



Dated: June 04, 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, 5th Floor, Plot no C/1
G Block, Bandra Kurla Complex
Bandra (E), Mumbai-400 051**

Scrip Code: 540750

Symbol: IEX

Sub: Investor Presentation Q4 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 for Q4 FY2020.

The above information will also be made available on the website of the Company:
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 - Q4 FY'20



In this presentation

Sector in transformation

Electricity value chain

IEX : Who we are

Impact of COVID - 19

Way forward

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

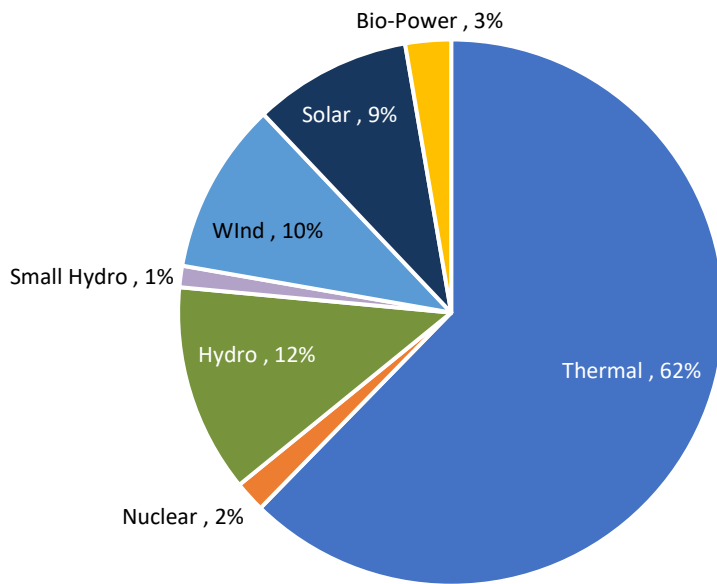
Outlook:

- Peer to peer energy trading

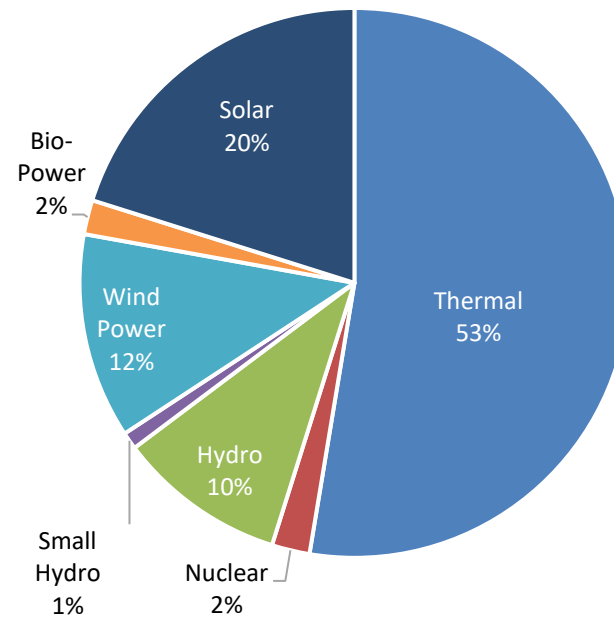
The energy shift

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

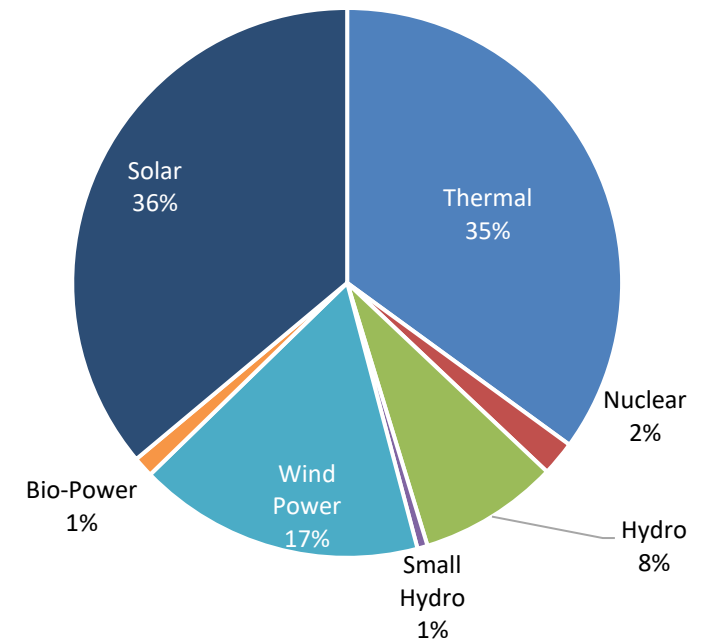
Hybridization requires technology driven apps and automation



