

Sling – Pricing Asia’s LNG

Dubai/Kuwait/India (DKI)

Background

Liquefied Natural Gas (“LNG”) is set to be the fastest growing fossil fuel source for power generation over the next two decades. Strong demand growth in the Asian region, coupled with new supplies from North America, Australia, Russia and East Africa, are set to drive trading and hedging activities in the spot LNG market.

Introducing Sling

The SGX LNG Index Group (“Sling”) is a series of indices created by Energy Market Company (“EMC”) and Singapore Exchange (“SGX”) to reflect the price of spot LNG cargoes at selected locations. The Sling is tailored to meet the industry’s needs for a responsive and transparent price point, as LNG spot trading volume increases. The Sling comprises the following indices:

- Singapore Sling
- North Asia Sling

The third Sling index - Dubai/Kuwait/India (DKI) - is developed in collaboration with Tullett Prebon, the world’s leading physical LNG broker, and is focused on the fastest growing region of LNG demand in Asia.

Methodology

The Sling is based on weekly assessments from a group of physical LNG players for the 3rd, 4th, 5th and 6th half-calendar months following the day of assessment. The index is calculated as the simple average of assessments for the first full month of delivery, with the top and bottom 15% outliers removed.

The indices are computed using assessments from a balanced and stable group of industry participants, which avoids issues such as data inconsistency, reporting lags, adjustment and editorial intervention. There are more than 20 participants comprising trading companies, producers and consumers which are active in the physical LNG market. Every participant, regardless of size, contributes only one assessment, so that no one firm has undue influence over the index.

Index Specifications

Participants’ Guiding Question When Quoting	“What are your assessments of a fair mid-price for LNG cargoes delivered ex-ship (“DES”) to the designated ports in Dubai, Kuwait, India on this assessment day?” For more details, please refer to the section overleaf on quoting specifications.
Assessment Periods	Assessments are made for 3 rd , 4 th , 5 th and 6 th half-calendar months, from the day of determination.
Index Value Calculation	The index is calculated for the first full calendar month of assessments as the arithmetic mean of its half month prices. The index is calculated to the fourth decimal place and rounded to the nearest third decimal place.
Determination Frequency	The determination of the index is done twice weekly on every Monday and Thursday. If the day of determination is a public holiday in Singapore, the calculation will take place on the following day; if the following day is also a public holiday, then there will be no determination for the half week.
Dissemination Time	By 8:00 PM Singapore time (GMT+8) on the relevant Singapore business day.
Hedging Products	Derivatives available



- Index based on twice-weekly assessments
- Based on balanced and stable group of more than 20 physical market participants

- Consistent data reporting
- Transparent governance
- Designed in line with IOSCO Principles

Tullett Prebon Quoting Specifications for DKI (LNG Delivered Ex-Ship Dubai Kuwait India)*

Delivery Term:

LNG shall be delivered on [DES/DAP/DAT] basis as per Incoterms [2000/2010].

Discharge Port:

The Base Discharge Port shall be one of the named regasification terminals, located in a safe port in the “DKI Market” (Dubai, Kuwait or India).

Contract Quantity:

Buyer and Seller shall agree an Estimated Delivered Quantity, “EDQ”, within the range 3.1 to 3.6 Trillion BTUs at the point of trade.

Delivery Window:

Buyer and Seller shall agree a five (5) Day Delivery Window, the “5 Day DW”, at the point of trade. No later than thirty-five (35) days prior to the first day of the 5 Day DW, Buyer shall nominate within the 5 Day DW a two (2) Day Delivery Window, the “2 Day DW”. After such nomination the 2 Day DW shall become the Delivery Window.



Uses of Sling

Sling can be used in the following ways:

- Price reference or floating basis for spot trades
- Price index for long term physical contracts
- Sling derivatives for hedging against price risk

Getting Started

- Subscribe to Sling (complimentary up to 2017); or
- Apply to participate in Sling (subject to meeting specific criteria)

Please contact us at:

Tel: +65 6557 2200

Email: lngindexdata@emcsg.com

URL: www.emcsg.com/Sling

All Participants and Subscribers will receive a notification email every publication day.

Supply Source:

For each Cargo, Seller shall nominate in writing the Supply Source no later than 40 days prior to the beginning of the first Day of the 5 Day Delivery Window. No later than thirty (30) days prior to the first Day of the 2 Day DW, Seller can nominate alternative Supply Source subject to meeting quality specifications. Once Seller's Facilities are specified, the relevant provisions of the Force Majeure clause in the respective MSA shall apply in respect of those Seller's Facilities.

LNG Specification:

The LNG Specification for LNG at the Discharge Port is as follows:

The temperature of the LNG on each cargo at the Discharge Port shall not be warmer than minus 159 degree Celsius.

There shall be no solids or any other impurities in the LNG.

In the event that the final nominated Discharge Port is able to accept a wider specification of LNG, Buyer shall use reasonable endeavours to accept alternative quality specifications.

Full quality specifications are listed in the table below.

LNG Ship:

The LNG Ship shall have a gross volumetric capacity of no less than 138,000m³ and no greater than 170,000m³.

The DKI Market

Country	Port	Terminal
India	Dahej	Dahej
India	Dabhol	Dabhol
India	Kochi	Kochi
Kuwait	Mina Al-Ahmadi	Mina Al-Ahmadi GasPort
Dubai	Jebel Ali	FSRU in Jebel Ali

LNG Specification

	Units	Minimum	Maximum
Nitrogen (N2) %Mol	%	0	1%
Methane (C1) %Mol	%	84%	100%
Ethane (C2)%Mol	%	0	8%
Propane (C3) %Mol	%	0	3%
Butane (C4) %Mol	%	0	2.0%
Pentanes plus (C5+) %Mol	%	0	0.25%
Carbon Dioxide(CO2)	ppm (vol.)	0	55.0
Gross Heating Value	Btu/Scf	1000	1165
Wobbe Index	Btu/Scf	1350	1450
Hydrogen Sulphide	mg/NCM	0	5
Mercaptan Sulphur	mg/NCM	0	7
Total Sulphur	mg/NCM	0	30
Water	ppm (vol.)	0	0.10
Mercury	ng/SCM	0	50

* Full contract specifications are available at www.emcsg.com/Sling

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