

Specifications Guide

Global LNG

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Definitions of the trading locations for which Platts publishes daily indexes or assessments

The following contains the primary specifications and methodologies for S&P Global Commodity Insights' Platts LNG assessments throughout the world. All the assessments listed here employ Platts Assessments Methodology, as published at https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/platts-assessments-methodology-guide.pdf.

These guides are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification questions.

This guide is current at the time of publication. Platts may issue further updates and enhancements to this guide and will announce these to subscribers through its usual publications of record. Such updates will be included in the next version of this guide. Platts editorial staff and managers are available to provide guidance when assessment issues require clarification.

Unless otherwise stated, standard specifications for all Platts LNG assessments are as follows:

Frequency: Assessments are published each business day and reflect market values prevailing at the close of markets in the respective region (Singapore/UK/US). On certain days ahead of a public holiday, such as Christmas Eve or New Year's Eve, Platts may assess the market earlier than normal. This would typically be 12:30 pm in Singapore and 12:30 pm in London.

Unit: All prices are quoted in US dollars per million British Thermal Units (\$/MMBtu) to three decimal places. ICE NBP futures in pence per therm are converted to \$/MMBtu using a USD/GBP exchange rate assessed at market close. Prices at European gas hubs in Euros per megawatt hour are converted to \$/MMBtu using a USD/EUR exchange rate

assessed at market close.

Quality: Price assessments reflect Btu/scf calorific value in a range; cargoes outside of this range are considered and may be normalized to within the range.

Vessel size: Standard cargoes of 135,000-175,000 cu m. Larger Qatari Q-Flex (210,000 cu m) and Q-Max (260,000 cu m) carriers are not assessed directly, though they may be normalized to the standard volume.

Timing: Platts assesses LNG Delivered Ex-Ship (DES) markets in half-month forward cycles, and the FOB Gulf Coast 30-60 days forward from the date of publication.

For instance, on June 1, Platts will assess DES cargoes for delivery in H1 July, H2 July, H1 August and H2 August in the case of Platts JKM™.

The price assessments represent the average of the two half-month cycles from the third half-month forward cycle onwards which comprise the first full month of delivery. For instance, on June 4, JKM, (Jul) represents the average of price assessments for cargoes for delivery in H1 July and H2 July.

DES price assessments roll over on the 16th of each calendar month unless that day is not a business day, in which case the price assessment rolls over on the following business day. For instance, if June 16 is a business day, Platts JKM, (Aug) is the average of price assessments of cargoes for delivery in H1 August and H2 August.

Netback and netforward assessments: For all netback and netforward assessments, Platts publishes a single value reflecting the implied price of a cargo at market close using

the freight route costs, which employ standard Platts freight assumptions and relevant journey times to a stated loading or delivery location. More details are provided in the netback and shipping assessments section below.

Commissioning cargoes: Platts LNG price assessments reflect cargoes that are widely merchantable and do not reflect the commissioning cargoes from a new LNG project site. This applies to bids, offers and trades published during the Platts LNG Market on Close (MOC) assessment process, meaning that neither base loading port stated in offers, nor loading port nominations for trades reported via the MOC process should be against LNG liquefaction sites yet to load an LNG cargo, or whose cargo specifications are still unknown to the wider market.

Floating price physical information: Floating price physical information may not be fully taken into consideration for the assessment process, normalized or may be excluded from the assessment process altogether, for reasons including timing, location and other factors, including linkage to benchmark bases that are not seen as typical relative to the market. Pricing bases with infrequent usage may differ in value from the typical and commonly observable information in the market.

Benchmark bases considered typical for one region may not be commonly used in another region. Similarly, benchmarks that may be used in longer term contracts may rarely appear in spot cargo pricing.

Platts evaluates the considerations of different markets when exercising judgment around which benchmark bases are deemed typical for LNG cargo price assessments in different regions.

Pacific Basin Spot LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min. size	Max. size	Currency	UOM
LNG Japan/Korea Spot Crg DES \$/MMBtu	AAOVQ00	AAOVQ03	Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea Spot Crg DES Eur/MWh	LNJKA00		Spot	DES	Japan/Korea	135,000	175,000	Eur	Mhw
LNG Japan/Korea DES 1 Half-Month	AAPSU00	AAPSU03	Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea DES 2 Half-Month	AAPSV00	AAPSV03	Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea DES 3 Half-Month	AAPSW00	AAPSW03	Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea DES 4 Half-Month	AAPXA00	AAPXA03	Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea DES BalMo Next-Day Cash Differential	AAOVU00	AAOVU03	Differential	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea DES Cash Differential Mo01	AAOVW00	AAOVW03	Differential	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea DES Pricing Month Cash Differential	AAOXX00	AAOXX03	Differential	DES	Japan/Korea	135,000	175,000	USD	MMBtu
LNG Japan/Korea vs Henry Hub Spore 16:30	AAPRZ00	AAPRZ03	Differential					USD	MMBtu
LNG Japan/Korea vs ADB Spore 16:30	AAPSB00	AAPSB03	Differential					USD	MMBtu
LNG DES JKM vs WIM Spore 16:30	LDJWS00	LDJWS03	Differential					USD	MMBtu
LNG Freight Japan/Korea Vs Taiwan/China 16:30	AAPSC00	AAPSC03	Differential					USD	MMBtu
HHub 1-Mo Spore 16:30 Hrs \$/MMBtu	AAPSD00	AAPSD03	Futures		Henry Hub			USD	MMBtu
HHub 2-Mo Spore 16:30 Hrs \$/MMBtu	AAPSE00	AAPSE03	Futures		Henry Hub			USD	MMBtu
Dutch TTF Mo01 \$/MMBtu Singapore Close	DTMSC01	DTMSC31	Forwards		TTF	5 MW		USD	MMBtu
Dutch TTF Mo02 \$/MMBtu Singapore Close	DTMSC02	DTMSC32	Forwards		TTF	5 MW		USD	MMBtu
Dutch TTF Mo01 \$/MMBtu Singapore Close (Mirrored)	DTOSC01	DTOSC31	Forwards		TTF	5 MW		USD	MMBtu
Dutch TTF Mo02 \$/MMBtu Singapore Close (Mirrored)	DTOSC02	DTOSC32	Forwards		TTF	5 MW		USD	MMBtu
LNG DES JKM Spot vs Dutch TTF Mo01 \$/MMBtu	LNTFJ00	LNTFJ03	Differential					USD	MMBtu
LNG JKM Spore 16:30 vs NWE Ldn 16:30	ALNGA00	ALNGA03	Differential					USD	MMBtu
LNG JKM Spore 16:30 vs Med Ldn 16:30	ALNGB00	ALNGB03	Differential					USD	MMBtu
LNG FOB Mid East 25-45 Days	AARXQ00	AARXQ03	Netback	FOB	Middle East	135,000	175,000	USD	MMBtu
LNG DES Middle East Marker MEM Spot Cargo Mo01	LMEMA00	LMEMA03	Spot	DES	Middle East	135,000	175,000	USD	MMBtu
LNG DES Middle East Marker MEM 1 Half-Month	LMEMB00	LMEMB03	Spot	DES	Middle East	135,000	175,000	USD	MMBtu
LNG DES Middle East Marker MEM 2 Half-Month	LMEMC00	LMEMC03	Spot	DES	Middle East	135,000	175,000	USD	MMBtu
LNG DES Middle East Marker MEM 3 Half-Month	LMEMD00	LMEMD03	Spot	DES	Middle East	135,000	175,000	USD	MMBtu
LNG DES Middle East Marker MEM 4 Half-Month	LMEME00	LMEME03	Spot	DES	Middle East	135,000	175,000	USD	MMBtu
LNG DES Middle East Marker MEM vs Henry Hub 16:30 London Mo01	LMEMG00	LMEMG03	Spot	DES	Middle East			USD	MMBtu
LNG DES Middle East Marker MEM vs JKM 16:30 Singapore Mo01	LMEMH00	LMEMH03	Spot	DES	Middle East			USD	MMBtu
LNG DES Middle East Marker MEM vs NBP 16:30 London Mo01	LMEMJ00	LMEMJ03	Spot	DES	Middle East			USD	MMBtu
LNG DES Middle East Marker MEM vs DES Northwest Europe	LMEMK00	LMEMK03	Spot	DES	Middle East			USD	MMBtu
LNG DES Middle East Marker MEM vs DES Mediterranean	LMEML00	LMEML03	Spot	DES	Middle East			USD	MMBtu
LNG FOB Australia NetBack	AARXR00	AARXR03	Netback	FOB	Australia	135,000	175,000	USD	MMBtu
LNG FOB Singapore	AARXU00	AARXU03	Netback	FOB	Singapore	135,000	175,000	USD	MMBtu
LNG DES West India Marker	AARXS00	AARXS03	Spot	DES	West India	135,000	175,000	USD	MMBtu

Pacific Basin Spot LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min. size	Max. size	Currency	UOM
LNG DES West India Marker 1 Half-Month	LMEAA00	LMEAA03	Spot	DES	West India	135,000	175,000	USD	MMBtu
LNG DES West India Marker 2 Half-Month	LMEAB00	LMEAB03	Spot	DES	West India	135,000	175,000	USD	MMBtu
LNG DES West India Marker 3 Half-Month	LMEAC00	LMEAC03	Spot	DES	West India	135,000	175,000	USD	MMBtu
LNG DES West India Marker 4 Half-Month	LMEAD00	LMEAD03	Spot	DES	West India	135,000	175,000	USD	MMBtu
LNG DES West India Marker 5 Half-Month	LMEAE00	LMEAE03	Spot	DES	West India	135,000	175,000	USD	MMBtu
LNG DES JKM vs Southeast Asia Marker (SEAM)	LNJSB00		Differential					USD	MMBtu
LNG DES Southeast Asia Marker (SEAM)	LNJSA00	LNJSC03	Spot	DES	Southeast Asia	135,000	175,000	USD	MMBtu
LNG DES Southeast Asia Marker 1 Half-month	LNJSA10		Spot	DES	Southeast Asia	135,000	175,000	USD	MMBtu
LNG DES Southeast Asia Marker 2 Half-month	LNJSA20		Spot	DES	Southeast Asia	135,000	175,000	USD	MMBtu
LNG DES Southeast Asia Marker 3 Half-month	LNJSA30		Spot	DES	Southeast Asia	135,000	175,000	USD	MMBtu
LNG DES Southeast Asia Marker 4 Half-month	LNJSA40		Spot	DES	Southeast Asia	135,000	175,000	USD	MMBtu
LNG DES Southeast Asia Marker Cumulative Mavg	LNJSC00		Spot	DES	Southeast Asia	135,000	175,000	USD	MMBtu
LNG Japan/Korea Spot Crg DES Jpy/MMBtu	AAOVR00	AAOVR03	Spot	DES	Japan/Korea	135,000	175,000	JPY	MMBtu
LNG Japan/Korea DES Spot Crg CNY/mt	LJCMS00	LJCMS03	Spot	DES	Japan/Korea	135,000	175,000	CNY	MT
LNG Japan/Korea DES Spot Crg CNY/MMBtu	LJWS00	LJWS03	Spot	DES	Japan/Korea	135,000	175,000	CNY	MMBtu
JKM Monthly Average USD*	AAOVS03		Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
JKM Monthly Average JPY*	AAOVT03		Spot	DES	Japan/Korea	135,000	175,000	JPY	MMBtu
DES West India Marker Monthly Average*	AAWIC03		Spot	DES	West India	135,000	175,000	USD	MMBtu
JKM Cumulative Moving Average USD*	AAOVS00		Spot	DES	Japan/Korea	135,000	175,000	USD	MMBtu
JKM Cumulative Moving Average JPY*	AAOVT00		Spot	DES	Japan/Korea	135,000	175,000	JPY	MMBtu
JKM Cumulative Moving Average CNY/mt*	LJCM00	LJCM03	Spot	DES	Japan/Korea	135,000	175,000	CNY	MT
JKM Cumulative Moving Average CNY/MMBtu*	LJCS00	LJCS03	Spot	DES	Japan/Korea	135,000	175,000	CNY	MMBtu
DES West India Marker Cumulative Moving Average USD*	AALIC00		Spot	DES	West India	135,000	175,000	USD	MMBtu

*Average of assessments between 16th of M-2 and 15th of M-1 for the delivery month (M)

Pacific Basin Assessments

Pacific Basin assessments, derivatives and netbacks are published each business day and reflect market values prevailing at the close of Asian markets, at 4:30 pm Singapore time. Prices are published in the following Platts services: Natural Gas Alert (PGN), LNG Alert (LNG), Platts LNG Daily, Platts Market Data, Platts LNG Navigator and Platts Dimensions Pro.

Cross-month delivery cargoes: Platts considers the standard delivery period for DES cargoes to fall within the same calendar month for bids and offers published during the Asia LNG MOC

process. Bids for cross-month delivery periods may be subject to normalization when considered in the final assessment price.

Consideration of midpoints in delivery period: For delivery periods of two days and four days long, the midpoint considered on the assessment curve would be based on the daily physical structure that determines the buyer's nomination. For example, for a delivery period of March 3-6, the midpoint considered on a curve reflecting a daily contango structure would be March 5.

Similarly, for a delivery period of March 3-6, the midpoint considered on a curve reflecting a daily backwardation structure

would be March 4.

For a delivery period of March 7-8, the midpoint considered on a curve reflecting a daily contango structure would be March 8. Similarly, for a delivery period of March 7-8, the midpoint considered on a curve reflecting a daily backwardation structure would be March 7.

Japan/Korea Marker (Platts JKM™)

Platts launched on February 2, 2009, daily spot Asian LNG assessments under the benchmark name Platts Japan/Korea

Marker (Platts JKM™). Platts also publishes a single value daily assessment of JKM in JPY/MMBtu, CNY/MMBtu and CNY/mt, calculated using daily currency exchange rates and published conversion factors.

Basis and Location: Cargoes delivered ex-ship (DES) to ports in Japan and South Korea that can receive a minimum cargo size of 135,000 cu m.

Prices of LNG spot cargoes delivered into ports in Taiwan or China with the same minimum cargo size may be normalized to basis Japan/Korea. Platts publishes a single value assessment for JKM. The assessment is based on confirmed spot transactions, firm bids and offers, indications of value, expressions of interest, or in the absence of liquidity, where a spot transaction would have been concluded. Due to changes in buying practices in the North Asian LNG cargo markets, Russia-origin LNG is not considered merchantable on the same basis as other origins, and consequently is not reflected in JKM.

Timing: Cargo delivery in the third, fourth, fifth and sixth half-month cycles forward from the date of publication.

Platts considers the following trading terms to be typical for the publication of bids, offers and other transactional data for spot LNG cargoes reflected in its benchmark JKM LNG price assessments.

These standards apply to bids, offers and trades published by Platts in the MOC price assessment process.

Standard Terms: Unless otherwise stated by a counterparty at the time of providing data for publication, the bids and offers provided for publication in the MOC should reflect these following standards, which Platts understands to be broadly typical in the spot market. Platts may publish bids, offers and trades for LNG cargoes that carry different terms and conditions, but may normalize these when considered in final, published assessments. Participants in the MOC process should clearly state in submitted bids or offers terms that differ from these standards.

Delivery Window: The delivery period reflected by bids and offers should be three days long, with the buyer to narrow to a one-day delivery window 30 days before the first day of the initial delivery window. The maximum delivery period Platts considers for publication in bids, offers and trades in the JKM MOC assessment process is no greater than five days long.

Discharge Location: Bids and offers should typically reflect delivery into Japan, South Korea, Taiwan and China, with buyer's option to nominate discharge country and port. Bids must state a specific base discharge port. The location chosen sets the conditions for any potential counterparty considering trading. For transactions concluded and reported through the MOC process, buyers must nominate delivery country, and a specific port within that country, at least 30 days before the first day of the initial window. Buyers retain the option to substitute delivery port within the same country up to 15 days before the first day of the final delivery window, subject to ship shore compatibility study (SSCS). Platts continues to publish bids, offers and trades with buyer's option to substitute a delivery port within the same country up to 15 days before the initial delivery window, and these are subject to normalization. Platts may also consider for publication bids and offers with 20 days as the nomination deadline for this term.

Loading location: Platts solely publishes bids, offers and trades where sellers have the option to nominate the loading port and may substitute loading port up to 30 days prior to the initial or final delivery window subject to the Gross Heating Value (GHV) quality range reported in the trade. Offers for cargoes for delivery at or less than 45 days from the date of assessment must explicitly state a base loading port.

Quality: Market participants should clearly state quality specifications in bids and offers submitted for publication. Platts JKM assessments reflect cargoes with a GHV of 1030-1130 Btu/scf, maximum total sulfur content of 5mg/Nm³ and maximum ethane content of 10%/mol. Unless explicitly stated, these will be the assumed specifications for bids, offers and trades reported during the MOC process. Bids, offers and trades that differ from the standard specification may be published subject to editorial

review. Platts may normalize bids, offers and trades for quality specifications with different GHV ranges, as well as for different total sulfur or ethane content limits.

Quantity: The standard cargo quantity reflected in JKM is 3.4 TBtu. Platts considers for publication bids, offers and trades for other cargo sizes, but may normalize these for assessment purposes to the standard value of 3.4 TBtu. Offers with cargo volumes submitted in a range during the APAC LNG MOC process are subject to normalization when considered in the final assessment price. The maximum volume range stated in these offers should be no greater than 0.3 TBtu. An example of an offer with a 0.3 TBtu quantity range would be 3.2 to 3.5 TBtu, with a +/-5% operational tolerance, or optol. For offers or bids submitted in a volume range, the specific volume should be declared by the seller 30 days prior to delivery. Platts considers the standard optol to be +/-5% at the seller's option, and only considers bids where the optol is +/-5% at the seller's option.

LNG Vessel: Platts JKM reflects a vessel size range of 135,000-175,000 m³. Sellers must nominate an LNG ship either 45 days prior to the first day of the initial delivery window or state the base vessel in the offer for more prompt delivery windows. Sellers may substitute delivery vessel up to 30 days prior to the initial or final delivery window subject to SSCS. For cargoes for delivery at or less than 30 days from the date of assessment, sellers should state the LNG vessel explicitly. JKM reflects transactions where the performing vessels are not Russian vessels, which includes vessels that are Russian flagged, registered, owned, controlled, chartered or operated, though the use of Russian vessels may be agreed by mutual consent.

For a bid submitted for publication in the MOC process, compatibility of the base delivery vessel is required. Similarly, for an offer submitted for publication during the MOC process, compatibility of the base discharge port is required should the base vessel be named.

All delivery vessels are subject to SSCS, in line with standard market practices. Platts does not publish bids, offers and trades

requiring delivery vessels to be already compatible or already SSCS compatible with discharge ports. Platts expects parties to be reasonable when exceptional circumstances require sellers to substitute vessels or buyers to substitute terminals beyond typical standards stated in Platts MOC guidelines. Companies must promptly communicate to their counterparties when such a substitution is required. Buyers or sellers should not unreasonably withhold substitutions or hamper the established delivery process.

