IEX
INDIAN ENERGY EXCHANGE

Dated: November 29, 2019

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: BSE- 540750; NSE- IEX

Subject: Analyst/Investor Presentation

Dear Sir / Madam,

Pursuant to Regulation 30 of the SEBI (LODR) Regulations, 2015, please find enclosed the presentation given at Analyst Meet held on November 28, 2019 in Mumbai.

The above information is also available on the website of the Company: www.iexindia.com.

This is for your information and records.

Thanking You

Yours faithfully,

For **Indian Energy Exchange Limited**

Indian Energy Exchange Limited

Vineet Harlalka
Company Secretary & Compliance Officer

Encl: as above

Indian Energy Exchange Limited
Registered & Corporate Office: Unit No. 3, 4, 5 & 6, Plot No.7, Fourth Floor, TDI Centre, District Centre, Jasola, New Delhi – 110025
Tel: +91-11-4300 4000 | Fax: +91-11-4300 4015
CIN: L74999DL2007PLC277039

IEX Analyst Meet

28.11.2019

In this presentation

Vision and Mission

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

Who we are

- Automated, open and transparent platform for physical delivery of electricity
- Commenced operations in 2008, CAGR 33%, 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 **I** **55** Discoms (all) **I 100+** ESCert Entities

400+ Generators **I** **1500+ RE** Generators & Obligated entities

- *Publicly listed company (NSE and BSE)*
- *ISO 9001:2015, ISO 27001:2013, ISO 14001:2015*

Transparency

Liquidity

Competition

IEX 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

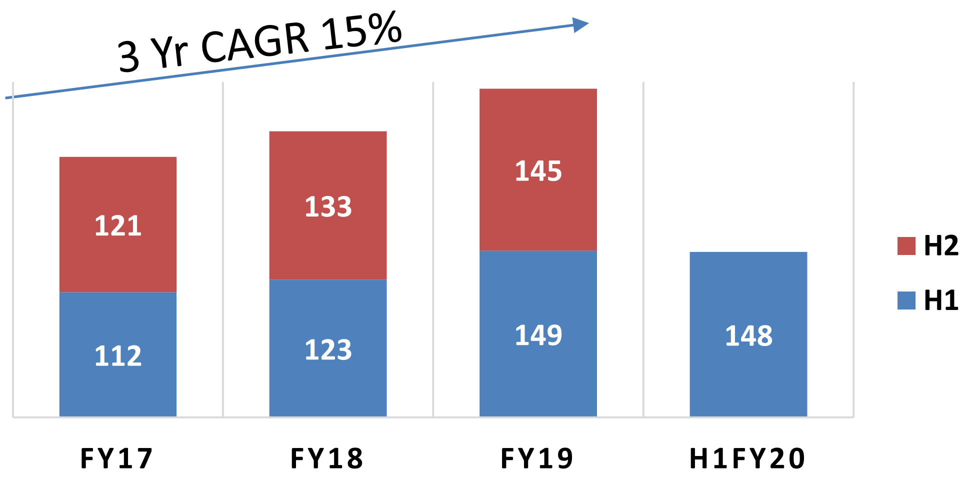
Distribution

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

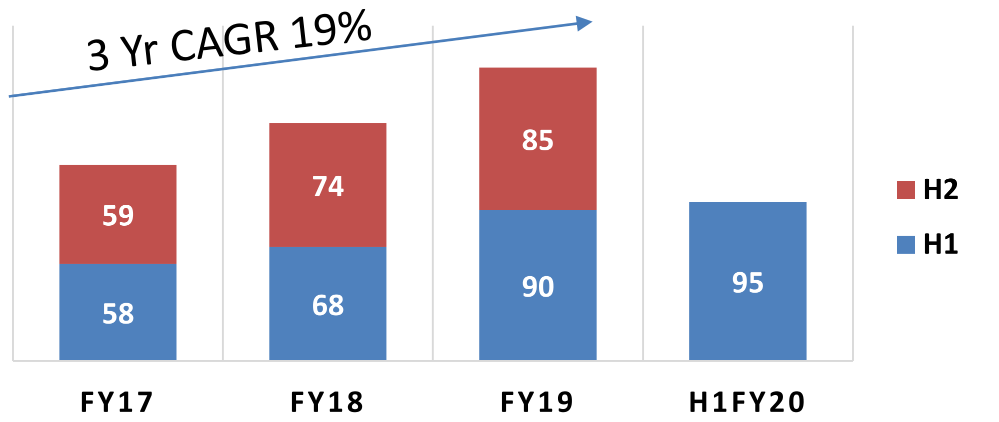
Robust financials & operational excellence

(In Rs Crore)

