

Five Days Online Faculty Development Programme On

# Nearly Zero Energy Building (nZEB)

August 10-14, 2020

Organized by



DBATU, Lonere

**DR. BABASAHEB AMBEDKAR  
TECHNOLOGICAL UNIVERSITY, LONERE**

And



Shri. Shamrao Patil (Yadravkar) Educational and Charitable Trust's

**SHARAD INSTITUTE OF TECHNOLOGY  
COLLEGE OF ENGINEERING,  
YADRAB-ICHALKARANJI**

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## About FDP

The nearly zero-energy building (nZEB) concept has recently gained prominence worldwide. Large scale adoption and implementation of NZEBs would potentially contribute greatly to greening of the building sector. However, it is still at a nascent stage of niche formation. As global warming and fossil fuel depletion highlight the need to save energy, demand for energy in buildings is bound to increase. This has recently gained a lot of attention from research communities, early adopters of construction innovations, policy makers as well as green building rating systems, such as Leadership in Energy and Environment Design—LEED, setting ambitious targets to transform the building sector by adopting low, near or net zero energy building concepts.

Although India's green building sector has gained momentum, numerically it can be considered rather small when compared to the number of buildings which are planned to be constructed in the country till 2030. When looking at the estimated 2030 building volume, 70% remains to be constructed. In this view scaling up nZEBs among the new to be constructed volume of buildings can be viewed as a potential "game changer" by curbing GHG emissions and drastically reducing energy demand of the building sector in India. Currently, in India the building sector is responsible for nearly 33% of the total energy consumption. From this perspective, large scale development of nZEBs has the potential to deal with future energy challenges and ensure energy security for the country, which is especially urgent in urban settings. However, this requires structural changes and innovations in policy, regulations, user practices, market incentives, awareness as well as new technology to overcome the existing barriers for green markets. At the moment the market for nZEBs in India is at a nascent stage of niche formation, with only a handful of nZEB demonstration projects running. Results from previous research revealed that the nZEB niche is immature and growing only slowly. Currently, there is no single nationally accepted definition of nZEB in India as the concept is still considered to be in its infancy. However, frontrunners define it as, "highly energy efficient building with extremely low energy demand, which is met by renewable energy sources". Such buildings produce as much energy as they consume (annually).

As per the Bureau of Energy Efficiency, any building whose Energy Performance Index (EPI) is less than 15kWh/square meter/year is termed as the nZEB building.

## About DBATU

Dr. Babasaheb Ambedkar Technological University, with its headquarters situated at Lonere, is now a statutory State Technical University established by Government of Maharashtra through special Dr. Babasaheb Ambedkar Technological University Act. Due to the implementation of academic reforms, the teaching-learning process has undergone significant improvement. Through TEQIP, we took a policy decision to support research-oriented projects of final year UG students. Several workshops have been conducted on 'Research Methodology' for the benefit of PhD/MTech students.



## About SITCOE

Shri Shamrao Patil (Yadravkar) Educational & Charitable Trust's Sharad Institute of Technology, College of Engineering, Yadrav is one of the budding institute in the state of Maharashtra with Seven courses. It has been established in the year 2009. The institute is approved by AICTE, New Delhi, Recognized by Government of Maharashtra DTE Mumbai & Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere and Shivaji University Kolhapur. Institute has accred-ited by NAAC with 'A' Grade and also ISO 9001-2015 certified and NBA accredited programs.

The motto of the college is to provide best quality technical education to the student from motivate them to become creative and responsible engineers aware of social implications of their work as well as flexible enough to adjust the rapid changestaking place in the engineering domain, which is a need of the country to develop as one of the leading industrialized nation in the world.

## Resource Persons

The course content will be delivered by resource persons from IIT, NIT, Industry experts and DBATU faculty members.

1. Prof. Rangan Banerjee IIT, Bombay.
2. Prof. Chetan Singh Solanki, IIT Bombay.
3. Prof. Muthukumar IIT, Guwahati.
4. Prof. Babu Ashok, NIT Suratkal.
5. Dr. D. T. Barki, VP GreenKO Group Company, Hyderabad.
6. Dr. S. A. Khot, SITCOE, Yadrav.
7. Mr. Vijay Limaye, Electrical consultant, Sangli.

**Who can attend FDP :** Faculty members / Research Scholars / PG / UG.

***This is open to all branch of Engineering & Technology, Pharmacy and Architecture.***

**Registration :** No registration fee. Selected participants must attend the entire course on all the days.

## Objectives of the FDP

- To understand concept of nZEB in India.
- Energy conservation potential in buildings
- Promote research in nZEB domain.
- Familiar with standard and labelling concept of energy efficient appliances
- Design of solar PV system for buildings.

## Schedule

Date/Time (10.30am to 12.30 pm)	Topic
10.08.2020	Introduction of nZEB
11.08.2020	Solar passive building
12.08.2020	Design of Solar PV System
13.08.2020	Ventilation and cooling
14.08.2020	A New Look at Energy & Sustainability

## Registration Link

<https://attendee.gotowebinar.com/register/8709404635627529739>

## Contact Persons

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2. Mr. A. S. N. Husainy : +91 80070 05860
3. Mr. A. L. Jamadar : +91 73851 05528

## Instructions to Participants

1. Filling the registration form is mandatory.
2. Attendance is mandatory for all sessions for the certificate to be issued.
3. All sessions will be conducted on online platform.
4. Participants need to have functioning Laptop /Desktop with webcam, microphone and mobile with headphones/ear phones.
5. Uninterrupted Internet Connectivity.
6. The FDP will commence at 10.30 AM on all 5 days and close by 12.30 PM.
7. Online link to attend sessions will be provided to all registered participants.
8. E-certificate will be emailed after successful completion.