For a cargo delivered against a trade reported in the MOC, a seller must ensure that an ETA notice of the nominated LNG ship to the discharge port is provided to the buyer upon the ship's departure from the loading port, or as soon as reasonably possible. If such a departure occurs prior to the nomination of the LNG ship, the seller must ensure the initial ETA notice is given as soon as reasonably possible. The seller must also notify the buyer of any material changes to the ETA as soon as the seller is aware of these changes.

In the event that a physical cargo offer is repeated after a trade, the seller must inform Platts editors of a different base vessel to the one published for the initial reported trade. The new base vessel stated in the reoffer should be commensurate with the base vessel in the initially reported trade. Platts will not publish reoffers if the new base vessel information has not been provided.

Outright and floating prices: Platts considers a variety of inputs, including outright price bids and offers and floating price bids and offers in JKM. Participants in the Platts MOC price assessment process may submit bids and offers for publication that price as a differential to an underlying benchmark. All floating price bids and offers should clearly state the pricing period.

Platts establishes the hedgeable, outright value of floating and spread price indications by applying them to the observable, prevailing value of underlying relevant derivatives instruments. The objective is to assess the prevailing tradable outright price of the commodity at the market close.

In the event of an observed conflict between outright values and floating price information, outright values prevail in Platts final published assessments. For example, an outright price bid or offer (e.g. \$11.50/MMBtu) may invalidate a floating price basis bid or offer (e.g. JKM plus \$1.00/MMBtu) during the assessment process if the prices demonstrably coexist in conflict at any moment in time.

For physical floating price bids, offers and trades, Platts prioritizes these based on the relative transparency of the bids, offers and trades reported to Platts on these derivatives instruments.

Should derivative bids, offers and trades be reported transparently through the MOC process for an instrument, Platts establishes a value for the derivative instrument that would be given priority in the physical MOC assessment process when compared with values resulting from derivative bid, offer and trade information that lacks equivalent transparency, for example anonymous information, or bids or offers that do not demonstrate value incrementally.

When determining the flat price equivalent of a floating price trade Platts considers the value of the derivative at the time of trade. For a bid or an offer left standing up until the market close, Platts would use the derivative value at the close of the MOC process to convert the floating price to a flat price equivalent.

Standard nomination deadlines: Platts considers for publication only bids and offers that reflect its existing editorial guidelines on nomination deadlines for the JKM assessment in the LNG MOC process. Platts continues to publish bids and offers with varying delivery port nomination deadlines within the same country, as well as varying volume nomination deadlines, and these are subject to normalization. Furthermore, Platts considers bids, offers and trades with nomination of a one-day final delivery window, final delivery country -- and a specific disport within that country, final load port, cargo quantity from a quantity range and final LNG vessel 30 days prior to the initial delivery window as the standard.

Platts continues to publish bids, offers and trades with nomination of final delivery country -- and a specific disport within that country, final load port, cargo quantity from a quantity range and final LNG vessel 30 days prior to the final delivery window, but may normalize them to the above standards in its price assessment process.

Cash differentials: Platts publishes spot cash differentials for the daily JKM assessment, which reflect the spread between the JKM assessment against balance-month next-day, pricing month and one month forward derivative assessments. Cash differentials, also known as premiums or discounts, represent the prevailing prices counterparties trade relative to benchmark values published.

Platts JKM Derivatives

Platts publishes daily JKM derivative assessments under the name DES Japan/Korea Marker (Platts JKM™) derivatives. These are assessed at 4:30 pm Singapore time and 4:30 pm London time. Platts JKM balance-month next-day derivative assessment is only assessed at 4:30 pm Singapore time. Platts monthly JKM derivative assessments from month four to ten are only assessed at 4:30 pm London time.

The assessments are published following editorial engagement with market participants such as producers, consumers, traders, brokers and other active derivatives market participants.

Timing: Derivative prices are assessed for JKM pricing month, balance-month next-day, one month to ten months forward from the physical JKM, the next two active quarters, the next two active seasons and the active three forward calendar years. For example, on June 1, Platts assesses the physical JKM for July delivery, and assesses JKM derivatives for balance-month next-day July, full-month July, August, September and October. The derivatives assessments roll over on the 16th of each calendar month unless that day is not a business day, in which case the assessment rolls over on the following business day. For example, if June 16

is a business day, the JKM derivatives assessments roll over to August, September, October and November. For the balance-month next-day derivative, this assessment is published from the first publication day of the new pricing month and ends two business days before the end of the pricing month. For example, if July 13 is a business day, the JKM balance-month next-day August assessment is published from June 16 to July 13.

Platts assesses two quarters, with each quarterly assessment rolling as pricing begins on the first month of each new quarter. For example, on February 15, 2023, with the front month derivative of March, Platts will assess Q2 2023 and Q3 2023. On February 16, 2023 when the front-month derivative rolls to April, Platts will assess Q3 2023 and Q4 2023.

Seasons are defined as follows: Summer represents April to September, and Winter represents October to March. The seasonal assessment rolls over on the first pricing day when JKM's pricing month is either April or October. For example, on February 16, 2023, Platts will assess Winter 2023 and Summer 2024 prices. On August 16, 2023, Platts will assess Summer 2024 and Winter 2024 prices.

The Calendar Year assessment rolls over on the first business day of the year. For example, in H2 December 2023, Platts assesses JKM forward curve periods: February, March, April, May, Q2 2024, Q3 2024, Summer 2024, Winter 2024, Cal 2024, Cal 2025 and Cal 2026. In H1 January 2024, the forward curve periods are: February, March, April, May, Q2 2024, Q3 2024, Summer 2024, Winter 2024, Cal 2025, Cal 2026 and Cal 2027.

Settlement: Platts JKM derivatives are financially settled against the average of the physical spot JKM assessments. For example, the August JKM derivative is settled against the average of the daily assessments for August physical JKM, published between June 16 and July 15.

Platts will publish bids, offers and expressions of interest to trade from approved participants in the JKM Derivatives MOC process in

line with the following editorial standards and guidelines:

Volume: Platts considers for publication JKM derivatives bids, offers and trades at a minimum size of 250,000 MMBtu (25 lots), and multiples thereof.

Credit and trading terms: Transactions for JKM derivatives reported in the MOC should reflect counterparties' standard credit and trading terms.

Carbon Accounted LNG

Platts publishes spot assessments reflecting the fair value of carbon accounted LNG (CAL) from Australia into the Japan/Korea/Taiwan/China (JKTC) region on well-to-tank (WTT), well-to-wire (WTW) and well-to-flange (DES) basis. These assessments use the Platts CNC or CRC carbon price assessments as the basis of the cost of carbon credits purchased and retired to offset the carbon emissions from an LNG cargo. Platts also publishes an assessment reflecting the cost to offset the combustion leg of a CAL trade in North Asia.

CAL WTT JKTC differential assessment: This assessment reflects greenhouse gas emissions offset on a WTT basis and takes into consideration emissions associated with production, liquefaction, freight (including ballast leg) and regasification. Platts uses a monthly modeled carbon intensity (CI) calculation provided by S&P Global Commodity Insights Analytics as the basis of the carbon dioxide equivalent (CO₂e) emissions stemming from production and liquefaction at every LNG production site in Australia and weights these emission levels by their 2021 LNG production volume to determine the upstream segment of emissions. Platts uses an estimate of CO₂e emissions stemming from a round-trip (laden and ballast legs) of a TFDE LNG carrier on the Australia-JKTC route as well as regasification in JKTC terminals to arrive at the total WTT emissions value.

CAL WTW JKTC differential assessment: This assessment reflects the cost to offset CO₂e emissions for the full life cycle of an LNG

cargo delivered to JKTC from Australia. The terms well-to-wheel or well-to-wire are also used to describe this type of trade.

CAL DES JKTC differential assessment: This well-to-flange DES assessment reflects the cost to offset CO₂e emissions of an LNG shipment from Australia delivered ex-ship to JKTC at the flanges of the discharge port.

CAL Combustion JKTC assessment: This assessment reflects the cost to offset the combustion leg of a CAL trade in North Asia. This will be an estimate of the cost to offset CO₂e emissions associated with internal pipeline transport and combustion of re-gasified LNG in the JKTC region.

CAL WTW Australia-JKTC (Removals Credits) assessment: This assessment reflects the cost to offset CO₂e emissions for the full life cycle of an LNG cargo delivered to JKTC from Australia based on removals credits.

Frequency: These daily assessments follow a Singapore publishing schedule. As Platts carbon price assessments form part of the calculations, but runs on the UK publishing schedule, Platts CAL assessments are published after the carbon price assessments market closes. On days where there is a UK public holiday, but not a public holiday in Singapore, the CAL assessments use the last available carbon price assessments prices in their calculations.

Basis, Location and Quantity: Platts CAL assessments reflect LNG produced and liquefied in Australia and shipped in a TFDE carrier to JKTC, based on the standard cargo volume of 3.4 TBtu reflected in the Platts JKM assessment.

Unit: CAL assessments are published in \$/MMBtu.

For more information on Platts carbon price assessments, which are spot assessments reflecting the tradable price of voluntary carbon credits, please consult the following methodology document: <https://www.spglobal.com/commodityinsights/en/our-methodology/methodology-specifications/energy-transition/>

carbon-credits

Platts West India Marker (WIM)

Platts publishes daily WIM LNG assessments for a total of five half-month periods. Platts assesses cargoes for delivery in the second, third, fourth, fifth and sixth half-month cycles forward from the date of publication. The WIM monthly assessment is based on the average of the two DES West India Marker half-months that match the JKM delivery month period.

The assessment is published following editorial engagement with producers, consumers, traders, brokers, shippers and other active spot market participants.

Basis and Location: Cargoes delivered ex-ship (DES) at ports on the west coast of India that can receive a minimum cargo size of 135,000 cu m.

Assessment: Platts publishes a single value indicating the price at which a cargo could be traded at the close of the MOC process. This assessed value is based on confirmed spot transactions, firm bids and offers, indications of value and expressions of interest, or in the absence of liquidity, where a spot transaction would have been concluded.

Timing: Cargo delivery for Platts WIM monthly assessment matches the month of Platts JKM.

Standard Terms: Unless otherwise stated by a counterparty at the time of providing data for publication, the bids and offers provided for publication in the MOC should reflect these following standards, which Platts understands to be broadly typical in the spot market. Platts may publish bids, offers and trades for LNG cargoes that carry different terms and conditions, but may normalize these when considered in final, published assessments. Participants in the MOC process should clearly state in submitted bids or offers terms that differ from these standards.

Delivery Window: The standard initial delivery period reflected by bids and offers is three-to-five days long, with the buyer to narrow to a one- or two-day final delivery window 30 days before the first day of the traded initial delivery window.

Discharge Location: Bids and offers typically reflect delivery into ports in the west coast of India, with buyer's option to nominate the discharge port. Bids will need to be expressed with a specific discharge basis (or base) port. The location chosen sets the conditions for any potential counterparty considering trading. For transactions concluded and reported through the MOC process, buyers should nominate delivery port at least 30 days before the first day of the traded delivery window, or at the time of trade confirmation for more prompt delivery windows.

Buyers will retain the option to substitute delivery location to a port on the west coast of India up to 15 days before the first day of the traded delivery window, subject to SSCS. Substitution of delivery location to ports on the east coast of India, Dubai or Kuwait may be subject to normalization.

Loading Location: Platts will reflect bids, offers and trades where sellers have the option to nominate the loading port up to 30 days prior to the first day of the traded delivery window and may be substituted up to 15 days prior to the first day of the traded delivery window subject to the GHV quality range reported in the trade. For cargoes for delivery at or less than 30 days from the date of assessment, sellers must state the load port explicitly.

Quality: Market participants should clearly state GHV specifications in bids and offers submitted for publication. Platts WIM assessments reflect cargoes with a GHV of 1000-1150 Btu/Scf. Platts may normalize for quality specifications with different ranges.

Quantity: WIM reflects a cargo quantity of 3.2 TBtu. This volume will be subject to +/-5% optol, at the seller's option. For cargoes offered or bid for in a volume range (e.g. 3.1-3.4 TBtu +/-5%), the specific volume (e.g. 3.3 TBtu +/-5%) should be declared by the

seller 30 days prior to delivery, and this declaration deadline should be stated in the offer or bid.

LNG Vessel: Platts standards reflect a vessel size range of 135,000-175,000 cu m. Sellers should nominate an LNG ship either 30 days prior to the first day of the traded delivery window, or at the time of trade confirmation for more prompt delivery windows. For cargoes for delivery at or less than 30 days from the date of assessment, sellers should state the LNG vessel explicitly. Sellers may substitute delivery vessel up to 15 days prior to the first day of the traded delivery window, subject to SSCS.

For a bid submitted for publication in the MOC process, compatibility of the base delivery vessel is required. Similarly, for an offer submitted for publication during the MOC process, compatibility of the base discharge port is required should the base vessel be named.

All delivery vessels are subject to SSCS, in line with standard market practices. Platts does not publish bids, offers and trades requiring delivery vessels to be already compatible or already SSCS compatible with discharge ports.

Platts expects counterparties to be reasonable when exceptional circumstances require sellers to substitute vessels or buyers to substitute terminals beyond typical standards stated in Platts MOC guidelines. Companies must promptly communicate to their counterparties when such a substitution is required. And buyers or sellers should not unreasonably withhold substitutions or hamper the established delivery process.

In the event that a physical cargo offer is repeated after a trade, the seller must inform Platts editors of a different base vessel to the one published for the initial reported trade. The new base vessel stated in the reoffer should be commensurate with the base vessel in the initially reported trade. Platts will not publish reoffers if the new base vessel information has not been provided.

Platts WIM Derivatives

Platts publishes daily WIM derivative assessments. These are assessed at 4:30 pm Singapore time.

The assessments are published following editorial engagement with market participants such as producers, consumers, traders, brokers and other active spot market participants.

Timing: Derivative prices are assessed for WIM pricing month and three forward months from the pricing month, next two active forward quarters, next two active seasons and three forward calendar years. For example, on May 3, Platts assesses the physical WIM for June delivery, and assesses WIM derivatives for June, July, August and September. These assessments roll over on the 16th of each calendar month unless that day is not a business day, in which case the assessments roll over on the following business day. For example, on May 16, the WIM derivative assessments roll over to July, August, September and October.

Quarterly assessments reflect the two quarters beyond the active forward quarter, or forward quarter +1 and forward quarter +2. For example, if the physical WIM pricing month is for June delivery, then the quarterly derivative assessments will be the third and fourth quarter of the calendar year. Each quarterly assessment rolls over as pricing begins on the first month of each new quarter.

Platts assesses two quarters, with each quarterly assessment rolling as pricing begins on the first month of each new quarter. For example, on February 15, 2023, with the front month derivative of March, Platts will assess Q2 2023 and Q3 2023. On February 16, 2023 when the front-month derivative rolls to April, Platts will assess Q3 2023 and Q4 2023.

Seasonal assessments reflect the two seasons beyond the active forward season, or forward-season +1 and forward-season +2, for summer or winter deliveries. Seasons are defined as follows: Summer represents April to September, and Winter represents October to March. The seasonal assessments roll over on the first pricing day when the WIM pricing month is either April or October.

The seasonal assessment rolls over on the first pricing day when JKM's pricing month is either April or October. For example, on February 16, 2023, Platts will assess Winter 2023 and Summer 2024 prices. On August 16, 2023, Platts will assess Summer 2024 and Winter 2024 prices.

The Calendar Year assessment rolls over on the first business day of the year. For example, in H2 December 2023, Platts assesses WIM forward curve periods: February, March, April, May, Q2 2024, Q3 2024, Summer 2024, Winter 2024, Cal 2024, Cal 2025 and Cal 2026. In H1 January 2024, the forward curve periods are: February, March, April, May, Q2 2024, Q3 2024, Summer 2024, Winter 2024, Cal 2025, Cal 2026 and Cal 2027. Settlement: Platts WIM LNG derivative assessments are financially settled against the average of the physical spot Platts WIM assessments. For example, the August WIM derivative will be settled against the average of the daily assessments for August physical WIM published between June 16 and July 15.

Volume: Platts considers for publication WIM derivatives bids, offers and trades at a minimum size of 250,000 MMBtu (25 lots), and multiples thereof.

Credit and trading terms: Transactions for WIM derivatives reported in the MOC should reflect counterparties' standard credit and trading terms.

Middle East Marker (MEM)

Platts publishes daily DES Middle East LNG assessments under the name Middle East Marker (MEM). The assessment is published following editorial engagement with market participants such as producers, consumers, traders, brokers, shippers and other active spot market participants.

Basis and Location: Cargoes delivered ex-ship at ports in the Middle East capable of receiving a minimum cargo size of 135,000 cubic meters.

The basis ports are Mina Al Ahmadi, Kuwait; Jebel Ali and Ruwais,

UAE. All other locations are normalized using an assessed deviation cost.

Assessment: Platts publishes a single value indicating the price at which a cargo could be traded at the close of the APAC MOC process. This assessed value is based on confirmed spot transactions, firm bids and offers, indications of value and expressions of interest, or in the absence of liquidity, where a spot transaction would have been concluded. It also takes into account netbacks from prevailing consumer markets.

Timing: Cargo delivery in the month matching Platts JKM.

Platts Southeast Asia Marker (SEAM)

Platts publishes the daily Southeast Asia Marker (SEAM) LNG assessments as a differential to Platts JKM, as well as on an outright basis for a total of four half-month periods.

Basis and Location: Cargoes delivered ex-ship (DES) to ports in Thailand are considered as the basis of the assessment. Prices of LNG spot cargoes delivered into ports in Singapore, the Philippines or Vietnam may be normalized. Bids and offers provided for publication in the Market on Close process typically reflect delivery into ports in Thailand, with the buyer's option to nominate a discharge port.

Bids must be expressed with a specific base discharge port. The location chosen sets the conditions for any potential counterparty considering trading. For transactions concluded and reported through the MOC process, buyers should nominate a base discharge port at least 30 days before the first day of the traded delivery window, or at the time of trade confirmation for a prompter delivery window.

Buyers retain the option to substitute discharge port within Thailand up to 15 days before the first day of the traded delivery window, subject to ship shore compatibility study (SSCS).

Timing: Platts assesses cargoes for delivery in the third, fourth,

fifth and sixth half-month cycles forward from the date of publication. The SEAM monthly assessment is based on the average of the two DES Southeast Asia LNG half months that match the JKM delivery month period.

Delivery Window: The delivery period reflected by bids and offers is typically three days long, with the buyer's option to narrow to a one-day delivery window by 30 days before the first day of the traded delivery window.

Loading Location: Platts reflects bids, offers and trades where sellers have the option to nominate the base loading port and may substitute the loading port up to 30 days prior to the first day of the traded delivery window subject to the Gross Heating Value (GHV) quality range reported in the trade. Offers of cargoes for delivery at or less than 30 days from the date of assessment must state a final load port explicitly. Offers of cargoes for delivery at or less than 45 days from the date of assessment must state a base loading port explicitly.

