



**Energy stakeholders will have to think creatively in the long term to meet a number of challenges arising from the greater availability of natural gas, International Energy Agency chief economist Fatih Birol, told ICIS in an exclusive interview. While the fuel's abundance will lead to the erosion of oil indexation in long-term gas contracts and its replacement with new formulae, it may also hit coal and renewable electricity generation. However, even in an age of cheap gas, there is a strong need for green energy, says Birol.**

Increased availability of natural gas, and in particular of liquefied natural gas (LNG), may lead to the replacement of traditional oil indexation with a hub pricing system for gas contracts and help to bridge the current gap between North American, European and Asian prices, Fatih Birol, chief economist at the International Energy Agency (IEA), told ICIS.

The greater availability of natural gas, especially in the wake of growing shale gas exploration and production across the world, will not only help to create a more competitive and liquid market, but also challenge stakeholders to rethink current pricing structures, said Birol.

It will also have a strong moderating effect on the price of natural gas, narrowing spreads between the US, where prices are around the \$2.50/MMBtu level, Europe where it trades at an average \$8.00/MMBtu, and Asia where it is at \$18.00/MMBtu.

*"In the medium term we are going to see major transformations in the gas pricing system," said Birol. "There will need to be creative [pricing] formulas. I hope to see more and more hub pricing in many regions of the world, which should be a reflection of greater liquidity and availability of gas."*

Birol conceded that following the 2008 economic crisis, governments and international institutions such as the International Organization of Securities Commissions were seeking tighter regulation of financial and commodity markets, a move that may affect the entire energy supply chain.

*"I think when I look at the evolution of oil prices – which are far too high and volatile – that this volatility is due to several factors, but I would not put speculation as the top reason either for volatility or for high oil prices," said Birol.*

*"The main reason is market fundamentals – supply and demand. Carefully designed regulatory measures are more than welcome in order to bring more transparency in the market, but one should also be careful not to bring unintended consequences to the market."*

Birol said that the introduction of a more flexible pricing mechanism can only happen if there is greater transparency in an opaque environment. He added that the IEA was supportive of transposing in the gas sector the aims of the Joint Organisation Data Initiative (JODI), a concrete outcome of the producer-consumer energy dialogue that seeks to bring transparency to the oil market.

*"Gas transparency is high on the agenda. It has been mentioned at the G8 Camp David summit recently. Together with our counterparties we [the IEA] are very much supporting such an initiative," he said.*



## Greater gas availability will change pricing – IEA chief

In its special report – Golden Rules for a Golden Age of Gas – released at the end of May, the IEA predicts that the production of unconventional gas, primarily shale gas, is set to more than triple, to 1.6 trillion cubic metres/year by 2035.

As a result, the shale gas revolution that started in the US and is expected to be replicated as far afield as east Africa, China and Australia, could lead to the substitution of coal as a secondary fuel by natural gas, Birol said.

*“In the US, shale gas availability exceeded market expectations so strongly that it substituted coal in a big way and a lot of coal became available for exports. That coal brought coal prices in Europe to a historical low. What I expect, if the US and China continue shale gas exploration and production, is to see coal as the most likely victim,”* said Birol.

He added that renewable forms of generation were also vulnerable to the shale gas revolution, but insisted that with support from governments, production from clean sources of energy ought to continue.

He said that even in an era of low gas prices, there is a case for renewable generation, arguing that the gas sector itself may support renewable forms of generation.

*“I hope renewables will not be affected,”* said Birol. *“If governments continue their support, gas could in many cases support renewable generation, but my message to governments today is that if they take energy security and climate change seriously they should continue to support renewable projects. There is a need to support renewable projects despite the lower gas prices.”*

While predicting an optimistic future for the gas market, Birol was also keen to emphasise that gas production, and in particular that of unconventional sources such as shale, coal bed methane and tight gas, may come up against a series of challenges ranging from political uncertainty in the US, risk in the Middle East and Africa, cost escalation in Australia, and also serious environmental scrutiny.

He reiterated the IEA’s call to the natural gas industry to abide by seven “golden rules” – a set of principles ranging from full transparency to engaging with local communities – that would allow policymakers, regulators and operators to address environmental and social impacts resulting from the exploration and production of unconventional sources of gas.

The IEA estimates that applying the seven golden rules could increase the financial cost of developing a typical shale gas well by an estimated 7%.

*“Roadblocks can be removed if governments and the gas industry were to increase shale gas production in line with the right rules and regulations and getting a social licence from local communities. We may suggest seven local rules for companies. If they are followed we may see more gas from the US, China, Canada and Australia coming on line.”*

**By Aura Sabadus**



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