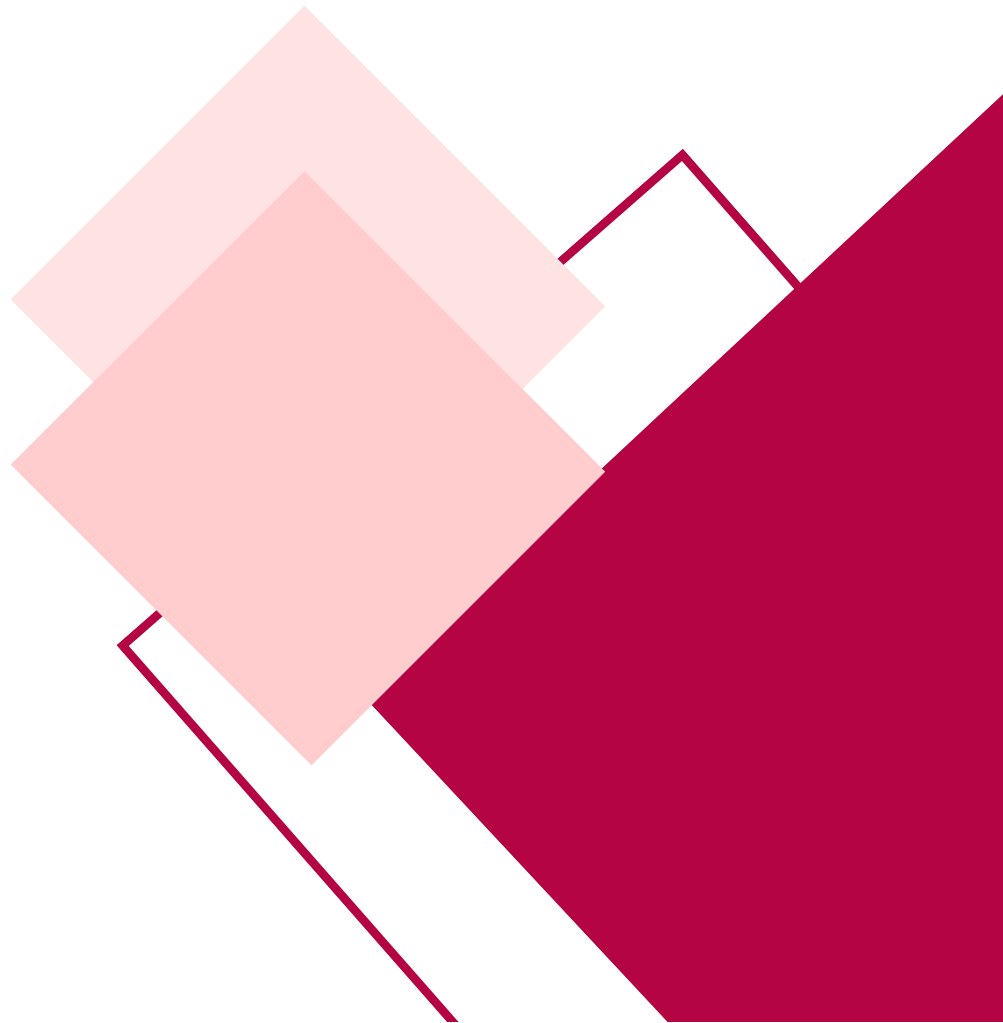




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# **INDIAN ENERGY EXCHANGE(IEX)**





**Market Capital:** 22619.51 Cr.  
**Enterprise Value:** 22542.14 Cr.  
**No. Of Shares:** 89.87 Cr.

**52 Week High:** 318.67  
**52 Week Low:** 75.08  
**Face Value:** 1.00

**We recommend a Buy position on IEX with a medium to long-term view owing to strong government push, the future of precast projects, prudent capital allocation, and new policies.**

## SECTOR OVERVIEW

### CURRENT SCENARIO

India's recent energy development has yielded promising results. The Covid-19 pandemic, on the other hand, has caused significant disruption. In Recent years,

- Hundreds of millions of Indians have now gained access to electricity in recent years.
- Most houses have been encouraged to switch to high-efficiency LED lights.
- India has spurred a significant expansion in renewable energy sources, spearheaded by solar energy.

Indian inhabitants have seen substantial improvements in their quality of life. The Covid-19 situation, on the other hand, has hindered efforts to tackle other important issues:-

- There is a lack of consistent electricity for many consumers
- 660 million people continue to rely on solid biomass, primarily firewood, as a cooking fuel
- Indian cities are among the most polluted in the world, thanks to financially troubled electrical distribution corporations and poor air quality.

