Impact of US shale gas echoes around Gulf

Justin Dargin, energy and environment scholar at the University of Oxford, talks to **Leigh Elston** about how the advent of cheap shale gas in the US poses a long-term threat to the economic strategies of the major Gulf economies.

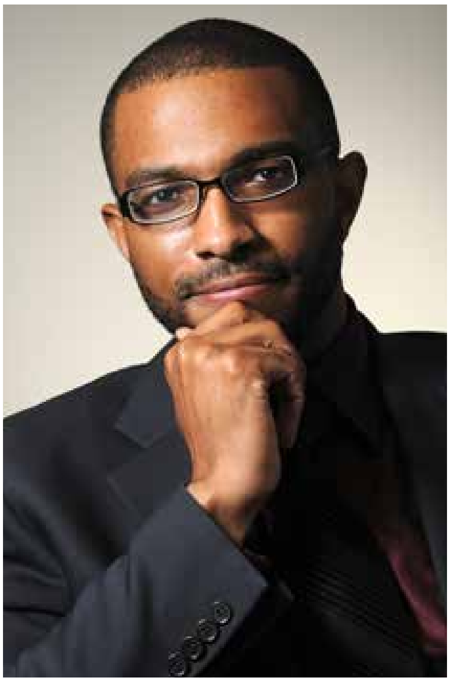
THE North American shale gas boom means the United States may not only eat into the market share from LNG suppliers in the MENA region, but seriously threatens the competitiveness of its growing petrochemical sector.

Justin Dargin, energy and environment scholar at the University of Oxford, speaks to *Interfax* about the long-term threats to Gulf economies that had relied on the development of energy-intensive industries for diversification.

Interfax: Cheap US shale gas has been a major boon to the petrochemicals industry in the US. How is this affecting the Gulf economies?

Justin Dargin: American shale gas will become a major threat for the Gulf states. It will affect their diversification plans significantly and that's the thing most Gulf countries are worried about, rather than potential LNG competition or even shale oil production.

Qatar, of course, is more worried about direct LNG competition. We can already see the relocation of investment funds taking place and heading to the US market. Currently, about 110 new petrochemical projects or major expansions to existing plants have been announced, with a capitalisation rate of about $75-80 billion, and the investment keeps coming in.



Justin Dargin, University of Oxford. (Lisa Swarbrick)

You have to put it in context; the US held about 25-30% of the world's petrochemical export market share in the 1980s, and by the 1990s this had declined to about 8-10%.

The Gulf has captured about a 15% market share so far, but it's edging up to about 20%. And one of the reasons the Gulf countries have had this rapid growth has been the low cost of gas feedstock.

But the Gulf countries have been more concerned about gaining market share than becoming more competitive, and that's now a major issue.

We are seeing a double movement in the petrochemical market; there are relatively low American gas prices as well as abundant and consistent supply. by contrast, in the Gulf region there are frequent ethane supply disruptions, and many producers are concerned about whether they will be guaranteed supply in the long term with so many shortages and deficits.

While prices have roughly stabilised in the US – they might creep upward in the mid-term, but technological improvements could help lower the cost of production – in the Gulf region gas prices are heading upwards and there's no way to escape that. If you import LNG at $11/MMBtu, for example, and have a domestic gas pricing framework of about $1.25/MMBtu, something has to give.

If the Gulf countries raise gas prices for the domestic industries, they will erode their competitive advantage; but if they don't raise prices, then they'll continue to suffer shortages. It is not an easy decision.

Interfax: Are Gulf countries looking at other ways to protect their petrochemical industries?

JD: What they're looking at now is how to improve their competitive positions at the margins and become more competitive in terms of technology deployed, and efficient managerial and technical skills.

There is also the push for joint ventures in some of these major consuming markets, such as China.

But it is going to be a highly competitive environment in 2020. And we also have to remember that the downstream gas industries are what the Gulf countries are staking their entire economic diversification strategy upon. They have invested billions of dollars in their downstream sector, not only in petrochemicals but also the energy-intensive industries.

Interfax: Are you seeing a sense of panic in the region over this issue now?

JD: There's so much panic in the Middle East – about Iran, Syria, the Arab Spring, job creation, Iranian and Iraqi oil price wars, gas supply, and so on – it's more a question of what to panic about first.

But I see this beginning to seriously affect the regional economy about five years from now, so while it's an issue of increasing concern, there's not much panic at the moment.

Right now, the immediate concern is how to source enough gas to be able to fuel the domestic industries and supply enough power.

Interfax: If other areas of the economy look increasingly vulnerable, do you think the key oil-producing states will be even more protective over keeping oil prices high – or even look to raise them higher?

JD: Yes, because if you look at the break-even prices in the Gulf region, they have increased significantly since the early 2000s.

