



Dated: April 29, 2022

The Manager  
BSE Limited  
Corporate Relationship Department  
Phiroze Jeejeebhoy Towers  
Dalal Street  
Mumbai- 400001

**Scrip Code: 540750**

The Manager  
National Stock Exchange of India Ltd  
Listing Department  
Exchange Plaza, 5<sup>th</sup> Floor, Plot No. C/1  
G Block, Bandra Kurla Complex  
Bandra (E), Mumbai-400 051

**Symbol: IEX**

**Sub: Investor Presentation Q4 FY 2022**

Dear Sir / Madam,

Pursuant to Regulation 30 of SEBI (Listing Obligation and Disclosure Requirements) Regulation 2015, please find attached Investor Presentation for Q4 FY2022.

The above information will also be made available on the website of the Company:  
[www.iexindia.com](http://www.iexindia.com)

You are requested to take the above information on record.

Thanking You.

Yours faithfully,

For Indian Energy Exchange Limited

Vineet Harlalka  
CFO, Company Secretary & Compliance Officer  
Membership No. ACS-16264

Encl: as above

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**Indian Energy Exchange Ltd**

**Registered Office:** C/o Avanta Business Centre, First Floor, Unit No. 1.14(a), D2, Southern Park, District Centre, Saket, New Delhi-110017, India

**Corporate Office:** 9th Floor, Max Towers, Sector 16B, Noida, Uttar Pradesh-201301, India

**Tel: +91-011-3044 6511 | Tel: +91-120-4648 100 | Fax No.: +91-120-4648 115**

**CIN: L74999DL2007PLC277039 | Website: [www.iexindia.com](http://www.iexindia.com)**



# Investor Presentation – Q4FY'22

**Building India's Sustainable &  
Efficient Energy Future**

# In this presentation:

Sector in transition

Electricity value chain

IEX: Who we are

IGX

Way forward

# Sector in transition



## Decarbonisation

Deployment of low-carbon technologies - wind and solar



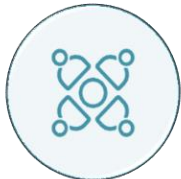
## Decentralisation

Small-scale generation across T&D network



## Democratisation

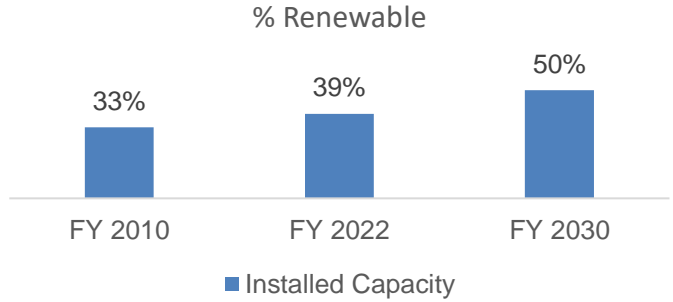
Empowered consumers - economic power shift



## Digitisation

Intelligent CS and Apps to optimise plants and grid

### Shifting Energy Mix



- 157 GW installed renewable capacity (including large hydro) in Mar'22
- India aspires to achieve 500 GW of renewable capacity by 2030

