

Indian Gas Exchange

Introduction to Long Duration Contracts (LDCs)

t

Jan-2025



Gas Exchange: Overview

Physical Delivery based Gas Exchange

Operating under PNGRB's Gas Exchange Regulations, 2020

6 Regional Gas Hubs

Hubs & Delivery points

- 6 Regional Gas Hubs
- 16 delivery points within 3 regional hubs (Western, Southern, Eastern)

9 Contracts*

Intra-Day | **Day-Ahead** | **Daily** | **Weekly** | **Weekday** | **Fortnightly** | **Monthly**

12 consecutive monthly contracts are available on any trade date

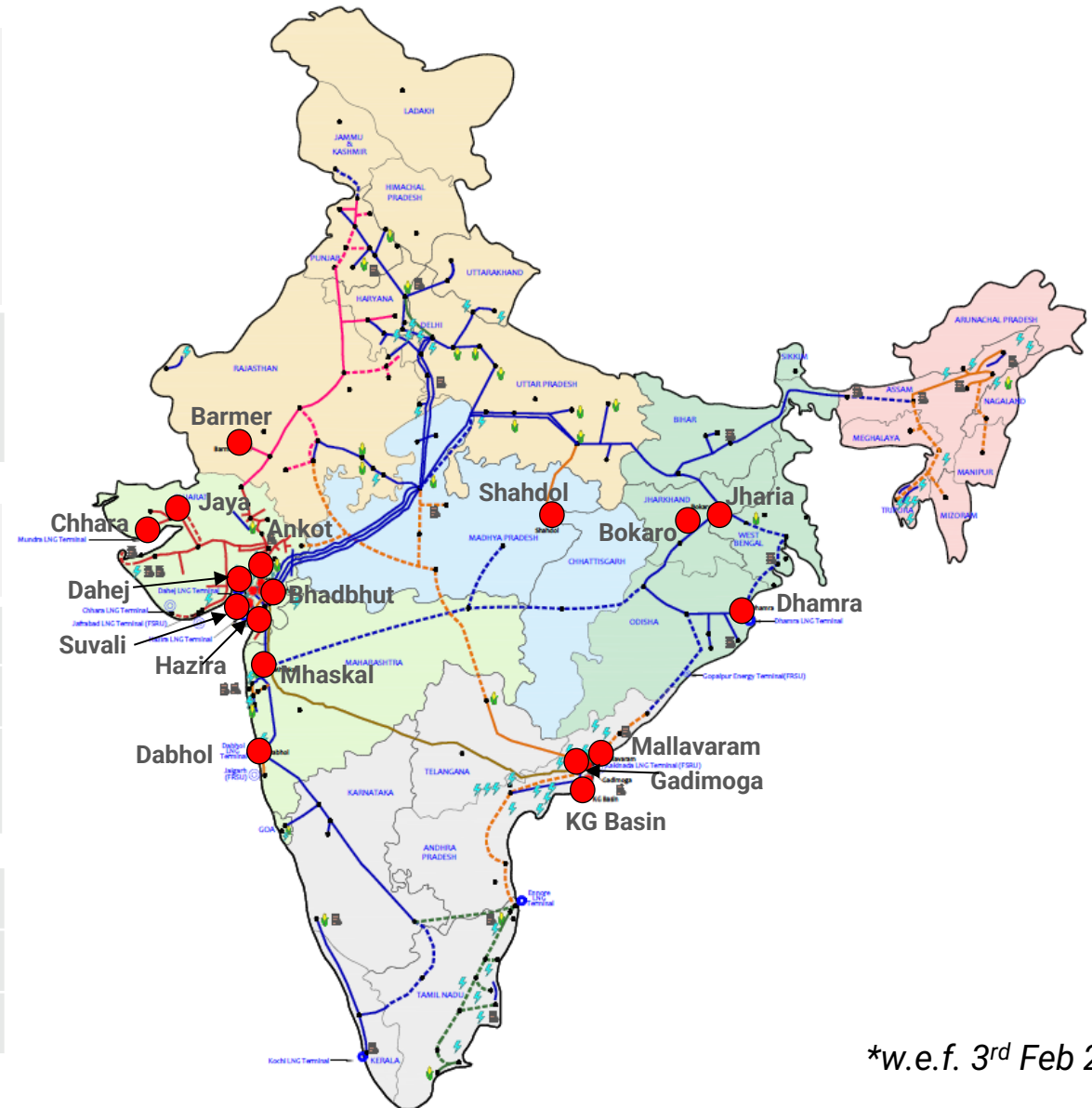
Long Duration Contracts* (3-months and 6-months) linked to GIXI, JKM, WIM, Brent,

Facilitates trade for:

RLNG

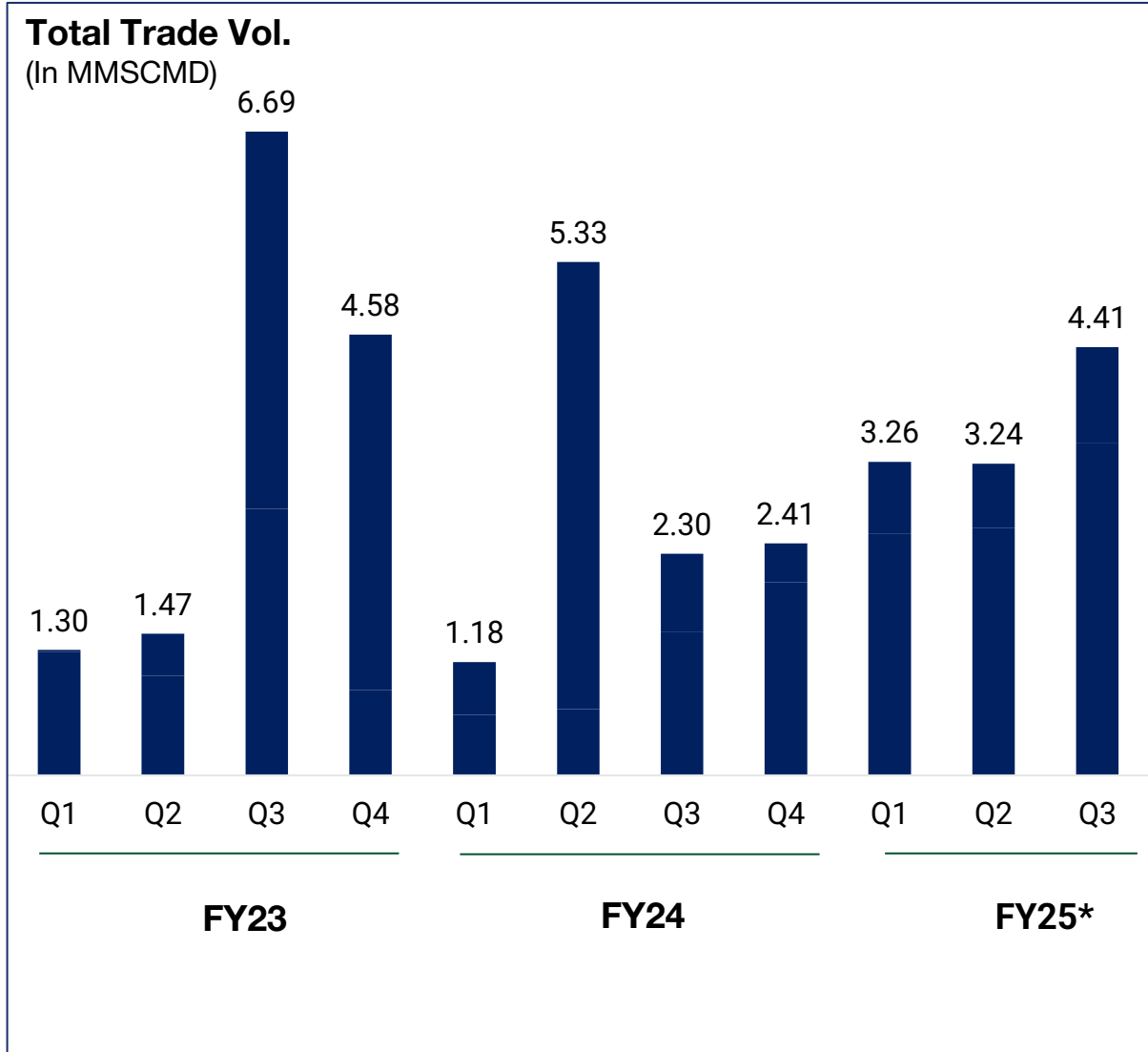
Domestic gas (with pricing freedom)

small-scale LNG (ssLNG)



