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1 Introduction and Context

HSE AG is a small-to-medium enterprise (SME) based in Kanton Zürich Switzerland, operating in the Pharmaceuticals, Biotechnology, and Life Science sector, with approximately 80 employees.

As a company, HSE AG has long been committed to conducting business in an ethical and socially responsible manner. This commitment is outlined in our quality policy [1], which emphasizes promoting sustainable practices, fostering ethical behavior among our employees, and actively contributing to the well-being of the communities in which HSE AG operates.

Since 2020, HSE AG has taken proactive measures to address its environmental impact, beginning with the purchase of trees through Tree-Nation.

In 2021, the company expanded its commitment by systematically monitoring its CO₂ emissions and integrating these insights into its broader Corporate Social Responsibility (CSR) strategy.

As part of its ongoing CSR strategy and in line with its Science Based Targets initiative (SBTi) commitment, HSE AG is dedicated to maintaining zero emissions for Scope 1 and Scope 2 through the continued use of clean technologies and renewable energy. The company’s primary objective moving forward is to enhance the monitoring and reporting of Scope 3 emissions, ensuring greater transparency and accountability across its value chain. These actions reflect HSE’s contribution to global climate goals while remaining firmly rooted in ethical and responsible business practices.

This baseline inventory sets a clear foundation for tracking, defining emissions objectives, and informing future sustainability actions.

2 CO₂ Emissions Baseline Year Assessment

In alignment with the Greenhouse Gas (GHG) Protocol [2] and SBTi guidance for SME [3], the company's greenhouse gas emissions for the baseline year 2023 have been assessed across all three scopes.

Base Year 2023	tCO ₂ e	%
Scope 1	0	0%
Scope 2	0	0%
Scope 3	77.1	100%

2.1 Scope 1 - Direct Emissions - 0 CO₂e

HSE AG reports zero Scope 1 emissions for the baseline year 2023, in accordance with the GHG Protocol [2]. The organization does not own or control any combustion sources such as thermic (combustion-based) company vehicles or on-site fuel-based energy systems. As a service-oriented enterprise with no manufacturing or industrial processing, HSE benefits from a structurally low-emission profile—a favorable foundation for its climate strategy.

The company car is fully electric, contributing solely to electricity consumption, which is reported under Scope 2 emissions. Similarly, the forklift operated on-site is electric-powered, with its energy use falling under Scope 2.

Building heating and cooling are provided through a heat pump system that is part of the infrastructure of the leased office space. As the system is owned and operated by the landlord, and HSE AG has no direct control over its energy supply or operation, the associated emissions whether from electricity use or occasional fossil fuel inputs are reported under Scope 3, specifically under emissions from upstream leased assets. The heat pump does not rely on refrigerants with high global warming potential and is not subject to leakage, thereby contributing no fugitive emissions.

2.2 Scope 2 - Indirect Emissions from Purchased Energy – 0 CO₂e

Scope 2 includes indirect greenhouse gas emissions associated with the generation of purchased electricity, steam, heating, or cooling consumed by an organization. For the baseline year 2023, HSE AG's Scope 2 emissions are limited exclusively to electricity consumption, as the company does not use steam, and all heating and cooling are provided through infrastructure managed by the building owner, falling outside of HSE's operational control.

In 2023, HSE AG consumed 78,023 kWh of electricity, sourced entirely from EKZ Mixtrom, a certified provider of 100% renewable energy.

Under the market-based method, this results in zero Scope 2 CO₂ emissions, reflecting the carbon-free nature of the purchased electricity.

However, as required by the GHG Protocol and the SBTi, HSE AG also calculated emissions using the location-based method. The company's total location-based Scope 2 emissions amount to 1.777 tCO₂e. This dual reporting approach ensures consistency and transparency across regulatory and benchmarking contexts.

Purchased heating and cooling, delivered via a heat pump system integrated into the leased office space, are categorized under Scope 3 emissions, as the system is owned and operated by the landlord. Similarly, no steam is purchased, making that category non-applicable under Scope 2.

This streamlined and clean Scope 2 profile underscores HSE AG's structurally low-emission operations and aligns with its broader commitment to sustainable and responsible business practices.