# In this presentation:

Sector in transition

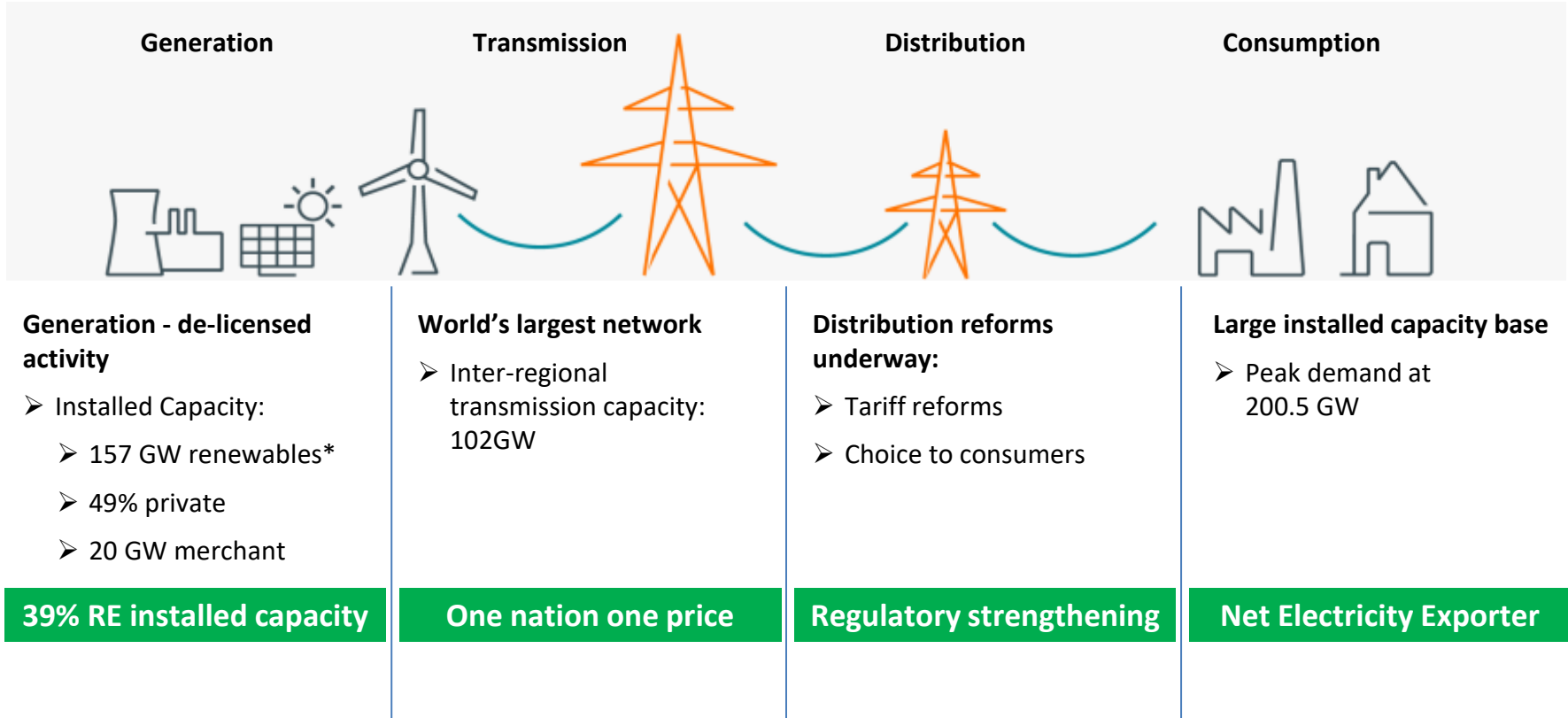
Electricity value chain

IEX: Who we are

IGX

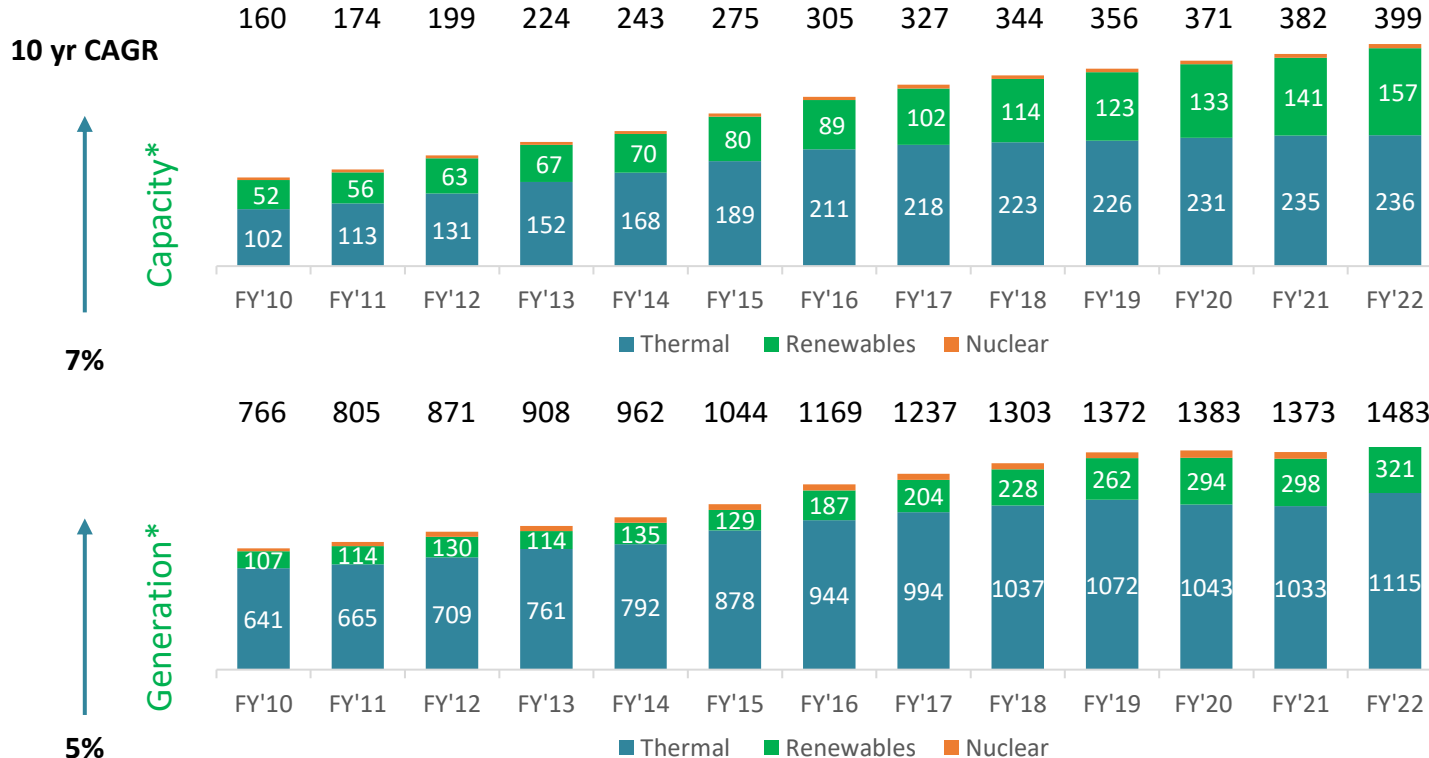
Way forward

# Electricity Value Chain



\*Renewables include: Hydro Power – 47GW and RES – 110GW

# Installed capacity has grown at a faster pace compared to demand

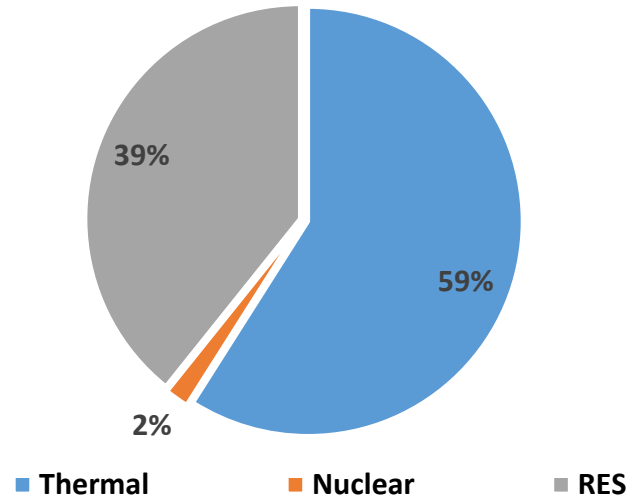


Capacity growth of 7% and generation increase of 5% in the last 10 years

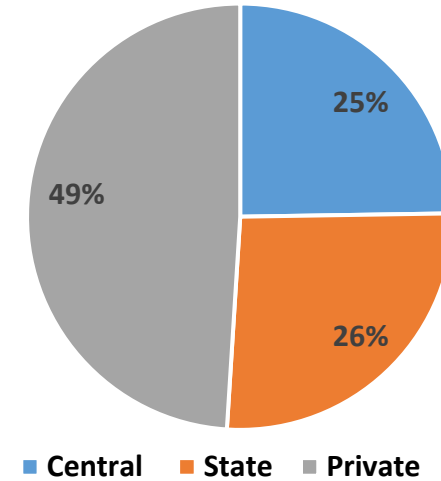
\*All units in GW

# Installed Capacity = 399 GW

Capacity by type - Mar'22



