



**KLINOVA**  
Climate Innovation Consulting & Services



# 2023

## Greenhouse Gas Emissions Inventory Report Summary

Implemented by:

Climate Innovation Consulting & Services **KLINOVA** JSC.

Hanoi, April 2024



Photo: Nguyen Dang Hao

# INTRODUCTION

**KLINOVA Climate Innovation Consulting & Services Joint Stock Company (KLINOVA)**, based in Hanoi, Vietnam, is a professional consulting company providing innovative and sustainable services and solutions within Renewable Energy, Energy Efficiency, Climate, Green Growth, Circular Economy, Carbon Credits Trading and, Environment sectors with highly qualified consultants and technical experts. Our company continues to take specific actions towards a greener world, reflecting its dedication to environmental sustainability and the reduction of greenhouse gas emissions.

## EXECUTIVE SUMMARY



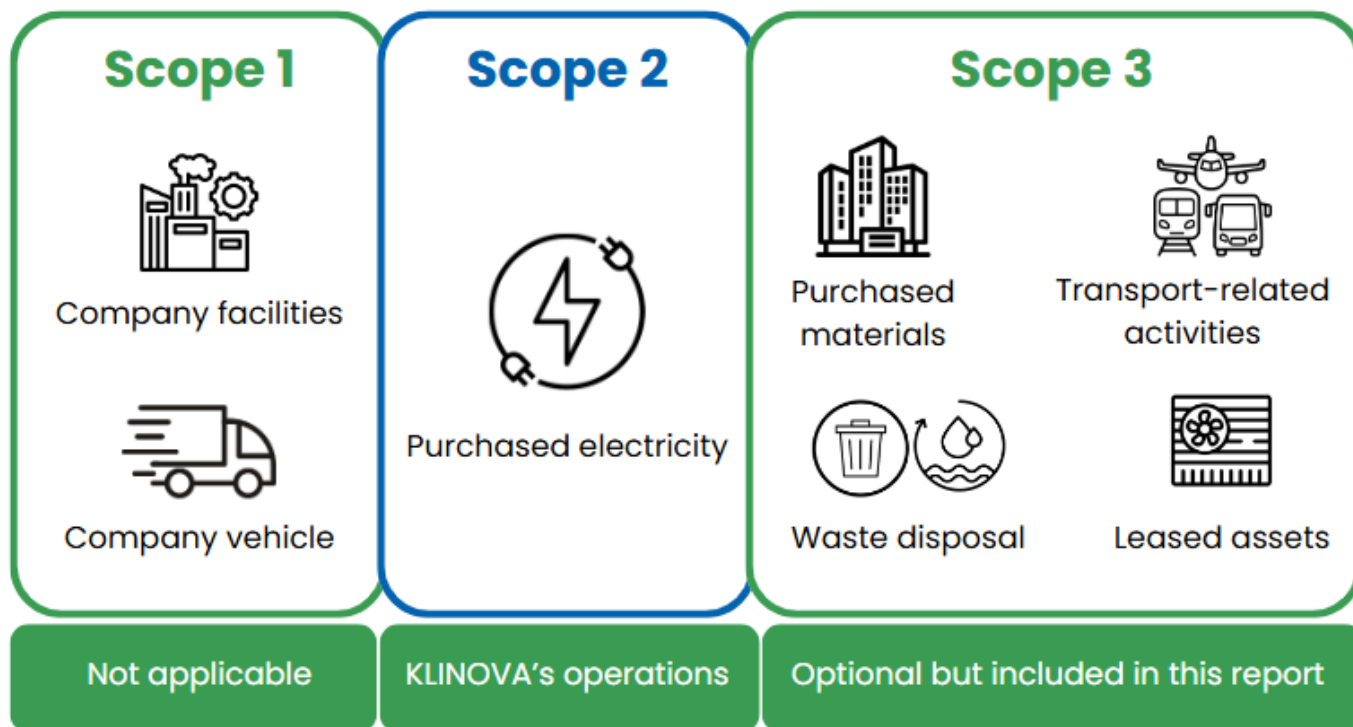
**KLINOVA's** Greenhouse Gas (GHG) Inventories have been conducted annually, starting from 2022. It will be important for us to reach our goals of green transformation and office greening.

