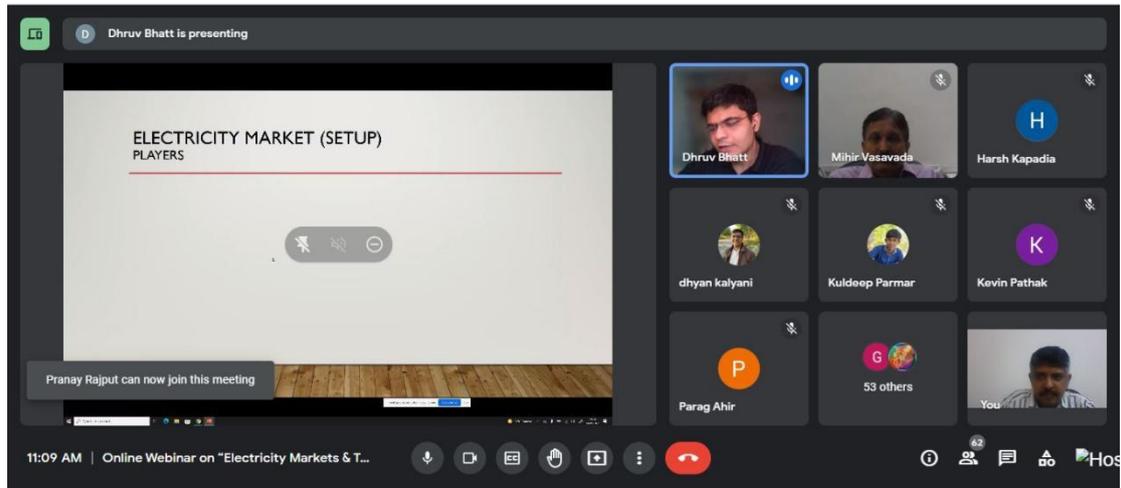


# **REPORT**

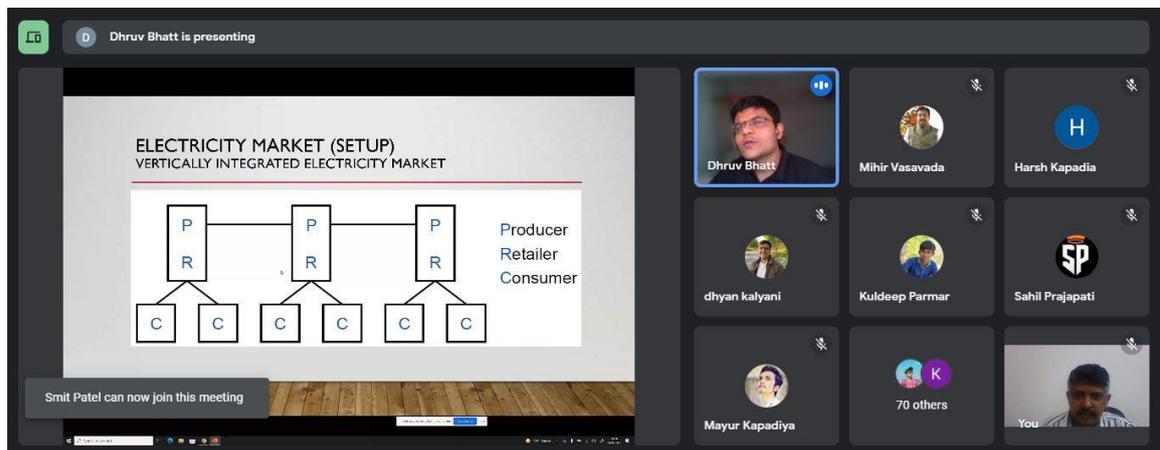
## **Webinar on "Electricity Markets and Trading"** **By Sh Dhruv. H. Bhatt, Junior Intraday Power** **Trader, Eneco Energy Trade, Rotterdam,** **Netherlands**



Owing to inclusion of many private players in the field of power generation, Power trading is now carried out by most of them on Intraday Trading basis. It is “State of Art” concept for Indian power sector also. However, it is profusely exercised in Netherlands. They are doing intraday trading by using different algorithms, load forecasting techniques and weather forecasting. In order to spread awareness about “Electricity Markets and Trading” IEI students’ chapter, Department of Electrical Engineering of L. D. College of Engineering organized an online expert session from Field expert for undergraduate students on March 4<sup>th</sup>, 2022. 84 nos. of students of under graduate studies and few faculty members have participated actively in this webinar.



The expert, Sh. Dhruv Bhatt is alumni of our college. He has conferred his U.G.Degree in the year 2014. Thereafter, he was with reputed multinational companies such A.B.B. Ltd at Vadodara, Gujarat and Siemens Industrial Turbo machinery AB, Finspång, Sweden till July 2017. Afterwards, he has completed his masters from KTH Royal Institute of Technology, Stockholm, Sweden with specialization in Electric Power Engineering. Now, he is working as a Junior Intraday Power Trader, Eneco Energy Trade, Rotterdam, Netherlands since year 2019. He has sound knowledge about Power markets and Trading.



