

Session A - International Leadership Panel: "Asia Outlook?"

- **Keisuke Sadamori**, Director for Energy Markets & Security, IEA
- **Dr. Tatiana Mitrova**, Head Oil & Gas, Energy Research, Russian Academy of Sciences
- **Jérôme Ferrier**, President, International Gas Union
- **Matt Fox**, Executive Vice President Exploration & Production, ConocoPhillips
- **Nawal Al-Fezai**, OPEC Governor, Kuwait

Moderator: **Sean Evers**, Gulf Intelligence

Sean Evers:

We'll go straight to the first survey question. Dr. Tatiana, what are your thoughts? How did you vote?

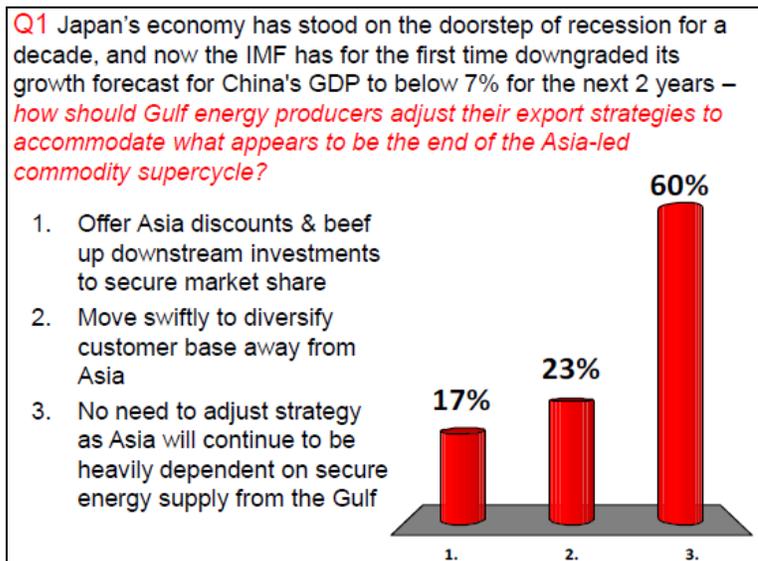
Dr. Tatiana Mitrova:

Well, actually, my vote was number 2. Generally speaking, I think that Asia is still going to be very much dependent on Gulf oil and gas supplies, but at the same time I would also join the first answer, because if you are dealing with Asia, and actually that's what Russia has experienced, you have to provide some discounts, especially with the Chinese buyers. It's absolutely a must to have a very flexible marketing position. It's something that they are

demanding and that they will be increasingly demanding in the future and while we remain in this situation of over-supply. What Russia has done was to discount for both the oil and the gas deal. At the same time, one has to realize that Russia's possibilities, export possibilities, are quite limited. Theoretically, it could happen in the longer term, but even if it happens, a consequence will be a sharp decline in Russia's supplies to Europe. So it's redirecting mainly due to political reasons, not due to economics.

Sean Evers:

Nawal, I'm curious how you voted. Kuwait has been talking a lot recently about getting into a refinery in China and there are large storage facilities in Korea. Is Kuwait putting too many of its eggs in the Asian basket and maybe needs to look at other markets?



Nawal Al-Fezai:

The Asian market is the major market for crude and products from Kuwait. So I go with answer number 1. There are a lot of uncertainties now about demand in China and India. There are efficiency measures they are taking and they are using more coal and gas. That's why there are a lot of supplies from other sources. And that's why I think Gulf countries have to keep their share in the Asian market by going downstream into refineries or petrochemicals, and by giving discounts on crude to keep their market share in Asia.

Sean Evers:

What about new markets, say Europe or South America?

Nawal Al-Fezai:

It's not easy to enter these new markets, taking into consideration distance and that these markets have their own historical supply sources.

Sean Evers:

So Asia is the only game in town?

Nawal Al-Fezai:

Yes, it's really a traditional customer and it's easier to deal with the Asian markets than going to new ones.

Sean Evers:

Let me bring in the voice from the international industry, Matt. What's your outlook for Asia?

Matt Fox:

Actually, I would take issue with the premise of the question of the end of the Asia-led commodity super cycle. There's going to be continued growth in Asia. Even in previous price projections before the correction, there was an expectation that oil demand in Asia would grow about 2.5 percent a year and natural gas demand would grow about 4.5 percent a year. We'll get to a place where by 2030, China will be consuming more oil than the U.S. is and metal prices are lower. Although economic growth may slow down to some extent in the Asian countries, the lower prices should help sustain that growth and perhaps grow it further. So I think that there's definitely a long-term source of demand growth across the Asia region, without any doubt.

Sean Evers:

So the thesis there that the commodity super cycle which saw oil prices quadruple from \$25 a barrel in the early 2000s to \$100, are we still in that?

Matt Fox:

No, I was only responding to the decline in demand in Asia. There is a decline in demand growth but it's not going to result in long-term demand disruption in Asia and there will still be very significant markets for all of our products.

