WALCHAND COLLEGE OF ENGINEERING

(Government-Aided Autonomous Institute)

Estd. 1947

Bharatiya Vidya Bhavan's

Sardar Patel College of Engineering

(Government Aided Autonomous Institute Under Mumbai University)

1938

1962

Joint One Week Faculty Development Program (FDP)

On

Energy Transition in India: Opportunities and Challenges

23rd to 27th November 2026

Organised by

Walchand College of Engineering (WCE), Sangli

and

Sardar Patel College of Engineering (SPCE), Mumbai





In Collaboration with

Net-Zero Energy Transition Association (NETRA)

About WCE Sangli

Walchand College of Engineering Sangli (WCE), established in 1947 and aided by the Govt. of Maharashtra, is one of the oldest and premier engineering institutions in India. With a rich history of 75 years and a beautiful campus of over 90-acres, WCE Sangli, is providing transformational learning experience in various disciplines of engineering.WCE offers 8 UG programs in Civil, Mechanical, Electrical, Electronics, Computer Science & Engineering, Information Technology, Robotic & Automation and Artificial Intelligence & Machine learning and 11 PG programs. It also offers PhD programs under Shivaji University, National Doctoral Fellowship of AICTE and under Quality Improvement Program (QIP) scheme of Ministry of Human Resource Development (MHRD).Walchand College of Engineering is affiliated to Shivaji University Kolhapur and is approved by AICTE, New Delhi. The Institute is also given Autonomous status by University Grants Commission since 2007. The students of WCE get placed in reputed Multinational and Indian Companies such as Google, Microsoft, LinkedIn, Amazon, John Deere, Rakuten, P&G, Mahindra, TCS, Infosys and many other companies.



Hon. Shri. Ajit Gulabchand
Chairman, Administrative Council,
WCE, Sangli

About SPCE Mumbai

Sardar Patel College of Engineering (SPCE) under the management of the Bharatiya Vidya Bhavan, was founded by Kulapati Dr. K. M. Munshi. It was established to meet the growing demand for engineering talent. The foundation stone of the college was laid on 17th September 1961 by Shri. Y. B. Chavan (the then Chief Minister of Maharashtra who later became the Defence Minister of India). The college was inaugurated by the first Prime Minister of Independent India, Pandit Jawaharlal Nehru in 1962. The college is dedicated to Sardar Vallabhbhai Patel, an eminent nation builder of independent India. SPCE has celebrated its diamond jubilee in the year 2022 by organizing AICTE, SERB and CSIR sponsored Sardar Patel International Conference on Industry 4.0 - Nascent Technologies and Sustainability for 'Make in India' Initiative 2022 (SPICON-2022). The college is autonomous and affiliated to the University of Mumbai for the full-time degree, post graduate, and research programs. The institute has set high standards for aspiring engineering students and also meets the need of quality education in the challenging world of business. Over the last 60 years the college has gained an excellent reputation in the field of Technical Education.

About NETRA

Net-Zero Energy Transition Association (NETRA) is an organization that works to accelerate the global transition towards net-zero emissions by bringing together industry, academia, policymakers, researchers, and other stakeholders. Its major activities include promoting clean-energy technologies, supporting industry-led research and development, encouraging policy initiatives, facilitating investment and partnerships, and developing skills in emerging sectors such as renewable energy, green hydrogen, advanced battery energy storage systems, electric mobility, and carbon capture. NETRA also focuses on capacity building through training programmes, workshops, webinars, knowledge sharing, and networking to encourage innovation and the adoption of sustainable energy solutions. For educational institutions, NETRA's approach provides opportunities to strengthen faculty development, promote industry–academia collaboration, and encourage research and innovation in clean energy and sustainable power systems.

NETRA
Net-zero Energy Transition Association



About Program

The transition to sustainable energy is a pressing global concern and India stands at an essential crossroads regarding its energy future. With ambitious renewable energy targets set forth, the landscape of sustainability presents both significant challenges and massive opportunities.

Key Takeaways

➢ **India's renewable energy targets:**
India aims to achieve 500 GW of installed non-fossil fuel capacity by 2030.

➢ **Significant challenges:**
Grid integration, infrastructure development, regulatory uncertainty, and financial barriers are key challenges in the energy transition.

➢ **Growth opportunities:**
The solar and wind sectors present immense opportunities for investment and technological innovation.

➢ **Executive strategies:**
Staying informed, investing in R&D, collaborating with stakeholders, seeking funding, focusing on education, and monitoring performance are crucial strategies for participatio in the energy transition.

➢ **Energy Storage:**
As per the upcoming CEA guidelines, 20% Battery Energy Storage System (BESS) integration with solar power is expected to be mandatory.

Program Objectives

- Understand the concept of energy transition and its significance in achieving sustainable development, energy security, and climate change mitigation in India.
- Explore India's energy transition policies and initiatives, including renewable energy targets, the National Green Hydrogen Mission, and net-zero emission commitments.
- To promote research, innovation, and interdisciplinary collaboration among faculty members in the areas of clean energy technologies, sustainable energy management, and energy policy.
- Develop teaching and research competencies by integrating contemporary developments, case studies, and practical applications of energy transition into academic curricula.
- Encourage sustainable and inclusive energy transition strategies that address regional disparities, energy access, affordability, and a just transition for communities dependent on conventional energy industries.
- Enhance participants' understanding of smart grids, energy efficiency, and energy storage systems for improving the reliability and sustainability of India's energy sector.