Saudi Arabia, for example, on the eve of the invasion of Iraq, the fiscal break-even price for the budget was between $30-40 per barrel. Now, the fiscal break-even price is pushing $85-95/bbl as a result of an increase in subsidies and welfare granted to the domestic market, the population

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It's not an issue of looking into the future and keeping oil prices high to balance out the loss in petrochemical sector – it's actually right now that they really need to keep oil prices around the $100 range.

However, with Iranian production coming online soon and expanded Iraqi production – as well as American shale oil – it appears there will be downward pressure on prices, especially if the emerging markets begin a comprehensive slowdown.

Interfax: While cheap US alternatives may be destroying the competitive advantage of the Gulf downstream gas industries, it looks like it may also play an important role in boosting their energy security. How likely do you think it is that the UAE and other countries will start importing US LNG?

JD: The UAE is not going to get another extremely low price as it had previously with the Dolphin gas pricing.

While dealing with the Qataris makes the most sense, and pipeline imports would be the most efficient and economic option for transporting gas regionally, the UAE is now seriously considering how the US would be able to meet some of their long-term gas needs.

The term 'revolution' has been bandied around a lot recently – the shale revolution, the Arab revolutions – but really there has been a revolution in terms of mindset in the region.

Just a few years ago there was pushback against the notion that the UAE or even Kuwait would become long-term gas importers; the idea was that LNG imports were just a short-term fix.

Plus, it would have been considered preposterous even several years ago that the Gulf would look towards the US for some of their gas needs. But it is now a new reality – policymakers have accepted this and are making efforts towards securing new supplies.

Interfax: Will the UAE get a lower price for US LNG than it would for Qatari cargoes?

JD: I'm not certain whether Henry Hub-linked US LNG is going to be that much cheaper than existing LNG, once you factor in the liquefaction and transport costs.

But what would likely happen is that the additional LNG supply on the global market would drive down global spot prices.

Interfax: Do you see a shift in Qatar's LNG marketing strategy in response to the advent of US LNG?

JD: What the Qataris are trying to do at the moment is lock in long-term prices to mitigate the potential threat from US LNG.

At the moment, Asian importers don't really have that much of an option but to sign up for Qatari LNG, although some are trying to diversify their supply.

For example, in India Petronet is seeking to reduce its dependence on Qatari gas and acquire more supply from Angola, Mozambique, Yamal and Indonesia to offset its dependence.

The Qataris are offering minimal flexibility and are still trying to lock in the same basic pricing framework for long-term contracts. As an example, Qatar revised its LNG price for Pakistan downward recently downward to help reduce that country's ongoing energy shortages.

However, the pricing was still pretty standard, and was only discounted by 0.5% to $17.437/MMBtu from the previous rate of $18.002/MMBtu for the 20-year contract.

Therefore, we can see some price discounts, but it's really nothing substantial because the Qataris want to preserve their long-term revenue for when American, Australian, East African and additional Russian LNG arrives on the market and the environment becomes much more price-competitive.

The Qataris are now beginning to offer shorter deals as a prelude for more strategic long-term contracts. These three year deals are priced at a 13.5% slope, with the longer-term deals hovering between a 14.5% and 14.7% slope.

The Japanese are not being as tough in negotiations as they could be, because they value stability more than necessarily getting a lower price, especially following the Fukushima crisis.

However, even the Japanese are moving to cap LNG prices, as the Japanese energy ministry informed the utilities they will not be able to pass on costs to consumers beyond a certain price ceiling.

Additionally, the Chinese are moving to cap prices with insistence on hybrid pricing and a resolve not to pay more than 14% of crude oil for long-term contracts.

Because of the increased supply of LNG poised to enter the market, Asian consumers are attempting to negotiate the best price available.

Interfax: Looking a long way into the future, if Iran opens up to the international oil and gas markets again, do you see American LNG eroding the competitiveness of future Iran LNG exports?

JD: Iran is optimistic that the lifting of sanctions will expedite gas exports to its neighbours. The Iranians are open to gas export negotiation and I don't see necessarily why its neighbours, particularly the Emiratis, would not be open as well.

We could see the UAE importing from Iran in the mid-term. But even during the best of days, the Iranians were always something of a mixed bag – you never know quite what they're going to do.

For example, Iran, somewhat unilaterally, cancelled its 25-year gas supply contract with Crescent Petroleum. The 280 km underwater pipeline to Sharjah had been constructed, but the Iranians did not come through because of pricing disputes.

But while the Emiratis would likely not want to depend upon the Iranians for the long term, Iran could be another potential gas supply option for them in terms of supply diversification.

When sanctions are ultimately lifted, we are going to see major investments into the Iranian gas sector because the Iranians are now open for serious discussions.

They are open to much more flexible investment terms and have moved away from this fixation on rigid contractual terms. Iran announced that over the next five years it requires approximately $150 billion of investment to rehabilitate its energy sector. This is what is driving them to be much more flexible.

At least by the beginning of the next decade, Iranian gas would likely come online. I imagine the Iranians will move more towards LNG as opposed to pipelines because, even though the initial capital costs are much higher, LNG offers destination flexibility for them. ■

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