AEGIR-Marine's CO_2 emissions report 2023

January 2023 - December 2023

Coolset

Table of contents

Introduction

Why this is important

Corporate sustainability is crucial to bend the curve on climate change, but making the right choices is hard. Measuring our climate impact is a critical step in defining the roadmap to net zero emissions.

At AEGIR-Marine, we are dedicated to measuring and monitoring our climate impact and beyond. Based on the universally recognized Greenhouse Gas Protocol, we precisely measure, monitor, and aim to reduce our emissions across Scope 1, 2 and 3.

The journey to sustainability is an ongoing process. At AEGIR-Marine, we aim to regularly revisit our strategies, assess our progress, and improve on the way we do business. By constantly evolving and adapting, we ensure our sustainability efforts remain relevant and effective.

To be part of this network is to be part of the next generation of future-proof businesses. It is our contribution to striking a healthy balance between planet and profit.

Measurement methodology

The applied greenhouse gas accounting and reporting methodology is based on The Greenhouse Gas Protocol (GHG Protocol) - the most widely used international accounting tools for government and business leaders to understand, quantify, and manage greenhouse gas emissions. The standards were developed in partnership between the World Resources Institute and the World Business Council for Sustainable Development and are used by 92% of Fortune 500 companies responding to the CDP.

The accounting methodology of the GHG Protocol is based on five core principles:

- Relevance: an appropriate inventory boundary that reflects the GHG emissions of the company and serves the decision-making needs of users;
- Completeness: accounting includes all emission sources within the chosen inventory boundary. Any specific exclusion is disclosed and specified;
- Consistency: meaningful comparison of information over time and transparently documented changes to the data;
- Transparency: data inventory sufficiency and clarity, where relevant issues are addressed in a coherent manner; and
- Accuracy: minimized uncertainty and avoided systematic over- or under-quantification of GHG emissions.

The Greenhouse Gas Protocol

Under the Greenhouse Gas Protocol, emissions are divided into direct and indirect emissions. Direct emissions are those originating from sources owned or controlled by the reporting entity. Indirect emissions are generated as a consequence of the reporting entity's activities but occur at sources owned or controlled by another entity. The direct and indirect emissions are divided into three Scopes as found below.

Scopes 1, 2 and 3 explained

Scope 1 includes all carbon emissions that can be directly managed by the organization (direct GHG emissions). This includes the emissions from the combustion of fossil fuels in mobile and stationary sources (e.g., owned or controlled boilers, power generators and vehicles) and carbon emissions generated by chemical and physical processes as well as fugitive emissions from the use of cooling and air conditioning equipment.

Scope 2 includes indirect GHG emissions from the generation of purchased electricity, steam, heat or cooling purchased by the organization from external energy providers.

Scope 3 includes other indirect emissions which arise along the value chain as a consequence of the reporting company's activities. These emission sources occur in another entity's operations. Examples of emission sources from Scope 3 include the extraction and production of purchased materials and services, vehicles not owned or controlled by the reporting entity, and outsourced activities and waste disposal.

For most companies, their carbon footprint consists largely of Scope 3 emissions - often >90%. For instance, Nike's FY2020 Scope 3 emissions accounted for over 98% of total emissions. Implementing a rigorous

methodology for calculating Scope 3 emissions is essential for companies to reduce their carbon footprint.

Hybrid methodology and why this works

The Greenhouse Gas Protocol's hybrid methodology combines both activity-based and spend-based approaches to assess greenhouse gas emissions. Activity-based methods rely on specific actions or processes, such as energy consumed or distance travelled, multiplied by associated emission factors, to calculate emissions. In contrast, spend-based methods estimate emissions using financial data, like procurement expenditures, leveraging economic input-output life cycle assessment models. By integrating these approaches, the hybrid methodology allows for a comprehensive and accurate capture of emissions across a company's value chain, especially beneficial for Scope 3 assessments where direct activity data might be challenging to obtain.

The Greenhouse Gas Protocol's hybrid methodology stands out as a leading approach for its qualitative strengths. Grounded in its ability to offer a comprehensive insight into emissions, it achieves:

- Full coverage: Where top-down, activity-based emissions profiles often only capture a part of Scope 1, 2 and 3 emissions, the hybrid methodology can achieve up to 100% coverage. The access to financial data opens doors to include the procurement of good and services on a transaction-level basis.

