



Dated: February 11, 2020

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

**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**

**Scrip Code: 540750**

**Symbol: IEX**

**Subject: Investor Presentation Q3 FY 2020**

Dear Sir / Madam,

Pursuant to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, please find attached an Investor Presentation made during meeting with the Analysts/Institutional Investor(s).

The above information is also 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**  
**Company Secretary & Compliance Officer**  
**Membership No. ACS-16264**



Encl: As above

# Investor Presentation -Q3'20

## IEX : Who we are



**In this  
presentation**

Sector transformation

Electricity value chain & Power market structure

Way forward

# Who we are

- Nationwide automated platform providing a competitive and transparent marketplace for physical delivery of electricity
- Commenced operations in 2008, CAGR 35%, CERC regulated
- India's leading power exchange, Market Share: **97%**
- Average daily trade **6000+ MW**
- Record day volume : 308 MU's (12,900 MW)
- Our customer base
  - 4000+** Industries | **55** Discoms (all) | **100+** ESCert Entities
  - 400+** Generators | **1500+** RE Generators & Obligated entities
- *Publicly listed company (NSE and BSE)*
- *ISO 9001:2015, ISO 27001:2013, ISO 14001:2015*

## VISION

Create marketplaces for efficient use of the energy resources

## MISSION

To operate an energy marketplace that is transparent, competitive and reliable, for the benefit of all stakeholders