### **Current Developments-**

- Wind energy capacity in India has increased by 2.2 times from FY 2016-17 to FY 2020-21
- Solar power capacity has increased by more than 5 times in the last five years from 6.7 GW to 40 GW in March 2021.
- Crude Oil import rose sharply to US\$ 101.4 billion in 2019-20 from US\$ 70.72 billion in 2016-17.
- India's consumption of petroleum products grew 4.5% to 213.69 MMT during FY20 from 213.22 MMT in FY19.



## **GROWTH POTENTIAL**

Energy is divided into 3 categories:

### Oil and gas

India is predicted to be a major contributor to global non-OECD petroleum consumption growth. According to the International Energy Agency (IEA), natural gas consumption in India is predicted to increase by 25 billion cubic meters (bcm) by 2024, with an average annual growth rate of 9%.

In addition, thanks to expanding infrastructure and supportive environmental policies, India's medium-term outlook for natural gas consumption remains positive. Industrial consumers are expected to account for ~40% of India's net demand growth. The demand is also expected to be driven by sectors such as residential, transport and energy.

### Power

The power sector in India is undergoing a profound transformation that has altered the industry's perspective. India's electricity demand is still being driven by sustained economic expansion. The Indian government's aim on achieving 'Power for All' has sped up capacity addition in the country. At the same time, both the market and supply sides are becoming more competitive (fuel, logistics, finances, and manpower). Solar energy is expected to produce 114 GW by 2022, followed by wind power at 67 GW and biomass and hydropower at 15 GW. By 2022, the renewable energy target has been raised to 227 GW.

### Renewable Energy

India has 100.68 GW of renewable energy capacity as of August 2021, accounting for 25.2 percent of total installed power capacity, presenting a significant opportunity for the construction of green data centres. By 2030, the country hopes to have installed renewable energy capacity of around 450 gigawatts (GW), with solar accounting for roughly 280 GW (over 60%).



## COMPANY OVERVIEW

Indian Energy Exchange is India's premier energy marketplace and first of its kind. IEX started its operations on June 27, 2008 and is regulated by the Central Electricity Regulatory Commission (CERC). It provides a nationwide automated, transparent and demutualised trading platform for the physical delivery of electricity, renewables, and certificates.

IEX enables efficient price discovery and price risk management for participants of the electricity market, comprising State Electricity Boards, Power producers, Power Traders and Open Access Consumers (both Industrial & Commercial), through an anonymous platform. This is a state-of-the-art, intuitive and customer centric technology which also facilitates the ease of power procurement. More recently, IEX has pioneered cross border electricity trade expanding its power market beyond India in an endeavor to create an integrated South Asian Power Market.

IEX is one of the two operational Power Exchanges in India. Ever since its incorporation, it has held an influential market share. IEX operates a day-ahead market based on closed auctions with double-sided bidding and uniform pricing;<sup>[3]</sup> it has over 3,800 registered clients, over 300 private generators and more than 3,300 industrial electricity consumers.

IEX has a robust ecosystem of 6,800+ participants located across 29 States and 5 Union

Territories comprising 55+ distribution utilities and 500+ conventional generators. It also has a strong base of 4400+ commercial and industrial consumers representing industries such as metal, food processing, textile, cement, ceramic, chemicals, automobiles, information technology industries, institutional, housing, and real estate, and commercial entities.



