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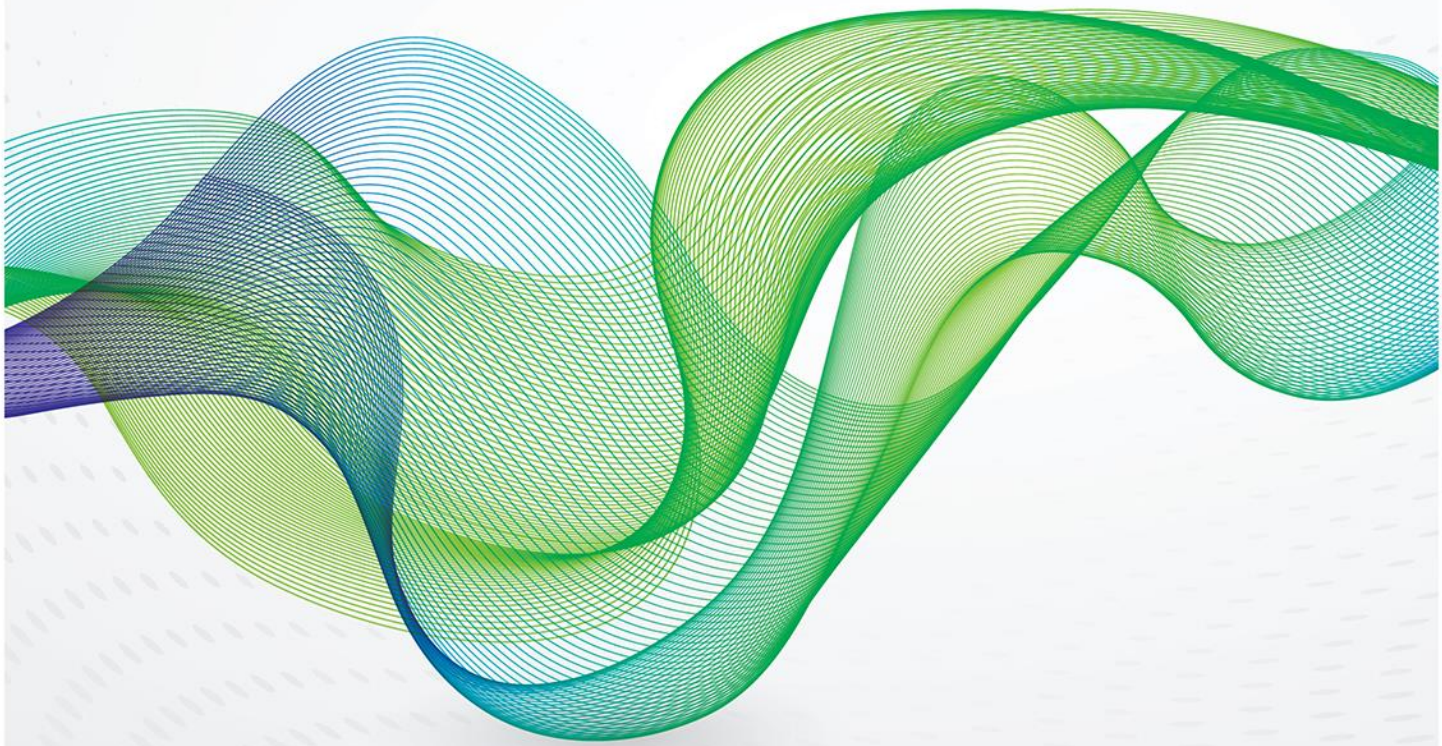
Scenarios for Asian long-term LNG contracts before and after COVID-19



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Introduction

Howard Rogers and Jonathan Stern have advanced three possible scenarios for Asian long-term LNG contracts in the 2010s and beyond: Contractual Impasse, Smooth Contractual Transition, and Contractual Train Wreck. The main objective of this paper is to consider the relevance of these scenarios to date and in the future, taking into account the ongoing COVID-19 crisis which, as this paper argues, will have a significant impact on the evolution of contractual arrangements in the industry. Discussing future scenarios, and highlighting that the anticipated European-style wave of price review arbitrations is unlikely to materialize in Asia in the near term, the paper concludes that a transition driven by comprehensive contract reviews executed by the parties would be an optimal scenario for long-term Asian LNG contracts in the 2020s.

1. Three scenarios for long-term Asian LNG contracts advanced by Rogers and Stern

1.1 Contractual Impasse, Smooth Contractual Transition, and Contractual Train Wreck

In the **Contractual Impasse** scenario, there is, in essence, little change in the status quo. No changes can be agreed in existing SPAs and no new long-term contracts are signed. In the **Smooth Contractual Transition** scenario, there are some challenges to contract prices but price reviews result in adjustments which are acceptable for both parties. In parallel, new contracts start to be signed with a mix of oil, hub and spot prices and more flexible price review clauses anticipating the creation of an Asian hub. In the **Contractual Train Wreck** scenario, the financial position of the parties becomes untenable. LNG buyers demand price renegotiations and fundamental changes. Price review arbitrations ensue with unpredictable results and large financial sums at stake.

Rogers and Stern have identified the Smooth Contractual Transition as 'clearly the most desirable outcome' for the move to hub-based pricing but noted that the fulfilment of this scenario depends on the parties maintaining a controllable financial situation. The Contractual Impasse remains a possible outcome, but the key risk is posed by the fulfilment of Contractual Train Wreck – although 'it must be hoped that Asian LNG markets can avoid such a scenario, it is by no means guaranteed.'[1]

1.2 Moving towards Smooth Contractual Transition in the period between 2015 and 2018

In the period between 2015 and 2018, the developments in the Asian LNG long-term contract segment were generally indicative of a 'smooth transition' towards the next contractual model.

Price reviews under Asian LNG SPAs were rare at that time, and their outcomes not revolutionary.[2] Most notably, there is no evidence of any price review executed in that period which would result in the departure from oil indexation. Even in the absence of fundamental structural changes, some price renegotiations brought major financial results and novel approaches, including the first reported price review arbitration under an Asian LNG SPA, between KOGAS and North West Shelf Joint Venture.[3] Generally, in line with the key premises of Smooth Contractual Transition, price reviews led to adjustments which were tolerable for both buyers and sellers and brought no fundamental changes or litigation. As a result, oil linkage, primarily to the Japanese Crude Cocktail (JCC) or Brent, remained practically unchallenged under the existing long-term contracts.

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[1] Rogers and Stern (2014), 48 – 49.
[2] For a general discussion of Asian LNG price reviews, see Ason (2019a). For a discussion of price reviews involving Chinese LNG buyers, see Ason and Meidan (2020).
[3] Ason, (2019a), 4.

In contrast, new long-term contracts started to include a variety of other pricing mechanisms. The influx of North American LNG played the key role in an increasing relevance of hub pricing in Asia.[4] Some Asian SPAs signed at that time combined a Henry Hub index with an oil link, or applied other hybrid formulae.[5] The discussion on spot-based indexation also progressed, and culminated in December 2018 with the announcement of a Memorandum of Understanding between Tellurian and Vitol for deliveries from the Driftwood terminal, which was understood to be 'the first long-term deal anywhere in the world priced off Platts' Japan Korea Marker' (JKM[6])'. Despite an increasing role of alternative indexes, oil linkage remained the predominant pricing mechanism in Asian LNG SPAs.[7] Notably, oil-linked Asian deals concluded between 2015 and 2018 applied lower slopes (set at 11 – 12%) and introduced new price review clauses stipulating more flexible conditions for a price review, reflected mainly in shorter price review periods (reduced from ten to five or four years[8]).

1.3 Shift towards Contractual Train Wreck in 2019

The collapse of spot prices in early 2019 (from over $10/MMBtu in January to less than $5/MMBtu by May[9]) has incentivized Asian LNG buyers to consider their price review options. It is understood that Japanese buyers, in particular, have become 'more aggressive in price reviews.'[10] Osaka Gas, the second largest gas utility in Japan, reportedly '[took] the Exxon Mobil-operated PNG LNG project to arbitration', which posed 'the multibillion-dollar question' in the industry whether Asian buyers will go down the same route, 'thinking they have nothing to lose.'[11]

Due to a number of factors, including falling spot prices (to less than half of oil-indexed prices), growing competition in domestic markets (translating into utilities becoming less able to pass through price increases to end-users), but also a comparison with lower slopes in the newer long-term deals, legacy contracts have started to be perceived as too expensive by several market participants. To some Asian LNG buyers, the losses from their contracts have become financially untenable, which accelerated their determination to seek price reductions. Throughout 2019, multiple price review requests have been filed (according to industry sources), and further (unreported) attempts at obtaining price adjustments in arbitrations have been made. As a result, by the end of 2019, Asian LNG SPAs have embarked on the fast track to the fulfilment of Contractual Train Wreck.

2. The COVID-19 crisis

In early 2020 the COVID-19 crisis hit an oversupplied and already difficult LNG market, dampening global gas demand, and bringing LNG spot prices to record-low levels within less than two months from the first reported COVID-19 case.[12] Travel and other restrictions imposed by governments to stem the

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[4] Between 2015 and 2018, Asian LNG buyers concluded several agreements with US and Canadian sellers. According to the GIIGNL 2019 Report, in 2018 only, three Asian buyers (CPC, PetroChina and Petronas) entered into long-term SPAs with Cheniere and three further Heads of Agreement were signed for Canadian LNG by CNOOC, Tokyo Gas and Toho Gas.