# 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 (~35 GW Merchant plants)**



### Transmission

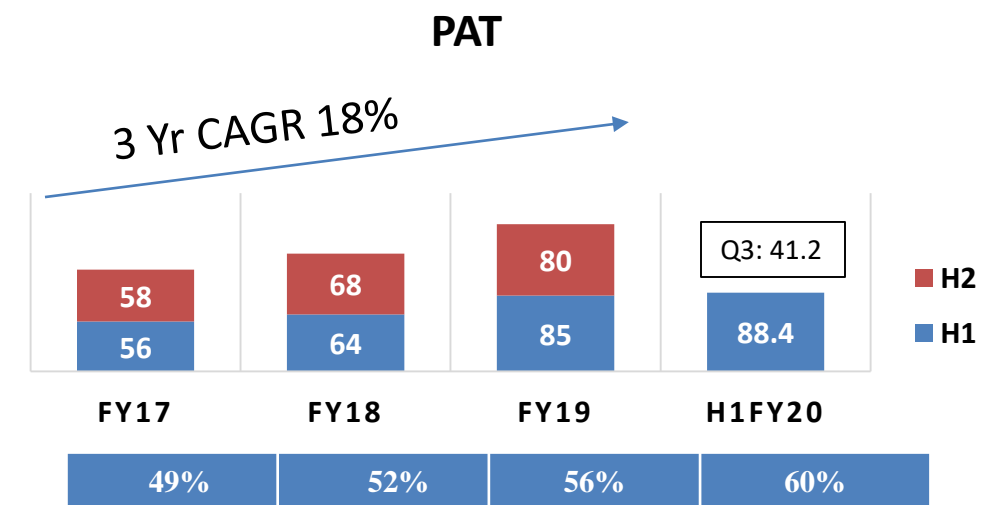
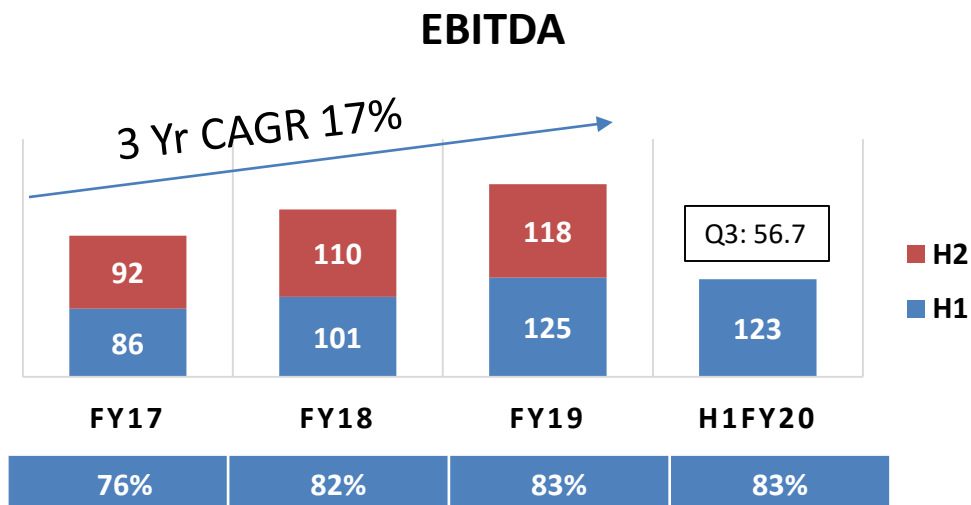
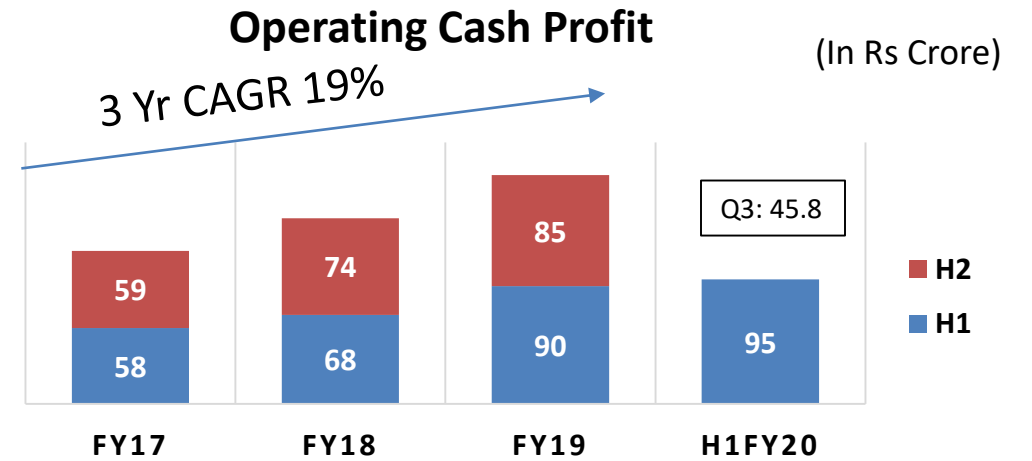
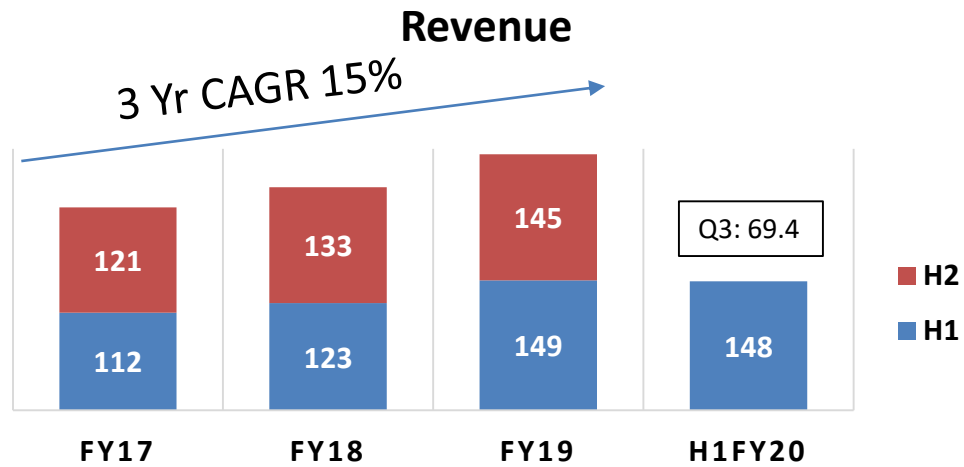
▶ **Investments in transmission-congestion free – One Grid One Price**



### Distribution

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

# Robust financials & operational excellence



\* Q3'20 financials are consolidated to include financials of Indian Gas Exchange; wholly owned subsidiary of Indian Energy Exchange incorporated on November 06, 2019.

