

February 15, 2011

## Interview with Almassadam Satkaliyev, Chair of WEC's Kazakhstan Committee



*Mr. Almassadam Satkaliyev is Chairman of the Kazakhstan Electricity Grid Operating Company's Management Board and Chairman of the Kazakhstan Electricity Association's Board of Directors.*

### **In this, the 20<sup>th</sup> year of Kazakhstan's independence, what progress has the country made toward developing its energy resources?**

About 0.5% of the world's mineral energy resources are located in Kazakhstan; that is equal to 90 billion toe and comprises 70% coal, 22% oil and gas condensate, and 8% gas. The total predicted recoverable hydrocarbon resources in the Republic of Kazakhstan are 17 billion tonnes of oil and condensate, of which eight billion tonnes are in the Kazakh sector of the Caspian Sea.

Since its independence, and led by President Nursultan Nazarbayev, Kazakhstan has achieved unique economic performance and systemic progress as a nation-state. During the past 11 years, our economy has grown much faster than global indicators. Gas production has more than quadrupled in the past 20 years, whilst oil production has doubled in the past 10. Kazakhstan has also become one of the world's largest uranium-producing countries.

In 2009, Kazakhstan produced 76.5 million tonnes of oil and gas condensate and exported 68.1 million tonnes. The main active export routes for Kazakhstan oil are the Atyrau-Samara pipeline, the Caspian Pipeline Consortium's (CPC) pipeline, Atasu-Alashankou pipeline and the port of Aktau. Exports to China amounted to 7.7 million tonnes, of which 6.2 million tonnes were Kazakh and 1.5 million tonnes were Russian. Marine exports amounted to 11.1 million tonnes; four million tonnes were shipped by rail and 1.8 million tonnes of pipeline condensate were delivered to the Orenburg Gas Processing Plant.

In 2014 the following increases are projected: oil production to 85.0 million tonnes; oil exports to 75.0 million tonnes; raw gas production to 55.8 billion cubic meters; dry gas exports to 14.6 billion cubic meters per year; gas transportation to 129.3 billion cubic meters per year (Caspian Pipeline Consortium to 67 million tonnes per year and Kazakhstan-China to 20 million tonnes / year); international transit of gas to 101.1 billion cubic meters per year.

Based on the principle of multivectorial distribution of hydrocarbon supplies to domestic and foreign markets, Kazakhstan is striving to develop all economically viable routes for natural gas transit and export. Construction projects are proceeding on the Kazakhstan-China, Beyneu-Shymkent and Caspian gas pipelines. These projects will improve Kazakhstan's transit and export capacity.

Kazakhstan has the world's eighth largest coal reserves, with 4% of global reserves in the bowels of the country. The coal industry accounts for almost 80% of the country's electricity. In 2009, coal production in Kazakhstan amounted to 94.3 million tonnes; in 2010 it rose to 110.8 million tonnes. By 2014, coal production should reach 123.0 million tonnes.

Kazakhstan holds a positive position for foreign investors in the energy sector. In 2009 alone, the volume of investment in the country's mineral complex was 3.2 trillion Kazakh tenge (US\$21.4 billion). Foreign investors from the US, China, Russia and the European Union provide over 70% of Kazakhstan's oil production. Large national and multinational companies such as ExxonMobil, Chevron, Agip, BG, BP/Statoil, Shell, Total, INPEX, Philips, LUKOIL, Oman Oil, Eni, and others perform operations in Kazakhstan. Therefore, Kazakhstan is ready to continue the dialogue on reforming the global energy market. It has a clear position regarding the implementation of open, constructive, apolitical and mutually beneficial energy relationships, and will make every possible effort to maintain global energy security.

**What are the features of Kazakhstan's electric power industry?**

**What is Kazakhstan's policy for developing its renewable energy resources?**

To read the rest of this article, please visit the WEC website: [http://www.worldenergy.org/documents/interview\\_15\\_02\\_2011.pdf](http://www.worldenergy.org/documents/interview_15_02_2011.pdf)

## WEC Debrief

### **WEC PGP Knowledge Network holds its first meeting in Madrid, Spain**

The WEC Knowledge Network on the Performance of Generating Plant, one of the most well-established and best-known WEC activities which started 35 years ago, held its first meeting in Madrid, on January 24. The meeting was focused on the discussion of the 2011-2013 Terms of Reference within the new integrated organisation of WEC's studies, including PGP's role in it, and the expected deliverables. Particular emphasis this year will be placed on the definition of energy efficiency improvement potential in power generation. The rapidly increasing share of intermittent renewable energy based generation, and the challenges of its integration in the existing electricity networks, will constitute another important focus of the Knowledge Network, which will also continue to monitor and analyse the development of electricity markets around the world, maintain the PGP database of key performance indicators and hold power plant performance benchmarking workshops.