# COMPANY FINANCIALS

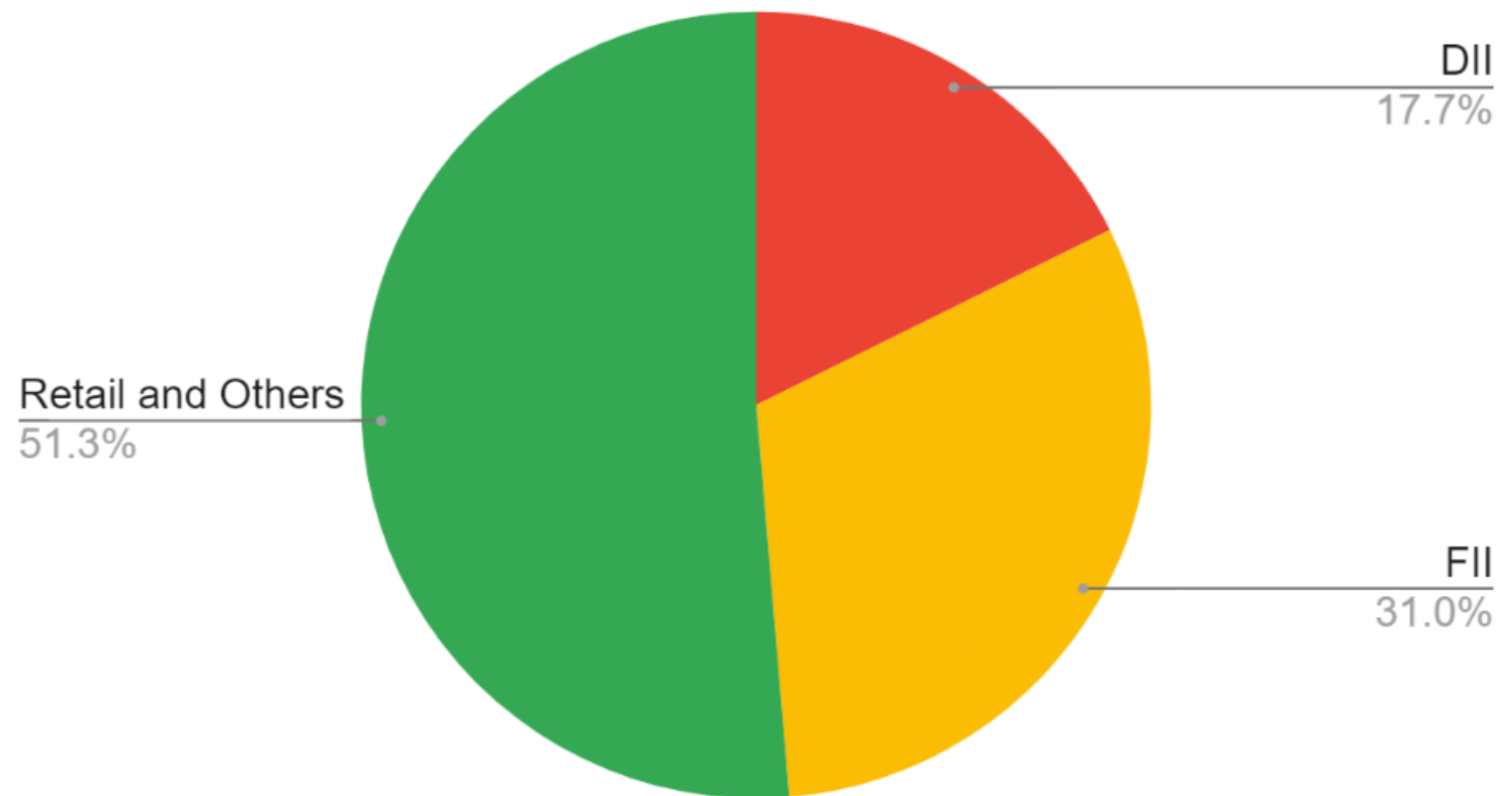
CONSOLIDATED(Cr)	FY2021	FY2020	FY2019
Basic EPS	8.57	5.96	5.47
P/E(x)	50.66	21.53	30.36
P/B(x)	43.40	16.67	21.43
Current Ratio	1.85	1.45	1.27
EV/EBITDA	32.90	15.49	20.16
ROE	47.37	47.77	51.01
ROCE	61.60	60.32	71.1
Net Profit/Share	7.15	5.96	5.47
Return on Assets(%)	23.02	26.62	23.39
D/E	0	0	0



## HOLDING PATTERN (FY2021)

- Total Promoter Holding: 0.00%
- Domestic Institutional Investors(DII): 17.66%
- Foreign Institutional Investors(FII): 31.01%
- Retail and Others: 51.33%

### Share Holding Patern





## INVESTMENT HYPOTHESIS

### **The first and only energy exchange in India:**

IX is India's 1st energy exchange with 92% of all short term trades being done on this platform, which accounts for 5.92% of total market share. In most of the developed nations, the share of such exchanges is about 40-60%, so there is a huge growth potential in this sector and for IX to be precise. Being the only player in the market and no promising competitor, IX is going to be the monopoly for upcoming years.

### **A widening market:**

Volumes are still extremely low in India, where the energy markets are still developing, suggesting rapid growth. Only 6% of the country's annual power consumption is sold on the market, despite the fact that it uses 1.3 trillion kWh. Generators sell the majority of their electricity to buyers through long-term power purchase agreements (PPAs) that generally last 25 years.

However, this is changing rapidly, as distributors need short term power packages, they are shifting to short term agreements.

### **Government push:**

The National Electricity Policy, 2021, aims to boost the spot market's share to 25%. And this is a huge opportunity for IX and upcoming players in this sector. The government has suggested a system known as "market-based economic dispatch," or MBED, to achieve this goal. All electricity will be supplied through the market, and any price disparity between the market and the price agreed upon under the PPAs will be settled offline between the buyer and the supplier. The goal is to both deepen the market and deliver a clear price signal depending on the market.