- Identification of emissions hotspots: By providing a holistic view, it helps companies pinpoint emissions-intensive areas in their operations or supply chains to focus reduction efforts on the things that matter.

- Vendor analysis: Identifying top vendors that have the highest contributions to a company’s footprint allows targeted supplier

switching or collaboration for reductions.

- Balanced accuracy and coverage: The hybrid methodology combines broad coverage and targeted precision, giving companies both a macro and micro view of their carbon footprint where it matters.

- Flexibility and adaptability: The hybrid approach can be adjusted and refined over time as more specific data becomes available or as business operations change. This motivates continuous improvements to create a sustainable and future-proof and organization.

In essence, the hybrid methodology is a dynamic tool, combining breadth with depth, to provide businesses with a robust, actionable, and holistic view of their greenhouse gas emissions.

Results

Overview

Below is an overview of the total emissions for the year, providing a clear representation of the scale of our environmental impact, measured in tonnes of carbon dioxide equivalents (CO2e).

In line with our commitment to transparency and continuous improvement, we recognize the significance of contextualizing our carbon footprint. As our company is growing every year, it becomes imperative to assess the efficiency of our operations relative to key factors.

In this spirit, we can present our emissions metrics in relation to two essential aspects of our organization: our employee headcount and our revenue.

OVERVIEW	CO_2e
Absolute emissions	9343.5 t
Emissions per employee	50.78 t
Emissions per unit of revenue	0.18 kg

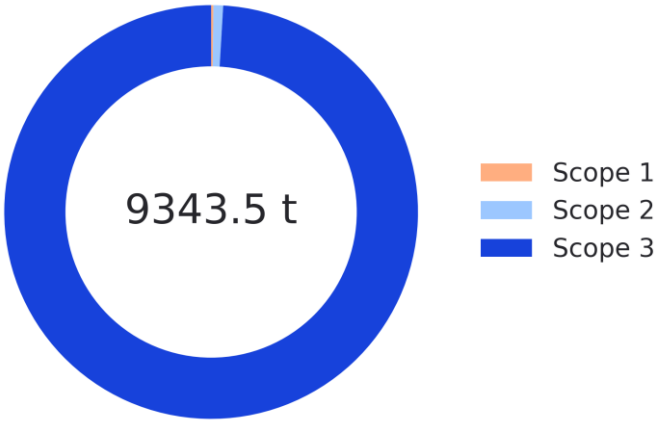
Table 1: Total emissions

Emissions by scope

AEGIR-Marine's Scope 1 emissions, which encompass direct emissions from our own operations, amounted to 16.4 t CO2e. These are emissions we have direct control over, such as those from our owned or controlled buildings, vehicles and machinery.

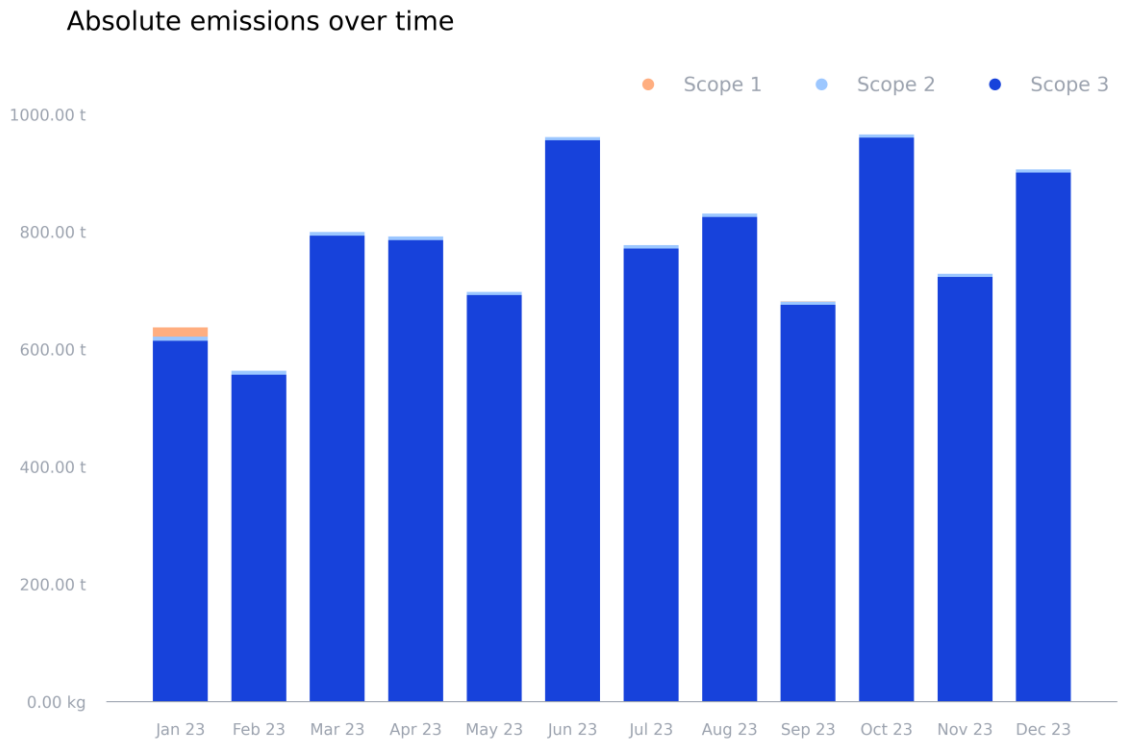
Meanwhile, our Scope 2 emissions, which result from the purchase of electricity, steam, heat, and cooling, were measured at 70.8 t CO2e.