## WEC Agenda

We invite our members to attend the following events:

### February 27; Johannesburg, South Africa

- WEC Africa Mentor Workshop
- Presentation & interactive discussion of WEC's new Mentor Scheme
- Contact: [fall@worldenergy.org](mailto:fall@worldenergy.org)

### February 28 – March 2; Johannesburg, South Africa

- Energy Indaba Conference & WEC Africa Regional Meeting
- Contact: [info@siyenza.za.com](mailto:info@siyenza.za.com)
- Special Scenarios Session
- Contact: [thomas@worldenergy.org](mailto:thomas@worldenergy.org)

### March 17; Bucharest, Romania

- WEC Romania National Committee event
- Launch of the 11th Edition of WEC Regional Energy Forum – FOREN 2012
- Contact: [ghbalan@cnr-cme.ro](mailto:ghbalan@cnr-cme.ro)

### March 22; Brussels, Belgium

- Joint European Commission-WEC Europe Seminar
- 'European Energy Infrastructure: sharing responsibility between policy & business'
- Contact: [slavov@worldenergy.org](mailto:slavov@worldenergy.org)

### March 24; London, UK

- UKWEC Workshop – details to follow
- Contact: [UKWEC@energyinst.org](mailto:UKWEC@energyinst.org)

### March 24-25; Bangkok, Thailand

- WEC Asia Regional Meeting & Green Energy Conference
- 'Green Energy: Global Challenge, Regional Opportunities'
- Contact: [leechongmoo@live.co.kr](mailto:leechongmoo@live.co.kr)

For further events and more details, please check the Events page on the WEC website...

[http://www.worldenergy.org/news\\_events/18.asp](http://www.worldenergy.org/news_events/18.asp)

## Inside Insight

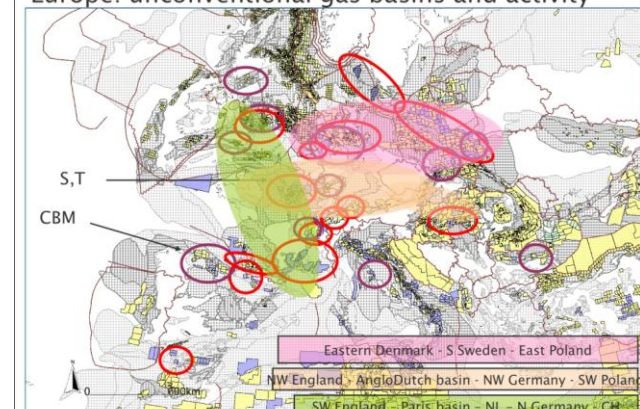
### Shale Gas in Europe

Shale gas reserves in the US have tripled over the past few years with estimated resource endowment currently at 3,760 tcf\*. This has brought the production cost of gas down to almost\*\* US\$3 per million Btu and is expected to go lower to US\$2 per million Btu. The availability of plentiful volumes of cheap gas implies reduced US gas imports, a slower ramping up of high cost renewable energy technologies, and a possible shift in the global gas trade.

Europe is estimated to have 7% of the world's shale gas reserves\*\*\*, mostly located in Poland, Germany, Austria, Sweden, and Denmark. Exxon Mobil and Shell have active unconventional gas operations in some of these countries. The question on many people's minds is whether the American shale gas experience can be replicated in Europe? In the US, the spot price of gas at Henry Hub has been falling over the past year. In continental Europe and Asia, gas prices are usually indexed to oil prices under long term 'take-or-pay' contracts. A resulting regional spread has therefore developed between the prices of gas in the US and continental Europe. This is exerting pressure on European gas markets. If shale gas reserves in Europe are optimally exploited along with sufficient infrastructural investment, the price of gas in Europe will move towards a market spot price, resulting in cheaper gas at higher volumes. In spite of this optimism, the Financial Times recently reported that BG has cautioned against the perception that the world would be 'awash with gas' in the long term and that 'US\$2,000bn of investment will be needed to bridge a supply challenge in the next decade'.\*\*\*\*

Looking forward, one must be careful not to generalise and superimpose the US shale gas experience on Europe - the two have very different geographies, gas reserve profiles, regional dynamics, and political governance structures. Although European shale gas may add to gas reserves, it is unlikely to offset continuing decline in existing reserves and also contribute to the replacement of 30% of European base load capacity in the next two decades. In light of these developments an interesting question to ask is, will sustained lower spot prices for gas eventually force a reconfiguration of long-term gas contracts in Europe which are currently indexed to oil?

Europe: unconventional gas basins and activity



Source (Graphic): Statoil

\*2010 Survey of Energy Resources: Focus on Shale Gas, WEC

\*\*[http://online.wsj.com/article/SB1000142405270230349130457518\\_7880596301668.html](http://online.wsj.com/article/SB1000142405270230349130457518_7880596301668.html)

\*\*\*Ibid 1

\*\*\*\*<http://www.ft.com/cms/s/0/c619922e-33ae-11e0-b1ed-00144feabdc0.html>

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