



Indian Gas Exchange

Building a Vibrant Gas Market in India



October-2023





In June 2020 IGX launched by then Honorable Minister Shri Dharmendra Pradhan Ji



In Dec 2020 IGX authorized by PNGRB and commenced operations as Gas Exchange

Strategic Partners:



Gas Exchange: Market Model

6 Regional Gas Hubs

Hubs & Delivery points

- 6 Gas Hubs with multiple Delivery Points
- Multiple delivery points within 2 regional hubs (western & Southern)

6 Contracts

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

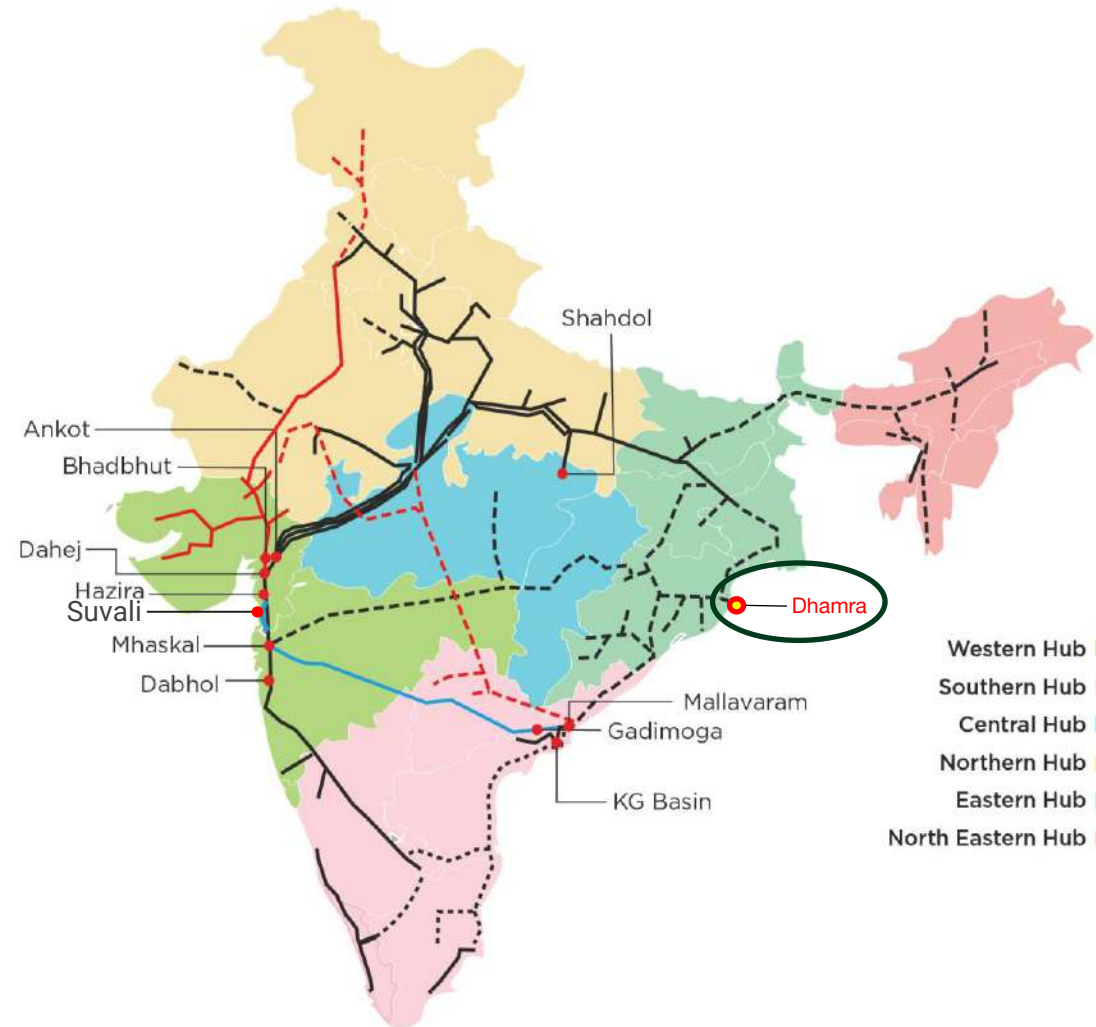
6 consecutive monthly contracts are available on any trade date

