

LNG – HEADING FOR CONSOLIDATION

IN THIS ARTICLE WE ASSESS THE DRIVERS, LESSONS LEARNT FROM PRECEDENT DEALS, AND POSSIBLE FUTURE TRENDS THAT COULD SHAPE THE NEXT WAVE OF LNG INDUSTRY CHANGE. BY **ANTHONY PATTEN**, PARTNER AND HEAD OF OIL & GAS, **ANTHONY LEPERE**, COUNSEL, AND **TOM FIELD**, ENERGY INDUSTRY BUSINESS DEVELOPMENT MANAGER, **SHEARMAN & STERLING**.

The LNG industry has packed an impressive amount of change into its 55-year history. Shifts in market fundamentals, technology, business models and regulation have all fed in to create the industry we see today. These include:

- The move away from the inflexible floating pipeline or tramline model of trading and growth in FOB supply;
- The introduction of project finance to the development of LNG projects;
- The rise of the aggregator or portfolio model for LNG suppliers, pioneered by BG Group and Royal Dutch Shell;
- The adoption of hub-based pricing for LNG SPAs, as markets such as Europe and the US developed;
- The advances in technology such as Qatari mega trains and floating regasification and liquefaction; and
- The emergence of the US as a major exporter through a new, infrastructure-led development model.

As it is still in progress, we do not yet have the benefit of hindsight when appraising the overall impact on the industry of the emergence of the US as a major exporter of LNG. However, what is already evident is the significant proliferation of active players in the market, catalysed in large part by the US LNG export phenomenon.

We believe that in time, this proliferation will be followed by consolidation and a move towards a less fragmented industry. In this article we

assess the drivers, lessons learnt from precedent deals, and possible future trends that could shape the next wave of LNG industry change.

Driving consolidation

In a 2002 study, Graeme K Deans, Fritz Kroeger and Stefan Zeisel¹ proposed that industry consolidation happens along a four-stage curve (Figure 1).

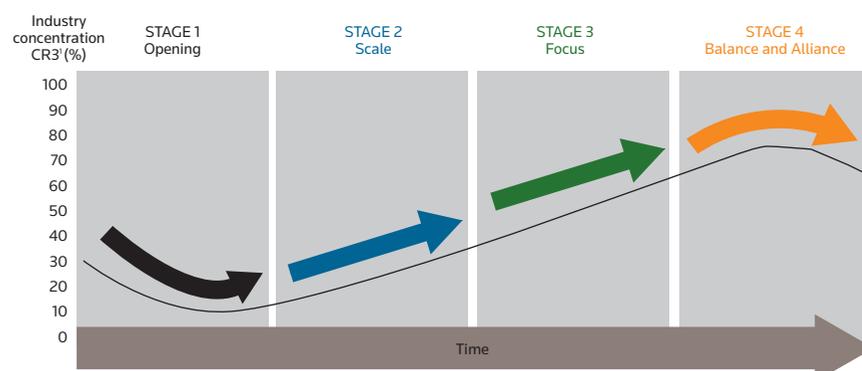
LNG has progressed through the opening stage as the industry has seen new competitors enter the market and create the frontier of consolidation that we see approaching.

During the opening stage, LNG players have sought to build scale and protect their positions through reinforcing barriers to entry. These barriers were historically very high in LNG, with steep requirements for capital, access to gas resources and technical capability.

In the scale stage, companies seek to add scale through inorganic means by buying up competitors; these acquisitions often provide access to new markets or capabilities that had been missing previously. For LNG, we see two main drivers for this consolidation on the sell-side: over-extension and strategic change.

- *Over-extension* – Originally caused by the Fukushima disaster and then carried on by the emergence of US LNG, over-extension by some companies refers to the taking on of supply commitments that are later sold off as they end

FIGURE 1 - THE INDUSTRY CONSOLIDATION LIFE CYCLE



Note: 'CR3' = The combined market share of the three largest companies in an industry (based on A.T. Kearney's Value-Building Growth database of 25,000 companies).

Source: "The Consolidation Curve" Graeme K Deans, Fritz Kroeger and Stefan Zeisel. Harvard Business Review, December 2002

up becoming a major financial liability to the company involved.

The Fukushima earthquake and subsequent disabling of Japan's nuclear fleet created a historic LNG market imbalance in which realisable prices in Asia rose significantly, rewarding LNG suppliers for re-directing LNG from the Atlantic Basin to Asia.

The rich financial rewards from this activity led some organisations to double down on LNG as it was a key contributor to Ebit growth.

With the arrival of US LNG projects, which typically liquefy gas sourced from the US gas network – without the need for related upstream development – suppliers could access flexible volumes of feedstock.