Most significantly, our Scope 3 emissions, which represent the indirect emissions in our value chain including from our vendors, business travels, and our purchased products and services, totalled 9256.2 t CO2e. This highlights the considerable responsibility we hold in working with our suppliers and partners to reduce our collective carbon footprint through better products, or alternative sourcing.

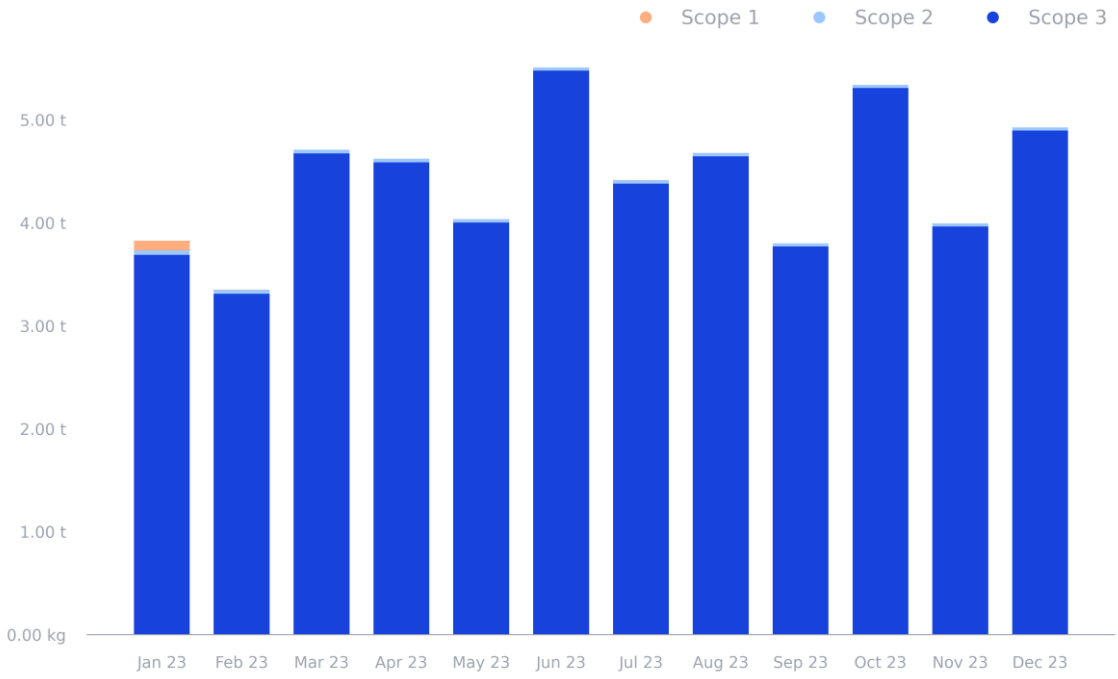


SCOPE	TRANSACTIONS	CO_2e	(%)
Scope 1: direct GHG emissions	295	16.4 t	0.2
Scope 2: indirect GHG emissions from purchased electricity, steam, heating and cooling	340	70.8 t	0.8
Scope 3: other indirect GHG emissions	34860	9256.2 t	99.1