[5] There was a strong interest in hybrid pricing in Asia at that time. For example, it was reported that 63% of delegates polled at the CWC LNG Conference Singapore in 2016 thought that hybrid pricing would be the front-runner in new term sales. 'Asian LNG Buyers Ponder Best New Pricing Formula', World Gas Intelligence, 5 October 2016.

[6] 'Vitol-Tellurian Deal Marks Price Breakthrough', World Gas Intelligence, 12 December 2018.

[7] As of 2018, the share of hub indexation in Asian long-term LNG contracts was estimated at 5% (up from 0% in 2008). See Goncalves and Melling (2020). Globally, as of 2019, around 68% of volumes sold through long-term contracts were indexed to oil while 24% were indexed to Henry Hub, according to the IGU 2020 World LNG Report.

[8] For a discussion whether price review clauses in Asian LNG SPAs 'are finally changing', see Ason (2019b).

[9] Fulwood (2019). In August 2019, the spread between the oil-indexed price and the Asia spot price widened to $6.71/MMBtu. In comparison, in September 2018, the spread was $0.30/MMBtu. See IGU 2020 World LNG Report.

[10] 'Japan LNG buyers talk tough as spot prices drop to 3-year lows', Reuters, 7 August 2019, https://www.reuters.com/article/us-japan-lng-contracts/japan-lng-buyers-talk-tough-as-spot-prices-drop-to-3-year-lows-idUSKCN1UX0TH.

[11] 'Exxon Taken to Arbitration as Asian LNG Buyers Get Tough', World Gas Intelligence, 7 August 2019.

[12] The first COVID-19 cases (classified as such) were reported in early January 2020. The JKM plunged to 'an all-time low' (at that time) of $2.713/MMBtu on 14 February 2020. See 'Infographic: Coronavirus outbreak throws global LNG markets into turmoil,' S&P Global Platts, 20 February 2020, https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/022020-infographic-lng-coronavirus-covid-19. In April 2020, it was reported that the JKM price has fallen for the first time below

spread of the virus have significantly affected the LNG value chain and reduced domestic demand in a number of Asian LNG markets. In response to the crisis, some Asian LNG buyers declared force majeure to their suppliers (**2.1**), and most market participants engaged in a discussion on cargo diversions and other negotiated solutions (**2.2**). If the pandemic continues, disputes and contract terminations could be on the rise in the industry (**2.3**).

2.1 Force majeure notices from Asian LNG buyers

Force majeure, broadly speaking, refers to unexpected external circumstances that impede performance under a contract. Asian LNG SPAs typically contain force majeure clauses. In response to the effects of COVID-19, in February 2020, China's largest LNG importer, CNOOC, declared force majeure under its LNG contracts. In early March 2020, PetroChina followed suit.[13] In late March 2020, three Indian LNG buyers, Petronet, GAIL, and GSPC, all reportedly issued force majeure notices under their SPAs,[14] 'creating turmoil in LNG markets.'[15] At that time, the government of Pakistan evaluated a declaration of force majeure under its LNG contracts (but reportedly decided against it[16]). The buyers in 'Old Asia' (Japan, Korea, Taiwan) took a different approach from the outset and, for various reasons, including less severe quarantine measures, but possibly also greater concerns to preserve a good long-term relationship, have not declared, or publicly considered, force majeure under their LNG SPAs to date.

The outcomes of force majeure notices from Chinese and Indian LNG buyers remain to be seen. To date, no seller is publicly known to have accepted a force majeure notice filed by an LNG buyer in response to the effects of COVID-19. In April 2020, CNOOC reportedly 'rescinded its force majeure declaration… after Chinese lockdowns were lifted and it realized that weak domestic gas demand was not a valid reason for the declaration.'[17] Earlier reports suggested that Total 'openly rejected' the force majeure notice from CNOOC, 'while other term suppliers may have followed suit more discreetly.'[18] Due to the confidential nature of force majeure discussions, it can be assumed that the reported force majeure notices (and their outcomes) are not fully reflective of the force majeure context in Asia, which likely involves several other cases at various stages.

2.2 Other negotiated solutions

The status quo in Asia is mainly reflected in cargo delays, diversions, and other negotiated solutions, which can be applied in a variety of ways, including in addition to (or instead of) a force majeure notice.

For example, Petronet is understood to have declared force majeure 'besides soliciting delayed gas deliveries.'[19] Similarly, KOGAS (reportedly having 'no plans to declare force majeure') requested LNG cargoes scheduled for discharge until October 2020 to be deferred 'as far ahead as possible.'[20] Several other LNG buyers in Asia have sought cargo deferments over the past six months (with delay requests

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$2/MMBu. 'Price agency Platts says JKM LNG price falls below $2 per mmBtu', Reuters, 23 April 2020, https://www.reuters.com/article/asia-lng-prices-idAFL5N2CB62T.

[13] For a discussion of force majeure notices from Chinese LNG buyers, see Ason and Meidan (2020).

[14] 'Indian LNG importers issue force majeure notices as gas demand slumps – sources', Reuters, 25 March 2020. https://www.reuters.com/article/india-lng-imports/update-3-indian-lng-importers-issue-force-majeure-notices-as-gas-demand-slumps-sources-idUSL4N2BI2YF.

[15] 'India Lockdown Adds to LNG Seller's Woes', World Gas Intelligence, 1 April 2020 (stating that Petronet, the country's biggest LNG buyer, sent force majeure notices to Qatargas and ExxonMobil).

[16] 'Pakistan may not invoke force majeure in LNG deal', The Express Tribune, 2 April 2020, https://tribune.com.pk/story/2189032/2-pakistan-may-not-invoke-force-majeure-lng-deal/. According to the press report, the Ministry of Energy (Petroleum Division) held that a force majeure notice was 'not an option' for the long-term deal with Qatar, due to the limited scope of a force majeure clause in the Qatar Liquefied – Pakistan State Oil (PSO) SPA.

[17] 'Force Majeure Standoffs Expose Flaws in Long-Term LNG Deals', World Gas Intelligence, 29 April 2020.

[18] 'India Lockdown Adds to LNG Seller's Woes', World Gas Intelligence, 1 April 2020.

[19] 'Measures to contain Covid-19 outbreak weakens Indian LNG demand', Gas World, 22 April 2020, https://www.gasworld.com/measures-to-contain-covid-19-outbreak-weakens-indian-lng-demand/2018907.article

[20] 'Kogas Seeks Widespread LNG Cargo Deferrals', LNG Intelligence, 20 April 2020, http://www.energyintel.com/pages/eig_article.aspx?DocId=1070044&NLID=117

from the top LNG buyers reportedly ranging 'from just a few days to as late as next year[21]).' Cargo diversions, initially to the others buyers in Asia,[22] but increasingly to other parts of the world, have also become common in response to recent market events.

Apart from seeking cargo deferments and diversions (and probably earlier exhausting their downward quantity tolerance and cancellation rights[23]), Asian LNG buyers have submitted other requests for delivery adjustments over the past few months, even if the contracts did not strictly allow for them.

Notably, the LNG industry has retained a sustained focus on cooperation in a time of crisis. From the early days of the coronavirus outbreak, the sellers have publicly indicated their willingness to accommodate requests for negotiated solutions[24] With the COVID-19 outbreak turning into a pandemic, and gradually affecting the entire LNG value chain, it has, however, become increasingly difficult for the parties to SPAs to agree on any alternative arrangements. The economic viability of diversions, in particular, has been increasingly put under pressure, and could further diminish, especially if European gas storage reaches full capacity (which could be 'well before the end of summer', according to OIES research[25]).

2.3 Outlook: disputes and contract terminations

If the COVID-19 crisis continues, disagreements between buyers and sellers could increase. Force majeure disputes (in particular) could become the key concern for several market participants in the short term.[26] Additional force majeure claims under Asian LNG SPAs (including from the sellers) cannot be ruled out at this point but they are likely to become more difficult in the future.[27]

The COVID-19 context, as discussed below, has exacerbated the difficulties of ongoing price reviews and created incentives for new price review requests. Price reviews are likely to become more contentious in the near term and could be affected by the perception that 'no price is low enough' to address the difficulties of demand reduction.[28]

Over the past six months, the ability of market participants to fulfil their contractual obligations under LNG SPAs has been put under significant pressure. Performance-based claims, which are almost unheard of in the relationship-based Asian LNG industry, could emerge at some point, especially considering that the options for cargo diversions and other operational adjustments might have been largely exhausted by now. If the COVID-19 crisis deepens or re-emerges, claims for breaches of contract, and take-or-pay or other penalties, seem unavoidable.[29]

A prolonged crisis could also force some market participants to terminate their SPAs (likely as a last resort because of the reputational risks of this step). This would be a particularly undesirable result from a market perspective, translating into uncommitted cargoes being sent to an oversupplied market, which would further exacerbate the pressure on LNG prices.

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[21] 'Top LNG Buyers Seek Cargo Delays as Virus Slashes Demand', Bloomberg, 15 April 2020, https://www.bloomberg.com/news/articles/2020-04-15/top-asian-lng-buyer-seeks-to-delay-shipments-deep-into-2020

[22] 'China's CNOOC declares force majeure on LNG contracts amid coronavirus outbreak', S&P Platts, 6 February 2020, https://www.spglobal.com/platts/en/market-insights/latest-news/oil/020620-chinas-cnooc-declares-force-majeure-on-lng-contracts-amid-coronavirus-outbreak.

