

## **Minutes of the Green Committee Meeting of IIT Roorkee held on February 27<sup>th</sup>, 2025 at Committee Room, James Thomson Building, IIT Roorkee**

The following members were present:

1. Prof K. K. Pant, Director	- Chairman
2. Prof U. P. Singh, Dy Director	- Special Invitee
3. Prof Bhanu Prakash Vellanki, CED	- Convener
4. Prof. Sujay Chattopadhyay, Dean Saharanpur Campus	- Member
5. Prof Jeevanand S., Associate Dean Infrastructure (Electrical & A/C)	- Member
6. Lt. Col. Deepak Kumar Thakur, Institute Engineer	- Member
7. Shri Bhavneesh Lal, Institute Architect	- Member
8. Prof Vimal Kumar, DoCE	- Member
9. Prof Sparsh Mittal, DoECE	- Member
10. Prof Saurabh Vijay, CED	- Member
11. Prof Kritika Kothari, WRDM	- Member
12. Prof Pratham Arora, DoHRE	-Member
13. Prof Gaurav Manik, DoPPE	- Special Invitee
14. Prof Nikhil Dhawan, DoMME	- Special Invitee
15. Prof Prakhar Mishra, CED	- Special Invitee
16. Prof A.S. Maurya, DoES, Professor In charge Security	- Special Invitee

Prof. P.K. Jha (ADOSW) and Prof. Inderdeep Singh, Dean Infrastructure and Student members could not join the meeting.

The last meeting was held on June 18, 2024 and minutes were circulated vide email dated July 14, 2024 and were uploaded on the website [https://www.iitr.ac.in/GP/green\\_committee.html](https://www.iitr.ac.in/GP/green_committee.html).

Prof K K Pant, Director, asked Prof Bhanu Prakash Vellanki, Convener Green Committee, to present the agenda scheduled for the meeting

### **Action taken report on the last meeting**

#### **1. Solid Waste Management, including Bio-methanation plant**

*“ A committee comprising of Prof Bhanu Prakash Vellanki and Executive Engineer nominated by Dean Infra shall review and examine the whole matter and the same shall be taken administratively for further implementation by IWD.”*

Dean Infra has not nominated any IWD member. No progress updated to GC so far.

The committee strongly reiterates the urgent need for report on the status of solid waste handling so that immediate action may be suggested and taken. The committee noted that solid waste management is now considered in NIRF ranking.

#### **2. . Reuse of treated wastewater**

The removal of freshwater taps in areas where treated wastewater is available was mandated in the previous Green Committee meeting. No update was provided by IWD in this regard. IE mentioned that some more pipelines were to be laid to make the treated wastewater available to all lawns of campus and this is expected to be completed by end of year 2025.

The committee reiterates that:

- Freshwater taps in areas where treated wastewater is available should be removed/closed immediately.
- Treated wastewater reuse lines in apartments and hostels built for this purpose should be made functional. IWD will ensure complete pathogen removal at STP before water is reused for flushing.
- Clear communication regarding the use of treated water, timings during which the water will be available, should be provided to campus horticulture staff.
- Dean Saharanpur will ensure BOD testing of STP treated water to ensure water quality before reuse for horticulture. If treated wastewater is not meeting reuse standards, IWD will take necessary action.
- More treated wastewater taps to be provided in LBS and for the existing Miyawaki forest.

### **3. E bikes and buggies**

- IIT Roorkee has signed a five-year MoU with Indeanta Mobility, under which 50 motor scooters and four buggies will be provided for campus use. The Institute Engineer is responsible for ensuring proper charging infrastructure. Dr Sparsh Mittal will coordinate with IE in this regard.
- The Green Committee discussed concerns about the buggies not being optimally utilized due to a manpower shortage. The committee emphasized that buggies should operate on optimized routes, particularly during peak hours, with designated stops to ensure maximum accessibility. To improve utilization, Prof. In-charge Security will liaise with Prof. In-charge Transportation to allocate the necessary manpower to ensure smooth operations.
- Dean Saharanpur requested similar facilities for the Saharanpur campus. To facilitate this, Dr. Sparsh Mittal will connect the company's representative with the Dean Saharanpur Campus to conduct an eco-feasibility study.

### **4. Ban on single use plastics (water bottles, plastic bags etc.) in the campus**

- ADOSW (Bhawan & Mess) submitted a report stating that single-use plastics are no longer used in canteens, messes, night cafes, or fruit shops.
- The committee appreciated this effort and requested continuous vigilance, with fines imposed for any violations.