Quality: Market participants should clearly state GHV specifications in bids and offers submitted for publication. Platts DES Southeast Asia assessments reflect cargoes with a GHV of 1,000-1,150 Btu/Scf. Platts may normalize information with other ranges for quality.

Quantity: DES Southeast Asia assessments reflect a quantity of 3.4 TBtu. This volume is subject to plus/minus 5% operational tolerance, at the seller's option.

For cargoes offered or bid for in a volume range (e.g. 3.3-3.5 TBtu plus/minus 5%), the specific volume (e.g. 3.4 TBtu plus/minus 5%) must be declared by the seller 30 days prior to delivery.

LNG Vessel: Platts standards reflect an LNG vessel size of above 135,000 cubic meters. Sellers nominate an LNG ship either 30 days prior to the first day of the traded delivery window, or at the time of trade confirmation for a prompter delivery window.

For offers of cargoes for delivery at or less than 30 days from the

date of assessment, sellers should state the LNG vessel explicitly. Sellers may substitute delivery vessels up to 30 days prior to the first day of the traded delivery window, subject to SSCS.

For a bid submitted for publication in the MOC process, compatibility of the base delivery vessel is required. Similarly, for an offer submitted for publication during the MOC process, compatibility of the base discharge port is required should the base vessel be named.

All delivery vessels are subject to SSCS, in line with standard market practices. Platts does not publish bids, offers and trades requiring delivery vessels to be already compatible or already SSCS compatible with discharge ports.

Platts expects counterparties to be reasonable when exceptional circumstances require sellers to substitute vessels or buyers to substitute terminals beyond typical standards stated in Platts MOC guidelines. Companies must promptly communicate to their counterparties when such a substitution is required. And buyers or sellers should not unreasonably withhold substitutions or hamper the established delivery process.

In the event that a physical cargo offer is repeated after a trade, the seller must inform Platts editors of a different base vessel to the one published for the initial reported trade. The new base vessel stated in the reoffer should be commensurate with the base vessel in the initially reported trade. Platts will not publish reoffers if the new base vessel information has not been provided.

FOB Middle East Netback

Platts publishes daily spot assessments of LNG under the name FOB Middle East (FOB ME). This assessment is a netback calculation from Platts WIM.

Timing: Assessment of cargoes loading 25-45 days forward from the date of publication. For instance, on March 1, the assessment reflects cargoes for loading between March 26 and April 15.

Basis and Location: Cargoes loaded FOB at ports in Qalhat in Oman, Das Island in Abu Dhabi and Ras Laffan in Qatar.

Assessment: Platts publishes a single netback value indicating the implied price of a cargo at the close of Asian markets using the cost of freight, as well as the forward inter-month structure of WIM. For FOB Middle East, a freight rate covering a three-day voyage is subtracted from WIM, as well as the forward structure across the third half-month and fifth half-month periods of the WIM assessment.

FOB Australia Netback

Platts publishes a daily spot netback assessment for LNG loading in Australia which subtracts the cost of freight from JKM.

Timing: This netback is assessed using the JKM assessment minus a freight period of eight days, and therefore represents cargoes loading eight days prior to the JKM delivery period.

Location: Loading at Dampier, Australia.

Assessment: Platts publishes a single value indicating the implied price of a cargo at Asian market close using the freight route cost.

FOB Singapore Netback

Platts publishes a daily spot netback assessment for LNG loading in Singapore which subtracts the cost of freight from JKM.

Timing: This netback is assessed using the JKM assessment minus a freight period of seven days, and therefore represents cargoes loading seven days prior to the JKM delivery period.

Location: Loading in Singapore.

Assessment: Platts publishes a single value indicating the implied price of a cargo at Asian market close using the freight route cost.

LNG Derivatives Assessments

Assessment	Symbol	Mavg	Contract Type	Location	Min size	Max size	Currency	UOM
Singapore Close								
LNG Japan/Korea derivatives Balance-Month Next-Day	LJKB00		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Pricing Month	LJKB00		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Mo01	LJKB01	LJKB031	Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Mo02	LJKB02	LJKB032	Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Mo03	LJKB03	LJKB033	Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Q1	LJKBQ01		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Q2	LJKBQ02		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives \$/MMBtu Season	LJBSN01		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives \$/MMBtu Season+1	LJBSN02		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Calendar Year	LJBYR01		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Calendar Year+1	LJBYR02		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG Japan/Korea derivatives Calendar Year+2	LJBYR03		Derivative	Japan/Korea	250,000		USD	MMBtu
LNG WIM derivatives Pricing Month	AWIMB00		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Mo01	AWIM01		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Mo02	AWIM02		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Mo03	AWIM03		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Q1	AWIMQ01		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Q2	AWIMQ02		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Season	AWISN01		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Season+1	AWISN02		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Calendar Year	AWIMY01		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Calendar Year+1	AWIMY02		Derivative	India	250,000		USD	MMBtu
LNG WIM derivatives Calendar Year+2	AWIMY03		Derivative	India	250,000		USD	MMBtu
London Close								
LNG Japan/Korea derivatives Pricing Month	JKLM000		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Mo01	JKLM001		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Mo02	JKLM002		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Mo03	JKLM003		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Q1	JKLQR01		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Q2	JKLQR02		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives \$/MMBtu Season	JKLSN01		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives \$/MMBtu Season+1	JKLSN02		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Calendar Year	JKLYR01		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Calendar Year+1	JKLYR02		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG Japan/Korea derivatives Calendar Year+2	JKLYR03		Derivative	Japan/Korea	50,000		USD	MMBtu
LNG DES NWE Financial Mo01	LNGDA01		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo02	LNGDA02		Derivative	DES NWE	10,000		USD	MMBtu

LNG Derivatives Assessments

Assessment	Symbol	Mavg	Contract Type	Location	Min size	Max size	Currency	UOM
LNG DES NWE Financial Mo03	LNGDA03		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo04	LNGDA04		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo05	LNGDA05		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo06	LNGDA06		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo07	LNGDA07		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo08	LNGDA08		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo09	LNGDA09		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo10	LNGDA10		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo11	LNGDA11		Derivative	DES NWE	10,000		USD	MMBtu
LNG DES NWE Financial Mo01 vs Dutch TTF Mo01 \$/MMBtu	LNDTA01		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo02 vs Dutch TTF Mo02 \$/MMBtu	LNDTA02		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo03 vs Dutch TTF Mo03 \$/MMBtu	LNDTA03		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo04 vs Dutch TTF Mo04 \$/MMBtu	LNDTA04		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo05 vs Dutch TTF Mo05 \$/MMBtu	LNDTA05		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo06 vs Dutch TTF Mo06 \$/MMBtu	LNDTA06		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo07 vs Dutch TTF Mo07 \$/MMBtu	LNDTA07		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo08 vs Dutch TTF Mo08 \$/MMBtu	LNDTA08		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo09 vs Dutch TTF Mo09 \$/MMBtu	LNDTA09		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo10 vs Dutch TTF Mo10 \$/MMBtu	LNDTA10		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo11 vs Dutch TTF Mo11 \$/MMBtu	LNDTA11		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo01/Mo02 Spread	LNDNF00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo02/Mo03 Spread	LNDNG00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo03/Mo04 Spread	LNDNH00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo04/Mo05 Spread	LNDNI00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo05/Mo06 Spread	LNDNJ00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo06/Mo07 Spread	LNDNK00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo07/Mo08 Spread	LNDNL00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo08/Mo09 Spread	LNDNM00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo09/Mo10 Spread	LNDNN00		Differential	DES NWE			USD	MMBtu
LNG DES NWE Financial Mo10/Mo11 Spread	LNDNO00		Differential	DES NWE			USD	MMBtu

WIM RLNG Assessments

Assessment	Symbol	Mavg	Contract Type	Location	Min size	Max size	Currency	UOM
RLNG Ahmedabad WIM INR/MMBtu	RLDIJ00		Netforward	West India			INR	MMBtu
RLNG Ahmedabad WIM \$/MMBtu	RLDDJ00		Netforward	West India			USD	MMBtu
RLNG New Delhi WIM INR/MMBtu	RLDIQ00		Netforward	West India			INR	MMBtu
RLNG New Delhi WIM \$/MMBtu	RLDDQ00		Netforward	West India			USD	MMBtu
RLNG Chhainsa WIM INR/MMBtu	RLDI000		Netforward	West India			INR	MMBtu
RLNG Chhainsa WIM \$/MMBtu	RLDD000		Netforward	West India			USD	MMBtu
RLNG Kootanad WIM INR/MMBtu	RLDIR00		Netforward	West India			INR	MMBtu
RLNG Kootanad WIM \$/MMBtu	RLDDR00		Netforward	West India			USD	MMBtu
RLNG Kota WIM INR/MMBtu	RLDIN00		Netforward	West India			INR	MMBtu
RLNG Kota WIM \$/MMBtu	RLDDN00		Netforward	West India			USD	MMBtu
RLNG Morbi WIM INR/MMBtu	RLDIK00		Netforward	West India			INR	MMBtu
RLNG Morbi WIM \$/MMBtu	RLDDK00		Netforward	West India			USD	MMBtu
RLNG Panvel WIM INR/MMBtu	RLDIL00		Netforward	West India			INR	MMBtu
RLNG Panvel WIM \$/MMBtu	RLDDL00		Netforward	West India			USD	MMBtu
RLNG Vijaipur WIM INR/MMBtu	RLDIM00		Netforward	West India			INR	MMBtu
RLNG Vijaipur WIM \$/MMBtu	RLDDM00		Netforward	West India			USD	MMBtu
RLNG Jagdishpur WIM INR/MMBtu	RLDIP00		Netforward	West India			INR	MMBtu
RLNG Jagdishpur WIM \$/MMBtu	RLDDP00		Netforward	West India			USD	MMBtu
RLNG Kakinada WIM INR/MMBtu	RLDIS00		Netforward	West India			INR	MMBtu
RLNG Kakinada WIM \$/MMBtu	RLDDS00		Netforward	West India			USD	MMBtu
RLNG West India Avg WIM INR/MMBtu	RLDIT00	RLDIT03	Netforward	West India			INR	MMBtu
RLNG West India Avg WIM \$/MMBtu	RLDDT00	RLDDT03	Netforward	West India			USD	MMBtu
RLNG Ex-terminal Dabhol WIM INR/MMBtu	RLEIC00		Netforward	West India			INR	MMBtu
RLNG Ex-terminal Dabhol WIM \$/MMBtu	RLEDC00		Netforward	West India			USD	MMBtu
RLNG Dabhol WIM INR/MMBtu	RLDIC00		Netforward	West India			USD	MMBtu
RLNG Dabhol WIM \$/MMBtu	RLDDC00		Netforward	West India			INR	MMBtu
RLNG Ex-terminal Dahej WIM INR/MMBtu	RLEIA00		Netforward	West India			USD	MMBtu
RLNG Ex-terminal Dahej WIM \$/MMBtu	RLEDA00		Netforward	West India			INR	MMBtu
RLNG Ex-terminal Hazira WIM INR/MMBtu	RLEIB00		Netforward	West India			INR	MMBtu
RLNG Ex-terminal Hazira WIM \$/MMBtu	RLEDB00		Netforward	West India			USD	MMBtu
RLNG Ex-terminal Kochi WIM INR/MMBtu	RLEID00		Netforward	West India			INR	MMBtu
RLNG Ex-terminal Kochi WIM \$/MMBtu	RLEDD00		Netforward	West India			USD	MMBtu
RLNG Ex-terminal Mundra WIM INR/MMBtu	RLEEI00		Netforward	West India			INR	MMBtu
RLNG Ex-terminal Mundra WIM \$/MMBtu	RLEDE00		Netforward	West India			USD	MMBtu
RLNG Ex-terminal West India Avg WIM INR/MMBtu	RLEIF00	RLEIF03	Netforward	West India			INR	MMBtu
RLNG Ex-terminal West India Avg WIM \$/MMBtu	RLEDF00	RLEDF03	Netforward	West India			USD	MMBtu
LNG India GST on Regasification	LINGR00		Percentage	West India				percent
LNG India GST on Transportation	LINGT00		Percentage	West India				percent

WIM RLNG Assessments

Assessment	Symbol	Mavg	Contract Type	Location	Min size	Max size	Currency	UOM
India LNG Import Duty	LINID00		Percentage	West India				percent
Transportation Tariff Dabhol WIM INR/MMBtu	TTDIC00			West India			INR	MMBtu
Transportation Tariff Ahmedabad WIM INR/MMBtu	TTDIJ00			West India			INR	MMBtu
Transportation Tariff Morbi WIM INR/MMBtu	TTDIK00			West India			INR	MMBtu
Transportation Tariff Panvel WIM INR/MMBtu	TTDIL00			West India			INR	MMBtu
Transportation Tariff Vijaipur WIM INR/MMBtu	TTDIM00			West India			INR	MMBtu
Transportation Tariff Kota WIM INR/MMBtu	TTDIN00			West India			INR	MMBtu
Transportation Tariff Chhainsa WIM INR/MMBtu	TTDIO00			West India			INR	MMBtu
Transportation Tariff Jagdishpur WIM INR/MMBtu	TTDIP00			West India			INR	MMBtu
Transportation Tariff New Delhi WIM INR/MMBtu	TTDIQ00			West India			INR	MMBtu
Transportation Tariff Koottanad WIM INR/MMBtu	TTDIR00			West India			INR	MMBtu
Transportation Tariff Kakinada WIM INR/MMBtu	TTDIS00			West India			INR	MMBtu

Platts WIM RLNG prices

Platts publishes daily prices for WIM re-gasified LNG (RLNG) in India on both an ex-terminal and delivered basis for various locations. WIM RLNG prices are published using the WIM price as the basis and additional costs and taxes incurred for regasification and transportation. Daily prices are published in both Indian Rupee/MMBtu and \$/MMBtu, using the daily USD/INR exchange rate at 4:30 pm Singapore time.

Basis and Location: Ex-terminal prices are published daily for Dahej, Hazira, Dabhol, Mundra and Kochi, as well as an average

price of these five locations. Delivered prices are published daily for Ahmedabad, Morbi, Panvel, Dabhol, Vijaipur, Kota, Chhainsa, Jagdishpur, New Delhi, Koottanad and Kakinada, as well as an average price of these 11 locations.

Calculation: The ex-terminal prices are calculated using the daily Platts WIM assessment plus the costs of prevailing import duties, re-gasification fees and GST (Goods and Services Tax) on regasification fees, and re-gasification volume loss. The delivered prices are calculated using the ex-terminal prices from the nearest terminal as per existing natural gas pipeline infrastructure, in addition to the transportation tariffs as

published by India's Petroleum and Natural Gas Regulatory Board and GST on transportation fees. Neither the ex-terminal nor the delivered prices include marketing margin and sales taxes. The calculations are periodically reviewed to ensure the inputs reflect prevailing market dynamics.

Delivery window: The pricing period for the WIM RLNG assessments matches that of WIM (AARXS00). For example, from Nov. 16, 2022 to Dec. 15, 2022, Platts publishes WIM RLNG prices for January 2023.

China trucked LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Location	Min size	Max size	Currency	UOM
LNG JKM-based China Trucked \$/MMBtu	LJNCG00	LJNCG03	Netforward	China			USD	MMBtu
LNG JKM-based China Trucked Yuan/mt	LJNCH00	LJNCH03	Netforward	China			CNY	MT
LNG JKM-based East China Trucked \$/MMBtu	LJNCB00		Netforward	East China			USD	MMBtu
LNG JKM-based East China Trucked Yuan/mt	LJNCE00		Netforward	East China			CNY	MT
LNG JKM-based North China Trucked \$/MMBtu	LJNCA00		Netforward	North China			USD	MMBtu
LNG JKM-based North China Trucked Yuan/mt	LJNCD00		Netforward	North China			CNY	MT
LNG JKM-based South China Trucked \$/MMBtu	LJNCC00		Netforward	South China			USD	MMBtu
LNG JKM-based South China Trucked Yuan/mt	LJNCF00		Netforward	South China			CNY	MT

Platts JKM-based China trucked LNG prices

Platts publishes daily prices for JKM-based China trucked LNG for various locations. Daily prices are published in both Yuan/mt and \$/MMBtu, using the daily USD/CNY exchange rate at 4:30 pm Singapore time.

Basis and Location: Ex-terminal China trucked LNG prices are

published daily for Tianjin floating storage and regasification unit in North China, Ningbo terminal in East China, and Beihai terminal in South China, as well as an average price of these three locations.

Calculation: The ex-terminal China trucked LNG prices are calculated using the daily Platts JKM assessment plus the costs of prevailing value added tax and terminal tolling fees.

The calculations are periodically reviewed to ensure the inputs reflect prevailing market dynamics.

Delivery window: The pricing period for the JKM-based China trucked LNG prices matches that of JKM (AAOVQ00). For example, from May 16, 2023 to June 15, 2023, the new assessments reflect China trucked LNG prices for July 2023.

APAC spark spread assessments

Assessment	Symbol	Mavg	Contract Type	Location	Min size	Max size	Currency	UOM
Tokyo Baseload Spark Spread Pricing Month \$/MMBtu	ATOKA00		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Pricing Month Yen/kWh	ATYOA00		Differential	Tokyo			JPY	kWh
Tokyo Baseload Spark Spread Mo01 \$/MMBtu	ATOKM01		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Mo01 Yen/kWh	ATYOM01		Differential	Tokyo			JPY	kWh
Tokyo Baseload Spark Spread Pricing Mo02 \$/MMBtu	ATOKM02		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Pricing Mo02 Yen/kWh	ATYOM02		Differential	Tokyo			JPY	kWh
Tokyo Baseload Spark Spread Pricing Mo03 \$/MMBtu	ATOKM03		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Pricing Mo03 Yen/kWh	ATYOM03		Differential	Tokyo			JPY	kWh
Tokyo Baseload Spark Spread Pricing Q1 \$/MMBtu	ATOKQ01		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Pricing Q1 Yen/kWh	ATYQQ01		Differential	Tokyo			JPY	kWh
Tokyo Baseload Spark Spread Pricing Q2 \$/MMBtu	ATOKQ02		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Pricing Q2 Yen/kWh	ATYQQ02		Differential	Tokyo			JPY	kWh
Tokyo Baseload Spark Spread Pricing Season \$/MMBtu	ATOKSSN		Differential	Tokyo			USD	MMBtu
Tokyo Baseload Spark Spread Pricing Season Yen/kWh	ATYOSSN		Differential	Tokyo			JPY	kWh

Platts Tokyo baseload spark spread assessments

Platts publishes baseload spark spread assessments for Tokyo. The spark spreads are published in \$/MMBtu and Yen/kWh.