Sean Evers:

I'd like to bring in Jerome Ferrier. Gas seems to be coming from everywhere into Asia. Is it wise for Gulf producers to be so heavily dependent on Asian demand when there is so much gas supply coming from other sources?

Jérôme Ferrier:

Regarding natural gas, the International Gas Union (IGU) considers China and Northeast and Southeast Asia as facing the prospect of a decline in energy supply security. The Asian-Pacific region is described by the International Energy Agency as having the capacity of sustaining robust economic growth and evolving towards a more environmentally-friendly energy mix with an increasing recourse to natural gas and renewables. So I would like to make three comments.

First, the more evident geographic distribution of natural gas and shale gas resources in the world is a risk mitigating factor. Second, the expected growth of the LNG market will result in a decoupling of oil and gas prices, and it is expected that the environmental qualities of natural gas shall be acknowledged in its price. Third, the pipeline of large-scale LNG supply projects should be made economically possible even in a steady regime of relatively low oil prices. So we are confident about new options for LNG production from the Middle East and particularly Qatar, even if local consumption increases, because in the region we have steady demand for power generation, for domestic gas production. But for new LNG exports, Asia, China and Southeast and Northeast Asia will remain the demand areas in the coming years.

Sean Evers:

Mr. Keisuke, 60 percent of the room is saying they don't need to adjust strategy as Asia will continue to be heavily dependent on secure energy supply from the Gulf. Do you agree with that?

Keisuke Sadamori:

It's actually a difficult question. I voted 3, being one of the directors at the IEA. But as I'm originally from Japan, I would welcome number 1 any day, the cheaper the better.

Sean Evers:

You would welcome it; do you think it's needed?

Keisuke Sadamori:

It may be needed to a certain extent in responding to the current price development. But in terms of the kind of structural demand and supply balance, we at the IEA consider that even though Chinese demand growth may be slower compared with the last five or 10 years, that China and others in Asia will lead demand growth of the entire global market. We expect about 6.6 million barrels a day of growth from 2014 to 2020 and around 4 million barrels out of that is expected to come from Asia, probably 1.7 million from China and 2.4 million from the rest of the emerging Asian countries. So in that sense, even though it could be slower than in the last

decade, we expect China and other emerging Asia to continue leading growth towards the 2020s.

Sean Evers:

Is there an opportunity that Asia can develop more of its own energy reserves and resources without being increasingly dependent on the Gulf – nuclear power coming back in Japan; shale gas in China, which is fairly undeveloped at this point in time; energy efficiency across the Asia-Pacific region?

Keisuke Sadamori:

In terms of oil demand and supply, we expect the Asian region will continue to depend upon imports from other regions. And in the case of gas, the supply source is a bit more diverse. We expect that there are very big projects coming online in Australia for instance. So there'll be more supply coming from that region.

Sean Evers:

Although Dr. Tatiana says Russia can't be dependent on being a big supplier into the Asian market unless it stops supplying Europe.

Dr. Tatiana Mitrova:

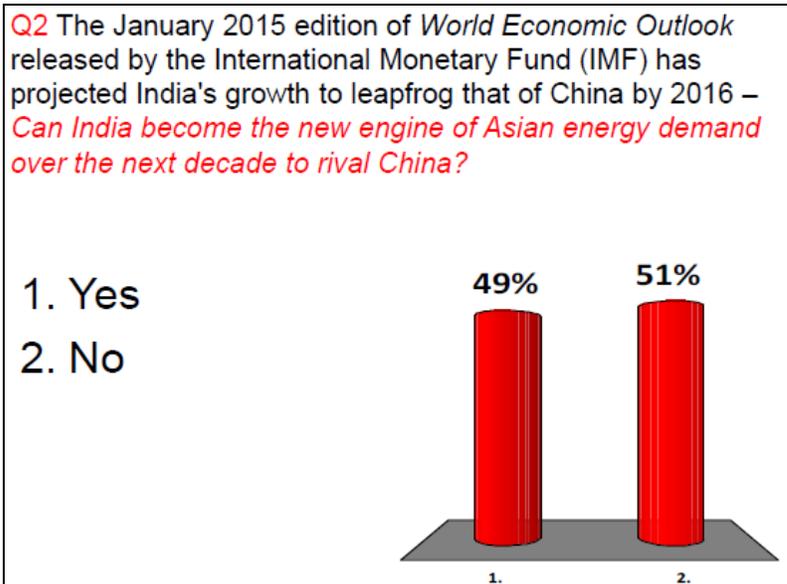
Again, it's different for gas and oil as you can quite easily divert oil flows; it's not that expensive. But it's enormously expensive to resend gas from Western Europe to Asia. It's almost not doable. So far, all Asian gas exports are based on the Eastern Siberian field, which would never reach Europe. It's the same issue for competitiveness of gas, actually for all new LNG projects - it doesn't fly at \$7 a million BTU. How can new upstream projects feed the market and how can they be competitive in the lower price environment?

Sean Evers:

Okay, let's bring up the next question please? What are your thoughts on that, Matt?