*w.e.f. 3rd Feb 25

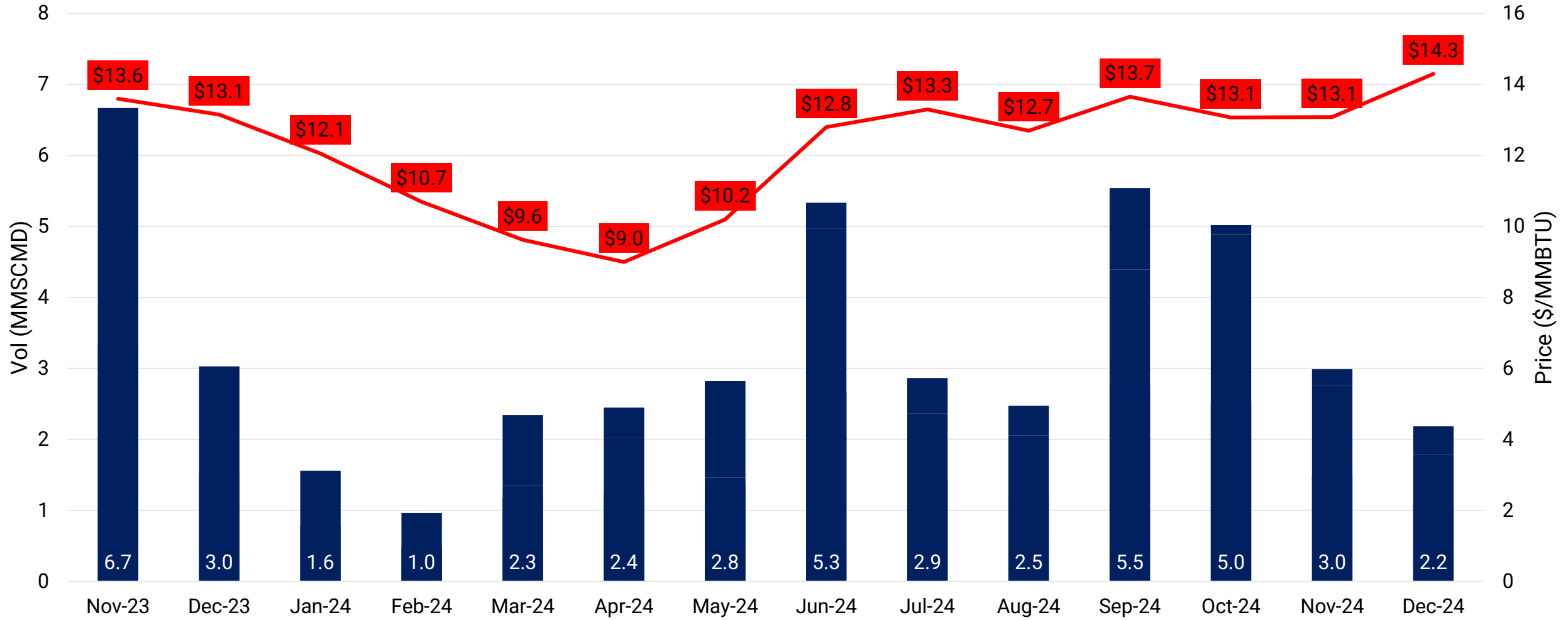
Trade Highlights



- Total trade volume : **> 3.5 BCM (14 Cr. MMBtu)**
- Total trade volume in FY25* : **1 BCM (4 Cr.)**
- Total No. of Trades Executed FY25*: **1040+**
- Total trade volume in FY24: **>1 BCM (4.1 Cr.)**
- Total No. of Trades Executed in FY24: **998**
- Total Participants: **35+ Sellers & 190+ Buyers**
- Total Members & Clients : **47+ Members & 200+ Clients**

IGX Highlights-Delivery Volume and Price

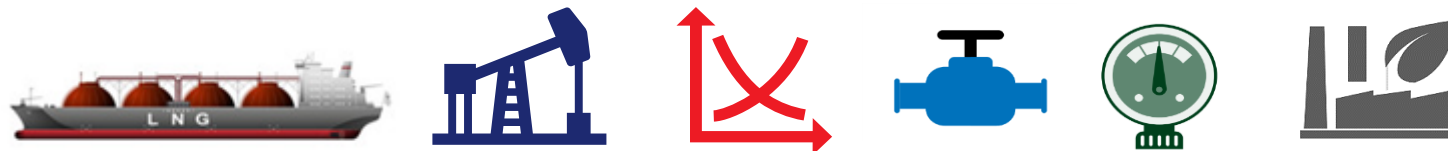
Trade Volume and Price



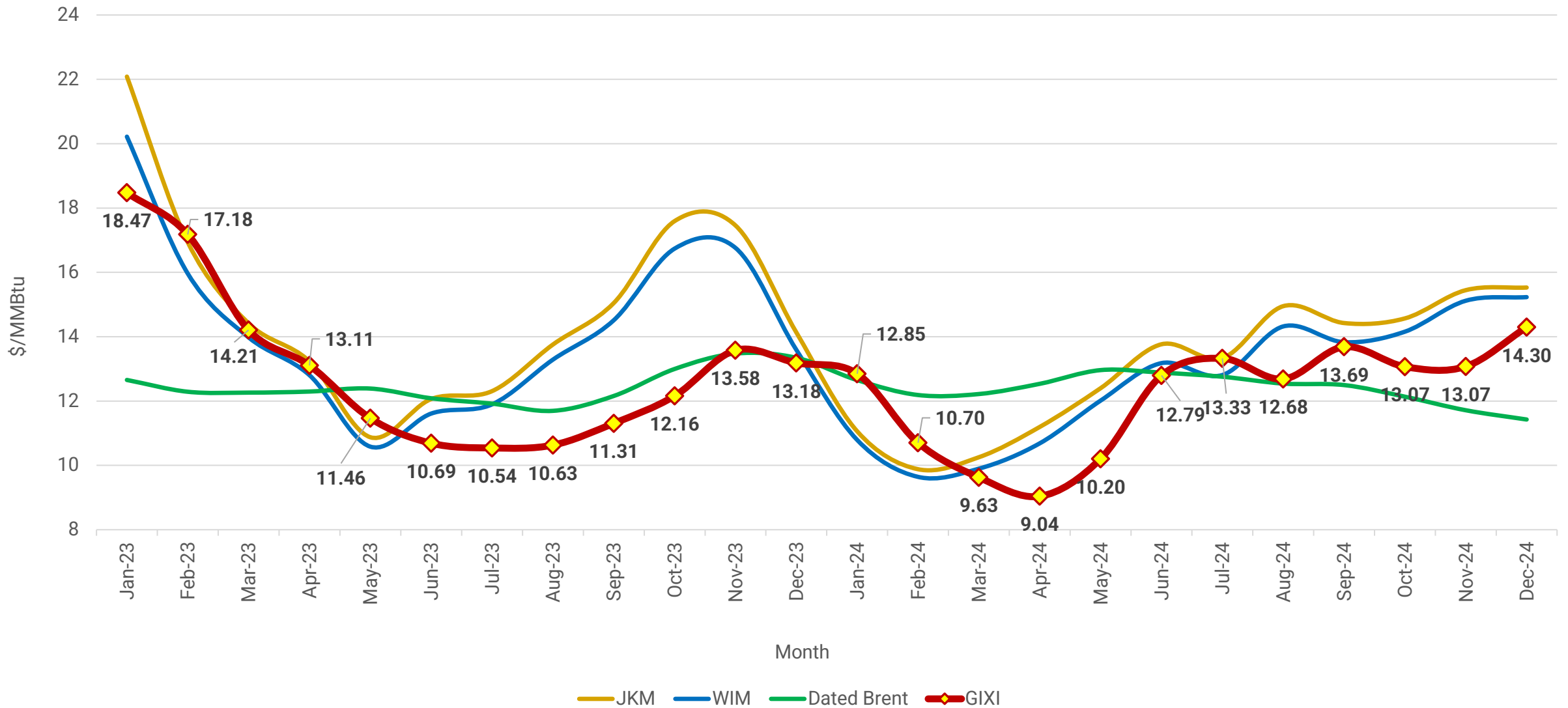
*For delivered volumes both ceiling and non ceiling volumes are considered , and Prices Excluding Ceiling Price

Introduction to Long Duration Contracts

Available for trading from 3rd February 2025



Gas Price Volatility



Note :
 1) JKM & WIM are Ex. West India after adding Custom Duty and Regas Charges.
 2) Dated Brent Prices are as per Long term LNG Contract Formula after adding Custom Duty and Regas Charges.