Platts calculates the Japan Tokyo Baseload spark spread assessments as the Japanese power futures (Tokyo, Baseload) settlement prices published by EEX minus the Platts JKM LNG

derivatives price assessments for the same period, taking into account various costs and efficiency factors in the final value.

The assessment periods are for the JKM pricing month, next three months forward, the next two active quarters, and the next active season.

Assumptions: 1 MMBtu is 293.2972222 kWh. 1 tonne of LNG is

52 MMBtu.

Tokyo baseload spark spread assessments are published for gas-fired plants with efficiencies of 50%

The LNG price includes petroleum and coal tax and regasification cost.

Atlantic Basin LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min size	Max size	Currency	UOM
LNG NWE Spot DES	AASXU00	AASXU03	Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE DES 0 Half-Month	LNDA00	LNDA03	Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE Spot DES 1 Half-Month	AASXV00	AASXV03	Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE Spot DES 2 Half-Month	AASXW00	AASXW03	Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE Spot DES 3 Half-Month	AASXX00	AASXX03	Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE Spot DES Monthly average*	AASDE03		Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE Spot DES Cumulative Moving Average*	AASDF00		Spot	DES	Northwest Europe	135,000	175,000	USD	MMBtu
LNG NWE Spot DES Eur/MWh	LNNTA00	LNNTA03	Spot	DES	Northwest Europe	135,000	175,000	Eur	MWh
LNG NWE Spot DES Eur/MMBtu	LNNXA00	LNNXA03	Spot	DES	Northwest Europe	135,000	175,000	Eur	MMBtu
LNG MED Spot DES	AASXY00	AASXY03	Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG Med DES 0 Half-Month	LNMDA00	LNMDA03	Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG MED Spot DES 1 Half-Month	AASXZ00	AASXZ03	Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG MED Spot DES 2 Half-Month	AASYA00	AASYA03	Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG MED Spot DES 3 Half-Month	AASYB00	AASYB03	Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG MED Spot DES Monthly Average*	AASWC03		Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG MED Spot DES Cumulative Moving Average*	AADCU00		Spot	DES	Mediterranean	135,000	175,000	USD	MMBtu
LNG MED Spot DES Eur/MWh	LNMTA00	LNMTA03	Spot	DES	Mediterranean	135,000	175,000	Eur	MWh
LNG MED Spot DES Eur/MMBtu	LNMXA00	LNMXA03	Spot	DES	Mediterranean	135,000	175,000	Eur	MMBtu
LNG Med DES Eur/Gj	LNMTA00		Spot	DES	Mediterranean	135,000	175,000	Eur	Gj
LNG Med DES p/th	LNMTA00		Spot	DES	Mediterranean	135,000	175,000	GBP	therm
LNG DES NWE Percent NBP	AASYD00	AASYD03	Percentage					USD	percent
LNG DES NWE vs Next Month TTF \$/MMBtu	LNDMA00		Differential					USD	MMBtu
LNG DES NWE Spot vs Dutch TTF Mo01 \$/MMBtu	LNTFN00	LNTFN03	Differential					USD	MMBtu
LNG DES MED vs Next Month TTF \$/MMBtu	LMDMA00		Differential					USD	c
LNG DES MED Spot vs Dutch TTF Mo01 \$/MMBtu	LNTFS00	LNTFS03	Differential					USD	MMBtu
LNG NWE vs HH London 16:30	AASYE00	AASYE03	Differential					USD	MMBtu
LNG MED vs HH London 16:30	AASYF00	AASYF03	Differential					USD	MMBtu
LNG NWE vs UK NBP London 16:30	AASYG00	AASYG03	Differential					USD	MMBtu
LNG MED vs UK NBP London 16:30	AASYH00	AASYH03	Differential					USD	MMBtu
LNG NWE vs DB London 16:30	AASYI00	AASYI03	Differential					USD	MMBtu
LNG MED vs DB London 16:30	AASYJ00	AASYJ03	Differential					USD	MMBtu
LNG NWE vs MED London 16:30	AASYK00	AASYK03	Differential					USD	MMBtu
LNG NWE Ldn 16:30 vs JKM Spore 16:30	AASYL00	AASYL03	Differential					USD	MMBtu
LNG MED Ldn 16:30 vs JKM Spore 16:30	AASYM00	AASYM03	Differential					USD	MMBtu
LNG MED vs NWE	ALNSA00	ALNSA03	Differential					USD	MMBtu
HHub 1-Mo London 16:30 Hrs	AASYN00	AASYN03	Futures		Henry Hub			USD	MMBtu
HHub 2-Mo London 16:30 Hrs	AASYO00	AASYO03	Futures		Henry Hub			USD	MMBtu
NBP 1-Mo London 16:30 Hrs p/th	AASYP00	AASYP03	Futures		NBP			GBP	therm
NBP 2-Mo London 16:30 Hrs p/th	AASYQ00	AASYQ03	Futures		NBP			GBP	therm
NBP 1-Mo London 16:30Hrs \$/MMBtu	AASYR00	AASYR03	Futures		NBP			USD	MMBtu
NBP 2-Mo London 16:30Hrs \$/MMBtu	AASYS00	AASYS03	Futures		NBP			USD	MMBtu
Dutch TTF 1-Mo \$/MMBtu	GTFWM10	GTFWM03	Forwards		TTF	5 MW		USD	MMBtu

Atlantic Basin LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min size	Max size	Currency	UOM
Dutch TTF 2-Mo \$/MMBtu	GTFWM20	GTFWM23	Forwards		TTF	5 MW		USD	MMBtu
Dutch TTF 3-Mo \$/MMBtu	GTFWM30	GTFWM33	Forwards		TTF	5 MW		USD	MMBtu
Global LNG Average vs Dutch TTF 1-Mo Eur/MWh	GLADA00		Differential					Eur	MWh
Global LNG Average vs Dutch TTF Three-Day Average Eur/MWh	GLADT00		Differential					Eur	MWh
LNG Japan/Korea at London MOC Financial vs Dutch TTF Physical \$/MMBtu Mo01	LJKTM01	LJKTM31	Differential					USD	MMBtu
DES Brazil Netforward Mo01	LEBMH01	LEBMH31	Netforward	DES	Brazil	135,000	175,000	USD	MMBtu
DES Brazil Netforward vs ARA Fuel Oil	LAARM01	LAAR003	Differential					USD	MMBtu
DES Brazil Netforward vs DES MED LNG	LASWM01	LASW003	Differential					USD	MMBtu
DES Brazil Netforward vs Dated Brent	LADB01	LADB003	Differential					USD	MMBtu
DES Brazil Netforward vs Henry Hub	LAHHM01	LAHH003	Differential					USD	MMBtu
DES Brazil Netforward vs JKM	LAJKM01	LAJK003	Differential					USD	MMBtu
DES Brazil Netforward vs NBP	LABPM01	LABP003	Differential					USD	MMBtu
DES Brazil Netforward vs Dutch TTF Physical	LDBTM01	LDBTM31	Differential					USD	MMBtu
Brazil Inland Gas Derived from LNG Cost, Northeast	ABINA00		Netforward		Brazil			USD	MMBtu
Brazil Inland Gas Derived from LNG Cost, Southeast	ABINB00		Netforward		Brazil			USD	MMBtu
Brazil Inland Gas Derived from LNG Cost, Average	ABINC00		Netforward		Brazil			USD	MMBtu
Brazil Inland Gas Derived from LNG Cost, Northeast vs JKM	ABIND00		Differential					USD	MMBtu
Brazil Inland Gas Derived from LNG Cost, Southeast vs JKM	ABINE00		Differential					USD	MMBtu
Brazil Inland Gas Derived from LNG Cost, Average vs JKM	ABINF00		Differential					USD	MMBtu
LNG FOB GCM spot cargo Mo01	LGCSM01	LGCSM31	Spot	FOB	Gulf Coast	135,000	175,000	USD	MMBtu
LNG FOB GCM spot cargo Cumulative Moving Average	LGCCN00		Spot	FOB	Gulf Coast	135,000	175,000	USD	MMBtu
LNG FOB GCM Month of Loading Cumulative Avg**	LGCSM00	LGCSM31	Spot	FOB	Gulf Coast	135,000	175,000	USD	MMBtu
LNG FOB GCM vs. Dated Brent	LGMDB00	LGMDB03	Differential					USD	MMBtu
LNG FOB US Gulf Coast Cargo Mo01 vs Dutch TTF Mo01 \$/MMBtu	LNTFG00	LNTFG03	Differential		TTF			USD	MMBtu
LNG FOB GCM vs Henry Hub London 16:30	LGMHM01	LGMHM31	Differential					USD	MMBtu
LNG FOB GCM vs JKM Spore 16:30	LGMJM01	LGMJM31	Differential					USD	MMBtu
LNG FOB GCM vs NBP London 16:30	LGMNM01	LGMNM31	Differential					USD	MMBtu
LNG FOB Gulf Coast Marker vs DES Northwest Europe	LGEUR00	LGEUR03	Differential					USD	MMBtu
LNG FOB Gulf Coast Marker vs DES Mediterranean	LGMET00	LGMET03	Differential					USD	MMBtu
LNG FOB GCM vs USGC 3%S fuel oil	LGMFO00	LGMFO03	Differential					USD	MMBtu
LNG FOB Murmansk NetBack	AARXV00	AARXV03	Netback	FOB				USD	MMBtu
LNG US Cargo Cancellations Mthly	ACANA00								

*Average of assessments between 16th of M-2 and 15th of M-1 for the delivery month (M)

**Average of assessments reflecting the calendar month of loading

Atlantic Basin Assessments

Atlantic Basin assessments and netforwards are published each business day and reflect market values prevailing at the close of European markets, 4:30 pm London time. Unless otherwise stated, prices are published in the following Platts services: LNG Alert (LNG), Natural Gas Alert (PGN), European Power Alert (EPA), Platts LNG Daily, Platts Market Data, Platts Dimensions Pro and Platts LNG Navigator.

Platts considers the following trading terms to be typical for the publication of bids, offers and other transactional data for spot LNG cargoes reflected in its NWE and MED LNG MOC price assessment process.

Standard Terms: Unless stated otherwise by a counterparty at the time of providing data for publication, the bids and offers in the MOC should reflect these following standards, which Platts understands to be broadly typical in the spot market. Platts may publish bids, offers and trades for LNG cargoes that carry different terms and conditions, but may normalize these when considered in final, published assessments. Participants in the MOC process should clearly state in submitted bids or offers terms that differ from these standards.

Delivery Window: The delivery period reflected by bids and offers should typically be three days long, with the buyer to narrow to a one-day delivery window up to 20 days prior to the first day of the initial delivery window.

Discharge Location: Bids and offers into Northwest Europe should typically reflect delivery into Bilbao, Brunsbuttel, Dragon LNG, Dunkirk, Eemshaven, Gate LNG, Isle of Grain, Montoir, Mugaros, South Hook, Wilhelmshaven and Zeebrugge, with the buyer to nominate base delivery port at least 30 days prior to delivery. The buyer should retain the option to substitute discharge port up to 15 days prior, subject to SSCS.

Bids and offers into the Mediterranean should typically reflect delivery into all ports in the Iberian Peninsula and

Fos Cavaou, with the buyer to nominate base delivery port at least 30 days prior to delivery. The buyer should retain the option to substitute discharge port up to 15 days prior, subject to SSCS. Bids and offers into other Mediterranean destinations may be considered for publication and subject to normalization.

Offers submitted in the MOC process that contain all NWE and Mediterranean terminals as potential discharge locations would be considered for the assessment process in both DES NWE and MED assessments. Bids that contain all NWE and Mediterranean terminals would be taken into consideration for the assessment process in both DES NWE and MED assessments, but subject to normalization.

Loading Location: Platts considers typical bids, offers and trades where sellers have the option to state the loading port up to 15 days prior to the first day of the traded delivery window subject to the stated (GHV) quality range.

Quality: Market participants should clearly state GHV specifications in bids and offers submitted for publication. Platts Europe LNG assessments reflect cargoes with a GHV of 1,010-1,130 Btu/Scf. Platts may normalize for quality specifications with different ranges.

Quantity: Platts considers for publication bids and offers for typical cargo sizes. Platts reflects cargoes whose optol is +/- 3% at the seller's option. For cargoes offered or bid for in a volume range (e.g. 3.1-3.4 TBtu +/-3%), the specific volume (e.g. 3.3 TBtu +/-3%) should be declared by the seller at least 30 days ahead of delivery a specific quantity. The quantity range stated in offers published during the MOC process must be no greater than 0.3 TBtu. An example of an offer with a 0.3 TBtu quantity range would be 3.1-3.4 TBtu, with an operational tolerance of +/- 3% at the seller's option.

Platts publishes bids and offers with operational tolerances of +/- 2%, +/- 4% and +/- 5%, but may normalize where appropriate to its base standard of +/- 3%.

LNG Vessel: Platts standards reflect LNG vessel size range of 135,000-175,000 m3. Platts reflects bids and offers where the seller should nominate the LNG carrier up to 15 days prior to delivery. Platts expects parties to be reasonable when exceptional circumstances require sellers to substitute vessels or buyers to substitute terminals beyond typical standards stated in Platts MOC guidelines. Companies must promptly communicate to their counterparties when such a substitution is required. Buyers or sellers should not unreasonably withhold substitutions or hamper the established delivery process. Platts Atlantic MOC process reflects transactions where the performing vessels are not Russian vessels, which includes vessels that are Russian flagged, registered, owned, controlled, chartered or operated, though the use of Russian vessels may be agreed by mutual consent.

Nomination deadlines: Platts Atlantic LNG price assessments reflect nomination deadlines in line with Platts editorial guidelines and standard market practices. For any cargo whose delivery or loading date is prompter than Platts standard nomination deadlines, Platts considers it standard that nominations would be provided at trade confirmation.

For example, in an offer for a DES Europe cargo whose delivery window is prompter than 15 days ahead, the seller would ask for the nomination of the discharge port from the buyer at trade confirmation. The seller should provide the LNG vessel name and the named load port within the offer.

In a bid for a DES Europe cargo whose delivery window is prompter than 15 days ahead, the buyer would ask for the nomination of the vessel and the load port from the seller at trade confirmation. The buyer should also provide the final discharge port and provide the final delivery window within the bid.

The Atlantic LNG MOC process considers information for Platts DES Northwest Europe (NWE), DES Mediterranean (MED) and FOB Gulf Coast Marker (GCM) price assessments.

Platts continues to consider for publication bids and offers with varying nomination deadlines in the Atlantic LNG MOC process and would normalize them to the standard.

Gas hub day-ahead price-linked cargoes: For cargoes in the MOC which price against the day-ahead gas hub prices, to normalize the prices of such cargoes to an outright basis, Platts infers the daily day-ahead derivatives prices during the pricing period by drawing two linear strips, one between the month-ahead (i.e. M1), and the following month (i.e. M2) gas hub derivatives values, and the other between the M2 and the M3 gas hub derivatives values, joined at M2 gas hub derivatives value. The monthly gas hub derivatives values mentioned above are assumed to be the derivatives values of the midpoint of the respective months.

Mediterranean Marker (MED)

Platts publishes a daily spot Mediterranean Marker (MED) LNG assessment. The assessment is published following direct contact with market participants such as producers, consumers, traders, brokers, shippers and other active spot market participants. Due to changes in buying practices in the European LNG cargo markets, Russia-origin LNG is not considered merchantable on the same basis as other origins, and consequently is not reflected in Platts MED.

Basis and Location: Cargoes delivered ex-ship (DES) to ports in the Mediterranean, including Spain, Portugal and Southern France, which can receive a minimum cargo size of 135,000 cu m.

Quantity: Platts reflects a base volume of 3.3 TBtu +/-3% optol in its DES Mediterranean LNG assessment.

Platts publishes a single value assessment for the MED. This assessed value is based on confirmed spot transactions, firm bids and offers, indications of value and expressions of interest or, in the absence of liquidity, where a spot transaction would have been concluded.

Timing: Cargo delivery in the second, third, fourth and fifth half-month cycles forward from the date of publication. The assessment rolls on the 16th of the month, or next business day after the 16th if the 16th is a holiday, to the following whole month. For example, on June 15, MED reflects the average of H1 and H2 July; the next business day after June 15, the month rolls to reflect August deliveries, or the average of H1 and H2 August.

Northwest Europe Marker (NWE)

Platts publishes a daily spot Northwest Europe Marker (NWE) LNG assessment. The assessment is published following direct contact with market participants such as producers, consumers, traders, brokers, shippers and other active spot market participants. Due to changes in buying practices in the European LNG cargo markets, Russia-origin LNG is not considered merchantable on the same basis as other origins, and consequently is not reflected in Platts NWE.

Basis and Location: Cargoes delivered ex-ship (DES) to ports in Northwest Europe that can receive a minimum cargo size of 135,000 cu m.

Quantity: Platts reflects a base volume of 3.5 TBtu +/-3% optol in its DES Northwest Europe LNG assessment.

Platts publishes a single value assessment for NWE. This assessed value is based on confirmed spot transactions, firm bids and offers, indications of value and expressions of interest or, in the absence of liquidity, where a spot transaction would have been concluded.

Timing: Cargo delivery in the second, third, fourth and fifth half-month cycles forward from the date of publication. The assessment rolls on the 16th of the month, or next business day after the 16th if the 16th is a holiday, to the following whole month. For example, on June 15, NWE reflects the

average of H1 and H2 July; the next business day after June 15, the month rolls to reflect August deliveries, or the average of H1 and H2 August.

Platts DES NWE LNG Derivatives

Platts publishes daily DES NWE LNG derivative assessments. These are assessed at 4:30 pm London time. The assessments are published following editorial engagement with market participants such as producers, consumers, traders, brokers and other active spot market participants.

Timing: Platts publishes price assessments for 11 monthly financial derivatives, with the start of the forward curve aligning with the benchmark pricing month of the physical assessment; the next two active quarters and the next two active seasons. Platts also publishes the corresponding monthly, season and quarter JKM differential to NWE and the monthly NWE derivative's differential to the corresponding month's TTF. These LNG derivative assessments roll over on the 16th of each calendar month unless that day is not a business day, in which case the price assessments roll over on the following business day. For example, on Aug. 12, the M1 assessment reflects September and M11 reflects July of the following year. On Aug. 16, the M1 assessment reflects October and M11 reflects August of the following year.

Settlement: The Platts DES NWE LNG derivative is financially settled against the average of the physical spot Platts DES NWE LNG assessment. For example, the August derivative settles against the average of the daily assessments for August physical, published between June 16 and July 15.

Volume: Each lot is equivalent to 10,000 MMBtu.

Credit and trading terms: Transactions for LNG derivatives reported to Platts should reflect counterparts' standard credit and trading terms.

Gulf Coast Marker (GCM)

Platts publishes a daily spot Gulf Coast Marker (GCM) LNG assessment. The assessment is published following direct contact with market participants such as producers, consumers, traders, brokers, shippers and other active spot market participants.

Frequency: The GCM assessment is published each business day and reflects market values prevailing at the close of European markets, 4:30 pm London time.