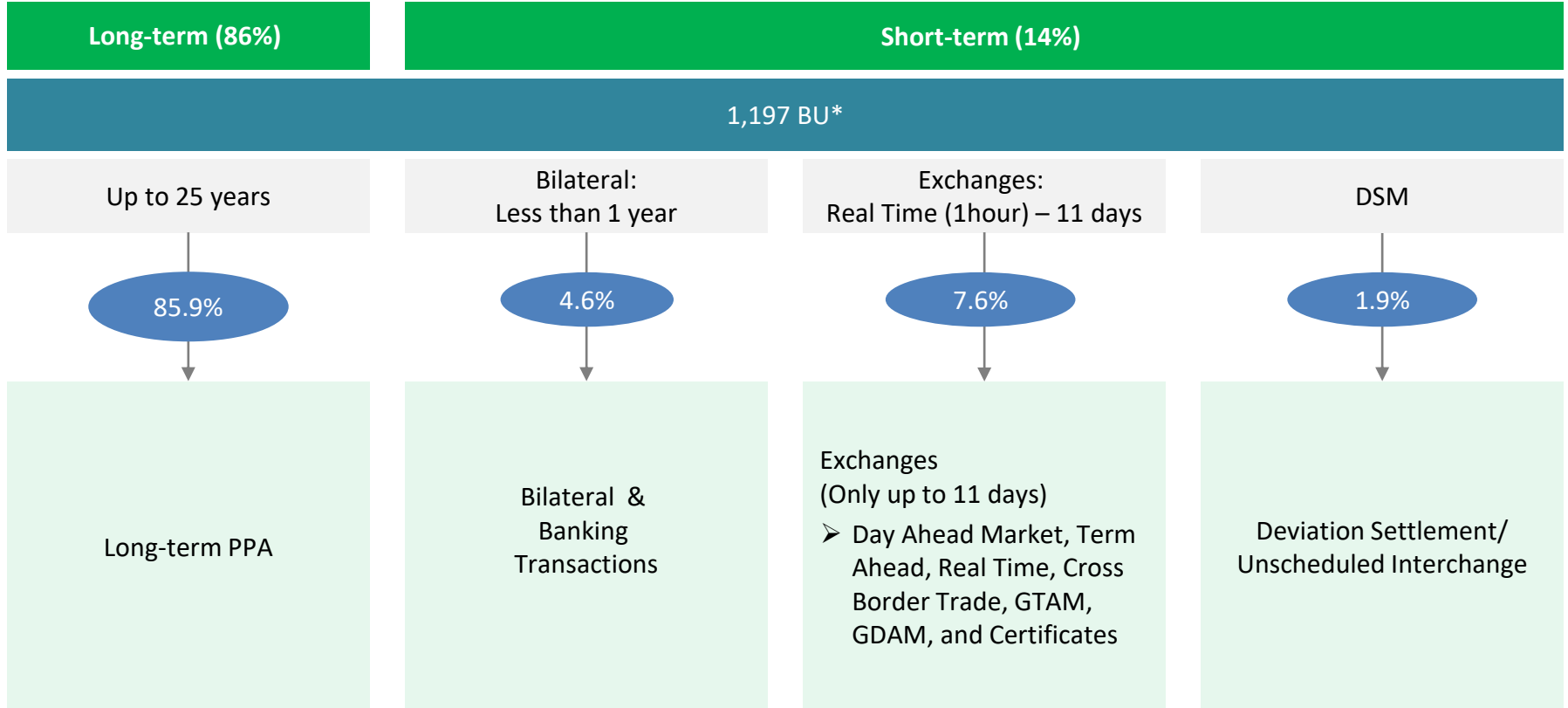
Capacity by ownership - Mar'22



\*Renewables include: Hydro Power – 12% and RES – 27%



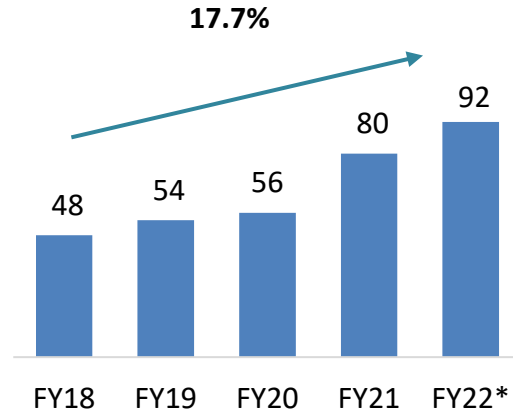
# Sector Construct



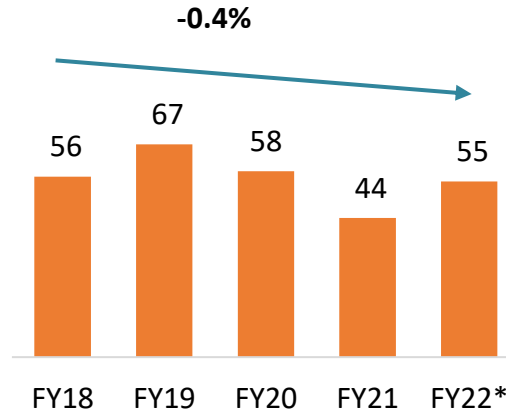
\*Power generation data till February 2022  
Source: CERC, CEA (till Feb'22)

# Fast growing Exchange Markets

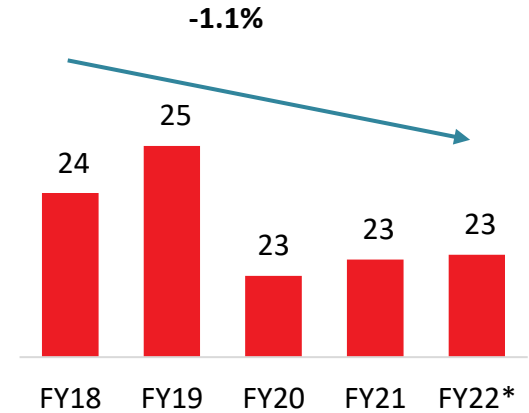
Exchanges (BU)



Bilateral (BU)



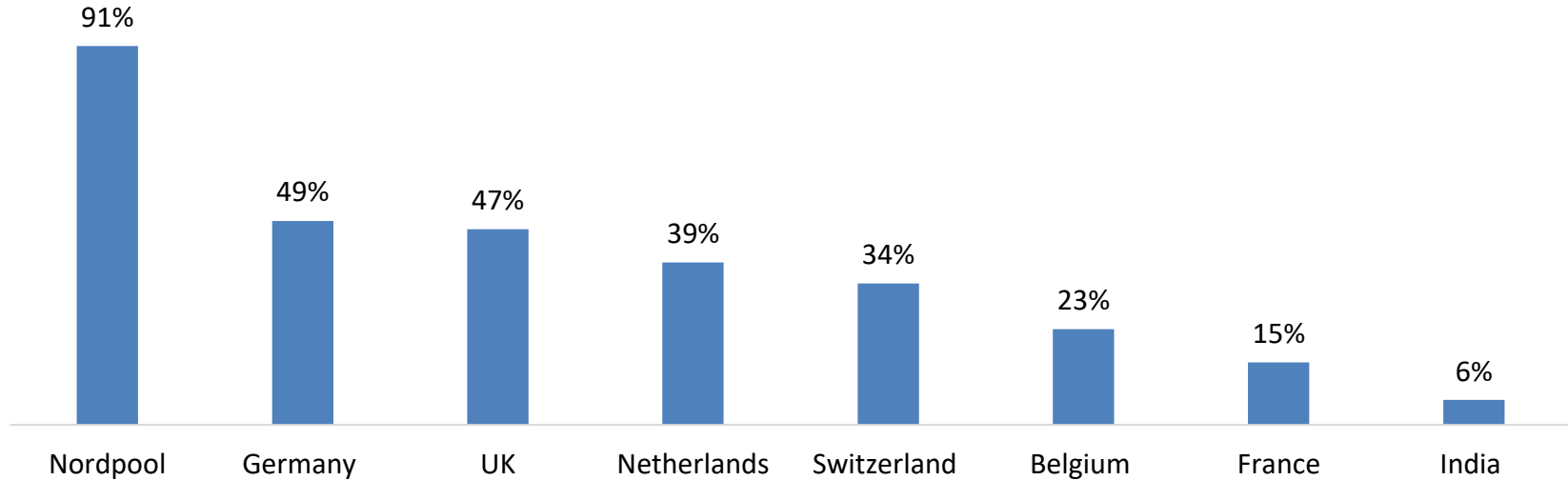
DSM (BU)



Driven by competition and flexible procurement, the Exchange markets constitute >50% of power market.