2020



2022



2030

Changing Installed Capacity Mix – Increasing reliance on RE

Sector in transformation

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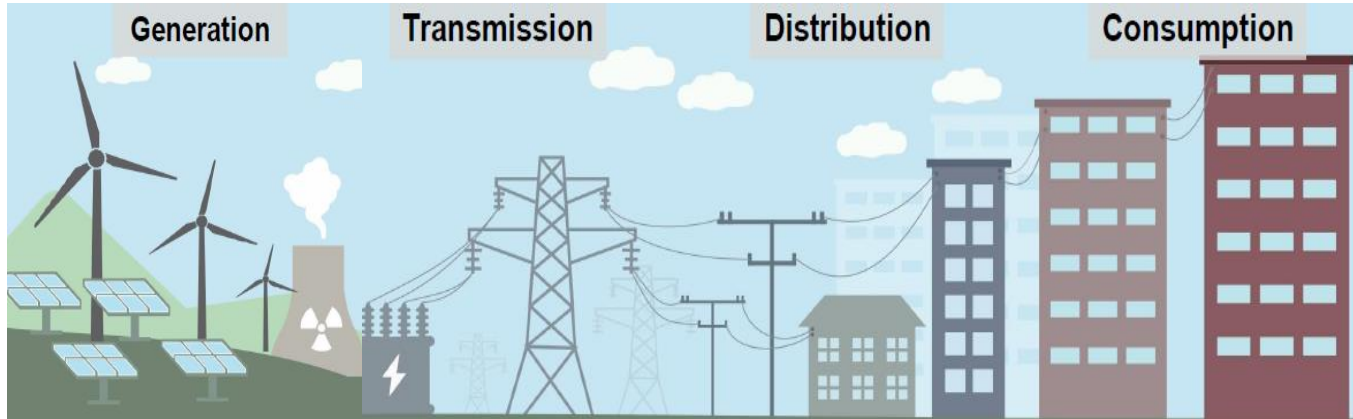
Impact of COVID - 19

Way forward



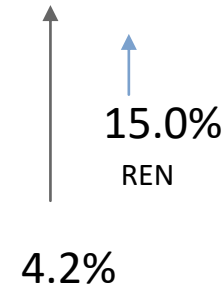
**In this
presentation**

Electricity value chain

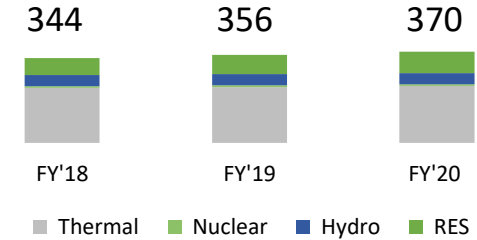


Generation	Transmission	Distribution	Consumption
De-licensed	is licensed	licensed	Energy deficit decreased from 10% to 0.5% over the last decade
Private sector ~46%	World's largest network	Rs 91,284 Cr O/S as of March 2020*	
Generation in distress	Pvt sector ~8%	AT&C Loss	

3 Yr CAGR (%)



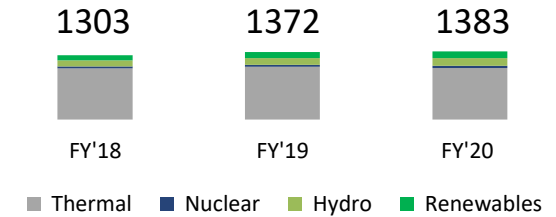
CAPACITY (GW)