Price Discovery Mechanism

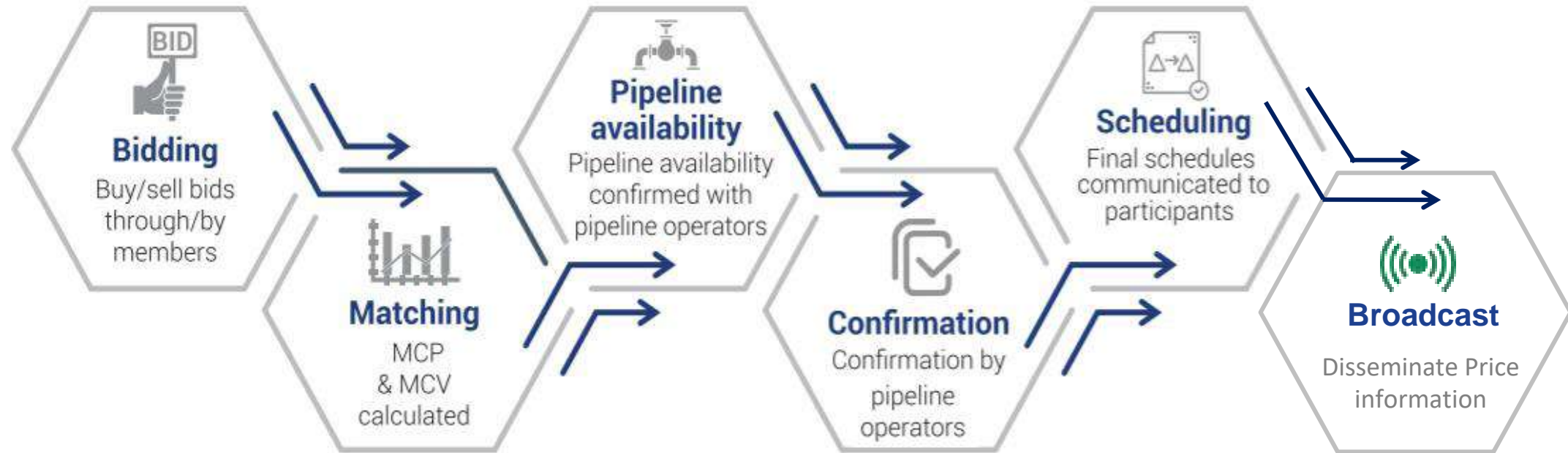
Open Auction	Weekday, Weekly, Fortnightly & Monthly
Continuous Matching	Day-Ahead, Daily
Open Auction	All contracts - for Ceiling Price Domestic Gas

Ex-hub: Delivery by Buyer
Delivered : Delivery facilitation by Exchange

INR Contracts
Minimum purchase 50 MMBtu /day



Trade Flow



IGX facilitates both Ex Hub and Delivered Transactions

Market Model: Trading products and timetable



Exchange products	Trading hours	Tenor	Trading window (S)	Trading window (E)
Day-Ahead	10:00 am – 2:00 pm	1 Gas Day	D-1	D-1
Daily		1 Gas Day	D-9	D-4
Weekdays		5 Gas Days	D-11	D-4
Weekly		7 Gas Days	4 Weekly Contracts on any Trading Date up to D-4 days	
Fortnightly		13-16 Gas Days (1-15 & 16-EoM)	5 FN Contracts on any Trading Date (up to D-4)	
Monthly		Calendar Month	6 MN Contracts on any Trading Date (up to D-4)	

- Maximum 8 daily contracts will be available on any trade date
- Days are business days
- For Ex-hub participants trading window will end on D-1 for all contracts