List of Imminent Speakers



Dr. Vinod Khadkikar
Professor, Electrical Department,
Khalifa University



Dr. Yogesh Vijay Hote
Professor, EED IIT, Roorkee



Dr. Dipankar Deb
Professor, Centre for AI and
Robotics, IIT, Mandi



Dr. Deepak Ronanki
Associate Professor,
IIT, Madras



Dr. Rahul Walawalkar
Founder – Net-Zero Energy
Transition Association (NETRA)
& Walawalkar Enterprise LLP



Dr. Shailendra Kumar
Head, Electrical Engineering
Department, IIT, Bhilai



Dr. E S N Raju P
Assistant Professor, School of
Energy Science and Engineering,
IIT Guwahati



Mrs. Netra Walawalkar
Co-Founder, Net-Zero Energy
Transition Association (NETRA)
& WE LLP



Dr. Sai Ram Boggavarapu
Assistant Professor, EED
IIT Dharwad



Mr. Hemant Bari Adani
Associate, General Manager,
Adani Power



Er. Dadasaheb Kachare
General Manager Power Grid, India

One Week FDP Schedule

On

"Energy Transition in India: Opportunities and Challenges"

Date	23rd Nov 2026	24th Nov 2026	25th Nov 2026	26th Nov 2026	27th Nov 2026
Time	10:00-10:30 Inauguration				
Topics of FDP					
10:30-12:30 Session 1	Electric Vehicle to Vehicle (V2V) Power Sharing	Water-Free Robotic Cleaning of Solar Panels: AI, Autonomous Systems, and Sustainable Energy	Advanced Control Strategies for Cyber-Resilient Power Systems	Electric Vehicle Charging infrastructure for Medium and Heavy Duty Electrified Vehicles	Integration of Renewable Energy Resources Opportunity and Challenges
12:30-1:30	Article Discussion	Article Discussion	Article Discussion	Article Discussion	Article Discussion
1:30-2:30	**Lunch**				
2:30-4:30 Session 2	Innovation & Scale up for Clean Technologies	Electric Vehicles in India's Energy Transition: Technology, Infrastructure, and Standards	BESS landscape in India	Enhancing Reliability: Turbo generator Component Assessment via NDT techniques	Multiphysics Analysis of Electromagnetic Systems: Importance and Applications
4:30-5:30	Article Discussion	Article Discussion	Article Discussion	Article Discussion	Dynamic Performance Evaluation of 2×150 MVAr GFL STATCOM in Indian Power Grid
5:30-6:00					Valedictory function

Organising Committee

Patron	
Mr. Amol Chavan Member, Admin Council, WCE Sangli	**Dr. R. Shesha Iyer** Chairman, BoG, SPCE, Mumbai
Dr. Surendra Singh Rathod Director, WCE, sangii	**Dr. M. M. Murudi** Incharge Principal, SPCE, Mumbai
Dr. Uday A. Dabade Deputy Director, WCE, Sangli	
Dr. Vijay Mohale FDP Convener and Head Electrical Department, WCE, Sangli	**Dr. Nandkishor Kinhekar** Head Electrical Department SPCE, Mumbai
FDP Coordinators:	
Mr. Ajay Patil (WCE, Sangli)	**Dr. Swapnil Patil** (WCE, Sangli)
Mr. Vishal Dake (SPCE, Mumbai)	
Organising Team:	
Faculty from Electrical Department, WCE Sangli	
Mr. N. V. Patel	**Mrs. S. L. Shaikh**
Dr. R. P. Hasabe	**Dr. Mrs. S. P. Diwan**
Dr. S. S. Karvekar	**Dr. D. S. More**
Dr. M P. Thakre	**Mrs. A. A. Dhamangaonkar**
Dr. Mrs. A. S. Karvekar	**Mr. M. S. Mahagaonkar**
Mr. V. S. Sathe	**Mr. A. N. Inamdar**
Mrs. N. B. Jagtap	**Mr. V. S. Bhandare**
Mr. K. P. Desai	–
Faculty from Electrical Department, SPCE, Mumbai	
Dr. B. B. Pimple	**Dr. Sangeeta Daingade**
Dr. Swati Lavand	**Mr. Rahul Chavhan**

Who May Be Benefitted:

The faculty members of the AICTE approved institutions, research scholars, students, participants from Government and Industry would be benefitted from the course.

Registration Details:

The eligible participants are requested to register through the following registration link:

https://forms.gle/NYLAwULLiUNDhs3z9

Registration fee: Free

Contact for More Information:

Dr. Swapnil Patil (WCE, Sangli),
Mob: +91-95959 74017,
Email: swapnil.patil@walchandsangli.ac.in

Mr. Vishal Dake (SPCE, Mumbai),
Mob: +91-77093 11322,
Email: vishal_dake@spce.ac.in



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WALCHAND COLLEGE OF ENGINEERING, SANGLI

Government Aided Autonomous Institute



Walchand College of Engineering,
Sangli-Miraj Road, Vishrambag, Sangli, Maharashtra 416415

+91-233-2300383 +91-233-2300831 walchandsangli.ac.in