Basis and Location: Cargoes loaded on FOB basis from ports across the US Gulf Coast. Basis port is Sabine Pass. All other locations are normalized to the basis port considering deviation costs.

Platts publishes a single-value assessment for the GCM. This assessed value is based on confirmed spot transactions, firm bids and offers, indications of value and expressions of interest or, in the absence of liquidity, where a spot transaction would have been concluded.

Timing: GCM reflects cargoes loading 30-60 days forward from the date of publication.

Platts considers the following trading terms to be typical for the publication of bids, offers and other transactional data for spot LNG cargoes reflected in its GCM LNG MOC price assessment process.

Standard Terms: Unless stated otherwise by a counterparty at the time of providing data for publication, the bids and offers in the MOC should reflect these following standards, which Platts understands to be broadly typical in the spot market. Platts may publish bids, offers and trades for LNG cargoes that carry different terms and conditions, but may normalize these when considered in final, published assessments. Participants in the MOC process should clearly

state in submitted bids or offers terms that differ from these standards.

Delivery Window: The loading period reflected in bids, offers and trades should typically be three to five days long, with the seller to narrow to a one-day loading window up to 30 days before the first day of the traded delivery window.

Loading Location: Bids, offers and trades should typically reflect loading in US Gulf Coast ports. Offers must state a specific base load port. The base load port chosen sets the conditions for any potential counterparty considering trading.

Sellers retain the option to substitute loading port in the US Gulf Coast up to a reasonable period before the first day of the traded loading window, subject to SSCS. Substitution of loading locations to ports outside of the US Gulf Coast may be subject to normalization, and the option would need to be stated in the bid or offer.

Quality: Market participants should clearly state GHV specifications in bids and offers submitted for publication. GCM reflects cargoes with a GHV of 1,010-1,050 Btu/Scf. Platts may normalize for quality specifications with different ranges.

Quantity: GCM reflects a cargo quantity of 3.7 TBtu. This volume is subject to +/-2% optol, at the seller's option. Platts continues to consider different cargo volumes but may normalize where appropriate back to 3.7 TBtu +/-2% optol.

LNG Vessel: Buyers should nominate an LNG ship up to 30 days prior to the first day of the traded delivery window, or at the time of trade confirmation for more prompt delivery windows. For cargoes for delivery at or less than 30 days from the date of publication, buyers should state the LNG vessel explicitly in the bid. Buyers may substitute delivery vessel up to 15 days prior to the first day of the traded delivery window, subject to SSCS.

Platts expects parties to be reasonable when exceptional circumstances require buyers to substitute vessels or sellers to substitute terminals beyond typical standards stated in Platts guidelines. Companies must promptly communicate to their counterparties when such a substitution is required. And buyers or sellers should not unreasonably withhold substitutions or hamper the established delivery process.

Platts also publishes a monthly average reflecting the calendar month of loading and a daily month-to-date cumulative average for the calendar month of loading. These averages reflect the average of GCM assessments corresponding to days when the midpoint of the GCM assessed period (i.e. 45 days forward from the date of publication) falls within the loading month. For example, the loading month average for August 2021 reflects the average of GCM assessments published between June 17, 2021 and July 17, 2021, inclusive. The daily cumulative monthly average for cargoes to be loaded in August 2021 is the average of month-to-date GCM assessments over June 17, 2021 to July 17, 2021 inclusive.

FOB Murmansk Netback

Platts publishes a daily FOB Murmansk netback using the assessed freight route cost from Murmansk to Zeebrugge and Platts DES NWE price assessment.

The voyage length for the Murmansk to Zeebrugge route is four days one-way.

The vessel specifications and assumptions are as per existing methodology (see Atlantic LNG Carrier Day Rates section for details).

DES Brazil

Platts publishes a daily spot netforward assessment for LNG delivered to Brazil, which applies a freight cost addition to the Platts GCM to arrive at a DES Brazil value, taking into

consideration the 13-day voyage from the US Gulf Coast to Salvador, Brazil.

Timing: Cargo delivery 13 days after the GCM loading period to account for the voyage time from USGC to Brazil, or 43-73 days ahead of the date of publication.

Location: Delivery at Bay of All Saints, Salvador de Bahia, Brazil.

Brazil inland gas derived from LNG

Platts publishes daily LNG-based natural gas assessments reflecting the value of natural gas delivered inland to end-users in the northeast and southeast of Brazil.

One assessment is for gas delivered to consumers in the northeast (ABINA00), one is for gas delivered in the southeast (ABINB00), and one assessment is the average of both regions (ABINC00). For the northeast netforward assessment Platts uses its daily DES Brazil LNG assessment (LEBMH01) as the basis for LNG delivered to Salvador, Bahia. For the southeast

netforward assessment Platts uses its daily DES Brazil LNG assessment, but accounts for the additional shipping days needed for arrival to Rio de Janeiro from common LNG supply ports.

Inputs once onshore include regasification, port fees, storage, pipeline transportation and the prevailing estimated distribution costs based on market survey. Inland shipping-related costs are included, while non-shipping related taxes are excluded. The assessments are published on a fixed price basis in \$/MMBtu and reflect market value at 4:30 pm London time.

Platts also publishes these assessments as a differential to Platts JKM (ABIND00, ABINE00, ABINF00).

These assessments follow the UK publishing schedule.

The calculations are reviewed periodically to ensure the inputs reflect prevailing market dynamics. The calculations are reviewed at least once annually, and more frequently based on market feedback.

North American feedgas cost model

Platts indicative feedgas cost model is calculated using data from Platts US natural gas indices as well as S&P Global Commodity Insights gas flow data.

Platts publishes a model of indicative procurement prices for feedgas into US LNG export facilities, weighting different gas trading locations' prices and delivery costs according to their likely influence on cumulative gas procurement costs at different facilities.

Proportional flow data and transport costs from S&P Global Commodity Insights are used to create a volume-weighted average using the following Platts gas indices, listed by facility:

Cameron LNG (ALNFD00) - Columbia Gulf (IGBBG00), Florida Gas (IGBBK00), Tennessee, La., 800 leg (IGBBR00), Texas Eastern, (IGBBR00), Transco, Zone 2, (IGBBU00)

Corpus Christi LNG (ALNFB00) - Transco Zone 01 (IGBBC00), Texas Eastern, STX (IGBBB03), Tennessee Zone 0 (IGBBA00)

Cove Point LNG (ALNFC00) - Transco Zone 5 (IGBEN00),

Columbia Gas, Appalachia (IGBDE00), Dominion South (IGBDC00)

Elba Island LNG (ALNFF00) - Sonat Louisiana (IGBBO00), Transco, Zone 5 (IGBEN00)

Freeport LNG (ALNFE00) - Katy (IGBAQ00)

Sabine Pass LNG (ALNFA00) - NGPL TexOk zone (IGBAL00), Trunk Line West LA (IGBBW00), Transco Zone 2 (IGBBU00) and Tetco West LA (IGBBR00)

Calcasieu Pass LNG (ALNFI00) - TransCameron Pipeline, Henry Hub (IGBBL00)

A daily computation of Average USGC LNG Feedgas Cost (ALNFH00) is calculated using the following capacity-based proportional weightings: Cameron LNG (19.3%), Corpus Christi LNG (21.3%), Freeport LNG (6.9%), Sabine Pass LNG (42.4%), and Calcasieu Pass LNG (10.1%).

A daily computation of Average US LNG Feedgas Cost (ALNFG00), is calculated using the following capacity-based proportional weightings: Cameron LNG (17.5%), Corpus Christi LNG (19.4%), Cove Point LNG (6.3%), Elba Island (3%), Freeport LNG (6.2%),

North America Feedgas

Assessment	Symbol
Daily average US LNG feedgas cost	ALNFG00
30-day moving average US LNG feedgas cost	ALNUS00
Daily average USGC LNG feedgas cost	ALNFH00
30-day moving average USGC LNG feedgas cost	ALNUG00
Export facility	
Sabine Pass	ALNFA00
Corpus Christi	ALNFB00
Cove Point	ALNFC00
Cameron	ALNFD00
Freeport	ALNFE00
Elba Island	ALNFF00
Calcasieu Pass	ALNFI00

Sabine Pass LNG (38.4%), and Calcasieu Pass LNG (9.2%).

A 30-day rolling average of these two costs is also published for USGC LNG Feedgas Cost (ALNUG00) and US LNG Feedgas Cost (ALNUS00).

The model is periodically reviewed to ensure the weightings of the procurement locations, the delivery costs to the facilities as well as the weightings of each export facility in the average USGC and US feedgas cost price series correspond to market dynamics.

LNG Shipping Assessments

Assessment	Symbol	Mavg	Contract Basis	Location	Delivery Period	Min. size	Max. size	Currency	UOM
LNG Carrier Day Rate Asia-Pac -TFDE	AARXT00	AARXT03	Day Rate	Asia-Pacific	25-45 Days Ahead	155,000	180,000	USD	
LNG Atlantic Carrier Day Rate - TFDE	AASYC00	AASYC03	Day Rate	Atlantic	25-45 Days Ahead	155,000	180,000	USD	
LNG Atlantic Ballast Rate - TFDE	AAXTM00	AAXTM03		Atlantic					
LNG Pacific Ballast Rate -TFDE	AAXTN00	AAXTN03		Asia-Pacific					
LNG Carrier Day Rate Asia-Pac - Two-stroke	LNACB00	LNACB03	Day Rate	Asia-Pacific	25-45 Days Ahead	170,000	180,000	USD	
LNG Atlantic Carrier Day Rate - Two-stroke	LNACA00	LNACA03	Day Rate	Atlantic	25-45 Days Ahead	170,000	180,000	USD	
LNG Atlantic Ballast Rate - Two-stroke	LNACC00	LNACC03		Atlantic					
LNG Pacific Ballast Rate -Two-stroke	LNACD00	LNACD03		Asia-Pacific					
LNG Trinidad-Japan/Korea Freight cost \$/MMBtu	AAUSB00	AAUSB03				155,000	180,000	USD	MMBtu
LNG Nigeria-Japan/Korea Freight cost \$/MMBtu	AAUSC00	AAUSC03				155,000	180,000	USD	MMBtu
LNG Algeria-Japan/Korea Freight cost \$/MMBtu	AAUSD00	AAUSD03				155,000	180,000	USD	MMBtu
LNG Zeebrugge-Japan/Korea Freight cost \$/MMBtu	AAUSE00	AAUSE03				155,000	180,000	USD	MMBtu
LNG Peru-Japan/Korea Freight cost \$/MMBtu	AAUSF00	AAUSF03				155,000	180,000	USD	MMBtu
LNG Sakhalin-Japan/Korea Freight cost \$/MMBtu	AAUSG00	AAUSG03				155,000	180,000	USD	MMBtu
LNG Middle East-S China/Taiwan Freight cost \$/MMBtu	AAUSH00	AAUSH03				155,000	180,000	USD	MMBtu
LNG Australia-S China/Taiwan Freight cost \$/MMBtu	AAUSI00	AAUSI03				155,000	180,000	USD	MMBtu
LNG Trinidad-S China/Taiwan Freight cost \$/MMBtu	AAUSJ00	AAUSJ03				155,000	180,000	USD	MMBtu
LNG Nigeria-S China/Taiwan Freight cost \$/MMBtu	AAUSK00	AAUSK03				155,000	180,000	USD	MMBtu
LNG Algeria-S China/Taiwan Freight cost \$/MMBtu	AAUSL00	AAUSL03				155,000	180,000	USD	MMBtu
LNG Zeebrugge-S China/Taiwan Freight cost \$/MMBtu	AAUSM00	AAUSM03				155,000	180,000	USD	MMBtu
LNG Peru-S China/Taiwan Freight cost \$/MMBtu	AAUSN00	AAUSN03				155,000	180,000	USD	MMBtu
LNG Sakhalin-S China/Taiwan Freight cost \$/MMBtu	AAUSO00	AAUSO03				155,000	180,000	USD	MMBtu
LNG Middle East-W India Freight cost \$/MMBtu	AAUSP00	AAUSP03				155,000	180,000	USD	MMBtu
LNG Australia-W India Freight cost \$/MMBtu	AAUSQ00	AAUSQ03				155,000	180,000	USD	MMBtu
LNG Trinidad-W India Freight cost \$/MMBtu	AAUSR00	AAUSR03				155,000	180,000	USD	MMBtu
LNG Nigeria-W India Freight cost \$/MMBtu	AAUSS00	AAUSS03				155,000	180,000	USD	MMBtu
LNG Algeria-W India Freight cost \$/MMBtu	AAUST00	AAUST03				155,000	180,000	USD	MMBtu
LNG Zeebrugge-W India Freight cost \$/MMBtu	AAUSU00	AAUSU03				155,000	180,000	USD	MMBtu
LNG Peru-W India Freight cost \$/MMBtu	AAUSV00	AAUSV03				155,000	180,000	USD	MMBtu
LNG Sakhalin-W India Freight cost \$/MMBtu	AAUSW00	AAUSW03				155,000	180,000	USD	MMBtu
LNG Middle East-Mediterranean Freight cost \$/MMBtu	AAUSX00	AAUSX03				155,000	180,000	USD	MMBtu
LNG Trinidad-Mediterranean cost \$/MMBtu	AAUSZ00	AAUSZ03				155,000	180,000	USD	MMBtu
LNG Nigeria-Mediterranean cost \$/MMBtu	AAUTA00	AAUTA03				155,000	180,000	USD	MMBtu
LNG Algeria-Mediterranean cost \$/MMBtu	AAUTB00	AAUTB03				155,000	180,000	USD	MMBtu
LNG Zeebrugge-Mediterranean Freight cost \$/MMBtu	AAUTC00	AAUTC03				155,000	180,000	USD	MMBtu
LNG Peru-Mediterranean Freight cost \$/MMBtu	AAUTD00	AAUTD03				155,000	180,000	USD	MMBtu
LNG Platts LNG Freight 2-Middle East-NWE Freight cost \$/MMBtu	AAUTE00	AAUTE03				155,000	180,000	USD	MMBtu
LNG Australia-NWE Freight cost \$/MMBtu	AAUTF00	AAUTF03				155,000	180,000	USD	MMBtu
LNG Nigeria-NWE Freight cost \$/MMBtu	AAUTG00	AAUTG03				155,000	180,000	USD	MMBtu
LNG Algeria-NWE Freight cost \$/MMBtu	AAUTH00	AAUTH03				155,000	180,000	USD	MMBtu

LNG Shipping Assessments

Assessment	Symbol	Mavg	Contract Basis	Location	Delivery Period	Min. size	Max. size	Currency	UOM
LNG Peru-NWE Freight cost \$/MMBtu	AAUTI00	AAUTI03				155,000	180,000	USD	MMBtu
LNG Sakhalin-NWE Freight cost \$/MMBtu	AAUTJ00	AAUTJ03				155,000	180,000	USD	MMBtu
LNG Middle East-North East US Freight cost \$/MMBtu	AAUTK00	AAUTK03				155,000	180,000	USD	MMBtu
LNG Australia-North East US Freight cost \$/MMBtu	AAUTL00	AAUTL03				155,000	180,000	USD	MMBtu
LNG Trinidad-North East US Freight cost \$/MMBtu	AAUTM00	AAUTM03				155,000	180,000	USD	MMBtu
LNG Nigeria-North East US Freight cost \$/MMBtu	AAUTN00	AAUTN03				155,000	180,000	USD	MMBtu
LNG Algeria-North East US Freight cost \$/MMBtu	AAUTO00	AAUTO03				155,000	180,000	USD	MMBtu
LNG Zeebrugge-North East US Freight cost \$/MMBtu	AAUTP00	AAUTP03				155,000	180,000	USD	MMBtu
LNG Peru-North East US Freight cost \$/MMBtu	AAUTQ00	AAUTQ03				155,000	180,000	USD	MMBtu
LNG Sakhalin-North East US Freight cost \$/MMBtu	AAUTR00	AAUTR03				155,000	180,000	USD	MMBtu
LNG Middle East-Argentina Freight cost \$/MMBtu	AAUTS00	AAUTS03				155,000	180,000	USD	MMBtu
LNG Australia-Argentina Freight cost \$/MMBtu	AAUTT00	AAUTT03				155,000	180,000	USD	MMBtu
LNG Trinidad-Argentina Freight cost \$/MMBtu	AAUTU00	AAUTU03				155,000	180,000	USD	MMBtu
LNG Nigeria-Argentina Freight cost \$/MMBtu	AAUTV00	AAUTV03				155,000	180,000	USD	MMBtu
LNG Algeria-Argentina Freight cost \$/MMBtu	AAUTW00	AAUTW03				155,000	180,000	USD	MMBtu
LNG Zeebrugge-Argentina Freight cost \$/MMBtu	AAUTX00	AAUTX03				155,000	180,000	USD	MMBtu
LNG Peru-Argentina Freight cost \$/MMBtu	AAUTY00	AAUTY03				155,000	180,000	USD	MMBtu
LNG Sakhalin-Argentina Freight cost \$/MMBtu	AAUTZ00	AAUTZ03				155,000	180,000	USD	MMBtu
LNG Platts LNG Freight Middle East-Japan/Korea Freight cost \$/MMBtu	AAUUA00	AAUUA03				155,000	180,000	USD	MMBtu
LNG Sakhalin-Mediterranean Freight cost \$/MMBtu	AAUUB00	AAUUB03				155,000	180,000	USD	MMBtu
LNG Platts LNG Freight 3-Trinidad-NWE Freight cost \$/MMBtu	AAUUC00	AAUUC03				155,000	180,000	USD	MMBtu
LNG Spain-Japan/Korea Freight cost \$/MMBtu	ACAAA00	ACAAA03				155,000	180,000	USD	MMBtu
LNG Spain/South China/Taiwan Freight cost \$/MMBtu	ACAAB00	ACAAB03				155,000	180,000	USD	MMBtu
LNG Spain/West India Freight cost \$/MMBtu	ACAAC00	ACAAC03				155,000	180,000	USD	MMBtu
LNG Spain/North West Europe Freight cost \$/MMBtu	ACAAD00	ACAAD03				155,000	180,000	USD	MMBtu
LNG Spain/NorthEast US Freight cost \$/MMBtu	ACA AE00	ACA AE03				155,000	180,000	USD	MMBtu
LNG Spain/Argentina Freight cost \$/MMBtu	ACA AF00	ACA AF03				155,000	180,000	USD	MMBtu
LNG Spain/Brazil Freight cost \$/MMBtu	ACA AG00	ACA AG03				155,000	180,000	USD	MMBtu
LNG Norway-Japan/Korea Freight cost \$/MMBtu	ACA AH00	ACA AH03				155,000	180,000	USD	MMBtu
LNG Norway/South China/Taiwan Freight cost \$/MMBtu	ACA AI00	ACA AI03				155,000	180,000	USD	MMBtu
LNG Norway/West India Freight cost \$/MMBtu	ACA AJ00	ACA AJ03				155,000	180,000	USD	MMBtu
LNG Norway/Mediterranean Freight cost \$/MMBtu	ACA AK00	ACA AK03				155,000	180,000	USD	MMBtu
LNG Norway/North West Europe Freight cost \$/MMBtu	ACA AL00	ACA AL03				155,000	180,000	USD	MMBtu
LNG Norway/NorthEast US Freight cost \$/MMBtu	ACA AM00	ACA AM03				155,000	180,000	USD	MMBtu
LNG Norway/Argentina Freight cost \$/MMBtu	ACA AN00	ACA AN03				155,000	180,000	USD	MMBtu
LNG Norway/Brazil Freight cost \$/MMBtu	ACA AO00	ACA AO03				155,000	180,000	USD	MMBtu
LNG Middle East/Brazil Freight cost \$/MMBtu	ACA AP00	ACA AP03				155,000	180,000	USD	MMBtu
LNG Australia/Brazil Freight cost \$/MMBtu	ACA AQ00	ACA AQ03				155,000	180,000	USD	MMBtu
LNG Trinidad/Brazil Freight cost \$/MMBtu	ACA AR00	ACA AR03				155,000	180,000	USD	MMBtu
LNG Nigeria/Brazil Freight cost \$/MMBtu	ACA AS00	ACA AS03				155,000	180,000	USD	MMBtu