[23] Cargo cancellation rights are a common feature of US LNG SPAs. Similar arrangements, effectively allowing for cargo cancellations, can be found in other SPAs. Multiple cargo cancellations under US contracts have been reported in the past six months but there is some expectation that the peak for cancellations in response to COVID-19 has passed. See, 'LNG Buyers Seen Rejecting Fewer US Cargoes As Prices Recover', Bloomberg, 22 June 2020 https://www.bloomberg.com/news/articles/2020-06-22/lng-buyers-seen-rejecting-fewer-u-s-cargoes-as-prices-recover

[24] See Ason and Meidan, (2020), 4.

[25] Fulwood and Sharples, (2020), 12. The European gas situation is crucial to the ability to absorb the surplus of Asian LNG.

[26] For a discussion of force majeure disputes, see Ason and Meidan (2020).

[27] Mainly because the pandemic has largely lost its characteristic of an 'unforeseeable' event (being typically a prerequisite to a successful force majeure claim). LNG sellers could also declare force majeure, especially if the pandemic continues to disrupt the LNG value chain and they are unable to deliver LNG.

[28] See Agosti and Moselle, (2020), 11.

[29] Some disputes will likely result in arbitrations considering that Asian LNG SPAs routinely contain arbitration clauses. Expert determinations could also play a role in Asia, especially in force majeure and pricing disputes.

3. Impact of the COVID-19 crisis on Asian LNG SPAs: 'three needs'

The COVID-19 crisis will have a significant impact on the evolution of contractual arrangements in the LNG industry. Recent market events have exposed several areas of concern, which translate into three key needs for changes to Asian LNG SPAs: to abandon oil-linked pricing (**3.1**), to increase operational flexibility (**3.2**), and to re-examine contract adjustment mechanisms (**3.3**).

3.1 The need to abandon oil-linked pricing

The tipping point

As recently explained by Stern and Imsirovic:

> The exposure of LNG buyers to the volatility of an oil market whose major decision-makers have fundamentally different interests to – and supply/demand fundamentals which lack any significant correlation with – those of gas, has become commercially untenable.[30]

The COVID-19 crisis reinforces the discussion about the rationale of tying the LNG contract price to the price of another commodity that is disconnected from global gas fundamentals and exposed to geopolitical shocks. Although there have been several oil price surges and crises in the past, the current discussion on the rationale of oil linkage in Asian LNG SPAs will be conducted in an unprecedented setting of global disruption, uncertainty as to the prospects of the recovery, and in a low price environment (with the feasibility of negative oil prices[31]). This unique setting could push the industry to the tipping point and a commercial decision that, after fifty years of dominance of oil price indexation in Asian LNG SPAs, this pricing mechanism is no longer fit for purpose.

An accelerated search for alternatives

The move away from oil linkage requires a feasible alternative. In the absence of any liquid Asian hub at the moment (or even in sight, as discussed below), the focus naturally shifts to other regional price signals. The JKM has recently come to the forefront of the discussions on the alternatives to oil indexation. Published since 2009, the JKM is currently used mainly as a risk management tool and features as a price index in and some preliminary offtake agreements[32], but it can be applied as a price mechanism in LNG SPAs. As assessed by Heather in January 2020, 'the signs auger well' for the JKM to be a marker price for bilateral contracts for LNG deliveries in Asia, and it 'could well become a liquid benchmark price for LNG and therefore promote the transition in gas pricing from oil indexation to market pricing in the Asian region.'[33] Although the impact of COVID-19 on JKM's growth trajectory remains to be seen, its role as an increasingly relevant consideration in contract (re)negotiations seems assured.

A temporary revival of fixed prices?

An unprecedented level of global disruption could also incentivize the parties to take an unusual approach and lock their long-term contract prices in response to market volatility. Fixed prices are a largely historical notion,[34] but they re-emerge from time to time in the discussions concerning both new and renegotiated LNG SPAs. For example, reports suggest that US sellers have offered 'fixed-price

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[30] Stern and Imsirovic, (2020), 16.

[31] See Fattouh and Imsirovic (2020), who explain the recent 'shock of negative pricing' and address the issue of negative pricing of Brent.

[32] See Corbeau (2019): 'Only a couple of preliminary LNG offtake agreements using JKM as a benchmark have been signed so far, notably between Tellurian and offtakers such as Total and Vitol. Some buyers and sellers may be ready to include JKM in term contracts within a pricing basket mixing different indexations.'

[33] Heather, (2020), 25. See also Bennett (2019).

[34] The very early Asian LNG SPAs applied fixed prices, including the first contract for delivery of LNG to Asia (from Alaska to Japan, signed in 1967) 'at a fixed price of $0.52 per MMBtu.' See Finizio, Trenor and Tan, (2020), 22.

long-term deals' in the past.[35] More recently, and specifically in response to COVID-19, the government of Pakistan has authorized PSO and Pakistan LNG (PLL) to negotiate a fixed price of LNG under their SPAs with Eni and Gunvor for 'up to $4.5/mmbtu' for the next 6 to 24 months.[36] If the uncertainty concerning future price levels persists, other market participants could take a similar approach in an attempt to stabilize their contract prices.

3.2 The need to increase operational flexibility

The COVID-19 crisis has triggered an urgent need for operational adjustments and elevated several non-price terms in Asian LNG SPAs to the centre of contract discussions. The provisions restraining the exercise of volume and destination flexibility, which largely determine the ability to respond to demand reductions, are particularly likely to come under scrutiny after the crisis.

Volume flexibility

Downward quantity tolerance (DQT) rights serve as an early response mechanism, which can be applied to mitigate a buyer's short-term decrease in domestic demand in response to critical events such as a pandemic. The key limitation to DQT rights is the percentage defining the quantities, which can be subject to DQT (typically set at 5 – 10 % of the annual contract quantity). A buyer is typically required to provide a fixed period of notice (commonly several months in advance[37]) before being able to receive reduced quantities. Furthermore, downward flexibility 'may not be an inexhaustible remedy' – if a party has relied on it in the past, its ability to do so again may be restricted.[38] Some LNG SPAs also prohibit the exercise of DQT in consecutive contract years or in respect of specific contract years. For example, the contract can stipulate that a buyer shall not exercise DQT in the three final contract years.

According to industry insights, DQT rights were a useful starting point, but have offered only a temporary fix to the issue of the required volume reductions in the past few months. In practice, DQT rights prove to be two-tier arrangements, with a 'basic' version, which can be exercised freely, and a 'premium', which is subject to additional requirements and typically requires the seller's consent.[39] Cargo rescheduling options are widely understood to have been more effective in the management of contract quantities and, as emphasized by several market participants, the sellers have been generally more open to a discussion of contract delays going beyond what is permitted under a contract.

Although LNG buyers favour suppliers offering a combination of the lowest cost and maximum flexibility in the management of take-or-pay commitments,[40] the contractual basis for the mitigation of a buyer's offtake risk could have failed some market participants during the pandemic. This will likely trigger a discussion about the improvements to volume flexibility arrangements in Asian LNG SPAs, but could also potentially intensify a broader discussion in the industry about whether take-or-pay obligations should be modified (or replaced with alternatives) in Asian LNG SPAs.[41]

Destination flexibility

Destination flexibility has become the key concern of several market participants from the early days of the pandemic. Recent events have highlighted that many Asian LNG SPAs do not foresee any diversion rights and some expressly prohibit them. The available diversion rights are typically subject to several constraints.[42] The exclusion of diversions to foreign terminals and the requirement to obtain the seller's

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[35] 'Asian LNG Buyers Ponder Best New Pricing Formula', World Gas Intelligence, 15 October 2016: 'Amid intense supply competition, some US sellers have even offered fixed-price long-term deals to help buyers deal with volatility, but these are the exceptions…'

[36] 'Government decides to negotiate fixed LNG price', Business Recorder, 22 April 2020. https://www.brecorder.com/news/591387/government-decides-to-negotiate-fixed-lng-price.

[37] For example, no later than on 1 October of the preceding contract year in which DQT is to be applied.

[38] Rockall, Holland and Flamank, (2020), 1.

[39] For example, a shorter notice period stipulated by a contract (such as 75 days) typically needs to be requested in a separate process, which allows the seller to determine at its sole discretion whether to accept such request.

[40] See Steuer, (2019), 2.

[41] For a recent discussion on the issue (and alternatives like ship-or-pay), see Talus, Looper and Burns (2020).

[42] For a discussion of a wide range of approaches to diversion provisions, see Finizio (2019).

consent for a diversion (and, in particular, the ability to obtain it in an expedited manner) have been, according to industry sources, the key practical impediments.

On the other hand, some major concessions around cargo diversions have been made, including under SPAs with limited (or no) diversion rights.[43] Operational adjustments executed in a time of crisis will certainly not mean that relaxation of destination restrictions will be seen as 'the new normal' (especially in relation to cargoes diverted for profit), but they could have a lasting impact. A practical implementation of solutions, which might have been earlier considered only in abstract terms for some business relationships, could offer a favourable ground for the discussions and, potentially, accelerate the general push towards more destination flexibility in Asian LNG SPAs.

Regulatory intervention in Asian LNG SPAs?