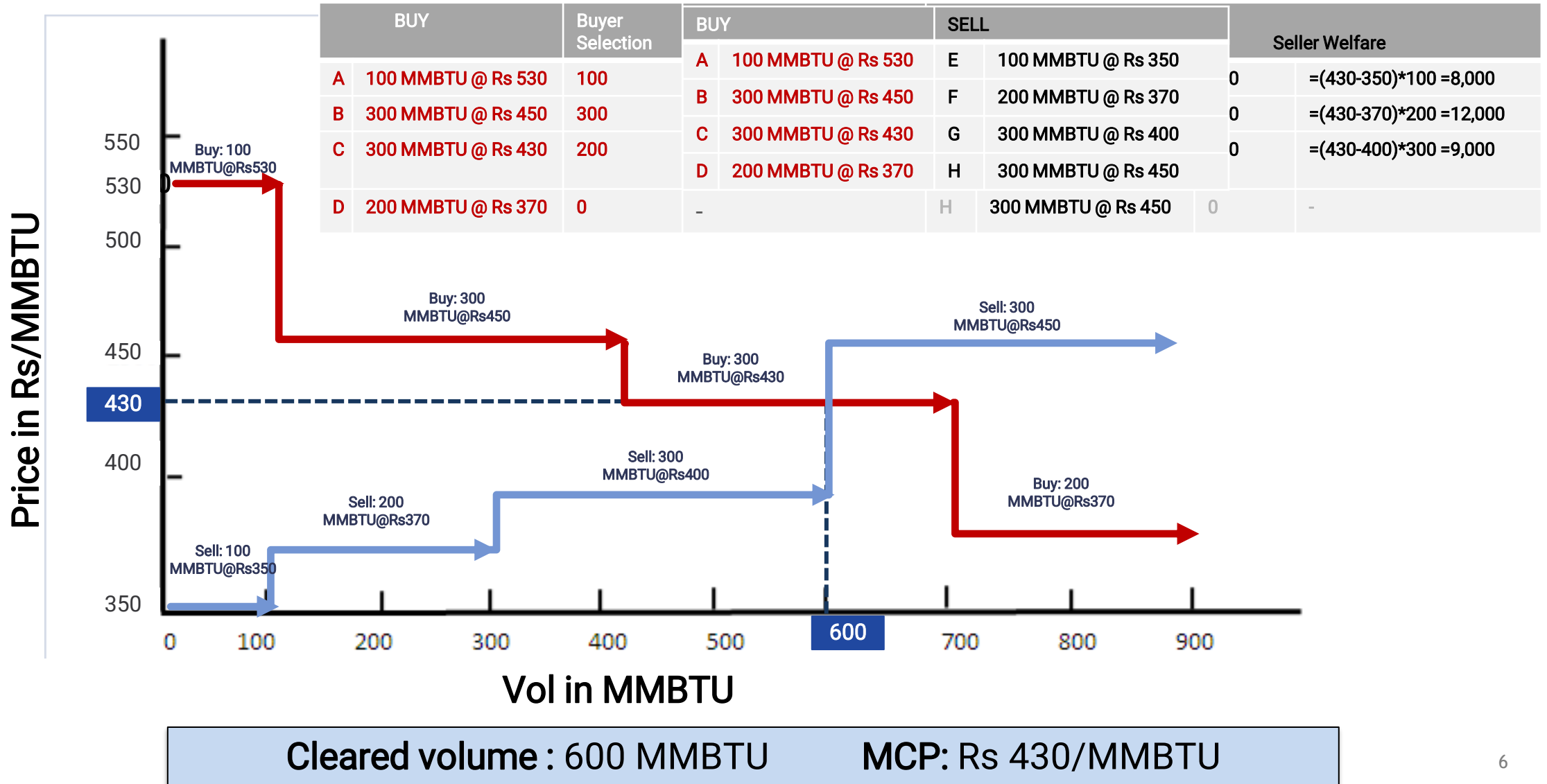
6 consecutive monthly contracts are available on any trade date

Market Model: Salient Features



Physical	All trades for firm delivery. Non-transferable.
Automated Platform	Facilitates - Trading, Delivery and financial settlement
Lot Size	1 lot = 50 MMBTU (per day)
Partial selection	Possible (Trade/Selected volume < Bid Quantity)
Bid unit	INR/MMBTU
Price tick	1 INR/MMBTU
Price discovery/ Matching Methodology	Auction - Uniform price, Open, double-sided auction (Top 5 bids – buy/sell visible) Bids collected during trading hours and then matched(WK / WD/ FN & MN) Continuous Trading – DA and DL
Types of delivery	<ul style="list-style-type: none"> Delivered: Gas and transmission capacity together Ex-hub: Gas only. Capacity will be organized by Buyer
Imbalance management	<ul style="list-style-type: none"> Facilitated by the exchange for Delivered transactions Handled by Buyer/Shipper for Ex-hub transactions
Margins	<ul style="list-style-type: none"> Buyers to pay upfront cash margins for DA & DL contracts; Cash/ non-cash margins for WK, WD, FN & MN contracts