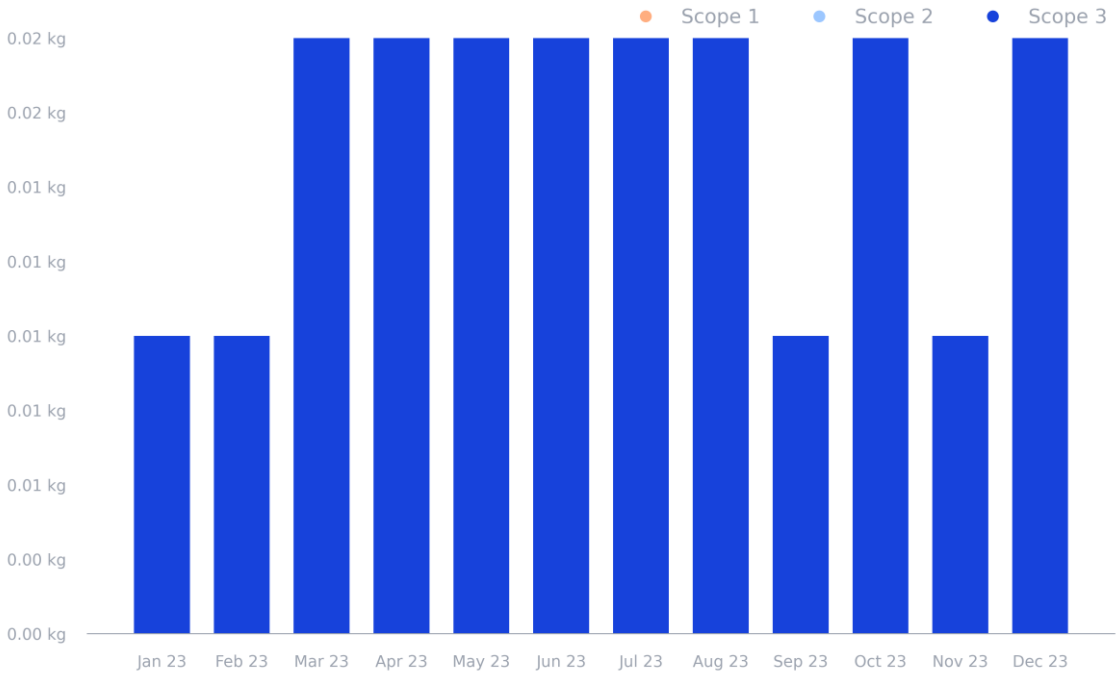
Table 2: Emissions by scope



Emission intensity per employee over time



Emission intensity per unit revenue over time



Emissions by category

Most emitting categories

Diving into the details of our carbon impact, we've pinpointed the areas where our operations have the biggest effect. The Materials and manufacturing, Travel, transport and logistics and Equipment categories stand out as the major contributors, with emissions of 4984.4 t CO2e, 967.9 t CO2e and 874.6 t CO2e.

These emission hotspots add up to 73.1% of AEGIR-Marine's footprint, and highlight where we need to focus our sustainability efforts most.

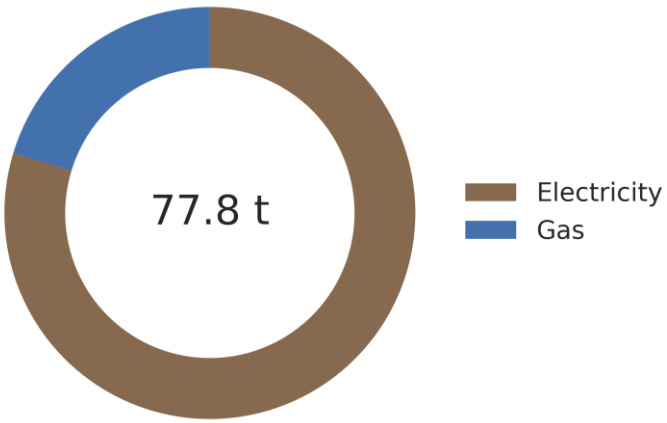
CATEGORY	TRANSACTIONS	CO_2e	(%)
Materials and manufacturing	2930	4984.4 t	53.3
Travel, transport and logistics	5977	967.9 t	10.4
Equipment	1668	874.6 t	9.4
Consumer goods and services	1538	738.5 t	7.9
Restaurants and accommodation	16156	604.6 t	6.5
Organizational support services	1911	427.1 t	4.6
Energy	2130	219.3 t	2.3
Information and communication	1047	134.5 t	1.4
Buildings and infrastructure	189	104.1 t	1.1
Insurance and financial services	441	103.7 t	1.1
Education	401	80.1 t	0.9
Waste	48	52.5 t	0.6
Employees	170	33.1 t	0.4
Other	414	9.3 t	0.1
Health and social care	34	6.7 t	0.1
Water	155	3.0 t	0.0
Agriculture, hunting, forestry and fishing	1	12.8 kg	0.0