LNG Shipping Assessments

Assessment	Symbol	Mavg	Contract Basis	Location	Delivery Period	Min. size	Max. size	Currency	UOM
LNG Algeria/Brazil Freight cost \$/MMBtu	ACAAT00	ACAAT03				155,000	180,000	USD	MMBtu
LNG Belgium/Brazil Freight cost \$/MMBtu	ACAAU00	ACAAU03				155,000	180,000	USD	MMBtu
LNG Peru/Brazil Freight cost \$/MMBtu	ACAAV00	ACAAV03				155,000	180,000	USD	MMBtu
LNG Russia/Brazil Freight cost \$/MMBtu	ACAAB00	ACAAB03				155,000	180,000	USD	MMBtu
LNG US Gulf - Japan/Korea Freight cost \$/MMBtu	LAUVA00	LAUVA03				155,000	180,000	USD	MMBtu
LNG US Gulf - Japan/Korea Freight cost via Cape \$/MMBtu	LAUVK00	LAUVK03				155,000	180,000	USD	MMBtu
LNG US Gulf - Japan/Korea Freight cost via Panama \$/MMBtu	LAUVI00	LAUVI03				155,000	180,000	USD	MMBtu
LNG US Gulf - Japan/Korea Freight cost via Suez \$/MMBtu	LAUVJ00	LAUVJ03				155,000	180,000	USD	MMBtu
LNG US Gulf - S China/Taiwan Freight cost \$/MMBtu	LAUVB00	LAUVB03				155,000	180,000	USD	MMBtu
LNG US Gulf - S China/Taiwan Freight cost via Cape \$/MMBtu	LAUVN00	LAUVN03				155,000	180,000	USD	MMBtu
LNG US Gulf - S China/Taiwan Freight cost via Panama \$/MMBtu	LAUVL00	LAUVL03				155,000	180,000	USD	MMBtu
LNG US Gulf - S China/Taiwan Freight cost via Suez \$/MMBtu	LAUVM00	LAUVM03				155,000	180,000	USD	MMBtu
LNG US Gulf - Argentina Freight cost \$/MMBtu	LAUVG00	LAUVG03				155,000	180,000	USD	MMBtu
LNG US Gulf - Brazil Freight cost \$/MMBtu	LAUVH00	LAUVH03				155,000	180,000	USD	MMBtu
LNG US Gulf - NW Europe Freight cost \$/MMBtu	LAUVE00	LAUVE03				155,000	180,000	USD	MMBtu
LNG US Gulf - Mediterranean Freight cost \$/MMBtu	LAUVD00	LAUVD03				155,000	180,000	USD	MMBtu
LNG US Gulf - W India Freight cost \$/MMBtu	LAUVC00	LAUVC03				155,000	180,000	USD	MMBtu
LNG US Gulf - W India Freight cost via Cape \$/MMBtu	LAUVP00	LAUVP03				155,000	180,000	USD	MMBtu
LNG US Gulf - W India Freight cost via Suez \$/MMBtu	LAUV000	LAUV003				155,000	180,000	USD	MMBtu
LNG Australia-Mediterranean Freight cost \$/MMBtu	AAUSY00	AAUSY03				155,000	180,000	USD	MMBtu
LNG Middle East/Kuwait/UAE Freight cost \$/MMBtu	LMEMM00	LMEMM03				155,000	180,000	USD	MMBtu
LNG Australia - Kuwait/UAE Freight cost \$/MMBtu	LMEMN00	LMEMN03				155,000	180,000	USD	MMBtu
LNG Trinidad - Kuwait/UAE Freight cost \$/MMBtu	LMEMP00	LMEMP03				155,000	180,000	USD	MMBtu
LNG Nigeria - Kuwait/UAE Freight cost \$/MMBtu	LMEMQ00	LMEMQ03				155,000	180,000	USD	MMBtu
LNG Algeria - Kuwait/UAE Freight cost \$/MMBtu	LMEMR00	LMEMR03				155,000	180,000	USD	MMBtu
LNG Belgium - Kuwait/UAE Freight cost \$/MMBtu	LMEMS00	LMEMS03				155,000	180,000	USD	MMBtu
LNG Peru - Kuwait/UAE Freight cost \$/MMBtu	LMENT00	LMENT03				155,000	180,000	USD	MMBtu
LNG Russia - Kuwait/UAE Freight cost \$/MMBtu	LMEMU00	LMEMU03				155,000	180,000	USD	MMBtu
LNG Spain - Kuwait/UAE Freight cost \$/MMBtu	LMEMV00	LMEMV03				155,000	180,000	USD	MMBtu
LNG Norway - Kuwait/UAE Freight cost \$/MMBtu	LMEMW00	LMEMW03				155,000	180,000	USD	MMBtu
LNG US Gulf Coast/Kuwait/UAE Freight cost \$/MMBtu	LMEMX00	LMEMX03				155,000	180,000	USD	MMBtu
LNG US Gulf Coast/Kuwait/UAE Freight cost via Suez \$/MMBtu	LMEMY00	LMEMY03				155,000	180,000	USD	MMBtu
LNG US Gulf Coast/Kuwait/UAE Freight cost via Cape \$/MMBtu	LMEMZ00	LMEMZ03				155,000	180,000	USD	MMBtu
LNG Trinidad-Japan/Korea (most economic) Freight Cost \$/MMBtu	AAUZC00	AAUZC03				155,000	180,000	USD	MMBtu
LNG Trinidad-Japan/Korea via Panama Canal Freight Cost \$/MMBtu	AAUXB00	AAUXB03				155,000	180,000	USD	MMBtu
LNG Trinidad-S China/Taiwan (most economic) Freight Cost \$/MMBtu	AAUZD00	AAUZD03				155,000	180,000	USD	MMBtu
LNG Trinidad-S China/Taiwan via Panama Canal Freight Cost \$/MMBtu	AAUZB00	AAUZB03				155,000	180,000	USD	MMBtu
LNG Gladstone-Argentina Freight Cost \$/MMBtu	ACABH00	ACABH03				155,000	180,000	USD	MMBtu
LNG Gladstone-Brazil Freight Cost \$/MMBtu	ACABG00	ACABG03				155,000	180,000	USD	MMBtu

LNG Shipping Assessments

Assessment	Symbol	Mavg	Contract Basis	Location	Delivery Period	Min. size	Max. size	Currency	UOM
LNG Gladstone-Kuwait/UAE Freight Cost \$/MMBtu	ACABI00	ACABI03				155,000	180,000	USD	MMBtu
LNG Gladstone-Japan/Korea Freight Cost \$/MMBtu	ACABA00	ACABA03				155,000	180,000	USD	MMBtu
LNG Gladstone-Northeast US via Panama Canal Freight Cost \$/MMBtu	ACABF00	ACABF03				155,000	180,000	USD	MMBtu
LNG Gladstone-Northwest Europe via Suez Freight Cost \$/MMBtu	ACABE00	ACABE03				155,000	180,000	USD	MMBtu
LNG Gladstone-S China/Taiwan Freight Cost \$/MMBtu	ACABB00	ACABB03				155,000	180,000	USD	MMBtu
LNG Gladstone-Mediterranean via Suez Freight Cost \$/MMBtu	ACABD00	ACABD03				155,000	180,000	USD	MMBtu
LNG Gladstone-West India Freight Cost \$/MMBtu	ACABC00	ACABC03				155,000	180,000	USD	MMBtu
LNG Bintulu-Japan/Korea Freight Cost \$/MMBtu	ABJKA00	ABJKA03				155,000	180,000	USD	MMBtu
LNG Bintulu-S China/Taiwan Freight Cost \$/MMBtu	ABCTA00	ABCTA03				155,000	180,000	USD	MMBtu
LNG Bintulu-West India Freight Cost \$/MMBtu	ABWIA00	ABWIA03				155,000	180,000	USD	MMBtu
LNG Bontang-Japan/Korea Freight Cost \$/MMBtu	AOJKA00	AOJKA03				155,000	180,000	USD	MMBtu
LNG Bontang-S China/Taiwan Freight Cost \$/MMBtu	AOCTA00	AOCTA03				155,000	180,000	USD	MMBtu
LNG Bontang-West India Freight Cost \$/MMBtu	AOWIA00	AOWIA03				155,000	180,000	USD	MMBtu
LNG Singapore-Japan/Korea Freight Cost \$/MMBtu	ASJKA00	ASJKA03				155,000	180,000	USD	MMBtu
LNG Singapore-S China/Taiwan Freight Cost \$/MMBtu	ASCTA00	ASCTA03				155,000	180,000	USD	MMBtu
LNG Singapore-West India Freight Cost \$/MMBtu	ASWIA00	ASWIA03				155,000	180,000	USD	MMBtu
LNG Tangguh-Japan/Korea Freight Cost \$/MMBtu	ATJKA00	ATJKA03				155,000	180,000	USD	MMBtu
LNG Tangguh-S China/Taiwan Freight Cost \$/MMBtu	ATCTA00	ATCTA03				155,000	180,000	USD	MMBtu
LNG Tangguh-West India Freight Cost \$/MMBtu	ATWIA00	ATWIA03				155,000	180,000	USD	MMBtu
LNG Murmansk-Zeebrugge Freight cost \$/MMBtu	AARXW00	AARXW03				155,000	180,000	USD	MMBtu

Shipping assessments

Platts shipping assessments and freight costs are published each business day and reflect market values prevailing at the close of markets, in the respective region (Singapore/UK). On certain days ahead of a public holiday, such as Christmas Eve and New Year's Eve, Platts assessment timestamp may be earlier than normal. This would typically be 12:30 pm in Singapore and 12:30 pm in London.

Prices are published in the following Platts services: Platts Shipping Alert (SHP), LNG Alert (LNG), Natural Gas Alert (PGN), Platts LNG Daily, Platts Market Data, Platts Dimensions Pro and Platts LNG Navigator.

Platts considers the following terms to be typical for the publication of LNG freight bids, offers, and trades. All submitted information will be considered against these terms for

assessment purposes. Platts may publish bids, offers, and trades for LNG freight that carry different terms and conditions, but may normalize these for assessment purposes.

These standards apply to bids, offers and trades published by Platts in the MOC process.

Standard Terms: Unless stated otherwise by a market participant at the time of submission, all bids and offers will be considered as reflecting the below standards, which Platts understands to be broadly typical in the spot LNG freight market. Any variation from these standards in published bids or offers should be clearly stated by MOC participants at the time of submission.

Delivery laycan: Two or three days; to be narrowed to one day by charterer seven calendar days prior to the first day of original laycan.

Delivery location: Region (e.g. USGC or Australia); with load port to be nominated at least 20 calendar days prior to the first day of original laycan.

Delivery condition: Cold and ready to load.

Redelivery location: Region (e.g. Northwest Europe or North Asia).

Charter period: Minimum of five calendar days and maximum of 60 calendar days, with charterers' options

Vessel size: Capacity range in cu m.

Vessel terms: Any additional terms to be clearly stated

Day rate: To be provided on a round-trip basis

Voyage times in days

	Japan/Korea	SChina/ Taiwan	West India	Southwest Europe	Northwest Europe	Northeast US	Argentina	Brazil	Kuwait/UAE
Middle East	15	13	3	13*	16*	22*	21	24	1
Australia	9	7	9	21*	24*	29	21	25	11
Gladstone	9	10	15	27*	30*	27**	18	22	20*
Bontang	6	4	9						
Tangguh	6	5	11						
Bintulu	6	3	8						
Singapore	7	4	6						
Trinidad	33*	31*	22*	9	9	5	11	7	17
Trinidad (via Panama Canal)	23**	28**							
Trinidad (most economic)	lower of above 2								
Nigeria	26	23	17	9	10	13	11	9	17*
Algeria	24*	22*	13*	1	4	9	14	12	11*
Belgium	28*	25*	16*	3	N/A	8	16	14	15*
Peru	21	24	27	23	24	24	9	14	29
Russia	3	5	15	27*	29*	35*	27	37	21
Spain	25*	22*	14*	N/A	3	7	14	11	12*
Norway	32*	28*	20*	6	3	9	19	18	18*
Sabine Pass (most economic)	lower of below 2, until Panama Canal starts	lower of below 2, until Panama Canal starts	lower of below 2, until Panama Canal starts	12	12	N/A	17	13	
Sabine Pass (via Suez Canal)	36*	32*	24*	N/A	N/A	N/A	N/A	N/A	23*
Sabine Pass (via Cape)	38	35	31	N/A	N/A	N/A	N/A	N/A	30
Sabine Pass (via Panama Canal)	24**	29**	N/A	N/A	N/A	N/A	N/A	N/A	

* Route uses Suez canal, adds one day extra for shipping and 24 cents/MMBtu for canal fees ** Route uses Panama canal, adds one day extra for shipping and 21 cents/MMBtu for canal fees

Platts expects parties to be reasonable when exceptional circumstances require sellers to substitute vessels or buyers to substitute terminals. Companies must promptly communicate to their counterparties when such a substitution is required. Buyers or sellers should not unreasonably withhold substitutions or hamper the established delivery process.

Asia Pacific LNG Carrier Day Rates (APDR)

Platts publishes daily spot charter rates for Tri-Fuel Diesel Electric (TFDE) and two-stroke (MEGI or X-DF) LNG carrier assessments under the benchmark name Asia Pacific LNG Day Rates (APDR).

Frequency: The APDR assessments are published each business day and reflect market values prevailing at the close of Asian markets, 4:30 pm Singapore time.

The assessments are published following editorial engagement with shipowners, brokers, producers, consumers, traders and other active spot market participants.

Basis and Location: The day rates cover the daily cost of chartering a modern TFDE or a modern two-stroke LNG vessel for a short period. The rates cover carriers delivered in the Asia-Pacific region, without regional transfer costs. They reflect loadings in the APAC region and represent a typical Pacific route of Australia-North Asia. Carriers are assumed to be delivered cooled down. Ice class vessels are not considered in the assessment.

Unit: All prices are quoted in US dollars per day (\$/day), to the nearest dollar.

Assessment: Platts publishes a single value reflecting the price at which a ship can be chartered at the close of Asian markets. This assessed value is based on confirmed spot transactions,

firm bids and offers, or in the absence of activity, where a spot transaction would have been concluded.

Volume: Standard TFDE carriers of 155,000-180,000 cu m are considered directly in the assessment, but other indications may be normalized to a 160,000 cu m standard. Standard two-stroke carriers of 170,000-180,000 cu m are considered directly in the assessment, but other indications may be normalized to a 174,000 cu m standard.

Timing: Carriers for loading 25-45 days from the date of assessment. For instance, on March 1, Platts would assess carriers loading between March 26 and April 15.

Asia Pacific LNG Ballast Rate

Platts publishes Asia Pacific Ballast Rate LNG carrier assessments.

Frequency: The assessments are published each business day and reflect market values prevailing at the close of Asian markets, 4:30 pm Singapore time.

The assessments are published following editorial engagement with ship owners, brokers, charterers, and other active spot market participants.

Basis and Location: in line with APDR

Unit: % of APDR

Assessment: Platts publishes a single value indicating the ballast rate at which a spot ship can be chartered at the close of Asian markets. The ballast rates reflect the number of days for which hire is payable during the ballasting part of a spot voyage. In tight markets the ballast rate tends to be a higher percentage, with delivery closer to last discharge port and/or re-delivery closer to the next load port. In this situation a lump sum may also be included in the total charter cost to position or reposition the carrier after the cargo is discharged: on such occasions Platts ballast rate assessments factor this lump sum into the percentage of the total day rate.

Atlantic LNG Carrier Day Rates (ATDR)

Platts publishes daily spot charter rates for Tri-Fuel Diesel Electric (TFDE) and two-stroke (MEGI or X-DF) LNG carrier assessments under the benchmark name Atlantic LNG Day Rates (ATDR).

Frequency: The ATDR assessments are published each business day and reflect market values prevailing at the close of European markets, 4:30 pm London time.

The assessments are published following direct contact with ship owners, brokers, producers, consumers, traders and other active spot market participants.

Basis and Location: The day rates cover the daily cost of chartering a modern TFDE or a modern two-stroke LNG vessel for a short period. The rates cover carriers delivered in the Atlantic region, without regional transfer costs. They reflect loadings in the Atlantic region and represent a typical Atlantic route of US Gulf Coast-Northwest Europe. Carriers are assumed to be delivered cooled down. Ice class vessels are not considered in the assessment.

Unit: All prices are quoted in US dollars per day (\$/day), to the nearest dollar.

Assessment: Platts publishes a single value reflecting the price at which a ship can be chartered at the close of European markets. This assessed value is based on confirmed spot transactions, firm bids and offers, or in the absence of activity, where a spot transaction would have been concluded.

Volume: Standard TFDE carriers of 155,000-180,000 cu m are considered directly in the assessment, but other indications may be normalized to a 160,000 cu m standard. Standard two-stroke carriers of 170,000-180,000 cu m are considered directly in the assessment, but any indications may be normalized to a 174,000 cu m standard, as Platts understands that the majority of Two-stroke fixtures in both the Atlantic and Pacific spot markets are done on a standard vessel size of around 174,000 cu m.

Timing: Carriers for loading 25-45 days out from the date of assessment. For instance, on July 1, Platts would assess carriers loading between July 26 and August 15.

Atlantic LNG Ballast Rate

Platts publishes Atlantic ballast rate LNG carrier assessments.

Frequency: The assessments are published each business day and reflect market values prevailing at the close of European markets, at 4:30 pm London time.

The assessment is published following editorial engagement with ship owners, brokers, charterers, and other active spot market participants.

