

Information Bulletin



Editorial

Samuele Furfari talks about the surprise emergence of unconventional gas

On 1 March at the Palais des Académies in Brussels, in the company of geologist Alain Préat, Samuele Furfari, Professor of the Geopolitics of Energy at the Free University in Brussels, held a conference about the surprise emergence of unconventional gas.

Talking about the surprise, sudden emergence of unconventional gas on the global energy market and its huge implications for the geopolitics of energy – and, indeed, the economy and political stability – Samuele Furfari opened the eyes of his audience to a global situation that is rapidly changing.

On page 3 of this report, readers will find the answers he gave to a number of fundamental questions I put to him.
(See page 3)

Jean-Claude Charrault

Upcoming events

- 17/04/2012** Dinner-debate Strasbourg
Fuels Quality Directive, the other side of the story: consequences for the EU Refining industry, EU security of supply and EU trade at the invitation of EUROPIA
- 18/04/2012** General Assembly EEF internal meeting
- 25-27/04/2012** Visit to Vaasa (Finland)
Flexible power generation and renewable energy solutions at the invitation of Wärtsilä
- 08/05/2012** Dinner-debate Brussels
ENTSOE's Ten-Year Network Development Plan 2012: Conclusions for EU Energy Policy at the invitation of ENTSO-E
- 22/05/2012** Dinner-debate Strasbourg
Unconventional Natural Gas: an opportunity for a new indigenous energy source for Europe at the invitation of Exxon Mobil
- 30/05/2012** Dinner-debate Brussels
Liquefied Natural Gas (LNG) & LNG infrastructure: a major contribution to a sustainable, competitive and secure European gas market at the invitation of GIE-GLE



Commissioner Oettinger dinner-debate, Brussels



Past Events



Philippe Knoche addresses the audience during the dinner-debate.

13 March 2012: Dinner-Debate in Strasbourg Is nuclear safe enough? at the invitation of Areva

Speakers: Philippe Knoche, Chief Operating Officer, AREVA

The presentation of Mr Philippe Knoche and the pictures of the event are available in the events section of our website at the following link: <http://www.europeanenergyforum.eu/events/nuclear-safe-enough>

"The Fukushima accident has not halted the development of nuclear but safety is reaffirmed as a non negotiable priority. The industry is committed to take stock of all the lessons from the Fukushima accident", Philippe Knoche.



Vittorio Prodi, Alejo Vidal-Quadras, Norbert Glante and Paul Rübig during the Board meeting.

14 March 2012: Internal meeting in Brussels Board meeting

The Board members examined in Strasbourg last year's results and this year's budget and discussed potential topics for upcoming events and visits.

EEF Board of Directors: Giles Chichester (President), Alejo Vidal-Quadras (Treasurer); Vice-presidents: Jerzy Buzek, Norbert Glante, Edit Herczog, Romana Jordan, Herbert Reul, Paul Rübig, Britta Thomsen; Directors: Inese Vaidere, Vittorio Prodi, Lambert van Nistelrooij, Robert Goebbels, Daniel Caspary, Corinne Lepage, Justas Vincas Paleckis, Vladimír Remek, Vladimir Urutchev.

20 March 2012: Dinner-Debate in Brussels An evening discussion with Commissioner Oettinger

Speaker: Commissioner of Energy Günther Oettinger

To see the speech of the Commissioner and the pictures of the event, please check our website by following this link: <http://www.europeanenergyforum.eu/events/evening-discussion-commissioner-oettinger>

"More renewables, more clean technology, more investment in networks, more integration, more energy efficiency, more international partnerships. All of this means more growth, more jobs, more power to Europe's consumers and industry. (...)To achieve this, we need political will and political commitment", Commissioner Günther Oettinger.



Edit Herczog, Giles Chichester, Lambert van Nistelrooij and Commissioner Oettinger after the dinner-debate.

21 March 2012: Internal meeting in Brussels ITAC meeting

The Associate Members were invited for a meeting with the Board of Directors to review the results and budget but mainly to discuss new proposals for upcoming events and visits. Please, check our website for these updates: <http://www.europeanenergyforum.eu/events>



Representatives of the Associate Members took part in the ITAC meeting.



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Following his conference on 1 March last, which Samuele Furfari held in his capacity as Professor of the Geopolitics of Energy, I put a number of questions to him in order to pull together the various threads of his presentation, with a particular emphasis on Europe's position in the face of this hugely significant phenomenon.

What phenomenon lies at the root of the sudden emergence of unconventional gas (better known as "shale gas"), the "surprise" you described during your conference?