In this webinar, initially, he discussed the structure of electricity market. Electricity market may be separated in three different levels namely (i) Producers (ii) Retailers, and (iii) Consumers. He elaborated the role of each of them. Nowadays, there are

The screenshot shows a Zoom meeting with a presentation slide. The slide title is "ELECTRICITY TRADING TYPES OF TRADING MARKETS". The diagram illustrates the structure of the electricity market:

- Electricity Market
  - Long Term
  - Day Ahead
  - Intraday
  - Balancing
    - Capacity
    - Energy
  - Ex-post

The meeting interface includes a list of participants: Dhruv Bhatt, Mihir Vasavada, Harsh Kapadia, dhyan kalyani, Kuldeep Parmar, Sahil Prajapati, Mayur Kapadiya, 73 others, and You. The time is 11:14 AM.

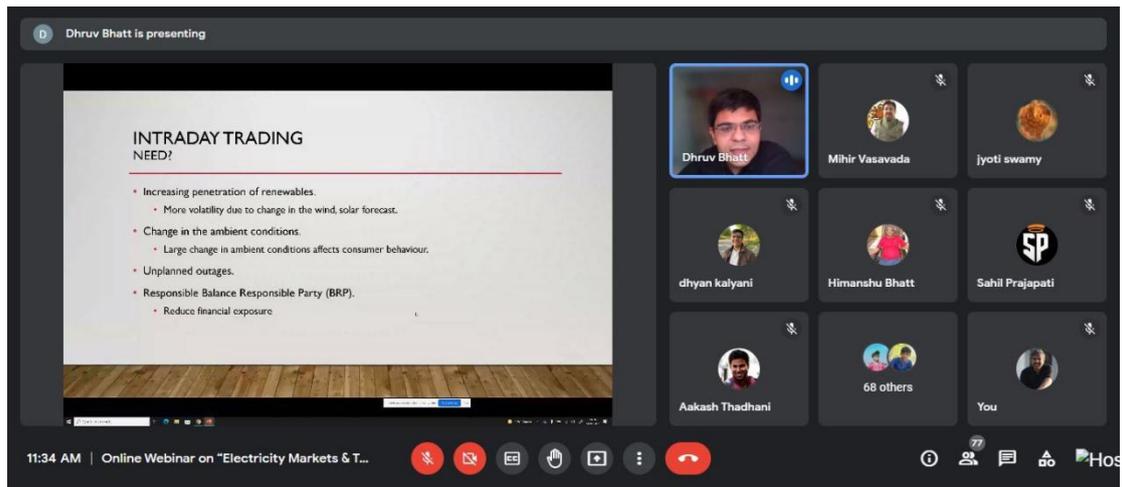
plenty of private players are included with their own power generating units. Hence, in order to make this market comparative and customer oriented Bids for different time slots are invited by Power Regulatory Authority. The requirement of hourly based Electrical Power Consumption is determined using load forecasting techniques such as (i) Short-term Load forecasting (ii) Medium Term Load forecasting, and (iii) Long term load forecasting. He has discussed all the three in brief.

The screenshot shows a Zoom meeting with a presentation slide. The slide title is "ELECTRICITY TRADING MARKET PRICE". The graph shows the relationship between Price (\$/MWh) and Demand (MW):

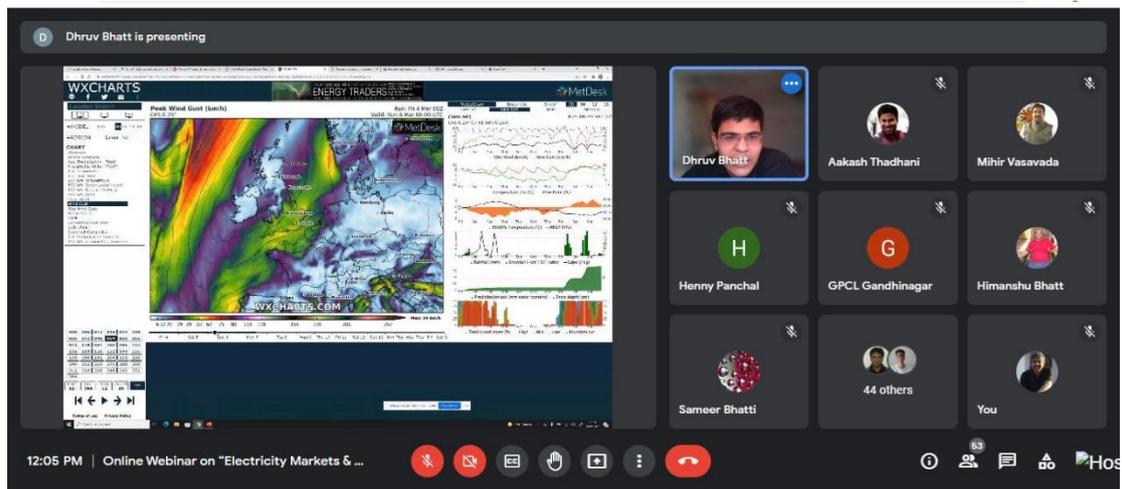
Demand (MW)	Price (\$/MWh)
0 - 200	10
200 - 250	20
250 - 400	40
400 - 500	60