\*FY22 data till Feb 2022  
Source: CERC

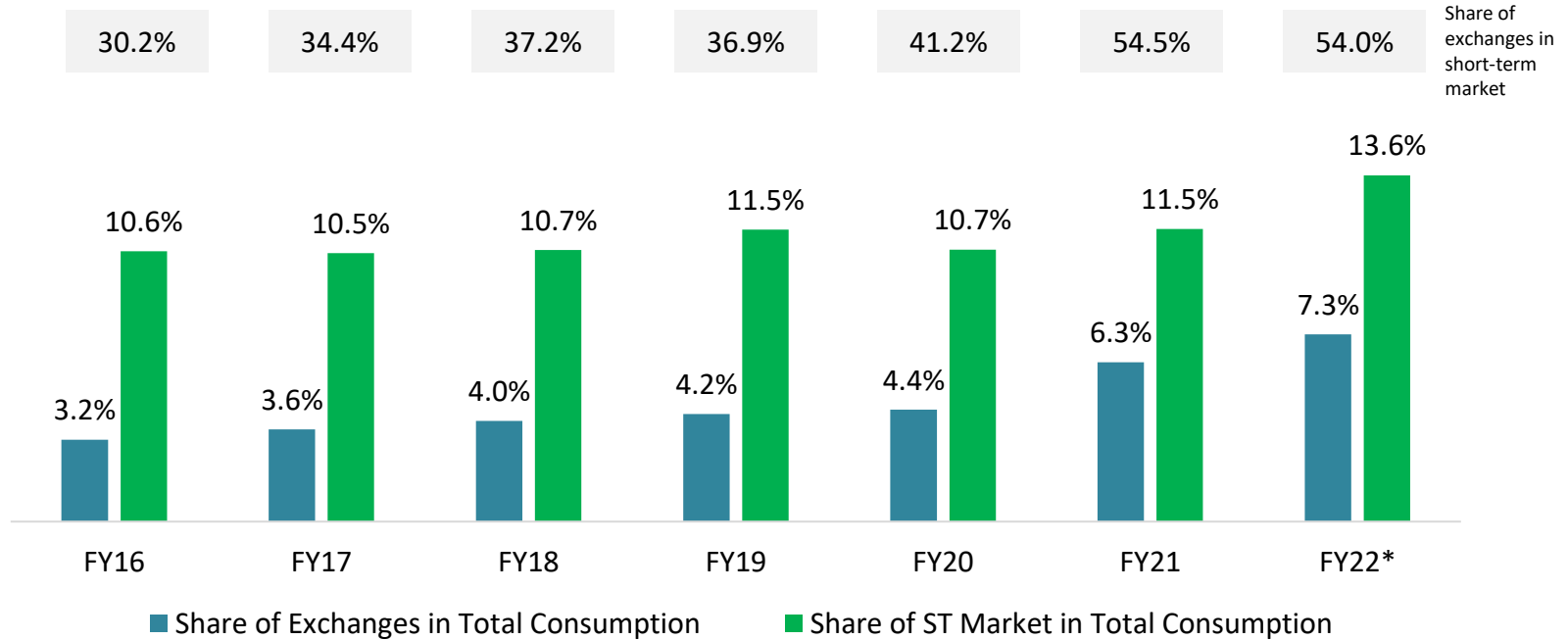
# Immense potential to deepen India's Power Market



Markets are in the range of 30-80% in developed economies.  
At 6%, India has an opportunity to deepen the power market.

# Exchanges share in short term market

## Exchange Market and ST Market - % of Total Consumption – India



\*FY22 data till Feb 2022  
Source: CERC

# Electricity Growth Drivers

India is placed as the most promising economy on the global map:

## ➤ Industrialization

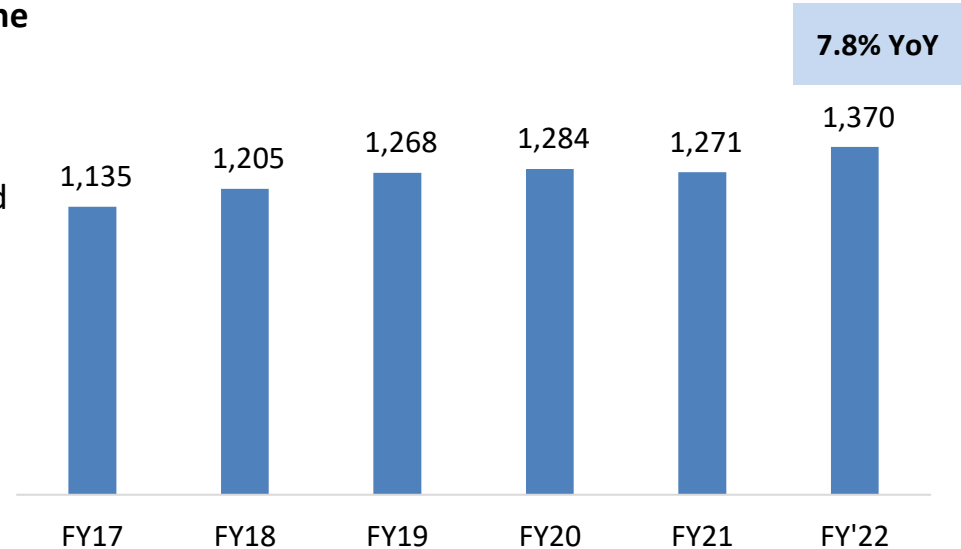
- GDP growth of 8-10% expected to drive demand for electricity
- Core sector growth will drive electricity consumption

## ➤ Rapid urbanization

- 17 of 20 world's fastest growing cities in India

## ➤ Consumer demand growth

- Last mile connectivity - Saubhagya : Power for All
- Power on 24x7 basis



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# India's premier technology-led energy marketplace

- Nation wide, automated and transparent trading platform for physical delivery of electricity, renewables & certificates
- Commenced operations in 2008; CERC regulated
- Publicly listed company (NSE and BSE)
- ISO 9001:2015, ISO 27001:2013, ISO 14001:2015
- Market Leader: ~95% (DAM & RTM >99%)
- Electricity volume CAGR 33% since 2008