This GHG Inventory describes **KLINOVA's** impact on the environment as measured in greenhouse gases (GHG) emitted in units of equivalent tons of carbon dioxide for the reporting year 2023, comprising the period from January 1, 2023, to December 31, 2023.

**KLINOVA's** organizational structure comprises one headquarters, one main office in Hanoi, and two representative offices in Central and Southern Vietnam. The headquarters and main office house most staff and key activities, making them central to operations. Thus, the emission inventory boundary includes only the headquarters and main office for accuracy.

# METHODOLOGY

## The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2016)



$$\text{GHG Emissions} = \text{Activity Data (AD)} * \text{Emission Factor (EF)}$$

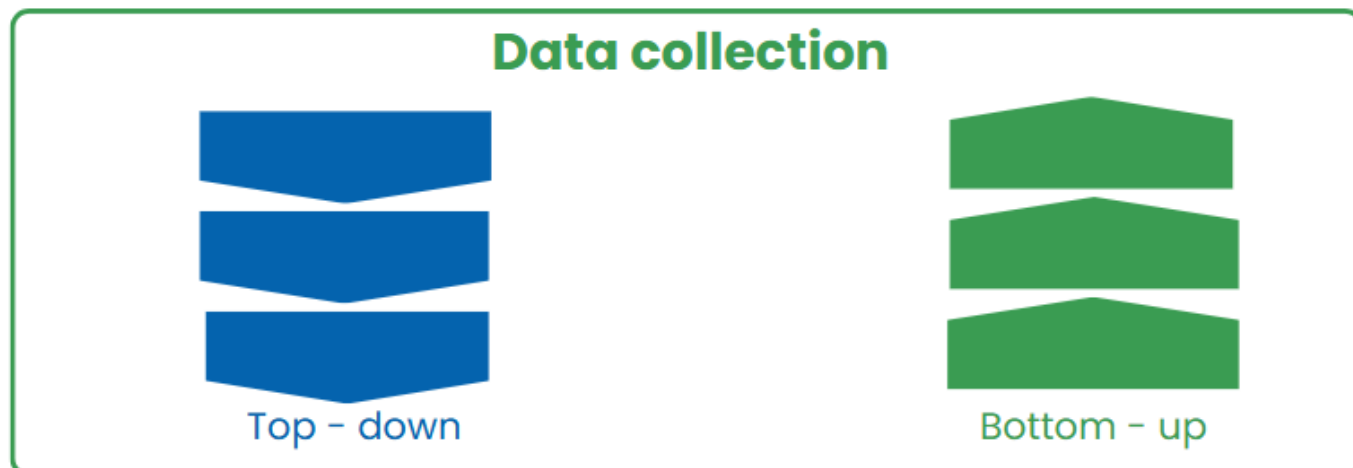


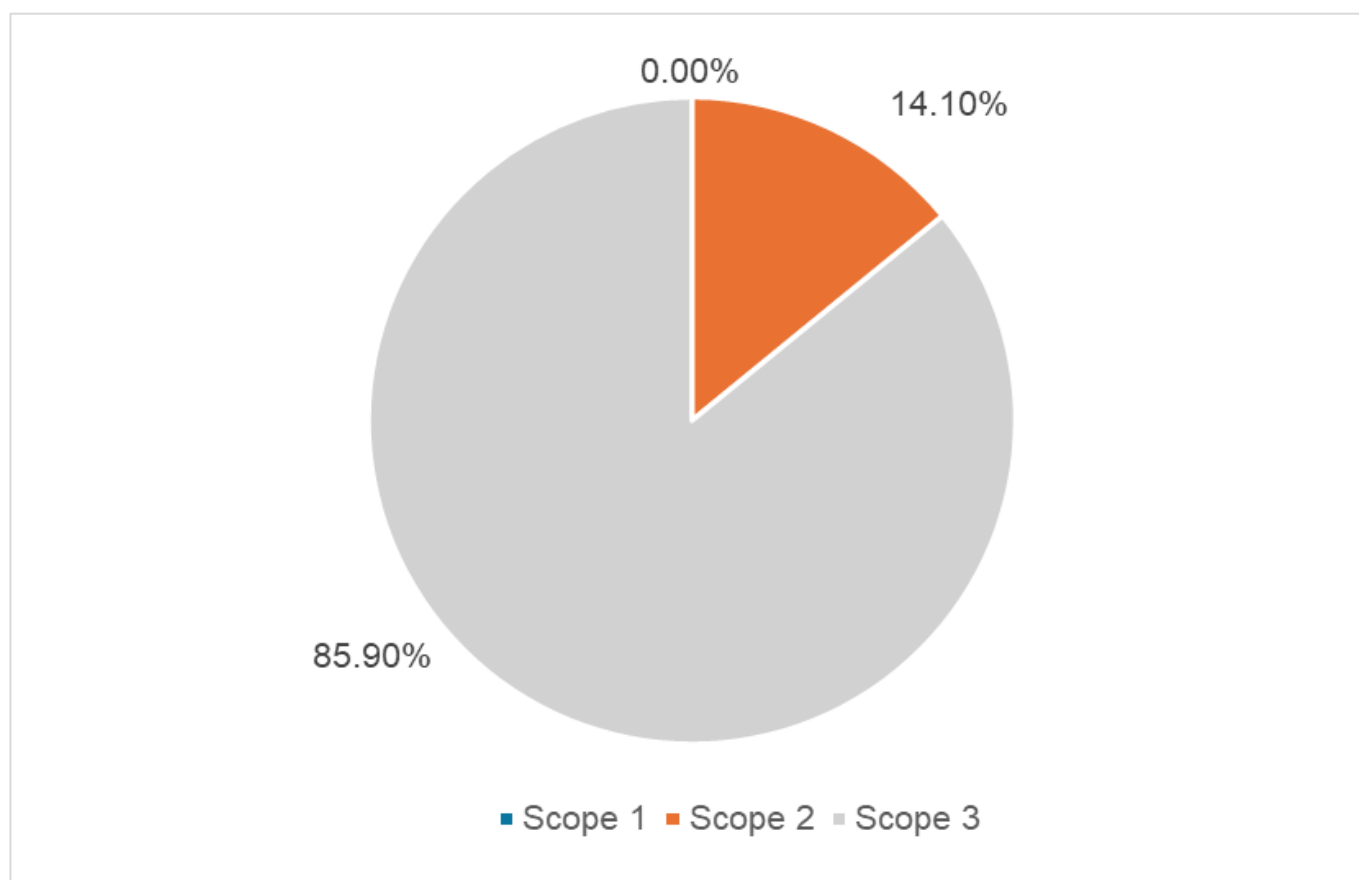
Figure 1: GHG Inventory methodology

# RESULTS

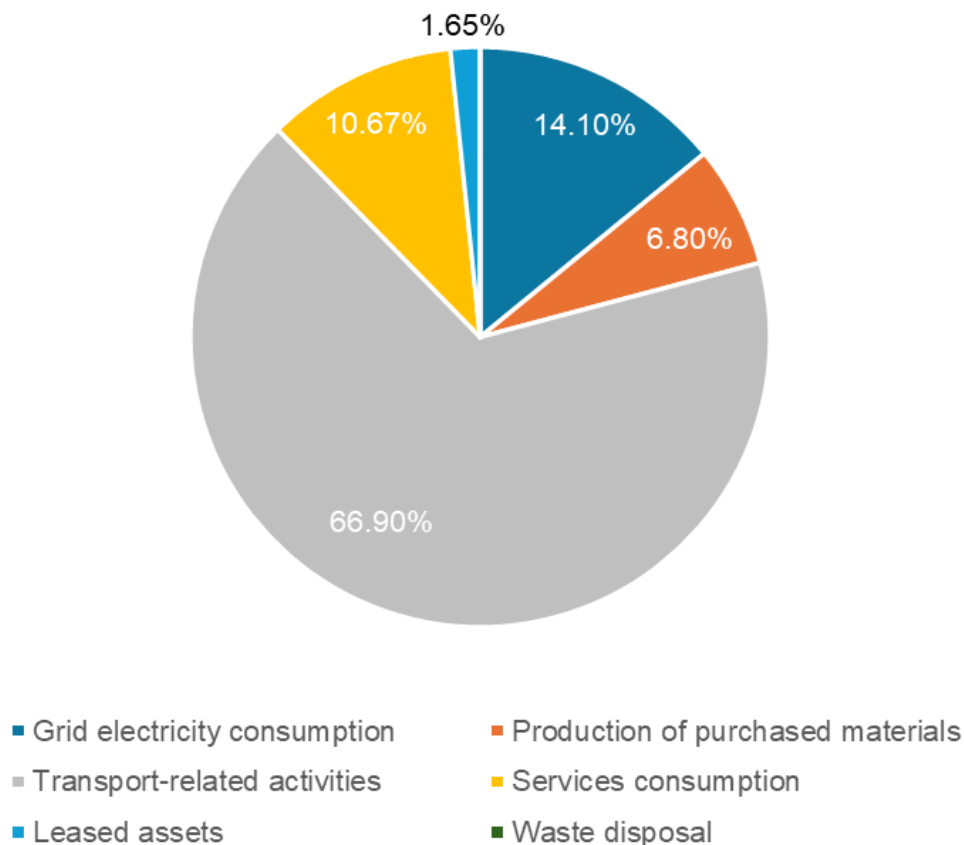
In 2023, KLINOVA's total emissions reached **9,378 tCO<sub>2</sub>eq**, marking a significant 32.00% increase from the previous year. This surge primarily stemmed from the company's expansions in operations and workforce.

**Table: KLINOVA's GHG inventory results**

Emissions	Scope 1	Scope 2	Scope 3