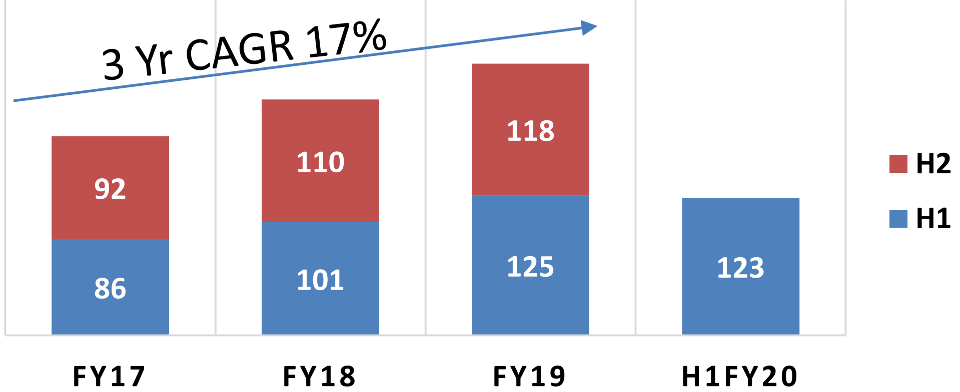
Revenue



Operating Cash Profit

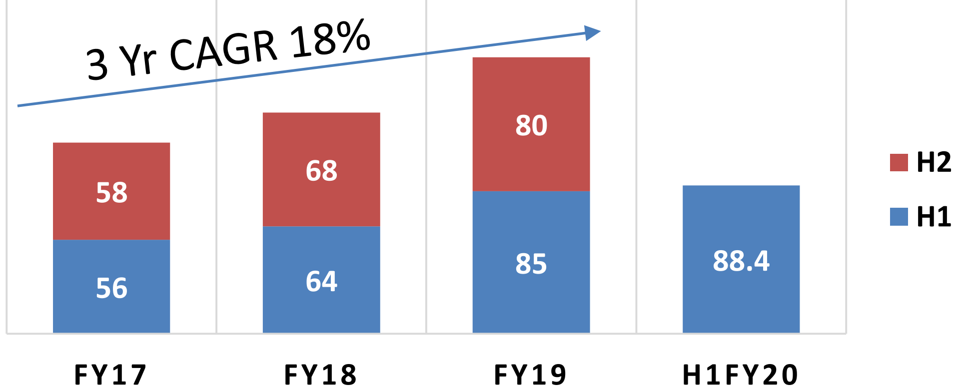


EBITDA



76%	82%	83%	83%

PAT



49%	52%	56%	60%

Top 10 shareholders

S. No.	Name of Shareholder	No. of Shares	% of Shares
	Top 10 Shareholders		
1	TVS SHRIRAM GROWTH FUND 1B LLP & Group	431	14.38
2	DALMIA POWER LIMITED	300	10.02
3	MIRAE ASSET & Group	163	5.44
4	WESTBRIDGE CROSSOVER FUND, LLC	143	4.78
5	IIFL SPECIAL OPPORTUNITIES FUND & Group	143	4.76
6	SMALLCAP WORLD FUND, INC	142	4.74
7	RIMCO (MAURITIUS) LIMITED	136	4.55
8	MOTILAL OSWAL & GROUP	125	4.17
9	RURAL ELECTRIFICATION CORPORATION LTD	123	4.10
10	THE PABRAI INVESTMENT FUND& Group	115	3.83
A.	**Total of top 10 shareholders holding**	**1,821**	**60.77**
B.	**Other shareholders holding**	**1,175**	**39.23**
	Total Shareholding (A+B)	**2,996**	**100.00**

(In lakh)

Category	No of Shares	% of Shares
FOREIGN INVESTMENT	**1,323**	**44.18**
- FOREIGN PORTFOLIO – CORP	858	28.66
- FOREIGN CORPORATE BODIES	452	15.08
- NON RESIDENT INDIANS	13	0.44
OTHERS	**1,673**	**55.82**
Total	**2,996**	**100.00**

As on 22nd Nov 2019

In this presentation

IEX : Who we are

Sector transformation, our strategy

Electricity value chain, New product launches

Technology - our differentiator

Customer experience

IEX a world class company

Regulatory enablers and IEX as a corporate citizen

New initiative

Way forward & Summary

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

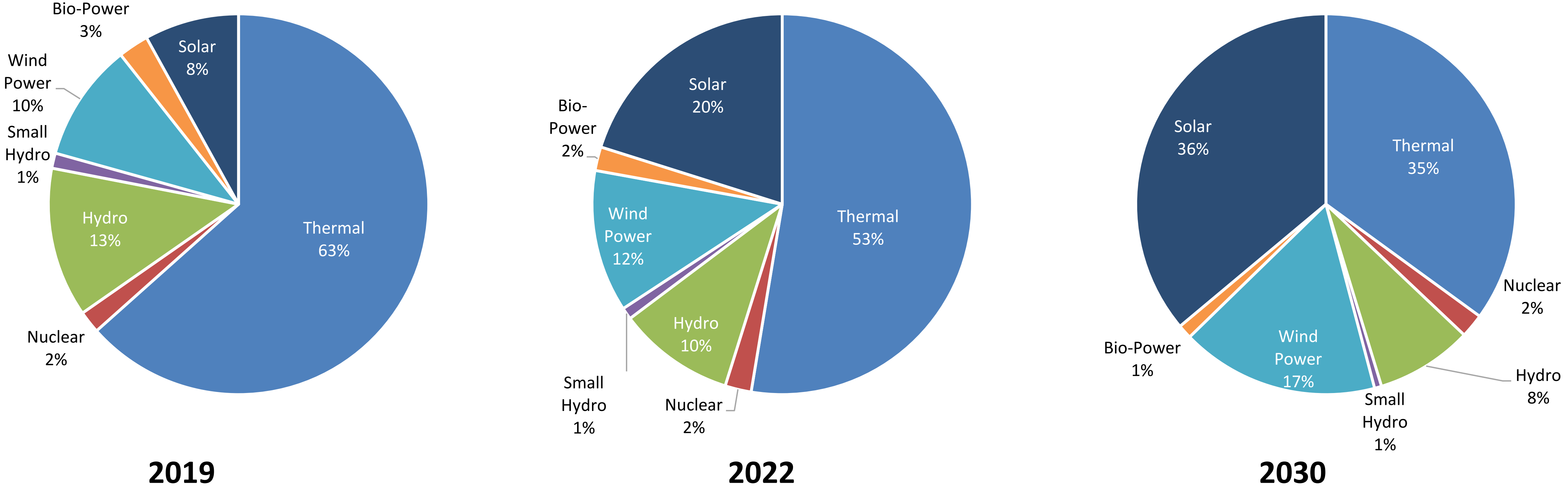
Outlook:

- Peer to peer energy trading

Sector transformation drivers

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

Hybridization requires technology driven apps and automation



Changing Installed Capacity Mix – Increasing reliance on RE

Source: CEA

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

IEX : two dimensional strategy

Deepen power market

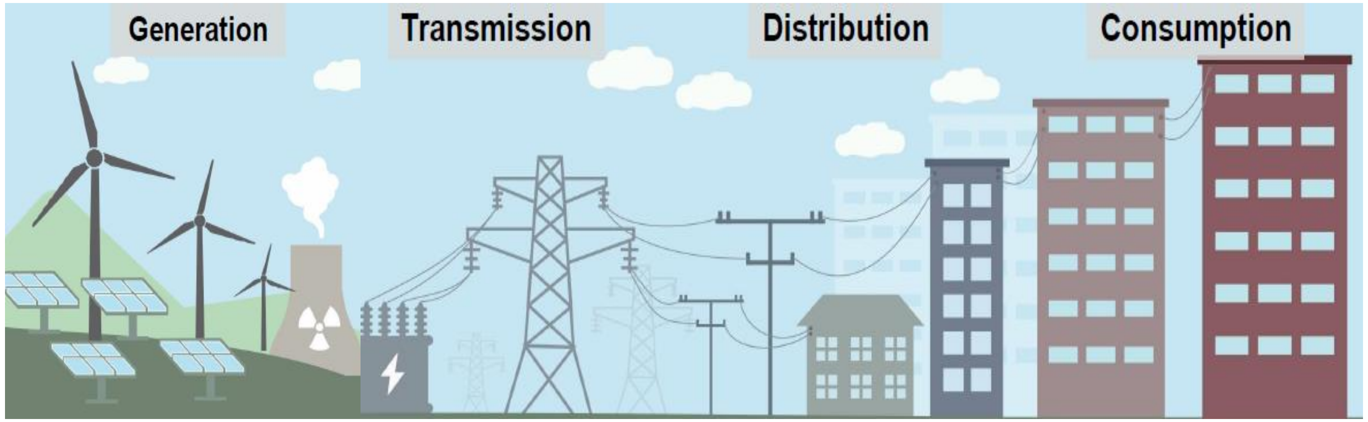
- Maximize DISCOM and Open Access volumes
- Longer duration contracts upto 1 year
- Cross Border Trade
- Real Time Markets
- Green Market
- Ancillary Markets

Tech based new opportunities

- Smart Power Procurement
- Analytics
- New Product Development
- Gas exchange
- Business acquisitions

In this presentation

Electricity value chain



Generation	Transmission	Distribution	Consumption
Generation De-licensed	Transmission is licensed	Distribution licensed	Energy deficit decreased from 10% to 0.7% over the last decade
Private sector ~46%	World's largest network	Rs 81,468 Cr O/S*	
Generation in distress	Pvt sector ~8%	DISCOM losses ~Rs.28,000 Cr	
		AT&C Loss	

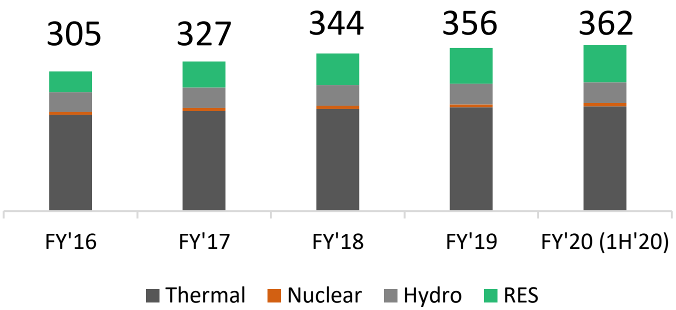
CAGR (%)

CAPACITY (GW)

Share of REN*

18.8%
REN

6.7%

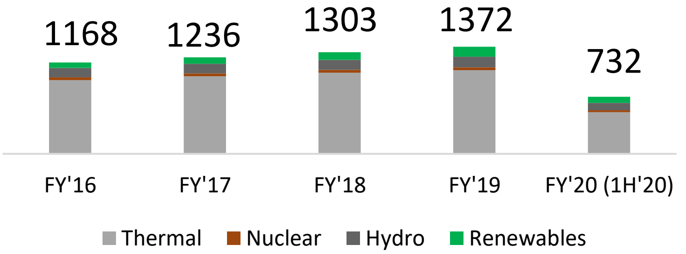


22%

GENERATION (BU)