## **New Products:**

IEX commenced two new market segments as well as launched its first diversification initiative in the gas markets through its subsidiary Indian Gas Exchange, aligned to India's aspiration of building a diversified and sustainable energy economy.

### **IGX(Indian Gas Exchange):**

The Indian Gas Exchange is a subsidiary of IEX, a natural gas trading exchange in India. As additional supply hubs are created, this is also picking up.

### **REC(Renewable energy certificates):**

Trading in renewable energy certificates (REC), which is likewise involved in legal wrangling. This isn't a huge portion of IEX's company, but it does bring in money. RECs are tradable instruments granted to renewable energy providers who agree to pay a lower price for their power in exchange for RECs that they may sell on the open market (IEX or PXIL). When this is decided, one way or the other, REC trading will resume, meaning more earnings for IEX.

### **G-TAM(Green Term Ahead Market):**

An exclusive sustainable energy channel G-TAM has traded 2.74 billion units so far, with an average price of 3.48 rupees per kWh for solar and 4.06 rupees cents per kWh for non-solar. These are now generating fancy pricing. When the G-TAM establishes a track record, investors may be able to fund 'merchant capacities' of wind and solar, in which all power would be sold solely through the markets, at higher rates.

### **RTM(Real-Time-Market):**

The Real-Time-Market (RTM) is a new market segment with trading commencing on 1st of June'20. The market features a new auction session every half an hour with power to be delivered after 4 time blocks or an hour after gate closure of the auction. The price and quantum of electricity trading is determined through a double-sided closed auction bidding process.





### **Promising Future:**

Energy's longer-term contracts and 'derivatives trading' are promising aspects of IEX. These were mired in a legal battle over who should be in charge of them: SEBI or the Forward Markets Commission. The issue has now been handled (SEBI for cash-settled transactions and FMC for energy supply), but the Supreme Court still needs to ratify it formally, which has been pending for over a year and a half.

More participants will flock to the exchanges if longer-term contracts — say, three or six months — and derivatives are permitted. As a result, IEX's blue ocean will expand. In 2020-21, IEX earned ₹356.23 crore, and made a net profit of ₹205.43 crore (58 percent of revenues) and paid total dividend of ₹4 for each share of ₹1; for Q1 of FY22, the numbers were ₹103 crore and ₹62 crore, respectively, earning ₹1.41 a share.

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## PEER COMPARISON

Company Name	PRICE	Mcap(Cr.)	P/E	P/B	EPS	ROE	ROCE	P/S	EV/EBIT A
Tata Steel	233.10	74483.36	26.52	4.00	8.79	6.01	6.65	11.69	24.10
JSW Energy	314.05	51630.81	149.94	4.06	2.09	1.77	4.16	17.82	51.10
Adani Power	108.55	41867.07	0	2.47	-1.33	-6.54	0.63	93.63	318.37
NHPC	31.05	31189.83	9.77	1.20	3.18	13.88	9.80	3.67	9.43
IEX	259.30	23302.50	87.73	33.80	2.96	47.37	61.60	73.48	63.33



## TATA POWER

Revenue: 6,374.22 cr.

Net Profit: 921.45 cr.

Employees: 8,613

Tata Power Company Limited is an Indian electric utility company based in Mumbai, Maharashtra, India and is part of the Tata Group. The core business of the company is to generate, transmit and distribute electricity. With an installed electricity generation capacity of 10,577 MW, it is India's largest integrated power company. Tata Power has operations in India, Singapore, Indonesia, South Africa and Bhutan. Tata Power Group has its operations based in 35 locations in India.

The thermal power stations of the company are located at Trombay in Mumbai, Mundra in Gujarat, Jojobera and Maithon in Jharkhand, Kalinganagar in Odisha, Haldia in West Bengal and Belgaum in Karnataka.

## JSW ENERGY

Revenue: 2,897.53 cr.

Net Profit: 186.18 cr.

Employee: 1225

The company currently generates 4,559 MW, out of which 3158 MW is thermal power, 1391 MW is hydropower and 10 MW solar power. It is present across several Indian states and has stakes in natural resource companies in South Africa. The company also has two 400 KV operational transmission lines in joint venture with Maharashtra State Electricity Transmission Company Limited a wholly owned corporate entity under the Maharashtra Government. JSW Energy also has lignite mines in two contiguous blocks - Kapurdi and Jalipa - in the district of Barmer Rajasthan with combined capacity of 9 MTPA.



## ADANI POWER

Revenue: 447.17 cr.

Net Profit: -498.74 cr.