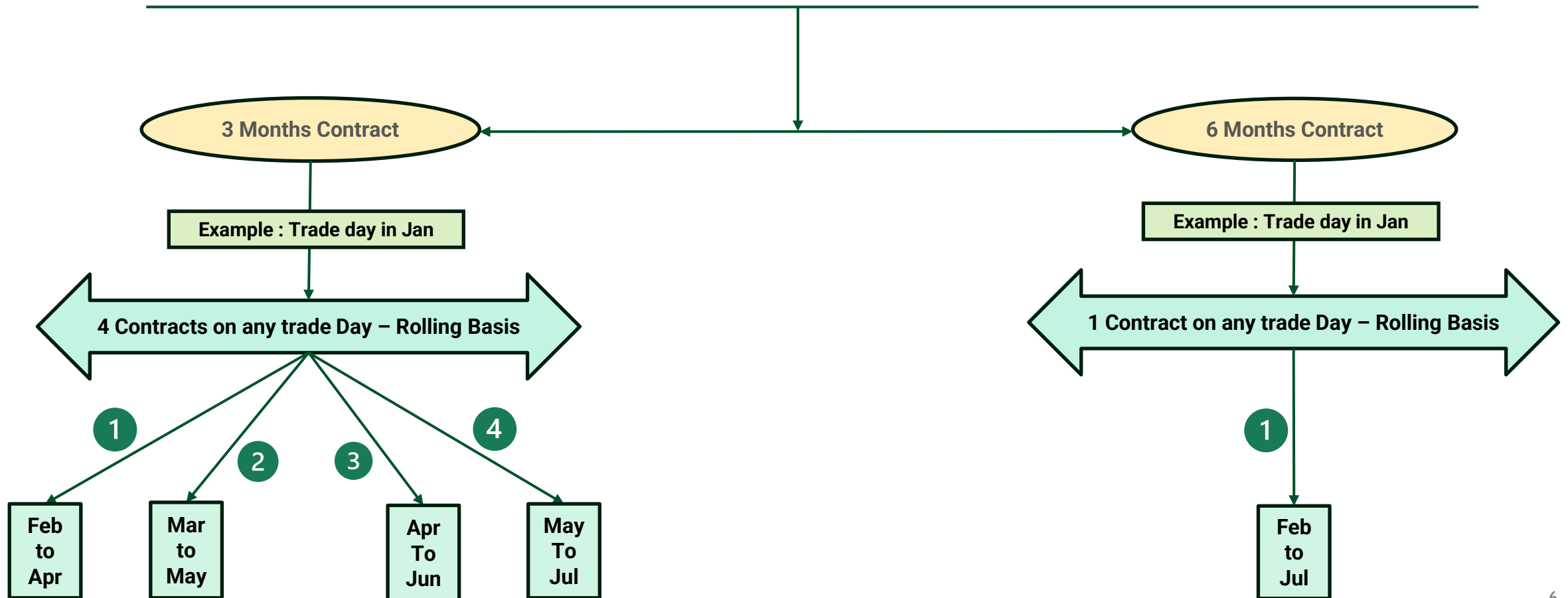
Long Duration Contracts (4 Index) – Trading Timeline

S&P Global
Platts JKM™ (Japan Korea Marker)

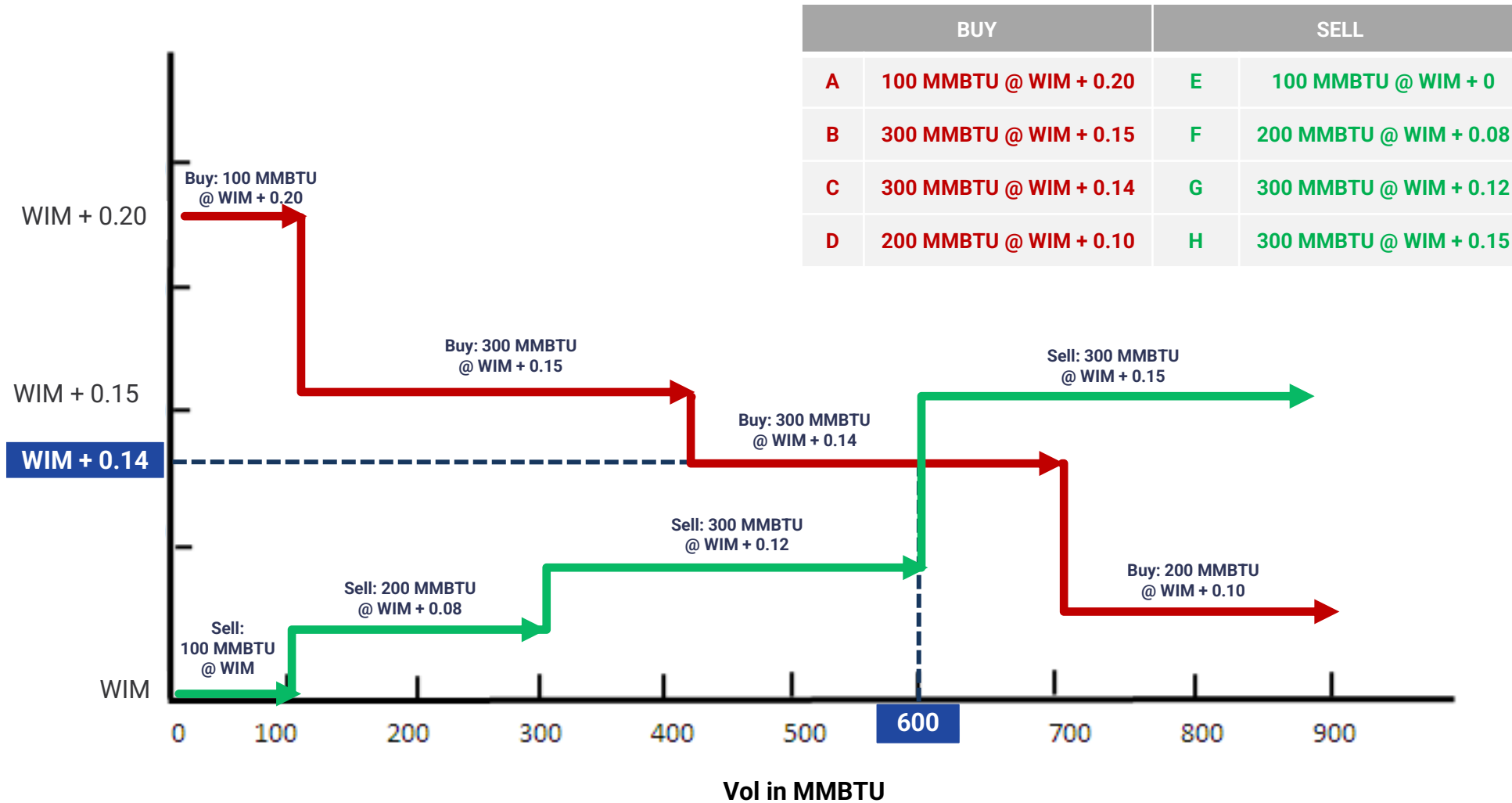
S&P Global
Platts WIM (West India Marker)

S&P Global
Dated Brent

GIXI
 — Gas Index of India —



Uniform Price double sided auction mechanism



Cleared volume : 600 MMBTU

MCP : \$ (WIM + 0.14) /MMBTU

Settlement Price Workout – Long Duration Contract

S&P Global
**Platts JKM™ (Japan
Korea Marker)**



Assessment Period :
For **Delivery in August**,
JKM assessment would
be **(Average quotations
for period of)**
16th June to 15th July

S&P Global
**Platts WIM (West
India Marker)**



Assessment Period :
For **Delivery in August**,
WIM assessment would
be **(Average quotations
for period of)**
16th June to 15th July

S&P Global
Dated Brent



Assessment Period :
For **Delivery in August**,
Dated Brent assessment
would be **(Average
quotations for period of)**
1st July to 31st July

GIXI
— Gas IndeX of India —



Assessment Period :
For **Delivery in August**,
GIXI assessment would
be **(Average trade price
for period of)**
1st July to 31st July

₹ conversion from \$ - Average of SBI TT Buy & TT Sell rates (latest available on invoicing day)

3M-WIM-P-ML-FEB25/APR25 ✕			
WIM±P		Parameter: P (Constant)	
Qty	Buy	Sell	Qty
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

WIM 3M – Bidding at P (\$/MMBtu)