24.4%
REN

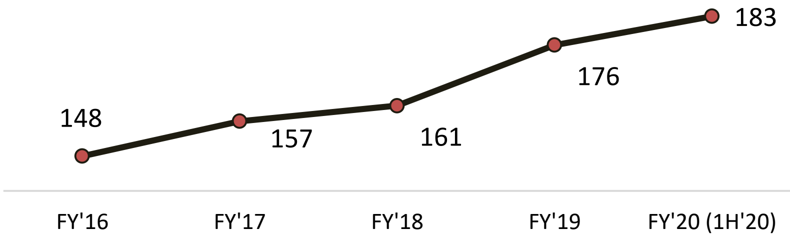
5.5%



10.5%
1H'20

PEAK DD (GW)

5.6%



- As of Sept 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%)

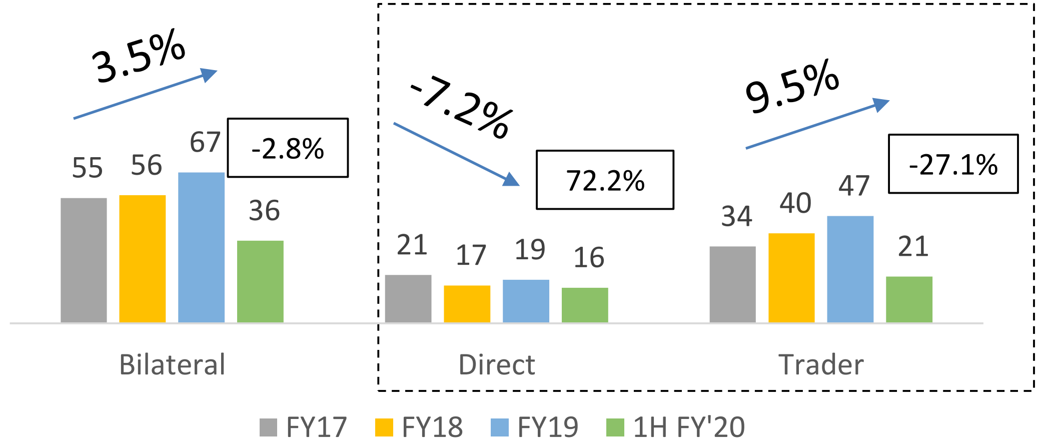
Short Term (10.6%) (3Yr CAGR: 8%; 1H'20: -1.7%)

1,372 BU (incl REN)*

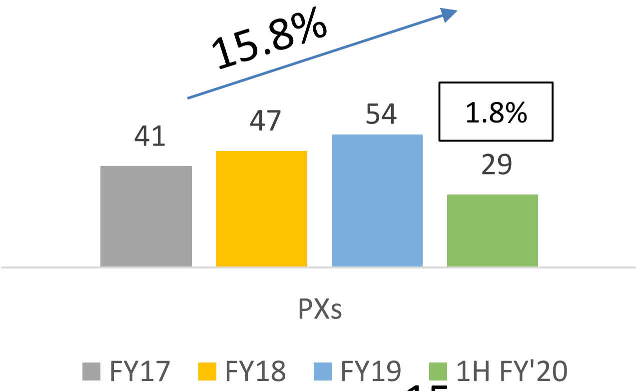
Up to 25 years	OTC: Intraday to 1 year	Exchanges: Intraday – 11 days	Real Time
1,226.5 BU	66.5 BU	53.5 BU	25.1 BU
89.4%	4.9%	3.9%	1.8%
Long-term PPA	Bilateral & Banking Transactions	Exchanges (Only up to 11 days) ➢ DAC ➢ Daily ➢ Weekly ➢ Day Ahead Market	Deviation settlement/ Unscheduled Interchange

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

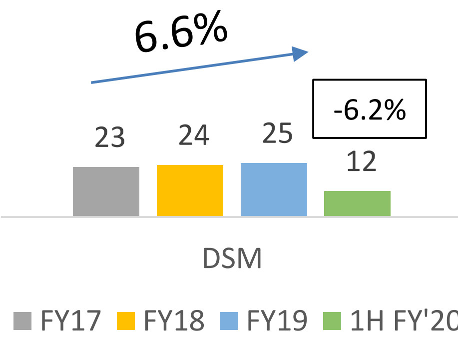
Bilateral (BU)



Exchange (BU)



