# Gas, LNG portfolio and contract optimization proposition

**KPMG Global Energy Institute**

## Landscape and recent developments

- The liquefied natural gas (LNG) trade flow landscape is broadening from burgeoning growth of liquefaction and regasification plants. Advancements in technology and development are allowing more flexible and faster paced receiving infrastructure development (including liquefaction/regasification and storage off-shore).
- LNG infrastructure scarcity and constraints are being unlocked and converting the traditional LNG supplier dominated market defined by long-term contractual arrangements with inflexible terms (e.g., 15-year fixed quantity, location-specific and oil price-linked) to short-term and more flexible arrangements.
- Leading traditional buyers including Japan are reducing volumes and seeking alternative terms and pricing, including reduced overall pricing.

Overall, the LNG industry is bracing itself for a new era as a buyer's market under buyer power and fueled by a new set of non-traditional buyers and buyer expectations, and as traditional Asian LNG demand growth begins to slow and a proliferation of new LNG supply projects enters the market.

### KPMG view:

The abundant supply picture has changed the negotiating dynamic in the LNG market; buyers will have the upper hand in both new contracts and contractual renegotiations due to both excess supply and locational optionality. Sellers will need to review and rationalize their portfolio and development options in light of attractiveness and exposure to buyer sensitivities and expectations.

These developments are gathering momentum to rapidly convert the LNG industry with the expected following impacts, all increasing contracting and portfolio management complexity and adding new risk considerations.

**The LNG market is globalizing with increasing diversity and capacity among sellers and buyers:** Recent developments in floating (and offshore) regasification technology have been a catalyst in connecting more countries with the LNG market, ultimately increasing the number of potential buyers. This has resulted in an increase of LNG traded, liquefaction and regasification capacity. At the same time, sell-side competition is set to go through unprecedented change in 2016, with the US and Australia adding considerable volume to the market.

**LNG demand is growing, albeit at a reduced rate; Asia is still a key buyer but its demand shape will change into an uncertain and price-sensitive demand**

Past growth in Japan and China that propelled current Asian demand to 75 percent of global LNG demand is waning. Japan's demand, representing 40 percent of world LNG demand, is set to decline as Japan reintroduces nuclear power generation and consolidates its purchases in buyer consortiums. As well, Japanese electricity market liberalization is expected to create uncertainty in terms of future feedstock needs for traditional buyers. For China, reduced growth forecasts and competition from piped natural gas supplies from Russia into China will check LNG growth and reinforce a more discerning buyer seeking optionality. New emerging Asian buyers are increasingly entering with demand that is price sensitive and shorter term and with more flexibility. In Europe, demand growth has been hampered by weak growth and competition from Russian piped natural gas that could intensify to protect existing market share.

## KPMG view:

With Japanese dependency on LNG slowly reducing, Chinese LNG demand waning and new opportunistic Asian demand, sellers need to prepare for fewer locked-in long-term contracts to guarantee supply and for buyers to be more aggressive, seeking more favorable options — such as: price reduction and re-openers; location optionality; volume flexibility; alternative pricing mechanisms; broader Force Majeure provisions; and even contributions to onshore delivery fees. For example, volume flexibility is being sought in the form of Upward and Downward Quantity Tolerance (UQT and DQT), cargo cancellation rights, back-end "ramp down" rights and call option structures, and seasonal flexibility. All elements add new complexity to risk assessment and contracting for buyers and sellers.

**Contractual arrangements are evolving through decoupling of oil and a move to gas hub indexation**

The traditional oil-linked contracts, both Brent and Japanese Custom Cleared (JCC)-linked LNG contracts, have been strained by oil price volatility observed over the last 24 months. The divergence in oil and gas price fundamentals has seen a significant dislocation in long-term LNG contract prices — particularly in Asia. In some cases, long-term LNG contract prices were 70 percent above the prevailing spot price.

In Europe, most LNG contracts contain a 'price review clause'. Such clauses have seen many European LNG and long-term gas contracts remove oil pricing altogether. Europe, blessed with a variety of natural gas pricing hubs, is leading the charge in non-oil LNG indexation — with NBP, TTF as some of the major pricing components within LNG contracts.

In Asia, LNG has been heavily linked to the oil price with the vast majority of contracts referring to a price slope of the JCC oil benchmark. With the US exporting LNG on a Henry Hub basis (gas price), and the significant volume glut, oil prices and the traditional price slope may no longer dominate or prevail in setting LNG prices in Asia.

## KPMG view:

The industry will move to a range of pricing mechanisms and remaining traditional oil index contracts will be under pressure to reduce their slope. Gas indices and switching fuel alternatives will become more prominent in medium-long-term contracts. Further, the development of liquid derivative LNG markets will also play a key role in the future pricing component of LNG contracts. The dislocation between long-term prices and spot markets will also see buyers seek to optimize portfolios with an increase in shorter-duration contracts.

### Emerging trends and micro-dynamics

We see the following factors as key drivers in the LNG market in 2016 and beyond:

- Increased demands from buyers for locational and lifting flexibility
- Spot pricing embedded in long-term contracts (e.g., JKM, NBP)
- Increase in spot market volumes, as buyers seek to diversify portfolios away from long-term contracts
- Push to reduced pricing formulas and inclusion of non-oil/alternate fuel pricing (e.g., Henry Hub)
- Burgeoning growth of hedgeable instruments and derivative markets (e.g., Asia: Singapore and Japan)
- Evolution of new derivative instruments (e.g., location swaps)
- Anticipated increase in uncontracted volumes (long-term contracts expiring between 2016 and 2020)
- Japanese nuclear restarts dampen Asian demand
- Mega-merger of Chubu-Tepco — setting the tone for a 'buyer's market' and consolidation of interests with need for sellers to respond in kind to buyer segmentation and exposure
- Panama Canal — competition under completion reducing journey time from USG to Asia by 11 days
- Increased risk-taking from sellers to ensure volumes are placed (e.g., Bangladesh, Pakistan — recently signed long-term contracts); new buyers with reduced creditworthiness, requiring credit enhancement or taking on additional risk appetite, capacity and mitigation
- Russian oversupply — threat of Russia swamping the European market with gas (impacting US LNG exports).

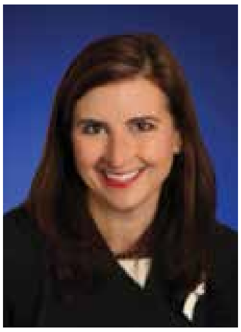
The above factors will herald a new era of portfolio optimization considerations. Sellers will need to look to secure value in the medium to longer term by extending existing contracts and doing business with new, more risky counterparties (while relaxing stringent credit requirements in the process). Buyers will look to widen the scope of term contracts, seeking both spot and shorter-term strip deals.

## KPMG view:

A buyer's market offers a significant risk and opportunity to proactively support the quest for portfolio optimization and associated contract formation and contract renegotiation from both the sell and buy sides, and for capital market and financing providers.

KPMG looks to serve the industry and our clients in this regard with our deep content insights on the market and a globally connected team in a global industry to support framing, shaping and implementing the required approach to protect and add value.

## Contact



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