Share of REN*

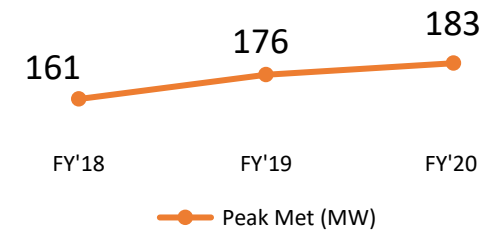
24%

GENERATION (BU)



10%

PEAK DD (GW)



5.2%

• Source: PRAAPTI; CEA; MOP 5 year vision; press

Power sector construct

Long Term (90%)

Short Term (10%) (3Yr CAGR: 8%; YTD Feb'20: -4.9% YoY)

1,274 BU (incl REN)*

Up to 25 years

OTC:
Intraday to 1 year

Exchanges:
Intraday – 11 days

Real Time

1,146.3 BU

54.7* BU

52.1* BU

20.8* BU

90.0%

4.3%

4.1%

1.6%

Long-term PPA

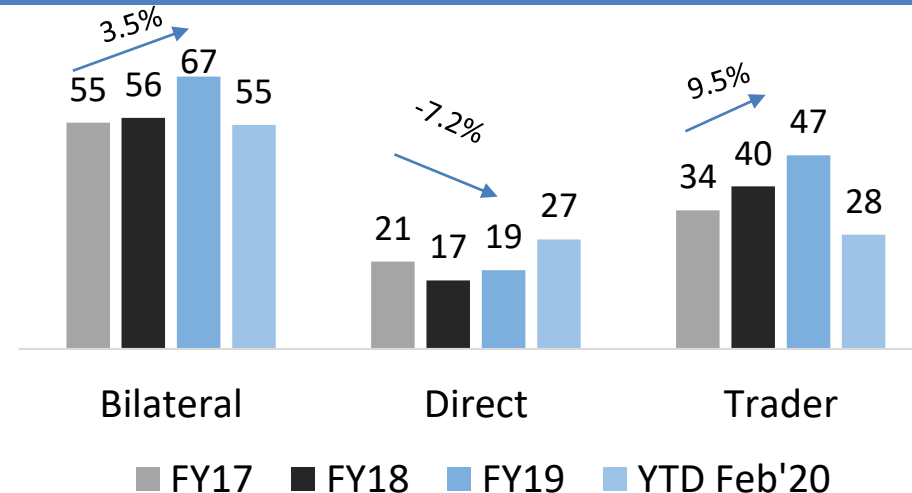
Bilateral &
Banking
Transactions

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

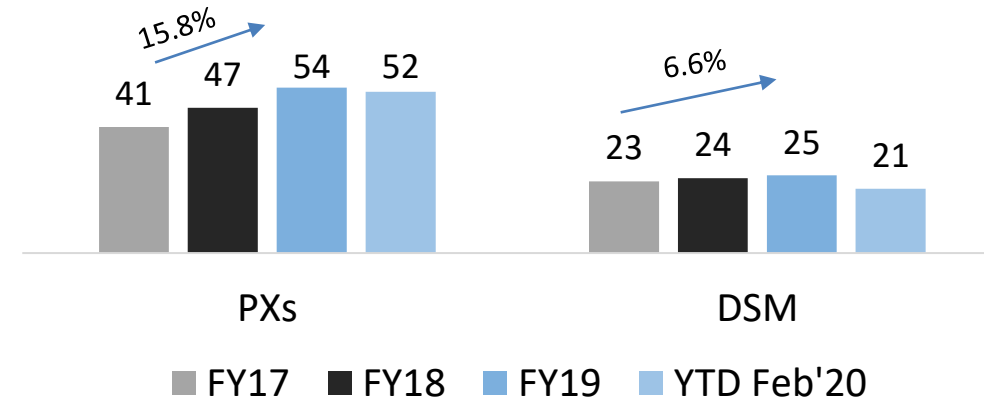
Deviation
settlement/
Unscheduled
Interchange