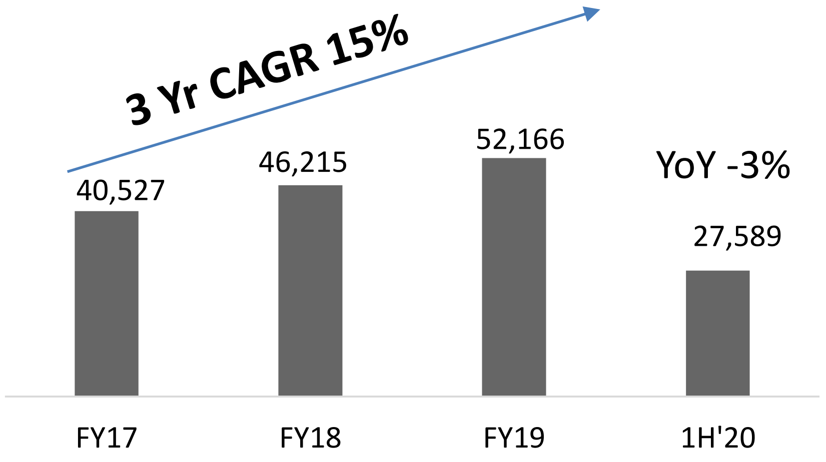
DSM (BU)



1H’20 volumes performance

Product	Q1’20	YoY	Q2’20	YoY	1 H’20	YoY
DAM	11,985	-14%	12,963	-6%	24,947	-10%
TAM	1,009	113%	1,632	425%	2,641	236%
Electricity	12,994	-10%	14,595	4%	27,589	-3%
REC	1,133	-44%	1,320	-58%	2,453	-52%
Total	14,126	-14%	15,915	-7%	30,042	-11%

Electricity cleared volumes (MU)



- **Macro-economic factors**
  - IEX correlation to: IIP: 81.3%; Core sector growth: 99.6%; Electricity demand: 86.1%
- **Union Elections of May 2019**
  - 1.5BU lost in April and May 2019; 13% increase in bilateral vol in the same time
- **Extended Monsoons**
  - Wettest Sept in more than 100 years; impact on electricity demand and increased hydro generation

- **MCP declined 14% Apr to Sept’19**
- **OA volume (except CPP) increased 68% (Apr to Sept 19)**

Way Forward

INDIAN ENERGY EXCHANGE

New Product Launches

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

DISCOM

- Power procurement cost optimization
- ST Bilateral replacement
- Engaging Marcom

Open Access

- Addition of clients
- Customer outreach
- Marketing initiatives
- Policy Advocacy

Organization Building

In this presentation

Technology Vision

Creating a customer centric energy marketplace through efficient and state of the art Technology Solutions

Customer centric, Efficient and State of the Art

Customer Centric

- Intuitive Design
- Secure
- Responsive

Customer survey

Web Based integrated Portal

Seamless Communication

Security as a service (TCIL, Akamai, F5)

Efficient

- Efficient Matching Algorithm
- Automation
- Low Latency

Global Standard Algorithm (MILP, NSide)

Digital Inside

RPA (Automation Anywhere UIPath)

Automation Testing

State of the Art

- Analytics
- Future ready

Forecasting tools (AI/ML)

Service oriented Architecture

Block chain

P2P exchange

Technology in transformation

INDIAN ENERGY EXCHANGE

- Manual Workflow
- Monolithic
- Desktop Based
- Disparate System
- Limited Products
- In-House Development

Automated Digital Mesh

- *Digital Inside*
- Open API integration
- *Robotic Process Automation*

Modular Digital Twins

- Service Oriented Architecture
- *Automated Bank Integration*

All Platforms

- *Web Based Portal*
- *Trading App*

Intuitive System

- *Customer Survey Driven UX design*
- *Unified Risk Management*
- Proactive Alerts

Configurable Products

- *Re-architecture*
- *Long Duration Contract, RTM*

Partnerships

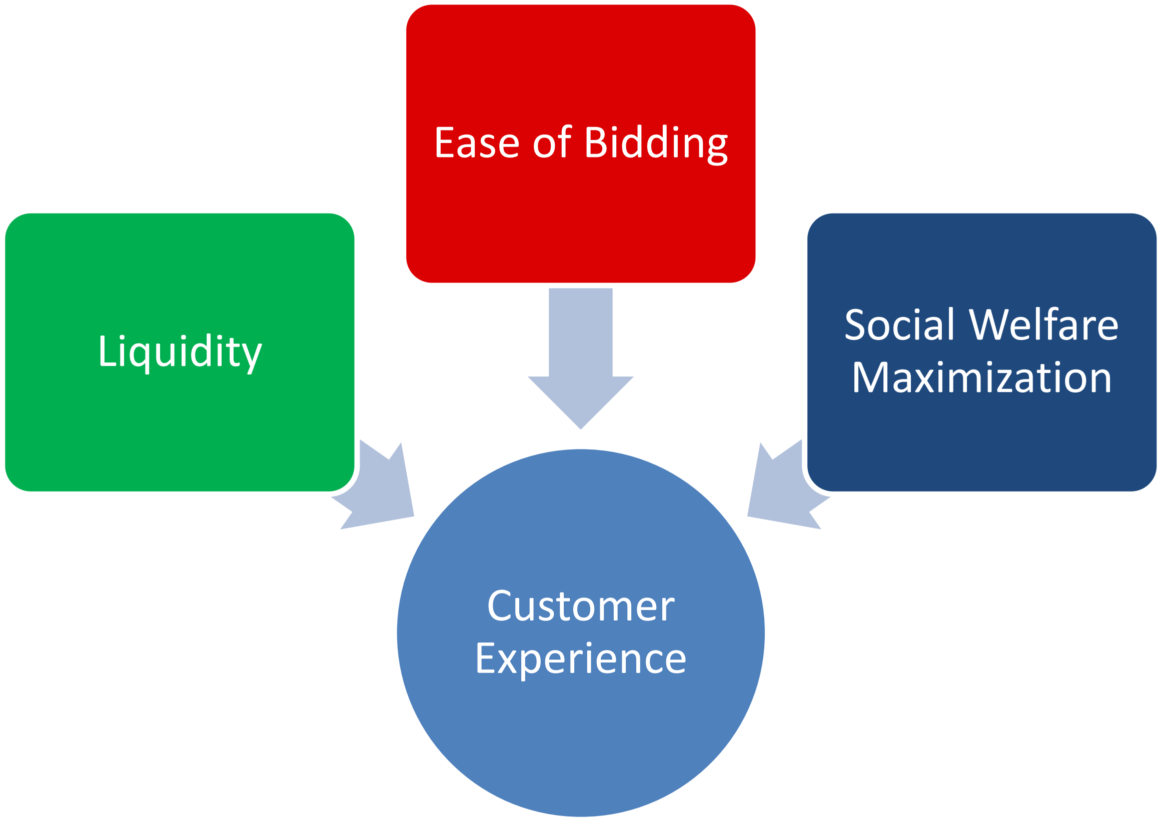
- Product: GMEX, UTrade, Nagarro, Twilio
- System Design: Cap Gemini, TCIL, Akamai
- Automation Anywhere,UIPath, Pentaho

