

# Greenhouse Gas Inventory Report (GHG Protocol)

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**kmutnb - January 2025 to October 2025**

*Generated on 05 October 2025 at 20:48*

## Executive Summary

This GHG carbon emissions report presents a comprehensive analysis of greenhouse gas emissions for kmutnb covering the period from January 2025 to October 2025. Total emissions reached 49546.07 kg CO2e across 95 emission records. The report follows GHG standards and provides actionable insights for emission reduction strategies. Key focus areas include energy efficiency improvements and sustainable operational practices to achieve carbon reduction goals.

## Key Metrics

Metric	Value
Total Emissions	49546.07 kg CO2e
Average Monthly	4954.61 kg CO2e/month
Reporting Period	01 January 2025 - 05 October 2025
Record Count	95 emission records

## Emissions by Scope (GHG Protocol)

Scope	Emissions (kg CO2e)	Percentage
Scope 1	16807.11	33.9%
Scope 2	32738.95	66.1%

**Scope 1:** Direct greenhouse gas emissions from sources owned or controlled by the organization (fuels, refrigerants, combustion)

**Scope 2:** Indirect greenhouse gas emissions from purchased electricity

## Key Findings

- Total emissions: 49546.07 kg CO2e
- Reporting period: January 2025 to October 2025
- Number of emission records: 95
- Primary emission source: grid\_electricity
- Number of emission categories: 24
- Scope 1: 33.9% of total emissions
- Scope 2: 66.1% of total emissions

## Recommendations

1. Prioritize reduction strategies for grid\_electricity emissions
2. Implement comprehensive energy management system

3. Conduct regular energy audits to identify efficiency opportunities
4. Consider renewable energy procurement options
5. Establish emission reduction targets and monitoring procedures
6. Develop employee awareness programs for carbon reduction

### **Trend Analysis**

Emissions showed an increasing trend over the reporting period, rising from 106.2 to 7869.6 kg CO<sub>2</sub>e. This indicates a need for enhanced emission reduction measures and closer monitoring of emission sources.

## Methodology

This report complies with the GHG Protocol Corporate Accounting and Reporting Standard. Emissions are classified according to Scope 1, 2, and 3 categories as defined by the GHG Protocol. Calculation methodologies follow GHG Protocol guidance for corporate inventories. Data quality and uncertainty are managed according to GHG Protocol requirements.

## Compliance Notes

This report complies with the GHG Protocol Corporate Accounting and Reporting Standard. Emissions are categorized into Scope 1, 2, and 3 as defined by the GHG Protocol. Calculation methodologies follow GHG Protocol guidance for corporate inventories. Data quality and uncertainty management align with GHG Protocol requirements.

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