The rationale for many of these investments was that opportunities for sales into markets across Asia and elsewhere would continue to grow and that the suppliers themselves would not be required to dramatically invest in new capabilities to access them.

This investment thesis was then challenged by the double whammy of collapsing oil and gas prices and a turn down in LNG demand growth from mid-2014 until 2018.

Although market sentiment is currently more positive – reflected in the recent positive FID for the LNG Canada project – this could change if the remaining first wave of US LNG to come on stream is met by a tepid demand response and the market heads back into a downturn.

If such a situation occurs, some of those with tolling agreements at US projects could face significant losses as prices in Europe – the sink or destination of last resort due to the presence of traded markets that can absorb volumes at a hub price – will not likely exceed the tolling fees paid and therefore not be sufficient to permit the recovery of the capital costs invested.

In an extreme situation, very low European prices may not even cover the short-run marginal costs of US liquefaction: the cost of feedgas and shipping.

Added to these risks around supply, demand and pricing are the important changes taking place within market dynamics. These include: (i) the growth in the number of market participants, (ii) emerging market buyers entering the market with new requirements and (iii) new services around flexibility being offered to customers by those with the capability.²

Essentially, the requirements of buyers are shifting as they expect more optionality and flexibility for their supply.

These expectations create a bifurcation within the market whereby on the one end there are the big portfolio players – eg Shell, BP and Total, etc – that can leverage a portfolio of supply sources and their overall scale to meet these demands; while on the other, trading houses – Trafigura, Gunvor and Vitol, etc – can leverage their sophisticated optimisation and risk management capabilities to meet customer needs for flexibility

or manage credit risk in supplying emerging market buyers.

This then potentially leaves a squeezed middle of LNG suppliers that are over-contracted and do not have a defined value proposition to stand out and win customers.

It is this situation that we see as a potential driver to consolidation as affected organisations – unable or unwilling to mobilise the capital needed to achieve the scale of a big portfolio player and uncomfortable with assuming the risks familiar to a trading house – seek an exit from LNG to avoid potential financial losses.

The recently announced sale process for Toshiba's LNG capacity commitments from Freeport is the most obvious example and we examine this below.

• *Strategic change* – The strategic shifts taking place among major European utility companies around decarbonisation, digitalisation and customer focus appear to sit awkwardly with large investments in LNG supply.

Previously, gas-fired generation was a key operational area and an LNG business was a necessity to support these ambitions. Now, companies such as Enel/Endesa, Engie and Naturgy, formerly Gas Natural Fenosa, are focused on aggressive renewable energy build-outs across the globe and an LNG business does not fit with this strategy.

Engie's exit from the LNG supply and trading business (see below) formed part of a larger transformation programme that is focusing the company on renewable energy and services businesses, and more recently it was reported that three major shareholders of Naturgy – Global Infrastructure Partners, CVC Capital Partners and Corporacion Financiera Alba – are calling for the CEO to sell its US\$5bn LNG business.³

This strategic change could be accelerated in the case of companies that took on US LNG commitments at a time of seemingly great opportunity for LNG/gas projects only to be faced with a different reality when commercial start-up comes into view. Both Engie and Naturgy committed to US capacity.

Taking on destination-free LNG over 20-year period, for most LNG suppliers, requires a solid commitment to actively trading LNG and possibly investing in downstream value chains, something that simply does not fit with the long-term aspirations or short-term skill-sets of some utility players.

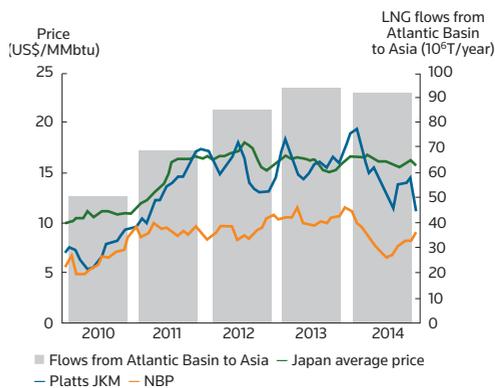
Deal precedents

M&A deals focused on LNG are still rare, although there are three important precedents that fit



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FIGURE 2 - LNG FLOWS FROM THE ATLANTIC TO PACIFIC BASIN VS. NBP, AVERAGE JAPANESE SPOT LNG AND AVERAGE JAPANESE TERM LNG PRICES, 2010-2014



Sources: METI, BP, Thomson Reuters, IGU, Platts, Gas Strategies

within the broad “types” outlined above: Repsol, Engie and Toshiba.