- As of YTD Feb FY'20; CAGR calculated for 3 years ending FY'19
- Source: CEA, CERC

Bilateral (BU)

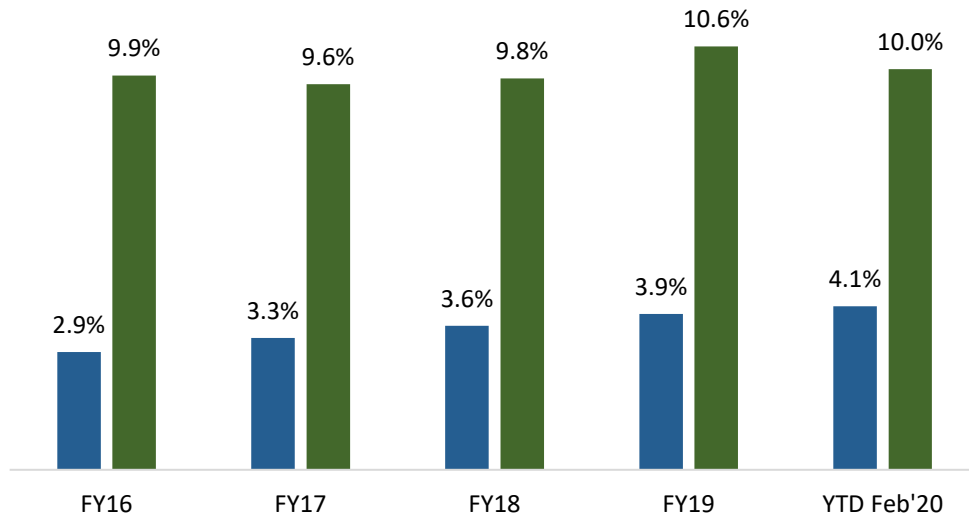


Exchange (BU)



Share of power exchanges globally

Exchange market and ST market a % of total generation (incl Ren) – India¹



Exchange market as a % of total demand – Global²

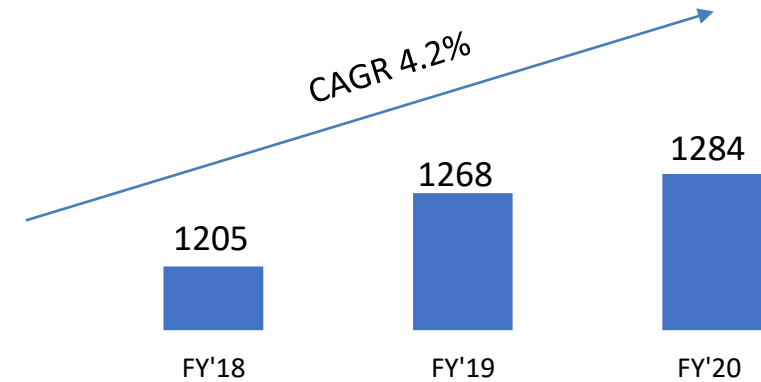


Power markets in developed economies are in the range of 30-80% of total power demand vis a vis 4% in India

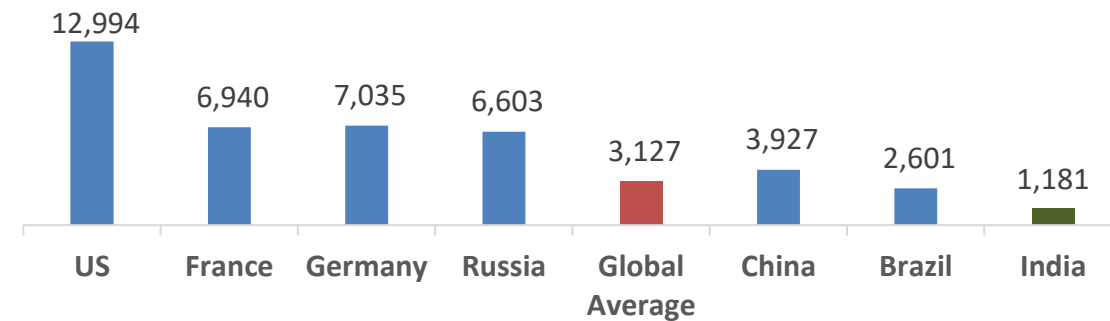
Electricity consumption bound to increase