Basis and Location: in line with ATDR

Unit: % of ATDR

Assessment: Platts publishes a single value indicating the ballast rate at which a spot ship can be chartered at the close of European markets, at 4:30 pm London time. The ballast rates reflect the number of days for which hire is payable during the ballasting part of a spot voyage. In tight markets the ballast rate tends to be a higher percentage, with delivery closer to last discharge port and/or re-delivery closer to the next load port. In this situation a lump sum may also be included in the total charter cost to position or reposition the carrier after the cargo is discharged: on such occasions Platts ballast rate assessments factor this lump sum into the percentage of the total day rate.

Time Charter Rates (TCRs)

Platts publishes daily TCR price assessments for Australia (Dampier) – Japan (Futtsu), US Gulf Coast (Sabine Pass) – Japan (Futtsu) and US Gulf Coast (Sabine Pass) – Northwest Europe (Zeebrugge). These reflect round-trip economics.

The basis of the calculation is as follows for the Australia – Japan TCR: Platts Asia Pacific Day Rate (AARXT00) * (laden leg number of days + ballast leg number of days * Platts Asia Pacific Ballast Rate (AAXTN00) + loading and discharge days) / number of round-trip days

The basis of the calculation is as follows for the USGC – Japan TCR: Platts Atlantic Day Rate (AASYC00) * (laden leg number of days + ballast leg number of days * Platts Atlantic Ballast Rate (AAXTM00) + loading days and discharge days + Canal-transit days) / number of round-trip days

The basis of the calculation is as follows for the USGC – NWE TCR: Platts Atlantic Day Rate (AASYC00) * (laden leg number of days + ballast leg number of days * Platts Atlantic Ballast Rate (AAXTM00) + loading days and discharge days) / number of round-trip days.

The number of round-trip days is 21 for the Australia-Japan route (nine days each way, three days for loading and discharge); 53 days (24 days each way, three days for loading and discharge, two days for Panama Canal transit) for the USGC-Japan route and 27 days (12 days each way, three days for loading and discharging) for the USGC-NWE route.

LNG global freight route costs

Frequency: The LNG freight costs are published each business day and reflect market values prevailing at the regional close. On Singapore public holidays, no routes east of the Suez Canal are published. On UK public holidays, no routes west of the Suez Canal are published. On US public holidays, no routes to or from the Americas are published.

Unit: All prices are quoted in \$/MMBtu to two decimal places.

Quality: Any quality of LNG.

Volume: Standard cargoes of 155,000-180,000 cu m normalized to a standard volume of 160,000 cu m.

Timing: Freight costs are calculated as per the APDR and ATDR, including respective ballast rate, listed above.

Location: Loading in: Middle East (Ras Laffan), Australia (Dampier, Gladstone), Indonesia (Bontang, Tangguh), Malaysia (Bintulu), Singapore, Trinidad and Tobago (Point Fortin), Nigeria (Bonny Island), Algeria (Arzew), Belgium (Zeebrugge), Peru (Pampa Melchorita), Spain (Huelva), Norway (Hammerfest),

Russia (Sakhalin, Murmansk) and USA (Sabine Pass).

Delivery Points: Japan/Korea (Futtsu), South China/Taiwan (Guangdong Dapeng), West India (Dahej), Southwest Europe (Huelva), Northwest Europe (Zeebrugge), Northeast US (Everett), Brazil (Salvador Bahia), Argentina (Bahia Blanca) and Kuwait/ UAE (Mina Al Ahmadi, Jebel Ali, Ruwais).

Assessment: Platts publishes a single value indicating the implied cost of a voyage. This value is based on applying the relevant freight and ballast rate to a base price assessment (e.g., JKM), a boil-off rate of 0.12%/day while laden, a boil-off rate of 0.09% while on ballast and a boil-off rate of 25% of the laden rate while in port. Boil-off is based off a 98.5% fillable volume. In addition, the value is based on the engine consuming 5200 MMBtu/day of LNG at an average speed of 17 knots.

Calculation: Platts calculates the total route cost as follows:

The cost of charter for the entire voyage, which accounts for a round-trip, including ballast rates, port costs, and three days for loading and discharge.

The cost of charter is divided by the total delivered volume in MMBtu. The total delivered volume accounts for boil-off, which is calculated by multiplying the volume lost by the delivered price in \$/MMBtu.

The delivered cargo volume is calculated by multiplying the vessel size of 160,000 cu m by a fillable volume of 98.5%, minus the volume of boil-off from the combined laden and ballast legs of the journey, including the three-day loading and discharge time.

Platts uses a factor of 23.0 in its conversion of cubic meters to MMBtu for loaded LNG in its freight assessments and calculations.

LNG port costs

Platts uses prevailing costs in the following ports to calculate its netbacks and has incorporated these port costs into the corresponding freight cost calculations.

Load ports

	USD
Ras Laffan	120,000
Dampier	200,000
Gladstone	240,000
Bontang	90,000
Tangguh	30,000
Bintulu	Convert from 800,000 MYR
Singapore	75,000
Point Fortin	60,000
Bonny	900,000
Arzew	160,000
Zeebrugge	130,000
Pampa Melchorita	200,000
Sakhalin	70,000
Huelva	240,000
Hammerfest	200,000
Sabine Pass	190,000
Murmansk	130,000

Discharge ports

	USD
Futtsu	120,000
Guangdong Dapeng	125,000
Dahej	40,000
Huelva	240,000
Zeebrugge	130,000
Everett	300,000
Bahia Blanca	0
Salvador Bahia	140,000
Mina Al Ahmadi/Jebel Ali/Ruwais	225,000

LNG Panama Canal Water Charge

	Symbol	Mavg	Currency	UOM
LNG Panama Canal Surcharge Day 3	APCSB00			PCT
LNG Panama Canal Surcharge Day 4	APCSA00			PCT
LNG Panama Canal Surcharge Day 42	APCSE00			PCT
LNG Panama Canal Surcharge Day 43	APCSC00			PCT
LNG Panama Canal Surcharge Day 51	APCSF00			PCT
LNG Panama Canal Surcharge Day 52	APCSD00			PCT
LNG Panama Canal Water Level Day 3	APCWB00			FT
LNG Panama Canal Water Level Day 4	APCWA00			FT
LNG Panama Canal Water Level Day 42	APCWE00			FT
LNG Panama Canal Water Level Day 43	APCWC00			FT
LNG Panama Canal Water Level Day 51	APCWF00			FT
LNG Panama Canal Water Level Day 52	APCWD00			FT
LNG Panama Canal Fee Surcharge Sabine Pass-China/Taiwan \$/MMBtu	APFCF00	APFCF03	USD	MMBtu
LNG Panama Canal Fee Surcharge Sabine Pass-Japan/Korea \$/MMBtu	APCFA00	APCFA03	USD	MMBtu
LNG Panama Canal Fee Surcharge Trinidad-China/Taiwan \$/MMBtu	APCFD00	APCFD03	USD	MMBtu
LNG Panama Canal Fee Surcharge Trinidad-Japan/Korea \$/MMBtu	APCFB00	APCFB03	USD	MMBtu

Panama Canal Fresh Water Surcharge

For the following four voyages:

Voyage	Code
US Gulf to Japan/Korea via Panama Canal	LAUVI00
US Gulf to China/Taiwan via Panama Canal	LAUVL00
Trinidad to Japan/Korea via Panama Canal	AAUXB00
Trinidad to China/Taiwan via Panama Canal	AAUZB00

Platts calculates an additional cost to account for the water level surcharge through the Panama Canal. Platts uses the most up-to-date figures from the Panama Canal Authority in this calculation and publishes both the levels used and the additional voyage cost each business day.

Conversion rates

Platts publishes a list of competing fuel prices daily in \$/MMBtu.

The prices of competing oil and thermal coal assessments are converted from \$/bbl and \$/mt to \$/MMBtu using the conversions listed below. The conversion factors reflect those typically applied throughout the industry.

- Dated Brent and Asian Dated Brent price assessments are converted by using 5.8 MMBtu per barrel.
- Minas crude oil assessments are converted by using 5.9 MMBtu per barrel.
- The factor applied to the fuel oil 2% sulfur 180 CST FOB Singapore assessment to convert from \$/mt to \$/MMBtu is 39.7.
- The factor applied to the naphtha CFR Japan assessment to

convert from \$/mt to \$/MMBtu is 46.8.

- The factor applied to the Northwest Europe fuel oil assessment to convert from \$/mt to \$/MMBtu is 39.7.
- The factor applied to the US West Coast 1% and 0.5% fuel oil, US Gulf Coast 3% fuel oil and New York Harbor 1% Sulfur fuel oil assessments to convert from \$/b to \$/MMBtu is 6.25.
- The factor applied to the Northeast Asia Thermal Coal price index (NEAT Coal Index) (5,750 kcal/kg NAR) is 23.705053 and CIF ARA coal (6,000 kcal/kg NAR) assessments to convert from \$/mt to \$/MMBtu is 24.294692.

LNG Competing Fuels Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min. size	Max.size	Currency	UOM
UK NBP Gas \$/MMBtu	LNCVM01		Futures		NBP			USD	MMBtu
Naphtha CFR Japan \$/MMBtu	LNPJH00	LNPJH03	Conversion		Japan			USD	MMBtu
CIF ARA 15-60 day thermal coal \$/MMBtu	CSAAB00	CSAAB03	Conversion		ARA			USD	MMBtu
NEAT Coal Index \$/MMBtu	JKTCB00	JKTCB03	Conversion		Japan, South Korea and Taiwan			USD	MMBtu
Fuel oil 180 CST 2% FOB Spore \$/MMBtu	LUADW00	LUADW03	Conversion		Singapore			USD	MMBtu
New York Harbor 1.0 FO \$/MMBtu	LUAXD00	LUAXD03	Conversion		New York Harbor			USD	MMBtu
US Gulf Coast 3% FuelOil \$/MMBtu	LUAXJ00	LUAXJ03	Conversion		US Gulf Coast			USD	MMBtu
Fuel oil 180 CST 3.5% FOB Singapore swap M1 \$/MMBtu	LUAXZ00	LUAXZ03	Conversion		Singapore			USD	MMBtu
NorthWest Europe FO \$/MMBtu	LAEGR00	LAEGR03	Conversion		Northwest Europe			USD	MMBtu
Japan Customs Cleared LNG Imp Est CIF \$/MMBtu	LAKPM00		Conversion		Japan			USD	MMBtu
Japan Customs Cleared LNG Imp Fin CIF \$/MMBtu	LAKPN00		Conversion		Japan			USD	MMBtu
Minas FOB Indonesia Crude oil \$/MMBtu	LCABO00	LCABO03	Conversion		Indonesia			USD	MMBtu
Asian Dated Brent	ADBAA00	ADBAA03	Conversion		North Sea			USD	MMBtu
Dated Brent	ADBAB00	ADBAB03	Conversion		North Sea			USD	MMBtu
Americas Dated Brent	ADBAC00	ADBAC03	Conversion		North Sea			USD	MMBtu
WTI 13:30 Houston	ADBAD00	ADBAD03	Conversion		Cushing			USD	MMBtu

LNG Bunker Fuel Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min. size	Max.size	Currency	UOM
Singapore LNG Bunker Fuel \$/MMBtu	LNBSG00	LNBSG03			Singapore			USD	MMBtu
Singapore LNG Bunker Fuel \$/mt (Oil)	LNBSM00	LNBSM03			Singapore			USD	mt
LNG Bunker Singapore \$/mt (LNG)	LNBSF00	LNBSF03			Singapore			USD	mt
LNG Bunker China \$/MMBtu	LNBCA00	LNBCA03			Shanghai	1,000		USD	MMBtu
LNG Bunker China \$/mt	LNBCB00	LNBCB03			Shanghai			USD	mt
Rotterdam LNG Bunker Fuel Eur/MWh	LNBR00	LNBR03			Rotterdam			Eur	MWh
Rotterdam LNG Bunker Fuel \$/mt (Oil)	LNBRM00	LNBRM03			Rotterdam			USD	mt
LNG Bunker Rotterdam \$/MMBtu	LNBRD00	LNBRD03			Rotterdam	5,000	5,000	USD	MMBtu
LNG Bunker Rotterdam Eur/mt	LNBRE00	LNBRE03			Rotterdam			Eur	mt
LNG Bunker Rotterdam \$/mt (LNG)	LNBRF00	LNBRF03			Rotterdam			USD	mt
LNG Bunker US SE Coast \$/MMBtu	LNCA00	LNCA03			Jacksonville		5,000	USD	MMBtu
LNG Bunker US SE Coast \$/mt (Oil)	LNCC00	LNCC03			Jacksonville			USD	mt
LNG Bunker US SE Coast \$/mt (LNG)	LNCL00	LNCL03			Jacksonville			USD	mt
LNG Bunker Barcelona \$/MMBtu	LNBA00	LNBA03			Barcelona			USD	MMBtu
LNG Bunker Barcelona \$/mt (LNG)	LNBB00	LNBB03			Barcelona			USD	mt

Carbon Accounted LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min. size	Max.size	Currency	UOM
CAL WTT JKTC (ex-Australia) Differential	ACNLB00	ACNLA03			JKTC			USD	MMBtu
CAL WTT JKTC (ex-Australia) Cumulative MAvg	ACNLD03				JKTC			USD	MMBtu
CAL Combustion JKTC	ACNLJ00				JKTC			USD	MMBtu

Carbon Accounted LNG Assessments

Assessment	Symbol	Mavg	Contract Type	Contract Basis	Location	Min. size	Max. size	Currency	UOM
CAL WTW JKTC (ex-Australia) Differential	ACNLF00	ACNLF03			JKTC			USD	MMBtu
CAL WTW JKTC (ex-Australia) Differential Cumulative Mavg	ACNLH03				JKTC			USD	MMBtu
CAL DES JKTC (ex-Australia) Differential	ACNLG00	ACNLG03			JKTC			USD	MMBtu
CAL DES JKTC (ex-Australia) Differential Cumulative Mavg	ACNLI03				JKTC			USD	MMBtu
CAL WTW Australia-JKTC (Removals Credits)	ACNLL00	ACNLL03			JKTC			USD	MMBtu
CAL WTW Australia-JKTC (Removals Credits) Cumulative MAvg	ACNLM00				JKTC			USD	MMBtu

Marine Fuel LNG Bunker price assessments

Platts publishes daily LNG Bunker Fuel assessments, reflecting the value of LNG used as a marine fuel, in the ports of Singapore, Shanghai, Rotterdam, Barcelona and Jacksonville.

Singapore LNG Bunker Fuel

Frequency: The Singapore LNG Bunker Fuel assessment is published each business day and reflects market values prevailing at the close of Asian markets, 4:30 pm Singapore time.

Basis and Location: Platts considers the prevailing tradable value of LNG bunker fuel in the locations on a barge-to-ship (delivered) basis in Singapore. While Platts continues to consider truck-to-ship deliveries, these may be normalized to a barge-to-ship basis when considered in the final assessment value.

Platts considers a variety of inputs in its LNG Bunker Fuel assessments, including the JKM and FOB Singapore LNG assessments. Platts Singapore LNG bunker assessment is published on a flat price basis in \$/MMBtu.

Timing: The Singapore LNG bunker fuel assessment is for bunker deliveries 7-20 days ahead.

Volume: The minimum volume reflected in the assessment is 1,000 cubic meters. Sizes below may be normalized for the

purposes of the assessment.

Unit: The LNG bunker fuel assessment includes the logistics costs from the terminal to the barge or truck, and charges for delivery direct to the receiving vessel. Platts also publishes \$/mt conversions for LNG Bunker Fuel assessments. This \$/mt price series is converted from the MMBtu assessment to a metric ton of fuel oil equivalent, using a factor of 38.643. A conversion to \$/mt of LNG is also published from the MMBtu assessment using a factor of 52.

East China LNG Bunker Fuel

Frequency: The East China LNG Bunker Fuel assessment is published each business day and reflects market values prevailing at the close of Asian markets, 4:30 pm Singapore time.

Basis and Location: Platts considers the prevailing tradable value of LNG bunker fuel in the locations on a barge-to-ship (delivered) basis Shanghai. Deliveries into Zhoushan and Ningbo are considered and normalized to a Shanghai basis. Truck-to-ship deliveries are considered and may be normalized to a barge-to-ship basis when considered in the final assessment value.

Platts East China LNG bunker assessment is published on a flat price basis in \$/MMBtu.

Timing: The East China LNG bunker fuel assessment is for

bunker deliveries 7-20 days ahead.

Volume: The minimum volume reflected in the assessment is 1,000 cubic meters. Sizes below may be normalized for the purposes of the assessment.

Unit: The LNG bunker fuel assessment includes the logistics costs from the terminal to the barge, and charges for delivery direct to the receiving vessel. Platts also publishes a \$/mt conversion from the MMBtu assessment using a factor of 52.

Rotterdam LNG Bunker Fuel

Frequency: The Rotterdam LNG Bunker Fuel assessment is published each business day and reflects market values prevailing at the close of European markets, 4:30 pm London time.

Basis and Location: Platts considers the prevailing tradable value of LNG bunker fuel in the locations on a barge-to-ship (delivered) basis in Rotterdam. Truck-to-ship (ex-wharf) basis is still considered for the assessment process but may be subject to normalization.

Platts assesses the differential from the spot LNG Northwest Europe (AASXU00) assessment, publishing the final assessment on a flat price basis in Eur/MWh. Other local gas hubs may also be considered as the basis for the Rotterdam assessment.

Timing: The Rotterdam LNG bunker fuel assessment is for bunker deliveries 7-20 days ahead.

Volume: The assessed volume is for deliveries of 5,000 cu m. Sizes above and below may be normalized for purposes of assessment.

Unit: The LNG bunker fuel assessment includes the logistics costs from the terminal to the barge or truck, and charges for delivery direct to the receiving vessel. Platts also publishes \$/mt conversions for LNG Bunker Fuel assessments. This \$/mt price series are converted from the MWh assessment to a metric ton of fuel oil equivalent, using a factor of 11.322, as well as \$/MMBtu conversion against Platts assess FX rates. A conversion to \$/mt of LNG is also published from the MMBtu assessment using a factor of 52.

US Southeast Coast LNG Bunker Fuel

Frequency: The US Southeast Coast LNG Bunker Fuel assessment is published each business day and reflects market values prevailing at the close of European markets, 4:30 pm London time.

Basis and Location: Platts considers the prevailing spot price of LNG bunker fuel transacted on the US southeast coast, with the basis port being Jacksonville, Florida on a barge-to-ship (delivered) basis.

Volume: The assessed volume is for deliveries of up to 5,000 cu m. Platts takes into consideration truck-to-ship trades and normalize where appropriate to a barge-to-ship equivalent price.

Unit: Platts also publishes \$/mt conversions for LNG Bunker Fuel assessments. This \$/mt price series are converted from the MMBtu assessment to a metric ton of 0.1% sulfur fuel oil equivalent, using a factor of 38.643. A conversion to \$/mt of LNG is also published from the MMBtu assessment using a factor of 52.