Smart Product/Bids

In this presentation

Customer Experience

Provide the most intuitive, reliable and cost effective power procurement option



Customer Experience Drivers

Customer Interactions with Exchange

Bidding

Anytime, Anywhere and Easy

Customer interactions

Scheduling

Automated Confirmation
and Minimum Customer Effort

Financial Settlement

Real time and Transparent

Create Customer Delight for each Interaction

Customer Experience Strategy

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

Customer Experience Transformation

1

Intelligent process automation

2

Digital customer experience

3

Digital trading platform

4

Data-driven insight

Key Pillars of Transformation

In this presentation

IEX : Who we are

Sector transformation, our strategy

Electricity value chain, New product launches

Technology - our differentiator

Customer experience

IEX a world class company

Regulatory enablers and IEX as a corporate citizen

New initiative

Way forward & Summary

Transforming people

VISION

To support IEX in becoming the most preferred Energy Market Place by attracting, recruiting, developing and retaining a high potential, high performing and highly engaged team of employees

MISSION

To be recognized as a trusted and valued business partnering function which is employee focused and delivers best in class HR processes and services through continuous improvements and innovations

IEX Leadership Team

MD & CEO
Rajiv Srivastava

Head BD
Rohit Bajaj

Head F&A- CS
Vineet Harlalka

Head- MO
Amit Kumar

Head- HR & Admin
Samir Prakash

Head – Technology
Sangh Gautam

Head – Corp Communication
Shruti Bhatia

Head – Strategy
Rajesh Mediratta

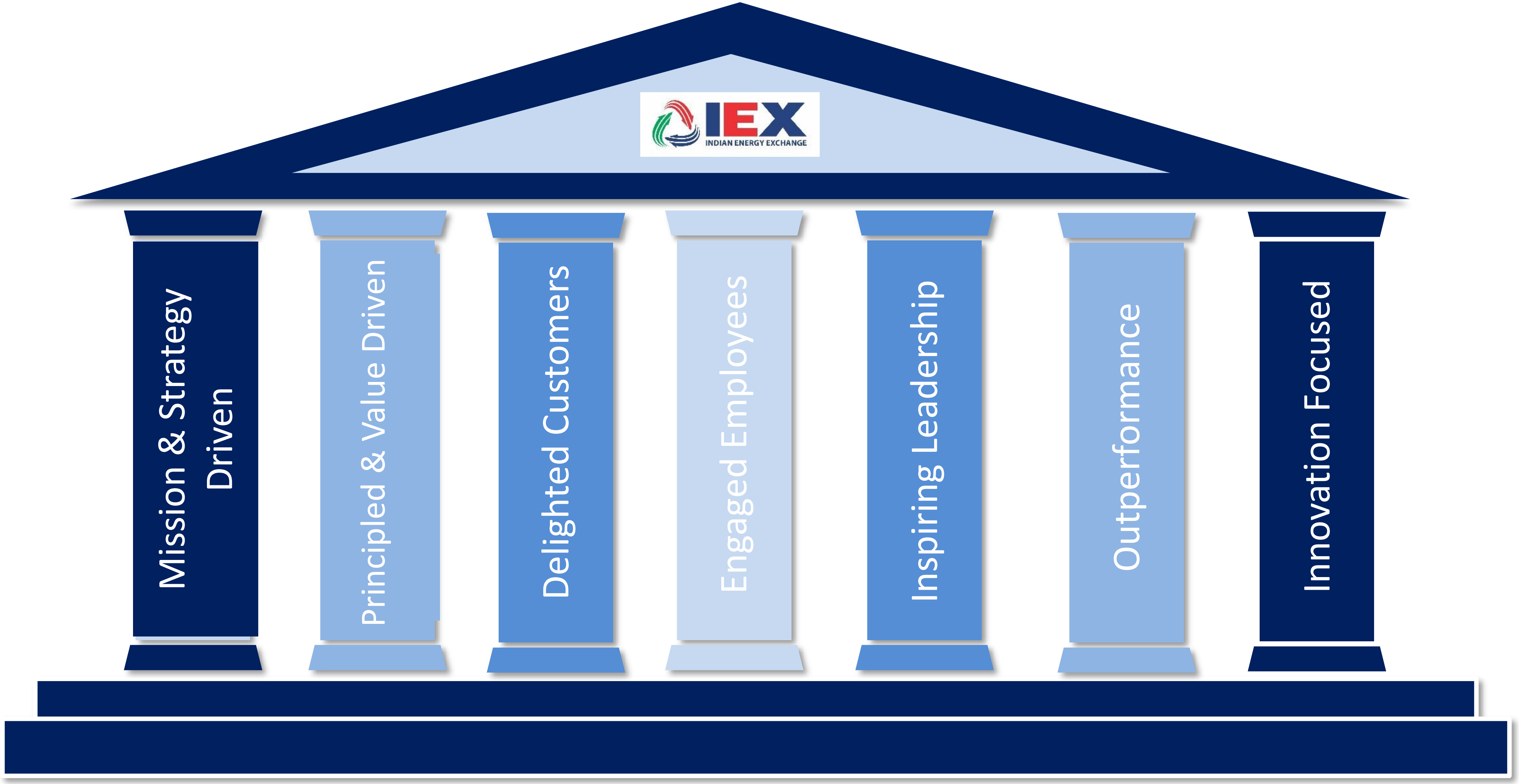
Head- Risk & Diversification
Indranil Chatterjee