Matt Fox:

I think that Indian growth can supplement Chinese growth but it's not likely to surpass the growth in China in my view. I think that both economies have got lots of room to grow, but I think that China is going to be a much more significant market over this period of time than India.



Jérôme Ferrier:

It will take time. What's interesting from a geopolitical point of view is to mention the two big gas pipeline projects to India – TAPI from Turkmenistan through Afghanistan and Pakistan to India; and IPI from Iran via Pakistan to India. They are moving on these two projects.

Sean Evers:

Nawal, do you see India as a great potential market?

Nawal Al-Fezai:

Yes, India has great potential for crude exports from Kuwait but not for downstream projects. There was talk between Kuwait and India about a refinery, but I don't see that there is big potential to build it. Kuwait now talks about a project in China, a refinery or petrochemical project. As I see it, energy demand in China will grow more than in India because China's economic structure is more organized than in India. Also, the culture, the technology is more on China's side.

Sean Evers:

Just looking at the trend lines, could India become a much bigger energy consumer than it is today in 10 years' time?

Dr. Tatiana Mitrova:

Most likely it will be a much larger consumer than it is today but I doubt that it will overtake China, even in 10 years time. But as an engine, China is definitely slowing down - we see it in all the measures they are undertaking, in their energy policy, in terms of energy efficiency, and also environmental policy. India has not reached that state of maturity yet.

Audience Member - Christopher Delbrück, Chief Executive Officer, E. ON Global Commodities:

It very much depends on how they solve the affordability question. Importing gas at world market prices is not affordable for many sectors and it's just the blend between the domestic gas and the international gas that makes it affordable. So if the economy picks up and then spending power picks up, this needs to go hand-in-hand to make it happen. Otherwise India will fall into a trap of having to import more but having to get finance essentially versus the consumers who can't afford the gas. So it is about the structural reforms which are being promoted by President Modi - are they going to happen and are they going to increase the growth of the overall economy.

Sean Evers:

Do you have any concern at all that China could surprise on the downside?

Christopher Delbrück:

I think if we talk about the larger projects, we're talking longer-term time frames. We tend to think of a slump right now, that everything is going to collapse and next year we're going to be bullish and everything is going to be brilliant. In the longer term, China will continue to grow; it

will not be able to continue on double digits as their base growth. In absolute terms, it's interesting to see what happens. And I think there is potential for maybe a short dip in consumption. But in the longer term, I'm not really worried.

Keisuke Sadamori:

We will see India growing more rapidly than China in the next decade. But at the same time, we should put the scale into perspective, because nothing compares to what China achieved in the first decade of the century. We expect slower growth for China and it may also change its pattern of growth and become successful in depending less on energy intensive sectors and go more for a service-oriented economy.

Dr. Tatiana Mitrova:

If we talk about drivers of energy demand growth, we have to define what energy we are talking about because hydrocarbons are only a part of the solution. Nuclear, renewable and energy efficiency, to a certain extent they can deliver part of the solution. But we are missing the elephant in the Asian room - coal. It is so far the cheapest and the most obvious solution for China and India. So if hydrocarbons are not accessible for some reason, then coal is what's left. And the major issue, especially for gas in Asia, is how competitive it's going to be. So far, gas is losing this competition. And the problem is that even with gas prices going down, what we are observing currently in the Asian market, is that coal prices are going further down. We saw this problem in Europe already, how coal plants are actually squeezing out gas-fired power generation. And I'm afraid that if there are no major changes in the Asian gas market, in Asian LNG pricing, we might see a similar situation when LNG—especially those very expensive projects from Australia, potentially from Russia and from East Africa with 12 dollar per million BTU breakeven prices—will simply not be competitive at all and gas will not become part of the solution, like what is happening in Europe.

Sean Evers:

The last question, please? Jérôme, your thoughts?

Jérôme Ferrier:

I think what we observed before the drop in oil prices was a relative disconnect between oil and gas prices. And the result was three clear markets: one in the U.S. with a very low Henry Hub price; one in Europe; and one in Asia. After the last shock, we are observing convergence of prices and a certain balance between Asia and Europe, even if gas prices stay very low in the U.S. So, I think that probably—and I support the first answer—the oil and gas price will consolidate Asia's demand for years to come. The question is: what about the very expensive new projects, gas pipelines or LNG projects, particularly in Australia? Up to now, the builders have decided not to interrupt and not to change the plans regarding the seven big LNG projects in Australia, but we are seeing that projects with no final investment decision will be postponed. And it's the same case in North America and Canada. So regarding Asian demand, I quite agree with the first option.

Q3 What will be the main impact of a lower oil price range on the historic rise of natural gas demand that we have seen in Asia over the last decade?

1. Lower oil and gas prices will consolidate Asian demand for both for years to come
2. Lower oil prices will threaten LNG's status as Asia's preeminent emerging energy source
3. LNG exports to Asia will be diverted to more lucrative markets such as Europe
4. Derail or at least delay plans in Japan to reopen nuclear plants
5. Gas pipelines will displace LNG