- **India a third of global average in per capita consumption**
- **Economic activity will accelerate**
 - Government envisions India as an industrial hub
 - 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

Total Electricity Demand (BU)¹



Per Capital Electricity Consumption (KWh)²





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Who we are

- India's leading power exchange – Nation wide, Automated and transparent platform for physical delivery of electricity
- Commenced operations in 2008, Market Share: **95%**
- Electricity CAGR ~40%, CERC regulated
- 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
 - 500+** Generators | **1500+** RE Generators & Obligated entities
- *Publicly listed company (NSE and BSE)*
- *ISO 9001:2015, ISO 27001:2013, ISO 14001:2015*

OUR VISION

To be the architect of next-generation solutions for sustainable energy ensuring competitive, transparent and reliable access.

Transparency

Liquidity

Competition

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**



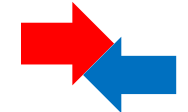
Distribution

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

Our Market segments

Day-Ahead Market	<ul style="list-style-type: none"> • <i>Delivery <u>for next day</u></i> • <i>Price discovery: Closed , Double-sided Auction</i> 
Term-Ahead Market	<ul style="list-style-type: none"> • <i>Intraday: For Delivery within the same day</i> • <i>Day Ahead Contingency: Another window for next day</i> • <i>Daily and weekly contracts</i> 
Real-Time Market	<ul style="list-style-type: none"> • <i>Delivery <u>after 1 hour of auction</u></i> • <i>Price discovery: Closed , Double-sided Auction</i> 
Renewable Energy Certificates	<ul style="list-style-type: none"> • <i>Green Attributes as Certificates</i> • <i>Sellers : RE generators not under feed in tariffs</i> • <i>Buyers: Obligated entities; 1MWh equivalent to 1 REC</i> 
Energy Saving Certificates	<ul style="list-style-type: none"> • <i>1 ESCert = 1 mtoe (metric Tonne of Oil Equivalent)</i> • <i>Trading Session on every Tuesday of the Week</i> • <i>Trading time 1300 hrs to 1500 hrs</i> 