Uniform Price double sided auction mechanism



Market Model: Risk Management

Risk management

Contract Type	Weekly / Weekdays / Fortnightly / Monthly	Day Ahead (only Ex-Hub) and Daily Contracts
Buyer Margin	<p>Ex-Hub:-25% of Trade value by next bank working day of Trade Date (T), cash/noncash</p> <p>Delivered: 25% of Trade value (cash/noncash) + 102% of the estimated ship or pay Margin in cash by next bank working day of Trade Date (T),</p>	<p>Ex-Hub:-100% of Trade value with tax (cash) on Trade Day (T)</p> <p>Delivered:-100% of Trade value with tax (cash) on Trade Day (T) + 102% of the estimated ship or pay Margin in cash</p>
Seller Margin	15% of Trade value by next bank working day of Trade Date (T), Cash/noncash	15% of Trade value on Trade Day (T), Cash/noncash
Pay-in from Buyer	Each day rolling on D-1 working day basis, Pay-In adjusted with Cash Margin	Pay-in adjusted with Cash Margin
Pay-out to Seller	Each Day rolling basis on D+2 working day (^)	On D+2 working day (^)

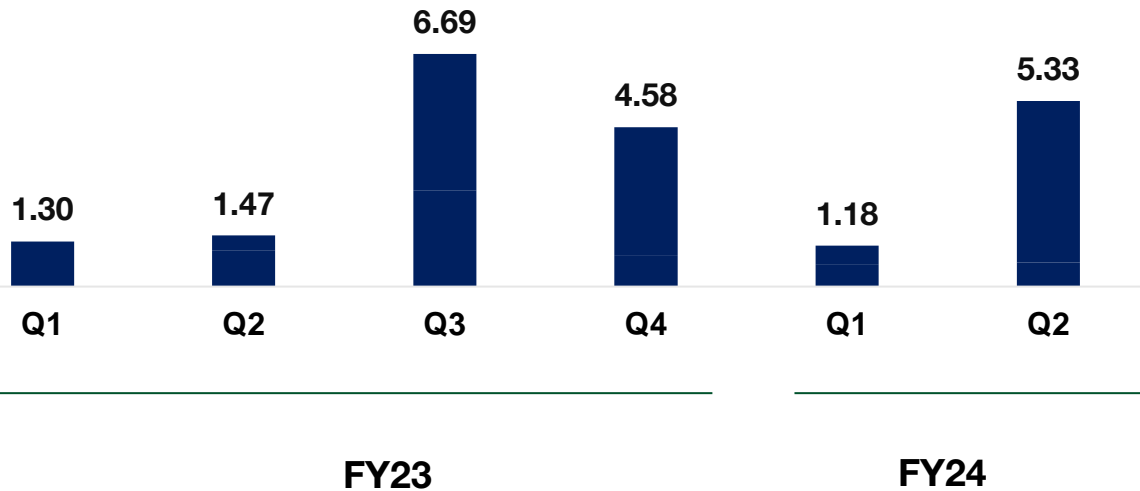
(^) subject to proof of delivery being available

Trade Highlights



~2.2 BCM
Gas Traded

In MMSCMD



- Total trade volume : **870 Lakh MMBtu**
- Total trade volume in FY23 : **508 Lakh MMBtu**
- Total Domestic Gas (CP) Trade: **291 Lakh MMBtu**
- FY22 vs FY23 Growth: **319%**
- Total No. of Trades Executed in FY23: **2,355**