The meeting interface includes a list of participants: Dhruv Bhatt, Mihir Vasavada, Harsh Kapadia, dhyan kalyani, Himanshu Bhatt, Sahil Prajapati, Aakash Thadhani, 73 others, and You. The time is 11:27 AM. A notification states "Raj patel has left the meeting".

After that each of private players will quote their price to supply electrical power for a specific slot. Moreover, these private producers should also take care about their hot, cold, and spinning reserves. Regulatory authority also compel them to strictly maintain their reserve. In case of abnormal situation, these reserves are used to avoid cascade tripping.



The bids are also three types such as (i) Short term (ii) Medium Term, and (iii) Long term. He has thrown some lights on short term trading ( also known as intraday trading) with some real time examples which he has faced.

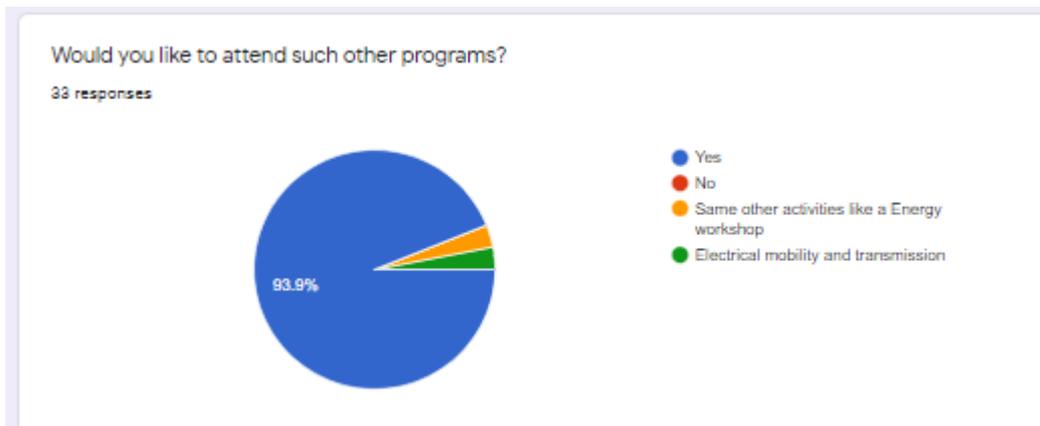


Thereafter, question-answer session had been held. Many students and faculty members had asked different questions about the dynamics of trading and Sh. Dhruv has given satisfactory answers to all. The Head of Department Prof. (Dr.) J.R.Iyer madam had asked few questions also. At last, vote of thanks has been given by Prof. H. N. Raval, APEE, L.D.C.E. Sh. Dhruv has also shared his e-mail ID with the students and motivate them to do some real time projects in said field. He has also shown his readiness to help the students.



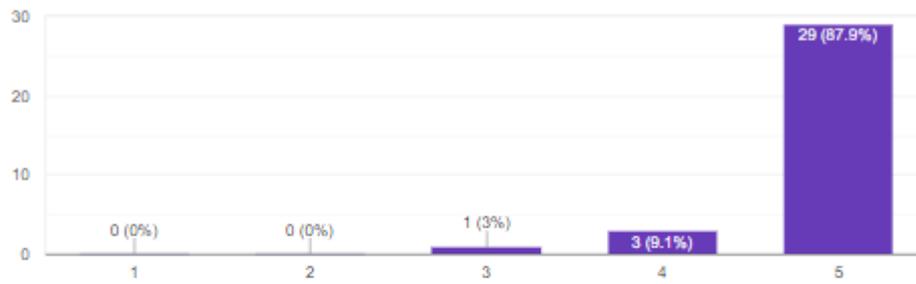
Feedback from the participants have been collected and its analysis is done

### Feedback form analysis



### Feedback about this workshop

33 responses



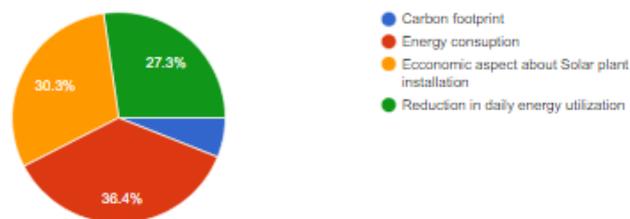
### Does the Duration of said training is ok?

33 responses



### Which topic you like the most?

33 responses



### Rate the speaker

33 responses