Employee: 83

Adani Power Limited is an Indian power business subsidiary of Indian conglomerate Adani Group with head office at Khodiyar in Ahmedabad, Gujarat. It is a private thermal power producer, with capacity of 12,450 MW. It also operates a mega solar plant of 40 MW at Naliya, Bitta, Kutch, Gujarat. Adani Godda Power is implementing a 1,600 MW plant at Jharkhand. The company has signed long term power purchase agreements of about 9,153 MW with the government of Gujarat, Maharashtra, Haryana, Rajasthan, Karnataka, and Punjab.

## NHPC

Revenue: 8,506.58

Net Profit: 3,233.37

Employee: 6,753

NHPC Limited (erstwhile National Hydroelectric Power Corporation) is an Indian government hydropower board under the ownership of Ministry of Power, Government of India that was incorporated in the year 1975 with an authorised capital of ₹2,000 million and with an objective to plan, promote and organise an integrated and efficient development of hydroelectric power in all aspects. NHPC is a Mini Ratna Category-I Enterprise of the Govt. of India with an authorised share capital of ₹150,000 Million. With an investment base of over ₹387,180 Million Approx., NHPC is among the top ten companies in the country in terms of investment.



## RELATED TO INDUSTRY

### **INDUSTRIAL**

In the manufacturing industries, energy is mostly needed for production, lighting, and other company needs. Industrial production accounts for little over half of all worldwide energy consumption, and it is predicted to expand by 1.5 percent annually until 2035. Work connected to processing resources has been heavily automated since the industrial revolution, first with simple machines, then assembly lines, and finally with automation.

### **TRANSPORTATION**

Transportation and energy are inextricably linked. Energy is a fundamental limitation on transportation nowadays, and transportation is a major determinant of energy consumption. India's transportation energy use is expected to expand at the fastest rate in the world, averaging 5.5 percent per year, compared to the global average of 1.4 percent per year, based on current patterns. India is becoming increasingly reliant on fuel imports. In the coming years, the use of electrical energy in transportation will also rise.

### **RESIDENTIAL**

In 2016, India's residential sector accounted for 24 percent of overall electricity consumption, with consumption expected to increase by more than eightfold by 2050, owing mostly to appliances and equipment. This rise in product usage can be attributed to a number of factors, including improved electricity access and increased disposable income. According to the data, appliance ownership and usage are on the rise. As households move toward family nuclearization, per capita energy demand is also rising.

### **COMMERCIAL**

The service sector's energy usage is included in commercial energy use. It is inextricably linked to population growth (as services tend to population serving). Electrical, heating, and cooling of buildings and other structures dominate commercial energy demand, however traffic lights, water, and sewer systems are also involved.



## RISKS AND THEIR MITIGATION

### **STRATEGIC RISKS:**

The electricity markets are constantly changing, with new policies and regulations being announced on a regular basis to make the market more deep, participatory, and transparent. The Central Electricity Regulatory Commission recently announced a new power market regulation for 2021. The government has underlined the need for a spirited and transparent power market in India in various vision documents. Being a self-regulatory organization with Rules, Bye-Laws, Business Rules, and circulars are certified by the Central Electricity Regulatory Commission.

The company is also governed by the Electricity Act of 2003, which includes the Power Market Regulations, Inter-State OA Regulations, and Procedure for Committee and Risk Management Committees, which are created as mandated by the Central Electricity Regulatory Commission. State Electricity Regulatory Commissions govern state-level regulations.

The Company also participates in proactive policy advocacy with the Central Electricity Regulatory Commission, State Electricity Regulatory Commissions, the Ministry of Power, and other industry authorities on a regular basis to address any regulatory changes that could have a negative impact on its operations.

### **TECHNOLOGY RISK:**

The Company's business may be negatively impacted by the usage of antiquated technology as well as by the threat to data security.

### **Mitigation:**

In a competitive market, the company's cutting-edge technology benefits a large number of participants. For information security and related benchmarks, the company is ISO 27001 certified. The company has a disaster recovery center in Mumbai that can immediately offer backup in the event of a breakdown issue, allowing it to resume operations as soon as possible.



### **CYBER SECURITY RISK:**

With effect from the fiscal year 2020, the Company must have a Risk Management Committee to monitor and assess the risk management plan, which shall cover cybersecurity, as per modified Regulation-21 of the SEBI Listing Obligations and Disclosure Requirements Regulations, 2015.

### **Mitigation:**

The Company has a cybersecurity policy in place to comply with the Listing Obligations and Disclosure Requirements regulations. Internal cybersecurity audits are undertaken on a regular basis, and the findings are presented before the Enterprise Risk Management Committee, which assesses and monitors them.