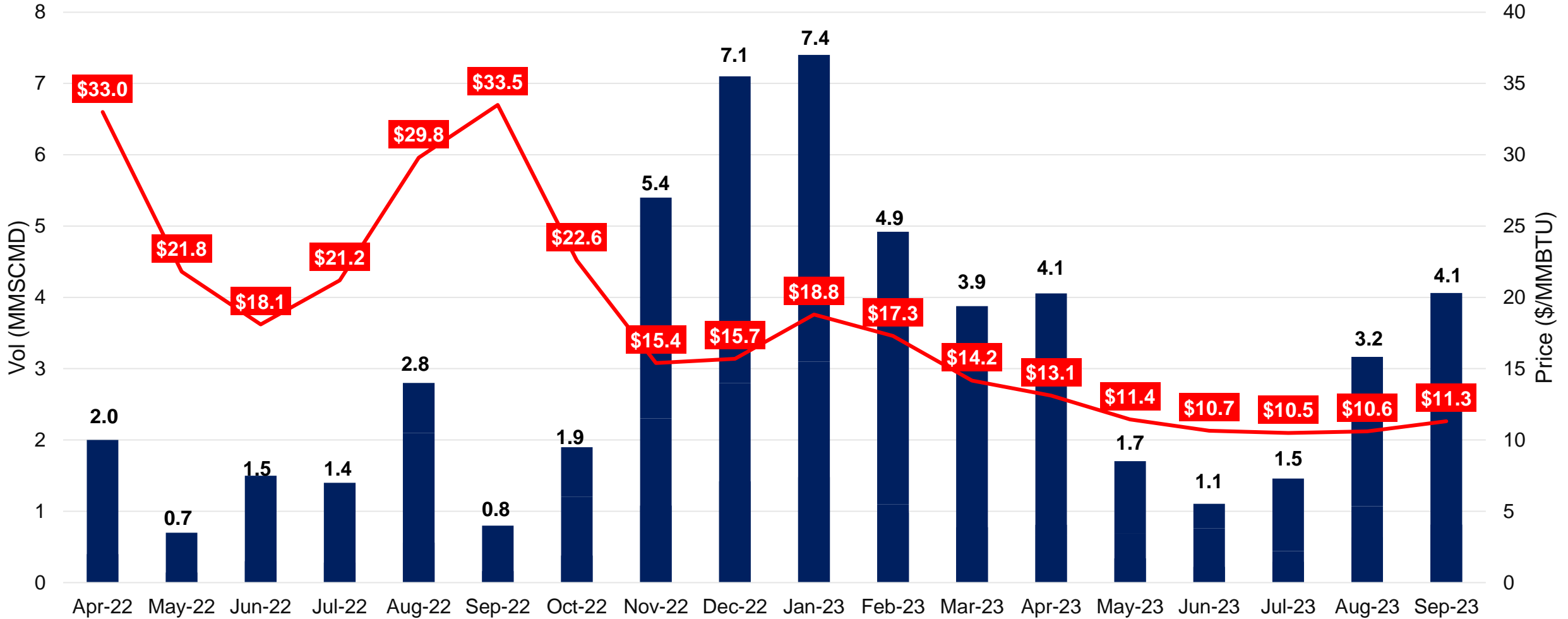
- Record Single Day Trade: **53 Lakh MMBtu**
- Record Single Month Trade: **114.5 Lakh MMBtu**
- Total Sellers: **35+**
- Total Buyers: **190+**
- Total Members & Clients : **43 Members & 190+ Clients**