In June 2017, the Japan Fair Trade Commission (JFTC) completed an investigation of destination flexibility in LNG sales contracts, concluding that destination clauses 'likely' violate Japanese Antimonopoly Act, and profit-sharing mechanisms, and that combinations of destination clauses and diversion restrictions were 'highly likely' do so.[44] The JFTC concluded its assessment (which is widely understood to be non-binding) with some recommendations for market participants and stated that it 'will keep monitoring the LNG market and take strict actions against any violations of the Antimonopoly Act.'[45]

To date, and in contrast to the European Commission, the JFTC has not conducted any formal investigations into contract practices of specific market players.[46] Although the market has reacted to the findings of the JFTC (with major Japanese buyers committing not to enter into new contracts with destination clauses and to renegotiate existing contracts in this respect), it is understood that JFTC 'appears to be *unhappy* with the progress made by market participants with regard to the removal of destination clauses…especially when it comes to existing contracts.[47] Accordingly, there is some expectation that a further inquiry may follow, potentially as 'a follow-up survey with legal authority to ensure the destination restriction is removed from [all] long-term contracts.'[48]

The recent pressure in Asia on the execution of destination flexibility rights could incentivize the JFTC to reconsider its earlier approach of recommendations, potentially in favour of antitrust enforcement actions. Other Asian regulators could also take steps aimed at securing destination flexibility for deliveries to their markets. For example, shortly after the JFTC Report, the Korean Fair Trade Commission (KFTC) has publicly indicated that it was examining the legality of the destination clauses in LNG contracts concluded by South Korean buyers. At that time, the KFTC was monitoring the situation and had not decided yet whether to conduct an official investigation.[49] The significance (and urgency) of the issue could increase on the basis of the experience of Korean buyers with the exercise of their flexibility rights during the pandemic. The same applies to the experience of other, for example, Chinese and Indian buyers. Their difficulties with receiving cargoes at alternative terminals (in particular) could potentially prompt the regulators to scrutinize destination restrictions featuring in their SPAs. Notably, in the case of State-owned companies, investigations of free trade commissions or other authorities could be replaced by a direct intervention in LNG SPAs and translate into specific

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[43] Industry evidence supports a conclusion which can be made on the basis of a comparison between multiple reported diversions from China and the approach to diversion rights in Chinese SPAs, which tend to prescribe a single delivery point and expressly prohibit the delivery of the LNG to 'any destination outside of the People's Republic of China.'

[44] Japan Fair Trade Commission, 'Survey on LNG Trades' (*JFTC Report),* June 2017. In its assessment, JFTC has differentiated between FOB and DES sales. See van Geuns and Abeln (2019) and Atkin (2020).

[45] JFTC Report, p. 20. The JFTC Report may be seen as a confusing and contradictory document which submits 'recommendations' but, at the same time, threatens to take 'strict actions' if 'recommendations' are not complied with.

[46] For a comparison between approaches of European and Japanese regulators to destination flexibility in LNG contracts, see Atkin (2020).

[47] Van Geuns and Abeln (2019, 9), emphasis added.

[48] Kobayashi and Li (2019, 59).

[49] See van Geuns and Abeln (2019).

requests from the governments to remove certain restrictions from the newly negotiated or existing agreements.

Although destination restrictions have been (and will likely remain) the focus of the regulators, as indicated by the JFTC Report, other contractual arrangements, including take-or-pay clauses, may be subject to regulatory oversight.[50] The arrangements in Asian LNG SPAs concerning both destination and volume flexibility could therefore be impacted by regulatory actions in the future.

3.3 The need to re-examine contract adjustment mechanisms

Recent market events have also exposed some weaknesses of contract mechanisms tailored to manage risks resulting from unforeseen market circumstances.

Force majeure clauses

The COVID-19 crisis has brought force majeure clauses under Asian LNG SPAs into the spotlight. A sudden interest in these provisions has revealed that many (if not most) market participants in Asia have never declared, or even considered, force majeure under their SPAs before the pandemic. Unsurprisingly against this background, the outcome of a recent due diligence of force majeure entitlements is, according to industry insights, often unsatisfactory. Some market players perceive force majeure provisions featuring in their contracts as overly burdensome (mostly in relation to the required mitigation efforts), unclear (for example, in terms of dispute resolution options), or one-sided (mainly 'seller-friendly').

On the basis of lessons learned, force majeure clauses will inevitably move higher in contract negotiation agendas in the future, including with the aim of securing that they will only lead to temporary contract adjustments (for example, halting LNG deliveries for the duration of the force majeure event) and will not be misused as contract reopener mechanisms in response to future disruptions.[51] Until then, some difficulties remain with the force majeure clauses under the existing contracts. The availability of contract termination rights in response to a force majeure event, in particular, could become a pressing issue, especially if the health crisis continues.

Force majeure-specific termination rights in Asian LNG SPAs vary significantly. Some SPAs do not include any specific termination rights in response to force majeure. Some other allow the parties (or one party) to terminate the contract, mainly in the event of a prolonged force majeure lasting typically for more than six months. Some SPAs entangle termination rights with contract quantities and require, for example, that a specific number of cargoes must be affected by force majeure before a party is entitled to terminate an SPA. There may be further limits to the execution of termination rights and the termination, as such, typically requires a fixed period of notice, which may range from a few days to several months. A requirement to engage in good faith discussions may further delay the execution of termination rights which, under other contracts, may be less restricted. Despite markedly different termination rights found in the pool of Asian LNG SPAs, it is not uncommon that a party will find similar (if not identical) arrangements in its own contracts, and will be effectively able to rely on only one approach to the execution of termination rights.

The current scenario of global disruption has exposed a mutual interdependence of force majeure entitlements. In practice, a 'weak' force majeure clause under one SPA can have a broader impact on a larger contractual matrix. The inability to claim force majeure due to specific exclusions, costly mitigation efforts, or the lack of any termination rights, are examples of difficulties which may affect performance of a party to an SPA under its other contracts, including with other market participants. Ideally, the weak spots will be identified well in advance. Apart from taking a look at their force majeure

[50] For example, while acknowledging that providing take-or-pay clauses in SPAs for new LNG projects 'is not in itself problematic under the Antimonopoly Act', the JFTC suggested that doing so 'even after the seller has already got sufficient return for initial investment' is likely to be in violation of the Antimonopoly Act. See JFTC Report, p. 19.

[51] Some buyers have attempted contract renegotiations in response to force majeure. See Ason and Meidan (2020), stating that force majeure clauses in LNG SPAs are unlikely to stipulate any rights to reopen the contract specifically due to the occurrence of a force majeure event.

clauses in the usual post-crisis assessment, parties to Asian LNG SPAs could consider how to diversify their force majeure risk in a broader pool of contractual arrangements.

Price review clauses

Recent market events have also highlighted some areas of concern, potentially translating into areas for improvement, in price review clauses in Asian LNG SPAs. In particular, the recent (significantly increased since 2019) price review activity in Asia has exposed a major weakness of temporal triggers for a price review.

The right to request a review of the contract price under Asian LNG SPAs can be typically invoked after a set number of years from the date of first delivery (for example, after 10 years), and later only within predefined price review windows set at regular intervals (for example, within six months after the beginning of every consecutive five contract years). In contrast, price reviews under Asian LNG SPAs can be very rarely requested in an unscheduled manner, or subject to the occurrence of some specified circumstances. The scarce availability of 'wildcard' price reviews constrains the parties in their attempts to revise the contract price, essentially forcing them to await the next time window to submit their request (regardless of the price pressure at any given point of time).[52]

Difficulties arising from temporal limitations for a price review notice may be further exacerbated by the lack of time limits for the completion of price review discussions, an uncertain recourse to arbitration (discussed below), and a prohibition of retroactive price adjustments, which is not uncommon in Asian LNG SPAs, and excludes backdated payments.[53] Despite Asian price review clauses becoming more detailed over the years, the practical reality is therefore that they still lead to fairly unregulated and often protracted price review discussions, which do not always deliver a satisfactory (or any) result, which would ease, or later compensate for, the financial pain of a party that requested a price review.

The recent pressure on gas and oil prices has delivered multiple incentives to both buyers and sellers to reopen their long-term contract prices. The Asian LNG buyers have obvious reasons for requesting a price decrease amidst record-low spot prices but the sellers could also seek their own relief (and a price increase) in a prolonged low oil price environment. In the coming months, both buyers and sellers should therefore prepare themselves for requests for price reviews.

Guidance on the appropriate price review methodology varies significantly in Asian LNG SPAs[54] but, as emphasised by industry sources, tends to be either too vague, or too prescriptive, and is therefore generally of little assistance in finding the right balance between the financial positions of the parties. The issue of aligning the contract price with the market where the LNG is being sold is likely to be a bone of contention in most price reviews. Although the task of securing market responsiveness of the contract price reflects the conceptual idea of a price review (and the practice of European price reviews), a reference to buyer's market conditions is conspicuously absent from Asian price review clauses.

The limited role of downstream market conditions in Asian LNG SPAs has a specific root cause and derives from the historical capability of Asian buyers to pass through any LNG price increases to their customers. A related consideration is the lack of 'in any case' clauses in Asian LNG SPAs. 'In any case' clauses provide that the revised contract price shall allow the buyer to 'economically market the gas'

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[52] Some Asian LNG contracts also expressly limit the number of price revisions throughout the life of the contract, even to a one-off revision of the contract price. For a discussion of triggers for a price review under Asian LNG SPAs, see Ason (2019a) and (2019b).