Lead- IR & Program Management
Aparna Garg

- More than ~200 years & ~50 Companies experience
- Average experience ~23 years
- Balance of Power, IT & Other Industry experience
- From best of the companies

…….. A complimentary mix

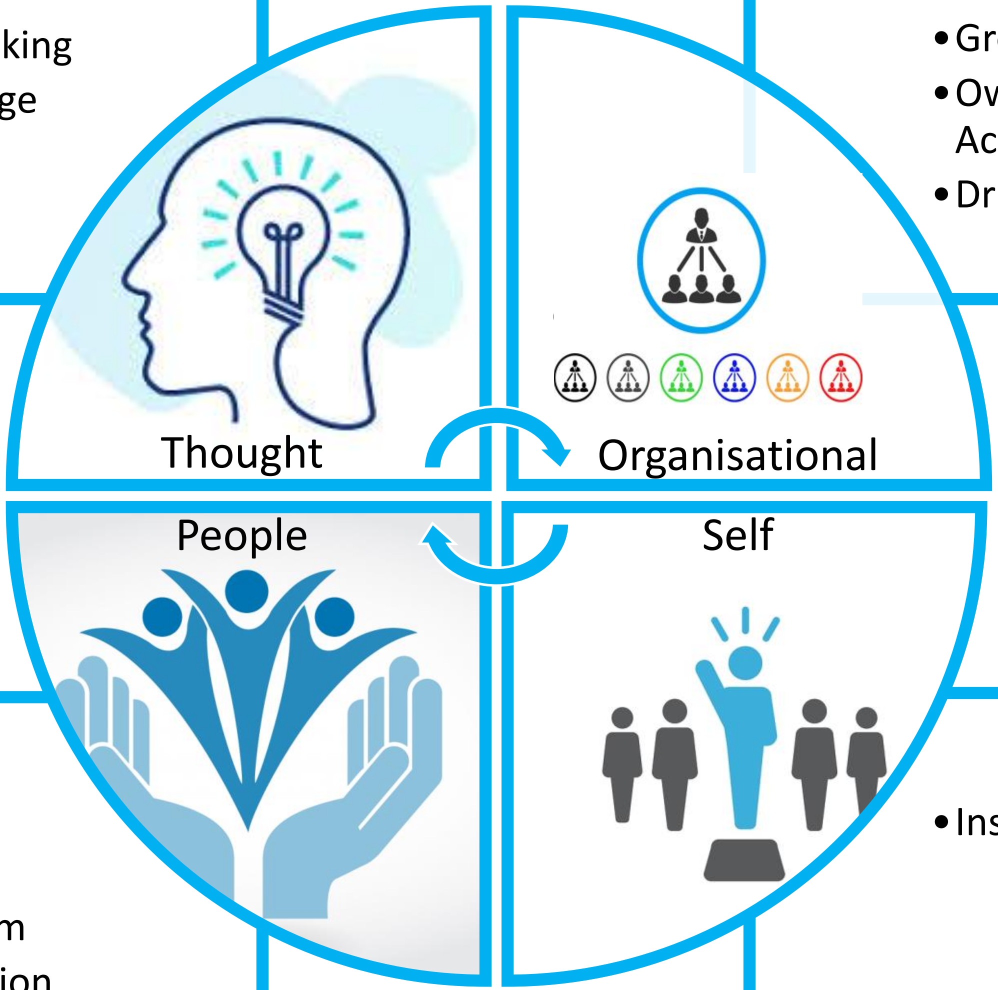
IEX a World Class Company



IEX Leadership Framework

- Strategic Thinking
- Leading Change
- Innovation & Creativity

- Growth Mindset
- Ownership & Accountability
- Drive for Results



- Build a High Caliber team
- Mobilise team
- Communication

- Inspirational

Way forward

	Organisation Culture	Talent Management	Performance Management	Employee Engagement
	- IEX Leadership Framework - New HRMS - Higher ownership through Simplification of processes	- Stronger Employer Brand - Top Search & Recruitment partners on board	- Clear & Signed Off Goals - Individual Incentive Target sheets signed off	- Monthly Meetings - Extended Leadership Meetings - All Hands Meetings - Ease of Work Survey - Work Life Balance activities
IN PROGRESS	- Revised IEX Vision, Mission & Values - Embed & Integrate in all process - Role Model & Brand Ambassadors	- Individual Development Plans – MYD - Top Talent -HPHP - Career Planning - Succession Planning - Long Term Retention Program	- Mid year discussions - Annual Performance review (Quality & On tool)	- GPTW Survey - Annual Employee Family Day

In this presentation

IEX : Who we are

Sector transformation, our strategy

Electricity value chain, New product launches

Technology - our differentiator

Customer experience

IEX a world class company

Regulatory enablers and IEX as a corporate citizen

New initiative

Way forward & Summary

MoP Actions

GENERIC

- SAUBHAGYA – 24x7 Power for All
- Ultra Mega RE Parks
- Generator's Distress Mitigation
    - Payment security Order (Mandatory LC)
    - Sanctity of contracts
- Uday 2.0 – enabling Discoms become sustainable

MARKET

- 5 Year Vision document (draft)
- Electricity Act Amendment
- National Tariff Policy
- MoP Committee on 'Deepening of Power Markets in India'
- New SHAKTI Policy allowing allocation of coal to Merchant Power Plants

Regulatory Successes

- Linking of DSM Prices with IEX prices
- National Open Access Registry for Gate Closure time reduction
- Rationalization of Transmission Charges (new draft Transmission Charge Regulation)
- Resolution of SEBI/CERC jurisdiction issue
- CBET Guidelines (new guidelines included trade through PX)