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# Sector transformation drivers

## Decarbonization



Deployment of low-carbon technologies - wind and solar.

### Outlook:

- Renewables to become leading energy sources
- Emerging new tech like hybrids

## Decentralization



Small-scale generation across T&D network

### Outlook:

- RE a threat to centralized energy production
- Requirement of local solutions

## Digitization



Intelligent CS and Apps to optimize plants and grid

### Outlook:

- Digital Tech to promote aggregation solutions

## Democratization



Empowered consumers - economic power shift

### Outlook:

- Peer to peer energy trading

***Paris Climate Agreement – Renewable energy to constitute 40% of total installed capacity base of 1250 GW by 2030***

***Hybridization requires technology driven apps and automation***





# In this presentation

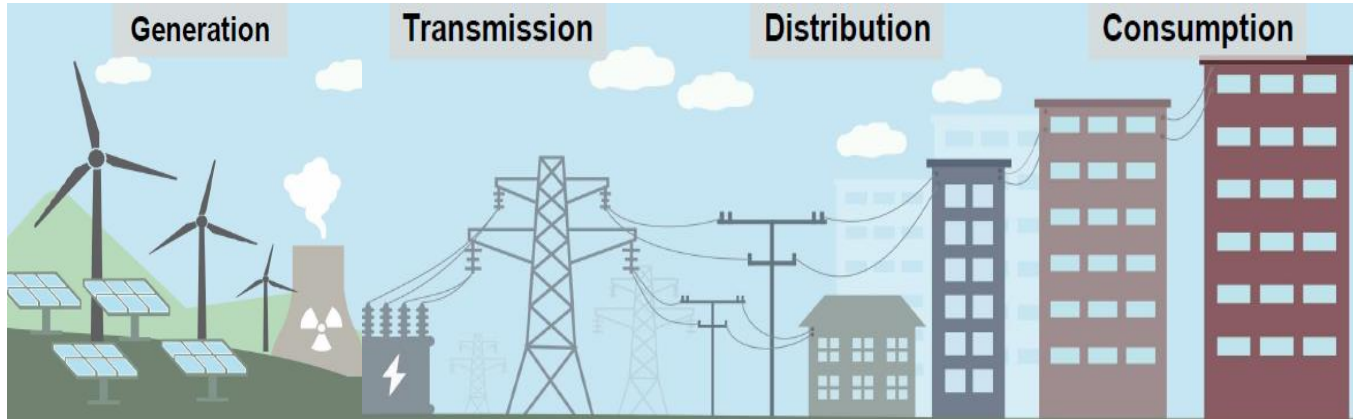
IEX : Who we are

Sector transformation

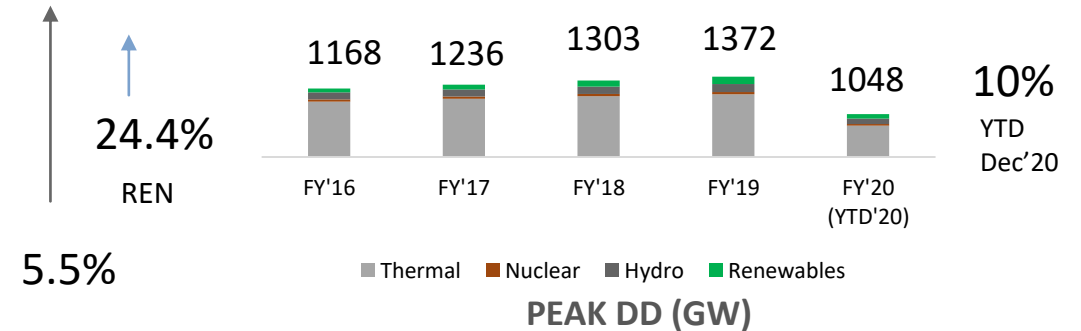
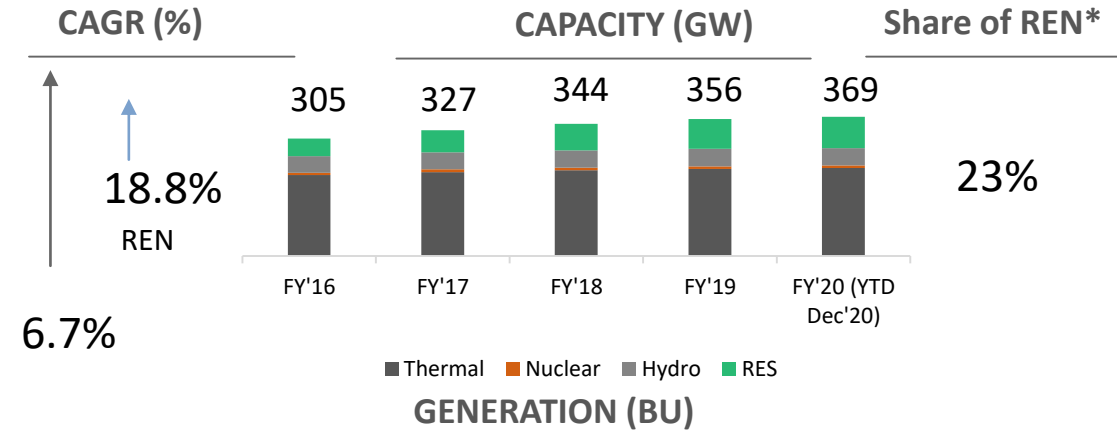
**Electricity value chain & Power market structure**

Way forward

# Electricity value chain



Generation	Transmission	Distribution	Consumption
De-licensed	is licensed	licensed	Energy deficit decreased from 10% to 0.7% over the last decade
Private sector ~46%	World's largest network	Rs 88,795 Cr O/S*	
Generation in distress	Pvt sector ~8%	DISCOM losses ~Rs.28,000 Cr	
		AT&C Loss	



- As of Dec 2019; CAGR till FY'19, calculated as 4 yr CAGR except for Generation (3 year CAGR)
- Source: CEA; MOP 5 year vision; press

# Power market structure

Long Term (89.4%)

Short Term (10.6%) (3Yr CAGR: 8%; 1H'20: -1.7%)