## Robust Ecosystem

**7000+**

Registered participants

**4400+**

Commercial & Industries

**1500+**

RE Generators & Obligated Entities

**600+**

Generators

**55+**

Discoms (all)

**100+**

ESCert Entities

**33%**

CAGR since 2008

**99%**

Market Share in DAM

**99%**

Market Share in RTM

Leading the future of energy with innovation and technology

# Benefitting Power Sector...and the nation

- Provides **benchmark prices** for all electricity transactions
- **Transparent Mechanism** for Price Discovery
- **High liquidity** on exchange has ensured lowest cost and assured supply

## Truly benefited Indian Power Sector



Generation

Signals for Generating  
Capacity addition  
(~20 GW Merchant plants)



Transmission

Investments in transmission-  
congestion free –  
**One Grid One Price**



Distribution

- Lower power prices for discoms, end consumers
- Avoids buying under take-or-pay contracts
- Flexibility on 15-min basis



# Our Values



24X7 Power



Transparency



Flexibility in Power  
Procurement



Competitive Price

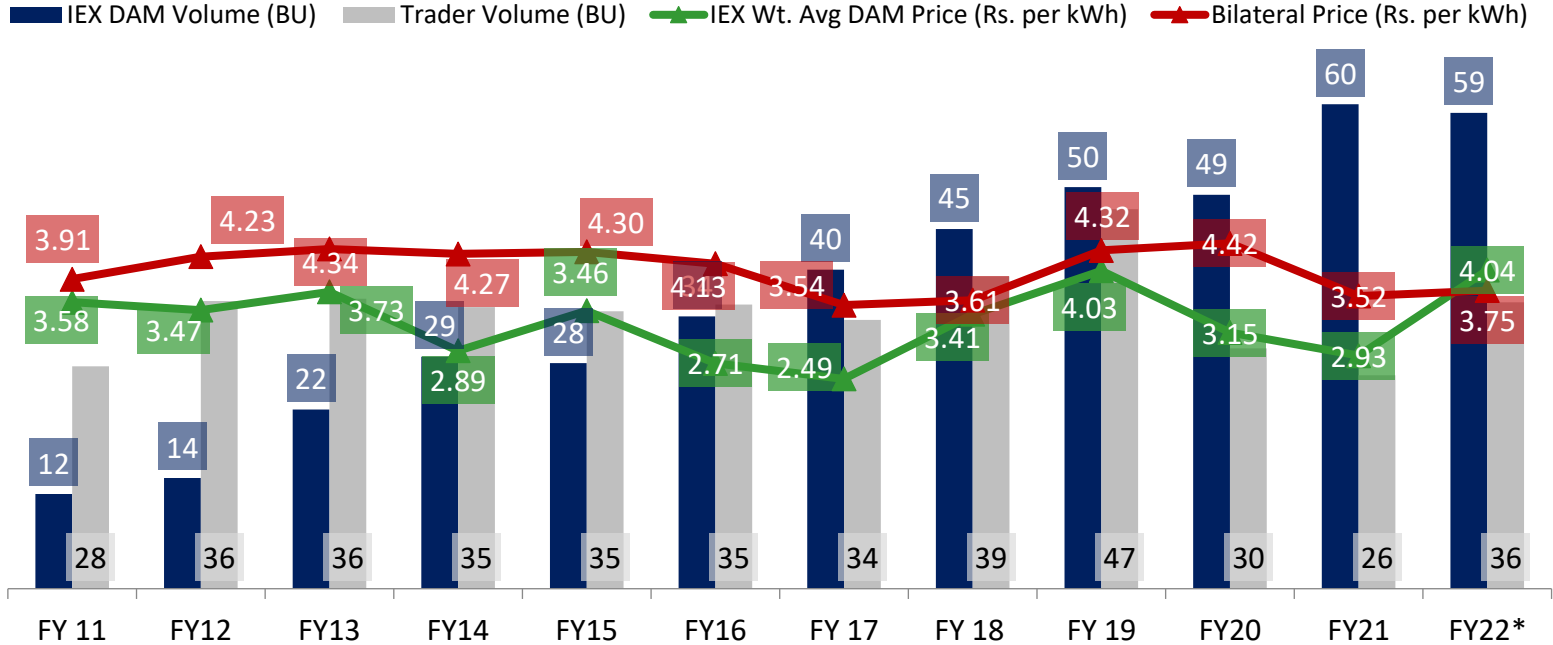


Payment Security










Cost Saving

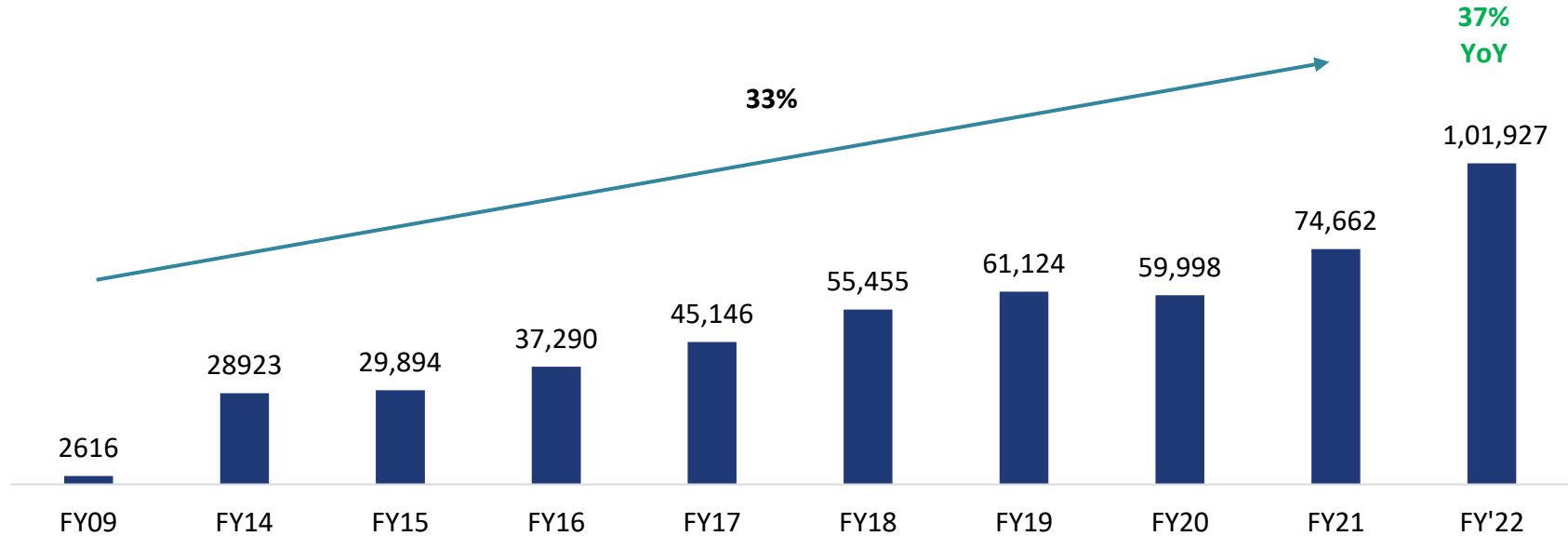
# Bilateral & Exchange Prices - Over the years