Table 3: Emissions by category

Energy - Breakdown

Zooming into our energy consumption, we have identified the segments where our operations generate the highest energy-related emissions. We have identified Electricity and Gas as our primary emission sources, with associated energy-related emissions of 62.0 t CO2e and 15.8 t CO2e, respectively. These are also the areas where we can make the most significant impact in improving energy efficiency and sustainable procurement.

These emissions are solely coming from the gas and electricity consumption of our premises. The total emissions related to energy usage (including vehicles, fugitive emissions, etc.) is included under both scope 1 and 2.



SUBCATEGORY	TRANSACTIONS	CO_2e	(%)
Electricity	319	62.0 t	0.7
Gas	14	15.8 t	0.2

Table 4: Energy - Breakdown

Employees - Breakdown

The total emissions related to scope 3 category 'Employee Commuting' can be found in table 3. We provide a more detailed breakdown per vehicle and teleworking in this section.

Examining our employee-related emissions, we have identified emissions from commuting. The commuting practices result in 33.1 t CO2e over the period. These insights emphasize the potential benefits of revisiting our work commute policies and infrastructure to further support sustainable work habits.

SUBCATEGORY	TRANSACTIONS	CO_2e	(%)
Employee commuting - private vehicle	74	33.1 t	0.4

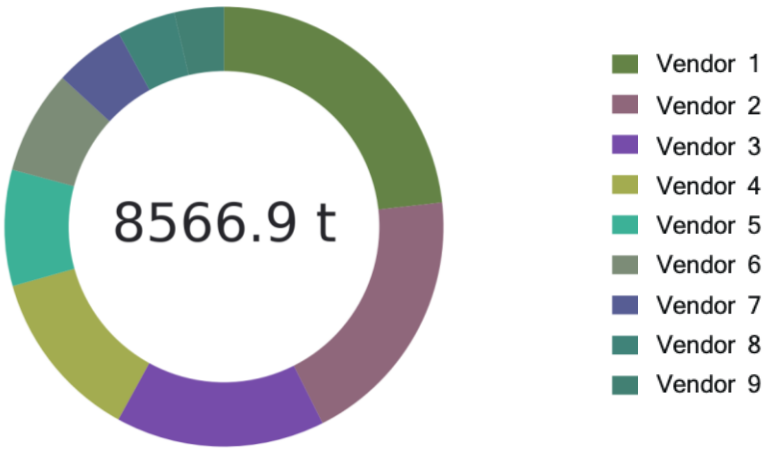
Table 5: Employees - Breakdown

Emissions by vendor

Most emitting vendors

Turning our attention to our vendor relationships, we have identified that certain partners significantly influence our carbon footprint. Specifically, our top 3 vendors emerge as the top contributors, with emissions of 901.9 t CO2e, 750.5 t CO2e and 597.9 t CO2e respectively.

Emissions associated with the top 3 vendors contributed to 26.3% of our footprint. These figures emphasize the importance of collaborative efforts with these vendors to explore sustainable practices and reduce our shared environmental impact.