- Long-term PPAs for base load (draft Tariff Policy)

Regulatory status on new products

1. **Long Duration Contracts/Electricity Derivatives :** Jurisdiction Issue resolved b/w SEBI and CERC; Both Regulators filed Joint application before SC to withdraw appeals.
2. **Cross Border Trade in DAM & TAM:** CEA and POSOCO to issue Procedures; Petition for CBTE-TAM already filed with the Commission
3. **Real Time Market:** CERC to finalize Regulations based on public comments; Expected Start Date : Jan20.
4. **Green Market:** Waiting for CERC Approval on Green TAM petition
5. **New Bid Types in DAM:** Final hearing completed
6. **Exchange based Ancillary Market:** Draft regulations awaited

CSR Objective: Sustainability & socio-economic empowerment

Education	Akshaya Patra Foundation – Mid Day Meal Program, Mathura, UP
Health Care	HelpAge India – Mobile Health Unit, Satna, Madhya Pradesh
Community Dev / Sustainability	Bharatiya Jain Sangathan – Sujalam Suphalam Project – Drought Free MH
Research	IIT Kanpur – Energy Analytics Lab - Research Lab, Kanpur, Uttar Pradesh
Culture & Heritage	Sabhayata Foundation: Red Fort, Delhi

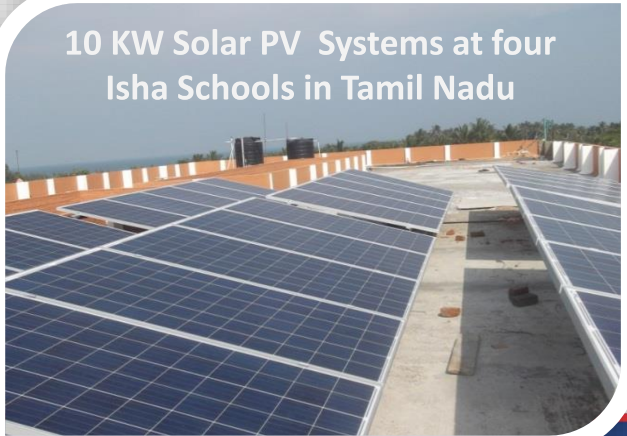
School bus to Isha Vidhya Rural School, Tamil Nadu


Smile Twin e-Learning Programme with Smile Foundation in Delhi-NCR

Mobile Health Services delivered to 32 villages in Satna district of Madhya Pradesh


Mid Day Meals to 5,000 School Children in UP with Akshaya Patra Foundation


Skilling of Solar Technicians


10 KW Solar PV Systems at four Isha Schools in Tamil Nadu

In this presentation

Gas Exchange

GoI vision of gas based economy

- GoI 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 GoI 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

In this presentation

IEX : Who we are

Sector transformation, our strategy

Electricity value chain, New product launches

Technology - our differentiator

Customer experience

IEX a world class company

Regulatory enablers and IEX as a corporate citizen

New initiative

Way forward & Summary

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 basket of India
   - Energy efficiency technology solutions

In Summary

- **Very interesting phase in our journey**
  - energy space is transforming at a fast pace
  - demand well positioned to grow

- **IEX has developed 360 plans to transform the energy basket of India**

- **All execution mode now!!**

Thank You!