[53] Some Asian LNG SPAs state clearly that there 'shall be no retroactive application of the new contract price' or apply a forward-looking perspective to a price adjustment (for example, from the beginning of a specific contract year). Some others allow for backdated price adjustments (preceded by provisional payments during the price review). This varied approach in Asian LNG SPAs is in sharp contrast with retroactive price adjustments under European contracts (mainly from the date of the price review notice), which are routinely applied in European price reviews.

[54] Some Asian LNG price review clauses do not say anything about the factors which should be taken into account in a price review. Some other only require the price adjustment to be 'appropriate', 'reasonable', 'equitable', 'fair and justified' (or apply a combination of these, or similar, thresholds). Finally, some (mainly recent) Asian LNG price review clauses provide specific guidance and list factors which 'shall be considered' by the parties in a price review, for example, prices under comparable long-term contracts. See Ason (2019a) and (2019b).

supplied under the contract (and feature in some European gas supply contracts).[55] Their general absence in Asian LNG SPAs is reflective of negotiating power of the sellers but may also be understood as a testament to well-functioning pass-through mechanisms in Asian markets.

Over the past few years, the ability of Asian utilities to transfer price increases under SPAs to their domestic customers has been increasingly put under pressure. Some Asian LNG buyers have started to face a more challenging regulatory environment, formally ending their regional monopolies and therefore limiting their ability to pass through the costs of LNG to the end-users. In April 2017, the retail market for gas in Japan was deregulated and 'opened for competition.'[56] In China, a growing share of LNG imports is contracted by independent gas companies who increasingly use third-party access to LNG terminals (owned by Sinopec, CNOOC and PetroChina), but also have started to build their own import facilities in China.[57] In 2016, the Korean government approved the gradual opening of gas imports and the wholesale market to the private sector by 2025.[58] The Indian government has also taken some preliminary steps towards unbundling the transmission and marketing of natural gas.[59] The world's top LNG buyers have therefore already been exposed to the idea (or practical reality) of growing competition and price pressure in their domestic markets. Some Asian LNG buyers could be already in a loss-making position under the existing contracts. But, at this point, most cases in Asia are likely to be less clear-cut, with the buyer paying more than what it considers to be a 'market price' but still retaining a positive margin due to favourable conditions in a domestic market.

In the absence of contractual guidance and case law in the context of Asian LNG SPAs, the parties will first need to define the relevance (and, if confirmed, the specific threshold) of a buyer's profitability in Asian price reviews. This could be done from scratch, or with some reference to the findings of arbitral tribunals in European price reviews.[60] Ideally, the parties will agree in advance (preferably at the time of drafting of a price review clause) on the acceptable impact of a price revision on financial performance of *both* parties, for example, to secure formally that the revised contract price will not put them in a loss-making position. Clear substantive guidance on the financial consequences of a price review could help parties to achieve a sustainable result in a price review process.

Procedurally, price reviews are likely to become more complex in response to recent market events. In particular, pending price reviews could involve new price review notices (filed in a new price review window), potentially also by the party that so far resisted a price review (most likely, a seller). In cases concerning different reference periods and price review requests, procedural choices of the parties tend to diverge. Depending on the options under the relevant contract, price reviews under one SPA could simultaneously involve different decision-makers, including the parties and arbitrators or experts.[61]

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[55] See Glassman Bock and Finizio (2020), who note that there are various formulations of 'in any case clauses', including that the revised contract price shall allow the buyer to achieve 'a reasonable rate of return' on the gas supplied under the contract.

[56] Hashimoto, Kunimatsu, and Hosokawa (2018), who explain that the competition landscape in Japan is 'shifting from the traditional faceoff between city-gas and electric power companies in the same region to new entrants from different regions and different business sectors and new alliances.'

[57] 'Opportunities and challenges of China's LNG expansion,' S&P Global Platts, 28 March 2018, https://www.spglobal.com/platts/plattscontent/_assets/_files/en/specialreports/lng/sr-china-lng-expansion-032018.pdf.

[58] Paik, (2018), 14 – 15.

[59] Corbeau, Hasan, Dsouza, (2018), 28.

[60] The application of 'in any case' clauses has been considered by a number of arbitral tribunals, including in publicly available arbitral awards. For example, in a Partial Award in ICC Case No 19374, an arbitral tribunal clarified that a provision '*indicating that one of the aims of the revision is precisely 'to enable the buyer to economically market' the gas implies that the buyer should be protected from suffering unsustainable losses.*' The tribunal has further explained that the requirement that the buyer should be able to economically market the gas does not amount to a guaranteed margin: '*Although this does not imply that the buyer is entitled to a guaranteed margin, his business, in the long term, should remain viable….*' (ICC Bulletin 2017, at p. 164, emphasis added).

[61] For example, a seller earlier opposing a price decrease in good faith discussions may initiate arbitration seeking a price increase in response to more recent market changes. Two price review arbitrations may be conducted in parallel. In a more hypothetical (but feasible scenario under some LNG SPAs), one price review case may be subject to expert determination and another one to arbitration.

In the past, scenarios of multiple price reviews have rarely been considered in the drafting of price review clauses. As a result, parties exposed to overlapping and/or competing price review claims will typically find little (if any) contractual guidance on how to deal with a complex procedural setting which can potentially produce inconsistent outcomes. In anticipation of price reviews intersecting throughout the life of the contract, parties to LNG SPAs could consider in advance, and possibly specify in a price review clause, how to secure the efficiency of related price review proceedings and mitigate the risk of conflicting decisions.

Other contract adjustment clauses

In addition (or in the alternative) to price review clauses, some Asian LNG SPAs incorporate other provisions, such as change of circumstances and hardship clauses, which may allow for contract adjustments 'in difficult times.'[62]

Japanese LNG SPAs traditionally contain 'meet and discuss' clauses, which mainly serve as a basis for price review discussions, but can also expressly allow the parties to discuss, and potentially implement, more comprehensive changes to an SPA. A sample Japanese contract reopener reads along the following lines:

> The Seller and the Buyer, recognising the long-term nature of this Contract and the need for it to remain fair and reasonable to both Parties throughout its lifetime, agree that, in the event that circumstances arise which were not foreseen at the outset of this Contract, the Parties shall <u>meet and discuss such circumstances in good faith, with a view to making mutually acceptable revision of the terms of this Agreement</u> to alleviate or eliminate such circumstances. (emphasis added)

One author has described these broad 'meet and discuss' provisions as 'an inbuilt amendment facility' in Japanese LNG SPAs, which obliges the parties to meet and discuss 'any given issue' and is sometimes expressed as an obligation 'to confer in good faith.'[63] Similarly, some SPAs for deliveries to other Asian markets require (but more commonly only encourage) the parties to discuss any contract-related issues 'in a spirit of mutual understanding and trust.'

The common weakness of the clauses in Asian LNG SPAs, which potentially allow for reopening of the contract terms outside of the context of price reviews, is that they are typically very general in nature (and likely unenforceable). They also typically do not stipulate any recourse to formal dispute resolution mechanisms and are commonly silent on the consequences of the parties' failure to reach an agreement on a mutually acceptable revision of the relevant contract terms. As a result, renegotiation attempts tend to be uncertain, and often either prove futile, or are forced under the threat of terminating the contract if the contractual conditions remain unchanged.

The lack of a practicable basis for a comprehensive contract renegotiation, which would cover non-price terms, significantly affects the ability of the parties to adjust contractual arrangements in response to changed market circumstances and, as discussed below in a broader context of the evolution of LNG contract terms in Asia, could be re-examined.

4. Future scenarios

In the 2020s, Asian long-term LNG contracts will continue their transition until the 'end game trading/merchant model negates the need for long-term contracts.'[64] The early 2020s, initially in response to the effects of the COVID-19 crisis, will likely see the partial fulfilment of Contractual Train Wreck and Contractual Impasse scenarios (**4.1**). The chances for a Smooth Contractual Transition

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[62] For a discussion of various LNG contract adjustment clauses, see Christie, Han and Shmatenko (2020).
[63] Herd, (2004), 327. Commentators emphasize that 'confer in good faith' clauses form 'the real heart of Japanese contractual relationships.' Herd, (2010), 327, quoting McCarthy, (1985), 213.
[64] Ledesma and Fulwood (2019).

seem largely compromised at this point (**4.2**), but the parties can create a stronger foundation for gradual adjustments of their contractual arrangements in the future (**4.3**).