3M-JKM-P-KC-FEB25/APR25 ✕			
JKM±P		Parameter: P (Constant)	
Qty	Buy	Sell	Qty
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

JKM 3M – Bidding at P (\$/MMBtu)

3M-BRN-P-DH-FEB25/APR25 ✕			
12.67%Brent±P		Parameter: P (Constant)	
Qty	Buy	Sell	Qty
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Brent 3M – Bidding at P (\$/MMBtu)
12.67% slope fixed

3M-BRN-S-DH-FEB25/APR25 ✕			
S%BRENT+\$1.60		Parameter: S (Slope)	
Qty	Buy	Sell	Qty
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Brent 3M – Bidding at S (%)

- Similar contracts for 6M will also be available.
- For 3 M - we have 4 rolling contracts available
- For 6 M – we have 1 contract available

Comparison of LDC with Current Contracts

Broad Comparison among different IGX Contracts

Parameter	Type of Contract			
	Normal Monthly Contract	Power Contract	Flexible Contract	LDC
Delivery Points Available	16	5	3	13
Type of contracts	All	Monthly, Fortnightly, Weekly	Monthly	3M and 6M
Availability of contracts	M-12	M-2	M-3	3M - 4 Consecutive contracts 6M - 1 Contract
Lot Size	50 MMBtu/day	50 MMBtu/day	50 MMBtu/day	50 MMBtu/day
Min. lot size for bidding	1 (50 MMBtu/day)	1 (50 MMBtu/day)	200 (10,000 MMBtu/day)	1 (50 MMBtu/day)
ToP/LD	90% in Free Market Gas / 85% in Ceiling Price Gas	90%	90%	85%
Recovery period	No	Yes	No	Yes
Recovery Days	0	MN - 7 FN- 4 WK -2	0	3 M – 10 6M - 15
Pay-in	D-1	D-1	FN+4	FN+4

NG Portfolio Management by Stakeholders

- ✓ Can diversify the risk by selling/buying in 4 different types of benchmark linked contracts.
- ✓ Can sell back-to-back molecules locking in the margin.
- ✓ Can offer blended portfolio to downstream customers.
- ✓ Risk management is offered by the Exchange.