1,372 BU (incl REN)\*

Up to 25 years

OTC:  
Intraday to 1 year

Exchanges:  
Intraday – 11 days

Real Time

1,226.5 BU

66.5 BU

53.5 BU

25.1 BU

89.4%

4.9%

3.9%

1.8%

Long-term PPA

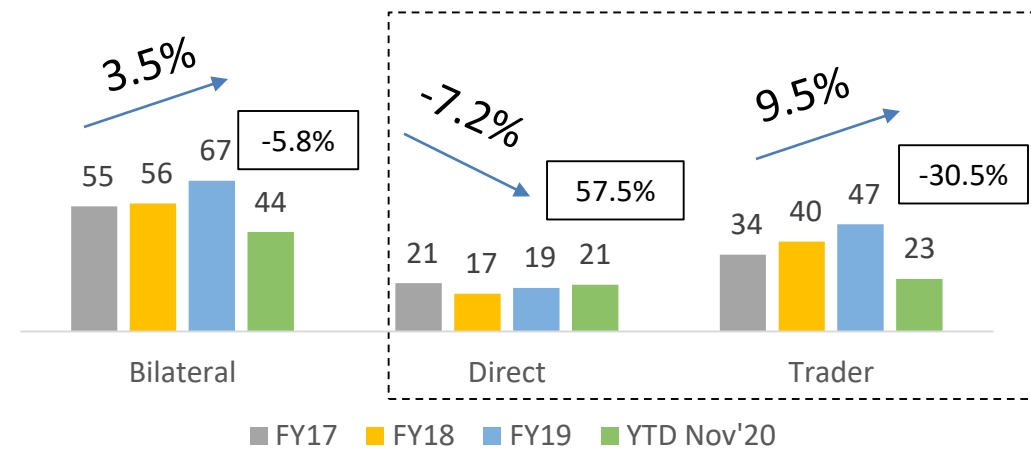
Bilateral &  
Banking  
Transactions

Exchanges  
(Only up to 11  
days)  
➤ DAC  
➤ Daily  
➤ Weekly  
➤ Day Ahead  
Market

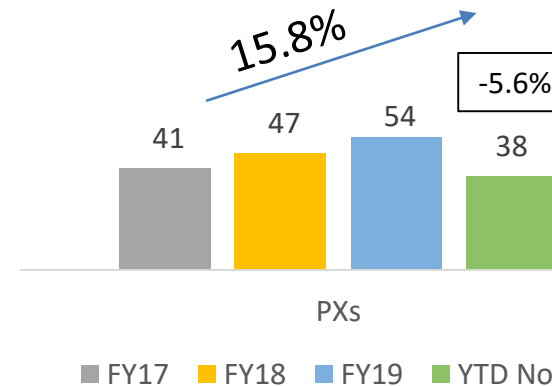
Deviation  
settlement/  
Unscheduled  
Interchange

- As of FY'19; CAGR calculated for 3 years ending FY'19
- Source: CEA, CERC

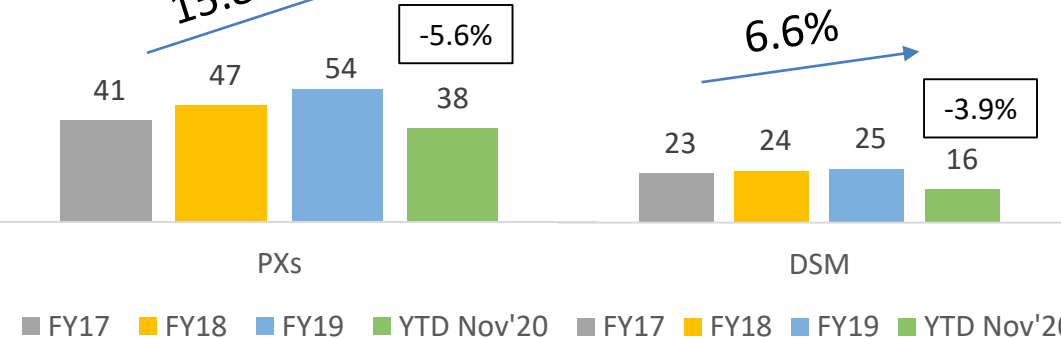
## Bilateral (BU)