### **LEGAL RISK:**

Non-compliance of various factors, such as membership criteria fulfilment, incorrect member enrolment, non-compliance to tax or accounting compliances, an entity with a criminal background, a change in the net worth profile of members, and so on, constitutes legal risk.

### **Mitigation:**

Mitigation measures include regular monitoring of the trading mechanism and periodic reporting of any errors to the Central Electricity Regulatory Commission. Furthermore, the company is ISO 9001:2008 certified and has established definitive Standard Operating Procedures.



### **OPERATIONAL RISK:**

Operational risks have the potential to negatively impact the regular business operation of the Company. This may include factors like margin maintenance, access to trading data, sufficient bank balance in a settlement account to meet the requirement of executing the trades, etc.

### **Mitigation:**

Mitigation measures include regular monitoring of the trading mechanism and periodic reporting of any errors to the Central Electricity Regulatory Commission. Furthermore, the company is ISO 9001:2008 certified and has established definitive Standard Operating Procedures.

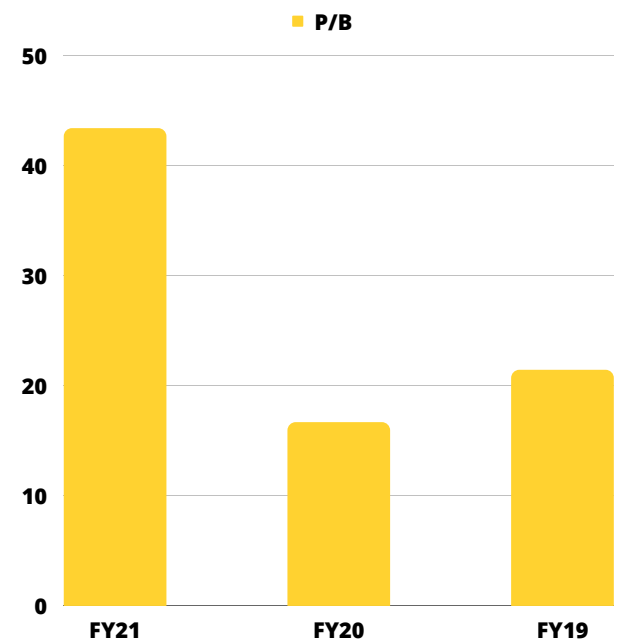
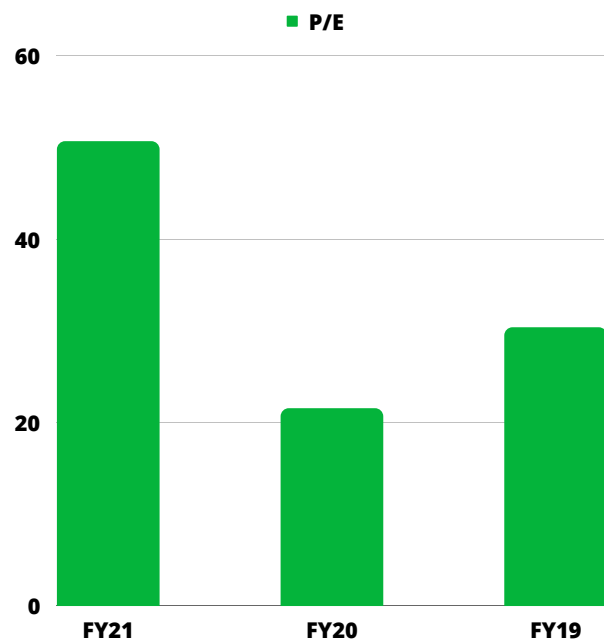
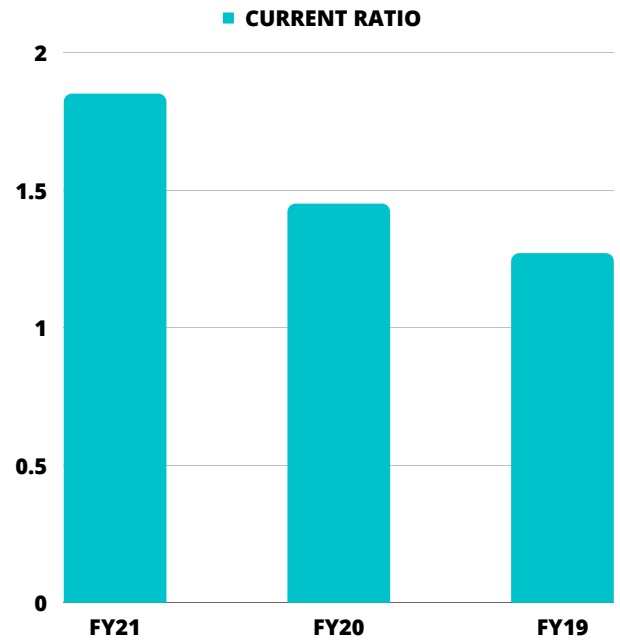
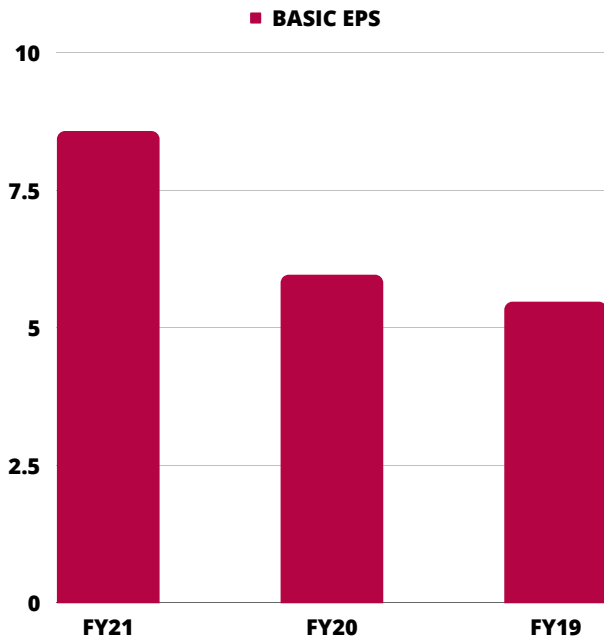
### **MARKET RISK:**