*Data till 30th Sep'23

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

*Data till 30th Sep'23 ⁹

Domestic Gas Trade - Ceiling Price Gas Auctions

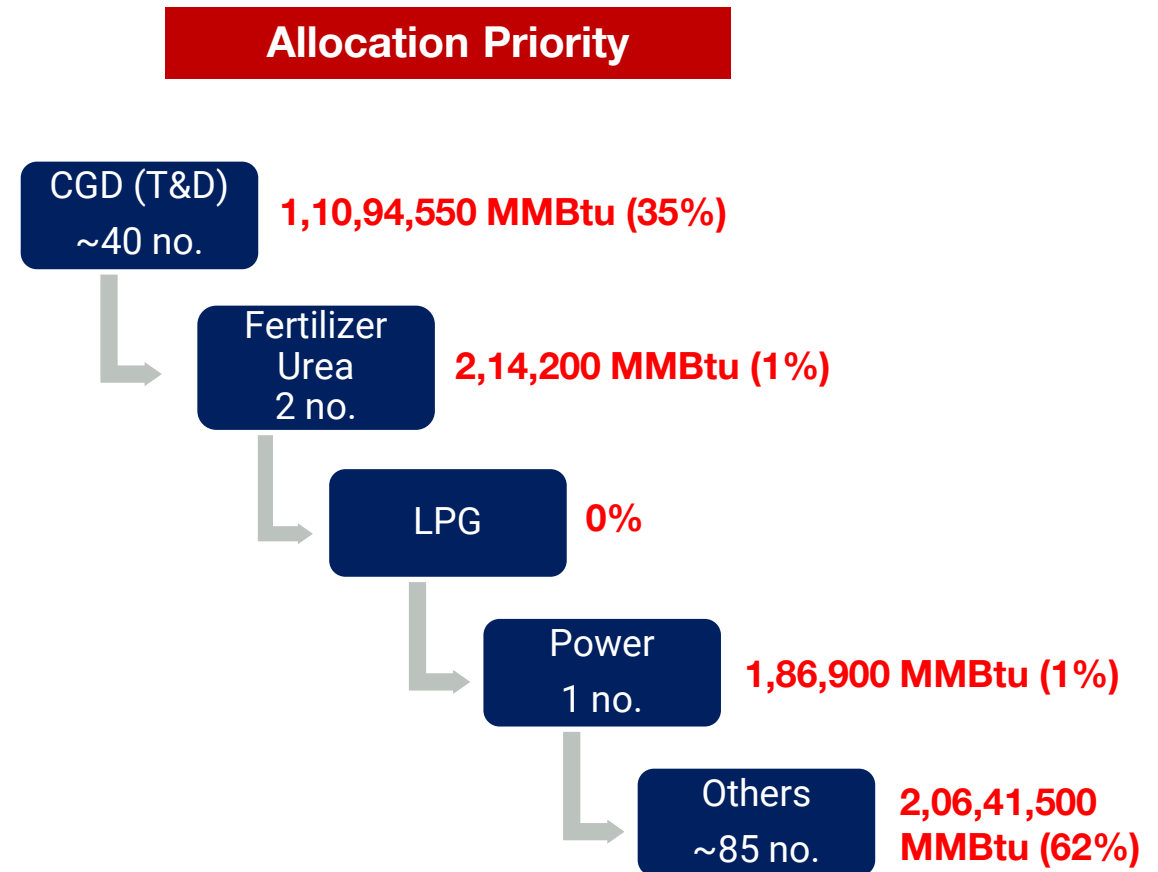


- **MoPNG** vide OM dt. 19.08.21 has granted additional option to **sell Domestic Gas** having Marketing & Pricing freedom
- All major domestic gas producers selling gas through Exchange (RIL, ONGC, Vedanta, HOEC)

- Total traded: **481 Lakh MMBtu (~1.1 BCM)**
- No. of Auction held: **71**
- Participants: **90+**
- Current Ceiling price \$9.96/MMBtu

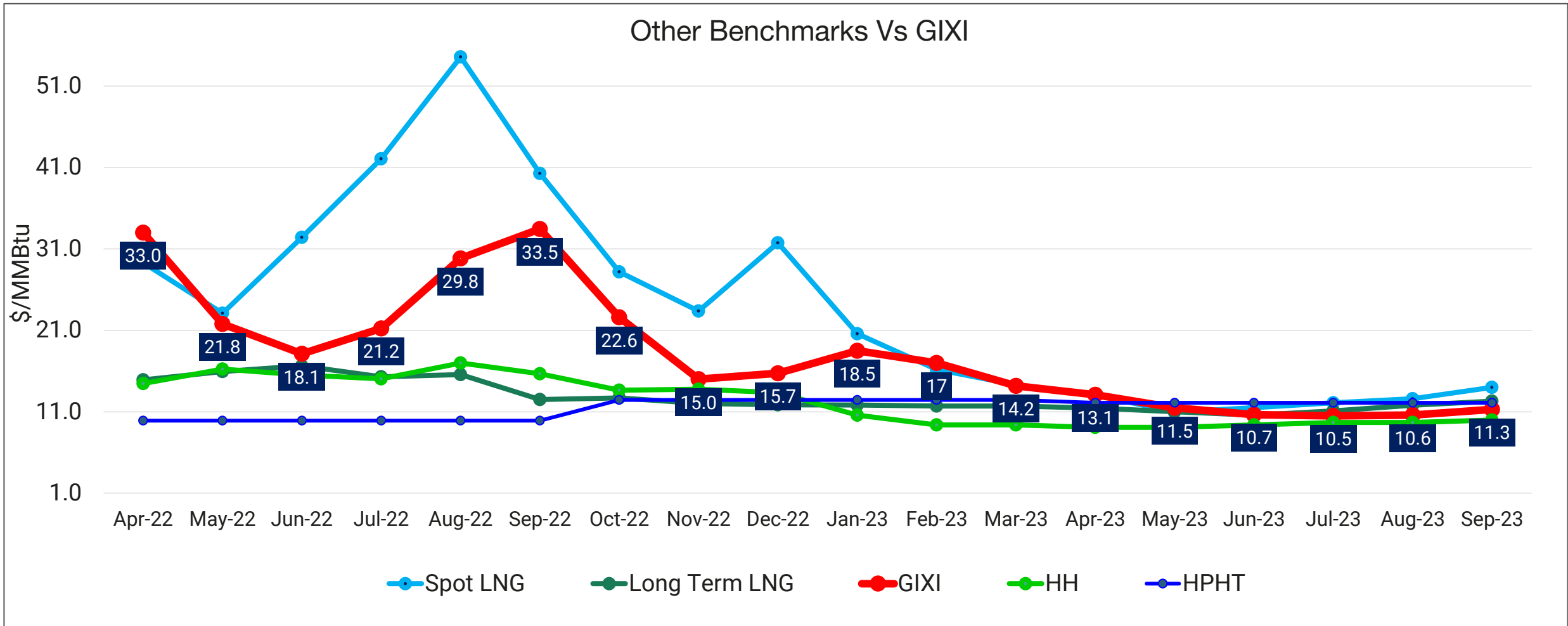
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Domestic Ceiling Price Gas auctions post MoPNG notification dated 13.01.2023