Technological innovation. It's that simple. It can never be stressed enough: energy is, first and foremost, a matter of technology. While the US was busy focusing its political and geopolitical efforts on safeguarding gas supplies in the form of LNG as everybody – including the big oil companies—thought they had reached "peak gas" in 2055, a handful of research scientists embarked on a quest for a technology that would enable this gas to be extracted, which geologists were familiar with and knew to be available in abundance. In 2008, the combination of targeted drilling and hydraulic fracturing produced this extraordinary outcome. We must remember that targeted drilling was developed thanks to the financing of the "oil and gas" demonstration project that the Commission managed in the 1980s. To some extent, in other words, we owe the surprise emergence of unconventional gas to a programme that was abandoned. The upshot is that, instead of building gas terminals for importing LNG, the USA can focus on building them to export their gas surplus. As a reminder of just how serious this issue is, in December 2009, ExxonMobil bought a small company, XTO, which nobody in Europe had heard of, for a sum of 42 billion dollars, because it

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How will the current situation on the energy market change?

There is so much gas at the moment in the USA that the price is below \$3/MBtu. In Europe, it is between \$12 and 14/MBtu and in Japan, due to the shutdown of nuclear power plants, it is \$16/MBtu. The price in the USA is so low that, nowadays, companies are only working on projects which deliver a profit from liquid products that can be extracted at the same time as the gas. Unlike the oil market, because of transportation issues, the gas market has never been unique; so the differences are nothing unusual. In this case, however, we're not talking about a difference, but a chasm, which may have drastic implications for the European economy. How can the European petrochemical industry compete with the American petrochemical industry when there is such a huge difference in the price of the basic commodity, which is also the basic energy of the US chemical industry? The European chemical industry will suffer hugely, compounding the sector's already well-documented difficulties.



*Samuele Furfari
and Jean-Claude Charrault*



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What are the most sensitive factors that will affect this major change?

"We must await the outcomes of the ongoing prospecting activities and hope (...) that unconventional gas will be in sufficiently abundant supply for the EU to remain competitive."

Aside from the economic consequences, there will be geopolitical implications too. The USA, which has a gas bonanza, is resuming ocean prospecting and imports oil produced in Canada from asphalt sand and is greatly reducing its imports from the most sensitive regions. This phenomenon is gaining further momentum because, at last, the US appears to be serious in its aim of reducing the amount of petrol consumed by its cars. Natural gas, which is in overabundant supply, is now becoming a serious alternative fuel. All of which means that, for the first time since 1961, the US has been a net exporter of petrol, which poses another problem for the European refining industry.

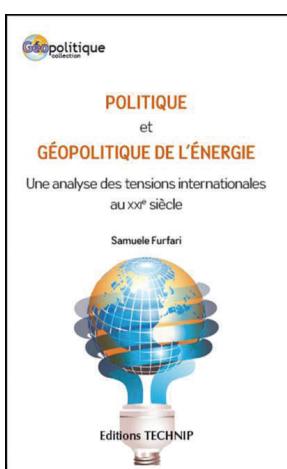
Moreover, since they always favour the Pacific region over the Atlantic, it's hardly a surprise that this has major repercussions for the geopolitics of energy and begs the question of how much longer their fifth military fleet will remain in the Persian Gulf. Technological innovation really can revolutionise numerous aspects of politics and geopolitics.

What is the EU's stance on unconventional gas?

Our geology is not as favourable as that of the USA, but there is significant potential in Europe nonetheless. Drilling is underway in several Member States whereas in others – applying a strict interpretation of the precautionary principle – this is forbidden. This example is yet another illustration of the application of Article 194.2 of the Lisbon Treaty, which stipulates that each Member State shall do what it feels necessary with its own resources.

But it seems that, among Europeans who are most involved in the issue, the primary concern is to protect the environment, giving rise to fierce opposition to this development. What matters, it seems to me, is that the Commission has been at pains to stress that the regulatory arsenal in place is sufficient and satisfactory. As Commissioner Oettiger said, "*We have not identified any significant gaps in the current legal framework, at either European or national level*". We must await the outcomes of the ongoing prospecting activities and hope, for the sake of our economy which certainly needs a nudge in the right direction, that unconventional gas will be in sufficiently abundant supply for the EU to remain competitive.

Samuele Furfari has just published his fifth book with Technip (Paris). The book (in French) is entitled "The Politics and Geopolitics of Energy" and has the subtitle "An analysis of international tensions in the 21st century".



Last book of professor Furfari