestion of nodes in the gas transportation grid may, in principle, increase transportation costs in the situation where a central clearing counterparty has to substitute gas volumes (and destination!) in place of a defaulting market participant.

Implementation a VAR or SPAN statistical approaches to these uncertainties will inevitably result in an establishment of so high individual and mutual clearing margins, which might prevent the proper market functioning because of cost inefficiency.

Take as an example the NYMEX gas futures contract that started in 1990. In this case, the final shipment of the contract amount took place in the form of a bilateral gas supply contract, i.e. risks of the final gas supply were transferred from the clearing organization to the supplier and consumer, which were chosen arbitrarily, i.e. by chance. On the contrary, in the modern European gas market, clearing agents act as central counterparties in the exchange market (or for over-the-counter cleared trades), and the cost of clearing is not higher than in other commodity market segments. This means that the allocation of risks, intrinsic to a clearing of a traditional gas trade, has essentially changed.

In what sphere might the risk allocation, related to the clearing process, be changed? It is hardly may happen in the area of diminishing commodity price volatility or improvements in counterparty's credit risk ratings. So the only possible explanation seems to be that the relationship in the sphere of physical gas supply and demand has changed.

And indeed, in example of the Austrian gas market model, the clearing house – European commodity clearing AG – is a central counterparty even for spot trades. But the new (post-deregulation) relationship between gas supplier and consumer has essentially changed. Traditional “take- or- pay” clauses have been repealed³. Now both parties have to fully perform their obligations. But it used to be actually impossible to do so because of the physical condition of gas as a commodity, the ways it is consumed and the weather unpredictability.

In the Austrian gas market model, this contradiction was resolved by the creation of special legal agents – the Gas Grid manager and Clearing and settlement body. As the title of the last agent says – it performs some of the clearing functions, but does not have financial clearing license; the companies act as managers in relation to local gas distribution companies. Its main function is to settle, including financially, imbalances between planned (contractual) and actual gas consumption. The efficiency gain of this scheme stems from the circumstance that the companies acting in the gas distribution sphere have a specific regional network of gas meters and have, through subsidiary local distribution companies, the most update and detailed picture of current gas consumption. They also appreciate anticipated volumes of their clients – final consumers – gas consumption.

As a conclusion, on the basis of the above arguments, we suggest that a structural shift in traditional clearing risk allocation has occurred, and the risk of settlement of physical gas over- or under-supply has moved from financial clearing to some other structures close to gas distribution grids and consumer gas meters. Alternatively stated, the roles of financial institutions and gas market infrastructures have mutually complemented one another. And this structural shift has become an indispensable part of the liberalization process of the European gas market.

³ See, for example, [http://www.efet.org/Cms_Data/Contents/EFET/Media/Documents/Public%20-%20Standardisation/May_11_2007_Genera_%20Agreement_Concerning_the_Delivery_and_Acceptance_of_%20Natural_Gas_Version_2.0\(a\).pdf](http://www.efet.org/Cms_Data/Contents/EFET/Media/Documents/Public%20-%20Standardisation/May_11_2007_Genera_%20Agreement_Concerning_the_Delivery_and_Acceptance_of_%20Natural_Gas_Version_2.0(a).pdf)