Total by scope (kgCO <sub>2</sub> eq)	NO	1,322.25	8,056.20
Total (kgCO <sub>2</sub> eq)	9,378.44		



**Figure 2: Share of emissions by scope (%)**



**Figure 3: Share of emissions by sources (%)**

A key category analysis of KLINOVA's GHG emissions identifies the major sources contributing most significantly to overall emissions. This analysis is crucial for prioritizing mitigation efforts and resource allocation. The key categories of KLINOVA's emissions in 2023 include:

- Business travel
- Grid electricity consumption
- Service consumption (accommodation)
- Production of purchased office appliances
- Employee commuting

Collectively, these categories account for over 97% of total emissions. This indicates that KLINOVA's carbon footprint is predominantly shaped by activities outside its direct operational control, which is typical for a consulting company or the service sector in general.

# RECALCULATION

There is currently a methodological inconsistency between the methodologies used in 2022 and 2023 for GHG emissions, due to differences in the guidelines and standards applied each year. For the year 2022, the Green Office Standard Toolkit by AIT-VN under the initiative “Upscale and Mainstream Green Office Lifestyles in Vietnam” was used for estimating GHG emissions, while the GHG Protocol Corporate Accounting and Reporting Standard was implemented for the 2023 inventory. To ensure that our emissions data is reliable and comparable, a recalculation of the 2022 inventory was conducted. The recalculated total emissions for 2022 is **4.948 tCO<sub>2</sub>eq**.

# CONCLUSION

In conclusion, to achieve our goals of green transformation and office greening, **KLINOVA** must focus on reducing transport-related emissions and enhancing energy efficiency within our operations. By addressing these key categories, we can make meaningful strides in reducing our environmental impact and contributing to global efforts to combat climate change.

**KLINOVA** remains dedicated to implementing innovative and sustainable solutions across all sectors, driving progress towards a greener and more sustainable future. Our commitment to environmental stewardship will continue to guide our actions as we work towards achieving our sustainability goals and fostering a positive impact on the environment.

*This report was implemented by:*




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