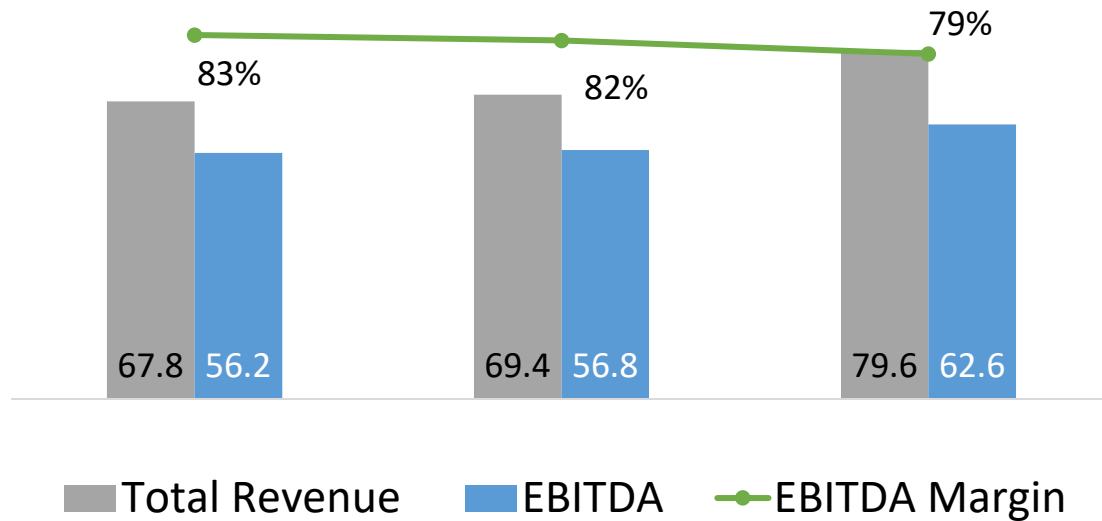
Auction



Continuous

Robust financial performance – Q4 2020

Consolidated Financials Rs Cr



Breakup of standalone revenues (%)	Q4 FY 2019	FY 2019	Q4 FY 2020	FY 2020
Transaction Fees	77%	80%	80%	80%
Admission and Annual Fees	6%	7%	7%	6%
Other Income	17%	14%	13%	14%

Robust business model and financial strength

Launch of a new market segment

- Introduced a new market segment - Real Time Markets
- Trading commenced on 1st June 2020
- Market Features
 - 48 bid sessions during the day; Each bid session for a duration of 15 minutes
 - First bid session starts at 2245 hrs
 - Double-sided anonymous auction bidding process
 - Exchange manages risk management
- Day 1 performance of IEX
 - Traded **3.41 MU** volume, Market share **99%**
 - All key generation & distribution companies as well as the open access companies participate
 - Attractive average price discovered at Rs 1.55 per unit



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Impact of CoVID-19 on Indian Power sector

- Being essential service, impact on power generation is likely to be less than other industries
 - IPP's will be impacted – no PPA's + anticipated fall in spot prices could drive them out of market
- Limited impact on coal prices and coal logistics, solar module prices would increase
 - 62GW thermal, 11GW RE under construction projects likely to be delayed – debt servicing, project viability
- Sustained lockdown to adversely impact industrial and commercial demand (~50% share)
 - Reduction in peak demand by about 25% in April and 10% in May
 - Fall in C&I demand will impact subsidies available to other consumers
 - Revenue collection will be impacted
- Collection delays and defaults by consumers will impact payment to gencos and debt servicing to FI's
 - Tariff revision for utilities could be deferred leading to revenue shortfall
- Govt budgets to power sector could be diverted to COVID funding

IEX extending support during the crisis

- Enabling replacement of costly PPAs through buying on exchange
- Supporting distribution companies in supplying 24*7 uninterrupted power
- Extensive customer engagements and communication drives
- Providing round-the-clock operations with seamless connectivity and high security
- End to end automation allowing remote working
- Pivoting on employee safety as the first principle

Providing significant savings to DISCOMs



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

“Maharashtra discoms turn to energy exchanges, shun costly PPAs” – PTI – April 12, 2020

"We are increasingly buying power from exchanges, which is cheaper than PPA tariffs," an official from state utility Mahavitaran

“Power utilities turn to cheaper exchange power as prices crash” – Live Mint – May 28, 2020

“We’ve been doing this for 6-7 months at APTransco, and we managed to save ₹500 crore in FY20. We were well placed to maximise this benefit when spot prices fell on the exchange during the lockdown in March and April. We saved ₹56 crore and ₹132 crore in those two months. We were able to buy power for as low as ₹1.8 a unit at one point.”





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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



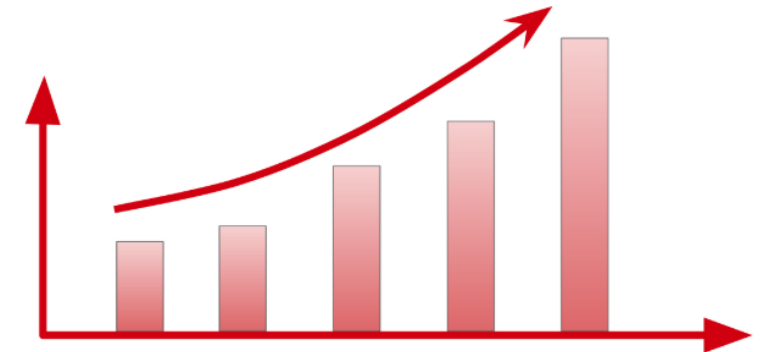
Expand coverage and market

New Product Launches

- Cross Border Trade
- Longer Duration Contracts
- Green TAM
- Exchange based Ancillary Market
- Banking contracts