Total Volume: 3,21,37,150 MMBtu

Gas Price Benchmarks



IGX prices reflecting Indian demand and supply, IGX Prices are converted to \$/MMBtu

Source: CME, IGX, Market intelligence

Benchmark prices are monthly average of daily published prices

GIXI (Gas Index of India)



Prices are volume weighted average price for all gas excluding domestic ceiling price gas

GIXI represents prices for all hubs; for regional hubs will be named as GIXI West etc.

For months, will be named as GIXI-Jan23 etc.

Helps the market participants to know inland gas prices and to take suitable decisions

GIXI is the precursor for the Gas Futures which will help stakeholder in hedging

29-09-2023					
GIXI — Gas Index of India —	Oct-23	West	₹ 1,103	\$13.3	-
		South	₹ 840	\$10.1	-
		CP			
Nov-23		West	₹ 970	\$11.7	-
		South	₹ 840	\$10.1	-
		CP			

Month	Delivery Point		₹/ MMBTU	\$/MMBTU	% Change	Best Buy	Best Sell	
GIXI	Western Hub							
	Oct-23	Mhaskal	MS	1103	13.3	-	-	-
		Suvai	SV	1055	12.7	-	-	-
	Nov-23	Mhaskal	MS	970	11.7	-	1000	-
	Southern Hub							
	Sep-23	Gadimoga	GD	1007	12.1	-	-	-
Oct-23	Gadimoga	GD	840	10.1	-	-	-	
Nov-23	Gadimoga	GD	840	10.1	-	-	-	



Note

- 1) Monthly GIXI Cumulative Prices are delivery month-wise volume weighted average price
- 2) Overall prices are excluding ceiling price gas only when gas traded at ceiling price (CP)
- 3) For details of gas hubs and delivery points, please refer Circular No. 59
- 4) \$/INR conversion rate considered at 83
- 5) Last Domestic Gas Ceiling Price Auction held on 18 Sep 23 at INR 840/MMBtu.
- 6) Best Buy/Sell bid price in Rs/MMBtu

IGX Members and Clients

IGX has 43 registered Members and 120+ Active clients

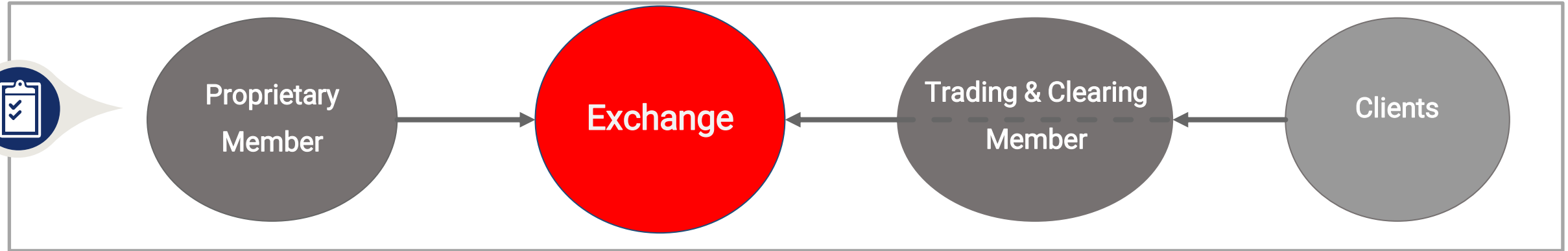
Proprietary Member

Trading & Clearing Member

Clients



*Selected representation



Proprietary member:

- *Member who can self-trade and also on behalf of its affiliates/associates*

Trading & Clearing member:

- *Member who can only trade on behalf of its clients*

Client-

- An entity who has been registered through a Member as a Buyer/Seller.
- The Client has to settle their financial obligation through respective Members.