S&P Global

**Platts JKM™ (Japan
Korea Marker)**

S&P Global

**Platts WIM (West
India Marker)**

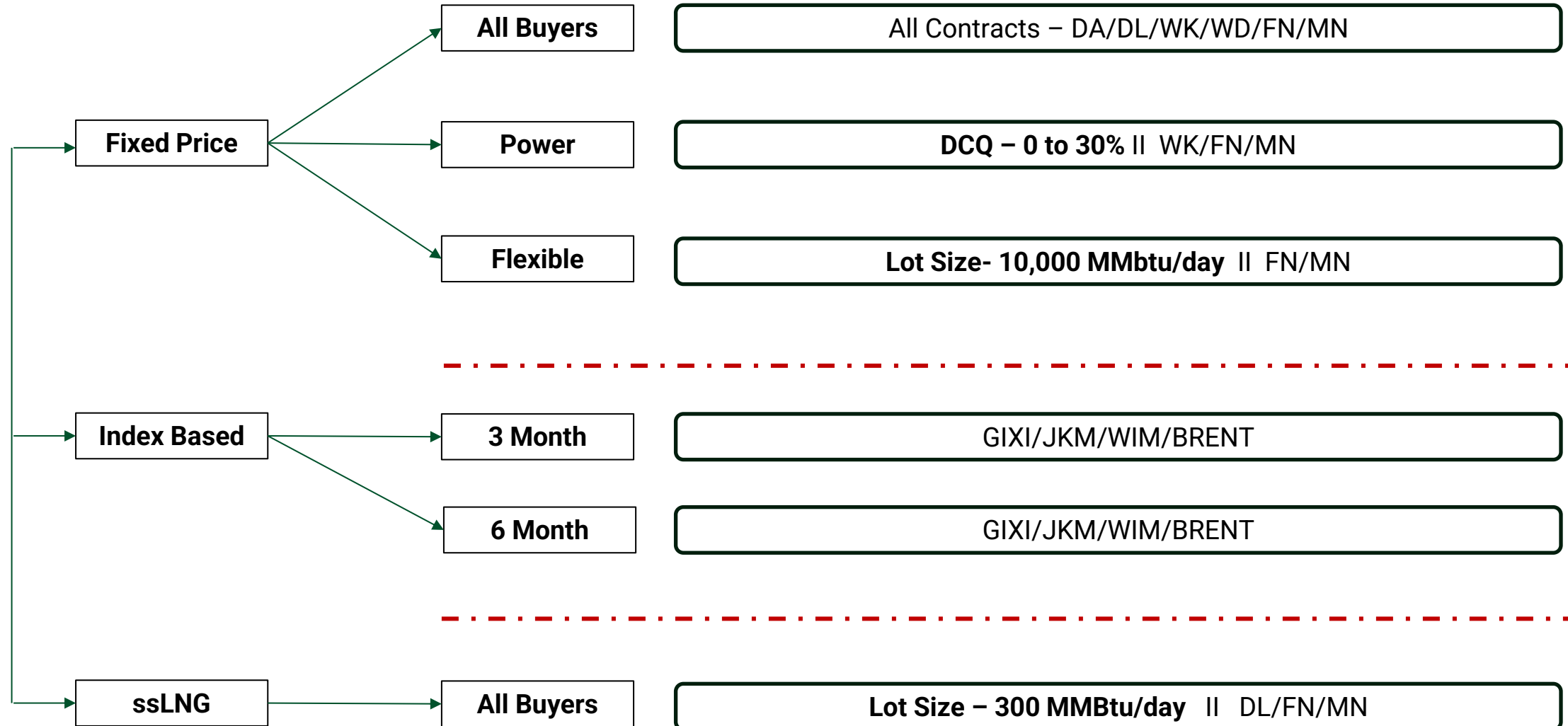
S&P Global

Dated Brent

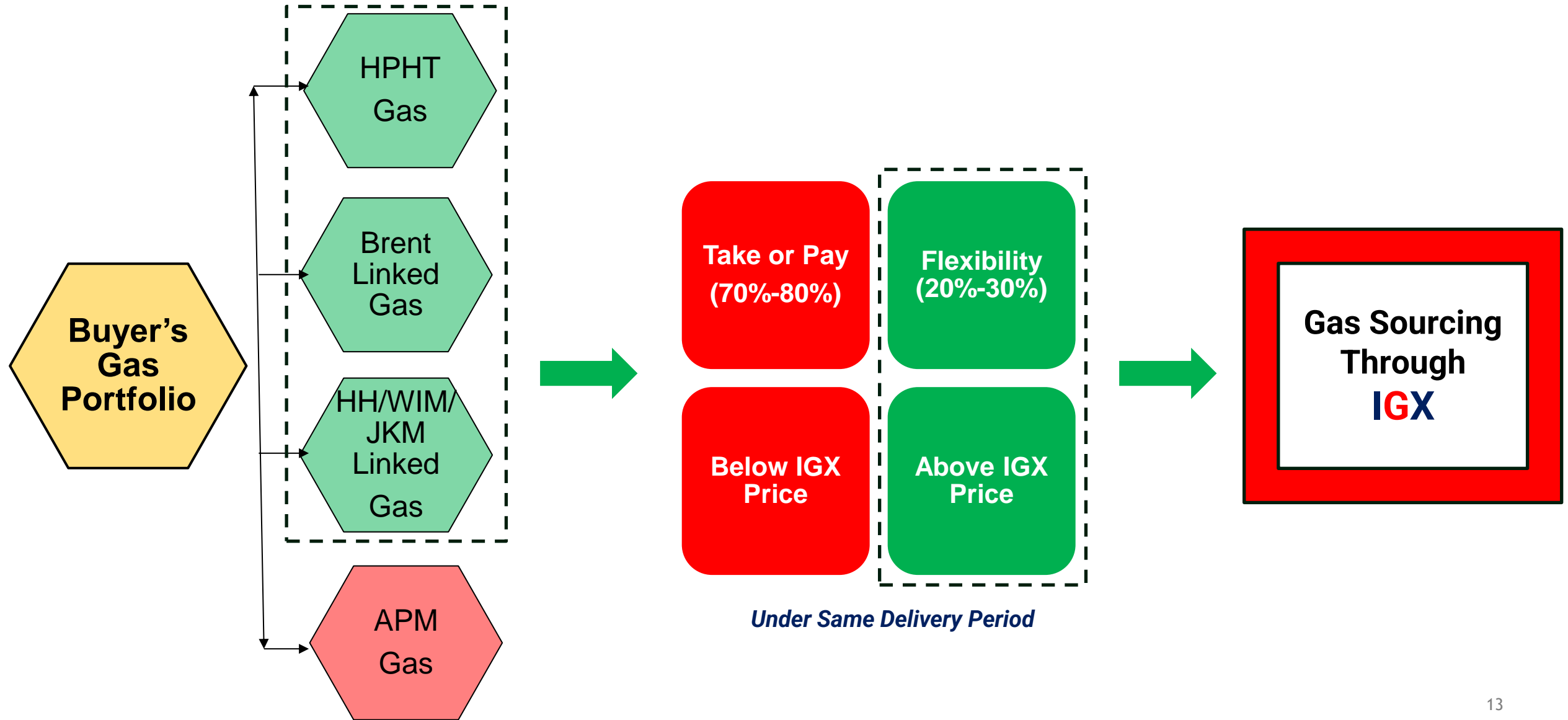


GIIX
— Gas IndeX of India —

Innovative Contracts offering as per the need of customer



Opportunity to Optimize Gas Portfolio



Value Propositions - Long Duration Contract at IGX

- ✓ **Flexible contracts** for sale and purchase of gas in Spot to Mid Term
- ✓ Open auction will allow **real-time** comparison of price across hubs
- ✓ **Choice** to bid prices linked to GIXI or Platts benchmarks like WIM, JKM, Brent etc
- ✓ Clients would be bidding +/- constant post **selecting the price benchmark**
- ✓ **Ease of Trade-** Sellers/Buyer does not require GSA signing, Standardized contracts approved by PNGRB
- ✓ **One-stop solution** to buy/sell natural gas with end-to-end management of trades viz., trading, clearing, delivery and settlement
- ✓ Provides opportunity to buyers to **hedge risk** against volatility in spot prices
- ✓ Provides **avenue to the sellers** to sell their surplus gas and provides **robust payment security**

IGX Members and Clients

IGX has 47 registered Members and 200+ registered clients

Proprietary Member



Trading & Clearing Member






Clients








*Selected representation

IGX Future Planning (New Products offerings to Market)

-  **Compressed Bio-gas / Green Certificates Trading**
-  **Hydrogen Trading**
-  **Balance of Month Contracts**

Key Gas Market Enablers

-  **Implementation of Access Code Regulations and Formation of ISO**
-  **Moving towards Entry Exit transportation tariff system**
-  **Price Discovery of APM gas through Exchange - Implementation of Kirit Parikh report recommendations**
-  **Allowing Fertilizer Plants for Sourcing of Gas through Exchange**
-  **Natural Gas under GST with one nation one taxation system**

Energy Talk on Enhancing Gas Markets: Developing India As Gas Hub

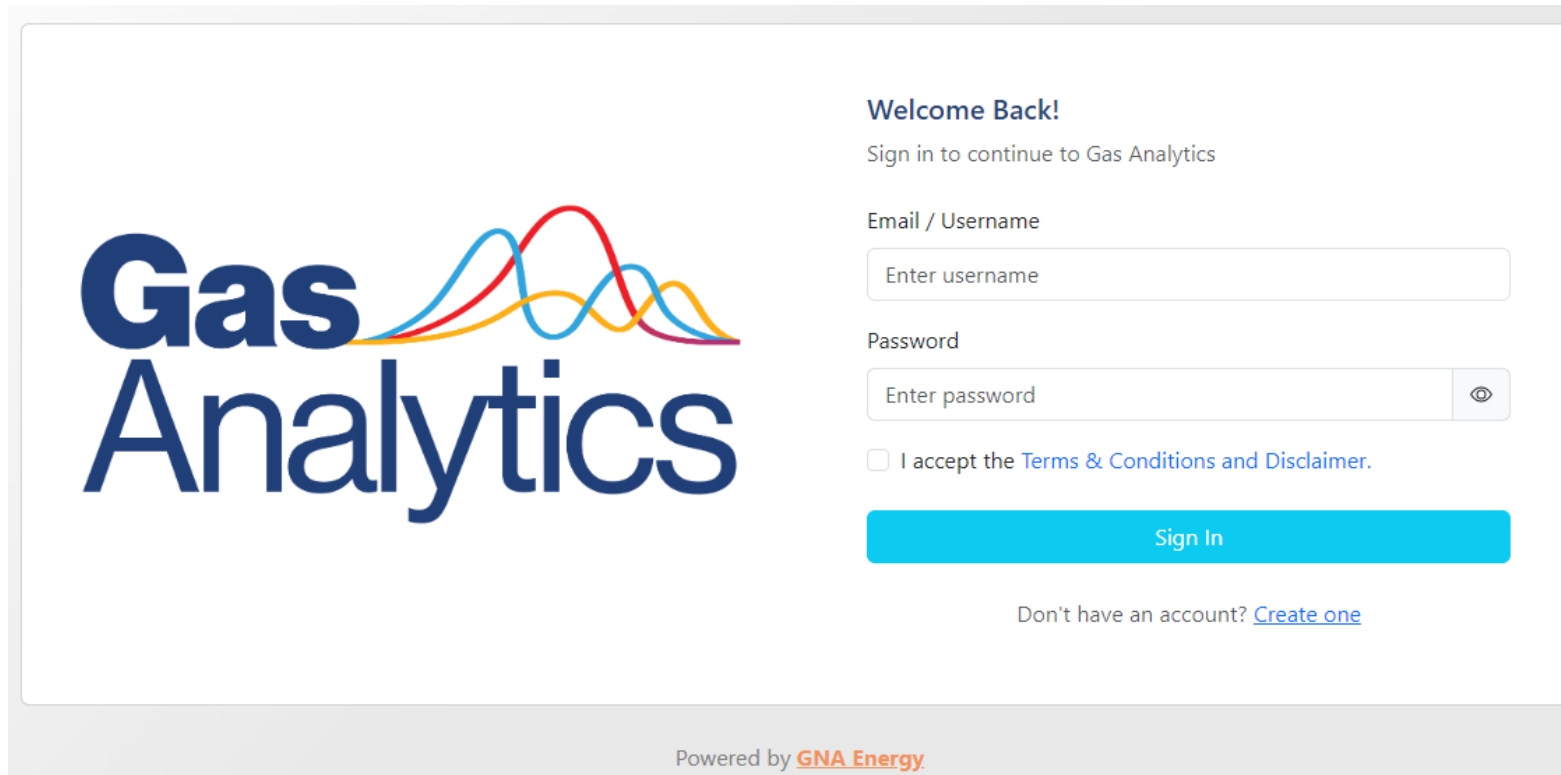


Participation of 300 + attendees - top leadership from Industries and senior guests from PNGRB, & other Regulatory body.

Launch of Gas Analytics, a one stop solution to analyze Indian Natural gas Sector scenario by Dr. Anil Kumar Jain, Chairperson PNGRB

The role of IGX in developing India as a Gas Hub was discussed. Dr. Jan Haizman highlighted the key takeaways from European exchange.

Comprehensive, one-stop platform for Indian gas market insights



The image shows a login interface for Gas Analytics. On the left is the logo with the text "Gas Analytics" and a colorful wave graphic. On the right, the text "Welcome Back!" is followed by "Sign in to continue to Gas Analytics". There are input fields for "Email / Username" and "Password". Below the password field is a checkbox for "I accept the Terms & Conditions and Disclaimer." and a blue "Sign In" button. At the bottom, it says "Don't have an account? [Create one](#)". At the very bottom of the interface, it says "Powered by [GNA Energy](#)".