VENDOR	TRANSACTIONS	CO_2e	(%)
Vendor 1	187	901.9 t	10.5
Vendor 2	136	750.5 t	8.8
Vendor 3	80	597.9 t	7.0
Vendor 4	97	491.0 t	5.7
Vendor 5	371	331.2 t	3.9
Vendor 6	152	296.6 t	3.5
Vendor 7	265	202.7 t	2.4
Vendor 8	4	166.9 t	1.9
Vendor 9	49	141.6 t	1.7

Table 6: Vendor emissions

Conclusions

AEGIR-Marine's sustainability impact report from January 2023 to December 2023 has provided key insights into our environmental impact, following the reporting standards of the GHG Protocol.

Starting out with our operations, the largest emission categories are Materials and manufacturing (4984.4 t CO2e), Travel, transport and logistics (967.9 t CO2e) and Equipment (874.6 t CO2e). This breakdown serves as a map, highlighting emission hotspots that require additional attention for improvement.

Furthermore, substantial emissions were identified from our top 5 vendors. This highlights the importance of working with our vendors to reduce our collective carbon footprint.

In conclusion, AEGIR-Marine's commitment to measuring, understanding, and reducing our carbon footprint is a first step towards running a sustainable and future-proof business. This report reinforces our commitment to proactive change, ensuring we make decisions today that create a brighter, more sustainable future for everyone.

Appendix

Emission factors

At the heart of Coolset's mission to provide accurate and actionable emission insights lies our commitment to sourcing and using the best available data. Our emission calculation engine relies on high quality, vetted open databases of emission factors. By anchoring our foundation on strictly science-based data, we ensure that our clients receive information that is both reliable and up to date.

Coolset's key data partners include, but are not limited to:

- co2emissiefactoren (NL): This Dutch database provides localized activity-based emission factors, ensuring that Coolset's calculations remain relevant and accurate for projects and companies operating in the Netherlands;

- ADEME (FR): Renowned for its commitment to sustainable development research, ADEME provides a robust database that forms a key component of both Coolset's spend-based and activity-based emission calculation engine;

- DEFRA (UK): The Department for Environment, Food & Rural Affairs is an instrumental arm of the UK government. DEFRA's emission factors are primarily used to calculate UK greenhouse gas emissions from various activities;

- BEIS (UK): Funded by and originating from British government, BEIS offers valuable emission factors related to energy and its correlation to

sustainable growth;

- EPA (US): The United States Environmental Protection Agency, with its legacy in comprehensive environmental data, was designed to provide organizations with a regularly updated set of default emission factors for organizational GHG reporting;

- EXIOBASE: As a global environmental database created by a consortium of university researchers, EXIOBASE presents a deep dive into the environmental emissions that are inherently tied to varied economic business activities;

- GLEC: Specializing in logistics emissions, GLEC's methodology is globally recognized and forms a part of our activity-based calculation engine for transportation and logistics;

- IPCC: The Intergovernmental Panel on Climate Change, the leading international body for assessing and reporting on climate change, provides guidelines and data for both spend- and activity-based calculations;

- UNFCCC: The United Nations Framework Convention on Climate Change, a key international treaty aiming to address climate change, offers valuable data and standards for activity-based calculations across the world.

Beyond these databases, Coolset adds another layer of precision by integrating vendor-specific emission data whenever available. Our dedicated climate research team follows the latest developments in literature and public resources to identify and incorporate the latest data sets. This ensures that our assessments are optimized to capture specific nuances,

thereby offering our clients the most comprehensive emission measurements available.

Sources and standards

How we handle currency conversion for EFs

At Coolset, accuracy and adaptability lie at the core of our operations. When it comes to emission factors (EFs) described in various currencies such as EUR, GBP, or USD, we acknowledge the intricate nature of currency fluctuations and their potential implications on our assessment metrics.

To maintain the reliability of our data, we employ a standardized process for currency conversions. Each emission factor, irrespective of its native currency, is converted based on the exchange rate on its publication date. This method ensures that we are adhering to the most relevant and time-appropriate currency value, making our evaluations both fair and consistent.

How we handle currency conversion for spend-based data

For spend-based data in non-native currencies, we streamline our approach by employing the average currency conversion rate over the course of the full year. This ensures that we factor in all exchange rate fluctuations, offering a comprehensive and fair representation of reality.

For our clients, this translates into dependable data. By using the annual average rate, we counteract the inconsistencies of short-term currency spikes or dips. It's a method that simplifies understanding and ensures that our data mirrors the long-term financial landscape.