Membership Fees Structure



	Proprietary Member (INR)	Trading & Clearing (INR)	CGD Member
1. Member Fees*			
Admission Fee	25 L	15 L	10 L
Security Deposit (One Time)	25 L	25 L	25 L
Annual Fees	5 L	5 L	5 L
2. Client Fees: Annual Fee Rs 1L			

Exchange Transaction Fees		
Particulars	UoM	Transaction Fees
Transaction fees- Ex Hub	INR/MMBTU	4
Transaction fees- Delivered	INR/MMBTU	6

Exclusive of taxes



Transparent Price Discovery

Market determined price based on price discovery for all submitted bids



Flexibility for gas sale

- Contracts from next day to month
- Immediate sales opportunity at GX
- No supply obligations like long term contracts



Payment Security

- Central clearing mitigates counterparty credit risk
 - Payment made the next day of delivery.



Competitive Price

- Reach to customers across country through single platform
- Availability of gas to last mile consumer



Cost Saving

- Transparent fee structure, no hidden cost
- No cost and lead time like in e-bidding

Glimpse of IGX 2nd Anniversary Event held on 19th Dec'22



Participation from 200+ Stakeholders across the Gas Sector



Stakeholders Testimonial



"IGX, with its game-changing platform, has consistently evolved as a key stakeholder in India's gas sector. Its contribution to the country's energy industry is also significant, considering that it promotes the most environment-friendly Conventional fuels for sustainable development. We at GAIL, are delighted to be a significant part of this platform and we hope to witness IGX continuously fulfill the requirements of such a dynamic market, and simultaneously benefit all the stakeholders."

Shri Sandeep Kumar Gupta,
Chairman & MD,
GAIL (India) Limited



"IGX has provided a robust platform for gas trading in India. Its success mantras are ease of trade, flexible contracts, competitive prices, risk-free transactions, and transparency. It has provided marketing opportunity to ONGC and various other upstream producers for early and short term monetization of gas produced domestically. ONGC wishes IGX much more success in the years to come."

Shri. Anurag Sharma
Director (Onshore) – ONGC



"IGX is instrumental in transforming India's Natural Gas landscape by bringing buyers & sellers on a customer centric and technology driven Gas delivery platform. IGX is augmenting efforts of making India a Gas-based economy. In the very first two years of its journey, IGX has emerged as a key stakeholder in India's Gas value chain. We wish IGX all success in its endeavor in enhancing the share of Natural Gas in India's primary energy basket."

Shri A. K. Singh,
MD & CEO,
Petronet LNG Ltd.



"It's been two years since the country's first automated national-level gas exchange – Indian Gas Exchange Ltd. (IGX) – was established and started operating. The growth in volumes traded on IGX over the past two years has been commendable benefiting both the buyers and sellers. It has been our pleasure to watch this journey up close. Wishing the entire IGX team all the very best for a vibrant future ahead."

Shri Amit Mahta
Sr. EVP and Head Gases,
Reliance Industries Limited



"IGX has successfully managed to introduce change to India's gas sector in the last two years by bringing delivery-based gas trading into the country. We identify with the efforts that they have made and therefore completely support them in building an efficient gas marketplace in the country which is at par with international standards."

Shri. Akhil Mehrotra
MD & CEO
Pipeline Infrastructure Limited



"As India's first gas exchange, IGX has played a key role in facilitating transparent price discovery in natural gas, apart from promoting the growth of natural gas in the country's energy basket. Congratulations on its second anniversary!"

Shri Sanjay Kumar,
Managing Director,
Indraprastha Gas Ltd

Awards & Recognition



ET Energy Leadership - **Energy Best Start-up of the Year**

June'22

IPPAI Power Award 2022 for - **Best Exchange**

April'22

Indian Smart Grid Forum,2022 - **Smart Start-up of the Year**

March'22

15th ENERTIA Awards 2022 - **"Best & Pioneering Gas Exchange initiative for Gas Economy"**

Dec'22

ET Energy Leadership - **Excellence in Digitization (Oil And Gas)**

June'23



Thank you

Strategic Partners



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