Registration Link - <https://gasanalytics.igxindia.com/>

Agenda



- 1 Trading – Contract, Benchmarks and Trading Screen**
- 2 Clearing – Margining, Mark to Market Settlement**
- 3 Settlement – Invoicing and Payment Terms**
- 4 Delivery – ToP, Make Up, Recovery Period, LD**

Market Segment



Fixed Price Contracts

Month | Fortnight | Week | Weekday

- Trading Window – Mon to Fri, 10 am to 02 pm with 4 extensions
- Price Discovery – Double sided Open Auction
Free Market Gas – Price Time
Ceiling Gas – Price Sector Prorata Time
- Bid Quantity in multiples of 1 lot, where 1 lot =50 MMBtu/d
- Bid Price in Rs/MMBtu | Price Tick = Rs.1/MMBtu
- Gas Contract Price = Trade Price derived from Bid Price
- Contract Code = Delivery Tenure + Delivery Point
Ex - MN-DH-01/03/25-MAR25

Long Duration | Index based Contracts

3 Month (3M) | 6 Month (6M)

- Trading Window – same as existing Fixed Price contracts
- Price Discovery – same as existing Fixed Price contracts
- Bid Quantity - same as existing Mid term contracts
- Bid Price as Constant/Slope of Index
Bid Price in \$/MMBtu for JKM, WIM, Brent | Price Tick = 0.01
Bid Price in Rs/MMBtu for GIXI, Price Tick = Rs. 1/MMBtu
- Gas Contract Price = Index Price + Trade Price (for JKM/WIM/BRN/GIXI)
%Trade Price *Index Price (for BRN)
- Contract Code = Delivery Tenure + Delivery Point + Index Price
Ex - 3M-JKM-P-DH-MAR25/MAY25

Contract Structure



3M- JKM-P -DH - FEB25/APR25

Contract Code

6M- BRN-S -GC - FEB25/JUL25

3M – Series 1
(M +1 to M + 3)

3M – Series 2
(M +2 to M + 4)

3M – Series 3
(M +3 to M + 5)

3M – Series 4
(M +4 to M + 6)

6 Month
(M +1 to M + 6)

Delivery Tenure

RLNG Terminal
Dahej, Hazira, Chhara

Domestic Non Ceiling
KG Basin, Suvali, Jaya, Bokaro, Jharia, Shahdol

I/C Point
Mhaskal

Domestic Ceiling
Gadimoga, KG Basin, Mallavaram

Delivery Points

JKM (\$/MMBtu)
Contract Price - JKM ± P
Bid Price – P, Constant
Tick - \$0.01/MMBtu

WIM (\$/MMBtu)
Contract Price - WIM ± P
Bid Price – P, Constant
Tick - \$0.01/MMBtu

GIXI (INR/MMBtu)
Contract Price - GIXI ± P
Bid Price – P, Constant
Tick – INR 1/MMBtu

BRENT (\$/MMBtu)
Contract Price - %S*Brent ± P
Bid Price – P, Constant
Tick - \$0.01/MMBtu

BRENT (\$/MMBtu)
Contract Price - %S*Brent ± P
Bid Price – S, Slope
Tick - 0.01%

Price Index

Bid Parameters

Existing Monthly Contracts -

Contract Nomenclature = Delivery Tenure + Delivery Point
Ex. MN-DH-01/03/25-MAR25

Bid Parameters = Bid Quantity (in lots) + Bid/Contract Price in Rs./MMBtu

BUY

MN-DH-01/03/25-MAR-2025 Lot Size 50

Client

Hub Dahej Product Monthly

Order Type Limit Validity DAY

Price (Rs/MMBtu) Lots 0

Buy Close

Long Duration Contracts -

Contract Nomenclature = Delivery Tenure + Delivery Point + **Index Price**
Ex. 3M-JKM-P-DH-MAR25/MAY25

Bid Parameters = Bid Quantity (in lots) + **Bid Price as Constant or Slope**
where, Contract Price = Index Price \pm Bid Price for JKM, WIM and GIXI

Buy

3M-JKM-P-DH-MAR25/MAY25 Lot Size: 50MMBtu

Indexed price contract linked JKM#P Tick Size: \$0.01

Client

Delivery Point Dahej Product 3MONTH

Order Type Limit Validity DAY

P (Constant) in \$/MMBtu Lots Quantity: 0 / day

Buy Close

Double sided Open Auction (1/2)



- For bid date 29th Jan'25; Contract Symbol 3M-JKM-P-DH-MAR25/MAY25

Buy Bid			
Buyer	Bid Price (P), in USD/MMBtu	Buyer Offered Gas Price	Buy Lots
B1	<u>0.5</u>	JKM + <u>0.5</u>	200

Sell Bid			
Seller	Price (P), in USD/MMBtu	Seller Offered Gas Price	Sell Lots
S1	<u>0.5</u>	JKM + <u>0.5</u>	250
S2	<u>1</u>	JKM + <u>1</u>	100

Matching and Allocation			
Trade Price (P, TP)	Gas Contract Price	Buy Bid Selected	Sell Bid Selected
0.5	JKM + 0.5	B1 = 200 lots = 10000 MMBtu/day	S1 = 200

- For Contract Symbol 3M-JKM-P-DH-MAR25/MAY25, the Gas Contract Price will be
 Contract Price = JKM 'Index Price' (in US\$/MMBtu) + 0.5 'Trade Price' (in US\$/MMBtu)

Double sided Open Auction (2/2)



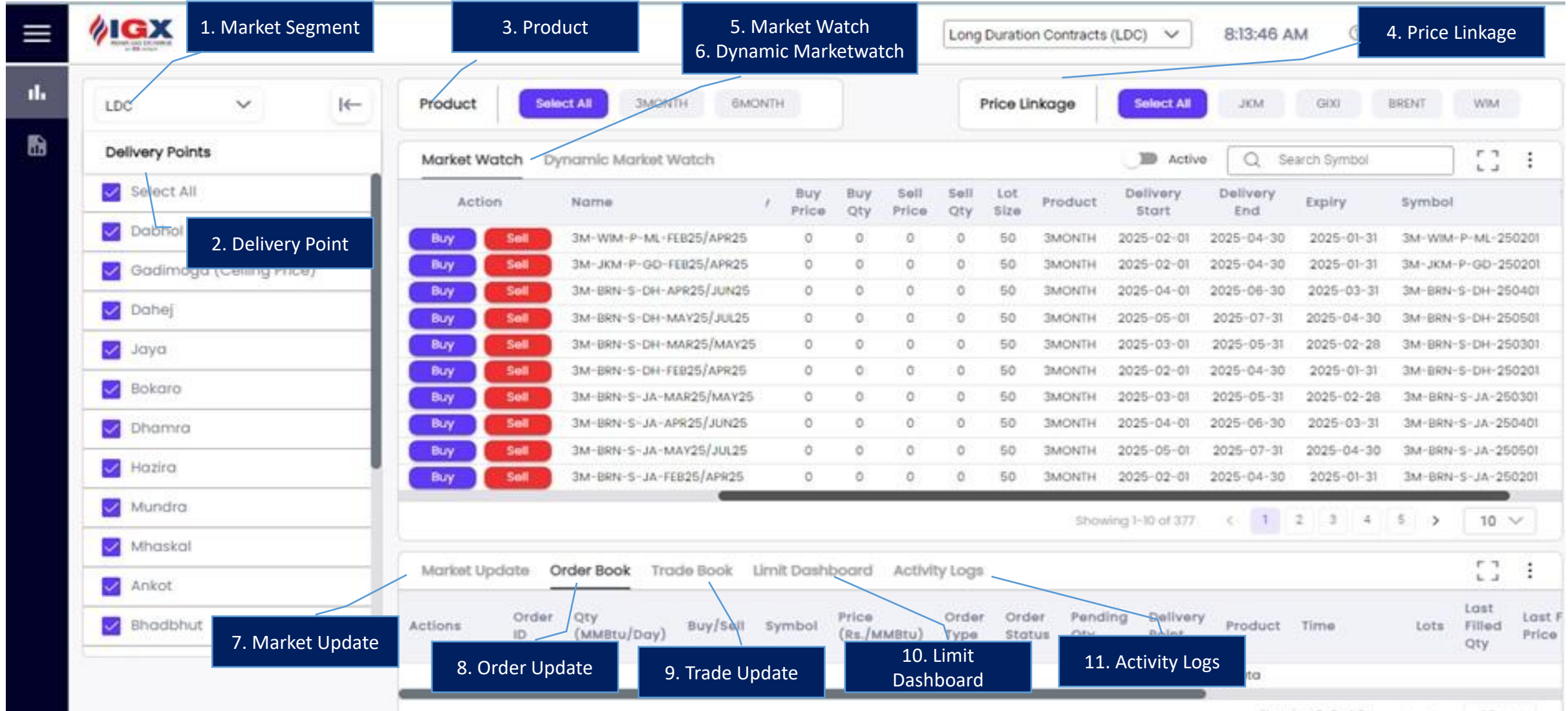
- For Contract Symbol 3M-JKM-P-DH-MAR25/MAY25 -

Contract Price for Settlement = JKM 'Index Price' (in US\$/MMBtu) + 0.5 'Trade Price' (in US\$/MMBtu)