# Market Segments






<b>Day-Ahead Market</b> since Jun 2008	<ul style="list-style-type: none"> <li>➤ Delivery for next day; Includes cross border trade launched on 21st April 2021</li> <li>➤ Price discovery: Closed, Double-sided Auction</li> </ul>	
<b>Term-Ahead Contracts</b> since Sep 2009	<ul style="list-style-type: none"> <li>➤ For delivery up to 11 days</li> <li>➤ Intra-day, Day-ahead Contingency, Daily Contracts, Weekly Contracts</li> </ul>	
<b>Real-Time Market</b> since 1 Jun, 2020	<ul style="list-style-type: none"> <li>➤ Delivery in an hour</li> <li>➤ Price discovery: Closed, Double-sided Auction</li> </ul>	 <p><b>Continuous</b></p>
<b>Green Term Ahead Market</b> since 21 Aug, 2020 <b>GDAM Sep 21</b>	<ul style="list-style-type: none"> <li>➤ GTAM - Intra-day, DAC , Daily and Weekly</li> <li>➤ GDAM - Green Power Delivery for next day</li> </ul>	  <p><b>Auction</b></p>
<b>Renewable Energy Certificates</b> since Feb 2011	<ul style="list-style-type: none"> <li>➤ Green Attributes as Certificates:             <ul style="list-style-type: none"> <li>➤ Sellers: RE generators not under feed in tariffs</li> <li>➤ Buyers: Obligated entities; 1MWh equivalent to 1 REC</li> </ul> </li> </ul>	
<b>Energy Saving Certificates</b> since 27 Sep, 2017	<ul style="list-style-type: none"> <li>➤ 1 ESCert= 1 Mtoe( Metric Tonne Oil Equivalent)</li> <li>➤ Trading session every Tuesday   Trading time 13:00 hrs. to 15:00 hrs.</li> </ul>	

# 33% CAGR since inception










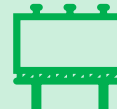
Note: Volume data in billion units. Data based on delivery volumes, DAM vols are based on trading  
Source: IEX Data (DAM+TAM+RTM+GTAM+GDAM+REC+ ESCERTs)

# Product-wise Key Statistics

	DAM + TAM	RTM	Green Power	REC	ESCerts
 <b>Market Share</b> (FY 22)	94.2%	99.9%	80.0%	72%	97% <sup>2</sup>
 <b>State Utilities</b> As on Mar'22	29 States 5 UTs	29 States 4 UTs	29 States 3 UTs	29 States 5 UTs	29 States 5 UTs
 <b>Generators</b> As on Mar'22	Total Power: 600+			1216	112
 <b>Industrial Consumers</b> As on Mar'22	Total Power : 4600+			593	59
 <b>Average Daily Volume<sup>1</sup></b> (Q4 FY22)	206 MU	50 MU	12 MU	NA*	NA

1. DAM on trade basis and Rest on delivery volumes 2. Market share for PAT Cycle - II  
\* 22.50lac no. of RE certificates traded during the quarter

# New Market Segments : Q4 FY22

REAL TIME MARKET		GREEN TERM AHEAD MARKET			
 <b>VOLUME (MU)</b>	<ul style="list-style-type: none"> <li>✓ Buy : 6926</li> <li>✓ Sell : 7785</li> <li>✓ Cleared : 4477</li> <li>✓ Daily Average Buy : 77</li> </ul>	<ul style="list-style-type: none"> <li>✓ Daily Average Sell : 86</li> <li>✓ Daily Average Cleared : 50</li> </ul>	 <b>VOLUME (MU)</b>	<ul style="list-style-type: none"> <li>✓ Buy : 559</li> <li>✓ Sell : 551</li> <li>✓ Cleared : 466</li> </ul>	<ul style="list-style-type: none"> <li>✓ Daily Average Buy : 6</li> <li>✓ Daily Average Sell : 5</li> <li>✓ Daily Average Cleared : 5</li> </ul>
 <b>PRICE (Rs/Unit)</b>	<ul style="list-style-type: none"> <li>✓ Average : 4.81</li> <li>✓ Min : 0.50</li> </ul>	<ul style="list-style-type: none"> <li>✓ Max : 20.00</li> </ul>	 <b>PRICE (Rs/Unit)</b>	<ul style="list-style-type: none"> <li>✓ Average : 4.94</li> <li>✓ Min : 1.99</li> </ul>	<ul style="list-style-type: none"> <li>✓ Max : 13.15</li> </ul>
 <b>PARTICIPATION</b>	<ul style="list-style-type: none"> <li>✓ Top 5 Buyers : J&amp;K, Telangana, Andhra Pradesh, Gujarat &amp; Tamil Nadu</li> <li>✓ Top 5 Sellers : Madhya Pradesh, West Bengal, Bihar, Rajasthan &amp; Uttar Pradesh</li> </ul>		 <b>PARTICIPATION</b>	<ul style="list-style-type: none"> <li>✓ Top 5 Buyers –Vedanta, TPDDL, MES,NDMC, HPSEB</li> <li>✓ Top 5 Sellers – PCKL, Nirani Sugar, Renew, Indian cane &amp; MRN cane</li> </ul>	
 <b>HIGHLIGHTS</b>	<ul style="list-style-type: none"> <li>✓ Highest ever Daily Cleared Volume : 98 MU</li> <li>✓ Highest Cleared volume in single time block : 6805 MW</li> <li>✓ Top 5 Buyers contributed 56%</li> <li>✓ Major OA Buyers : Vedanta, Jindal Stainless, AMNSIL, SAIL, Dalmia Cement</li> </ul>		 <b>HIGHLIGHTS</b>	<ul style="list-style-type: none"> <li>✓ Highest ever Daily Cleared volume : 32.84 MU (18 Oct'21)</li> <li>✓ Top 5 Buyers contributed 80%</li> <li>✓ Major OA Buyers : Vedanta, BALCO, SAIL</li> </ul>	

The Green Market and the Real-time Markets are poised to build India as a sustainable energy economy

# Technology at the Core

## CUSTOMER CENTRIC



- **Digital Experience**
  - Secure Web and Mobile access
  - Integrated bids across segments
- **Ease of Bidding**
  - Member API launch
  - Smart Power Procurement

## EFFICIENT



- **Security and seamless uptime**
- **Comprehensive Product Portfolio**
  - New Products Launched – RTM, Green Markets, CBET
  - Longer Duration Contract
- **Automation**
  - Real Time reporting
  - Alerts/Notifications
  - SAP integration