## Exchange (BU)



## DSM (BU)



# Electricity consumption set to increase

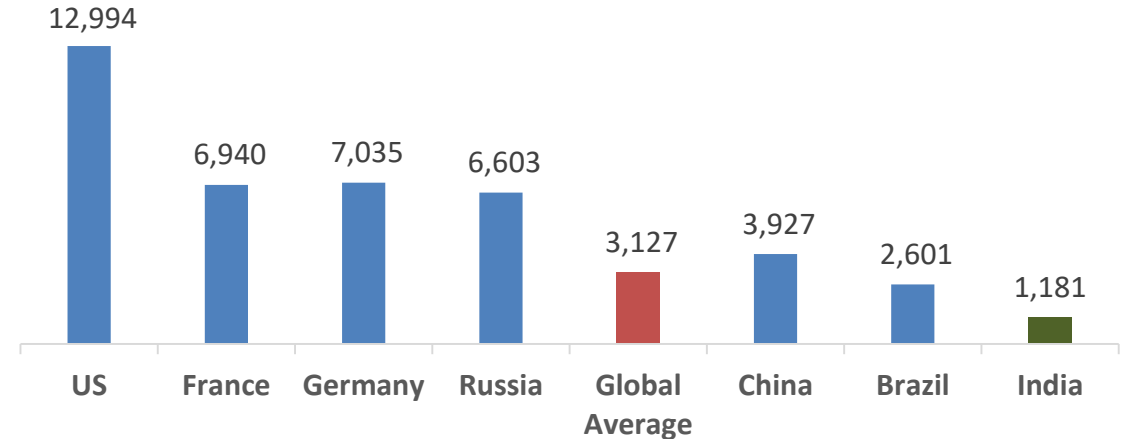
- **India a third of global average in per capita consumption**
- **Economic activity will accelerate**
  - Government envisions India as a \$5tn economy by FY'25
  - Manufacturing contribution up from 15% to 25%
  - Core sector growth will drive electricity consumption
- **Rapid urbanization**
  - 17 of 20 world's fastest growing cities in India
- **Consumer demand growth**
  - Last mile connectivity - Saubhagya : Power for All
  - Power on 24x7 basis



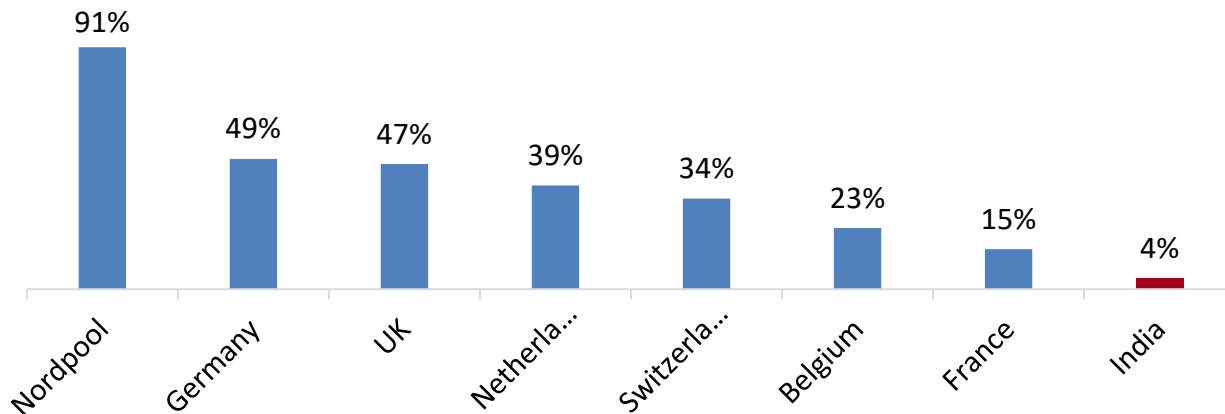
# Markets have immense potential

- Electricity demand grew 5.6% in the last 3 years
- India's per capita electricity demand is 1/3<sup>rd</sup> global average; projected to increase 40% in next 5 years
- ~ 45 GW of PPA's retiring in the next 8 years
- ~4.3 GW of PPA's (LT and MT) expiring in the next 8 years

