THE RAPIDAN GROUP
GLOBAL ENERGY INSIGHT

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Hearing entitled "Challenges and Opportunities for Oil and Gas development in Different Price Environments"

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Chairman Murkowski, Ranking Member Cantwell, and Members of the Committee, my name is Leslie Palti-Guzman and I am the Director of Global Gas at The Rapidan Group, an independent energy market, policy, and geopolitical consulting firm based in Bethesda, Maryland, with a representation in New York where I am based. It is an honor to speak with you today about the changing price environments and what it means for natural gas and LNG developments.

As a European gas analyst, who is familiar with EU energy security, and as a US resident for the past ten years who has witnessed the transformative US energy boom and what it means for the rest of the world, I will focus my remarks on the new global gas order that has emerged since the second half of 2014 and what it means for US LNG exports, global gas trade and the geopolitics of gas.

A New Global Gas Order

Large oil price declines reflected in oil-indexed gas prices (notably in Asia), abundance of new LNG supply and European and Asian rock bottom spot prices at a time when traditional Asian demand is muted, have ushered in a new order for LNG markets.

The 2016 global gas market features a buyer's market with greater flexibility, growing competition between exporters, entry of more diverse LNG players, a convergence of European and Asian spot prices below $5/mmbtu, and a wait-and see approach on LNG infrastructure investments.

US LNG Needs to Sell

Permitting, contracting and building US shale-to-LNG facilities was in retrospect the easy part, now the US LNG needs to sell. Flexible purchasing agreements, eroding international prices and weakened demand in top LNG consumer country could make the US shale-to-LNG market less attractive than it was a few months ago.

There is no guarantee that the customers of the US's first shale-to-LNG export facility, Sabine Pass, in Louisiana will not leave the fuel at its port when commercial operations start next month. Roughly 58 million tons of US LNG have been sold under long-term contracts out of the five facilities currently under construction (sufficient to supply the combined LNG markets of Europe and South America), however there is no guarantee that the customers which have contracted the volumes will actually use their option to export the gas if the economics do not work. US LNG is all about flexibility, which has made US LNG appealing to purchasers, but it also means that buyers are free to walk away from previously agreed purchases by giving notice.

Furthermore, buyers are free to send their LNG without a fixed destination attached—meaning that there is no predetermined dedicated market for US exports. The destination of US Gulf Coast LNG, with first commercial cargoes starting in coming weeks, will be determined by regional price spreads. Current narrowing regional spreads make US LNG to Asia unlikely. Whereas about half of all cargoes from new LNG export projects were initially expected to go to Asia, as it stands today, it seems that 1/3 of US LNG will go to Asia, while possibly 1/3 will be sent to Europe and 1/3 to the rest of the world, notably South America.

Along with its unique Henry-Hub pricing, the newly found flexibility is highly attractive for purchasers, but it also creates unpredictability for market players, governments, and market forecasters regarding the amount of future exports and their destinations.

Next Wave of US LNG Investments

Given the medium-term glut, the market takes a wait-and-see approach when it comes to making major final investment decisions (FIDs). Oil price levels, project cost mitigation, competition between supply sources, and natural gas demand will shape the flow of incremental US supply in the coming years.

FIDs that do go ahead in the next four years will feature either major cost reductions, competitive technologies (such as FLNG), capacity downsizing, or access to a large-scale resource and/or strategic market that makes the project a winner in the long run despite the current, unfavorable market conditions.

US LNG plays will continue to be attractive for new investment decisions (including Greenfield) given their low cost, unique pricing and stable source of supply.

However, it is important to keep in mind that Asian and European buyers like to diversify their sources of supply and pricing exposure, which implies that they don't want solely US LNG in their portfolio. Some in Europe, do not want to replace a Russian dependence by a US dependence. In Asia they want a portfolio as diversified as possible (supply from Russia, Qatar, Australia and others). Delays in other plays (Mozambique, Western Canada) will be a boon for new investments in US LNG. But the most important competition to additional US LNG capacity will be unsold volumes from operational export plants.

Medium-term and long-term demand for LNG will be one of the most critical elements to watch in determining whether the world needs additional US LNG. In many countries, natural gas must compete for market share with cheaper coal and zero-emission renewables, which makes future demand uncertain. In Europe, there is no obviousness in the role of gas and gas cannot compete with coal without a carbon price. Post Cop-21 has raised the profile of gas has the best partner to a greener economy, but prices matter. Gas and LNG have to remain competitive.

More affordable and accessible LNG creates renewed or new appetite in several countries, making also the environmental argument of favoring gas over coal or fuel oil more compelling. As the Asian premium for LNG prices evaporate, large Asian importers such as Japan and South Korea will save billions of dollars on their LNG bills. Cheaper natural gas imports can accelerate switching from coal, a top Chinese priority to address urban pollution.

Moreover opportunistic demand for spot LNG is on the rise. LNG is gaining traction in new niche markets that see it as a stop-gap solution or as a security of supply necessity. New countries have entered the LNG importer club past 2 years (Jordan, Egypt, Pakistan) due to cheaper and wider availability of "non-long-term" LNG supply as well as expanded use of floating storage and regasification units (FSRU) that cut lead time to get in place a LNG import infrastructure (less than 2 years). However, demand from these new, opportunistic importers could be fickle if prices rebound, and some may increase domestic production, secure alternative import supplies, or displace natural gas with competing fuels.

Trends in Global LNG Trade and Pricing

The surge of flexible supply available to the spot market will be a defining feature of medium-term global LNG markets. It will have a transformative impact on the market, which will become freer and more transparent by the end of the decade. While this flexible supply is a boon for buyers, it is a challenge for suppliers in an oversupplied market and will drive intense competition, downward pressure on pricing and doubts regarding the sanctity of long-term contracts.

In addition, oil price gyrations will make oil-gas pricing less predictable, speeding LNG buyers' push away from oil-indexation. At a time when lower pricing and cost inflation put at risk projects and companies are tempted to defer investment, a reform of financing for LNG projects might be needed. Once Hubs will be liquid enough, especially in Asia, investments will increasingly rely on market forces and reliable price signals.

Geopolitics of Gas

The rise of more politically stable suppliers, such as Australia and the US, reduces the exposure of global gas markets to geopolitical disruptions, which means enhanced energy security for consumers.

Current structural overcapacity mitigates the risk that any isolated geopolitical event that disrupts LNG flows would significantly impact pricing near term. A simultaneous cutoff of gas to Europe from Algeria and Libya is our highest probability event for this year, but odds are low. Longer term, Russia's continual threats to long-term gas diversification and the evolution of Qatar-Iran relations pose risks in Europe, the Caspian, and across the Middle East, but near-term disruptions are unlikely.

The more liquid, competitive and transparent the market is, the more established suppliers such as Qatar and Russia will continue to adapt their pricing downward and offer more flexible terms, which in turn will improve the odds of the golden age of gas.