### **5. Sanitary Waste Management**

Preferably vacuum-sealed bins, if they are economical, should be installed in every bathroom of the girls' hostels.

### **6. Energy Conservation Measures and Generation from Solar**

The Associate Dean of Infrastructure (Electrical) mentioned that some progress was made towards optimum utilization of installed capacity. But, due to a notable decline in solar energy generation, the committee resolved that Prof. Pratham Arora will collaborate with the Associate Dean to review the reasons for decline in solar energy generation and ensure optimum utilization of installed capacity.

### **7. Electricity Consumption in common facilities**

Temperature for centralized air-conditioning in lecture halls and other common facilities

will be set at 28°C.

## **8. E waste**

- Prof. Nikhil Dhawan will champion e-waste management on campus, with NCC and NSS assisting in collection efforts.
- ADOSW (Student Activities) will support Dr. Dhawan. The Safety Office will provide quarterly assistance.
- The Material Management section must maintain a proper record of e-waste disposal for sustainability rankings and ensure bulk disposal is done only through authorized recyclers and not based on self-certification by vendors.

## **9. Green space loss due to concretization and laying of paver blocks**

- Despite previous policies, significant areas have been unnecessarily paved, reducing green cover and increasing urban heat island effect and exacerbating flooding.
- The committee resolved:
  - No concreting/paving without Green Committee approval.
  - IWD will de-concretization unnecessarily paved areas after a review.
  - IWD will follow Ministry of Urban Development guidelines and court judgements in various states for urban greening wrt spacing around trees and paving.
  - Dr. Saurabh Vijay will conduct a thermal imaging-based drone survey to identify areas needing transition from paved/concretized sections to unpaved green areas and/or tree plantation.
  - Future paving, if any approved, must avoid concrete bases. Pavers should be of variety that, unlike the one being used by IWD, has more open area, allowing for maximum soil exposure for groundwater recharge and vegetation growth.

## **10. Vision and action plan based on inclusion of sustainability in NIRF**

- Considering the importance of sustainability wrt campus life and NIRF rankings, the committee mandated bi-monthly meetings between the Green Committee Convener, Institute Engineer, and Dean Infrastructure. These meetings will track the implementation of sustainability policies and align IWD actions with NIRF and QS sustainability rankings. These bi-monthly meetings will ensure that there is no bottleneck in implementing sustainability-driven initiatives.
- Sustainability parameters outlined in NIRF, including open green spaces, water conservation measures, energy efficiency, sustainable material purchase and waste management, will be reviewed in these meetings, and a roadmap will be developed for achieving sustainability benchmarks.
- As part of these efforts, Dr. Saurabh Vijay will collaborate with the Institute Architect to identify and implement **green roofing and green facades**, as required by NIRF, to improve energy efficiency.

## **11. Miyawaki Forest Plantation**

- Dean Saharanpur will lead afforestation by Miyawaki at one of the two identified sites in Saharanpur campus, with the aid of IA.
- The Institute Architect is yet to provide sites for Miyawaki forest within the main campus. IA will provide written recommendation in this regard.

## **12. Setting up of AQI stations in campus**

- Dr. Prakhar Mishra will evaluate AQI monitoring systems available in the market and submit proposals with financial details for installations at Gate 5 and ECE Circle, to meet NIRF requirements for AQI monitoring.
- He will also assess the existing AQI stations at Saharanpur and Greater Noida

## **13. Parking and alternative modes of transportation**

- Prof. In-charge Security mentioned that 5000 vehicles enter through Gate 5 daily.
- The Committee resolved that Prof. In-charge Security will work with DOSW to restore and maintain 3,000–4,000 bicycles for use by campus community.
- Prof. In-charge Security, Dr. Saurabh Vijay, and Dr. Sparsh Mittal will submit a proposal to the administration to incentivize sustainable transport within academic areas while disincentivizing excessive private vehicle use and parking in the academic areas.

## **14. Contamination of IITR water supply during rains by pathogens**

Ensuring safe drinking water during the rainy season is critical. IWD will take immediate measures to ensure drinking water complies with regulatory standards by installation of inline chlorinators/disinfection systems at UGRs. During rainy season, more frequent monitoring is required by IWD, with the assistance of EEG, Civil Department

## **15. No Carbon Vehicle Day**

- The initiative will be implemented on the 1<sup>st</sup> of every month. The initiative will remain voluntary during extreme weather (rain or heatwaves) conditions.

The Director acknowledged the contributions of all members and stressed IIT Roorkee's role in setting sustainability benchmarks.