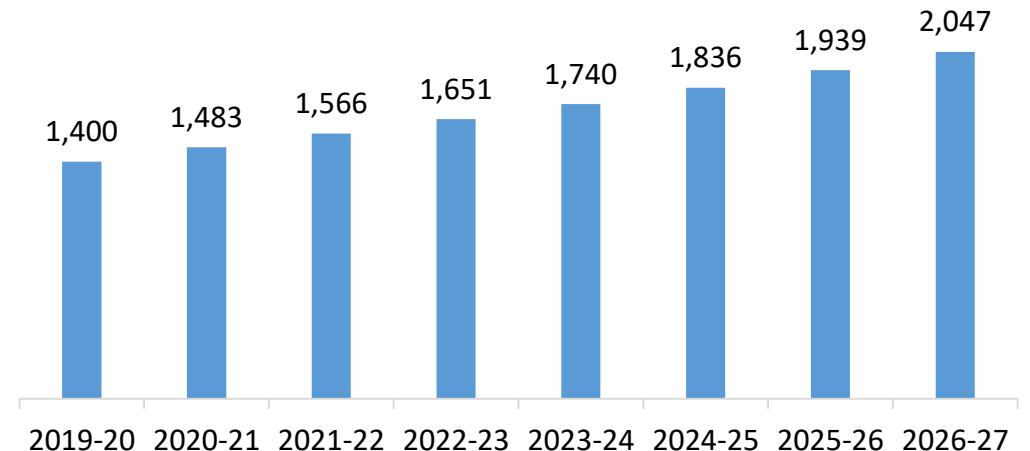
## Per Capital Electricity Consumption (KWh)<sup>2</sup>



## Exchange market as a % of total demand – Global<sup>4</sup>



## Expected Electrical Energy Requirement (BU)<sup>3</sup>





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**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



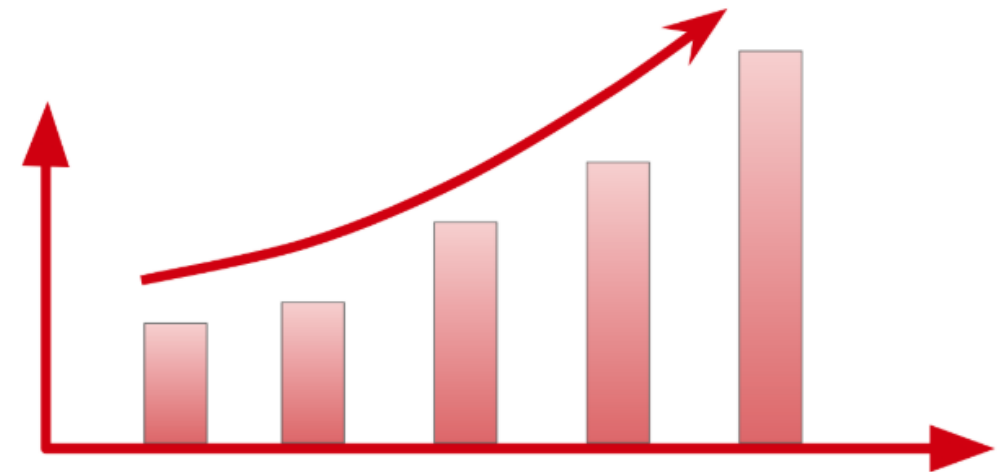
# Expand coverage and market

## New Product Launches

- Real time electricity market
- Cross Border Trade
- Longer Duration Contracts
- Green TAM
- Exchange based Ancillary Market
- Gross Bidding