How we update EFs

Climate science is evolving rapidly over time and calculation methods from a few years ago may be changed and improved tomorrow. Therefore, at Coolset, we work with internal climate experts that ensure our measurement methodology and applied emission factors are updated on a regular basis. Climate awareness is growing, and industries are now collecting more data than ever to ensure emission factors are accurate. This ultimately leads to changes in the data we use for our accounting.

For our customers, this means that results may change retrospectively. Just like accounting might be corrected after year end, the same can be expected for the results of a greenhouse gas assessment. Changing results are a consequence of better data quality, and this should be embraced and encouraged. Coolset will notify their customers of any material changes in the applied calculation methodology or emission factor databases.

How we account for inflation

When it comes to inflation, we have made a deliberate choice not to adjust for it. By doing so, we ensure our clients can depend on a consistent baseline when reviewing their data year-on-year.

Inflation is a complex factor. Not only can it vary considerably month-to-month, but its impact is also highly product or service-dependent. Incorporating inflation correction can therefore introduce distortions in our data, which enters the risk of diverging from actual consumption patterns and environmental impacts. In essence, such corrections might lead us further from the real-world scenarios we aim to assess at Coolset.

The heart of our mission is to empower businesses to reduce emissions through improved behaviour and the selection of better suppliers. By maintaining a consistent metric, excluding the volatility of inflation, we provide a clearer picture for our clients to measure and act on their emission outputs.

Terminology

TERM	DEFINITION
Scope 1	Scope 1 emissions encompass emissions that originate directly from resources owned and managed by a company. This implies that emissions are discharged into the air as a direct outcome of specific activities conducted within the company. All fuels that generate greenhouse gas emissions are required to be accounted for within scope 1 calculations, this includes combustion from transportation, process and fugitive emissions.
Scope 2	Scope 2 emissions refer to indirect emissions arising from the production of energy purchased from external utility providers. To put it differently, these are all the greenhouse gas emissions that are discharged into the atmosphere due to the utilization of bought electricity, steam, heat, and cooling.
Scope 3	Scope 3 emissions encompass all the indirect emissions that are not encompassed by scope 2 emissions. These emissions emerge throughout the value chain of the reporting company.
Emission intensity	Emissions intensity is the level of GHG emissions per employee or unit of economic activity.
Vendor	A vendor is a person, business, or entity that offers goods or services for sale to customers
Category	Categories are thematic groupings within which emission factors are classified. They delineate specific clusters of activities or processes that give rise to greenhouse gas emissions. For instance, the category "Travel, Transport, and Logistics" encompasses a range of activities and associated emission factors

	linked to the movement of both people and goods. These categories aid in organizing and analyzing emissions data for effective measurement and management strategies.
Subcategory	Subcategories are narrower divisions within broader categories. In the context of "Travel, Transport, and Logistics," subcategories like "Air travel" or "Car travel" further segment and specify distinct modes or methods within the transportation domain. They offer a more detailed classification, enabling finer analysis and management of emissions within specific subsets of activities.
Emission hotspot	The term 'emission hotspots' designates categories or subcategories where a majority of the emissions are generated, and where action towards reduction leads to the most substantial decrease in total emissions.
Greenhouse Gas Protocol	The GHG Protocol is universal and structured framework designed to measure and track greenhouse gas (GHG) emissions stemming from businesses activities, as well as emissions from value chains and efforts to reduce these emissions.
Emission factor	An emission factor (EF) is a numerical factor that represents the amount of greenhouse gas emissions released into the air related to a specific activity.
Spend based EF	Spend based emissions factors assess emissions by considering the financial worth of products and services procured by an entity. These factors are computed by multiplying the organization's expenditures by the emission intensity associated with the acquired goods or services.
Activity based EF	Activity based emission factors quantify the emissions linked to a particular action, such as the distance a

	vehicle travels or the electricity consumption of a building. These factors are determined using activity-specific data, like the vehicle's fuel consumption or the emissions output of the electricity generation source.
Coverage	The coverage of classified emission factors pertains to the range and extent of activities, processes, or sources for which emission factors have been identified and categorized.
Accuracy	Accuracy in classifying emission factors refers to the degree of precision and correctness with which the factors are determined and assigned to various activities or processes. It reflects the alignment between calculated emission values and actual observed data, ensuring reliable representation of greenhouse gas emissions in specific scenarios or contexts.

Table 8: Terminology