Settlement/Delivery Period	Settlement Date	JKM Index Price (in US\$)	Trade Price (in US\$)	Gas Settlement Price (in US\$)	Conversion Rate	Settlement Price (in INR)
1 st Half MAR	15 th Mar	12	0.5	12.5	80	1000
2 nd Half MAR	31 st Mar	12	0.5	12.5	80.5	1006
1 st Half APR	15 th Apr	12.75	0.5	13.25	80.25	1063
2 nd Half APR	28 th Apr	12.75	0.5	13.25	81.25	1077
1 st Half MAY	15 th May	13	0.5	13.5	81.5	1100
2 nd Half MAY	31 st May	13	0.5	13.5	81.75	1104

- Conversion Rate means the average of the TT (Telegraphic Transfer) buying and selling rates of exchange for converting US\$ to INR, as quoted by SBI applicable on the date of invoicing

Trading Gateway



The screenshot displays the IGX Trading Gateway interface with several callout boxes highlighting key features:

- 1. Market Segment:** Points to the 'LDC' dropdown menu.
- 2. Delivery Point:** Points to the 'Select All' checkbox in the 'Delivery Points' list.
- 3. Product:** Points to the 'Product' section with 'Select All', '3MONTH', and '6MONTH' buttons.
- 4. Price Linkage:** Points to the 'Price Linkage' section with 'Select All', 'JKM', 'GIXI', 'BRENT', and 'WIM' buttons.
- 5. Market Watch / 6. Dynamic Marketwatch:** Points to the 'Market Watch' and 'Dynamic Market Watch' tabs.
- 7. Market Update:** Points to the 'Market Update' tab.
- 8. Order Update:** Points to the 'Order Book' tab.
- 9. Trade Update:** Points to the 'Trade Book' tab.
- 10. Limit Dashboard:** Points to the 'Limit Dashboard' tab.
- 11. Activity Logs:** Points to the 'Activity Logs' tab.

The main content area shows a table of market watch data:

Action	Name	Buy Price	Buy Qty	Sell Price	Sell Qty	Lot Size	Product	Delivery Start	Delivery End	Expiry	Symbol
Buy	3M-WIM-P-ML-FEB25/APR25	0	0	0	0	50	3MONTH	2025-02-01	2025-04-30	2025-01-31	3M-WIM-P-ML-250201
Buy	3M-JKM-P-GD-FEB25/APR25	0	0	0	0	50	3MONTH	2025-02-01	2025-04-30	2025-01-31	3M-JKM-P-GD-250201
Buy	3M-BRN-S-DH-APR25/JUN25	0	0	0	0	50	3MONTH	2025-04-01	2025-06-30	2025-03-31	3M-BRN-S-DH-250401
Buy	3M-BRN-S-DH-MAY25/JUL25	0	0	0	0	50	3MONTH	2025-05-01	2025-07-31	2025-04-30	3M-BRN-S-DH-250501
Buy	3M-BRN-S-DH-MAR25/MAY25	0	0	0	0	50	3MONTH	2025-03-01	2025-05-31	2025-02-28	3M-BRN-S-DH-250301
Buy	3M-BRN-S-DH-FEB25/APR25	0	0	0	0	50	3MONTH	2025-02-01	2025-04-30	2025-01-31	3M-BRN-S-DH-250201
Buy	3M-BRN-S-JA-MAR25/MAY25	0	0	0	0	50	3MONTH	2025-03-01	2025-05-31	2025-02-28	3M-BRN-S-JA-250301
Buy	3M-BRN-S-JA-APR25/JUN25	0	0	0	0	50	3MONTH	2025-04-01	2025-06-30	2025-03-31	3M-BRN-S-JA-250401
Buy	3M-BRN-S-JA-MAY25/JUL25	0	0	0	0	50	3MONTH	2025-05-01	2025-07-31	2025-04-30	3M-BRN-S-JA-250501
Buy	3M-BRN-S-JA-FEB25/APR25	0	0	0	0	50	3MONTH	2025-02-01	2025-04-30	2025-01-31	3M-BRN-S-JA-250201

Below the table, there are tabs for 'Market Update', 'Order Book', 'Trade Book', 'Limit Dashboard', and 'Activity Logs'. The 'Order Book' tab is currently active, showing a table with columns: Actions, Order ID, Qty (MMBtu/Day), Buy/Sell, Symbol, Price (Rs./MMBtu), Order Type, Order Status, Pending Qty, Delivery Point, Product, Time, Lots, Last Filled Qty, and Last F Price.

Buy ×

3M-JKM-P-DH-MAR25/MAY25 Lot Size: 50MMBtu
Indexed price contract linked JKM±P Tick Size: \$0.01

Client

Delivery Point Product

Order Type Validity

P (Constant) in \$/MMBtu Lots

Buy ×

3M-WIM-P-DH-MAR25/MAY25 Lot Size: 50MMBtu
Indexed price contract linked WIM±P Tick Size: \$0.01

Client

Delivery Point Product

Order Type Validity

P (Constant) in \$/MMBtu Lots

Buy ×

3M-BRN-P-DH-MAR25/MAY25 Lot Size: 50MMBtu
Indexed price contract linked 12.67%Brent±P Tick Size: \$0.01

Client

Delivery Point Product

Order Type Validity

P (Constant) in \$/MMBtu Lots

Buy ×

3M-BRN-S-DH-MAR25/MAY25 Lot Size: 50MMBtu
Indexed price contract linked S%BRENT+\$1.60 Tick Size: 0.01%

Client

Delivery Point Product

Order Type Validity

S (Slope) in % Brent/MMBtu Lots

Buy ×

3M-GIXI-P-DH-MAR25/MAY25 Lot Size: 50MMBtu
Indexed price contract linked GIXI±P Tick Size: ₹1

Client

Delivery Point Product

Order Type Validity

P (Constant) in ₹/MMBtu Lots

Agenda



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- 3 Settlement – Invoicing and Payment Terms**
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LDC Margin Structure

Margin/Security = CONTRACT PERFORMANCE + PAYMENT SECURITY

Existing Monthly
Contract

Post Trade Margin
Seller = 15% of TV
Buyer = 25% of TV
By T + 1

No Margin,
Advance Pay-in
from Buyer on
each D-1 basis

Long Duration
Contract

Contract Performance Margin (CPM)
1. 3M - Seller/Buyer = 15% of TV ~ 14 d
2. 6M - Seller/Buyer = 10% of TV ~ 18 d
By T + 2

Payment Security Margin (PSM)
1. 3M - Buyer = 26% of TV ~ 24 d
2. 6M - Buyer = 13% of TV ~ 24 d
By Delivery Start - 2

Contract Performance Margin (CPM)

Margin (Security) = **CONTRACT PERFORMANCE** + **PAYMENT SECURITY**

Long Duration Contract

Contract Performance Margin (CPM)
 1. 3M - Seller/Buyer = 15% of TV ~ 14 d
 2. 6M - Seller/Buyer = 10% of TV ~ 18 d
 By T + 2

Payment Security Margin (PSM)
 1. 3M - Buyer = 26% of TV ~ 24 d
 2. 6M - Buyer = 13% of TV ~ 24 d
 By D - 2

- CPM in 3M on T date = (15%) of Trade Value = 15% * Price for CPM * Total Trade Qty
 CPM in 3M on T date = (15%)* (Avg. Index Ref. Price for 3 Month ± Trade Price) * Total Trade Qty
- Calculation of Avg. Index Ref. Price -> Example - 3M-JKM-P-DH-MAR25/MAY25, on trade date 29th Jan :-

Delivery Month	JKM Index Code, JKM _M	Price in USD/MMBtu	Conversion Rate 'C _R '	Index Price (in INR), M _{PJKM}
Mar'25	LJKMO01	9	80	720
Apr'25	LJKMO02	10	80	800
May'25	LJKMO03	11	80	880
Reference Price (rounded to 0 decimal places)				800

- Trade Price = TP = USD 0.5/MMBtu = 0.5*80 = INR 40/MMBtu
- Required Contract Performance Margin = 15%*(800+40) * 10000/d*92 ~ INR 12 Cr.



