

## Leading India's Energy Transformation







ANNUAL REPORT 2021



I N D E X

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## Fiscal year 2021

## Exemplary.

In our journey of 13 years, FY 21 was characterized by



Digital Transformation



Robust Business Continuity Plan



New Products and Markets



**Customer Centric Activities** 



Seamless Operations

...leading to exemplary business performance.

IEX is transforming the energy sector, underpinned by the value proposition of efficiency, competitiveness, flexibility, and customer choice. The efforts have resulted in exchanges now accounting for 6% of India's total electricity basket.

Record-breaking Yearly Trading Volume

74 BU

**Revenue Uptick** 

20.3% YoY

with revenue at Rs. 357.4 Cr

**Electricity Segment Growth** 

37.3% YoY

**Profit After Tax growth** 

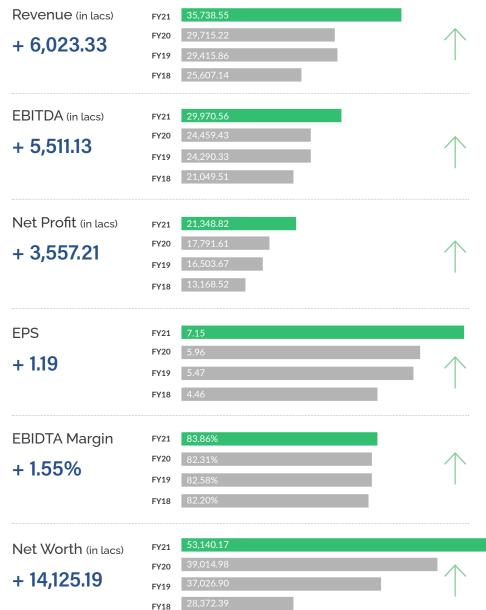
20.0% YoY

with PAT at Rs 213.5 cr





IEX, with its transformative model, is creating tremendous value for its shareholders, year on year.







# **IEX is Leading India's Energy Transformation**

The Indian Energy Exchange is leading India's energy transformation by architecting a markets-based energy order, leveraging technology and innovation towards building a sustainable energy sector which is anchored in efficiency, competitiveness, flexibility and customer choice.

Towards this endeavor, IEX works proactively in partnership with the energy ecosystem stakeholders to develop and deepen energy markets while contributing towards accomplishing the national aspiration of building India as a sustainable energy economy.





The fast paced addition of renewable capacity across the world reinforces optimism about our ability to accelerate clean energy transition and achieve goals under the Paris Climate Agreement, 2015. According to the International Renewable Energy Agency, despite the COVID-19 pandemic, more than 260 GW of renewable energy capacity was added globally in 2020, beating the previous record by almost 50%.

India has also seen an accelerated momentum in solar and wind energy based projects at the grid as well as decentralised level. Governments and industry have been rallying behind the increased adoption of renewable energy. They are also pro-actively exploring the feasibility of adoption of other new emerging renewable technologies like storage, hydrogen, geothermal etc., driving the energy innovation.

Renewable energy has seen fast-paced growth in India. From a mere 4% share in electricity generation in the year 2008-09, it has reached a mighty 11% in 2020-21. The installed renewable capacity at 94 GW represents 24.7% of the total installed capacity of 382 GW. The fast and steady growth of renewable is a testament to India's persistent efforts to decarbonize its energy economy.

Further, the mobility space, which has been fulcrumed on the conventional fuels over last many decades, is now seeing a shift towards electric. Several innovative decentralized hybrid models for vehicle charging stations are now emerging. With policies such as FAME II, India is poised to witness the transformation of its automobile sector with electric mobility leading the way. To spur this shift, decentralization supported by new models such as virtual power plants as well as integration of mobility with grids will emerge.

### Building India as a Sustainable Energy Economy

India's energy policy is guided, to a great extent, by Nationally Determined Contributions committed under the Paris Climate

Agreement, 2015. Some of the specific targets include reducing emission intensity by 33-35% by the year 2030 as compared to 2005 levels, achieving a 40% share of non-fossil fuel based electricity generation capacity, and 450 GW of installed renewable capacity by 2030.

Honorable Prime Minister, Shri Narendra Modi's stated focus areas for India's energy economy include use of cleaner fossil fuels, greater use of bio-fuels, rapid scaling up of renewables, electric mobility, and a shift towards emerging fuels including hydrogen. While solar power accounts for about 4% of India's electricity consumption today, it is set to see an exponential growth in the coming years.

As per the International Energy Agency India Energy Outlook 2021, if stated energy policies are implemented in India, the market for solar PV, wind turbine and lithium-ion battery equipment will expand to over \$40 billion per year by 2040. In such a scenario, by 2040, 1 in every 7 dollars spent worldwide on sustainable equipment will be in India, compared to 1 in 20, today.

#### **From Consumers to Prosumers**

Given the accelerated pace of the energy shift that has been underway, India is likely to see a heightened emphasis on building smart and robust grids at various levels and on other resources that offer flexibility to successfully balance the grid. India's large transmission grid, coal-fired power fleet supported by renewables, hydro power and gas-fired capacity can meet the bulk of balancing and flexibility requirements in the near term. It is notable that the Government of India envisages 40 GW of decentralized solar energy solutions by the year 2022.

The adoption of decentralised off-grid solutions, and microgrids supported by the enabling policy framework, is driving decentralized generation and leading to the creation of a new breed of consumers called 'prosumers' who produce as well as consume energy. The increasing number of prosumers also underline a greater need to accelerate battery storage and hydrogen based fuel cells in the mid to long run, for a round the clock and reliable energy solution. The prevalence of prosumers and increased adoption of decentralised energy systems will likely lead to the creation of local energy markets