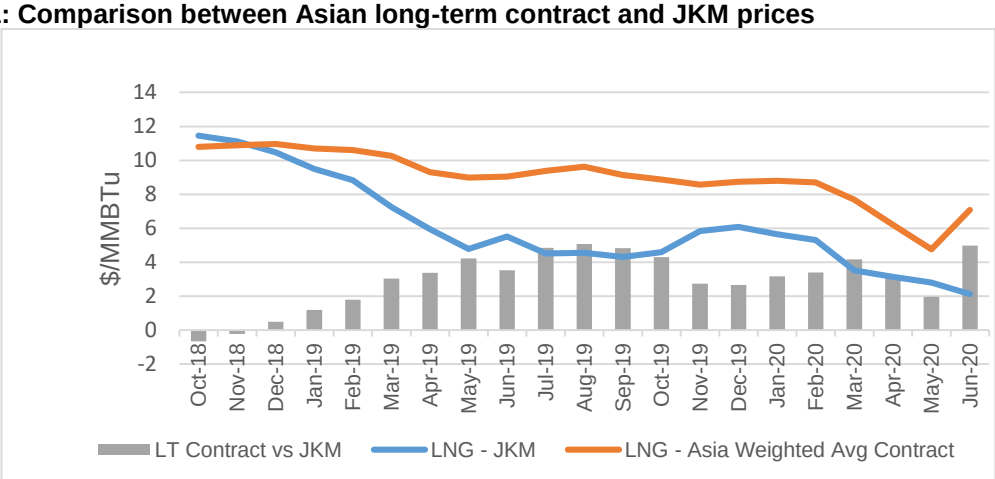
4.1 Combination of elements of Contractual Train Wreck and Contractual Impasse

Proliferation of price reviews

Price reviews triggered by Asian LNG buyers before COVID-19 will likely continue, especially under SPAs which apply S-curves, oil price floors, or other mechanisms protecting a seller from the effects of an oil price collapse. Although the recent fall of oil prices has raised some expectation of financial relief for LNG buyers, it is unclear how long the low price environment will last, and it cannot be excluded at this point that its effects will be limited (technically, to a few cheaper invoices for oil-indexed contracts). Importantly, oil price drops affect LNG price levels but do not resolve the issue of price formation.[65] In response to recent market events, some market participants may no longer wish to risk exposure to the volatility of oil prices and, instead, take a more decisive approach aimed at achieving a 'reset' in their long-term pricing arrangements.

As of June 2020, prices under oil-linked contracts were, for the nineteenth consecutive month, above the JKM price (**Figure 1**).

Figure 1: Comparison between Asian long-term contract and JKM prices



Source: S&P Global Platts

The difficulties of a prolonged disconnect between spot and term prices (commonly seen in earlier price reviews) are further exacerbated by a number of other factors, including the financial burden, and uncertainty about the further development, of the pandemic. Domestic demand remains weak (despite initial signs of recovery) and budgets are likely to be strained.

At least some SPAs, which could now be under price reviews, were concluded by incumbents who were insulated from any shareholder pressure and unrestricted in passing through any price increases to end-users. At least some of these SPAs were signed in a completely different commercial reality when spot prices were at record-high levels exceeding $15/MMBtu. It remains to be seen whether the buyers will be able to argue that they could not have anticipated the financial risks of their long-term contracts but, clearly, some of these contracts have become a financial burden for the buyers, which could significantly affect the profitability of their business. Some price review attempts could be forced outside a contractual framework through a more aggressive price review trigger such as a threat of bankruptcy. The prohibition of retroactivity of price adjustments could become a serious problem under some Asian LNG SPAs and potentially prevent some buyers from recovering millions of dollars in backdated payments. This could put even more pressure on the buyers to look at renegotiating their other long-

[65] For a discussion of risks of confusing price formation with price level, see Rogers and Stern (2012) and Stern and Rogers (2014).

term contracts and submit further price review requests. Against this background, it should be expected that the pressure will continue to build and price reviews under Asian LNG SPAs will significantly increase in the coming months.

… but not arbitrations

Whilst it seems certain that price review discussions will proliferate in the early 2020s, the 'litmus test' is widely understood as a question whether market participants 'will be prepared to progress their disputes to arbitration if negotiations fail'.[66] Some authors refer to a likely 'notable growth'[67] in the number of price review arbitrations under Asian LNG SPAs. There is some expectation (and fear) in the industry that a wave of price review arbitrations seen earlier in Europe could materialize in Asia in the coming years.

There are indeed several considerations which suggest an increased use of LNG price review arbitration in Asia in the future.[68] But the key factors explaining why parties to Asian LNG contracts have favoured informal price review discussions (and, accordingly, not adopted the European preference for arbitration), remain relevant, mainly because they are deeply rooted in the relationship-focused nature of Asian LNG business and culture. It should therefore be expected that most price reviews in Asia will be resolved in an informal manner in the foreseeable future.

In the early 2020s, and especially in the evolving context of global market disruptions, the price pressure might become very high for many market participants. This, in turn, could trigger an unprecedented scrutiny of price review arrangements under Asian LNG SPAs, possibly even by those unwilling to consider price review arbitration as a matter of policy choice (or, for example, out of hesitance to engage in an adversarial dispute resolution process with a State-owned company) in 'more usual market' conditions.

However, an increased perceived need for a price review arbitration will not necessarily translate into an increased number of arbitral proceedings. Leaving relationship-based concerns aside, the practical reality is that parties will rarely find a straightforward basis for a price review arbitration request. The opposite is likely to be true under most Asian LNG SPAs, which prove to be a 'minefield' for jurisdictional challenges to price review arbitration (and were virtually unheard of in European price reviews[69]).

The key question concerning the role of arbitration in Asian LNG price reviews is therefore not whether market participants will be prepared to progress their dispute to arbitration if negotiations fail, but whether they will be allowed to do so under the relevant SPA.

The rulings of arbitrators will resolve the issue whether an arbitral tribunal is empowered to hear a price review claim (and adjust the contract price) on a case-specific basis but, generally, the level of difficulty of a claimant's case on jurisdiction is likely to be high. Any jurisdictional failures (which are unlikely to be reported), could have a strong influence inside the industry and discourage further price review requests or lead to the withdrawal of pending arbitration claims.

The key jurisdictional obstacle in Asian LNG SPAs is the absence of an express right within the price review clause to refer a failure to agree on a new price to arbitration.[70] The practice currently seeks to clarify whether the lack of reference to arbitration excludes recourse to arbitration in relation to the setting of the price of LNG, or a general arbitration clause (set out elsewhere in an SPA) can be relied upon instead. Notably, the wording of a price review clause can effectively create a 'barrier' to an attempted transposition of a general arbitration clause to a price review context. A successful reliance on a general arbitration clause could prove particularly problematic in scenarios where a price review clause clearly stipulates a different outcome of failed price review discussions (for example, that the

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[66] Rockall and Holland (2020).
[67] Finizio, Trenor and Tan, (2020), 39.
[68] See Ason (2019a); Jeneway (2020); Rockall and Holland (2020); Finizio, Trenor and Tan (2020).
[69] For a discussion of jurisdictional challenges, which mainly result from the general nature of price review clauses, see Ason (2019a). For a discussion of price review clauses under English law, see Leggatt (2018) and Griffin (2019).
[70] Ason, (2019b), 34.

contract 'shall continue unamended'), or if it identifies the agreement of the parties as an exclusive means for price adjustment (for example, referring to a new contract price 'agreed by the parties'). The lack of detailed requirements for a price review process (including in relation to a price review notice), a limited guidance on the price review methodology, as well as a comparison with other provisions in an SPA which expressly refer the parties to arbitration (or expert determination), are examples of some other considerations which may reflect the intention of the parties to resolve a price review without any external decision-makers.

An industry context will also play a role. Although Asia is an amalgam of different LNG markets and cultures (and, accordingly, different approaches to price reviews), some conclusions can be drawn in relation to the industry practice in specific markets. For example, industry evidence strongly suggests that the lack of recourse to adversarial price review mechanisms is a common feature of Japanese LNG SPAs. In comparison, procedural solutions for a price review are much more heterogenous in Chinese LNG SPAs.[71]

In some commercial relationships, the parties could be particularly inclined to secure the right for a potential arbitration in relation to the setting of the price of LNG. International energy traders have been at the forefront of a greater push towards price review clauses providing for arbitration in the case of failure of good faith discussions.[72] For deliveries from some projects, an express recourse to price review arbitration may be presented as an integral part of the deal.[73] In general comparison, buyers in the emerging Asian LNG markets are understood to be most likely to propose (or agree on) a price review arbitration as the second step after good faith discussions.[74]

Industry evidence suggests that the recent paradigm shift in favour of arbitration of price review claims is starting to emerge in relation to Japanese LNG contracts. Japanese utilities, mainly due to an increased exposure to price pressure in their domestic market (but also their increased activity in the global LNG market, including as portfolio players), are becoming less inclined to rely exclusively on their relationship with the other party in managing the price risk under their SPAs. According to industry insights, some Japanese buyers may be ready to negotiate new-generation price review clauses with an express right of arbitration in relation to the setting of the contract price.

The recent approach supporting an increased use of LNG price review arbitration under Asian LNG SPAs will likely offer a more favourable contractual basis for future arbitration requests. However, a general change in available price review dispute resolution options will certainly take a few more years before it becomes tangible in the region.[75] Until then, a wave of arbitrations resulting in LNG price adjustments imposed by arbitral tribunals is unlikely to materialize in Asia.

Re-emergence of contractual impasse for new long-term contracts

In the early 2020s, a Contractual Impasse scenario could resurface in relation to new long-term contracts. The combination of the COVID-19 context, record-low spot prices, and several Asian LNG long-term contracts set to expire in the near term[76], could offer a particularly favourable ground for the

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[71] At one extreme, some long-term Chinese LNG contracts do not even include a price review clause. At another extreme, some apply detailed (and European-like) price review provisions with an express reference to arbitration if the parties fail to agree within 120 days on a new contract price. It is also not uncommon to see termination rights in price review clauses in newer SPAs for deliveries to China which allow either party to terminate the contract in the event the parties cannot agree on a contract price in good faith discussions for example, within a period of six months.

[72] Ason, (2019a), 13.

[73] Industry evidence suggests that this could be particularly the case for some Australian projects. It is unclear, however, whether Asian LNG SPAs for deliveries to Japan provide recourse to price review arbitration.