## Tech based

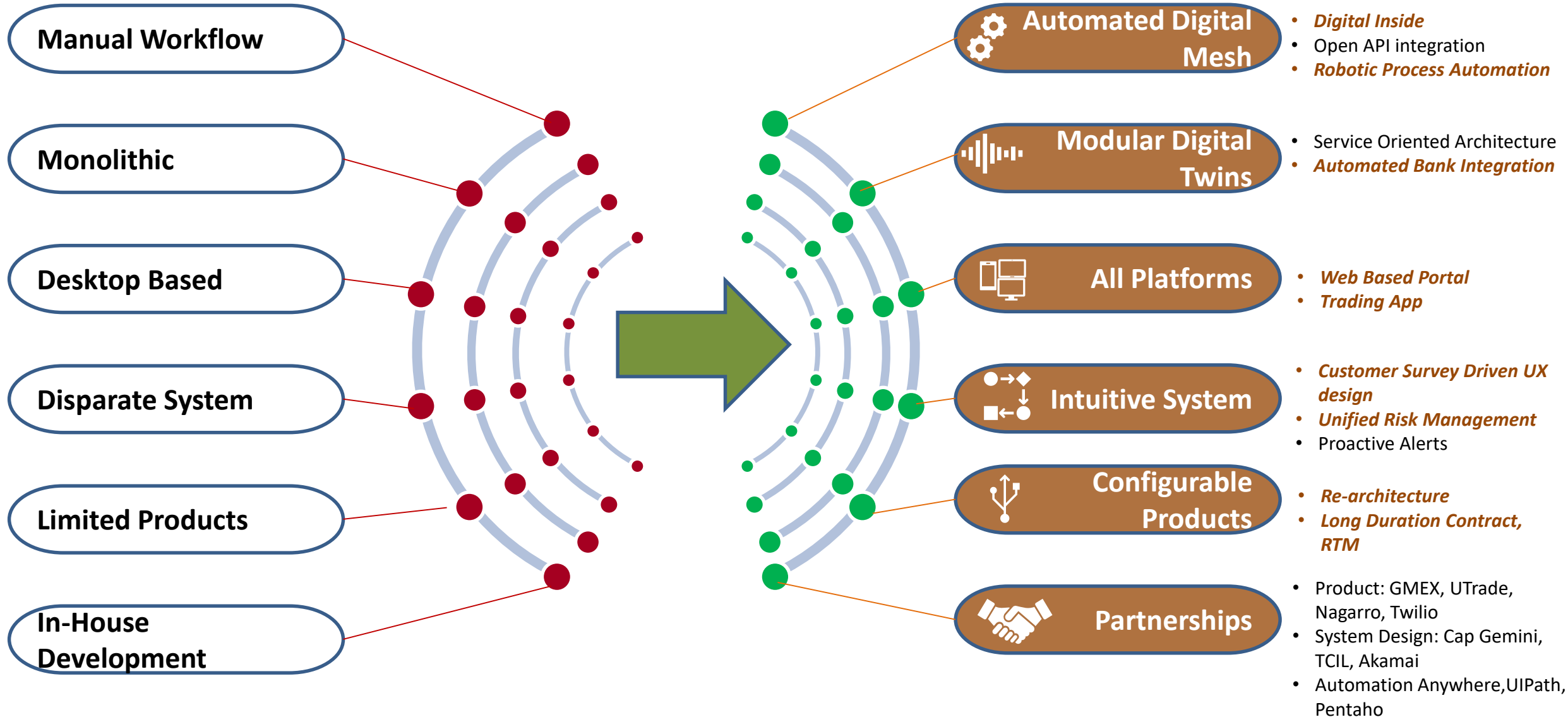
- Smart Power Procurement
- Analytics
- New Product Development



**Open Access + DISCOM Maximization**



# Technology in transformation



# Smart Product/Bids



## **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**

## Govt vision of gas based economy

- Govt policy targets to increase share of natural gas in India's energy basket from 6.5% to 15% in 5 years.
- This would lead to Indian Gas market growing 2.5X (166 to 380 MMSCMD) by 2030.
- A robust gas trading exchange enabling seamless transactions can help Govt realize this ambitious target.

## Market gaps and need

- Buyers desire price transparency, flexibility and anonymity to overcome suppliers' bargaining power.
- MoPNG has expressed the need for a Gas Trading Hub. Taken steps towards market development.

## Our plan/solution

- To optimize trading value chain, plan to set up a Gas Exchange - Physical hubs near Dahej and Kakinada.
- Prompt and longer duration products with delivery facilitation by the exchange.
- State of the art and proven exchange technology backed with long experience in electricity

## Enablers required for success

- The history of gas market hubs globally has shown that certain steps are needed to enable development
- Few technical issues need resolution to ensure liquidity and enable efficient trading at the hub

Thank You