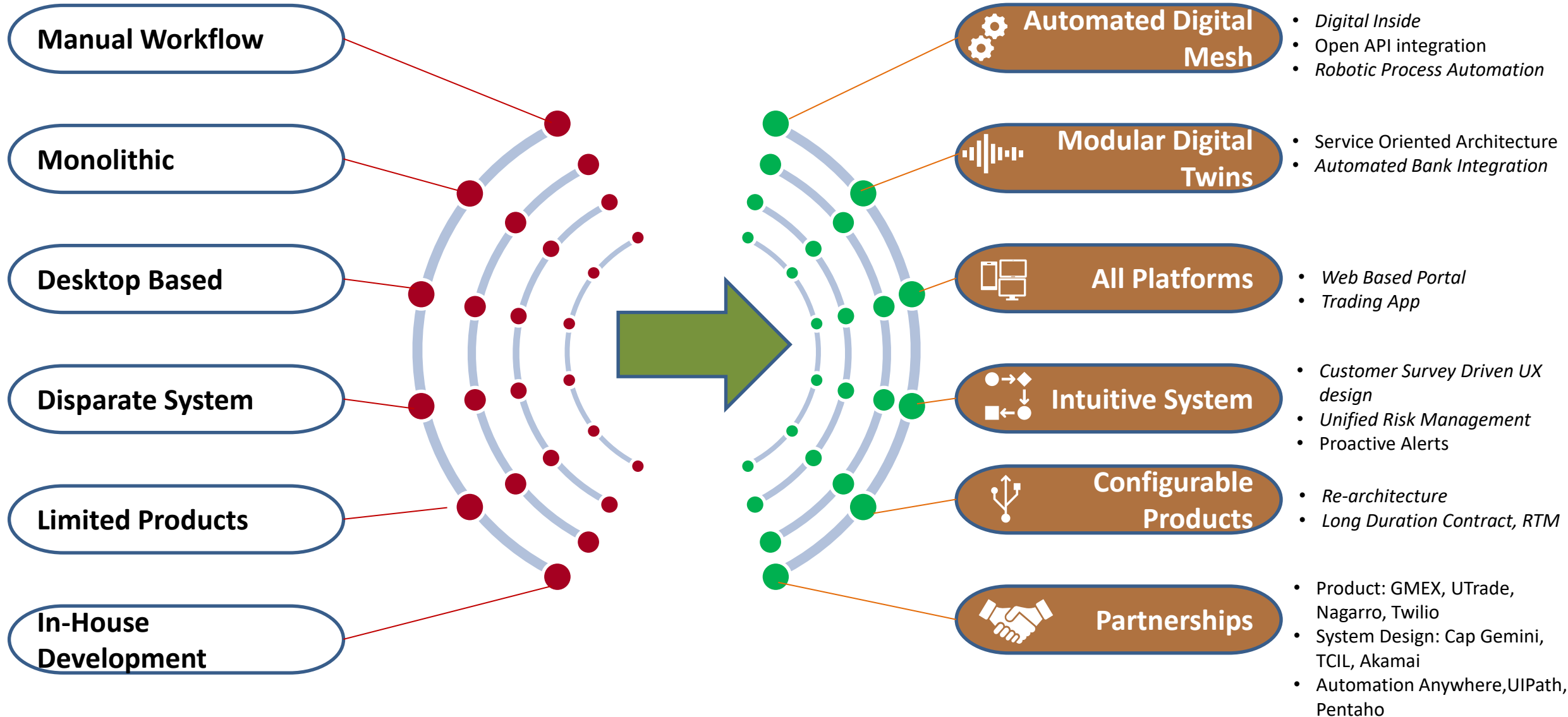
Tech based

- Smart Power Procurement
- Analytics
- New Product Development



Organization capacity building – Adding resources

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, Hazira and Oduru.
- 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