[74] According to industry sources, buyers who do not see an LNG deal primarily through the lens of security of supply tend to have a particularly positive attitude towards price review arbitration.

[75] This particularly applies to price review clauses in new contracts since there are typically several years between the conclusion of the contract and the first opportunity for a price review. Temporal limitations in relation to the first price review request (for example, only after ten years from the first delivery) tend to persist in newer Asian LNG contracts, especially if they are attached to new projects.

[76] Significant volumes of old long-term Asian LNG contracts will soon expire. In Japan, around 7 mtpa of contracts with Qatar are set to expire by December 2021 'making it the single biggest tranche of contract renewals coming up.' See,

reconsideration of the financial burden of legacy contracts. If no alternative price arrangements can be agreed, They could ultimately lead to the result that 'buyers refuse to sign new long term contracts at prices linked to crude oil even with lower slopes; producers refuse to go ahead with new projects on any other price basis, and no new long- term LNG contracts are signed.'[77]

Contract terminations, which remain a likely implication of COVID-19 pressures, including in the event of prolonged force majeure and failed price reviews, could further exacerbate the effects of Contractual Impasse, especially if the parties turn to the spot market instead of filling the gaps with new term deals.

4.2 Elusive Smooth Contractual Transition

Uncertain financial positions of the parties

The end of the pandemic will likely see a less thriving LNG industry faced with several serious challenges, including shut-ins, project delays, cash flow issues (or even bankruptcies). This necessarily questions the feasibility of the fulfilment of the Smooth Contractual Transition scenario which, as noted by Rogers and Stern, 'depends on maintaining a controllable financial situation for buyers and sellers'.[78] In the early 2020s, the financial burden of legacy contracts (which will be inevitably exacerbated by the effects of COVID-19) will likely not allow Asian LNG buyers to await their deals to expire in the comfort of a Smooth Contractual Transition.

Delay in the creation of an Asian hub

Despite long-standing discussions as to the possible location of the hub (mainly Singapore, Tokyo, Shanghai), or the timing of its creation (which used to be widely estimated for before the 2020s), a liquid Asian gas hub is not yet available, and it is uncertain when (and if) it will be created. There are several reasons behind the delay but an insufficient level of liberalisation of the major Asian gas markets[79] could be the key impediment. Amongst the main Asian LNG trading centres, only Singapore has a liberalised gas market.[80] In all five top Asian LNG importing countries (Japan, China, South Korea, India, and Taiwan), the completion of the liberalisation process would require a sustained legislative and regulatory effort.81 Support for the liberalisation programme could be less certain after the pandemic, when the focus of the governments will be mainly on the general recovery of domestic economies. Any delays in the liberalisation agenda, which is aimed at opening up the market and therefore 'prepares the ground' for a liquid gas hub, could delay the market-driven efforts aimed at its creation.

Comparison with the European experience

The comparison with the prior European experience in the move to market pricing is a recurrent theme and there is some expectation of a 'sequel' of the European experience in Asia. A comprehensive assessment of this issue goes beyond the scope of this paper but there are at least three differences between the two contexts, which are relevant to the discussion concerning the chances of a Smooth Contractual Transition for Asian LNG SPAs.

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https://blogs.platts.com/2019/09/17/lng-sector-transformation-long-term-contracts/. In South Korea, 11 mtpa of KOGAS' supply contracts with Qatar and Oman will expire by 2026. See Paik (2018).

[77] Rogers and Stern, (2014), 49.

[78] Rogers and Stern, (2014), 49.

[79] See Stern and Imsirovic (2020, 15), who refer to 'the absence of any significant liberalisation of the major Asian gas markets.'

[80] Despite initial expectations that the Asian hub would be created in Singapore, there have been several impediments to the fulfilment of this project, including the size of the market. As explained by Fulwood (2018), 'while Singapore ticks most of the boxes in terms of liberalization and a competitive market', its domestic market 'is simply not big enough and lacks sufficient market players to create the truly competitive wholesale market that is a prerequisite for a hub.' In 2019, the Singapore Exchange stopped producing its Sling spot price indices for LNG less than four years after their launch, 'dashing the city-state's hopes of becoming Asia's main pricing hub for the fuel.' See 'Singapore to stop 'Sling' LNG indices, sheds hopes of main price hub', Reuters, 30 July 2019, https://www.reuters.com/article/us-singapore-lng-prices/singapore-to-stop-sling-lng-indices-sheds-hopes-of-main-price-hub-idUSKCN1UP052

[81] The progress of liberalisation in the top five Asian importing markets can be broadly assessed as *high* for Japan, *moderate* for China, and *low* for South Korea, India, and Taiwan. For a recent discussion of the relevant regulatory framework in the key gas markets in the Asia Pacific region, see Finizio, Trenor, and Tan (2020).

The first difference lies in the progress of liberalisation efforts. An important aspect of this comparison is the relevant time perspective. When the rationale for the continued oil linkage in long-term gas contracts started to be questioned in Continental Europe[82], the key gas markets in North West Europe were already formally liberalised.[83] The practical move to market pricing in European gas supply contracts took off in the early 2010s, after 'the perfect storm' of market events, including collapsing demand and recession following the financial crisis of 2008, that created the commercial conditions for hub pricing to take off in Continental Europe.[84] Importantly, in terms of liberalisation progress, the key Asian LNG markets today are not where the key European gas markets were in the early 2010s. As noted above, in all five top Asian LNG importing countries, the liberalisation of gas markets is an unfinished process (at varying levels, but mainly far from completion). The expectation of a sequel of the European experience in Asia in the short term misses at least several years of complex legislative packages and regulatory changes, which gradually prepared the ground for the move to market pricing in the 1990s and the early 2000s, initially in North West Europe. The Asian example highlights that progressive changes to contract fundamentals cannot be successfully implemented in what can be indeed described as a situation of 'minimal liberalisation and reduced competition.'[85] As exemplified by the European experience, contract changes need to be driven by, rather than seek to precede, liberalisation of gas markets.

The second difference between the European and Asian contexts lies in the attitude of market participants towards oil indexation. While the move away from oil indexation in European gas contracts was clearly a one-sided push from the buyers (accelerated in the context of $100+ oil prices), the situation could be more nuanced in Asia. Even if it still seems rather unlikely at this point that an initiative for the removal of an oil linkage could come directly from the sellers, some of them (but also their lenders) might be increasingly influenced by the argument that using oil indexation for gas pricing is dysfunctional in the long run.[86] Generally, the sellers should be more responsive to discussion on the issue than was the case in Europe some ten years ago. The European example of the departure from an oil linkage[87] is particularly useful in confirming that pricing preferences of the sellers are not set in stone. Perhaps most relevantly for the Asian context, Qatar (widely known for its long-standing preference for oil-indexation[88]) has already accepted spot and hub-based pricing in its European contracts.[89] Despite different market fundamentals, Asian LNG buyers should be able to capitalize on the European prior experience in price discussions concerning the removal of oil linkage from their contracts.

The third difference between the European and Asian experience lies in the role of price review arbitration. In the past decade, arbitrators have replaced the original oil link with hub and spot pricing in several (confidential) cases under European gas supply contracts. The role of price adjustments imposed by arbitral tribunals in the move to market pricing in Europe was a rather unexpected outcome, which took some sellers by surprise.[90] Clearly, the risk of a Contractual Train Wreck of 'litigation rendering unpredictable results'[91] is significantly lower in Asia than it was in Europe (including due to

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[82] See, in particular, Stern (2007), who argued in a high-impact paper on the subject that 'a narrow focus on the rationale for continued oil-linkage may risk missing the bigger commercial picture.'

[83] For example, the German gas market was formally liberalised in 1998. For a detailed discussion of liberalisation in the major European markets up to 2008, see Haase (2008).

[84] Stern and Rogers (2014, 11 – 12). The removal of oil linkage in favour of hub and spot-based pricing in gas supply contracts for deliveries to Continental Europe was a combined result of changes to new contracts and price reviews executed since the early 2010s.

[85] Rockall and Holland (2020).

[86] As aptly observed by one commentator, recent events have proved that using oil indexation for gas pricing 'is just as dysfunctional on the way down as it is on the way up.' See https://blogs.platts.com/2020/04/16/coronavirus-new-order-lng-markets/.

[87] See Stern (2007) and (2009), and Stern and Rogers (2012) and (2014).

[88] See Corbeau, (2016), 534, quoting Critchlow: 'Qatar has always supported the view that long term contracts based on oil indexation are a more predictable and reliable mechanism for all concerned in the industry.'

[89] Stern and Mitrova, (2020), 40.

[90] One may recall the Deputy CEO of Gazprom quoted as saying in 2011: 'If it does come to arbitration proceedings, we are pretty confident…God help them if someone takes a risk to go to arbitration.' See Stern (2011).

[91] Rogers and Stern, (2014), 49.

jurisdictional impediments to arbitration under Asian LNG SPAs, which are discussed above). The practical consequence (and a potential downside) of the lack of access to price review arbitration is that arbitrators may not be able to 'help' with the move away from the oil-indexation in Asia. Accordingly, the parties to Asian LNG SPAs will likely need to execute the transition of their pricing arrangements on their own.

4.3 An idea: transition through contract reviews

A different basis for Smooth Contractual Transition

Smooth Contractual Transition remains the most desirable scenario for the evolution of contract structures in Asia but it is unlikely that the parties will be able to execute it through the usual avenue of price reviews. Tolerable adjustments to Asian LNG SPAs are possible, but a gradual recalibration of contractual arrangements would require a stronger contractual basis for more comprehensive contract reviews.