2.3 Scope 3 - Other Indirect Emissions – 77.1 tCO₂e

The assessment of key Scope 3 categories has been conducted. Total estimated emissions amount to 77.1 tCO₂e, with contributions from employee commuting, business travel, and waste disposal. These categories have been selected for their materiality and relevance to the company's operational context. This early assessment enables the identification of hotspots and supports the formulation of reduction strategies in line with SBTi criteria for Scope 3 engagement.

Scope 3 emissions include the following:

- Business Travel 53.7 tCO₂e
- Employee Commuting 21.6 tCO₂e
- Waste 1.8 tCO₂e

3 Monitoring and Reporting

To ensure transparency, consistency, and continuous improvement in its climate strategy, HSE AG has established a structured monitoring and reporting framework for greenhouse gas emissions, in alignment with the GHG Protocol [2]. This framework encompasses Scope 1, Scope 2, and selected Scope 3 categories, focusing on those most relevant to the company's operational context.

Data collection is conducted on an annual basis, with all relevant information for a given calendar year gathered and analyzed during the following year. Emissions are then calculated using the same methodology as base year 2023 as described in this document, ensuring both accuracy and comparability across reporting periods.

The results of this assessment—expressed in tons of CO₂ equivalent (tCO₂e) by scope and emission source—will be disclosed transparently to HSE AG's customers and stakeholders.

Emission figures will be published in the company's annual report, made available on its corporate website, and shared directly with clients upon request, supporting informed dialogue and reinforcing the company's commitment to responsible environmental practices.

4 Emissions Objectives

HSE AG is committed to aligning its climate strategy with the Science Based Targets initiative (SBTi) for Small and Medium-Sized Enterprises (SMEs), as well as with the accounting and reporting principles of the GHG Protocol.

HSE AG commits to maintain zero emissions for Scope 1 and 2, while working to improve monitoring, reporting, and reduce Scope 3 emissions by 2029 from a 2023 base year.

5 Action Plan

5.1 Maintain Scope 1 and Scope 2 at 0 tCO₂e

Actions	Details	Timeline
Maintain 100% renewable electricity sourcing	Continue purchasing electricity from EKZ Mixtrom or equivalent with Guarantees of Origin	Annual
Archive certificates and invoices	Keep Guarantees of Origin documentation to prove zero-emission sourcing (for audit/SBTi renewal).	Annual
Ensure no new direct-emission equipment is added (Scope 1)	Avoid adding oil/gas heating or fossil fuel-powered vehicles.	Annual
Monitor building energy changes	Engage HSE AG building operator to notify HSE AG of any switch in heating systems or building upgrades.	Annual

5.2 Improve Scope 3 CO₂e Monitoring and Reporting

Actions
Improve energy monitoring of heating and cooling in the rented building (fuel and heat pump) to better quantify Scope 3, Category 8 emissions (Upstream Leased Assets).
Estimate and report CO ₂ emissions from relevant purchases under Scope 3, Category 1 (Purchased Goods and Services).
Estimate and report CO ₂ emissions from capital goods under Scope 3, Category 2 (Capital Goods).

5.3 Reduce Scope 3 Emissions

Actions
Implement incentives and policies to promote low-emission commuting options (e.g., public transport, cycling).
Develop and enforce sustainable business travel guidelines prioritizing low-carbon alternatives.

6 Carbon Compensation

HSE AG has proactively engaged in carbon compensation since 2020, well before initiating its alignment with the Science Based Targets initiative (SBTi). This early and voluntary action reflects the company's deep-rooted commitment to climate responsibility and sustainable practices.

Since the beginning of this initiative, HSE AG has partnered with Tree-Nation [4], an internationally recognized platform specializing in reforestation and biodiversity restoration. Through this collaboration, HSE supports carefully selected global tree-planting projects that not only contribute to carbon sequestration, but also promote ecosystem restoration, biodiversity conservation, and social impact in reforested communities.

As of 2024, HSE AG has planted a total of 801 trees, corresponding to 0.6 hectares of reforested land and an estimated 72.52 tons of CO₂ captured over the lifetime of the trees. These contributions are transparently tracked and documented through Tree-Nation's digital platform, reinforcing accountability and demonstrating measurable climate impact.

7 References

- [1] QM-Z-13-00033 Quality Policy
- [2] The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard – Revised Edition (2nd edition - March 2004)
- [3] Science Based Targets for Small and Medium-Sized Enterprises (SMEs): Guidance for Companies (November 2021)
- [4] Tree Nations HSE Reporting: <https://tree-nation.com/fr/profil/impact/hseag>