## STATE OF THE ART



- **National Open Access Registry**
  - Integration of NOAR
- **Economic Surplus/Social Welfare optimization**
  - MILP
- **Data Insights**
  - Bid Data Analytics for senior management
  - Power market data analytics

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## Driven by customer centricity

### **S – Self-service web/mobile applications**

- enable customers' anytime anywhere easy access

### **I – Intelligent process automation**

- reduce customer effort; insights to enable effective decision making

### **M – Matching engine optimization**

- increase social welfare

### **P – Product launches**

- meet the needs of all customer segments

### **L – Learning opportunities for our customers**

- experiential learning for customers through organizing events

### **E – Energy portfolio management solutions**

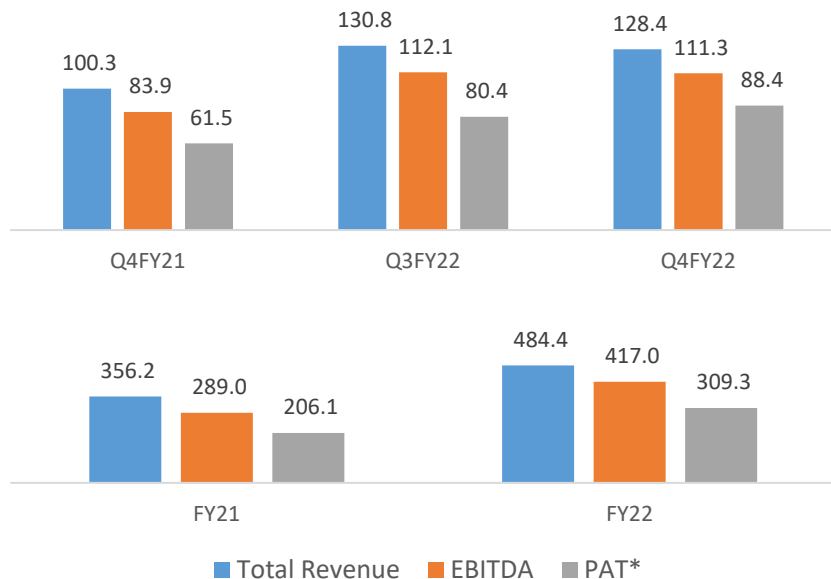
- optimize procurement cost for customers

Create effective solutions to fulfil all Power Procurement related needs of our customers



# Robust financial performance

## Consolidated Financials Rs Cr



Breakup of standalone revenues (%)	Q4FY21	FY21	Q4FY22	FY22
Transaction Fees	88%	84%	83%	84%
Admission and Annual Fees	5%	5%	5%	5%
Other Income	7%	11%	12%	11%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Robust business model and financial strength

\* PAT attributable to owner of the equity

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# No lockdown at IEX!



- Accessible 24\*7 to facilitate uninterrupted power with seamless connectivity and high security
- Enabling replacement of costly PPAs through buying on exchange
- Launched Real Time Market, Green Term Ahead Market, Green Day Ahead Market and Cross Border Trade with high availability during the challenging covid-19 crisis
- Extensive customer engagements, capacity building and communication drives
- End to end technology and automation allowing remote working
- Employee safety pivoted as the first principle

# Towards a sustainable energy future

Green Market




## Together, towards a green future.

Telangana DISCOMs have sold about 797 MU of solar energy from September 2020 to July 2021. It has helped the State in ensuring financial liquidity while also enabling us to channelise the surplus renewable energy into the market.

The Green Market is an important part in India's green energy shift and going forward, we will increasingly tap into the market segment.

**C. Srinivasa Rao**  
Joint Managing Director  
Telangana Transco



In April, the first full month of the lockdown, national power demand crashed by 25% year-on-year. Photo: Indranil Bhoumik/Mint

## “Andhra Pradesh saves Rs 2,350 crore in power purchases in 2 years” –Times of India – May 24, 2021

*Andhra Pradesh has saved around Rs 2,350 crore by purchasing electricity in spot markets at cost effective prices in the last two years, i.e., 2019–20 and 2020–21*

*The power utilities procured 3,393 million units in 2019-2020 and 8,890 MU in 2020-21 from the open market at cheaper prices*

Green Market




## Together, towards a green future.

As India's largest producer of aluminium, we are making rapid strides towards realisation of our climate action targets. This includes attaining the highest standards of energy efficiency at our plants and processes, and increasing the share of renewables in our energy mix to produce aluminium, the metal of the future. We procured 354 MU of green power from IEX's Green Market in Q1, becoming India's largest green power buyer. IEX's Green Market has the potential to shift the paradigm on the Indian Aluminium Industry's sustainability targets, enabling companies like us to produce high-quality low-carbon value-added products of aluminium, a metal critical for realisation of India's aspirations of \$ 5 trillion economy.

**Rahul Sharma**  
Chief Executive Officer  
Aluminium Business, Vedanta Limited

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## VISION

To lead India's transition towards a gas-based economy by architecting next generation solutions for natural gas trading and access

**01**

**1st natural gas trading exchange**

**02**

**Automated platform with cutting edge technology**

**03**

**Efficient & transparent market driven price discovery mechanism**

**04**

**Indigenous price benchmark**

# Opportunity

- Under Paris Climate Agreement, govt commitment to reduce carbon emissions will promote use of Natural Gas
- Government's vision of increasing share of Natural Gas in total energy basket from 6% to 15% by 2030 will increase gas consumption in the economy from current 160 MMSCMD to 500+ MMSCMD
- CGD 11th round to cover >90% population in next 6 years
- LNG terminal capacity is expected to grow from current 42.5 MMTPA to around 72 MMTPA in 3 years
- Transmission pipeline network is expected to grow from ~20,000 km to around 35,000 km by 2023
- Presently out of 160 MMSCMD of gas consumption ~85 MMSCMD is imported through short term
- Unified transmission tariff (two-zone) under implementation

**Indian gas sector is poised for an unprecedented growth in demand, led by CGD coupled with increasing dependency on imported LNG. Supported by ramp up in LNG terminal and gas T&D infrastructure enabling short term trading of gas.**