Barcelona LNG Bunker Fuel

Frequency: The Barcelona LNG Bunker Fuel assessment is published each business day and reflects market values prevailing at the close of European markets, 4:30 pm London time.

Basis and Location: Platts considers the prevailing tradable value of LNG bunker fuel in the locations on a barge-to-ship (delivered) basis in Barcelona. Truck-to-ship(ex-wharf) basis is still considered for the assessment process but may be subject to normalization. Loadings in other ports within Iberian Peninsula and Southern France may also be considered and normalized.

Timing: The Barcelona LNG bunker fuel assessment is for bunker deliveries less than 15 days ahead.

Volume: The assessed volume is for deliveries of 2,000 cu m. Sizes above and below may be normalized for purposes of assessment.

Unit: The LNG bunker fuel assessment includes the logistics costs from the terminal to the barge, and charges for delivery direct to the receiving vessel. A conversion to \$/mt of LNG is also published from the MMBtu assessment using a factor of 52.

Revision history

November 2023: Platts updates standard LNG cargo volume considered in GCM, and standard nomination deadlines in JKM LNG MOC process. Platts launches DES Southeast Asia LNG (SEAM) cargo assessments on Oct. 23, 2023. Platts adds details of East China LNG bunkers price assessment, launched October 2, 2023.

September 2023: Platts updates the standard trading terms reflected in its NWE and MED LNG MOC price assessment process and the assessment periods in the examples used to illustrate the assessment rolling logics of NWE and MED.

August 2023: Platts clarifies assessment basis for delivery, timing and volume of Singapore LNG bunkers price assessment. Platts launched Barcelona LNG Bunker Assessment on Aug. 16, 2023.

July 2023: Platts adds Bilbao and Mugardos to base delivery ports in DES NWE LNG. Platts clarifies that it considers it standard for the seller to state at least 30 days ahead of delivery a specific quantity for offers, bids and trades reported in a quantity range in the Atlantic LNG price assessment process. Platts clarifies that the standard loading method considered in its Rotterdam LNG bunkering assessment is LNG supplied by barge. Platts launched baseload spark spread assessments for Tokyo, Japan, on June 1.

May 2023: Platts clarifies normalization of gas hub day-ahead price-linked cargoes for Atlantic LNG

March 2023: Platts completed an annual review of this guide, reviewing all content, correcting typos and making edits to language throughout.

February 2023: Platts replaces the term “Carbon Neutral” with “Carbon Accounted”, meaning the assessments are now under the header “Carbon Accounted LNG”. The abbreviated version

CNL in assessments is replaced by CAL. Platts updated this guide to reflect the launch of additional JKM monthly derivative assessments, JKM/NWE differential derivative assessments and NWE/TTF differential assessments (launched Dec-22). Platts updated the guide to reflect the launch of Brazil netforward gas assessments and the launch of the Calcasieu Pass calculation in the US feedgas cost model (launched Jan-23). Platts added TTF next-month differentials versus DES NWE and DES MED, JKM in eur/mwh, a global LNG average versus TTF and a three-day rolling average of the global LNG versus TTF spread.

November 2022: Platts launched Asia Pacific and Atlantic LNG day rates for two-stroke vessels on Nov. 7, 2022. Platts added details of the change to the standard delivery window reflected in JKM.. Platts launched spot cash differential assessments for JKM LNG on Oct. 17, 2022. Platts clarified consideration of floating price physical information in global LNG assessments on Oct. 17, 2022, and Russian vessels merchantability in the Atlantic LNG MOC on Oct. 14, 2022.

August 2022: DES NWE LNG Forward curve added. Corrected usual early UK MOC time to 12:30 London time. Removed US from respective close of market regions. Corrected TFDE acronym to Tri-Fuel Diesel Electric. Changed USGC-Japan voyage length 24 days in each direction from 23 days, and the total voyage length to 53 days from 51.

August 2022: Platts completed an annual review of this guide, reviewing all content, correcting typos, and making edits to language throughout. Platts has also updated dates for assessment examples and added reference to the CRC assessments to the carbon neutral LNG section. Adds Southern France as a Mediterranean port where missing. Added mentions of changes to Russia-origin LNG and Russia vessels merchantability status.

June 2022: Platts changed the carbon intensity (CI) numbers used for Platts carbon neutral LNG (CNL) assessments, effective June 1, 2022. Platts clarified nomination guidelines for prompt

cargoes in the Atlantic LNG MOC on June 13, 2022.

May 2022: Platts launched JKM-based China trucked LNG assessments on May 17, 2022. Platts started publishing JKM vs WIM LNG spread assessment from May 17, 2022.

April 2022: Platts launched H+2 LNG assessments for DES Northwest Europe and DES Mediterranean on April 1, 2022. Platts launched US SE Coast bunker assessment, and its associated oil and LNG equivalent assessments on March 16, 2022. Platts launched month-ahead, second month and third month ahead physical Dutch Title Transfer Facility (TTF) natural gas price assessments in \$/MMBtu, time stamped to 4:30 pm London time, as well as comparative LNG prices assessments for DES Brazil Netforward and front-month JKM derivative against month-ahead TTF on Feb. 28, 2022. Platts discontinued publishing its daily price assessments for month-ahead and second month ahead UK National Balancing Point (NBP) natural gas at 4:30 pm Singapore close, effective Feb. 28, 2022. The LNG bunker fuel assessment table was updated to reflect parcel size at Rotterdam.

February 2022: Platts launched month-ahead and second month ahead physical Dutch Title Transfer Facility (TTF) natural gas price assessments on a \$/MMBtu basis, time stamped to 4:30 pm Singapore time, effective Feb. 3, 2022. Platts clarified publication of reoffers in APAC LNG physical MOC on Jan. 21, 2022. Platts clarified that TTF-related floating physical bids and offers will not be reflected in the Asia-Pacific LNG MOC assessment process during days with early close on Dec 22, 2021. Platts changed standard deadline for same-country delivery port nominations in JKM LNG MOC from Dec 16, 2021. Platts solely reflected standard nomination deadlines in JKM MOC bids and offers from Dec. 16, 2021. Platts clarified consideration of midpoints of LNG cargo delivery periods, half-month assessments on Dec. 8, 2021. Platts clarified consideration of cross-month delivery window cargoes in APAC LNG MOC on Oct. 13, 2021. Platts clarified prioritization, determination of floating prices in

the LNG MOC process on Oct.6, 2021. The guide was also updated to correct the typographical error under contract type for LNG FOB Mid East 25-45 Days in the Pacific Basin Spot LNG Assessments table.

September 2021: Platts launched JKM balance-month next-day derivative assessment on Sept. 16, 2021. Platts clarified its assessment process around bids and offers submitted in the Atlantic MOC process that contain all NWE and MED terminals as potential discharge locations on Aug. 20, 2021. The guide was also updated to correct typo errors on JKM quarterly derivatives assessments, clarity on seasonal derivatives assessments, and clarification on nomination deadline for bids, offers and trades reported in a volume range in the MOC process for the JKM LNG assessment in July 2020.

August 2021: Platts launched three daily LNG price assessments relating to carbon neutral LNG (CNL), namely the cost to offset the combustion leg of a CNL trade in North Asia, a CNL well-to-wire assessment and a CNL well-to-flange DES assessment, effective Aug. 16, 2021. Platts discontinued the Middle East Marker (MEM) LNG comparative differentials against fuel oil 180 CST 2% FOB Singapore cargo and FO 180 CST FOB Arab Gulf fuel oil in \$/mt on August 2, 2021. Footnote in the Voyage Times in Days table was updated to state the journey time for specific Panama Canal routes includes Panama Canal transit.

July 2021: Platts completed an annual update to the LNG Specifications guide in July 2021. In this update, Platts reviewed all content. In this edition, Platts made minor edits throughout. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself. Platts stated the base volume reflected in its DES Northwest Europe LNG and DES Mediterranean LNG assessments. Platts clarified vessel compatibility for APAC LNG MOC.

June 2021: Platts launched a daily spot differential assessment reflecting carbon neutral LNG deals into the Japan/Korea/

Taiwan/China (JKTC) region from Australia, effective June 16, 2021. Platts changed the loading period for the Gulf Coast Marker to reflect LNG cargoes loading from the US Gulf Coast 30-60 days forward from the date of publication, the assessed period for the DES Brazil Netforward marker to 13 days after the GCM loading period, or 43-73 days ahead of the date of publication, and launched a monthly average reflecting the calendar month of loading and a daily month-to-date cumulative average for the calendar month of loading for the GCM assessments from June 1, 2021. Platts added existing assessments to the LNG Competing Fuels Assessments table and added new LNG bunker conversions launched October 16, 2020.

May 2021: Platts launched WIM LNG derivative assessments on May 3, 2021. Platts clarified the maximum quantity range stated in offers published during the Atlantic LNG MOC process for its DES Northwest Europe and Mediterranean Markers assessments on April 16, 2021.

April 2021: Platts started databasing the monthly North American LNG cargo cancellations reported to Platts by market participants, effective April 20, 2021. The Atlantic Basin LNG assessments table was updated with new comparisons for the GCM against the daily spot NWE and MED LNG assessments launched July 16, 2020. Typographical errors in the tables were amended. Platts clarified MOC shipping guidelines for Asia Pacific LNG Day Rates and Atlantic LNG Day Rates on February 10, 2021. Details on European LNG MOC guidelines were added.

March 2021: Platts updated its assumptions around boil-off volume in its calculation of delivered LNG volume, as well as the journey time for specific Panama Canal routes. Platts clarified that the APDR represents a typical Pacific route of Australia-North Asia, while the ATDR represents a typical Atlantic route of US Gulf Coast-Northwest Europe. Platts also clarified its standard around the maximum delivery period for cargoes reflected in its Asia MOC process. Details on the inputs into the Platts Singapore LNG bunker assessment, and description of monthly average and

cumulative moving average assessments were added. Platts updated the list of LNG competing fuel assessments table to reflect the discontinuation of the FOB Indonesia LSWR Mixed/Cracked assessment from April 1, 2019.

February 2021: Platts clarified that it reflects Tri Fuel Diesel Engine (TFDE) LNG vessels of between 155,000 cu m and 180,000 cu m in its daily hire rates in both the Atlantic and Pacific basin in January 2021. Platts started publishing Japan Customs Cleared crude oil and LNG prices under their full names on February 8, 2021.

December 2020: Platts started publishing WIM RLNG prices from November 16, 2020.

August 2020: Platts stated forward delivery period and delivery quantity for Rotterdam LNG marine fuel assessments.

July 2020: Platts completed an annual update to the LNG Methodology and Specifications guide in July 2020. In this update, Platts reviewed all content. In this edition, Platts made minor edits throughout. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself. Platts discontinued East Atlantic Marker (EAM) in June 2020. Platts clarified its MOC standard around the provision of ETA notices in May 2020.

June 2020: Platts changed the timestamp of the Gulf Coast Market (GCM) from a 1:30 p.m. Houston time to 4:30 p.m. London time. Platts added Panama Canal Fresh Water Surcharge to four routes in May 2020. The fees on a \$/MMBtu level are recorded in four new symbols. Platts also added six new symbols for the water levels, and six for the surcharges.

April 2020: Platts changed name of LNG DES West India assessment to West India Marker (WIM). Platts changed minimum volume, timing cut-off for JKM LNG derivatives MOC. Platts changed netback structure, basis of LNG FOB Middle East Netback

March 2020: Platts clarifies in February 2020 maximum quantity range in Asia LNG MOC offers.

January 2020: Platts clarified quarterly roll protocol for JKM and provided an example. Platts launched an analytical feedgas cost model for US LNG export terminals, on January 2 2020. Platts added Yuan conversions of JKM assessment. Platts added Euro conversions for NWE and MED markets on January 16. Platts added published Asia MOC guideline on discharge port and vessel compatibility. Platts changed the assumption on fuel-consumption in its global freight costs to boil-off gas only. The LNG freight calculations references LNG rather than fuel-oil due to this methodology change.

December 2019: Platts clarifies consideration of lump sum positioning or repositioning costs in ballast rate freight assessments. Platts adds seasonal and calendar year JKM derivative assessments and clarifies roll protocol.

November 2019: Platts adds FOB Murmansk netback and Time Charter Rates (TCR) for routes in the Pacific and Atlantic Basin. Platts adds definition to standard terms reflected in GCM. Platts adds sulfur and ethane limits to JKM specification. Platts adds FOB Singapore netback assessment.

October 2019: Platts added sulfur and ethane limits to the specification that forms the basis of JKM.

September 2019: Platts renames the Southwest European Marker (SWE) to Mediterranean Marker (MED). Platts launched LNG Bunker Fuel assessments, in the ports of Singapore and Rotterdam. Platts defined the DES West India standard terms for LNG MOC process.

Aug 2019: Platts completed an annual update to the LNG Methodology and Specifications guide in August 2019. In this update, Platts reviewed all content. In this edition, Platts made minor edits throughout. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself.

Platts clarified other locations considered in DES West India assessment process.

July 2019: Platts adds TTF Dutch gas hub differentials against JKM, NWE, SWE and GCM.

June 2019: Platts changed the DES Brazil LNG assessment to be a netforward from the GCM rather than the EAM. Platts updated the MOC guidelines for its JKM and European assessment processes. Platts completed an annual update to sections 1 to 6 of Platts Methodology and Specifications Guides in April 2019, and moved these sections into a standalone Methodology Guide.

May 2019: Platts adds 12 new freight routes; from Bontang, Tangguh, Singapore and Bintulu to Futtsu, Dapeng and Dahej.

April 2019: Platts adds JKM derivatives assessments for Pricing Month on Singapore and London time

February 2019: Platts amends LNG freight cost to align with rebased Middle East Marker

December 2018: Platts adds London 16:30 assessments for JKM derivatives and updates basis for the Middle East Marker.

October 2018: Platts updates guidelines for LNG MOC process.

August 2018: Platts completed an annual update to the LNG Methodology and Specifications guide in August 2018. In this update, Platts reviewed all content. In this edition, Platts made minor edits throughout. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself.

August 2018: Platts launched LNG freight costs from Gladstone, Australia, on August 20 2018.

July 2018: Platts launched Ballast rate assessments, added

port costs and updated various components in shipping calculations on July 2. Platts also revamped sections I-VI on July 13, Platts also made changes to the CIF ARA coal price listed under LNG Competing Fuels Assessments on July 23 to replace the existing CIF ARA 90-day coal assessment in \$/MMBtu with the CIF ARA 15-60-day coal assessment in \$/MMBtu.

November 2017: Platts updates JKM™ quality specifics as LNG spot pricing becomes more precise.

October 2017: Platts expanded the JKM™ derivatives curve assessment to include a new calendar year period.

September 2017: Platts amended Panama Canal transit cost from \$0.18/MMBtu to \$0.21/MMBtu on September 18.

August 2017: Platts completed an annual update to the LNG Methodology and Specifications guide in August 2017. In this update, Platts reviewed all content. In this edition, Platts made minor edits throughout.

June 2017: Platts launched five half-month assessments for the DES West India assessment. Platts launched new freight route costs from Trinidad to North Asia using Panama Canal.

February 2017: Platts launched new freight route costs to the Egyptian port of Ain Sukhna from loading ports in the existing freight route cost table.

January 2017: Platts launched the DES Middle East Marker and corresponding comparisons on January 16, 2017. Platts also replaced the Qinhuangdao coal price with the Northeast Asia Thermal Coal price index, or NEAT Coal Index (\$/MMBtu conversion).

November 2016: Platts launched monthly averages and cumulative monthly averages for JKM™, JKM™ JPY conversions, NWE, SWE, EAM, West India and GCM markers. JKM™

derivatives curve assessment expanded to include two new quarter periods.

October 2016: Platts introduces new assessment of currency conversion for JKM™, assessment to Jpy/MMBtu.

September 2016: Platts completed an annual update to the LNG Methodology and Specifications guide in September 2016. In this update, Platts reviewed all content. In this edition, Platts made minor edits throughout.

August 2016: Platts corrects printing errors in the LNG Methodology and Specifications Guide relating to the freight routes going to Japan/Korea. These were wrongly printed S China/Taiwan; Platts added symbol AAUSY00 for the route Australia>Southwest Europe that was previously missing; clarified Sabine Pass>West India freight

July 2016: Platts clarifies LNG freight route costs following a printing error in the LNG Methodology and Specifications Guide relating to the voyage times for two freight routes. The routes are Sabine Pass to Argentina and Sabine Pass to Brazil.

July 2016: Platts added new freight routes via the Panama Canal.

June 2016: Platts introduced the Gulf Coast marker and corresponding fuel comparisons on June 16, 2016, and added new freight routes loading from US Gulf.

January 2016: Platts revised its shipping assumptions and

netback calculations methodology to reflect newer spot tonnage and provide more specificity regarding routes.

October 2015: Platts introduced the DES Brazil netforward on October 1 2015 and changed its basis port for Brazil from Pecem to Bahia de Salvador. A number of price comparisons against the DES Brazil netforward were also launched.

February 2015: This methodology guide was updated to include further description of Platts processes and practices in survey assessment environments.

January 2015: Platts introduced the East Atlantic Marker (EAM) assessment for FOB cargoes lifted from ports along the East Atlantic on January 2, 2015. Additions to the global freight costs table were made in light of the launch of the EAM. Rotterdam was added as a bunker port to accommodate the addition of Norway as an export destination. Brazil as an import destination was also included within the global freight cost matrix.

November 2014: Platts revamped all LNG Methodology And Specifications Guides, including this guide in November 2014. This revamp was completed to enhance the clarity and usefulness of all guides, and to introduce greater consistency of layout and structure across all published methodology guides. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself.

August 2012: Platts changed the FOB Middle East (FOB ME) quote to a netback calculation. This was clarified in the methodology guide in October 2015.

June 2012: Platts launched daily Asian LNG derivatives assessments. Platts also launched the sixth half-month cycle for JKM™ on June 1, 2012.

August 2011: Platts modified the methodology for the daily spot DES West India assessment from a net-forward calculation which applied the freight cost addition to the FOB Middle East (FOB ME) assessments, to a stand-alone DES West India assessment on August 1 2012.

January 2011: Platts launched on January 17, 2011, daily LNG freight cost assessments for 55 routes.

June 2010: Platts launched daily spot Southwest European (SWE) LNG assessments and daily spot Northwest Europe (NWE) LNG assessments on June 28, 2010.

January 2010: Platts launched on June 28, 2010, daily spot charter LNG carrier assessments under the benchmark names Asia Pacific LNG Day Rates (APDR) and Atlantic LNG Day Rates (ATDR). In addition, Platts launched a netforward calculation for West India on January 8 2010. Platts also launched daily spot assessments for FOB Middle East (FOB ME) on January 8.

January 2010: Platts began publishing a single value assessment for the JKM™ from January 4 2010. Prior to January 4, 2010, Platts published a low-high range of price, indicating a narrow tradable range either side of the mean spot market value, assessed at the close of Asian markets on a typical trading day.