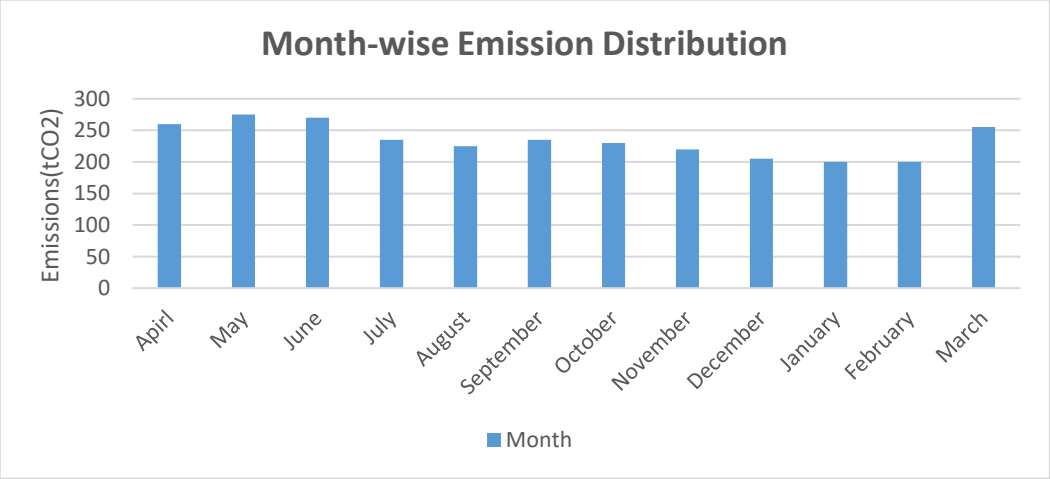
Veer Bahadur Singh purvanchal University Campus, Jaunpur, Uttar Pradesh

Annual on CO_2 Emission in the University Campus (2025-2026)

This report indicates moderate organic pollution, suggesting the need for wastewater treatment systems.

Month-wise Emission Distribution

Month	Emissions(tCO2)
April	260
May	275
June	270
July	235
August	225
September	235
October	230
November	220
December	205
January	200
February	200
March	255



Seasonal Trend Analysis:

High → Apr → May → Jun

- Medium → Jul → Aug → Sep
- Stable → Oct → Nov
- Low → Dec → Jan
- Rise → Feb → Mar

Discussion:

1. Summer → highest emissions due to AC.
2. Winter → lowest emissions.
3. Transition months → moderate variation.

Overall Interpretation

The analysis shows that:

- AC + Electricity = Major source (~60–65%).
- Generators = Significant (~10–15%).
- Transportation = Moderate (~5–10%).

The large number of:

1. 465 Acs.
2. 27 generators.
3. 655 total vehicles (525 bikes + 130 cars).

Significantly increases the carbon footprint of the campus.

- Total emissions ≈ 3000 tCO_2/year.
- Peak emission month = May.
- Lowest emission month = January.

Major contributors:

1. Air conditioning.
2. Electricity consumption.

Renewable energy reduces emissions but needs expansion.

"**The results demonstrate that the high number of air conditioning units, vehicles, and diesel generators significantly contribute to the overall carbon emissions of the campus. Seasonal variation plays a crucial role, with maximum emissions during summer months. Effective energy management and increased use of renewable energy are essential for reducing the campus carbon footprint**."