While it could be argued that the Shell/BG Group takeover in 2016 was also an example of LNG industry consolidation as it took out of the market a leading player, this transaction also included a significant upstream oil and gas portfolio and therefore it is not included here.

What is also interesting is that from the buyer perspective, a key driver appears to have been access to flexible LNG, reflecting the changes in the market that now reward this operational capability.

- **Repsol** – Repsol sold its LNG business to Shell in 2013 as a way to shore up its balance sheet and reduce debt as part of its strategic plan that called for a focus on upstream operations.⁴

The Spanish company had been under pressure following the Argentine government’s seizure of its stake in YPF, causing its credit rating to be downgraded to one level above junk. The sale price for the LNG business was approximately US\$4.1bn, allowing Repsol to reduce its net debt by US\$3.3bn and protect its investment-grade rating.

At the time, Shell was seeking ways to access more volumes of flexibly traded LNG after seeing the success that BG Group was having with its portfolio model.

The deal provided them with access to around 3.7 Mtpa of destination-free volume from Atlantic LNG in Trinidad and Tobago.

Additionally, Shell took over Repsol’s equity stake in the 4.2 Mtpa Peru LNG project as well as all the offtake from the project that included a 3.5 Mtpa supply agreement into Mexico. The balance of the project’s offtake could then be traded in the Pacific Basin as part of Shell’s portfolio.

The sale also involved the shipping operation Stream, including nine LNG carriers under long-term charter, thus providing Shell’s global LNG trading business with further flexibility for its LNG portfolio.

- **Engie** – In July 2018, Engie closed the sale of the

majority of its LNG business to Total, bringing to a close an important chapter of its history as a major industry player. This sale formed part of its transformation programme, based on the divestment of commodity linked businesses. Engie kept its downstream LNG business such as its ownership of French regasification terminals, under Elengy, and its retail/small-scale LNG operations.

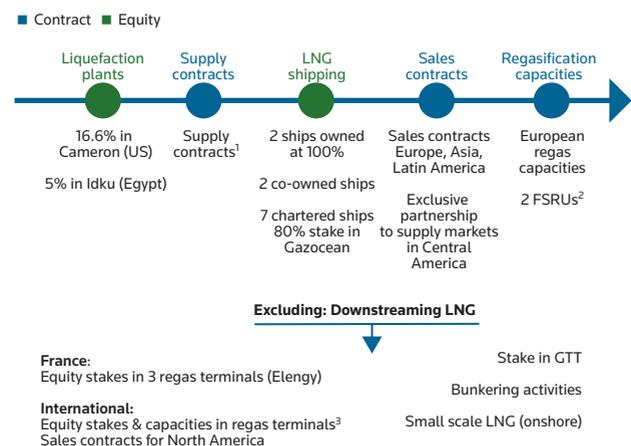
The sale price was US\$1.4bn with the possibility of a further US\$0.55bn earn-out, dependent on future oil price developments. At the time of the completion Engie’s portfolio included nearly 20 Mtpa of LNG from a mix of projects, weighted towards the Atlantic Basin. However, over 9 Mtpa of this was due to expire by 2019 – from Algeria and Trinidad, which was not included – and a further 6 Mtpa is currently under force majeure due to shutdowns in Egypt and Yemen.

The main attraction for Total was likely the access to flexible volume, chief among them the 4 Mtpa of tolling capacity at Cameron LNG along with a 16.6% equity stake in the project. Also included were LNG vessels and regasification capacity in European terminals. The latter may have been an additional sweetener as this capacity would provide Total with a backstop destination for its LNG in the event of a demand turn-down.

The shut-down issues, the requirement to re-contract for new supply and the looming arrival of US volumes at a time when Engie was already having doubts over its long-term commitment to fossil fuel projects are expected to have all been significant drivers for the sale.

- **Toshiba** – This transaction differs from the others in that it has not yet closed. However, it has been widely reported that Toshiba has begun a sale process for its LNG capacity in Freeport LNG in the US and that there are a number of interested bidders.⁵

FIGURE 3 - ENGIE LNG PORTFOLIO



Notes: (1) Excl. supply contract for Atlantic LNG; (2) FSRUS also included in shipping figures; (3) Mejillones (Chile), Everett (USA), Penuelas (Puerto Rico)

Source: ENGIE

There is some uncertainty as to the reason Toshiba decided to invest in US LNG when this represented a significant leap strategically and operationally from its existing business.

Toshiba has maintained that its investment thesis was to be able to provide bundled LNG-to-power solutions and therefore drive business for its power plant operations (see below). This is disputed by the Nikkei Business Review, which argued that it signed the agreement with Freeport as a way to secure power sales to the project from the troubled South Texas Nuclear Project.⁶

In either scenario, the company struggled to find buyers for its volume and as a result ended up in an over-extended position. Toshiba will only be selling its capacity rights in Freeport, though this on its own will be viewed as an attractive proposition.