Payment Security Margin (PSM)

Margin (Security) = CONTRACT PERFORMANCE + PAYMENT SECURITY

Long Duration Contract

Contract Performance Margin (CPM)

1. 3M - Seller/Buyer = 15% of TV ~ 14 d
 2. 6M - Seller/Buyer = 10% of TV ~ 18 d
- By T + 2

Payment Security Margin (PSM)

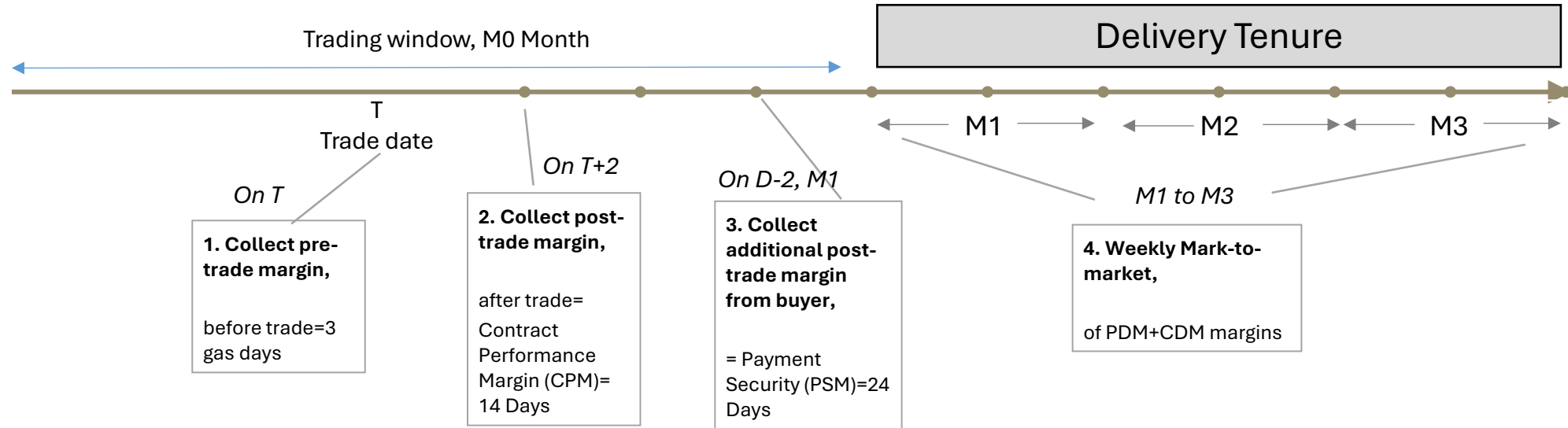
1. 3M - Buyer = 26% of TV ~ 24 d
 2. 6M - Buyer = 13% of TV ~ 24 d
- By D - 2

- PSM in 3M on T date = (26%) * (Latest Index Ref. Price ± Trade Price) * Total Trade Qty
- Calculation of Latest Index Ref. Price Example - 3M-JKM-P-DH-MAR25/MAY25, on trade date 29th Jan :-

Delivery Month	WIM Index Code, JKM _M	Price in USD/MMBtu	Conversion Rate 'C _R '	Index Price for M+1 (in INR), M _{P1JKM}
Mar'25	LJKMO01	9	80	720

- Trade Price = TP = USD 0.5/MMBtu = 0.5*80 = INR 40/MMBtu
- Required Payment Security Margin = 26%*(720+40) * 10000/d*92 = INR 18 Cr.
- Additional Margin for Tax for 24 days. In Delivered Transaction, Transport Margin for 24 days

Weekly Mark to Market Settlement Process



Mark to Market (MTM) Process -

1. MTM involves revaluing margin positions at current market prices on weekly basis
2. All margins will be revalued at the end of each week based on current market prices.
3. The difference between last week's settlement price and the current market price is calculated.
4. Actions based on MTM Assessment:
 - Margin Position In-the-Money: Exchange credits the account of the Member with the gain.
 - Margin Position Out-of-Money: Exchange requires the Member to deposit additional funds to cover the shortfall.



Agenda



- 1 Trading – Benchmarks, Screen
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Index Price for Fortnight Settlement

JKM Index-Linked Contracts

Settlement Price = $\text{JKM} \pm P$
JKM -> Average of AAOVQ00
quotations from 16th of M-2 to
15th of M-1

WIM Index-Linked Contracts

Settlement Price = $\text{WIM} \pm P$
WIM -> Average of AARXS00
quotations from 16th of M-2 to
15th of M-1

BRENT Index-Linked Contracts

Settlement Price = $\%S * \text{Brent} \pm P$
BRENT -> Average of PCAAS00
of each day of previous month
M-1

GIXI Index-Linked Contracts

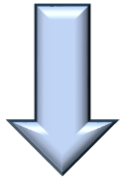
Settlement Price = $\text{GIXI} \pm P$
GIXI -> Weighted average price
for all trades in M-1 month for
delivery in M month

Conversion Rate for Settlement

USD/MMBtu -> INR/MMBtu
Average of SBI Sell and Buy rate
published on last day of
Fortnight basis

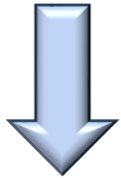
Process of Fortnight Settlement

Exchange



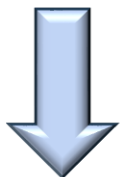
- On Fortnight end + 1
- Exchange to calculate Fortnight Settlement Price
- Provisional Fortnight Report - Payment details to Seller/Buyer for each Fortnight
- Exchange to raise transaction fees invoice for each fortnight to seller and buyer

Seller



- On Fortnight end + 2
- Seller to raise Fortnight Invoice including taxes

Buyer



- By Fortnight end + 4
- Buyer to make payment to Exchange for
Seller's Invoice + IGX Fees Invoice + Transport Invoice (if Delivered)
- If Seller's Invoice not received, Buyer to make payment on allocated/DCQ
- Late Payment Interest Rate -> SBIMCLR + 6.50% -> Passed to Seller

Exchange

- By Fortnight end + 6
- Exchange to make payment to Seller for Seller's Invoice - IGX Fees Invoice
- For Delivered, Exchange to make payment to Transporter

Exchange Reports



1. **Trade and Margin Report** on T date - Trade details, Counterparty information, Required Contract Performance and Payment Security Margin from Member
2. **MtM Report** on each Week – Mark to Market Report to provide current market price, status of Contract Performance and Payment Security Margin
3. **Provisional Fortnight Statement** on each Fortnight – Based on allocation qty, details on required payment from Buyer to Seller
4. **Final Fortnight Statement** on each Fortnight – Details on actual payment received from Buyer and paid to Seller
5. **Delivery Reports** – CT Details, Nomination, Scheduling and Allocation details
6. **IGX Transaction Fees Invoice** – On each Fortnight basis

Agenda



- 1** Trading – Benchmarks, Screen
- 2** Clearing – Margining, Mark to Market Settlement
- 3** Settlement – Invoicing and Payment Terms
- 4** Delivery – ToP, Make Up, Recovery Period, LD

Nomination, Scheduling and Allocation

1.Capacity Booking:

- Ex-Hub: Buyer books CT for DTQ
- Delivered: Exchange handles CT booking

2.Nominations:

- Buyer must submit CT details before gas supply
- DNQ and SQ normally equal DCQ
- Buyer can request changes by 12:00 hrs D-1
- Higher nominations need Seller approval

3.Allocation:

- Seller/Buyer to report Allocation Quantity by 13:00 next day
- Extra Allocated Quantity (EAQ) = quantity >105% of SQ
- EAQ adjusted with following days' DCQ
- Seller compensates Buyer for imbalance charges from EAQ

Buyer Quantity Obligation

1. Quarterly Deficiency Payment:

- Buyer must take/pay for minimum Take or Pay Quantity each quarter for 85%
- If buyer fails, they pay Quarterly Deficiency Payment = (Weighted Average Price for that quarter × Deficiency Quantity), where Deficiency Quantity = Take or Pay Quantity minus Actual Allocated Quantity

2. Make Up Gas:

- Buyer payment for deficiency quantity becomes "Make Up Gas" rights
- Can be claimed in later quarters after meeting that quarter's Take or Pay Quantity
- Credit given based on lower of: current quarter's price or original deficiency payment price

3. Recovery Period:

- 10 days for 3-month contracts, 15 days for 6-month contracts
- Pricing follows same principle: pays current price, and get credit based on lower of current or original price
- All unused Make Up Gas rights expire after Recovery Period with no refunds

4. Planned Maintenance: For 6M contract, the seller and buyer may each designate up to 10 days of Planned Maintenance



Seller Quantity Obligation

1. Seller's Shortfall Gas = 85% of $\min(\text{DCQ}, \text{DNQ})$ - Actual Delivered Quantity, excluding force Majeure events and Buyer's failure to accept delivery
2. Liquidated Damages:
 - 3-Month Contracts: $15\% * \text{Weighted Average Price for 3M} * \text{Total Shortfall}$
 - 6-Month Contracts: $10\% * \text{Weighted Average Price for 6M} * \text{Total Shortfall}$
 - Additional Payment: Seller pays pipeline tariff costs

Thank you

Strategic Partners



Disclaimer: The contents covered under the presentation are subject to change without any prior intimation. For more details, please visit Market Rules By Laws published on the website www.igxindia.com from time to time.