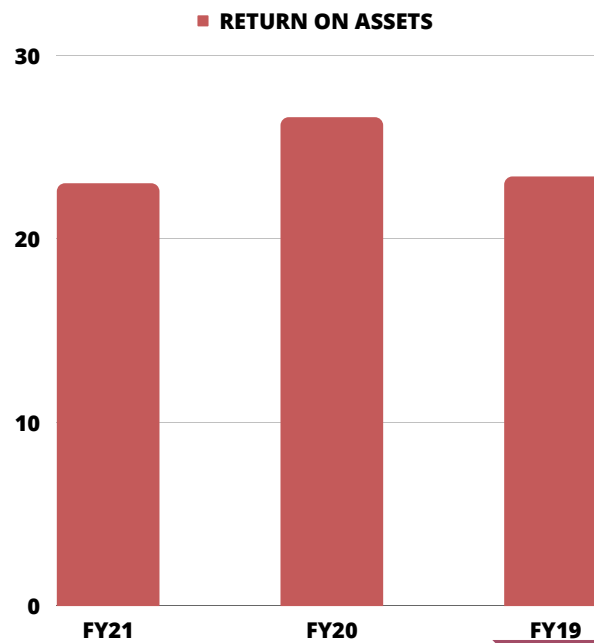
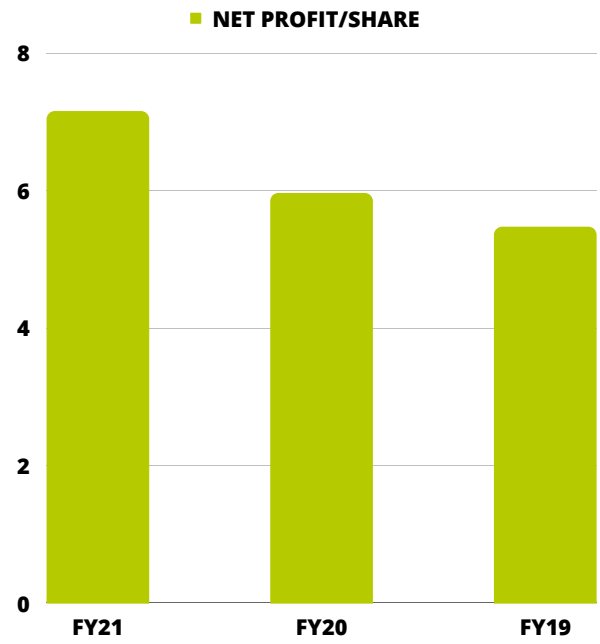
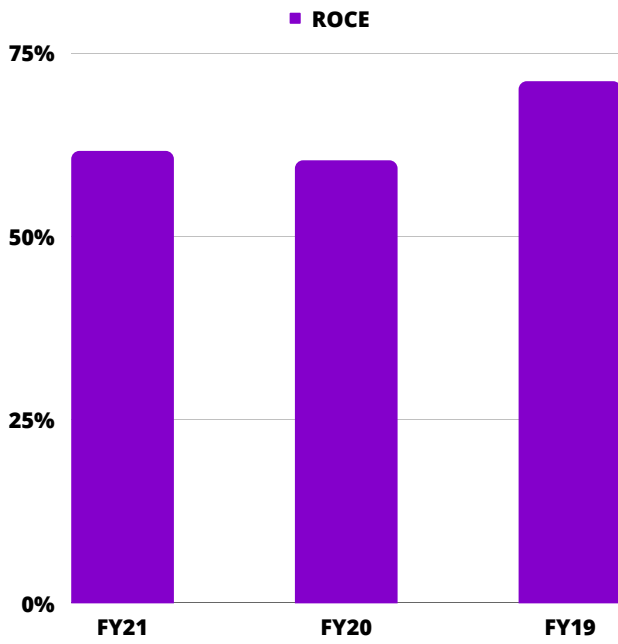
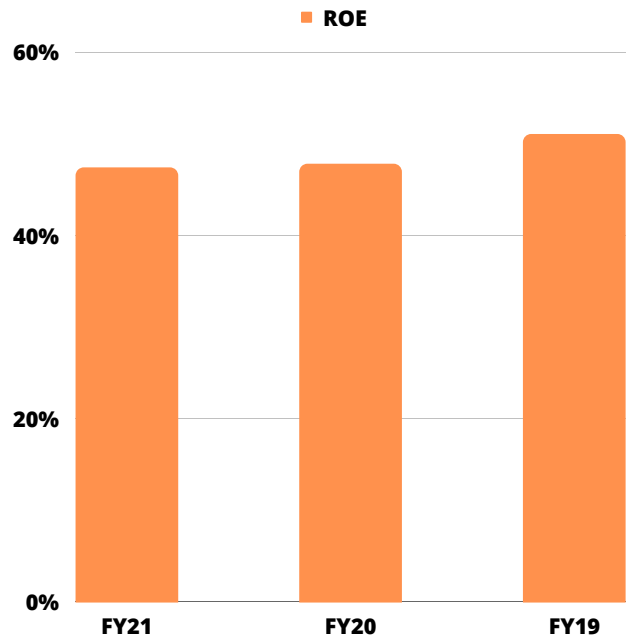
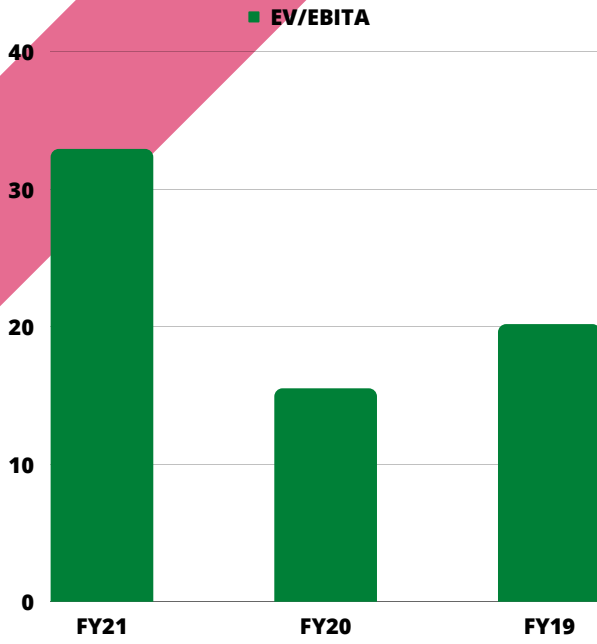
The Company's revenues may suffer if its market share does not increase year after year and it does not make efforts to bring products that are in line with changing market demands.

### **Mitigation:**

The company's revenues are primarily drawn from transaction fees and annual subscription fees. The company engages with all stakeholders, increasing the number of participants and driving revenue growth. The company has recently launched new products to mitigate market risk.









## Indian Energy Exchange Ltd NSE:IEX





## SUMMARY

We recommend a BUY position on Indian Energy Exchange with a medium to long term view owing to the following:

- **PERFORMANCE RECORD**
- **INTRODUCTION TO NEW INNOVATIVE PRODUCTS**
- **GOVERNMENT INITIATIVES**

After looking at sector growth from recent years, and policies that the government has made recently, we expect high growth in the Energy sector. Any major change in government policies will strongly affect the growth of the industry as it will bring more short term energy trading into the market.

Some important growth influencing factors are:

- New Products
- Widening market
- IT service
- Favorable government policies

IEX is 1st of its kind in the Indian market and has no high risk competitor whatsoever. IEX is expected to remain the monopoly in the market in the long haul.



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