Not only is it access to flexible volume on a long-term basis, it will also give the buyer access to volume relatively quickly, with start-up expected by the end of 2019.

Other possible deal drivers

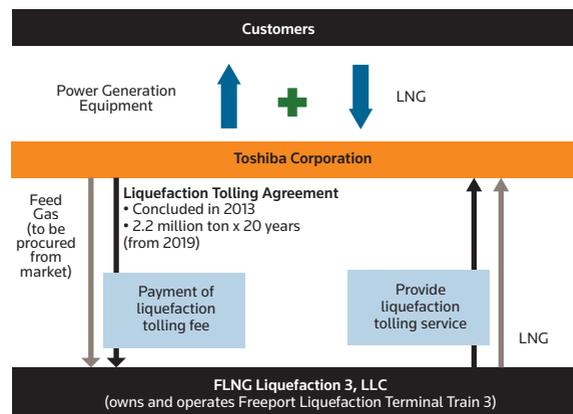
Looking ahead, what other factors could drive M&A activity in the sector? Beyond the exits of certain players for the reasons described above, we also see some drivers on the buy-side, consolidation in the shipping sector and combinations that would involve LNG but where it is not the key driver.

Consolidation in the FSRU, FSU and FLNG market: currently split between 10 different operators, all serving different markets and customers. With the technology now proven and lenders growing more comfortable with these projects, consolidation could take place. In our view, this would be driven by LNG suppliers – either traders or those “long” on LNG – to acquiring midstream infrastructure providers, including LNG shipping capability, in order to control more of the value chain and therefore stand behind existing capacity or acquire more.

Trading houses seeking access to volume: the big commodity traders are no stranger to “upstream” M&A in other commodities to gain access to resources and this may be a tactic that is employed in LNG as they grow more influential in the market.

Consolidation among Japanese traders: The major sogo susha – Itochu, Marubeni, Mitsui, Sumitomo and Mitsubishi – were all adversely impacted by the downturn in commodity prices. In response, some have signalled possible retreats from both natural resource trading and involvement in upstream projects for mining and oil and gas. LNG’s long-term future in Japan is now more complicated, with nuclear power generation starting back up and the ambitious plans for renewables, all in the context of shrinking energy usage. This situation could add weight to calls for consolidation so that an enlarged player can enjoy the benefits of scale.

FIGURE 4 - TOSHIBA PROPOSED US LNG BUSINESS MODEL



Notes: • Toshiba receives liquefaction tolling service, converting natural gas to LNG

• Toshiba does not invest in the liquefaction facilities

Source: Toshiba Investor Presentation, November 2015

Conclusions

The LNG industry that has come out the other side of a significant downturn is very different to that which went in. What it takes to compete and win in this industry has changed and in this new market paradigm, some companies will struggle to create lasting value in the LNG business.

For others, a more commoditised and flexible market will provide them with the opportunity to craft a competitive edge from where they can build scale through acquiring rival companies.

Any future consolidation will also be driven by events outside of LNG; the wider energy industry continues to change rapidly and for some, new opportunities afforded by the energy transition will lead them to refocus and seek an exit.

While the unique structure of the LNG industry will likely act as a brake on deal making, we believe that consolidation could be an important part of LNG’s evolution in the coming years. ■

Footnotes

1 - “The Consolidation Curve” Graeme K Deans, Fritz Kroeger and Stefan Zeisel. Harvard Business Review, December 2002

2 - A new era for commoditised LNG, Anthony Patten and Tom Field, Project Finance International Global Energy Report 2018

3 - <http://interfaxenergy.com/gasdaily/article/31439/gas-natural-fenosa-shareholders-ask-ceo-to-sell-lng-business>

4 - [https://lngjournal.com/index.php/latest-news-mainmenu-47/item/4292-repsol-ends-long-lng-asset-sales-process-as-shell-buys-stakes-and-terminals-for-\\$67bln](https://lngjournal.com/index.php/latest-news-mainmenu-47/item/4292-repsol-ends-long-lng-asset-sales-process-as-shell-buys-stakes-and-terminals-for-$67bln)

5 - <https://uk.reuters.com/article/us-toshiba-lng-exclusive/exclusive-toshiba-tries-to-sell-down-7-billion-u-s-gas-commitment-idUKKCN0SV0PW20151107>

6 - <https://asia.nikkei.com/Business/Companies/Toshiba-s-LNG-sell-off-its-final-piece-of-housecleaning>