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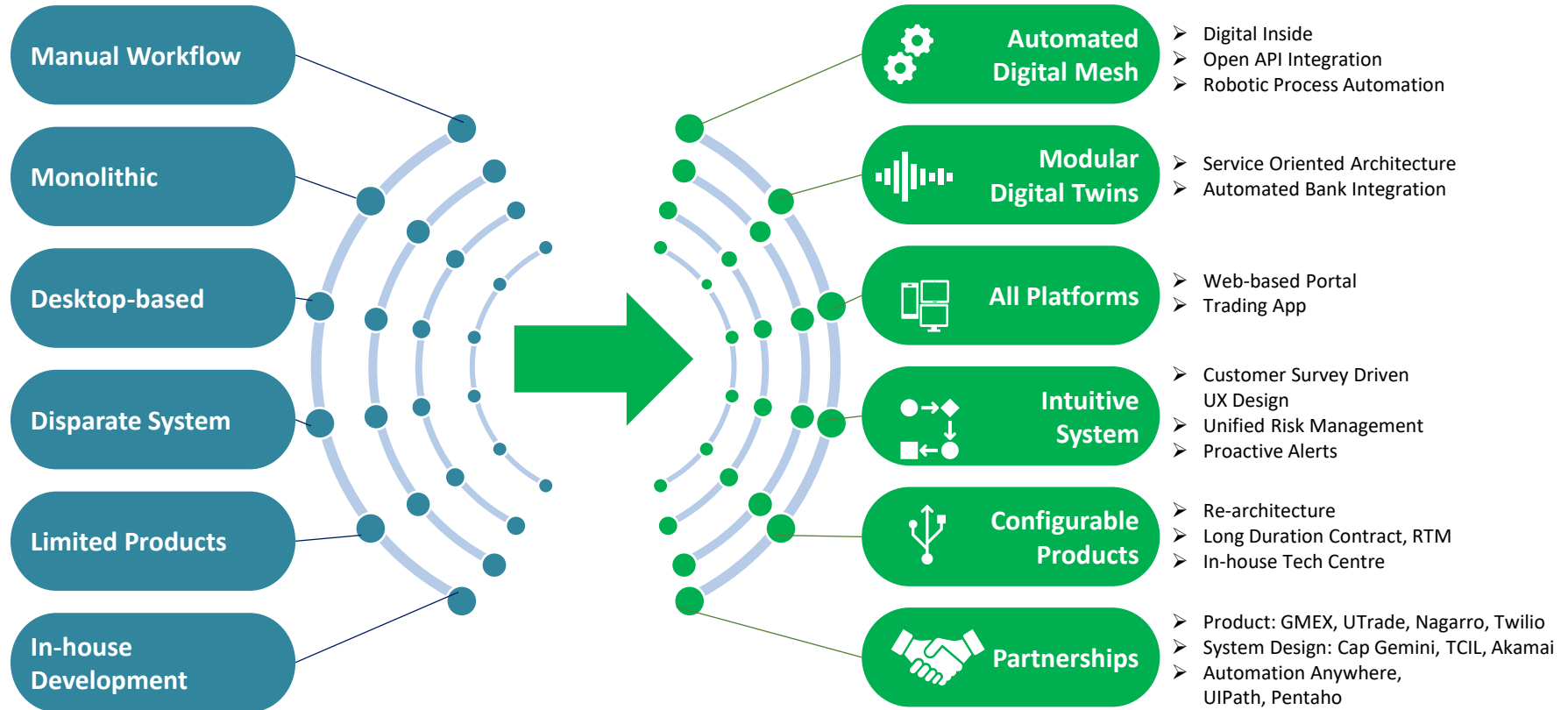
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# Transitioning towards a Futuristic Tech Architecture





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# Customer Experience Transformation

## ➤ Platform access beyond 70+ Members

- Anytime, Anywhere, Secure Web and Mobile access to 70+ Members, 6000+ Clients, Senior Leaders across Members and Clients, key Stakeholders in the Power Sector

## ➤ Personalized and Deep Data Insights for effective Decision making (Real time and trend data)

- Bid Details (Cleared, Un-cleared, Distribution of un-cleared Buy and Sell from Clearing Price, etc...)
- DSM and RTM comparison
- Generation, Transmission Lines Outage
- Demand, Weather

## ➤ Bid upload Automation through APIs, and through auto-flow of un-cleared Bids across market segments

## ➤ Digital / Paperless processes

- Online Registration and Updates
- National Open Access Registry (NOAR) integration

## ➤ Robust Business Continuity through seamless DC to DR switch

# Immense growth potential

## Demand for Electricity

- Expected growth of 8-10% in GDP anticipated to further drive demand for electricity
- 100% household electrification under SAUBHAGAYA scheme
- Rapid urbanization - 17 of 20 world's fastest growing cities in India
- Per capita electricity consumption is expected to increase by ~40% in the next 4 years

## No new PPAs and Merchant Sell at reasonable rates

- No new long-term PPAs signed in the last 5 years in thermal power
- ~20GW of untied merchant capacity in the country

## Phasing out of old and inefficient Thermal Plants

- Total capacity likely to phase out by March 2027: 41 GW
- Incremental ~100BU opportunity for Exchange

# Immense growth potential

## Favorable Policy and Regulatory Initiatives

- CERC approved the Procedure for Short Term Open Access in inter-State Transmission System for implementation of National Open Access Registry (NOAR) which will enable automation, seamless processes, transmission allocation, and greater efficiency in the power market
- In Dec'21, CERC issued the draft CERC (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021 which is expected to promote development of power market in the country
- CERC issued the Ancillary Services Regulations 2022 which includes the Secondary Reserve Ancillary Services along with the Tertiary Reserve Ancillary Services with an aim towards maintaining the grid frequency close to 50 Hz, expand and relieving congestion in the transmission network
- MoP issued guidelines for Procurement and Utilization of BESS as part of Generation, Transmission and Distribution assets along with Ancillary Services to facilitate procurement of BESS, augmentation of existing RE Projects and to provide ancillary, grid support and flexibility services for the grid
- Ministry of Power issued Green Hydrogen Policy in order to facilitate the transition from fossil fuel/ fossil fuel-based feed stocks to Green Hydrogen/Green Ammonia

# Immense growth potential

## Efficient Price discovery

- Efficient price discovery has been the biggest growth driver for exchanges in the past
- Discoms can source cheaper power through Exchange to meet shortages
- Industries can source competitive power to reduce their input costs
- Prices at Exchange lower than Bilateral contracts

## Flexibility

- Exchange provides flexibility to purchase power as per requirement throughout the year
- Option available to Buy/Sell different quantum for each 15 mins time block. Minimum bid quantum can be as low as 0.1 MW
- Availability of power within 1hour of requirement

## New launches

- New product launches – National Open Access Registry, Longer Duration Contract, Ancillary Market, Capacity Market, Gross Bidding Contract
- Derivatives – IEX price to be used as reference
- Diversification opportunities – Play in the energy basket of India

# Way forward

## 1. Expand coverage and market

- Launch new products
- Advocacy to increase short term market

## 2. Best in class, futuristic Technology Infrastructure

- Enterprise IT, trading platform
- Technology & analytics solutions for customers

## 3. Strengthen the organisation


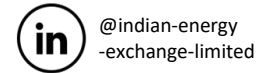
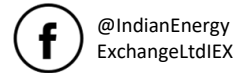
- Capacity building, hi-performance culture
- Talent acquisition, development and retention

## 4. Business diversification

- Play in the energy (eg. - gas) basket of India
- Energy efficiency technology solutions




# Thank you



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