Model contract renegotiation clause

The idea of contract reviews is inspired by 'confer in good faith' provisions in Japanese LNG SPAs. The key difference, and a modern addition to the traditional 'meet and discuss' concept, would be an express right to refer the matter to arbitration if the parties fail to agree in negotiations within a stipulated period of time. An example of such a renegotiation clause reads as follows:

> It is hereby agreed between the parties **that in the event of any major physical or financial change in circumstances … either party may serve notice on the other requiring <u>the terms of this [contract] to be re-negotiated</u>** with effect from the date on which such notice shall be served. The parties **shall immediately seek to agree amended terms** reflecting such change in circumstances and **if agreement is not reached within a period of <u>six months</u> from the date of the notice <u>the matter shall be referred to an Arbitrator</u>** (whose decision shall be binding on both parties and who shall so far as possible be an expert in the area of dispute between the parties) (emphasis added)

The clause quoted above comes from a long-term (25-year) license agreement between Associated British Ports and Tata Steel UK concerning the use of harbour facilities. It offers a practicable basis for a comprehensive contract renegotiation, which (as noted above) is typically lacking in Asian LNG SPAs. The clause was held to be enforceable under English law[92] and can therefore serve as a model clause for most Asian LNG SPAs.[93]

The particularities of a renegotiation clause could be adjusted to the needs of a specific contract but its core effect should be that the clause allows for renegotiation of non-price terms without the need to submit a price review request.

In a renegotiation process (and dispute resolution options), the contract could require the parties to 'seek to agree' amended contractual terms (for example, 'within a period of six months'), failing which the matter 'shall be referred to' a sole arbitrator or an arbitral tribunal.[94] In terms of a trigger for a renegotiation, the contract could refer to a 'change of circumstances', or allow the contract to be reopened subject to other requirements. The clause could also conceivably stipulate a periodic review of contractual arrangements (which would provide a particularly compelling basis for a gradual transition of contract terms). The drafting process would necessarily need to involve other considerations and,

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[92] *Associated British Ports v Tata Steel* [2017] EWHC 694.
[93] Asian LNG SPAs are typically governed by English law and, less frequently, New York (or other) law.
[94] Expert determination could also play a role, at least in relation to some aspects of the renegotiation exercise.

crucially, a careful balancing of contract flexibility and stability so that an inbuilt amendment mechanism does not undermine the continuity of performance under a contract.

An alternative to contract changes secured in price reviews

Non-price terms in Asian LNG SPAs are commonly renegotiated in the context of price reviews. The following statement from the President of Tokyo Gas is reflective of this practice:

> For our existing long-term contracts such as 20-year contracts, we are trying to renegotiate to gain flexibility in destination when prices are reviewed.[95]

Some other non-price terms discussed in price reviews are volume flexibility and contract duration. For example, a buyer requesting a price decrease may additionally seek a removal of diversion restrictions or an extension of DQT rights. The proposal for added flexibility to non-price terms may come from a seller in price discussions, so that a buyer is more keen on a less significant price reduction. In a price review, a buyer may agree to buy more LNG to get a lower price, and so forth.

There may be an infinite number of combinations where price and non-price terms can interact in a price review but their common characteristic is that a discussion on non-price terms originates in a price review request and remains largely price-centered. Any changes to non-price terms are relative to, and can be measured against, changes in the contract price and are, ultimately, secondary outcomes of a price review.

Arguably, contract changes secured through price review clauses have failed to keep the entire contract structure in line with the evolution of market fundamentals. For example, the limited ability to reopen the contract via a price review clause (within predefined time windows), could be one of the reasons why some Asian LNG contracts remain on a 100%-take-or-pay basis and destination clauses are still common in Asian contracts (and, in particular, have not been removed from multiple Japanese LNG contracts predating the JFTC Report).

The experience of the past few months has also exposed some limits of a price review process in relation to changes to non-price terms, including that issues related to short-term demand reduction in circumstances such as COVID-19 cannot be efficiently dealt with in price reviews (which may prove 'too slow' for the task[96]).

Finally, amendments to non-price terms tend to become more difficult if a dispute is submitted to arbitration (which is an unlikely scenario for Asia in general but a likely outcome under some Asian LNG SPAs). The experience of European price reviews highlights that price review arbitration is not the most appropriate forum for adjustments going beyond the contract price and, under some SPAs, it can be an impermissible forum for changes to non-price terms. In particular, arbitrators my not have jurisdiction to change any part of the contract other than the price formula on the basis of the following (or a similar) reservation found in many SPAs:

> For the avoidance of doubt, any adjustment awarded shall only operate to amend the Contract Sales Price and shall not extend to any other provisions of this Agreement.[97]

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[95] 'Tokyo Gas aims to renegotiate contracts, raise flexibility', Reuters, 26 September 2019 (emphasis added) https://www.reuters.com/article/us-japan-lng-conference-tokyo-gas/tokyo-gas-aims-to-renegotiate-lng-contracts-raise-flexibility-idUSKBN1WB10C

[96] See Agosti and Moselle, (2020), 11: 'Whether or not issues related to weak domestic demand might conceivably be dealt with through price review provisions is a question of law. However, in our experience such provisions in long-term Asian LNG contracts do not make any reference to downstream market conditions … In any case, the buyer may feel that price adjustments via price review provisions are too slow to deal with their urgent need to reduce contractual volumes, and in some extreme circumstances (a COVID-19 lockdown) they may argue that no price is low enough to address short-term demand reduction.'

[97] The clause is quoted by von Mehren, (2014), 93 – 94.

A renegotiation clause combining the logic of comprehensive contract adjustments with recourse to arbitration could provide a solution to some of the ills of contract changes attempted through price reviews. It would offer the parties more certainty that the provisions of their SPAs may be subject to changes which are specifically allowed by a contract (rather than executed 'on the occasion' of price reviews, or 'out of a contract'), but also a reassurance that, in the event of parties' failure to agree, a fair and expedited solution will be imposed by a third party.

5. Summary and conclusions

Asian long-term LNG contracts keep evolving and, in the period between 2015 and 2018, they were on the right path to the fulfilment of a Smooth Contractual Transition. The sharp fall of spot prices since January 2019 has triggered multiple price reviews in Asia and brought Asian LNG SPAs to a fast track (and certainly no longer the right path) towards a Contractual Train Wreck.

In early 2020, the coronavirus outbreak has added an unexpected scenario in its own right – of a global health crisis and severe market disruption – which has impacted the LNG industry.[98] While the full implications remain to be seen, it seems certain that the crisis will have a lasting impact. The record-low spot prices could accelerate the transition to market pricing in long-term contracts, but the focus on the broader recovery from the crisis could delay the creation of a liquid regional gas hub in Asia. In the early 2020s, the financial burden of oil-linked legacy contracts will likely not allow Asian LNG buyers to await unfavourable deals to expire and could trigger further price review requests. Price reviews could initially become more contentious but will generally not lead to a wave of price adjustments imposed by arbitral tribunals, primarily due to a combination of relationship-based concerns and jurisdictional impediments under Asian LNG SPAs. The early 2020s will therefore likely see a partial fulfilment of a Contractual Train Wreck of price reviews (but not arbitrations), which would bring the risk of abrupt contract changes implemented by the parties in the context of price reviews. In parallel, Contractual Impasse could re-emerge in relation to new long-term contracts, including as a result of contract terminations triggered by unsuccessful price reviews, prolonged force majeure, or other circumstances such as bankruptcies of market participants. Smooth Contractual Transition remains the most desirable scenario but its fulfilment would require parties to Asian LNG SPAs to prioritise their shared long-term goals over immediate price adjustments. Transition driven by contract reviews executed by the parties, gradually and comprehensively recalibrating the key contractual arrangements, would be an optimal scenario for Asian LNG SPAs in the 2020s. Although disputes could be on the rise in the short term, an increased level of cooperation in a time of a crisis could make it easier for market participants to agree on the next-generation contract fundamentals in the long run.

[98] For an interim assessment (as of May 2020), see OIES Quarterly Gas Review: The impact of COVID-19 on global gas markets, https://www.oxfordenergy.org/publications/quarterly-gas-review-issue-9/.

Glossary

CNOOC	China National Offshore Oil Corporation
$	US dollar
DQT	Downward quantity tolerance
GAIL	Gas Authority of India Limited
GIIGNL	International Group of Liquefied Natural Gas Importers
GSPC	Gujarat State Petroleum Corporation
ICC	International Chamber of Commerce
IEEJ	The Institute of Energy Economics, Japan
JCC	Japan Customs-cleared Crude Oil Price, also known as 'Japanese Crude Cocktail'
JKM	Platts' Japan Korea Marker (spot LNG price published by Platts)
KAPSARC	King Abdullah Petroleum Studies and Research Center
KOGAS	Korea Gas Corporation
MMBtu	Million British thermal units
mtpa	Million tonnes per annum
OGEL	Oil, Gas and Energy Law
PSO	Pakistan State Oil
S-curve	A price mechanism in Asian LNG SPAs limiting the exposure of the parties to oil price movements within a certain range (lessening the impact of high oil prices on the LNG buyer and of low oil prices on the seller).
slope	A component of an oil-linked price formula in Asian LNG contracts which is typically expressed as a percentage and determines how the LNG price changes in response to changes in oil prices
SPA	Sales and Purchase Agreement

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